Abstract
Fish assemblage and habitat use in North Carolina and Virginia waters during the annual Cooperative Winter Tagging Cruise, 1988-2013
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Long-term ecological research can be valuable in understanding ecosystem function and species requirements, allowing managers to better regulate and enforce strategies for continued use of the resource, commercially and recreationally. My project focuses on the examination of trawl data from the Cooperative Winter Tagging Cruise (CWTC), a long-term effort off the North Carolina and Virginia coasts that has collected data on many important fish species since 1988. The data collected from this effort had not been fully entered in a database or utilized by researchers. The goal of my project was to develop habitat parameters and examine the relationships and trends between and among an assemblage of fish taxa, and their habitats within and across the time series 1988-2013.

Hard copies of the data from the CWTC were transcribed into a single electronic database for analysis, and a suite of hypotheses testable with the data in their current state were developed. Using GIS, a study area was delineated, and trawl tows from the CWTC mapped. Habitat parameters were developed from data recorded during the CWTC efforts; additional parameter models were created in GIS from publicly available USGS data. Eight taxa were chosen for my analysis, based on consistency of records and ecologic and economic importance. These taxa were assessed with regard to their distributions within the study area and eight habitat parameters that describe the physical influences on their environment.

My study describes the habitats used by these eight taxa and trends in the co-occurrence and north-south distributions of the taxa. This information is intended to aid in understanding the taxa life history and ecology – to fill existing data gaps in the overwintering requirements, encourage researchers to fully utilize available data and prompt new testable hypotheses using this platform, and provide management agencies with more comprehensive data to regulate and conserve existing resources.

Fish assemblage and habitat use in North Carolina and Virginia waters during the annual Cooperative Winter Tagging Cruise, 1988-2013

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FISH ASSEMBLAGE AND HABITAT USE IN NORTH CAROLINA AND VIRGINIA WATERS DURING THE ANNUAL COOPERATIVE WINTER TAGGING CRUISE, 1988-2013

by

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DEDICATION

This is thesis is dedicated, most sincerely and gratefully, to those who have encouraged and supported me in this endeavor.

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National Oceanic and Atmospheric Administration

All of the vessel crew members, scientists, and researchers.

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CHAPTER 1: NOTES ON LONG-TERM DATASETS AND MONITORING, ECOSYSTEM-BASED FISHERIES MANAGEMENT, HABITAT CONSIDERATIONS, AND TAXA

The purpose of this project was to analyze the available data from the Cooperative Winter Tagging Cruise - a long-term effort off the Atlantic coasts of North Carolina and Virginia begun in 1988. The focus of the project was the delineation of habitat, and the determination of trends in habitat use and assemblage of taxa of ecologic and economic interest. Knowledge of the region, context, and conditions in which the data were collected are critical to successful interpretation of these analyses, as well as to understanding the scope and potential impact of them. Therefore, Chapter 1 of this thesis is devoted to a review of the importance of long-term efforts; the broader implications of those long-term efforts to ecosystem-based management, and its value; factors in determining habitat - the physical and biological influences of the study area and variables assessed in the analyses; and pertinent notes on the taxa of interest.

Long-term Datasets and Monitoring

With the increased attention to fisheries from a societal standpoint, along with global concerns about decreases in fish harvests, it is more important than ever to evaluate systems as comprehensively as possible (Pauly 1995). The correlation of biodiversity, measured by presence/absence or by actual enumeration of individuals, over both temporal and spatial scales, can aid researchers and agencies in better understanding the structure of ecological communities (Magurran et al. 2010). The analysis of long-term biological data can be used to determine if variability seen in a system is the result of natural fluctuations within a system, or from an outside or anthropogenic source (Wolfe et al. 1987). One of the major impacts of long-term dataset analysis is the ability to provide recommendations to management agencies responsible for the targeted species on population location and stability (Strayer et al. 1986). Palumbi et al.

(2009) expressed the current and future need for long-term study sites, for management efficacy. The retrospective analysis of long-term datasets can be used as a form of verification of laboratory studies, as a route to examine newly developed hypotheses, or be applicable to current problems within a system (Wolfe et al. 1987). The contributions of long-term datasets to the general ecological knowledge of a system, and the education and employment opportunities encompassed by these efforts, provide justification for their continuation and analysis of the data (Strayer et al. 1986).

For long-term datasets to be available, long-term ecological monitoring or research must first be established. A study can be classified as long-term in relation to the subject of the study (Strayer et al. 1986), being that in studying biota, the life-span of the subject has the greatest bearing on whether the duration of a study can be considered a long-term endeavor. Familiar long-term studies include the Park Grass experiments at Rothamsted, England (established 1856), the Lund studies on phytoplankton in the Lake District of England (initiated in the 1950s), and more recently, the National Science Foundation (NSF) Long-Term Ecological Research (LTER) program (established 1980) (Strayer et al. 1986). The NSF requested proposals for the establishment of new LTERs, including two in the marine environment, which will double the number of marine LTERs the program supports (NSF 2016).

Long-term ecological monitoring and research in general is more cost effective and can be more easily applied in terrestrial environments than in aquatic systems. The high cost of ship time and personnel, limited timeframes of acceptable weather, and variations in sea conditions are some of the difficulties associated with establishing long-term research studies in the nearshore and open ocean environments. Intensive, focused research within a targeted marine ecosystem can be limited by small study areas within habitats, using local vessels staffed by local personnel or

visiting scientists. In addition to logistic constraints in creating long-term studies in aquatic systems, obstacles associated with the analysis of long-term datasets include inconsistent design and methods, insufficient data throughout the time series, and the comparison of subsequent records to retroactively established baselines (Magurran et al. 2010). These types of studies often achieve sampling only once per year and focus on gathering data for specific questions. This often results in specialized, narrow datasets – which can limit the applicability of the data and hinder funding options.

For most marine applications, state and federal agencies often complement their surveys with data from independent sampling efforts by scientists with commercial fishing data. In North Carolina, the State Trip Ticket Program keeps track of all commercial harvests in estuarine and coastal state waters – providing the amount of effort, gear types, and the individual species landed (NCDMF 1999). Recreational fishing data are supplemented by marine creel, head boat, and charter boat surveys (Grabman 2011). The National Marine Fisheries Service (NMFS) has its own set of reporting requirements to supplement long-term surveys; for example, the Northeast Fisheries Science Center (NEFSC) Spring and Autumn Trawl surveys (NOAA 2018). These two surveys include the North Carolina continental shelf north of Cape Hatteras, North Carolina. In the case of North Carolina, sampling of nearshore waters too shallow for the larger, deeper draft NOAA vessels is provided by commercial fisher survey sampling (i.e., Jimmy Ruhl, out of Rudee Inlet, Virginia, who conducts the Northeast Area Monitoring and Assessment Program (NEAMAP) under contract).

Many long-term programs have utilized trawling techniques for the analysis of species assemblage and patterns in species diversity, as well as distributions within a system. From data collected during an autumn groundfish survey in Icelandic waters, Stefansdottir et al. (2010)

were able to perform hierarchical cluster analyses and identify four distinct fish assemblages within their study area. Stefansdottir et al. (2010) also found spatial and temporal variation, including a shift in the diversity of species correlated to temperature. Callaway et al. (2002) were able to determine relationships between epibenthic invertebrates, fishes, and environmental data from a compilation of various trawl survey data, identifying diversity and community structure variations and patterns throughout the North Sea area (but no ecological interactions were implied with the use of the term 'community' in their study). Another study by Rice and Gislason (1996) performed an evaluation of a multi-species virtual population analysis model by using 16 years of data from the English Groundfish Trawl Survey, allowing the identification of size composition, diversity, and temporal shifts in the North Sea fish assemblage.

Trawl data can also be used to identify persistent, major, and minor fish assemblages, such as in Bosman et al. (2011) who utilized both univariate and multivariate analyses to identify spatial and temporal assemblages from six years of bottom trawl data in Canadian waters. Rijnsdorp et al. (1996) worked with data from non-standardized surveys with different gear types, major differences in area and catch efficiency, and recording consistency. They divided and categorized the study area into statistical rectangles and used correction factors to compare catch data between the surveys and analyze the temporal trends in catch rates for fish species – identifying major relative decreases in several fishes throughout the study area (Rijnsdorp et al. 1996). Heesen and Daan (1996) looked at long-term trends using catch data from non-target species in the International Bottom Trawl Survey in the North Sea, finding distribution variation between the species and abundance patterns over time. They also stressed that when dealing with incomplete sets of long-term data involving multiple species, information on some species may

be consistently recorded enough so as to be able to offer reliable conclusions from the analyses of their data (Heesen and Daan 1996).

Gabriel (1992) used data from the Northeast Fisheries Science Center bottom trawl surveys over a 20-year period to distinguish persistent geographical boundaries, groundfish assemblages, assemblage regions and distributions, and temporal shifts in the species groups between Cape Hatteras and Nova Scotia. The use of cluster analyses and species diversity indices showed site groups with similar species composition and groups with similar spatial distributions for each year, along with strong species group affiliations over time (Gabriel 1992).

Although there is some concern with non-random sampling or bias in the gear, trawling can provide the most efficient overall sampling for community diversity analysis and across-year component species patterns in presence or abundance correlations, especially when sampling gear and technique remains constant over time (Rijnsdorp et al. 1996). While there are inherent difficulties to long-term studies, the benefits of continuous datasets to the development of ecological theory and knowledge, including trophic interactions, can be invaluable. Due to these reasons, Worm et al. (2009) asserts that ongoing and long-term research trawl surveys are the ideal tool for examining the status of marine communities.

Ecosystem-based Fisheries Management and the Current Status of Fisheries

Ecosystem-based fisheries management (EBFM) has the intended goal of allowing sustainable harvest while maintaining the function and structure necessary to ensure healthy ecosystems (Pikitch et al. 2004, Fogarty 2014). The implementation of EBFM requires managers to not only consider the impact of fishing or habitat alteration on targeted species, but also the forage and predators of the species, along with potential impacts on habitat surrounding the locations and species under review. One advantage of trawls over longline or gillnet surveys in continental

shelf waters is the variety of species and specimen sizes captured in trawl-based surveys. While the current focus may be on targeted, harvestable species, consideration of the contributing and non-target species (and additional weight given to the importance of biodiversity) should be applied to develop a more effective ecosystem approach and common criteria to evaluate changes and trends in a system (Palumbi et al. 2009). Palumbi et al. (2009) proposed that with the focus on preserving the biodiversity within EBFM, the conservation of species interactions and system function will inherently follow. Slocombe (1993) recognized that multidisciplinary data collection – including the use of previously collected or archived data – along with an exploration of methods to consolidate, analyze, and combine available ecological data, is needed for the knowledge base on which ecosystem-based management is developed.

The inadvertent effects of targeted fishing, habitat degradation, and changes in ecosystem function have been gaining attention (Pikitch et al. 2004). Concurrently, there is a gaining appreciation of the inefficacy of single species management and recognition of the need for EBFM – along with a progression towards adequate data to implement such a strategy (Pikitch et al. 2004). While EBFM is not a recently proposed strategy, because of political and socio-economic barriers it has lacked the momentum to be implemented to its full potential (Slocombe 1993). Powers and Monk (2010) urged the development and use of 'suites' of ecological indicators to implement EBFM strategies, by evaluating species' biomass, abundance rankings, and the ecological attributes of those species selected to be included within the indices or used as indicators. Fogarty (2014) provides examples of potential indicator categories, which include environmental conditions, catch and effort of species and functional groups, abundance and biomass, species diversity and population demographics, spatial concentration, and trophic variability – along with the trends and correlations among these categories – as important

considerations when approaching an EBFM. The applicability of ecological indicator suites depends upon the assessment and implementation used by fisheries managers; the usefulness of existing indices and indicators should be evaluated on a broader scale (Powers and Monk 2010). Long-term, multispecies data within a system can be used to help assess the services and functions provided by the system, as well as to aid in the development of management plans based on an EBFM strategy.

Considering the gaining recognition of the merits and applicability of EBFM, and to gain a broader recognition of the position of the species and taxa of ecologic and economic standing that are looked at in this project, it is important to understand the overall global status of fisheries. The ideal situation for any fishery stock is to manage it in such a way as to allow for harvest at the maximum amount while maintaining the stability of the population. With proper monitoring and careful management of resources, stocks may obtain this desired 'fully-exploited' status (FAO 2011). The Food and Agricultural Organization (FAO) of the United Nations (UN) reviews the status of marine fishery resources on a global and regional scale every five years. Most recently, the review indicates that the number of fully-exploited and overexploited (including declining and collapsed) stocks has continued to increase (FAO 2011, FAO 2016).

The area of interest for the study described herein is in the FAO designated regions of the Northwest Atlantic (21) and Western Central Atlantic (31) (FAO 2011). The location is important as EBFM is inherently a place-based concept (Fogarty 2014). These two regions have shown the largest decrease in fishery landings out of all global regions: Northwest Atlantic landings have decreased by fifty-five percent since the peak in 2009 and in the Western Central Atlantic by forty-six percent (FAO 2011). While there has been a continued decrease in landings

in these regions, it is presumed to be in part due to the stricter management regulations put into place in the effort to recover and rebuild stocks (FAO 2016). As of the latest assessment, 31% of stocks in the Northwest Atlantic and 44% of stocks in the Western Central Atlantic regions are considered fished at unsustainable levels (FAO 2016). It is hoped that the EBFM concept will result in a better understanding of the habitat usage and trophic level interactions, and therefore better estimate fishing effects on the ecosystem and its ability to sustain long-term harvest.

Continental Shelf Habitats and Habitat Parameters

Habitat use by migratory fishes while in shelf waters can be regarded as a key limiting factor when assessing potential changes in population sizes or potential recruitment models (Caddy 2013). In the area extent of my study, multiple habitat types can be delineated based on physical, biotic, and abiotic factors. Also, the area of my study is unique in that it is a meeting point along the Atlantic seaboard for the Labrador Current from the North and the Gulf Stream current from the South. Topographic features of the continental shelf in this region, such as the Charleston Bump, play heavily in the current mixing and benthic environments to produce viable fisheries habitats (Cahoon et al. 1999b).

Continental Shelf Habitats

Major physical habitat types found in the continental shelf area include Carolina hard bottoms, shipwrecks, artificial reefs, and canyons; other physical habitat types also exist in the area.

Carolina hard bottoms, Shipwrecks, Artificial reefs. Carolina hard bottom habitat is defined in the 2005 North Carolina Coastal Habitat Protection Plan (Street et al. 2005) as "exposed areas of rock or consolidated sediments, distinguished from surrounding unconsolidated sediments, which may or may not be characterized by a thin veneer of live or dead biota, generally located in the ocean rather than in the estuarine system" (Street et al. 2005). These types of hard bottoms

can include both natural and man-made relief from the surrounding sediments with a vertical ranges between flat, or small slopes, or 10 m of vertical structure (Deaton et al. 2010). The NCCHPP (Deaton et al. 2010) details possibilities for natural hard bottom habitats (live bottom) as relic reefs partially or wholly covered with algae/sessile organisms, condensed mud sediments, and rocky outcrops; man-made hard bottoms include artificial reefs, shipwrecks, and jetties. Hard bottom habitats can be subject to variable exposure and concealment from shifting loose sediments, such as sand (Deaton et al. 2010).

Canyons. Submarine canyons are a major geomorphic feature along the continental shelf. Canyons that originate on the continental shelf and cross the shelf edge act as a boundary between differing ocean and sediment systems (Obelcz 2014). These geomorphic features have played an important role in the transport of sediments from the continental shelf to the deep sea floor, especially during low sea level, high river flows, and major storm events (Obelcz 2014).

Other. Several other physical habitat types occur within the continental shelf, including loose sediment soft bottoms such as sand, silt, and non-compacted mud flats. Pebble and gravel beds are also prevalent habitats.

Soft bottoms in the ocean environment provide a myriad of services to the system. The natural, biogeochemical processes of soft bottom sediments allow for the deposition, resuspension, and recycling of nutrients, toxins, and organic material (Deaton et al. 2010). These substrates provide habitat for benthic microalgae, which can aid in the stabilization of the sediments (Deaton et al. 2010). Along with the microalgae colonies that provide important primary production in these systems, in the study area for the project described herein, more than 600 species of benthic invertebrates and over 100 polychaete taxa have been identified; bivalves, crabs, and amphipods are also present in these soft bottom habitats (Deaton et al.

2010). The NCCHPP highlights the importance of the presence of these species and benthic communities as foraging areas for larger biota (Deaton et al. 2010).

To avoid damage to the habitat as well as the gear, bottom trawling necessitates the avoidance of rugose habitats. Areas with or around structure, such as rocky outcrops, oyster beds, and reefs are avoided because of the risks of entanglement and snagging. Canyons and deeper waters may be avoided due to limitations with rigging cable lengths. Damage to the habitat is also a concern in these areas, because of the disruption that can be affected by the deployment of a trawl.

Habitat Parameters

Habitats in aquatic systems are also frequently delineated through individual or combined parameter metrics. Parameters used in my study to delineate habitat include water depth, sediment grain size, sediment percent organic carbon content, salinity, water temperature, air temperature, bottom type as defined by Shepard code, and time of day. These aspects can each play distinct and overlapping roles in the geospatial and temporal viability of habitats for different species. The habitat parameters discussed here are all interconnected to a degree, and the various combinations of ranges of these factors can create a plethora of habitat types within the study area.

Salinity, water temperature, air temperature, and depth. The water quality parameters of the study area are not only affected by the influence of the Labrador and Gulf Stream Currents, but also the Artic Oscillation, the North Atlantic Thermohaline Circulation (THC), and freshwater input and potential sediment loading from large North American coastal rivers. In the immediate vicinity of the Albemarle and Pamlico sounds, which are fed by large coastal rivers, the Cape Fear River, and the Chesapeake Bay, the extent of freshwater input and sediment loading into the

system is highly likely to be increased, and the point salinity significantly decreased following heavy rain events.

Salinity in the Atlantic Ocean generally ranges between 33-37 psu (preferred salinity units). Abnormal or intense fluctuations in salinity are often noted and studied (such as the 'great salinity anomalies' recorded in the mid and late 1900s). Considering the properties of water, the salinity of any area will depend on the temperature and be co-dependent on depth, time of day, location and strength of the prevailing currents, and freshwater input.

Water temperature is dependent, to an extent, on the depth of the water (i.e., generally the deeper the water, the cooler the temperature). Water temperature at the surface (<10 m) is also impacted by other factors such as the prevailing currents and time of day. Warm waters pulled from the Gulf Stream current can create significant thermoclines in otherwise colder winter waters, while the colder waters from the Labrador Current can push the warmer waters higher in the water column. Wind currents on the surface, as well as ambient air temperature, can also create a mixing effect that impacts surface water temperatures. Daylight strength and duration warms the photic zone, which can then mix with the lower waters via the currents, although strong thermoclines will prevent mixing. Temperature and illumination are also interdependent in their effect on planktonic processes, productivity, and the metabolic and activity of fishes (Moore 1966).

The ambient air temperature close to the water's surface is likewise affected by the surface water temperature. Air currents and major ocean currents are interlinked to a degree, and the surface interchange can influence the temperature of the water in the upper column.

With increased depth, the water temperature normally decreases. Thermoclines may form within the upper layers of the photic zone, influenced strongly by the prevailing ocean currents, with

deep cold water circulating beneath the shallow warm waters. Increasing depth also brings an increase in hydrostatic pressure, at a rate of 1 atmosphere every 10 meters. Thus, the rate at which organisms can safely traverse the pressure gradient is determined by their ability to compensate for the changes in hydrostatic pressure. Physoclistous fishes, with closed swim bladders but with rete mirabile and oval bodies, may move vertically in the water column at different rates than physostomous fishes, which have the ability to fill and deflate the swim bladder via the digestive tract (Cailliet, 1996). Deeper waters are often avoided with trawling due to restrictions of the rigging lengths and out of concern for captured organisms that may suffer barotrauma.

Sediment type, sediment grain size, and sediment percent organic carbon content. The type and properties of the sediment in an area can have a profound influence on the species that utilize it. Sediment types are most commonly defined by Shepard code, or a modified version that includes hard rock/solid structure along with the sand-silt-clay ratio basis. Related to the type of sediment is the grain size of the sediments. These two metrics provide physical and geomorphic descriptions of habitat. Physical and geomorphic factors in regard to marine systems can be vital to the presence of species which rely on the structure of their habitats for predation and avoidance of predators. Many organisms are sediment size-dependent (Gray 1974, Snelgrove 1994, Bax 1999), creating niche habitat for prey species that predators prefer. Many factors may contribute to the presence or absence of organisms in relation to specific sediment types and sizes (Grey 1974, Cammen 1982, Anderson 2008); however, it is important to take the sediment type, grain size, and percent organic carbon content into consideration for habitat types. This is not only for those species that are niche specific to certain ranges of these parameters, but also

because these parameters may offer insight into the overall habitat diversity available to organisms within a system.

The ranges and locations of the biogeochemical facet of habitat and percent organic carbon content of the sediment in a particular area can give an indication of the productivity of the system. Ocean soft sediments allow for the biogeochemical processes of deposition, resuspension, and recycling of nutrients, toxins, and organic materials (Deaton et al. 2010). Species may exhibit strong relationships to areas with certain ranges of sediment percent organic carbon content. Microalgae, benthic and epibenthic organisms, and forage species assemblages are evidenced to be co-dependent in these environments (Cammen 1982, Levin et al. 2001, Anderson 2008). Percent organic carbon content of the sediment, in some instances, may be more of an indicator of habitat preferences of species than sediment type or grain size (Snelgrove 1994, Levin et al. 2001, Anderson 2008).

Time of Day. The time of day during which species are captured can typically reflect activity of the species, predictably influenced by the movement of prey items (either plankton or other fishes) and water temperature. Diel movements (notably in the photic zone) are noted as a factor in presence or absence of a species in given habitat types, particularly when attempting to characterize habitat (Snelgrove 1994, Levin et al. 2001, Anderson 2008). Photo-periods, or the diel cycle limits of day and night, are well known to affect the natural biological behaviors of fishes – influencing the temperatures of surface waters, growth rates of fry and juvenile fishes, as well as triggering resting stages, spawning, and feeding behaviors. Thus, time of day can be considered an important parameter for habitat, especially when examining the spatial variation throughout other multiple parameters.

Notes on Taxa

The taxa of interest in my analyses of the Cooperative Winter Tagging Cruise data exhibit a wide range of life history characteristics and behavioral patterns. Taxa included in my study, by groups, are: Striped Bass (*Morone saxatilis*); Atlantic Sturgeon (*Acipenser oxyrinchus oxyrinchus*); Spiny Dogfish (*Squalus acanthias*); skates (Winter - *Leucoraja ocellata,* Clearnose - *Raja eglanteria,* Little - *Leucoraja erinacea*); flounders (Summer – *Paralichthys dentatus,* Southern - *Paralichthys lethostigma*, Windowpane - *Scopthalmus aquosus,* Fringed - *Etropus crossotus*); clupeids (Blueback Herring - *Alosa aestivalis*, Atlantic Herring - *Clupea harengus,* American Shad - *Alosa sapidissima,* Hickory Shad - *Alosa mediocris,* Alewife - *Alosa pseudoharengus,* Atlantic Menhaden - *Brevoortia tyrranus*); Red Drum (*Sciaenops oscellatus*); and other sciaenids (Atlantic Croaker - *Micropogonias undulatus,* Spotted Seatrout - *Cynoscion nebulosus*, Weakfish - *Cynoscion regalis*).

For the purposes of this project, the organisms examined are defined as an assemblage – delineated by their places within the near-shore community and their taxa (Figure 1). This distinction is taken from the practical use of ecological terms found in Fauth et al. (1996). The use of the term "assemblage" within the context of my thesis is not intended to denote ecological significance of, or complete groups within, the community. Striped Bass, Atlantic Sturgeon, and several clupeid species examined in this project exhibit anadromous spawning patterns. Anadromous species spend most of their adult lives in the ocean and return to freshwater rivers and streams to spawn. The other taxa examined in this project generally exhibit ocean or estuarine spawning, and currents may carry eggs and larvae into estuarine nursery environments to develop. All the taxa of interest in my study undergo migrations. Some migrations may be

small, such as the inshore-offshore movements of flounders (Sackett et al. 2007), or the extensive latitudinal migrations of Spiny Dogfish (Campana et al. 2008, Cudney 2015).

Striped Bass

Striped Bass is an upper level, opportunistic predator that may compete with other piscivores (Setzler 1980, Overton et al. 2008). Overton et al. (2008) identified and described the diet of the larger migratory adult Striped Bass in their offshore wintering grounds. Atlantic Menhaden and Bay Anchovy (*Anchoa mitchilli*) have been noted as regular prey items (Setzler 1980, Overton et al. 2008, Overton et al. 2009). In a review of diet data from several studies, Walter, III et al. (2003) were able to compile a base standard diet composition. Walter, III et al. (2003) noted regional and seasonal differences, and highlighted diets consisting mostly of sciaenids, amphipods, and decapods, and clupeid dominated diets. By utilizing samples obtained from trawl surveys, Waldman et al. (2012) were able to use mitochondrial and nuclear DNA genotypic frequencies to characterize Striped Bass from winter aggregations and showed support for genetic mixing between the breeding stocks in the areas sampled.

The Atlantic States Marine Fisheries Commission is currently undertaking the completion of the 2018 assessment of the female spawning stock biomass (SSB – an indicator metric used for assessing stock health and fishing pressure sustainability). As of 2016, the stocks of Striped Bass were not considered overfished, and overfishing was not taking place; however, the SSB has continued to decrease since 2004 (ASBTC 2016). The spawning stock is expected to recover even while falling short of the SSB threshold (the limit at which the female spawning stock biomass must be sustained for a stock to be considered stable under fishing pressure) given current regulations; some of the decrease seen the past few years is due to the strength of the recent year class recruitment to the spawning stock cohort (ASBTC 2016).

Atlantic Sturgeon

Four of the five distinct population segments (DPS) of Atlantic Sturgeon on the United States East Coast are currently listed as endangered under the federal Endangered Species Act. The other is listed as threatened (Table 1). At least two of these can be found within the study area for this project: the Chesapeake Bay and Carolina distinct population segments (NOAA 2012a, NOAA 2012b, and NOAA 2013). NOAA has identified current threats to the species in the estuaries and ocean environment: bycatch, habitat degradation, and habitat loss from human activities such as dredging.

Laney et al. (2007) reported insight into the life history of and habitats used by Atlantic Sturgeon, especially regarding sub-adults and juveniles. Atlantic Sturgeon captured were found over gravelly type bottoms, in shallow shelf waters (being most frequently found in waters less than 14 m deep), and in waters averaging 6.7 °C with an average salinity of 31.5 ppt (Laney et al. 2007). The necessity for additional information about, and enhancement of, Atlantic Sturgeon habitat and diet was also detailed by Laney et al. (2007). Dunton et al. (2010) reported that Atlantic Sturgeon engage in large-scale migrations: northward in the spring and southward in the fall. Dunton et al. (2010) partially identifies essential habitat for juvenile Atlantic Sturgeon as coastal waters less than 20 m deep, adjacent to estuaries. This information supports the findings of Laney et al. (2007) and helps to refine habitat characteristics for this species. Atlantic Sturgeon are opportunistic bottom feeders using their protractile mouths and sensory receptors on their snouts to feed on mollusks, insects, crustaceans, and even fishes (Bain 1997, Haley 1998, Miller 2004). Juvenile Atlantic Sturgeon have been shown to feed on polychaetes, isopods, and amphipods (Bain 1997, Haley 1998, Miller 2004).

Spiny Dogfish

Spiny Dogfish (*Squalus acanthias*) is a small, slow-growing, slow to mature, highly migratory, coastal shark (Nammack et al. 1985). Spiny Dogfish overwinter off the coast of North Carolina before migrating northward to the coastal waters of Cape Cod for the summer months (Rulifson and Moore 2002). Some dogfish will migrate as far north as Canada (Rulifson and Moore 2002). Bowman et al. (2000) and Bangley and Rulifson (2014) identified many of the potential prey items consumed by Spiny Dogfish depending on size, habitat selection, and prey availability. Finfish, squid, decapods, and other crustaceans were all found to be a part of the Spiny Dogfish diet (Bowman et al. 2000). However, Bangley and Rulifson (2014) demonstrated that menhaden and bay anchovies have a high rate of presence in the diets. The key factors in diet selection for Spiny Dogfish may be size of the prey and habitat selection (Bangley and Rulifson 2014). There is evidence that Spiny Dogfish undergo more extensive migrations than previously thought – intermingling with Canadian and European stocks (Campana et al. 2007; Cudney 2015). Dell'Apa et al. (2014) reported sex differences in distribution and abundance from shore near Cape Cod, with some evidence that shifts in those distributions occurred in a diel pattern. The Spiny Dogfish is highly marketable as a food item and is being increasingly discussed on an international scale regarding managing the various stocks and economic markets (Dell'Apa et al. 2013). This is also a species that can severely affect the ecology of the system it inhabits (Bangley and Rulifson 2014). It is currently fished under a quota system that has been consistently underutilized (ASMFC 2018), likely contributing to the rebuilding and rapid recovery of the stock. The implementation of the reauthorization of the Magnuson-Stevens Act also contributed to the recovery of the stock in the United States, as foreign fishing fleets were

no longer able to harvest the massive quantities of Spiny Dogfish for commercial production they had in years previous (ASMFC 2018).

Skate Species

Little information is known about the age and growth of skate species – demersal elasmobranchs, which like the Spiny Dogfish use internal fertilization; however, skates are oviparous. Skates tend to be omnivorous, feeding on crustaceans, mollusks, worms, and even some fishes (Bigelow and Schroeder 1953). While not currently highly sought after as a commercial or targeted recreational species, these species may be of importance ecologically in the system.

Flounders

Flounder species, particularly Summer Flounder, garner significant attention due to their importance as a commercially harvested fish. These species have been shown to exhibit inshore-offshore movements (Sackett et al. 2007), utilizing estuarine environments between spring and fall, and emigrating into near and offshore shelf waters during the winter months. Sackett et al. (2007) found variation in the movement rates and patterns of Summer Flounders emigrating from an estuary system, noting that during nighttime emigration, flounders were in deeper waters and migrated at slower rates compared to daytime emigrating individuals. There is also evidence that tidal stage may play a role in the time of movements with ebb tides being most utilized (Sackett et al. 2007).

Flounder burial behavior or settlement, an adaptation for predation strategy, has been shown to be influenced by time of day, temperature, sediment type, and tidal stage (Keefe and Able 1994). Summer Flounder adults have shown preferences for more compact sand bottoms and salinities greater than 28 psu (Able and Kaiser 1994). Differentiation between the diets exists for the various species included in this taxa group. While the diets of Summer Flounder were comprised

of over 80% fishes (including herring) and cephalopods, Winter Flounder diets comprised mostly of polychaetes and amphipods, with over 13% anthozoans (Link et al. 2002). Windowpane diets were primarily shrimps and benthic invertebrates, with fish being secondary prey items (Link et al. 2002).

The latest assessment for Summer Flounder indicates that while the stock is not currently overfished, overfishing is occurring, and the stock has been in decline since 2010 (ASMFC 2018). This species along with associated flounder species are commercially and recreationally important and currently suspected of being highly poached (ASMFC 2018).

Clupeids

The species in this taxa group all exhibit large schooling behaviors and have elongated, laterally compressed bodies. Most of the clupeid species are forage fish, suitable for predation by larger and more recreationally sought-after species. Some species however, such as the American Shad, have rich histories as major economic staples for coastal communities. Menhaden are still commercially sought after for products such as fish meal, fertilizer, and fish oil. All these species are planktivorous; the Blueback, Alewife, Hickory Shad, and American Shad are anadromous (ASMFC 2018). These species, specifically the American Shad, Blueback, and Alewife, have not recovered or shown any indication of recovery after the stock collapses in the late 1900s; petitions to have Blueback and Alewife listed under the Endangered Species Act have been unsuccessfully attempted, however these attempts have spurred on new investigations into the status of these stocks (ASMFC 2018). Potential threats to this taxa group revolve mostly around spawning habitat accessibility and availability in freshwater systems, and overharvest in marine environments.

Red Drum and Other Sciaenids

The Red Drum (*Sciaenops ocellatus*) is the most highly sought-after species for recreational fishing in the South Atlantic, although some commercial harvest does occur, and two populations are recognized (ASMFC 2018). A study by Bachelor et al. (2009) provided some evidence that movement patterns of Red Drum may be age-dependent. They also noted that there were instances of fish migrating northward into Virginia and Delaware waters (Bachelor et al. 2009). While federal waters currently remain under moratorium for commercial harvest, recreational harvest of the species continues, and no recent definitive stock assessment has been completed due to lack of data for specific year classes. Peacock (2014) showed evidence that the diet of Red Drum in North and South Carolina waters was dominated by decapod crustaceans and clupeids. Other sciaenids included in my analyses are representative of small to medium-sized fishes that are typically bottom-dwellers. These species all feed on benthic organisms such as polychaetes, decapods and other crustaceans, mollusks, and fish (Bowman et al. 2000, Powers 2012). They do not exhibit large-scale migrations but have been shown to utilize shallow near-shore and estuarine seagrass beds (ASMFC, Bowman et al. 2000, Powers 2012).

CHAPTER 2: THE COOPERATIVE WINTER TAGGING CRUISE: A LONG-TERM DATASET WITH A SHIFTING EMPHASIS

The History and Evolution of the Cooperative Winter Tagging Cruise

Since 1988 the Cooperative Winter Tagging Cruise (hereafter Cruise or CWTC) has been conducted annually (except the years 2011, 2012, and 2014) in the continental shelf waters off the North Carolina and Virginia coasts. It began as part of an effort by the Atlantic States Marine Fisheries Commission (ASMFC) to assess the migratory Striped Bass population in its ocean wintering grounds using a coastwide mark-recapture study. As originally designed, the CWTC employed twin trawls (Figure 2) to capture Striped Bass; in recent years the CWTC employed both trawling and hook-and-line sampling to collect specimens for tagging. The National Oceanic and Atmospheric Administration (NOAA) vessels R/V Oregon II, R/V Albatross IV, R/V Chapman, and the National Science Foundation (NSF) R/V Cape Hatteras were used to conduct the trawling portions of the Cruise. The CWTC is the only winter monitoring of its kind in the mid-Atlantic region. Only data from the trawling portions of the Cruise were examined in my analyses.

In the months of January and February (Table 2), from 1988 through 2010, and 2013, the Cruise conducted trawling in the shallow shelf waters between Cape Lookout, NC and Cape Charles, VA. Only 2011 and 2012 saw an interruption in Cruise activity due to a lack of funding for trawling vessel use. The number of samples (trawl tows) per cruise ranged from a low of 53 (1992) to a high of 329 (2008). Vessel and trawl specification are summarized in Table 1. The Cruise was manned each year by the vessel crew and volunteer teams of scientists and researchers.

Trawling was used in all years to capture and tag Striped Bass from the migrating winter stock. From 1996 to 2013, fishes other than Striped Bass and Atlantic Sturgeon were identified to the

lowest possible taxon, enumerated, and released. Subsamples of these, along with rarely encountered species, were measured for length and weight. Species designated for tagging, which varied depending on the researchers on board, were placed in flow-through saltwater holding tanks on the deck and processed as quickly as possible to minimize stress to the fishes. A summary of species and taxa that were recorded consistently for presence is presented in Table 3. The Cruise has also functioned as a platform for collaborating researchers working on various species including Summer Flounder, Spiny Dogfish, other elasmobranchs, horseshoe crabs (*Limulus polyphemus*), and several skate species.

Water quality parameters of salinity (psu) and depth (fathoms, feet, or meters) were recorded aboard vessels for each trawl sample either by manual sampling, transducers, or sensors mounted on the hull or keel of the vessel. Environmental data, including wind speed (knots) and direction, air temperature (°C), water surface temperature (°C), and sea state were also recorded for each year.

Hardcopies of the CWTC bridge and deck logs were archived each year with one of the Cruise partners: the Maryland Department of Natural Resources (1988-2013). Information from the bridge and deck logs, as well as the catches, were entered into electronic format with moderate consistency. Only catches of Striped Bass and Atlantic Sturgeon were dependably entered from trawl catches, since those were the primary target species. In recent years, additional species were more consistently recorded on hard copies, but not entered into electronic dataset format. This created a large gap in the information available for analysis to Cruise partners.

Research from the Cooperative Winter Tagging Cruise

The CWTC has served as a productive platform for Striped Bass winter aggregation research, resulting in multiple studies on diet, movements, and genetics (Overton et al. 2008, Overton et al. 2009, Waldman et al. 2012). Atlantic Sturgeon research has also benefitted by additions to the life history and habitats used by sub-adults and juveniles (Laney et al. 2007) from the Cruise, with at least two of the DPS regions represented in the study area extent. Bangley and Rulifson (2014), Cudney (2015), Campana (2007), and Dell'Apa et al. (2013, 2014) were able to increase the understanding of the movements, diet, and habits of Spiny Dogfish during their winter aggregations, and intermingling of populations from the data obtained from the Cruise. Evidence for red drum (*Sciaenops ocellatus*) movement patterns being age dependent, and northward migrations (Bachelor et al. 2009) was aided by the Cruise as a platform for tagging of the individuals captured. Horseshoe crab tagging aboard the Cruise occurred from 2003-2016, adding to the ASMFC and Maryland Fish and Wildlife Conservation Office efforts for the conservation of this species.

As CWTC data are in the public domain and accessible to those who request it, many researchers choose to use the available data to bolster their own studies, verify laboratory findings, or generate hypotheses for which they would request data to be collected on future Cruises.

Goals and Objectives of my Study

Chapter 3 of this thesis describes the types and disposition of data collected by the CWTC trawling, models habitats by parameter ranges, and describes the trends in habitat use and distribution of the winter fish assemblage inhabiting environments off the Carolina Outer Banks and Virginia. We wanted to determine if a long-term trawl survey could be used to ascertain

changes in fish assemblage, habitat use, and abundance of target species. If so, then results may provide additional evidence for effects of fishing, harvest, and climate change on nearshore coastal resources.

Little published documentation is available on how migratory fishes utilize various continental shelf habitats during the winter months. This lack of understanding can be regarded as a key limiting factor when assessing potential changes in population sizes or potential recruitment models (Caddy 2013). By combining the trawl catch data with Geospatial Integrated Systems (GIS) map layers, we increased the power of the CWTC data set to better interpret habitat use of the fish assemblage.

This project encompasses several goals in relation to the data available from the CWTC. These goals included the inclusion of the data into a database format compatible with other long-term marine monitoring studies and surveys, determining patterns in the taxa capture information, analyzing for habitat use, and analyzing for shifts in these patterns over time. The final goal of this project was to present the results of these analyses to researchers, management, and funding agencies to encourage the continuation of this long-term effort, as well as to generate and test new hypotheses regarding these taxa and related taxa within this system.

This was accomplished by completing four major objectives. 1) Tow and fish data from the CWTC were converted into electronic format. 2) Catch rates for taxa of interest were calculated. 3) GIS layers were created for habitat parameters and Cruise data, and then spatially analyzed. 4) Combined Cruise and spatial analysis data were examined for correlations between taxa and locale including habitat variables at the sampling location; habitat use by taxa and assemblages; and trends over time in spatial variability, assemblage, and habitat use. These objectives allowed

for the identification of patterns in the catch data, habitat parameters, geographical shifts in the winter distribution, correlations to other taxa, and correlation of habitat use to taxa of interest.

Hypotheses

H_1: Catch per unit effort (CPUE) for Striped Bass, Atlantic Sturgeon, Spiny Dogfish, flounder, and skates will increase over time, but will decrease over time for clupeids.

H_2: Habitat ranges utilized will be similar for Striped Bass, elasmobranchs, Atlantic Sturgeon, and flounders.

H_3: Habitat utilized by taxa of interest will be consistent across years.

H_4: Striped Bass will not co-occur at a significant rate with elasmobranchs, Atlantic Sturgeon, or flounders.

H_5: Distributions of taxa throughout the study area will not remain stagnant throughout the time series.

CHAPTER 3: ASSEMBLAGE AND HABITAT USE ANALYSES FROM THE COOPERATIVE WINTER TAGGING CRUISES

Introduction

While geographic information systems (GIS) have been used extensively in terrestrial applications for decades, application of the technology had a much slower start in marine and fisheries circles. Several of the main issues facing fisheries can be characterized as spatial: ecosystem destruction and habitat degradation; areas of pollution; concentrations of fishing effort; efficacy of management systems; and climate change impacts on marine community distribution (Meaden 2000).

Fisheries and marine sciences exist in a dynamic setting where the actual environment as well as many of the items within it are constantly moving independently (Meaden 2000); thus, even the most complex modelling endeavors with the best data cannot accurately predict across time and space simultaneously, but only for specific areas or times (Valavanis 2008). Because of this, most of the growth of GIS as an application to fisheries between the late1980s and 2000 was slow and revolved around mapping of habitats and system productivity, human impacts, and resource management (Meaden 2000). With advances in GIS technology and greater accessibility to datasets on a global scale, a wider range of applications is now possible – including combining applications in a dynamic environment to the aid of resource management. These models may result in direct and indirect causal linkages, or only coincidental and temporary ones (Valavanis 2008).

The use of different methods of combining data with sampling, along with modelling processes, create similar results as long as representative sampling and a robust validation of the model is utilized (Valavanis 2008). The use of publicly available datasets, as well as the combination of those data with fisheries sampling to create custom models for specific issues or ecosystem-

based management strategies has been established as both common and acceptable (Valavanis 2008).

The objectives for this section of the study included the creation of habitat parameter models and layers from the Cruise data in GIS, the spatial joining of the models with the Cruise data, and the categorization and spatial analysis of the data. These objectives allowed for the classification of habitat parameter ranges for the species examined.

Methods

Cooperative Winter Tagging Cruise

The CWTC uses bottom trawls (one or two depending on the vessel platform used) pulled at speeds between 1 and 5 knots for 10 to 30 minutes. The National Marine Fisheries Service constraints due to concern for endangered and protected marine life (sea turtles) prevent longer tows; however, operating without a turtle excluder device (TED) was permitted because of the combined factors of temperature, tow duration, location, and time of year that sampling was conducted. Tows were conducted 24 hours a day for the duration of the Cruise, barring equipment malfunction/snagging, inclement weather, or other unforeseen circumstances.

Once trawls were retrieved to the deck of the vessel, cod end ties were released and deck crews sorted through the catch while recorders on watch noted species or lowest identified taxa, sex, sizes, and tag numbers as the catch was processed. Only after catches were fully processed did another trawl tow begin, minimizing the possibility that specimens would be recaptured.

Habitat parameters were used in conjunction with CWTC data in spatial and statistical analyses. The factors of water depth, salinity, water temperature, percent organic carbon of the sediment, sediment type, sediment grain size, and time of day were used as parameters to categorize the habitats used by fishes captured.

For the purposes of this project, and to facilitate the analysis of temporal trends within the data series, Cruise years were divided into an early period and a late period. The early period is classified here as the years 1988-1995, and the late period as encompassing the years 1996-2013. The Cruise data examined here were from both the early (1988-1995) and late (1996-2013) periods. The summary file of data from the Cruise hard copies is presented in Appendix A.

GIS Layers and Habitat Models

Variables used to delineate habitat within the confines of this project included time of day, water depth (meters), surface water temperature (°C), surface salinity (psu), air temperature (°C), sediment grain size (phi), sediment percent organic carbon content (%orgC), and sediment type (Shepard Code). Surface water temperature and salinity measurements were taken at less than 10 meters depth.

GIS layers and models were created using ArcMap™ in ESRI ArcGIS® 10.1. Datasheets for the individual Cruise years were imported into the data frame as stand-alone tables, then exported as tables within the mapping software to create object identification fields (OID). Vector point layers were created using the starting latitude and longitude coordinates for each tow. Coordinate notation, in DD_2 format, was converted for each layer into WGS_1984_Web_Mercator_Auxiliary_Sphere to match the projection system of the base layer. Output coordinate points were rejoined with the point layer data by tow number. All geographical coordinates were expressed in decimal degrees. Layer fields from Cruise data along with their metadata have been included in Appendix B.

The ‘Oceans’ basemap from ESRI ArcGIS® 10.1was used as the base layer. The WGS_1984_Web_Mercator_Auxiliary_Sphere projected coordinate system is the default projection of this layer. The coordinate notations for all subsequently added layers were

converted to, or layer projection transformed, into WGS_1984_Web_Mercator_ Auxiliary_Sphere.

After the Cruise tows were plotted, an analysis mask was created by drawing a polygon along the shoreline of the basemap from north of the northernmost Cruise tow to south of the southernmost Cruise tow, and extending to the first continental shelf break denoted on the basemap. The polygon graphic was then converted to a shapefile for use as the analysis mask and to delineate the study area for the project (Figure 3).

The alt_ext shapefile (metadata in Appendix C), is an extracted dataset from the 'usSEABED Atlantic Data' files, pertaining to the entire United States East Coast and containing data on sediment type and grain size, water depth, and percent organic carbon (USGS 2005). This shapefile was downloaded from the United States Geological Survey (USGS) website's public data catalog and imported into the dataframe, expressed as a vector point layer. The shapefile was then intersected with the analysis mask (Figure 4) and copied into the dataframe to produce individual layers for each of the habitat parameters of water depth (m), sediment type (Shepard Code), sediment grain size (in phi units), and percent organic carbon (%orgC). Spatial interpolation was then used to produce prediction models, allowing the assignation of habitat parameters to CWTC tows within the study area.

The diagnostic statistics of the root mean square (RMS) error and standardized root mean square (RMS-S) error of cross-validations of interpolation models were examined for of all the spatial interpolations conducted, and compared with the predicted error, standardized error, and normal QQ plot distributions produced by the interpolation methods to choose the best fitting model. Methods reports for all spatial interpolations are reported in Appendix D.

The water depth layer (Figure 5) was created as a prediction map through local polynomial interpolation, after 'no data' values were removed from the attribute table. A stand-alone table

was exported into the dataframe, and a new point vector layer was created following the same methods from the Cruise layer creation. The model parameters for the local polynomial interpolation included a first order polynomial with an exponential kernel function; advanced parameters were not enabled. Prediction errors resulted in an RMS of 71.81 and an RMS-S of 0.956 (n=917), and the average standard error was 76.69. The prediction map was exported into a geostatistical layer with filled contour type, then intersected with the analysis mask. Once restricted to the analysis mask, the maximum predicted depth ranged from 9 to 2000 meters within the study area. This predicted depth range includes portions of the study area located within the analysis mask that are beyond the continental shelf margin, in the transition zone into ocean depths including some canyon formations that traverse the shelf break.

The sediment type layer, denoted by the categorical parameter of Shepard Code, was mapped by creating Theissen polygons from the Shepard Code assigned to the data points, dissolving the boundaries between like categories, and then intersecting the resulting layer with the analysis mask (Figure 6). Within the study area, 11 distinct sediment types were identified. Polygons that represented locales with no available data to match the spatial interpolation parameters were included in the Shepard Code category of 'Other' for bottom type. Sediment types included the following Shepard Codes: clayey sand; clayey silt; gravel; gravelly sediment; sand; sand silt clay; sandy silt; sediment; silt; silty clay; and silty sand.

The sediment grain size layer (Figure 7) was created as a prediction map through local polynomial interpolation, after 'no data' values were removed from the attribute table. A new stand-alone table was exported into the dataframe, and a new point vector layer was created using the same methods as for creating the Cruise data layers. The model parameters for the local polynomial interpolation included a first order polynomial with an exponential kernel function; advanced parameters were not enabled. Goodness of fit was 1.37 (RMS), based on

cross-validation results (n= 709). Prediction errors resulted in an RMS-S of 0.987, and the average standard error was 1.40. The prediction map was exported into a geostatistical layer with filled contour type, then intersected with the analysis mask. Once restricted to the analysis mask, the minimum predicted grain size ranged from -0.155 to 6.197 phi. Grain sizes were defined by bins (defined in Table 4). Bin 1was excluded because no fish were captured in that range.

The percent organic carbon (%orgC) layer (Figure 8) was also created as a prediction map through local polynomial interpolation, after 'no data' values were removed from the attribute table. A new stand-alone table was exported into the dataframe, and a new point vector layer was created using the same methods as for creating the Cruise data layers and the sediment grain size layer. The model parameters for the local polynomial interpolation included a first order polynomial with an exponential kernel function; advanced functions were not enabled. Goodness of fit for this model was 1.22 (RMS), based on cross-validation results (n= 278). Prediction errors resulted in an RMS-S of 0.802, and average standard error was 1.58. The prediction map was exported into a geostatistical layer with filled contour type, then intersected with the analysis mask. Once restricted to the analysis mask, the minimum predicted sediment percent organic carbon content ranged from 0 to 2.54%. Percent of organic carbon content of the sediment was defined by bins (Table 5).

All layers created were spatially joined with the point shapefiles of the Cruise tows to allow each individual tow to be assigned a water depth from the model, in addition to that which was recorded on board the vessel. The spatial joining also assigned each Cruise tow with values for sediment type, sediment grain size, and sediment percent organic carbon. Parameters for the spatial joins of habitat layers to Cruise tow layers were intersecting one-to-one joins, keeping all target features, and with a search radius of one-half (0.5) of a mile.

Spatial Analyses and Regressions

Spatial trends for taxa of interest were assessed by identifying the central latitude of the distribution of captured individuals for that year. Tows that had recorded catches for the taxa were selected from all tows from each Cruise year and exported. The minimum, maximum, mean, and median latitudes and longitudes, along with standard deviation, total number of fishes captured, and the number of tows containing individuals of each taxon were calculated for each year (Table 6). The median latitude, by year, was mapped as the central latitude of distribution for each taxon. The range of latitudes for each taxon was used to delineate the north-south span of the distribution observed each year by mapping the latitudinal median as a line segment the length of the latitudinal range drawn along the longitudinal plane. (Figure 9).

Shapiro-Wilk's test for normality was applied to the calculated coordinates, with $\alpha = 0.05$. H_0 for the Shapiro-Wilk test was that the median latitude follows a normal distribution. The Grubbs test was used to identify outliers for each taxon, with $\alpha = 0.05$. H_0 for the Grubbs test was that there were no outliers in the data. P values and Z-scores were used to determine rejection of the null hypothesis.

Linear regressions were performed on the median coordinates for all taxa examined and included the 95% confidence intervals.

Taxa Co-Occurrence

The co-occurrence of taxa within Cruise tows was calculated to be co-occurring if the presence of any individual was recorded as captured. Matrices were created for each year of the Cruise, enumerating the number of tows in which taxa co-occurred (Table 8).

Catch per Unit Effort

For the purposes of this analysis, effort was defined by tow miles (*M*), where:

$$M = 1.151TSN$$

and, *T* = tow duration (hours); *S* = tow speed (knots); and *N* = number of nets deployed. Tow speed in knots was converted to miles per hour using the conversion of 1.151 knots to 1 mile per hour.

Catch per unit effort (CPUE) was assessed for each taxon using the following equation:

$$CPUE = \frac{n}{M}$$

where *n* is the minimum number of individuals captured, and *M* is tow miles. This allowed for CPUE to be assessed for the individual tow, as well as for the duration of the Cruise, by year and overall.

Results

Descriptive Statistics of Cruise Tows

A total of 4,057 tows from the Cruise were examined for the early and late periods (1988-1995; 1996-2013). Ten distinct bottom types were sampled. All sampling locations ranged in minimum depth from 5.6 to 32.6 meters. The most common depth range sampled was 11-20 meters, represented in 84% of tows.

Tow locations overlaid with habitat parameter models showed variation in the ranges sampled. Grain size of sediments ranged from 1.6 to 4.4 phi. The percent of organic carbon in the sediment varied from 0.086 to 2.535%. Out of 3,506 tows conducted on identified bottom types, the most common sampled was SAND (73.7%). The most common grain size range that tows were conducted over was 2.602-3.255 phi (56.1%, n=4,057, bin 6), and the most common range of organic carbon was 0.217-0.384% organic carbon (54.5%, n=4,053, bin 3).

Recorded salinities ranged from 11.2 to 40.7 ppt in the late period, with 28 to 33.0 ppt being the most frequently recorded range (89.3%, n=2,643). No salinity data were available from the early period. Water temperatures ranged from 0 to 19.2°C, with 4.5 to 10°C being the most commonly recorded (77.7%, n=4,057). Air temperatures during sampling ranged from -5 to 19.1°C, with 4-10°C most commonly recorded (60%, n=4,057). The descriptive statistics of habitat model parameters sampled for each year of the Cruise are presented in Table 7.

Descriptive Statistics of Taxa Habitat

The descriptive statistics represent only those tows from the Cruise that were included in the spatial analysis. All descriptive statistics for taxa habitat use are shown in Figures 9-73. Majority catch percentages by habitat parameter range, for each taxon, are summarized in Tables 9-16. Striped Bass were recorded as present in 2,362 tows, with a total of 48,300 fish throughout both time periods. From 179 tows, 252 Atlantic Sturgeon were captured. A minimum of 72,280 Spiny Dogfish were recorded as captured from 2,462 tows. At least 48 individual Red Drum were recorded as present in 42 tows. Present in 489 tows, a minimum of 1,571 other sciaenid fishes were captured. A minimum of 6,757 flounder taxa were recorded as present in 1,454 tows. Clupeid species were recorded as present in 834 tows, totaling at least 9,966 fishes. A minimum of 6,319 skates were recorded as present in 1,431 tows.

Overall, more than 90% of each taxon was captured in the 11-21 meters range. Except for flounder species, all taxa showed a shift in the highest percentages of catch to deeper water (between 3-11 meters increase in depth) between the early and late periods. Red Drum showed the most difference in depth between the time periods – from the majority (33% and 50%) being captured from 0-13 m (early period), to the majority (40% and 31%) being captured between 14-21m (late period).

More than 99% of each taxon were captured in habitats with a sediment grain size between 1.6-3.3 phi throughout both time periods. Percentages of catch for Spiny Dogfish, clupeids, and skates did not have a notable shift in habitat sediment grain sizes between the early and late periods. Striped Bass and other sciaenids showed an increase of percent capture in habitat with larger grain sizes. Atlantic Sturgeon had a slight increase to the larger grain sizes (2.2-2.6 to 2.6-3.3 phi) between the early and late periods, as did Red Drum. The highest percentages of catch for flounder species shifted from a majority (81%) in the larger grain size (2.6-3.3 phi) in the early period, to a more even distribution throughout the smaller grain sizes (1.6-2.6 phi) in the late period (50% from 2.6-3.3 phi).

Throughout both time periods, more than 75% of each taxon was recorded as captured in habitats with the organic carbon content of the sediment ranging from 0.2-1.3%. Striped Bass, Atlantic Sturgeon, Spiny Dogfish, other sciaenids, and skates showed no notable shift between the time periods –the highest percentages of catch (49-78%) occurred in habitats with a sediment percent organic carbon content between 0.2-0.4%orgC. The highest percentages of catch for Red Drum shifted between the early and late periods to habitat with a lower percentage of organic carbon content in the sediment (83% - 0.2-0.71%orgC; 93% - 0.13-0.4%orgC). Flounder species showed a shift to a higher percentage of organic carbon content, from 90% captured between 0.13-0.4%orgC in the early period, to 93% captured between 0.2-1.3%orgC in the late period. Clupeids showed a slight shift in the distribution of percent of catch to habitats with a higher percent organic carbon content in the sediment (77% from 0.13-0.4%orgC to 62% from 0.2-0.4%orgC).

No salinity data were available from the early period for analysis. During the late period, more than 86% of each taxon was captured in water with salinities between 26-35ppt. Spiny Dogfish had similar percentages of catch (46% and 44%) for both salinity brackets (26-30ppt and 31-

35ppt). The lower salinity bracket (26-30ppt) had higher percentages of catch for Striped Bass (51%), Red Drum (56%), and clupeids (57%). The higher salinity bracket (31-35ppt) had higher percentages of catch for Atlantic Sturgeon (79%), other sciaenids (64%), flounders (51%), and skates (62%).

Water temperatures between 1-12°C accounted for over 92% of the catch for each taxon in both time periods. Striped Bass and flounder species showed no shift between the time periods; the majority of Striped Bass (75% and 67%, respectively) were captured in the range of 4-9°C and the majority of flounders (79% and 74%) were captured in the range of 7-12°C. Atlantic Sturgeon, Spiny Dogfish, Red Drum, and skates all showed a slight increase and a wider distribution in warmer water temperatures during the late period. Other sciaenids had a higher percentage of catch (94%) in warmer temperatures (4-12°C) in the late period compared to the early period (91% from 1-9°C). The highest percentages of clupeid catch (98%) shifted to cooler temperatures (4-9°C) in the late period compared to the early period (80% from 7-12°C).

Overall, more than 83% of each taxon was captured when the air temperature ranged from 1-15°C. In both time periods, the highest percentage of catch of Striped Bass occurred when the air temperature ranged from 6-10°C (48% and 43%, respectively). The highest percentage of catch for Spiny Dogfish shifted from a more even distribution, to the majority being captured between 6-10°C (53%). Atlantic Sturgeon, Red Drum, flounders, clupeids, and skates had a shift in distribution of the percentages of catch to slightly cooler temperatures. Other sciaenids had a slight shift in the distribution of the highest percentages of catch to occurring during warmer air temperatures.

The SAND bottom type accounted for between 50 and 75% of the catch for each taxon overall. Between the early and late periods Striped Bass, Atlantic Sturgeon, and Spiny Dogfish all had increases in the percent of catch occurring in habitats with the bottom type of SAND (5-26%

increases). Red Drum percentage of catch in SAND bottom type decreased (from 100% to 71%) between the early and late periods. No notable shift in the highest percentages of catch occurred for other sciaenids and clupeids between the time periods. Flounder taxa percentage of catch in GRAVELLY bottom types increased slightly (7%) in the late period. Skates also had a slight increase in the percentage of catch occurring in GRAVELLY bottom types (6%), as well as SAND (13%), in the late period.

Morning hours (0500-0959) accounted for 13-31% of each taxon overall. Between 14-30% of each taxon captures occurred during the day hours (1000-1559). Evening hours (1600-2059) accounted for 22-38% of the catch for each taxon, and catches during night hours (2100-0459) ranged from 16-31%. Striped Bass and other sciaenid percentages of catch did not have a notable shift between the time periods. Atlantic Sturgeon captures shifted slightly from day/evening hours (59%) to night/morning hours (62%). Spiny Dogfish and clupeid catch percentages were more evenly distributed in the late period with dogfish catch percentage increasing for the morning hours (9%) and decreasing for the night hours (10%), and clupeid catch decreasing (11%) in the evening hours and increasing (15%) during the night hours. Red Drum percentage of catch during night hours increased from 0% (early period) to 24% (late period). Other sciaenids did not have a shift in the highest percentages of catch between the two time periods. The percentage of catch for flounder species during the evening and night hours increased from 41% to 61%. The highest percentages of catch for skate taxa shifted from day hours (47%) in the early period, to evening and night hours (58%) in the late period.

Spatial Trends

Spatial distribution maps for taxa and species groups by year are shown in Figures 74-81. Figure 82 presents all regressions of latitudinal medians for all taxa.

All median latitudes for each taxon had normal distributions, with Shapiro-Wilk's p-values ranging from 0.217-0.949 (α=0.05). The Grubb's test for normality returned p-values between 0.103-0.838 (α=0.05). Z-values from the Grubb's test were used to determine outliers in the distributions of the median latitudes for each taxon. No outliers were identified for Red Drum, other sciaenids, clupeids, or skates. The median latitudes for Striped Bass, Atlantic Sturgeon, and Spiny Dogfish from the years 1996 and 1997 were identified as outliers. The median latitude for flounders from 1988 was also identified as an outlier to the dataset.

Latitudinal medians for all taxa ranged from 35.1070 to 37.2072 N. Linear regressions on the median latitudes resulted in no statistically significant trends for any taxon. Striped Bass, Spiny Dogfish, other sciaenids, flounders, clupeids, and skates all showed slightly positive trends (median latitude increase), with goodness-of-fit for the models ranging from r^2 = 0.043 to 0.546. Red Drum showed a slightly negative trend (median latitude decrease), with an r^2 = 0.061. The linear regression model for Atlantic Sturgeon showed no trend.

Taxa Co-Occurrence and CPUE

All taxa co-occurrence matrices are presented in Table 8. Overall, instances of other taxa co-occurring with Striped Bass equaled a count of 3,514. Spiny Dogfish were the most frequent co-occurring species in tows containing Striped Bass (57.4%), Atlantic Sturgeon (57.5%), flounders (76.8%), clupeids (87.8%), other sciaenids (73%), and skates (86.9%). Striped Bass were the most frequent co-occurring species in tows containing Spiny Dogfish (55.4%) and Red Drum (71.4%). In tows containing Atlantic Sturgeon, the most frequently co-occurring taxa were Spiny Dogfish (58%) and Striped Bass (54%).

Overall, the mean CPUE for all taxa, except for Striped Bass, increased between the early and late period.

Striped Bass mean CPUE decreased from 10.3 per tow mile in the early period to 5.8 per tow mile in the late period; the variance also decreased by 52%. The mean CPUE for Atlantic Sturgeon had no statistically significant change between the two periods; the mean increased marginally from 0.025 per tow mile to 0.032 per tow mile. Spiny Dogfish had a statistically significant increase in mean CPUE from 0.11 to 12.63 (P=0.0005) per tow mile in the early and late periods, while the variance also increased from 0.02 to 154.64. Flounder species had a statistically significant increase from 0.29 to 0.92 mean CPUE between the periods (P=0.01). The mean CPUE for clupeids also had a statistically significant increase from 0.16 to 1.97 (P=0.04). Other sciaenids exhibited increased mean CPUE from 0.04 to 0.27 (P=0.004), and skate species increased from 0.01 to 0.98 (P=0.10). The mean CPUE for Red Drum did not show any significant change across the years, but a slight increase was observed (0.005 to 0.007). A summary of the CPUE for all taxa, in all years, is presented in Figure 84.

Discussion

During the mapping of the Cruise tows, the start coordinates were used to map the tow locations. Although mid-point coordinates, end coordinates, and line segments would also have been viable options for mapping the tow locations, gaps in the recording of end coordinates for Cruise tows would have resulted in the exclusion of a substantial proportion of tows. Start locations were chosen because of the consistency with which they were recorded. Other considerations for using the start coordinates included the size of the study area, and the scale of the habitat layers spatially joined with the tow data in comparison with the distance covered by a single tow. As tow durations could not exceed 30 minutes, and with all tow speeds less than 5 knots, the longest possible tow would not exceed a straight-line distance of 2.9 miles (4.7 km), minimizing the opportunity of a single tow encompassing more than one habitat parameter category. In future work, use of the elliptical method developed by Mills et al. (2006) could be utilized to assign

habitat parameters throughout the areas encompassed by individual tows, if parameter layers of adequate resolution are available. For this method however, direction of tow is required in addition to the start and end coordinates. For purposes of this project, given gaps in the stop locations along with the assumption of direct travel from start to stop, the start locations were used as the sole identifier of trawl location and tow mile, rather than area sampled, was used for assessing CPUE.

Five tows were excluded prior to conducting spatial analyses because of the inability to reconcile the recorded geographic coordinates with the known operational boundaries of the Cruise.

As water depth was recorded during most of the Cruise, and the prediction map created from USGS data resulted in high RMS and average standard error values, water depths from the Cruise data sheets were accepted in place of the model. Although it was not utilized for the spatial analysis during my study, an interpolation model using the same methods would be valuable in a situation where depth would constitute a necessary variable, or to fill in gaps in existing datasets. The prediction model for water depth can also be of interest to populate the depth value on those tows from the Cruise where depth was not recorded, with the caveat that the depths and spatial arrangement of the previous and following tows should be examined to determine if the predictive model provides a reasonable measure of depth at location.

It was expected that a larger percentage of the catch for Striped Bass would be captured in sand bottom types, given the prevalence of SAND bottom type represented in the bottom type habitat layer throughout the study area and that Striped Bass are targeted in the Cruise effort. This expectation held for Striped Bass for all years except 1989 and 2009, where higher percentages of fish were captured in CLAYEY SILT and GRAVELLY SEDIMENT bottom types.

In years where no catch was reported for a particular taxon, or only one individual was recorded, the latitudinal median could not be established, and the year was excluded from the linear

regression. Although the Grubbs test for all taxa resulted in a failure to reject the null hypothesis that no outliers were present in the data, outliers of the distribution medians were considered valid if both the latitude and longitude coordinates resulted in Z-scores outside of the calculated acceptable range.

As the Cruise actively targets Striped Bass in its tagging efforts, the opportunity is present for the latitudinal medians for all years and all taxa to be skewed towards that of the Striped Bass for any year. This was not a concern however, as the other taxa exhibited latitudinal medians spatially distinct from that of Stiped Bass, with the exception of 1993, 1995, 2006, and 2013. Positive trends in the spatial linear regressions are indicative of a northward shift over time. While no statistically significant movements were found, there were noteworthy trends detected through the regressions. With the exceptions of Atlantic Sturgeon and Red Drum, all species groups displayed a slightly positive trend for their latitudinal medians across the years. As there are at least two distinct populations of Atlantic Sturgeon within the study area of the Cruise, one explanation for the static regression could be that individuals from separate populations were captured. Red Drum was the only taxon to express a slightly negative trend, indicating a southerly shift across the years, although the sample size (only ten years with recorded Red Drum catches) was low. In the case of Red Drum, it is also noteworthy that there are two populations that may be encountered in the study area, with the more southern centered population potentially skewing the data and indicating a false southerly shift of the northern population.

It was expected that Spiny Dogfish and Striped Bass would be the most frequently co-occurring species for each other, as they were the most common taxa recorded as captured by instance and by abundance. It is worth noting, however, that with the exception of Red Drum tows, the Spiny Dogfish rather than Striped Bass was the most frequently co-occurring taxon for all other taxa.

Taxa co-occurrence determined from the spatial analysis only includes information on the number of occurrences and does not offer insight into the correlations of abundance between recorded catches of the various taxa in specific habitat parameter ranges.

For taxa other than Striped Bass, Atlantic Sturgeon, and Red Drum, the lack of consistent enumeration of individuals captured in each tow during certain periods of the Cruise resulted in a method for recording presence regardless of enumeration. If a taxon was recorded as captured (i.e. “Dogfish” was recorded on the catch data sheet for the tow, without a record of the number of individuals captured), a minimum number of 1 Spiny Dogfish was recorded as present for that tow. Due to this, the CPUE as well as taxa habitats in a large portion of tows, particularly from the early period, can be assumed to be highly conservative given the schooling nature of the taxa and known catch trends of abundance when enumeration of individuals took place. This should also be a consideration when examining large increases in mean CPUE for the Spiny Dogfish, flounders, clupeids, other sciaenids, and skates, as confidence in consistent enumeration of individuals is lacking for the early period.

CHAPTER 4: ASSESSMENT OF STUDY, IMPLICATIONS, AND APPLICABILITY

Notes on the Completion of Goals and Objectives

Several goals, and objectives to meet those goals, were identified for my study. These were designed to allow for the description of the types and disposition of taxa and data collected by the efforts of the Cooperative Winter Tagging Cruise (CWTC), to provide information to better understand and utilize the data, and to assess if a long-term trawl survey could be used to ascertain changes in the assemblage, habitat use, and taxa abundance. A few notes on the completion of these tasks is necessary for the understanding of the project and its future applicability.

The first goal in relation to the data available from the CWTC was to enter and compile the raw data into electronic format, compatible with other long-term marine monitoring studies and surveys. Initial fulfillment of this goal was done by completing the objective of entering the tow and taxa data into electronic format, in Microsoft ® Excel. The end design of this is to add the data from past and future cruises to the publicly available data published online – in a user-friendly interface that will allow for more widespread dissemination and utilization of the data. Tow and trawl data were entered into electronic format, completing this portion of the study goal. Future work related to this goal, and moving toward the end design, will be to continue to enter individual species measurements for inclusion in the online database format, finalize the user-interface, and select an appropriate online platform to publish the data.

Determining patterns in the capture information of taxa of interest was the second goal of this project. This was fulfilled during the transfer of the raw data into electronic format by assessing the recording consistency found in Cruise data. A decided lack of recording consistency in regard to the enumeration of individual taxa or species identification was found in the early period (1988-1995), which impacted the ability to analyze the data for taxa co-occurrence and

CPUE. The lack of accurate species identification in the recordings also resulted in the necessity to relegate analysis of most non-targeted species to taxa group levels. During the late period (1996-2013) recording consistency in the identification of species and taxa, as well as enumeration of individuals captured was greatly improved. Increased recording consistency allowed for a more accurate representation of the data and provided a more comprehensive view of the fish assemblage in the study area. For the purposes of this project however, only those taxa whose data were used from the early period were assessed in the late period. Future work on this aspect will continue as an in-depth analysis is conducted of the entire suite of species (150+) recorded, preferably utilizing multivariate analyses to determine if environmental drivers or co-occurrence of species may account for shifts in the distributions of species of interest.

Due to the on-going nature of the Cruise, future efforts should include methods to ensure the consistency of data recording. These methods may include: training deck personnel in standard recording procedures to match the raw data formatting of previous years; designating personnel for each shift as data recorders; tasking a single designated person to enter the raw data into the database; and using a separate quality control person to ensure that formats and procedures are followed. Several of these methods have already begun to be implemented in the Cruise protocols, with marked improvements in data consistency. As the Cruise continues its efforts in monitoring the Striped Bass winter aggregations, and additional species are included for research and study, more years of data have been recorded. These were not included in this project as time and logistical constraints prevented the entering of the raw data into the dataset for analysis. With the inclusion of additional years however, the robustness of the entire dataset will increase, as will the ability of any analysis conducted to determine patterns and trends.

Also pertinent to the patterns of capture information and Cruise protocol is the lack of standardized sampling locations. As the monitoring of Striped Bass is the initial impetus of the

Cruise itself, and due to the nature of marine sampling, it is understandable that the targeted species will be actively sought, in order to make the most efficient use of vessel time. However, the benefits of recording other species and taxa information are already being seen in the efforts presented here. It is expected that the implementation of the original design to use standardized sampling locations along with actively seeking Striped Bass during the Cruise will have similar benefits. Standardized locations within the study area to be sampled during every year the Cruise is conducted will provide baseline data for future years, as well as a consistency currently lacking in the design. It is recommended that a suite of at least ten to twenty standardized locations, stratified throughout the study area be identified, which will provide representation for each habitat type already assessed. These locations may be stratified in such a way as to be sampled during the normal course of vessel travel during the Cruise.

The third goal for this project was to analyze the available capture information for taxa habitat use. This was completed by fulfilling the objectives of creating GIS layers for habitat parameter models and cruise data, then combining cruise and habitat data with the spatial analysis of the GIS layers. The completion of this goal resulted in the identification of ranges of habitat parameters throughout the study area used by targeted species and taxa of interest.

In order to determine shifts in catch patterns observed in taxa over time, catch rates (catch per unit effort – CPUE) was calculated for each taxon and the results from the spatial analysis were examined for both taxa and local relationships throughout the time series. Taxa co-occurrence and CPUE calculations should be considered extremely conservative for the early period, as the minimum number of individuals captured was the default when data recording inconsistencies were found. This resulted in a minimum count of one individual in many instances for the early period where, due to the nature and experience of the Cruise efforts and taxa schooling strategies, logic suggests that multiple individuals should have been present.

The final goal, and impetus of my study, was to present the results of these analyses to researchers, management, and funding agencies in order to encourage the continuation of this long-term effort, along with inducing new hypotheses regarding the taxa within this system. Selected results from this project have already been included in the annual reports to funding agencies of the Cruise, and have been provided to researchers interested in examining habitat parameters and species utilization of them. Plans are in progress to provide the information gained from my study, to agencies who may actively use the pertinent results to improve and enforce current policies, and as appropriate to present data and results in peer-reviewed publications. Therefore, this goal aligns with the forthcoming online accessible database.

Implications of Results and Notes on Future Research

This project began with the intention of testing several hypotheses regarding the data from the Cruise.

H_1: Catch per unit effort (CPUE) for Striped Bass, Atlantic Sturgeon, Spiny Dogfish, flounders, and skates will increase over time, but will decrease over time for clupeids.

Spiny Dogfish, flounders, and clupeids all saw statistically significant increases in CPUE over time; other sciaenids also had a statistically significant increase. The overall increase in CPUE for these taxa can in attributed in part to the variability and inconsistency found in the data recording from the early period. The SSB assessments, along with management strategies in effect, and subsequently implemented, during the two periods were taken into consideration when formulating this hypothesis. An increase in CPUE was expected for Striped Bass due to the moratorium put into effect in the 1980s, however, a decreased CPUE was calculated. The latest SSB for Striped Bass also confirms that a continued decrease is exhibited, likely due to the strength of the year classes currently recruiting to the range of the assessment (ASBTC 2016). The marked decrease in CPUE for this species (10.3 to 5.8 fish per tow mile) was initially

concerning, however, the significant decrease in variance (decrease of 52%) of the CPUE suggests that rather than a reduced catch overall, the trend is toward more consistent capture of individuals throughout the duration of the sampling. This is likely due in part to more concentrated sampling effort in locations that have shown aggregations in the past, along with crew experience in locating schools (such as by following birds).

The unexpected increase in clupeid CPUE is likely due to the increased consistency in enumeration of individuals seen in the late period. With additional years of consistent records regarding species of this taxa, it is likely that no increase will be seen in the near future, as the stocks of these fishes have shown no evidence of recovery (ASMFC 2018).

H_2: Habitat ranges utilized will be similar for Striped Bass, elasmobranchs, Atlantic Sturgeon, and flounders.

Comparisons between the distributions of taxa within habitat parameter ranges, for the early and late periods, respectively, were conducted using two sample t-tests, assuming unequal variance. Out of the 140 comparisons evaluated, 83 (59%) were not statistically different. Salinity ranges were not compared due to lack of data from the early period for comparison.

Depth ranges for these taxa were similar, overall and for both the early and late periods. The majority of these taxa were captured between 11-17 meters of depth. With the exception of skate species, the early period is characterized by a broader and more uniform distribution of the percentages of catch throughout the depth classes, whereas the late period showed a distinct increase in the percentages of catch in deeper waters (3-11 meter increase in depth).

H_3: Habitat utilized by taxa of interest will be consistent across years.

The results from the comparison between the early and late periods showed evidence to the contrary of this hypothesis. Although there was no salinity data available from the early period for comparison, the taxa groups showed trends in the other habitat parameters. The changes

observed in the capture percentages of the taxa in the various habitat parameter ranges indicate shifts in habitat usage. For all taxa, with the exception of flounder species, higher percentages of catch were observed in deeper water in the late period – an increase between 3 and 11 meters in depth between the early and late periods. While this is partly due to the restrictions of rigging lengths and increased concern for barotrauma on captured individuals, the trend through the later period suggests that this may be indicative of shift in depth preferences. Anecdotal history from the Cruise also provides the information that in the early years, the vessel captains were more willing to trawl very close to shore. Later captains were more unwilling to risk the vessels and gear, therefore the depth ranges in which the trawls were deployed narrowed. As mentioned in Chapter 1, depth is interdependent with temperatures and currents. Future examination should be a priority to establish if the trend is stabilizing or represents a flux pattern.

Several taxa (Striped Bass, Atlantic Sturgeon, Red Drum, and other sciaenids) all showed increased percentages of catch in areas with sediments with larger grain sizes. However, flounder species showed a marked shift in the percentages of catch during the early period occurring majorly in the larger grain size (81% relegated to the 2.6-3.3 phi ranges), to a more even distribution in sediments with a smaller grain size in the late period (50% distributed through 1.6-2.6 phi ranges). While the ranges utilized for sediment percent organic carbon content remained relatively consistent, the percentages of catch for Red Drum, flounder species, and clupeids all showed narrower distributions in the late period. An increase in the percentage of catch, as well as wider distributions, were observed for Atlantic Sturgeon, Spiny Dogfish, Red Drum, and skate species, in warmer water temperatures in the late period. In other sciaenid species, a shift to warmer water temperature was also observed. Clupeid species, however, showed an increase in the percentage of catch in cooler water temperatures (80% captured in the early period in the 7-12°C range; 98% captured in the late period in the 4-9°C range).

Overall, there were several notable trends in all of the habitat parameters, with the exceptions of air temperature and bottom type, for the majority of taxa groups examined. While there is not enough of a statistically significant difference across the years to fully reject this hypothesis, there is substantial evidence to warrant further investigation into the shifts shown by these taxa, to determine consistency and level of persistence.

H_4: Striped Bass will not co-occur at a significant rate with elasmobranchs, Atlantic Sturgeon, or flounders.

At a rate of co-occurrence with Striped Bass over 50% for all the taxa examined in this hypothesis, the rate of co-occurrence of these taxa gives evidence to support its rejection. Taking into consideration that these taxa would compete to an extent for resources within the system, it is a mark of the health of the system that it is able to support this level of co-occurrence for the assemblage. If competition for resources were higher, it is likely that the rates of co-occurrence would significantly decrease as niche partitioning increased.

H_5: Distributions of taxa throughout the study area will not remain stagnant throughout the time series.

The results of the linear regressions for the N-S distribution of these taxa indicates a stagnant trend. However, due to the low sample sizes of the Red Drum and Atlantic Sturgeon captures, along with the possibility of sampling multiple populations that span the Atlantic seaboard, it would be impractical to use these regressions as indicators at this time for these species.

Other taxa in the study showed slightly positive regressions for the latitudinal medians, though none significant. A point of interest, and certainly a necessity for future work, would be to assess the longitudinal medians and distance from shore for these taxa. The reason for this would be that observations have been noted, and historically seen that Striped Bass in particular were largely captured at or near shore. Recent years have necessitated that vessels travel beyond the

three-mile state waters boundary and into federal waters further offshore to capture Striped Bass. Evidence towards this trend would greatly impact management strategies, as well as researchers seeking to better understand the movements of these fish. On this point as well, is the consideration of continued illegal harvesting of this species in federal waters. The United States Coast Guard is constantly seeking better ways to help mitigate the poaching problem. Definitive habitat characteristics, descriptions, and locations that aggregates of this and other taxa (especially those listed as threatened or endangered) utilize can aid in the efficacy with which these resources are protected and managed.

Applicability of the Data

The Cruise represents the only long-term winter study of its kind for this region, providing the only wintertime aggregate sampling of these highly migratory, economically, and ecologically valuable species. The continuation of the efforts of the CWTC is necessary for the provision of definitive habitat usage characterization. This information can be invaluable to enforcement of current and future management strategies, and the development of marine protected areas. At the same time, notable data gaps for several taxa could be filled by this sampling platform - with proper sampling regimes and a few years of data, providing insight to researchers and managers as to the best way to study, monitor, and regulate for the desired 'fully-exploited' status or to recover the fishery in the cases of those taxa that have become of concern in recent decades.

My project focused on the characterization of the habitats used by the assemblage designated, and did not address more in-depth questions of ecological or environmental drivers to explain the presence or abundance of these taxa. With continued recording consistency, multivariate analysis and improved modelling techniques can provide a more comprehensive view of this assemblage, even to the community and system levels – allowing for ecosystem-based management the opportunity to improve the resources in the system.

Dietary analysis was not included in my project. There is evidence that both prey and predator species may have preferences for specific sediment types and compositions. The information on taxa habitat ranges for sediment type, grain size, and percent organic carbon content may be combined with future dietary studies or habitat studies to determine viability of areas that may be considered critical habitat.

My study has provided a database, as complete as the raw data recorded allowed, for the public dissemination to researchers and managers, and to be joined with other online databases. This provides researchers, managers, and user groups with the ability to fully utilize the data collected. Interdisciplinary and ecosystem-based approaches to the use and regulation of natural resources depends on such freely-shared information.

My project has also provided descriptions of the habitat ranges and characterizations of the taxa co-occurrence likely to be utilized and seen by these taxa. For species such as the Atlantic Sturgeon, Striped Bass, and clupeids, this information can aid in the creation of plans to help rebuild the stocks. The information provided through this analysis of Cruise data on taxa habitat use, CPUE, and co-occurrence within the assemblage described can allow for a more in depth understanding of those fishes and their utilization of this area in the winter, as well as guide the development of protected areas to preserve the habitats utilized by these taxa.

References

Able, K. W. and S. C. Kaiser. 1994. Synthesis of summer flounder habitat parameters. NOAA Coastal Ocean Program Decision Analysis Series. No. 1. NOAA Coastal Ocean Office, Silver Spring, MD. 68 p.

Anderson, M. J. 2008. Animal-sediment relationships re-visited: Characterising species' distributions along an environmental gradient using canonical analysis and quantile regression splines. Journal of Experimental Marine Biology and Ecology. 366: 16-27.

Atlantic States Marine Fisheries Commission (ASMFC). 2018. Species' Profiles. 16 October 2018. <www.asmfc.org/species/>.

Atlantic Striped Bass Technical Committee (ASBTC). 2016. Atlantic Striped Bass Stock Assessment Update 2016. Atlantic States Marine Fisheries Commission. 100 pp.

Bain, M. B. 1997. Atlantic and Shortnose Sturgeon of the Hudson River: common and divergent life history attributes. Environmental Biology of Fishes. 48: 347-358.

Bachelor, N. M., L. M. Paramore, S. M. Burdick, J. A. Buckel, and J. E. Hightower. 2009. Variation in movement patterns of Red Drum (*Sciaenops ocellatus*) inferred from conventional tagging and ultrasonic telemetry. Fisheries Bulletin. 107: 405-419.

Bangley, C. W. and R. A. Rulifson. 2014. Feeding habits, daily ration, and potential predatory impact of mature female Spiny Dogfish in North Carolina coastal waters. North American Journal of Fisheries Management. 34(3): 668-677. doi:10.1080/02755947.2014.902410.

Bax, R., Kloswer, A. Williams, K. Gowlett-Holmes, T. Ryan. 1999. Seafloor habitat definition for spatial management in fisheries: a case study on the continental shelf of southeast Australia. Oceanologica Acta. 22, 6: 705-719.

Bigelow, H. B. and W. C. Schroeder. 1953. Fishes of the Gulf of Maine. U.S. Fish and Wildlife Service, Fishery Bulletin. 74: 577 pp.

Bosman, S. H., D. A. Methven, S. C. Courtenay, J. M. Hanson. 2011. Fish assemblages in a north Atlantic coastal ecosystem: spatial patterns and environmental correlates. Estuarine, Coastal, and Shelf Science. 92: 232-245.

Bowman, R. E., C. E. Stillwell, W. L. Michaels, and M. D. Grosslein. 2000. Food of northwest Atlantic fishes and two common species of squid. NOAA Technical Memorandum. NMFS-NE-155. 137 p.

Caddy, J. F. 2013. Why do assessments of demersal stocks largely ignore habitat? International Council for the Exploration of the Sea, Journal of Marine Science. doi:10.1093/icesjms/fss199.

Cahoon, L. B., J. E. Nearhoof, and C. L. Tilton. 1999b. Sediment grain size effect on benthic microalgal biomass in shallow aquatic ecosystems. Estuaries. 22: 735-741.

Callaway, R., J. Alsvåg, I. de Boois, J. Cotter, A. Ford, H. Hinz, S. Jennings, I. Kröncke, J. Lancaster, G. Piet, P. Prince, and S. Ehrich. 2002. Diversity and community structure of epibenthic invertebrates and fish in the North Sea. International Council for the Exploration of the Sea, Journal of Marine Science. 59: 1199-1214.

Calliet, G. M., Love, M. S., and A. W. Ebeling. 1996. Fishes: a field and laboratory manual on their structure, identification, and natural history. Waveland Press, Inc. Long Grove, Illinois. 194 pp.

Cammen, L. M. 1982. Effect of particle size on organic content and microbial abundance within four marine sediments. Marine Ecology Progress Series. 9: 273-280.

Campana, S., L. Marks, W. Joyce, R. Rulifson, and M. Dadswell. 2008. Stock structure, life history, fishery and abundance indices for Spiny Dogfish (*Squalus acanthias*) in Atlantic Canada. Fisheries and Oceans Canada.

Cudney, J. 2015. Dissertation: Incorporating migration and local movement patterns into management strategies for Spiny Dogfish (*Squalus acanthias*). Coastal Resources Management, East Carolina University. Greenville, North Carolina.

Deaton, A. S., Chappell, W. S., Hart, K., O'Neal, J., and B. Boutin. 2010. North Carolina coastal habitat protection plan. Morehead City, North Carolina. North Carolina Department of Environment and Natural Resources, Division of Marine Fisheries. 639 pp.

Dell'Apa, A., J. C. Johnson, D. G. Kimmel, and R. A. Rulifson. 2013. The international trade and fishery management of Spiny Dogfish: A social network approach. Ocean and Coastal Management. 80: 65-72.

Dell'Apa, A., J. Cudney-Burch, D. G. Kimmel, and R. A. Rulifson. 2014. Sexual segregation of spiny dogfish in fishery-dependent surveys in Cape Cod, Massachusetts: potential management benefits. Transactions of the American Fisheries Society. 143(4): 833-844.

Dunton, K. J., A. Jordaan, K. A. McKown, D. O. Conover, and M. G. Frisk. Abundance and distribution of Atlantic Sturgeon (*Acipenser oxyrinchus*) within the Northwest Atlantic Ocean, determined from five fishery-independent surveys. Fishery Bulletin. 108: 450-465.

Fauth, J. E., J. Bernardo, M. Camara, W. J. Resetarits, Jr., J. Van Buskirk, and S. A. McCollum. 1996. Simplifying the jargon of community ecology: a conceptual approach. The American Naturalist. 147(2): 282-286.

Fogarty, M. J. 2014. The art of ecosystem-based fishery management. Canadian Journal of Fisheries and Aquatic Sciences. 71: 479-490.

Food and Agricultural Organization of the United Nations (FAO). 2011. Review of the state of world marine fishery resources. FAO Fisheries and Aquaculture Technical Paper No. 569. Rome, FAO. 334 pp.

Food and Agricultural Organization of the United Nations (FAO). 2016. The state of world fisheries and aquaculture 2016. Contributing to food security and nutrition for all. Rome, FAO. 200 pp.

Gabriel, W. L. 1992. Persistence of demersal fish assemblages between Cape Hatteras and Nova Scotia, Northwest Atlantic. Journal of Northwest Atlantic Fishery Science. 14: 29-46.

Grabman, A. 2011. Presentation: Cooperative surveys of fishing effort and catch on charter boats, partyboats, and headboats. Southeast Fisheries Science Center. Southeast Regional Office, Office of Science and Technology, NOAA.

Gray, J. S. 1974. Animal-sediment relationships. Oceanography and Marine Biology: an Annual Review. 12: 223-261.

Haley, N. 1998. A gastric lavage technique for characterizing diets of sturgeons. North American Journal of Fisheries Management. 18:978-981.

Heesen, H. J. L. and N. Daan. 1996. Long-term trends in ten non-target North Sea fish species. International Council for the Exploration of the Sea, Journal of Marine Science. 53: 1063-1078.

Keefe, M. and K. W. Able. 1994. Contributions of the abiotic and biotic factors to settlement in Summer Flounder, *Paralichthys dentatus*. Copeia. 1994 (2): 458-465.

Laney, R. W., J. E. Hightower, B. R. Versak, M. F. Mangold, W. W. Cole, Jr., and S. E. Winslow. 2007. Distribution, habitat use, and size of Atlantic Sturgeon captured during Cooperative Winter Tagging Cruises, 1988-2006. American Fisheries Society Symposium. 56: 167-182.

Levin, L. A., D. F. Boesch, A. Covich, C. Dahm, C. Erséus, K. C. Ewel, R. T. Kneib, A. Moldenke, M. A. Palmer, P. Snelgrove, D. Strayer, and J. M. Weslawski. 2001. The function of Marine critical transition zones and the importance of sediment biodiversity. Ecosystems. 4: 430-451.

Link, J. S., K. Bolles, and C. G. Milliken. 2002. The feeding ecology of flatfish in the northwest Atlantic. Journal of Northwest Atlantic Fishery Science. 30: 1-17.

Magurran, A. E., S. R. Baillie, S. T. Buckland, J. M. Dick, D. A. Elston, E. M. Scott, R. I. Smith, P. J. Somerfield, and A. D. Watt. 2010. Long-term datasets in biodiversity research and monitoring: assessing change in ecological communities through time. Trends in Ecology Evolution. 25: 574-582.

Meaden, Geoff. 2000. GIS in Fisheries Management. GeoCoast. 1(1): 82-101.

Miller, M. J. 2004. Sturgeons and Paddlefish of North America. Eds. G.T.O. LeBreton, F. W. H. Beamish, S. R. McKinley. Fish and Fisheries Series. Kluewer Academic Publishers. New York. Pp: 87-92.

Mills, C. M., S. E. Townsend, S. Jennings, P. D. Eastwood, and C. A. Houghton. 2006. Estimating high resolution trawl fishing effort from satellite-based vessel monitoring system data. International Council for the Exploration of the Sea, Journal of Marine Science. 64: 248-255.

Moore, H. B (editor). 1966. Marine Ecology. John Wiley & Sons, Inc. New York.

Murphy, B. R. and D. W. Willis. 1996. Fisheries Techniques. 2nd Edition, American Fisheries Society. Bethesda, Maryland.

Nammack, M. F., J. A. Musick, and J. A. Colvocoresses. 1985. Life history of Spiny Dogfish off the Northeastern United States. Transactions of the American Fisheries Society. 114: 367-376.

National Science Foundation (NSF). 2016. “Long-Term Ecological Research (LTER) New Site Competition.” Program solicitation, NSF 16-509. 16 October 2018. <https://www.nsf.gov/pubs/2016/nsf16509.html>.

NOAA, NMFS. 2012a. Endangered and threatened wildlife and plants; threatened and endangered status for distinct population segments of Atlantic Sturgeon in the Northeast region, final rule. Federal Register 77:24 (6 February 2012): 5880-5912.

NOAA, NMFS. 2012b. Endangered and threatened wildlife and plants; final listing determinations for two distinct population segments of Atlantic Sturgeon (*Acipenser oxyrinchus oxyrinchus*) in the Southeast, final rule. Federal Register 77: 24 (6 February 2012): 5914-5982.

NOAA, NMFS. 2013. Endangered and threatened species; protective regulations for the Gulf of Maine distinct population segment of Atlantic Sturgeon, interim final rule. Federal Register 78: 223 (19 November 2013): 69310-69315.

NOAA, Fisheries Service. 2018. Northeast Fisheries Science Center. 16 October 2018. <www.nefsc.noaa.gov>.

North Carolina Division of Marine Fisheries (NCDMF). 1999. “Division of Marine Fisheries Trip Ticket Program.” 16 October 2018. <portal.ncdenr.org/web/mf/46>.

Obelcz, J., D. Brothers, J. Chaytor, U. Brink, S. W. Ross, and S. Brooke. 2014. Geomorphic characterization of four shelf-sourced submarine canyons long the U.S. Mid-Atlantic continental margin. Deep-Sea Research II. 104: 106-119.

Overton, A. S., C. S. Manooch III, J. W. Smith, and K. Brennan. 2008. Interactions between adult migratory Striped Bass (*Morone saxatilis*) and their prey during winter off the Virginia and North Carolina Atlantic coast from 1994 through 2007. Fisheries Bulletin. 106: 174-182.

Overton, A. S., F. J. Margraf, and E. B. May. 2009. Spatial and temporal patterns in the diet of Striped Bass in Chesapeake Bay. Transactions of the American Fisheries Society. 138(4): 915-926. doi: 10.1577/T07-261.1.

Pauly, D. 1995. Anecdotes and the shifting baseline syndrome of fisheries. Trends in Ecology and Evolution. 10(10): 430.

Palumbi, S. R., P. A. Sandifer, J. D. Allan, M. W. Beck, D. G. Fautin, M. J. Fogarty, B. S. Halpern, L. S. Incze, J. Leong, E. Norse, J. J. Stachowicz, and D. H. Wall. 2009. Managing for ocean biodiversity to sustain marine ecosystem services. Frontiers in Ecology and the Environment. 7(4): 204-211. doi:10.1890/070135.

Peacock, T. 2014. Thesis: A synthesis of Red Drum feeding ecology and diets from North Carolina and South Carolina. Department of Biology, East Carolina University. Greenville, North Carolina. 96 pp.

Pikitch, E. K., C. Santora, E. A. Babcock, A. Bakum, R. Bonfil, D. O. Conover, P. Dayton, P. Doukakis, D. Fluharty, B. Heneman, E. D. Houde, J. Link, P. A. Livingston, M. Mangel, M. K. McAllister, J. Pope, and K. J. Sainsbury. 2004. Ecosystem-based fishery management. Science. 305: 346-347.

Powers, J. E. and M. H. Monk. 2010. Current and future use of indicators for ecosystem based fisheries management. Marine Policy. 34: 723-727.

Powers, J. E. 2012. Thesis: Distribution patterns of juvenile Spotted Seatrout (*Cynoscion nebulosus*) and Red Drum (*Sciaenops ocellatus*) along shallow beach habitats in Pamlico River, North Carolina. Department of Biology. East Carolina University. Greenville, North Carolina.

Rice, J. and H. Gislason. 1996. Patterns of change in the size spectra of numbers and diversity of the North Sea fish assemblage, as reflected in surveys and models. International Council for the Exploration of the Sea, Journal of Marine Science. 53: 1214-1225.

Rijnsdorp, A. D., P. I. van Leeuwen, N. Daan, and H. J. L. Heessen. 1996. Changes in abundance of demersal fish species in the North Sea between 1906-1909 and 1990-1995. International Council for the Exploration of the Sea, Journal of Marine Science. 53: 1054–1062.

Rulifson, R. A. and T. M. Moore. 2002. Biological characterization of the North Carolina Spiny Dogfish (*Squalus acanthias*) Fishery. Fishery Resources Grant Program. Report 97FEG-28. 40 p.

Sackett, D. K., K. W. Able, and T. M. Grothues. 2007. Dynamics of summer flounder, *Paralichthys dentatus*, seasonal migrations based on ultrasonic telemetry. Estuarine, Coastal and Shelf Science. 74: 119-130.

Setzler, E. M., W. R. Boynton, K. V. Wood, H. H. Zion, L. Lubbers, N. K. Mountford, P. Frere, L. Tucker, and J. A. Mihursky. 1980. Synopsis of biological data on Striped Bass, *Morone saxatilis* (Walbaum). NOAA. NMFS. Technical report circular 433. (FAO). No. 121. 70 p.

Slocombe, D. S. 1993. Implementing ecosystem-based management: development of theory, practice, and research for planning and managing a region. Bioscience. 43(9): 612-622.

Snelgrove, P. R. and C. A. Butman. 1994. Animal-sediment relationships revisited: cause versus effect. Oceanography and Marine Biology: an Annual Review. 32: 111-177.

Stefansdottir, L., J. Solmundsson, G. Marteinsdottir, K. Kristinsson, and J. P. Jonasson. 2010. Groundfish species diversity and assemblage structure in Icelandic water during recent years of warming. Fisheries Oceanography. 19(1): 42-62.

Strayer, D., J. S. Glitzenstein, C. G. Jones, J. Kolasa, G. E. Likens, M. J. McDonnell, G. G. Parker, and S. T. A. Pickett. 1986. Long-term ecological studies: an illustrated account of their

design, operation, and importance to ecology. Institute of Ecosystem Studies, The New York Botanical Garden. No. 2. 38 pp.

Street, M. W., Deaton, A. S., Chappell, W. S., and P. D. Mooreside. 2005. North Carolina coastal habitat protection plan. Morehead City, North Carolina. NC Department of Environment and Natural Resources, Division of Marine Fisheries.

U.S. Geological Survey and University of Colorado (USGS). 2005. ATL_EXT: usSEABED EXTracted data for the entire U.S. Atlantic Coast. <http://pubs.usgs.gov/ds/2005/118/htmldocs/data_cata.htm>. *Accessed: October 2013.*

Valavanis, V. D., G. J. Pierce, A. F. Zuun, A. Palialexis, A. Saveliev, I. Katara, J. Wang. 2008. Modelling of essential fish habitat based on remote sensing, spatial analysis, and GIS. Hydrobiologia. 612: 5-20.

Waldman, J., L. Maceda, and I. Wirgin. 2012. Mixed-stock analysis of wintertime aggregation of Striped Bass along the Mid-Atlantic coast. Journal of Applied Ichthyology. 28: 1-6.

Walter III, J. F., A. S. Overton, and K. H. Ferry. 2003. Atlantic coast feeding habits of striped bass: a synthesis supporting a coast-wide understanding of trophic biology. Fisheries Management and Ecology. 10: 349-360.

Wolfe, D. A., M. A. Champ, D. A. Flemer, and A. J. Mearns. 1987. Long-term biological data sets: their role in research, monitoring, and management of estuarine and coastal marine systems. Estuaries. 10(3): 181-193.

Worm, B., R. Hilborn, J. K. Baum, T. A. Branch, J. S. Collie, C. Costello, M. J. Fogarty, E. A. Fulton, J. A. Hutchings, S. Jennings, O. P. Jensen, H. K. Lotze, P. M. Mace, T. R. McClanahan, C. Minto, S. R. Palumbi, A. M. Parma, D. Ricard, A. A. Rosenberg, R. Watson, D. Zeller. 2009. Rebuilding global fisheries. Science. 325:578-585.

TABLES

Table 1. Current status of distinct population segments of Atlantic Sturgeon.

Distinct Population Segment	Listing Status	Reference/Federal Register
New York Bight	Endangered	NOAA, FR 77(24): 5880-5912, 2012.
Chesapeake Bay	Endangered	NOAA, FR 77(24): 5880-5912, 2012.
Carolina	Endangered	NOAA, FR 77(24): 5914-5982, 2012.
South Atlantic	Endangered	NOAA, FR 77(24): 5914-5982, 2012.
Gulf of Maine	Threatened	NOAA, FR 78(223): 69310-69315, 2013.

Table 2. Vessel and trawl specifications for all years of the CWTC, 1988-2013.

Year	Dates	Vessel	Vessel Length (ft)	Trawl Specifications	Number of Nets	Effort (number of tows)	Average Tow Duration (min)	Average Speed (knots)
1988	January 15 - 23	Oregon II	170	High-open bottom stern trawl; 65' headrope length; 13' vertical spread; 97' wings to tail; Mesh Size: 8"-4"-2"; Lines 1.25"; Funnel 1 3/8"	2	200	28	3.4
1989	January 16 - 22	Oregon II	170	High-open bottom stern trawl; 65' headrope length; 13' vertical spread; 97' wings to tail; Mesh Size: 8"-4"-2"; Lines 1.25"; Funnel 1 3/8"	2	175	18	4.0
1990	January 17 - 24	Chapman	127	65' x $3m^2$	1	77	25	3.1
1991	January 24 - 31	Oregon II	170	65' x $3m^3$	2	180	29	3.4
1992	January 18 - 19; February 2 - 5	Albatross IV	187	65' x $3m^4$	1	53	30	3.7
1993	February 2 - 8	Chapman	127	65' x $3m^5$	1	55	26	3.3
1994	January 22 - 25	Oregon II	170	65' x $3m^6$	2	96	24	2.8
1995	January 24 - 28	Chapman	127	65' x $3m^7$	1	57	25	3.1

Table 2. continued.

Year	Dates	Vessel	Vessel Length (ft)	Trawl Specifications	Number of Nets	Effort (number of tows)	Average Tow Duration (min)	Average Speed (knots)
1996	January 23 - 25; February 7 - 12	Oregon II	170	High-open bottom stern trawl; 65' headrope length; 13' vertical spread; 97' wings to tail; Mesh Size: 8"-4"-2"; Lines 1.25"; Funnel 1 3/8"	2	204	20	3.0
1997	February 1 - 6	Oregon II	170	High-open bottom stern trawl; 65' headrope length; 13' vertical spread; 97' wings to tail; Mesh Size: 8"-4"-2"; Lines 1.25"; Funnel 1 3/8"	2	131	27	3.1
1998	January 16 - 22	Chapman	127	65' Mongoose (65' x 13')	1	64	25	2.7
1999	February 3 - 8	Oregon II	170	65' Mongoose (65' x 13')	2	146	18	2.8
2000	January 29 - February 4	Oregon II	170	65' Mongoose (65' x 13')	2	141	22	3.0
2001	January 14 - 19	Oregon II	170	65' x 13'	2	163	16	2.9
2002	January 14 - 21	Oregon II	170	65' x 13'	2	226	15	3.0
2003	January 14 - 22	Oregon II	170	65' x 13'	2	227	23	2.8

Table 2. continued

Year	Dates	Vessel	Vessel Length (ft)	Trawl Specifications	Number of Nets	Effort (number of tows)	Average Tow Duration (min)	Average Speed (knots)
2004	January 16 - 24	R/V Cape Hatteras	132	65' x 13' Otter Trawl	1	258	26	3.1
2005	January 25 - February 2	Oregon II	170	65' x 13'	1-2	149	22	3.2
2006	January 19 - 28	Oregon II	170	65' x 13'	2	302	19	3.1
2007	January 18 - 24	Oregon II	170	65' x 13'	2	185	18	2.7
2008	January 15 - 24	Oregon II	170	65' x 13'	1-2	329	19	2.9
2009	January 29 - February 7	R/V Cape Hatteras	132	65' x 13' Otter Trawl	1	210	28	3.4
2010	February 18 - 24	R/V Cape Hatteras	132	65' x 13' Otter Trawl	1	200	21	3.3
2013	January 8 - 16	R/V Cape Hatteras	132	65' x 13' Otter Trawl	1	244	21	3.0

Table 3. Recording consistency of taxa as seen in CWTC deck logs, X = consistent; / = some consistency; blank = no consistency.

Year	Striped Bass	Atlantic Sturgeon	Spiny Dogfish	Flounders	Skates	Clupeids	Red Drum	Other Sciaenids
1988	X	X	/	/		/	X	/
1989	X	X	/			/	X	
1990	X	X	/			/	X	
1991	X	X	/	X	/	X	X	X
1992	X	X	/	/	/	/	X	/
1993	X	X	/				X	
1994	X	X		/		/	X	/
1995	X	X		X			X	
1996	X	X	X	/	/	X	X	X
1997	X	X	X	X			X	
1998	X	X	X	X			X	X
1999	X	X	X	X			X	
2000	X	X	X	X		/	X	/
2001	X	X	X	X	X	X	X	X
2002	X	X	X	X			X	X
2003	X	X	X	X	X	/	X	X
2004	X	X	X	X	X	X	X	X
2005	X	X	X	X	X	X	X	X
2006	X	X	X	X	X	X	X	X
2007	X	X	X	X	X	X	X	X
2008	X	X	X	X	X	X	X	X
2009	X	X	X	X	X	X	X	/
2010	X	X	X	/	/	X	X	/
2013	X	X	X	X	X	X	X	X

Table 4. Sediment grain size bin ranges.

Bin	Range in phi units
2	0.943-1.595
3	1.595148-1.98326
4	1.98326-2.214074
5	2.214075-2.602186
6	2.602187-3.254793
7	3.254793-4.352146

Table 5. Sediment percent organic carbon content bin ranges.

Bin	% Range
1	0.086186-0.13075
2	0.13075-0.216936
3	0.216936-0.383621
4	0.383621-0.705992
5	0.705992-1.329459
6	1.329459-2.535249
7	2.535+

Table 6. Spatial analysis statistics for latitude and longitude by taxa, Striped Bass.

	LATITUDE					LONGITUDE							
YEAR	MEAN	MEDIAN	MIN	MAX	STDEV	MEAN	MEDIAN	MIN	MAX	STDEV	N	T	TN
1988	36.2399	36.2834	35.5168	36.9828	0.24	-75.7396	-75.7669	-75.8525	-75.4168	0.10	1615	199	135
1989	36.5765	36.6169	35.7668	37.7286	0.32	-75.6629	-75.6269	-75.9001	-75.4334	0.13	1169	174	69
1990	36.1694	36.1579	35.7397	36.6147	0.22	-75.7060	-75.7246	-75.8519	-75.3994	0.10	3008	77	60
1991	36.4187	36.4502	35.8336	36.8000	0.21	-75.7869	-75.8002	-75.9169	-75.5167	0.08	1810	175	96
1992	36.5321	36.6100	35.9489	36.8472	0.25	-75.8292	-75.8472	-75.9319	-75.5761	0.09	1062	53	32
1993	36.5670	36.5501	36.0502	36.8472	0.21	-75.8271	-75.8303	-75.9335	-75.6667	0.08	564	55	41
1994	36.1257	36.1701	35.5372	36.5464	0.24	-75.6832	-75.7233	-75.8503	-75.3967	0.12	5311	96	80
1995	35.9316	36.0212	35.2231	36.5169	0.29	-75.5949	-75.6441	-75.8319	-75.3953	0.14	911	57	48
1996	35.2220	35.1460	35.0310	36.0470	0.17	-75.2600	-75.2530	-75.4970	-75.1860	0.04	745	204	137
1997	35.3447	35.3077	35.0733	36.2013	0.24	-75.2943	-75.2851	-75.4534	-75.2102	0.05	1391	131	105
1998	36.0924	36.0198	35.1550	36.7715	0.44	-75.6490	-75.6334	-75.8980	-75.3758	0.15	467	64	30
1999	35.9563	36.1313	35.0990	36.5485	0.50	-75.6157	-75.6878	-75.8032	-75.3513	0.17	283	146	51
2000	36.0038	36.1243	35.0147	36.3882	0.36	-75.6361	-75.6772	-76.0655	-75.3733	0.13	6492	141	91
2001	35.8318	35.8188	35.4060	36.2993	0.24	-75.5269	-75.4918	-75.7525	-75.3637	0.12	2476	163	106
2002	36.1759	36.2153	35.1645	36.5903	0.30	-75.6946	-75.7223	-75.8365	-75.3783	0.12	4183	226	163
2003	35.9037	35.9089	35.0339	36.3811	0.24	-75.5750	-75.5469	-75.7875	-75.4050	0.09	1929	227	143
2004	36.1887	36.2228	35.5739	36.9344	0.22	-75.6732	-75.6792	-75.8217	-75.3834	0.09	2738	257	199
2005	35.9526	35.9742	35.1200	36.1928	0.19	-75.5789	-75.5733	-75.6919	-75.3856	0.06	4298	147	133
2006	36.4338	36.4956	35.7834	36.6597	0.16	-75.7674	-75.7744	-75.8436	-75.4414	0.07	4525	148	228
2007	37.1410	37.2072	35.6001	37.4606	0.32	-75.6598	-75.6568	-75.8381	-75.3681	0.07	370	149	82
2008	36.7135	36.5572	36.0189	37.3175	0.33	-75.7238	-75.7586	-75.8411	-75.5002	0.07	1038	150	185
2009	36.5080	36.6206	36.0047	37.2261	0.33	-75.5561	-75.5436	-75.7650	-75.4335	0.09	147	151	30
2010	36.0985	35.9452	35.7431	36.4144	0.27	-75.5383	-75.5631	-75.6975	-75.3502	0.12	572	152	40
2013	36.9358	36.9344	36.8669	37.0731	0.03	-75.7691	-75.7629	-75.8342	-75.7001	0.03	1196	153	78

Table 6. Continued, Atlantic Sturgeon.

	LATITUDE					LONGITUDE							
YEAR	MEAN	MEDIAN	MIN	MAX	STDEV	MEAN	MEDIAN	MIN	MAX	STDEV	N	T	TN
1988	36.2329	36.2933	35.4756	36.6335	0.27	-75.7403	-75.7764	-75.8501	-75.4686	0.10	15	199	15
1989	36.8918	36.8918	36.5834	37.2002	0.44	-75.6334	-75.6334	-75.7501	-75.5167	0.17	2	174	2
1990	36.3012	36.2925	36.2001	36.4001	0.07	-75.7795	-75.7869	-75.8072	-75.7336	0.03	10	77	8
1991	36.2001	36.2502	35.8667	36.4834	0.31	-75.7056	-75.7501	-75.8167	-75.5500	0.14	3	175	3
1992	36.6608	36.6947	36.5592	36.7286	0.09	-75.8811	-75.8981	-75.9319	-75.8133	0.06	6	53	3
1993												55	
1994	36.0768	36.0424	35.7272	36.3508	0.22	-75.6754	-75.6651	-75.8033	-75.4867	0.11	6	96	6
1995												57	
1996	35.5164	35.4320	35.2950	36.0210	0.24	-75.3066	-75.2850	-75.3900	-75.2350	0.06	15	204	13
1997	35.3539	35.1668	35.0822	36.2013	0.48	-75.3122	-75.2982	-75.3659	-75.2902	0.03	5	131	5
1998	36.7682	36.7682	36.7682	36.7682		-75.8437	-75.8437	-75.8437	-75.8437		1	64	1
1999	35.8778	35.8778	35.7680	35.9875	0.16	-75.5161	-75.5161	-75.6138	-75.4183	0.14	2	146	2
2000	35.8798	35.9893	35.1987	36.1523	0.35	-75.6296	-75.6454	-75.7115	-75.5203	0.07	8	141	6
2001	35.7095	35.7828	35.1768	36.0955	0.44	-75.5672	-75.6088	-75.6523	-75.3987	0.12	4	163	4
2002	36.0627	35.9783	35.7862	36.4678	0.20	-75.6477	-75.6025	-75.8300	-75.4928	0.10	22	226	17
2003	35.8067	35.9079	35.1675	36.0292	0.28	-75.5956	-75.6006	-75.7872	-75.4675	0.10	8	227	8
2004	35.5272	35.5272	35.5272	35.5272		-75.4353	-75.4353	-75.4353	-75.4353		1	257	1
2005	36.0019	36.0019	36.0019	36.0019		-75.6236	-75.6236	-75.6236	-75.6236		1	147	1
2006	36.3765	36.4843	35.7501	36.5200	0.25	-75.7649	-75.8190	-75.8375	-75.4378	0.13	22	148	16
2007	36.8895	37.1489	35.8586	37.4031	0.57	-75.6461	-75.6297	-75.7531	-75.5436	0.08	13	149	10
2008	36.3966	36.2469	36.2001	37.2942	0.26	-75.7630	-75.7560	-75.8433	-75.5544	0.06	72	150	32
2009	36.3402	36.2386	35.9453	37.1619	0.31	-75.7108	-75.7272	-75.7906	-75.5369	0.07	31	151	21
2010	35.7931	35.7931	35.7931	35.7931		-75.4619	-75.4619	-75.4619	-75.4619		1	152	1
2013	36.9556	36.9429	36.8864	37.0501	0.07	-75.7414	-75.7463	-75.7834	-75.6897	0.04	4	153	4

Table 6. Continued, Spiny Dogfish.

	LATITUDE					LONGITUDE							
YEAR	MEAN	MEDIAN	MIN	MAX	STDEV	MEAN	MEDIAN	MIN	MAX	STDEV	N	T	TN
1988	36.2770	36.2668	35.9731	36.4503	0.15	-75.7445	-75.7502	-75.8167	-75.5853	0.07	20	199	20
1989	36.5591	36.6167	35.4835	37.2002	0.41	-75.6973	-75.7251	-75.9489	-75.4335	0.14	54	174	54
1990	35.7061	35.7397	35.5342	35.8022	0.11	-75.4353	-75.4331	-75.4936	-75.3994	0.04	43	77	5
1991	36.2781	36.3275	35.5335	36.8500	0.33	-75.6989	-75.7251	-75.9169	-75.3500	0.14	70	175	70
1992	36.2032	36.3219	35.7625	36.5761	0.29	-75.6877	-75.7540	-75.8303	-75.4067	0.14	12	53	12
1993	36.0876	36.0084	35.8334	36.4001	0.21	-75.6656	-75.6417	-75.8303	-75.5334	0.10	8	55	8
1994	36.0418	36.0418	35.5372	36.5464	0.71	-75.6186	-75.6186	-75.8119	-75.4253	0.27	2	96	2
1995												57	
1996	35.2206	35.1550	35.0510	35.4710	0.14	-75.2546	-75.2450	-75.4970	-75.1790	0.05	1231	204	39
1997	35.1852	35.1490	35.0733	36.0159	0.16	-75.3104	-75.2898	-75.4534	-75.2215	0.06	555	131	48
1998	35.9093	35.9208	35.0700	36.7715	0.50	-75.6247	-75.5977	-75.8810	-75.3758	0.14	949	64	41
1999	36.0096	36.0363	35.1132	36.4438	0.32	-75.6160	-75.6337	-75.8003	-75.3832	0.13	338	146	23
2000	35.2653	35.1951	34.4703	36.2667	0.44	-75.6489	-75.4731	-76.4763	-75.3342	0.38	401	141	26
2001	35.7814	35.7320	35.1582	36.2663	0.25	-75.5126	-75.4712	-75.7540	-75.3637	0.11	894	163	102
2002	35.9771	36.0095	35.1687	36.5022	0.27	-75.6050	-75.6082	-75.8105	-75.3783	0.12	1308	226	67
2003	35.8389	35.8919	35.0106	36.9817	0.35	-75.6001	-75.5783	-76.0603	-75.4050	0.12	5894	227	162
2004	36.1379	36.1536	35.5236	36.9344	0.24	-75.6497	-75.6721	-75.8217	-75.3733	0.11	5334	257	240
2005	35.9149	35.9731	35.1200	36.1928	0.25	-75.5756	-75.5721	-75.7228	-75.3856	0.07	1646	147	126
2006	36.3838	36.4542	35.5669	36.6597	0.19	-75.7527	-75.7692	-75.8436	-75.3736	0.08	12047	148	285
2007	36.6888	36.5747	35.6001	37.4606	0.56	-75.6516	-75.6594	-75.8381	-75.3681	0.10	9972	149	183
2008	36.5686	36.5372	35.7897	37.3175	0.37	-75.7162	-75.7544	-75.8436	-75.2600	0.09	8607	150	321
2009	36.3641	36.2914	35.0725	37.2492	0.38	-75.6441	-75.6558	-75.9586	-75.3586	0.12	2602	151	194
2010	36.0341	35.9397	35.5406	36.5478	0.26	-75.5410	-75.5461	-75.8267	-75.3203	0.14	11228	152	193
2013	36.8324	36.9297	35.7728	37.1719	0.31	-75.7295	-75.7550	-75.9036	-74.8331	0.11	9065	153	241

Table 6. Continued, Skate species.

	LATITUDE					LONGITUDE							
YEAR	MEAN	MEDIAN	MIN	MAX	STDEV	MEAN	MEDIAN	MIN	MAX	STDEV	N	T	TN
1988	35.1514	35.1514	35.1334	35.1694	0.03	-75.5335	-75.5335	-75.5668	-75.5001	0.05	2	199	2
1989	35.4835	35.4835	35.4835	35.4835		-75.4335	-75.4335	-75.4335	-75.4335		1	174	1
1990	35.8022	35.8022	35.8022	35.8022		-75.4331	-75.4331	-75.4331	-75.4331		1	77	1
1991	36.3470	36.4538	35.6501	36.8500	0.33	-75.6722	-75.6752	-75.8334	-75.3169	0.13	20	175	20
1992	36.1750	36.1186	35.8303	36.5761	0.38	-75.6834	-75.7117	-75.8133	-75.5253	0.15	3	53	3
1993	36.1168	36.1168	36.1168	36.1168		-75.7002	-75.7002	-75.7002	-75.7002		1	55	1
1994	35.7076	35.7076	35.6881	35.7272	0.03	-75.4819	-75.4819	-75.4867	-75.4772	0.01	2	96	2
1995												57	
1996	35.3644	35.3040	35.0600	36.0350	0.34	-75.3149	-75.3230	-75.4640	-75.2090	0.09	9	204	8
1997												131	
1998												64	
1999												146	
2000												141	
2001	35.3406	35.2310	35.1143	35.9383	0.25	-75.4496	-75.4265	-75.5865	-75.3687	0.08	13	163	13
2002												226	
2003	35.3673	35.1403	35.0106	35.9578	0.34	-75.7333	-75.8689	-76.0425	-75.4050	0.26	16	227	13
2004	36.1396	36.1339	35.5272	36.9344	0.24	-75.6498	-75.6700	-75.8217	-75.3733	0.11	485	257	173
2005	35.8951	35.9703	34.8981	36.1928	0.28	-75.5767	-75.5711	-75.8239	-75.3869	0.08	118	147	61
2006	36.3635	36.4293	35.7834	36.5906	0.20	-75.7456	-75.7669	-75.8436	-75.4394	0.08	958	148	170
2007	36.6861	36.5751	35.6001	37.4606	0.56	-75.6500	-75.6590	-75.8381	-75.3681	0.10	1444	149	172
2008	36.5730	36.5397	35.7897	37.3175	0.37	-75.7156	-75.7543	-75.8436	-75.2600	0.09	2077	150	308
2009	36.4160	36.4581	35.0725	37.2492	0.41	-75.5952	-75.5783	-75.9586	-75.3586	0.11	329	151	115
2010	36.0623	35.9747	35.5501	36.4344	0.27	-75.4954	-75.4167	-75.7225	-75.3203	0.14	51	152	37
2013	36.8153	36.9263	35.7728	37.1719	0.33	-75.7298	-75.7539	-75.9036	-75.4036	0.10	789	153	198

Table 6. Continued, Flounder species.

	LATITUDE					LONGITUDE							
YEAR	MEAN	MEDIAN	MIN	MAX	STDEV	MEAN	MEDIAN	MIN	MAX	STDEV	N	T	TN
1988	35.3977	34.9182	34.8642	36.3669	0.67	-75.9651	-75.9919	-76.2501	-75.5903	0.25	10	199	10
1989	35.6835	35.5169	35.4835	36.2001	0.30	-75.4735	-75.4335	-75.6669	-75.4001	0.11	8	174	5
1990	35.8008	35.8008	35.8008	35.8008		-75.3835	-75.3835	-75.3835	-75.3835		1	77	1
1991	36.0717	36.1168	34.8669	36.7503	0.48	-75.6656	-75.7003	-76.1334	-75.3169	0.20	853	175	71
1992	35.9406	35.9406	35.7625	36.1186	0.25	-75.5592	-75.5592	-75.7117	-75.4067	0.22	6	53	2
1993	35.9168	35.9168	35.9168	35.9168		-75.5668	-75.5668	-75.5668	-75.5668		1	55	1
1994	35.9407	36.0010	35.2431	36.5464	0.40	-75.6065	-75.6265	-75.8119	-75.3772	0.15	53	96	12
1995	35.9376	35.9658	35.5169	36.4717	0.29	-75.5958	-75.6086	-75.8319	-75.4001	0.15	58	57	26
1996	35.1570	35.1085	35.0870	35.5350	0.13	-75.3010	-75.2475	-75.4640	-75.1950	0.10	13	204	12
1997	35.2958	35.3077	35.0702	36.0159	0.20	-75.2998	-75.2798	-75.4534	-75.2102	0.06	334	131	53
1998	35.8797	35.9183	35.0872	36.7715	0.57	-75.6674	-75.6630	-75.8852	-75.3758	0.16	35	64	26
1999	35.8784	35.7635	35.1447	36.4540	0.47	-75.5932	-75.5813	-75.8075	-75.3740	0.17	415	146	41
2000	35.7725	35.9713	34.4703	36.3017	0.52	-75.6596	-75.6346	-76.4662	-75.3308	0.26	104	141	40
2001	35.5817	35.6463	35.0832	36.0982	0.36	-75.5674	-75.5555	-75.9192	-75.3637	0.14	158	163	63
2002	36.0106	36.0095	35.2023	36.5142	0.29	-75.6220	-75.6190	-75.8055	-75.3783	0.13	470	226	105
2003	35.8016	35.8528	35.0231	36.9817	0.33	-75.5854	-75.5525	-76.0603	-75.3668	0.13	618	227	144
2004	36.1524	36.1583	35.6169	36.5272	0.22	-75.6705	-75.6861	-75.8217	-75.4002	0.11	755	257	136
2005	35.9621	35.9792	35.1358	36.1928	0.21	-75.5913	-75.5854	-75.6919	-75.4517	0.06	86	147	46
2006	36.3870	36.4511	35.7501	36.5842	0.19	-75.7614	-75.7764	-75.8436	-75.4378	0.08	774	148	189
2007	36.6085	36.5175	35.6001	37.4606	0.56	-75.6520	-75.6711	-75.8150	-75.3681	0.11	920	149	141
2008	36.4900	36.5169	35.8092	37.2942	0.36	-75.7233	-75.7571	-75.8436	-75.2600	0.11	780	150	152
2009	36.6242	36.6269	35.8536	37.2403	0.41	-75.5965	-75.6026	-75.8161	-75.4506	0.10	27	151	18
2010	36.1864	36.3506	35.6775	36.5719	0.31	-75.6113	-75.6592	-75.7931	-75.3502	0.15	44	152	30
2013	36.8750	36.9264	35.8022	37.1719	0.25	-75.7352	-75.7575	-75.9036	-74.8331	0.12	234	153	130

Table 6. Continued, clupeids.

	LATITUDE					LONGITUDE							
YEAR	MEAN	MEDIAN	MIN	MAX	STDEV	MEAN	MEDIAN	MIN	MAX	STDEV	N	T	TN
1988	36.2584	36.2669	35.9731	36.4744	0.19	-75.7348	-75.7669	-75.8167	-75.5853	0.09	16	199	11
1989	36.3897	36.6003	35.4835	37.1001	0.49	-75.7209	-75.7964	-75.9489	-75.4002	0.16	28	174	25
1990	36.0143	35.8929	35.5342	36.6300	0.36	-75.5965	-75.5635	-75.8001	-75.4331	0.15	111	77	10
1991	36.3296	36.4003	35.8334	36.8500	0.27	-75.7440	-75.8001	-75.9169	-75.4501	0.12	64	175	47
1992	36.1468	36.0339	35.8303	36.5761	0.39	-75.6608	-75.6439	-75.8133	-75.5253	0.14	4	53	3
1993	35.9168	35.9168	35.9168	35.9168		-75.5668	-75.5668	-75.5668	-75.5668		1	55	1
1994	35.7726	35.7076	35.4747	36.0501	0.23	-75.5358	-75.4819	-75.6761	-75.4253	0.10	9	96	8
1995												57	
1996	35.2673	35.1660	35.0090	36.0350	0.23	-75.3274	-75.2780	-76.0060	-75.1870	0.15	40	204	31
1997	35.4222	35.4222	35.4222	35.4222		-75.2732	-75.2732	-75.2732	-75.2732		1	131	1
1998	35.4371	35.5045	35.1650	35.6417	0.25	-75.5060	-75.4363	-75.6500	-75.4317	0.12	3	64	3
1999	36.0090	36.0090	36.0090	36.0090		-75.6232	-75.6232	-75.6232	-75.6232		1	146	1
2000	35.5230	35.5058	35.1860	35.9250	0.26	-75.4520	-75.4520	-75.5175	-75.4170	0.04	14	141	5
2001	35.5430	35.5312	35.0832	36.1933	0.32	-75.5252	-75.4660	-75.9192	-75.3637	0.15	122	163	71
2002	36.4245	36.4245	36.4245	36.4245		-75.7998	-75.7998	-75.7998	-75.7998		1	226	1
2003	35.9382	35.8022	35.6336	36.3811	0.29	-75.5842	-75.4994	-75.7875	-75.4408	0.14	10	227	9
2004	36.1513	36.1414	35.5431	36.9344	0.25	-75.6513	-75.6675	-75.7931	-75.3834	0.09	162	257	55
2005	35.8901	35.9707	35.1244	36.1739	0.27	-75.5713	-75.5721	-75.7228	-75.3869	0.07	191	147	66
2006	36.4170	36.4876	36.0011	36.5544	0.17	-75.7762	-75.8046	-75.8419	-75.5794	0.07	34	148	26
2007	37.1246	37.2038	36.2961	37.4168	0.33	-75.6935	-75.7007	-75.7797	-75.6231	0.05	60	149	14
2008	36.7158	36.5433	35.8092	37.3175	0.47	-75.6963	-75.7001	-75.8433	-75.3668	0.10	509	150	89
2009	36.2470	36.2156	35.0725	37.2492	0.34	-75.6742	-75.7057	-75.9586	-75.3586	0.12	2937	151	130
2010	36.0808	36.0143	35.5406	36.5719	0.28	-75.5899	-75.5821	-75.8267	-75.3503	0.14	3508	152	120
2013	36.8448	36.9189	35.8022	37.1575	0.29	-75.7386	-75.7650	-75.9036	-74.8331	0.13	2140	153	107

Table 6. Continued, Red Drum.

	LATITUDE					LONGITUDE							
YEAR	MEAN	MEDIAN	MIN	MAX	STDEV	MEAN	MEDIAN	MIN	MAX	STDEV	N	T	TN
1988	36.4744	36.4744	36.4744	36.4744		-75.8281	-75.8281	-75.8281	-75.8281		1	199	1
1989												174	
1990												77	
1991												175	
1992												53	
1993	36.5420	36.5422	36.5335	36.5502	0.01	-75.8168	-75.8169	-75.8334	-75.8002	0.02	3	55	3
1994	35.8633	35.8633	35.6881	36.0386	0.25	-75.5636	-75.5636	-75.6501	-75.4772	0.12	2	96	2
1995												57	
1996	35.1390	35.1390	35.1390	35.1390		-75.2860	-75.2860	-75.2860	-75.2860		1	204	1
1997												131	
1998												64	
1999	35.1248	35.1208	35.1090	35.1447	0.02	-75.4400	-75.4017	-75.5173	-75.4010	0.07	3	146	3
2000	35.9893	36.0620	35.0592	36.3145	0.35	-75.6561	-75.6576	-75.9612	-75.4342	0.14	13	141	12
2001	35.8240	35.7355	35.6565	36.1683	0.24	-75.5063	-75.4542	-75.7043	-75.4123	0.13	6	163	4
2002												226	0
2003	35.9127	35.9251	35.7436	36.0492	0.12	-75.5673	-75.5758	-75.6428	-75.4675	0.07	8	227	6
2004	36.1829	36.1964	35.9233	36.4242	0.20	-75.7150	-75.7408	-75.8211	-75.5911	0.10	8	257	7
2005	35.8758	35.9753	35.5853	36.0669	0.26	-75.5504	-75.5647	-75.6367	-75.4497	0.09	3	147	3
2006												148	
2007												149	
2008												150	
2009												151	
2010												152	
2013												153	

Table 6. Continued, other sciaenids.

	LATITUDE					LONGITUDE							
YEAR	MEAN	MEDIAN	MIN	MAX	STDEV	MEAN	MEDIAN	MIN	MAX	STDEV	N	T	TN
1988	36.2638	36.2669	35.1694	36.5025	0.25	-75.7513	-75.7668	-75.8383	-75.5001	0.08	78	199	30
1989	36.2590	36.2711	35.3001	37.1335	0.67	-75.5818	-75.5002	-75.8667	-75.4334	0.18	15	174	10
1990	35.7387	35.6819	35.5342	36.0000	0.24	-75.4946	-75.4422	-75.6334	-75.4081	0.12	3	77	3
1991	36.1256	36.1669	35.5502	36.6334	0.36	-75.6407	-75.7002	-75.8336	-75.3169	0.18	36	175	32
1992	35.9038	35.8303	35.7625	36.1186	0.19	-75.5479	-75.5253	-75.7117	-75.4067	0.15	3	53	3
1993	35.1694	35.1694	35.1694	35.1694		-75.5501	-75.5501	-75.5501	-75.5501		1	55	1
1994	35.3573	35.2890	35.2706	35.6881	0.16	-75.4593	-75.4756	-75.4783	-75.4061	0.03	14	96	6
1995												57	
1996	35.1010	35.1070	34.5982	35.4560	0.12	-75.3633	-75.2750	-76.0634	-75.1950	0.23	49	204	32
1997	35.3363	35.3255	35.0984	35.5958	0.27	-75.3609	-75.3571	-75.3872	-75.3421	0.02	8	131	4
1998	35.4514	35.2030	35.0750	36.1932	0.41	-75.6231	-75.6368	-75.8008	-75.4150	0.10	55	64	20
1999	35.5022	35.5022	35.4885	35.5158	0.02	-75.4218	-75.4218	-75.4230	-75.4207	0.00	4	146	2
2000	35.2900	35.2413	35.0592	35.6342	0.19	-75.4872	-75.4157	-75.9612	-75.3308	0.19	71	141	10
2001	35.4719	35.2110	35.0832	36.1933	0.41	-75.6169	-75.6192	-75.9192	-75.3875	0.15	64	163	36
2002	35.8081	35.8535	35.1360	36.5903	0.52	-75.6253	-75.6082	-75.8437	-75.3962	0.17	27	226	19
2003	35.6574	35.7025	35.0842	36.2717	0.34	-75.5956	-75.5753	-75.9450	-75.4050	0.15	53	227	31
2004	36.0660	36.0744	35.5236	36.9022	0.27	-75.6216	-75.6264	-75.8069	-75.3733	0.12	55	257	39
2005	35.5371	35.5853	34.8981	36.0850	0.41	-75.5743	-75.5689	-75.8239	-75.4497	0.09	39	147	25
2006	36.3824	36.4843	35.5669	36.6597	0.27	-75.7554	-75.8019	-75.8375	-75.3736	0.12	62	148	46
2007	36.2142	36.0725	35.6001	37.4031	0.51	-75.6095	-75.6211	-75.8053	-75.3681	0.14	84	149	19
2008	36.3086	36.2550	35.8175	37.2864	0.39	-75.6835	-75.7001	-75.8436	-75.4758	0.13	403	150	41
2009	36.0042	36.1125	35.0725	36.3744	0.40	-75.7039	-75.6969	-75.9586	-75.5211	0.11	175	151	14
2010	36.3864	36.3864	36.2008	36.5719	0.26	-75.7361	-75.7361	-75.7931	-75.6792	0.08	2	152	2
2013	36.7859	36.9177	35.8364	37.1719	0.35	-75.7274	-75.7531	-75.9036	-75.4364	0.11	270	153	64

Table 7. Descriptive statistics for habitat model parameters sampled.

YEAR	Number of Tows	Depth (m) Min	Depth (m) Max	Grain Size by Min	Grain Size by Max	% Org. Carbon Min	% Org. Carbon Max	Bottom Types Shepard Code	# of	% of
1988	199	11.0	27.4	0.943	3.255	0.0862	1.3295	GRAVEL	40	25.3
								GRAVELLY SEDIMENT	17	10.8
								SAND	99	62.7
								SEDIMENT	2	1.3
1989	174	9.1	29.3	1.595	4.352	0.1308	4.8673	CLAYEY SILT	22	14.0
								GRAVEL	6	3.8
								GRAVELLY SEDIMENT	9	5.7
								SAND	96	61.1
								SANDY SILT	17	10.8
								SEDIMENT	5	3.2
								SILTY SAND	2	1.3
1990	77	7.3	29.3	1.595	3.255	0.1308	1.3295	GRAVEL	6	11.1
								GRAVELLY SEDIMENT	12	22.2
								SAND	29	53.7
								SANDY SILT	2	3.7
								SEDIMENT	5	9.3
1991	175	9.1	28.0	1.595	4.352	0.0862	2.5352	CLAYEY SILT	5	3.9
								GRAVEL	6	4.7
								GRAVELLY SEDIMENT	19	15.0
								SAND	96	75.6
								SILTY CLAY	1	0.8
1992	53	6.1	26.5	1.595	3.255	0.2169	4.8673	GRAVEL	1	2.6
								GRAVELLY SEDIMENT	1	2.6
								SAND	35	89.7
								SEDIMENT	2	5.1

Table 7. Continued.

YEAR	Number of Tows	Depth (m) Min	Depth (m) Max	Grain Size by Min	Grain Size by Max	% Org. Carbon Min	% Org. Carbon Max	Bottom Types Shepard Code	# of	% of
1993	55	7.3	23.8	1.595	3.255	0.1308	4.8673	GRAVELLY SEDIMENT	3	6.0
								SAND	46	92.0
								SEDIMENT	1	2.0
1994	96	9.1	22.6	1.595	3.255	0.1308	1.3295	GRAVEL	8	12.1
								GRAVELLY SEDIMENT	14	21.2
								SAND	41	62.1
								SEDIMENT	3	4.5
1995	57	8.5	20.7	1.595	3.255	0.1308	0.7060	GRAVEL	1	2.9
								GRAVELLY SEDIMENT	8	22.9
								SAND	24	68.6
								SEDIMENT	2	5.7
1996	204	10.4	29.6	1.983	3.255	0.1308	0.7060	CLAYEY SILT	12	5.9
								SAND	190	93.1
								SEDIMENT	2	1.0
1997	131	9.1	24.7	2.602	3.255	0.1308	0.7060	CLAYEY SILT	1	0.8
								SAND	127	97.7
								SEDIMENT	2	1.5
1998	64	12.8	23.8	1.983	3.255	0.1308	2.5352	GRAVELLY SEDIMENT	18	30.0
								SAND	41	68.3
								SEDIMENT	1	1.7
1999	146	10.7	24.1	1.595	3.255	0.1308	0.7060	GRAVEL	6	4.4
								GRAVELLY SEDIMENT	28	20.7
								SAND	96	71.1
								SEDIMENT	5	3.7
2000	141	9.8	22.6	1.595	3.255	0.0862	0.7060	GRAVEL	14	12.1
								GRAVELLY SEDIMENT	20	17.2
								SAND	76	65.5
								SEDIMENT	6	5.2

Table 7. Continued.

YEAR	Number of Tows	Depth (m) Min	Depth (m) Max	Grain Size by Min	Grain Size by Max	% Org. Carbon Min	% Org. Carbon Max	Bottom Types Shepard Code	# of	% of
2001	163	10.7	22.3	1.595	3.255	0.1308	0.7060	GRAVEL	4	2.7
								GRAVELLY SEDIMENT	31	21.2
								SAND	103	70.5
								SEDIMENT	8	5.5
2002	226	10.1	24.7	1.595	3.255	0.1308	1.3295	GRAVEL	10	5.7
								GRAVELLY SEDIMENT	33	18.8
								SAND	126	71.6
								SEDIMENT	7	4.0
2003	227	11.6	22.3	1.595	3.255	0.0862	0.7060	GRAVEL	11	6.0
								GRAVELLY SEDIMENT	35	19.1
								SAND	124	67.8
								SEDIMENT	13	7.1
2004	257	9.1	23.9	1.595	3.255	0.1308	0.7060	GRAVEL	11	5.2
								GRAVELLY SEDIMENT	40	19.0
								SAND	146	69.5
								SEDIMENT	13	6.2
2005	147	10.4	26.7	1.983	3.255	0.1308	0.7060	GRAVEL	14	10.2
								GRAVELLY SEDIMENT	35	25.5
								SAND	78	56.9
								SEDIMENT	10	7.3
2006	299	9.1	21.9	1.595	3.255	0.1308	1.3295	GRAVEL	34	12.5
								GRAVELLY SEDIMENT	22	8.1
								SAND	211	77.3
								SEDIMENT	6	2.2
2007	185	9.8	25.6	1.595	4.352	0.1308	1.3295	GRAVEL	4	2.9
								GRAVELLY SEDIMENT	15	10.8
								SAND	111	79.9
								SANDY SILT	9	6.5

Table 7. Continued.

YEAR	Number of Tows	Depth (m) Min	Depth (m) Max	Grain Size by Min	Grain Size by Max	% Org. Carbon Min	% Org. Carbon Max	Bottom Types Shepard Code	# of	% of
2008	329	9.1	32.6	1.595	4.352	0.1308	1.3295	GRAVEL	11	3.8
								GRAVELLY SEDIMENT	12	4.1
								SAND	231	79.1
								SANDY SILT	9	3.1
								SEDIMENT	2	0.7
								SILT	1	0.3
								SILTY SAND	26	8.9
2009	210	5.6	23.9	1.595	4.352	0.0862	1.3295	CLAYEY SILT	6	3.6
								GRAVEL	18	10.7
								GRAVELLY SEDIMENT	23	13.7
								SAND	102	60.7
								SANDY SILT	6	3.6
								SEDIMENT	8	4.8
								SILTY SAND	5	3.0
2010	199	9.0	26.7	1.595	3.255	0.1308	0.7060	GRAVEL	7	4.1
								GRAVELLY SEDIMENT	9	5.3
								SAND	145	84.8
								SEDIMENT	10	5.8
2013	243	10.6	25.0	1.595	4.352	0.1308	2.5352	CLAYEY SAND	1	0.4
								GRAVEL	3	1.3
								GRAVELLY SEDIMENT	3	1.3
								SAND	212	88.7
								SANDY SILT	7	2.9
								SEDIMENT	1	0.4
								SILTY CLAY	8	3.3
								SILTY SAND	4	1.7

Table 8. Taxa co-occurrence matrices, by year.

1988	Striped Bass	Atlantic Sturgeon	Spiny Dogfish	Flounder	Clupeids	Red Drum	Sciaenids	Skates
Striped Bass								
Atlantic Sturgeon	11							
Spiny Dogfish	9	2						
Flounder	2	1	3					
Clupeids	4	2	9	3				
Red Drum	0	0	0	0	0			
Sciaenids	15	2	20	4	10	0		
Skates	0	0	0	0	0	0	1	

1989	Striped Bass	Atlantic Sturgeon	Spiny Dogfish	Flounder	Clupeids	Red Drum	Sciaenids	Skates
Striped Bass								
Atlantic Sturgeon	1							
Spiny Dogfish	18	1						
Flounder	0	0	2					
Clupeids	8	0	24	2				
Red Drum	0	0	0	0	0			
Sciaenids	0	0	8	1	2	0		
Skates	0	0	1	1	1	0	1	

1990	Striped Bass	Atlantic Sturgeon	Spiny Dogfish	Flounder	Clupeids	Red Drum	Sciaenids	Skates
Striped Bass								
Atlantic Sturgeon	8							
Spiny Dogfish	2	0						
Flounder	0	0	0					
Clupeids	4	0	3	0				
Red Drum	0	0	0	0	0			
Sciaenids	1	0	2	0	1	0		
Skates	0	0	1	0	1	0	0	

1991	Striped Bass	Atlantic Sturgeon	Spiny Dogfish	Flounder	Clupeids	Red Drum	Sciaenids	Skates
Striped Bass								
Atlantic Sturgeon	1							
Spiny Dogfish	39	1						
Flounder	33	1	33					
Clupeids	36	1	47	24				
Red Drum	0	0	0	0	0			
Sciaenids	14	1	28	22	18	0		
Skates	0	0	19	9	10	0	7	

1992	Striped Bass	Atlantic Sturgeon	Spiny Dogfish	Flounder	Clupeids	Red Drum	Sciaenids	Skates
Striped Bass								
Atlantic Sturgeon	2							
Spiny Dogfish	5	0						
Flounder	0	0	1					
Clupeids	1	0	3	0				
Red Drum	0	0	0	0	0			
Sciaenids	0	0	2	2	1	0		
Skates	0	0	2	1	2	0	2	

1993	Striped Bass	Atlantic Sturgeon	Spiny Dogfish	Flounder	Clupeids	Red Drum	Sciaenids	Skates
Striped Bass								
Atlantic Sturgeon	0							
Spiny Dogfish	3	0						
Flounder	0	0	1					
Clupeids	0	0	1	1				
Red Drum	2	0	0	0	0			
Sciaenids	0	0	0	0	0	0		
Skates	0	0	0	0	0	0	0	

1994	Striped Bass	Atlantic Sturgeon	Spiny Dogfish	Flounder	Clupeids	Red Drum	Sciaenids	Skates
Striped Bass								
Atlantic Sturgeon	5							
Spiny Dogfish	2	0						
Flounder	10	0	1					
Clupeids	4	2	1	1				
Red Drum	2	0	0	1	2			
Sciaenids	1	0	0	2	1	1		
Skates	1	1	0	1	2	1	1	

1995	Striped Bass	Atlantic Sturgeon	Spiny Dogfish	Flounder	Clupeids	Red Drum	Sciaenids	Skates
Striped Bass								
Atlantic Sturgeon	0							
Spiny Dogfish	0	0						
Flounder	23	0	0					
Clupeids	0	0	0	0				
Red Drum	0	0	0	0	0			
Sciaenids	0	0	0	0	0	0		
Skates	0	0	0	0	0	0	0	

1996	Striped Bass	Atlantic Sturgeon	Spiny Dogfish	Flounder	Clupeids	Red Drum	Sciaenids	Skates
Striped Bass								
Atlantic Sturgeon	10							
Spiny Dogfish	25	0						
Flounder	2	0	2					
Clupeids	14	0	7	7				
Red Drum	1	0	0	0	0			
Sciaenids	17	0	8	4	11	0		
Skates	2	0	3	2	7	0	3	

1997	Striped Bass	Atlantic Sturgeon	Spiny Dogfish	Flounder	Clupeids	Red Drum	Sciaenids	Skates
Striped Bass								
Atlantic Sturgeon	3							
Spiny Dogfish	41	3						
Flounder	46	1	25					
Clupeids	0	0	0	1				
Red Drum	0	0	0	0	0			
Sciaenids	2	0	0	1	0	0		
Skates	0	0	0	0	0	0	0	

1998	Striped Bass	Atlantic Sturgeon	Spiny Dogfish	Flounder	Clupeids	Red Drum	Sciaenids	Skates
Striped Bass								
Atlantic Sturgeon	1							
Spiny Dogfish	26	1						
Flounder	15	1	18					
Clupeids	0	0	3	2				
Red Drum	0	0	0	0	0			
Sciaenids	7	0	9	7	1	0		
Skates	0	0	0	0	0	0	0	

1999	Striped Bass	Atlantic Sturgeon	Spiny Dogfish	Flounder	Clupeids	Red Drum	Sciaenids	Skates
Striped Bass								
Atlantic Sturgeon	0							
Spiny Dogfish	5	1						
Flounder	10	0	6					
Clupeids	0	0	1	0				
Red Drum	0	0	0	1	0			
Sciaenids	0	0	0	0	0	0		
Skates	0	0	0	0	0	0	0	

2000	Striped Bass	Atlantic Sturgeon	Spiny Dogfish	Flounder	Clupeids	Red Drum	Sciaenids	Skates
Striped Bass								
Atlantic Sturgeon	4							
Spiny Dogfish	11	0						
Flounder	23	3	13					
Clupeids	2	0	1	0				
Red Drum	11	0	0	3	0			
Sciaenids	5	0	6	4	0	1		
Skates	0	0	0	0	0	0	0	

2001	Striped Bass	Atlantic Sturgeon	Spiny Dogfish	Flounder	Clupeids	Red Drum	Sciaenids	Skates
Striped Bass								
Atlantic Sturgeon	3							
Spiny Dogfish	81	1						
Flounder	31	2	33					
Clupeids	40	2	39	32				
Red Drum	4	0	4	1	2			
Sciaenids	10	1	15	21	26	1		
Skates	3	1	3	7	11	0	8	

2002	Striped Bass	Atlantic Sturgeon	Spiny Dogfish	Flounder	Clupeids	Red Drum	Sciaenids	Skates
Striped Bass								
Atlantic Sturgeon	15							
Spiny Dogfish	47	6						
Flounder	79	10	49					
Clupeids	1	0	0	1				
Red Drum	0	0	0	0	0			
Sciaenids	12	0	5	5	0	0		
Skates	0	0	0	0	0	0	0	

2003	Striped Bass	Atlantic Sturgeon	Spiny Dogfish	Flounder	Clupeids	Red Drum	Sciaenids	Skates
Striped Bass								
Atlantic Sturgeon	6							
Spiny Dogfish	109	4						
Flounder	94	4	104					
Clupeids	5	0	7	8				
Red Drum	3	1	6	3	0			
Sciaenids	13	1	14	19	3	1		
Skates	2	1	3	9	3	1	8	

2004	Striped Bass	Atlantic Sturgeon	Spiny Dogfish	Flounder	Clupeids	Red Drum	Sciaenids	Skates
Striped Bass								
Atlantic Sturgeon	0							
Spiny Dogfish	189	1						
Flounder	109	0	130					
Clupeids	41	0	54	26				
Red Drum	5	0	7	6	1			
Sciaenids	24	0	39	23	21	2		
Skates	133	1	167	105	38	5	30	

2005	Striped Bass	Atlantic Sturgeon	Spiny Dogfish	Flounder	Clupeids	Red Drum	Sciaenids	Skates
Striped Bass								
Atlantic Sturgeon	1							
Spiny Dogfish	116	0						
Flounder	43	0	44					
Clupeids	56	0	59	23				
Red Drum	2	0	3	1	2			
Sciaenids	15	0	22	8	18	1		
Skates	54	0	55	23	31	2	12	

2006	Striped Bass	Atlantic Sturgeon	Spiny Dogfish	Flounder	Clupeids	Red Drum	Sciaenids	Skates
Striped Bass								
Atlantic Sturgeon	11							
Spiny Dogfish	221	15						
Flounder	144	13	188					
Clupeids	19	1	25	24				
Red Drum	0	0	0	0	0			
Sciaenids	34	2	42	32	7	0		
Skates	126	6	170	119	11	0	11	

2007	Striped Bass	Atlantic Sturgeon	Spiny Dogfish	Flounder	Clupeids	Red Drum	Sciaenids	Skates
Striped Bass								
Atlantic Sturgeon	4							
Spiny Dogfish	81	10						
Flounder	53	9	139					
Clupeids	12	1	14	12				
Red Drum	0	0	0	0	0			
Sciaenids	4	2	19	17	1	0		
Skates	76	9	170	130	11	0	18	

2008	Striped Bass	Atlantic Sturgeon	Spiny Dogfish	Flounder	Clupeids	Red Drum	Sciaenids	Skates
Striped Bass								
Atlantic Sturgeon	8							
Spiny Dogfish	179	32						
Flounder	63	19	148					
Clupeids	50	12	87	49				
Red Drum	0	0	0	0	0			
Sciaenids	10	3	40	31	13	0		
Skates	176	27	303	141	83	0	39	

2009	Striped Bass	Atlantic Sturgeon	Spiny Dogfish	Flounder	Clupeids	Red Drum	Sciaenids	Skates
Striped Bass								
Atlantic Sturgeon	1							
Spiny Dogfish	29	20						
Flounder	1	0	18					
Clupeids	9	16	123	10				
Red Drum	0	0	0	0	0			
Sciaenids	0	1	13	0	12	0		
Skates	23	7	111	14	54	0	9	

2010	Striped Bass	Atlantic Sturgeon	Spiny Dogfish	Flounder	Clupeids	Red Drum	Sciaenids	Skates
Striped Bass								
Atlantic Sturgeon	0							
Spiny Dogfish	39	1						
Flounder	5	0	29					
Clupeids	20	0	117	22				
Red Drum	0	0	0	0	0			
Sciaenids	0	0	1	1	2	0		
Skates	9	0	37	8	15	0	0	

2013	Striped Bass	Atlantic Sturgeon	Spiny Dogfish	Flounder	Clupeids	Red Drum	Sciaenids	Skates
Striped Bass								
Atlantic Sturgeon	1							
Spiny Dogfish	78	4						
Flounder	36	1	129					
Clupeids	24	3	107	65				
Red Drum	0	0	0	0	0			
Sciaenids	13	1	64	40	40	0		
Skates	59	4	198	107	91	0	59	

Table 9. Summary of Striped Bass habitat parameters, n=48,082.

	Overall	Early	Late
Depth (m)	14-17	11-13	14-17
	38.11%	56.07%	44.85%
Grain Size (phi)	2.60-3.25	1.59-1.98	2.60-3.25
	38.08%	36.21%	42.72%
Soil % Organic Carbon Content	0.217-0.384	0.217-0.384	0.217-0.384
	61.94%	62.57%	61.65%
Salinity	--	--	36-30
	--	--	45.74%
Water Temperature (°C)	4-6	4-6	4-6
	35.27%	38.16%	33.92%
Air Temperature (°C)	6-10	6-10	6-10
	44.69%	48.29%	43.00%
Shepard Code	SAND	SAND	SAND
	62.54%	44.76%	70.91%
Time of Day	Day (1000-1559)	Morning (0400-0959)	Day (1000-1559)
	30.21%	29.60%	30.79%

Table 10. Summary of Atlantic Sturgeon habitat parameters, n=252.

	Overall	Early	Late
Depth (m)	14-17	11-13	14-17
	44.44%	57.14%	51.43%
Grain Size (phi)	1.59-1.98	1.59-1.98	1.59-1.98; 2.6-3.25
	38.49%	47.62%	36.67%; 36.67%
Soil % Organic Carbon Content	0.217-0.384	0.217-0.384	0.217-0.384
	68.25%	69.05%	68.10%
Salinity	--	--	31-35
	--	--	79.19%
Water Temperature (°C)	7-9	4-6	7-9
	51.59%	38.10%	55.71%
Air Temperature (°C)	6-10	6-10	6-10
	47.22%	66.67%	43.33%
Shepard Code	SAND	SAND	SAND
	50.00%	45.24%	50.95%
Time of Day	Night (2200-0359)	Evening (1600-2159)	Night (2200-0359)
	30.16%	35.71%	33.81%

Table 11. Summary of Spiny Dogfish habitat parameters, n=72,105.

	Overall	Early	Late
Depth (m)	14-17	11-13	14-17
	41.96%	45.19%	42.02%
Grain Size (phi)	2.60-3.25	2.60-3.25	2.60-3.25
	59.84%	51.20%	59.36%
Soil % Organic Carbon Content	0.217-0.384	0.217-0.384	0.217-0.384
	55.65%	55.50%	55.65%
Salinity	--	--	26-30
	--	--	46.40%
Water Temperature (°C)	7-9	7-9	7-9
	48.79%	64.59%	48.74%
Air Temperature (°C)	6-10	11-15	6-10
	52.98%	37.80%	53.04%
Shepard Code	SAND	SAND	SAND
	68.04%	54.07%	68.08%
Time of Day	Morning (0400-0959)	Night (2200-0359)	Morning (0400-0959)
	25.70%	33.50%	25.73%

Table 12. Summary of Red Drum habitat parameters, n=48.

	Overall	Early	Late
Depth (m)	14-17	11-13	14-17
	37.50%	50.00%	40.48%
Grain Size (phi)	2.60-3.25	1.98-2.21; 2.21-2.59; 2.60-3.25	2.60-3.25
	64.58%	33.33% each	69.05%
Soil % Organic Carbon Content	0.217-0.384	0.384-0.706	0.217-0.384
	72.92%	50.00%	78.57%
Salinity	--	--	26-30
	--	--	55.88%
Water Temperature (°C)	4-6	4-6	4-6
	60.42%	66.67%	59.52%
Air Temperature (°C)	1-5	6-10	1-5
	41.67%	50.00%	45.24%
Shepard Code	SAND	SAND	SAND
	75.00%	100.00%	71.43%
Time of Day	Evening (1600-2159)	Morning; Day; Evening (0400-0959; 1000-1559; 1600-2159)	Evening (1600-2159)
	35.42%	33.33% each	35.71%

Table 13. Summary of other sciaenids' habitat parameters, n=1,570.

	Overall	Early	Late
Depth (m)	11-13	11-13	18-21
	34.59%	44.97%	33.57%
Grain Size (phi)	2.60-3.25	1.59-1.98	2.60-3.25
	53.66%	40.67%	55.17%
Soil % Organic Carbon Content	0.217-0.384	0.217-0.384	0.217-0.384
	49.40%	53.33%	48.98%
Salinity	--	--	31-35
	--	--	63.53%
Water Temperature (°C)	7-9	1-3	7-9
	45.77%	46.00%	47.15%
Air Temperature (°C)	1-5	1-5	1-5
	38.06%	48.67%	36.95%
Shepard Code	SAND	SAND	SAND
	51.69%	54.67%	51.37%
Time of Day	Morning (0400-0959)	Evening (1600-2159)	Morning (0400-0959)
	31.32%	28.67%	31.74%

Table 14. Summary of flounder habitat parameters, n=6,646.

	Overall	Early	Late
Depth (m)	14-17	18-21	14-17
	37.11%	28.51%	39.23%
Grain Size (phi)	2.60-3.25	2.60-3.25	2.60-3.25
	54.51%	81.31%	49.90%
Soil % Organic Carbon Content	0.217-0.384	0.131-0.217	0.217-0.384
	60.04%	45.66%	62.74%
Salinity	--	--	31-35
	--	--	50.90%
Water Temperature (°C)	7-9	10-12	7-9
	47.18%	45.66%	49.61%
Air Temperature (°C)	6-10	11-15	6-10
	43.91%	53.33%	45.45%
Shepard Code	SAND	SAND	SAND
	65.12%	75.15%	63.40%
Time of Day	Evening (1600-2159)	Day (1000-1359)	Evening (1600-2159)
	29.75%	32.83%	31.47%

Table 15. Summary of clupeid habitat parameters.

	Overall	Early	Late
Depth (m)	14-17	11-13	14-17
	46.84%	64.81%	69.56%
Grain Size (phi)	2.60-3.25	2.60-3.25	2.60-3.25
	69.45%	64.81%	69.56%
Soil % Organic Carbon Content	0.217-0.384	0.131-0.217	0.217-0.384
	60.93%	45.92%	61.65%
Salinity	--	--	26-30
	--	--	56.94%
Water Temperature (°C)	4-6	10-12	4-6
	58.40%	43.35%	59.57%
Air Temperature (°C)	6-10	11-15	6-10
	61.54%	59.23%	62.52%
Shepard Code	SAND	SAND	SAND
	72.76%	77.68%	72.64%
Time of Day	Evening (1600-2159)	Evening (1600-2159)	Evening (1600-2159)
	38.27%	58.93%	37.80%

Table 16. Summary of skate habitat parameters.

	Overall	Early	Late
Depth (m)	14-17	14-17	14-17
	42.37%	33.33%	42.41%
Grain Size (phi)	2.60-3.25	2.60-3.25	2.60-3.25
	54.76%	50.00%	54.78%
Soil % Organic Carbon Content	0.384-0.706	0.217-0.384	0.384-0.706
	42.13%	50.00%	42.20%
Salinity	--	--	26-30
	--	--	37.72%
Water Temperature (°C)	7-9	7-9	7-9
	62.56%	73.33%	62.51%
Air Temperature (°C)	6-10	11-15	6-10
	47.08%	36.67%	47.18%
Shepard Code	SAND	SAND	SAND
	66.58%	53.33%	66.64%
Time of Day	Night (2200-0359)	Day (1000-1359)	Night (2200-0359)
	26.48%	46.67%	31.25%

FIGURES

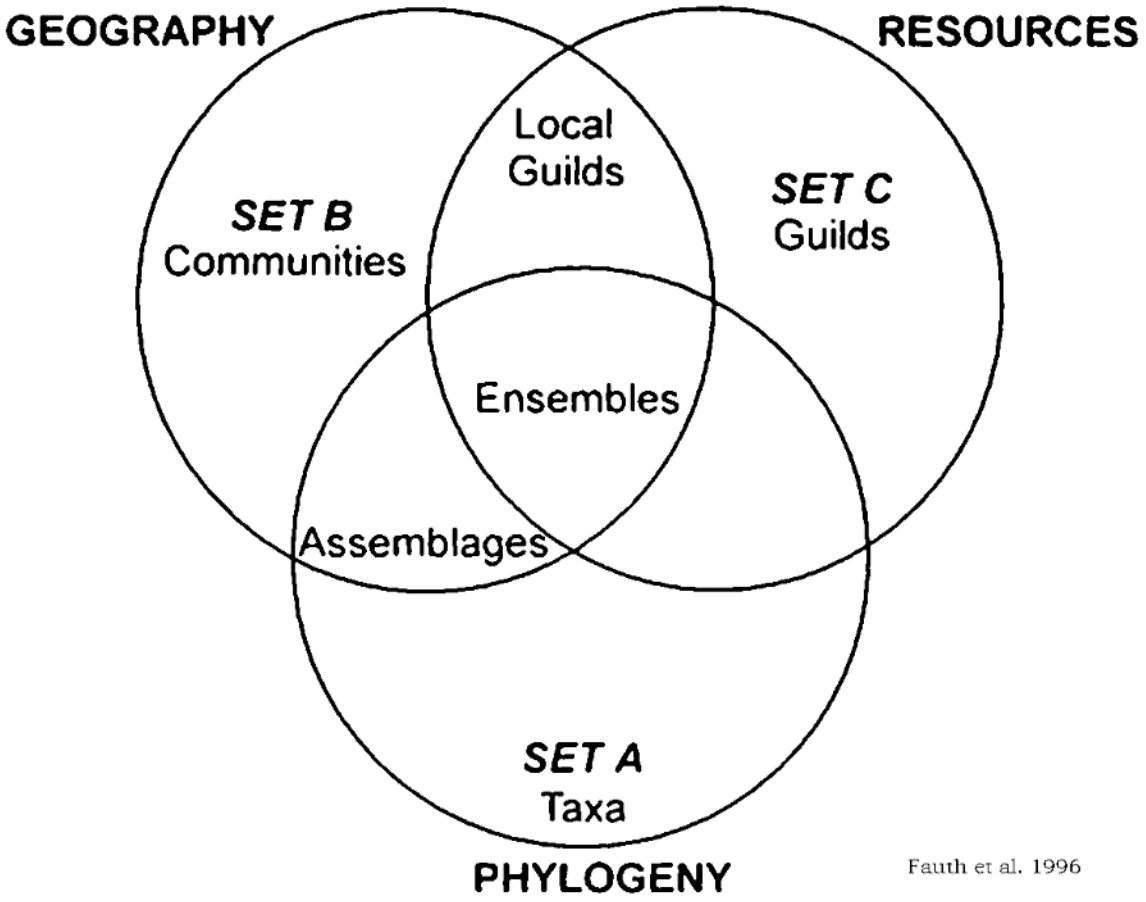

Figure 1. Conceptual diagram depicting practical definitions of ecological terms, from Fauth et al. 1996.

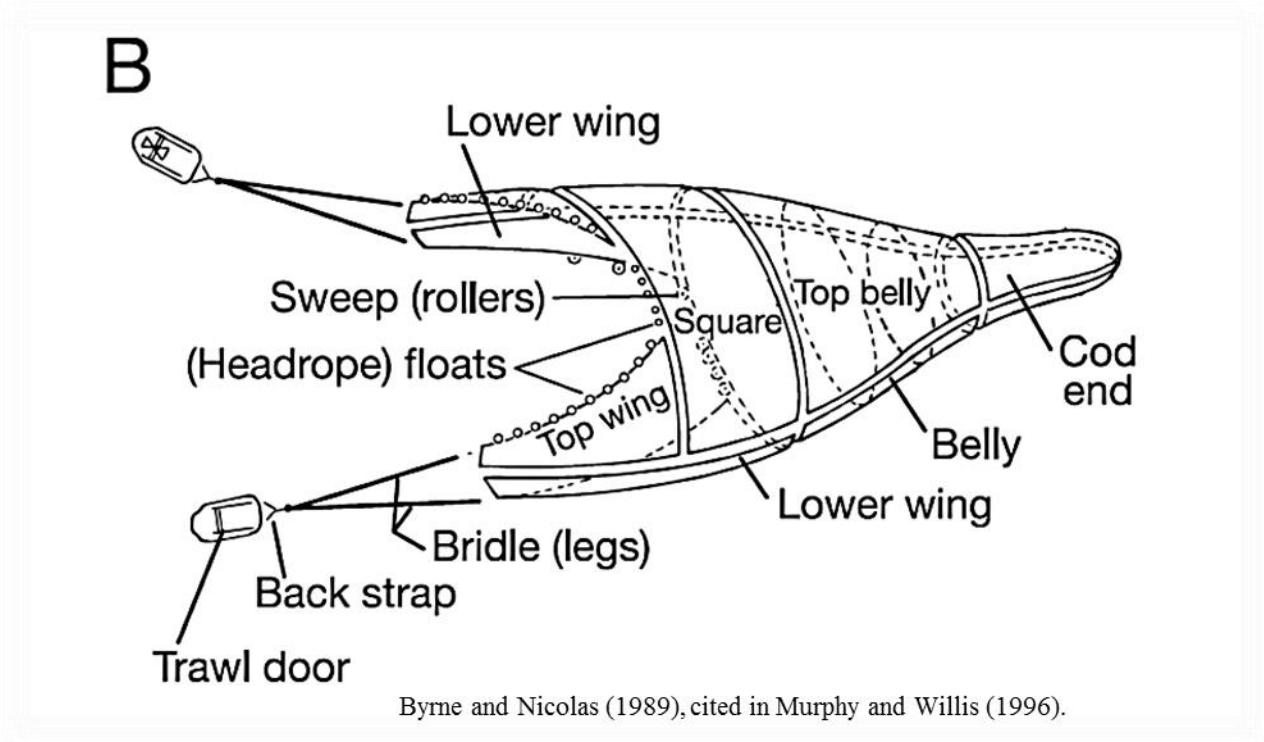

Figure 2. General diagram of an otter trawl, similar to that used during the CWTC, taken from Murphy and Willis (1996).

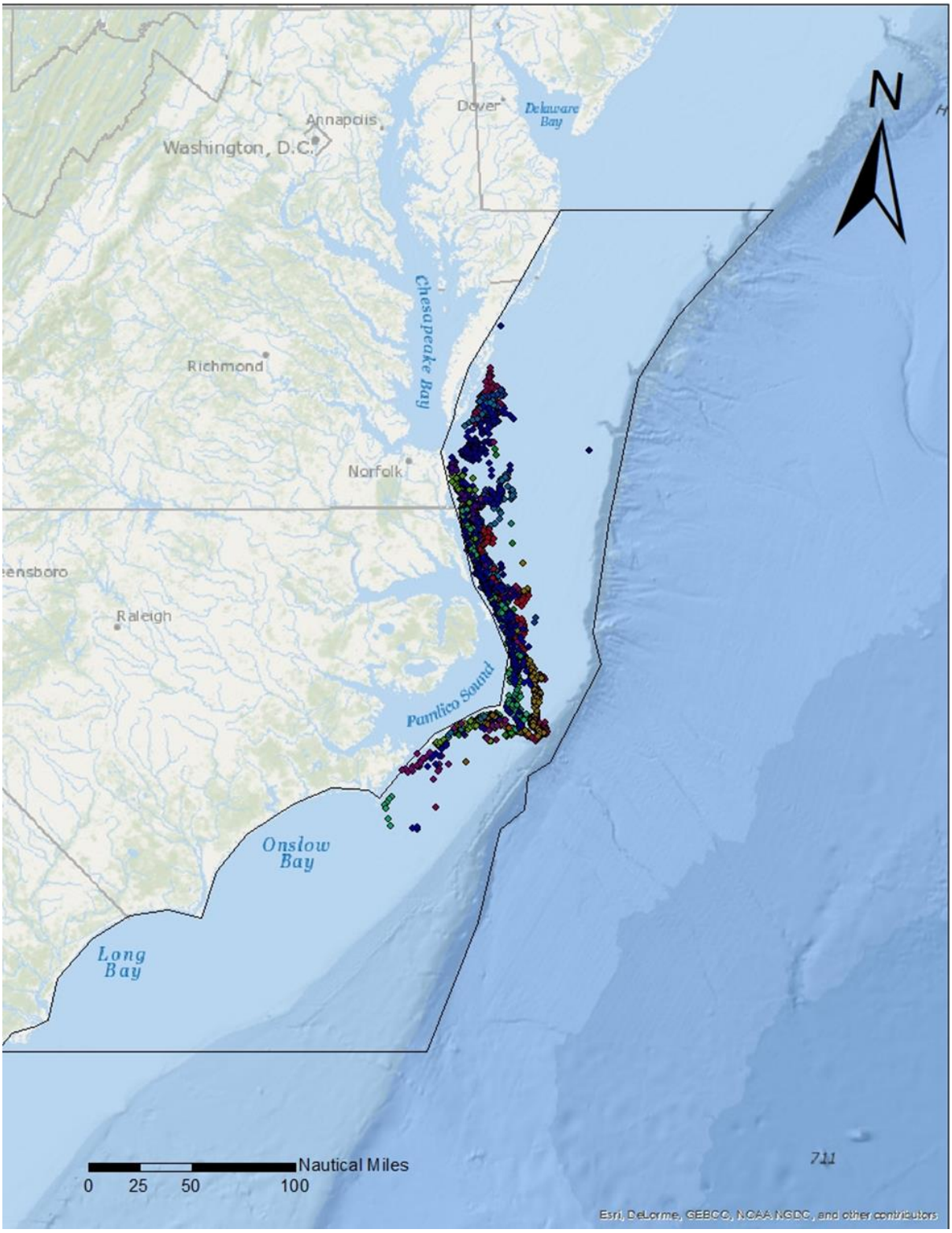

Figure 3. Polygon graphic delineation of the study are with the analysis mask and cruise tows.

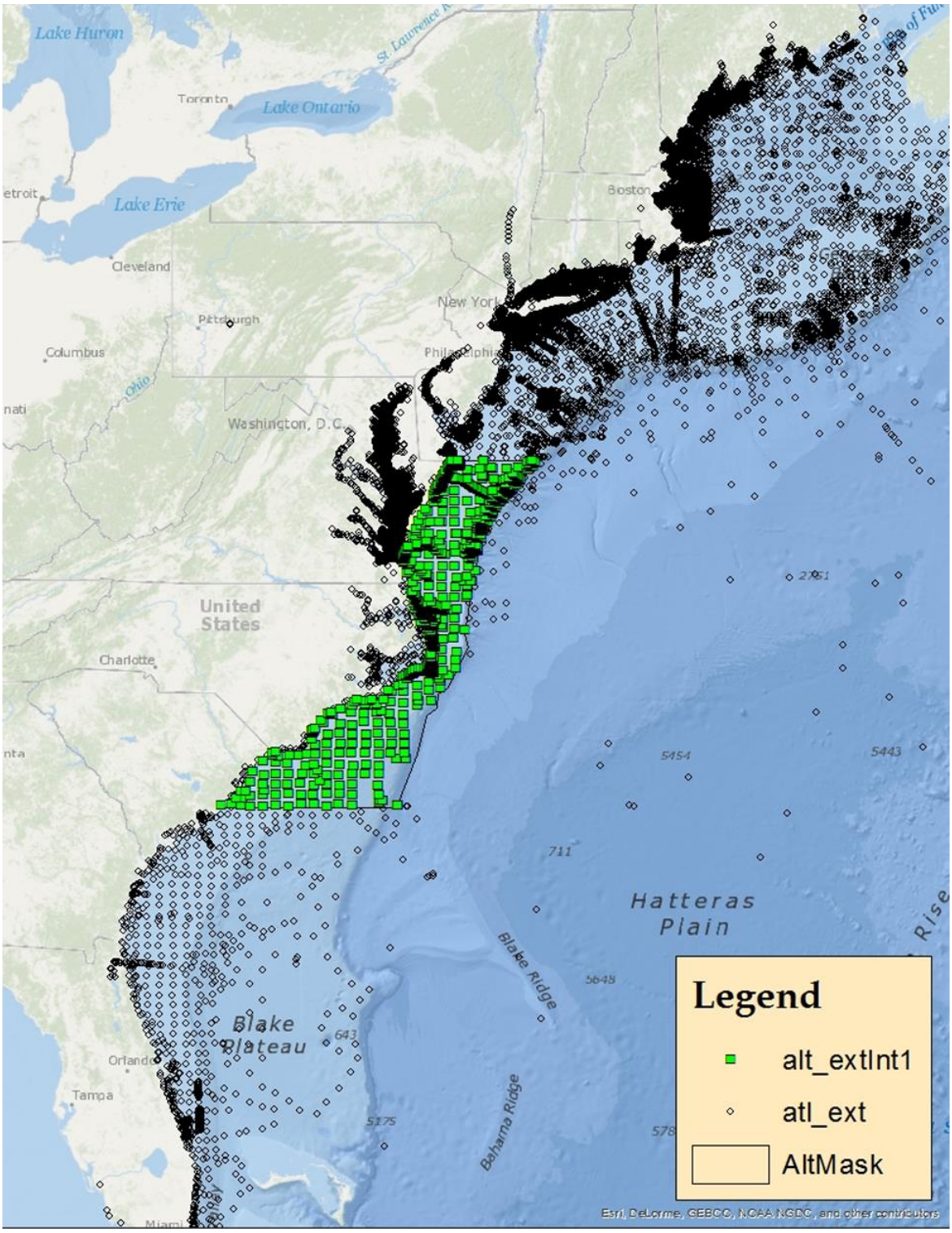

Figure 4. Intersection of usSEABED Extracted data point vector layer with analysis mask from habitat parameter data.

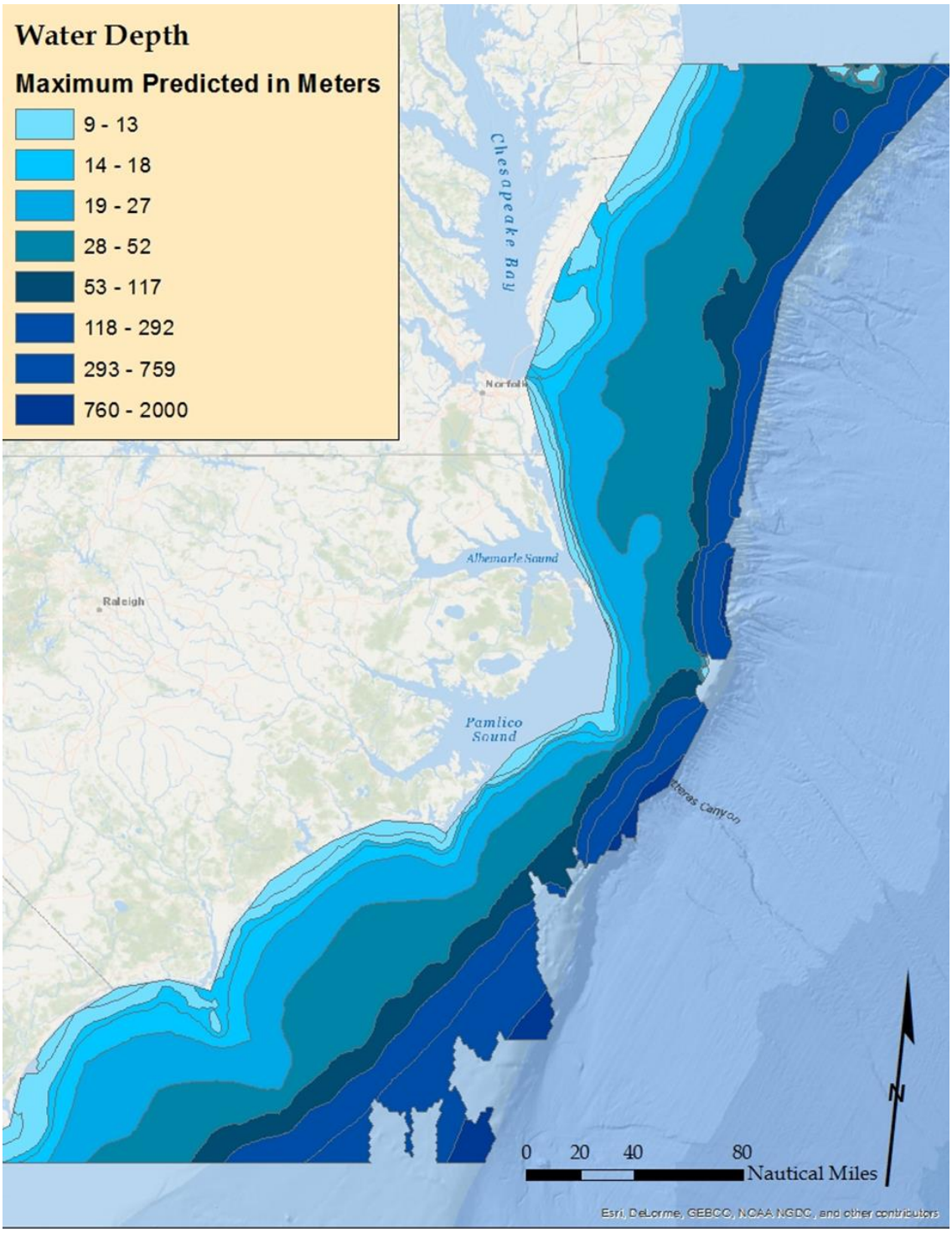

Figure 5. Local polynomial interpolation water depth layer prediction map.

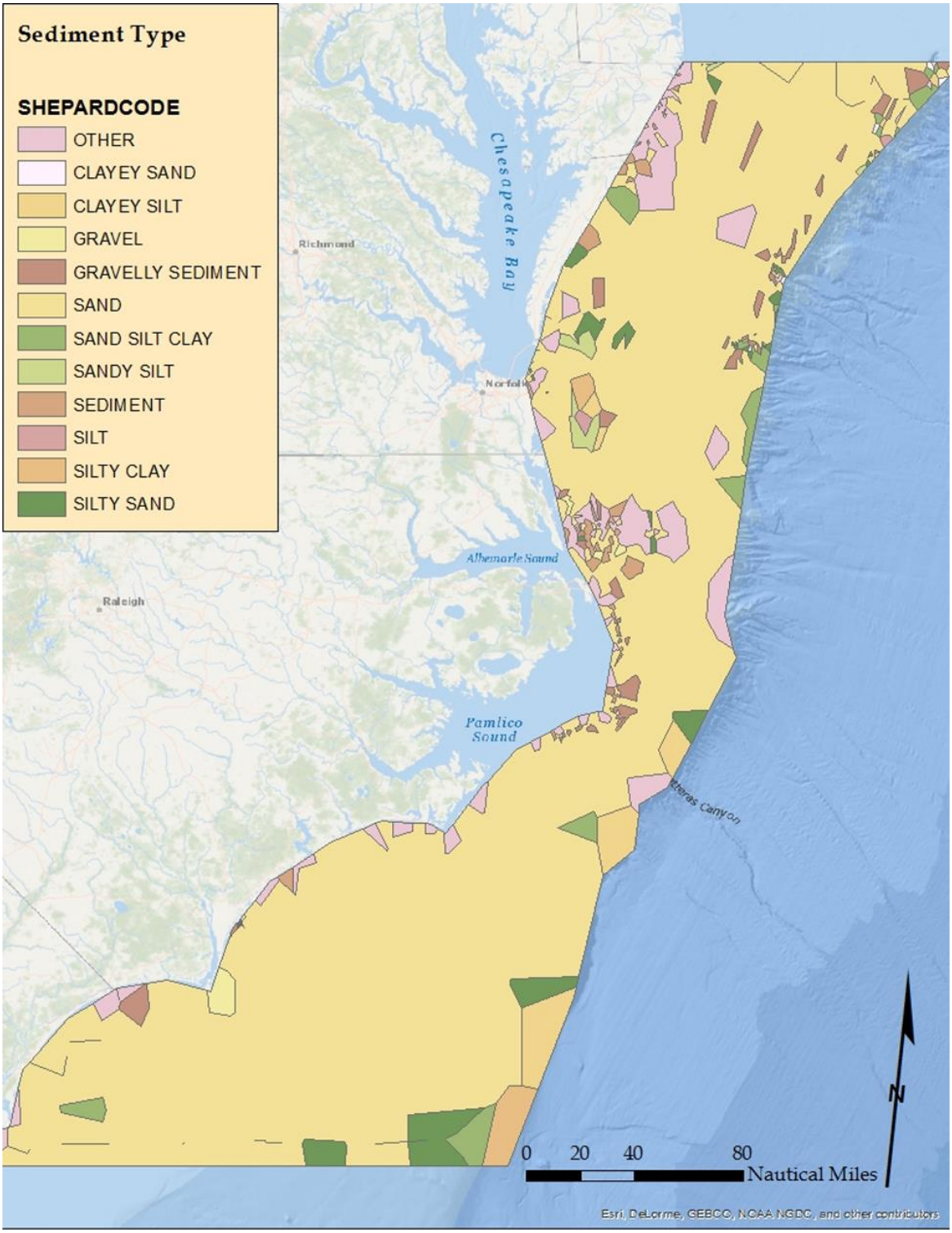

Figure 6. Theissen polygon Shepard code intersected layer map.

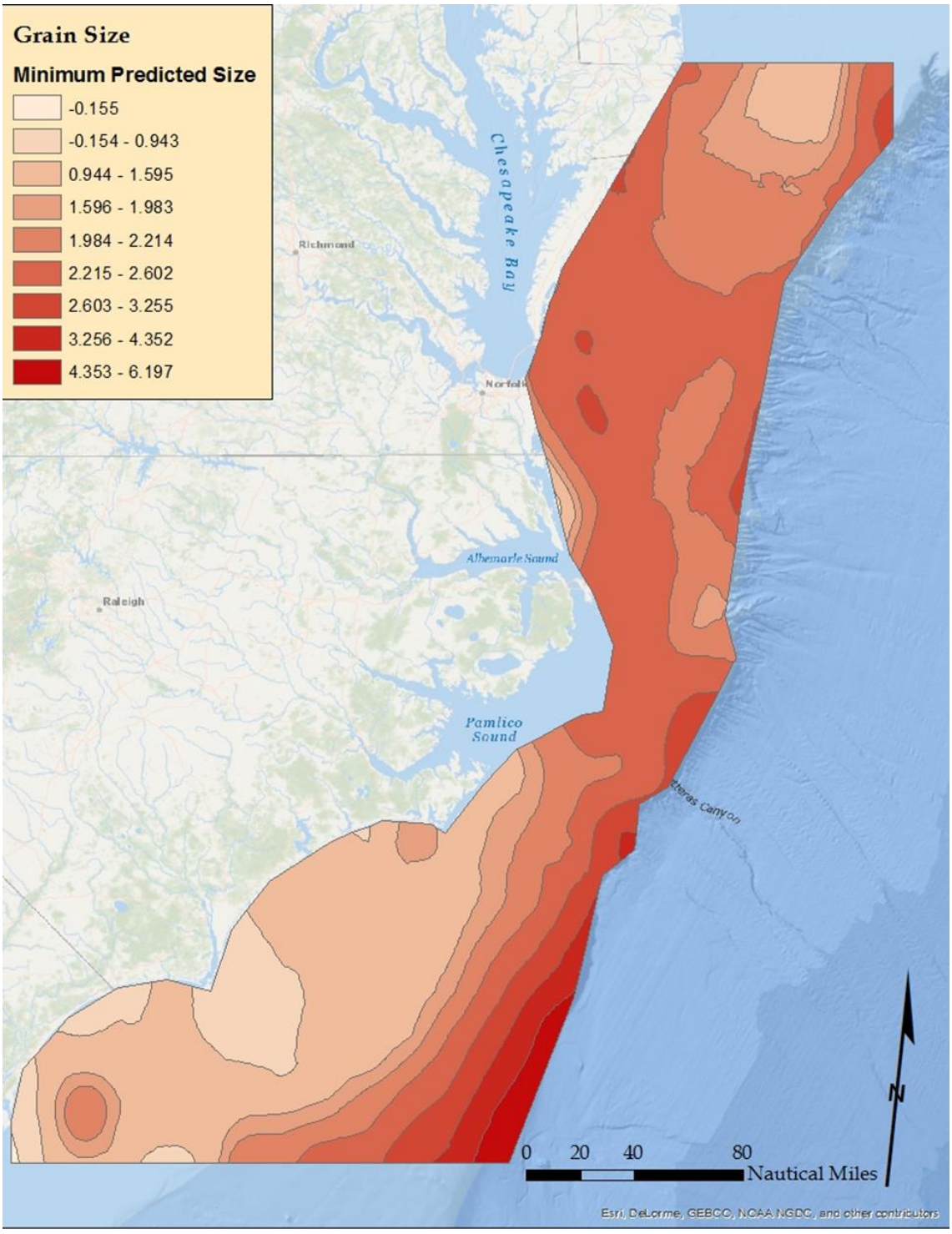

Figure 7. Local polynomial interpolation sediment grain size layer prediction map.

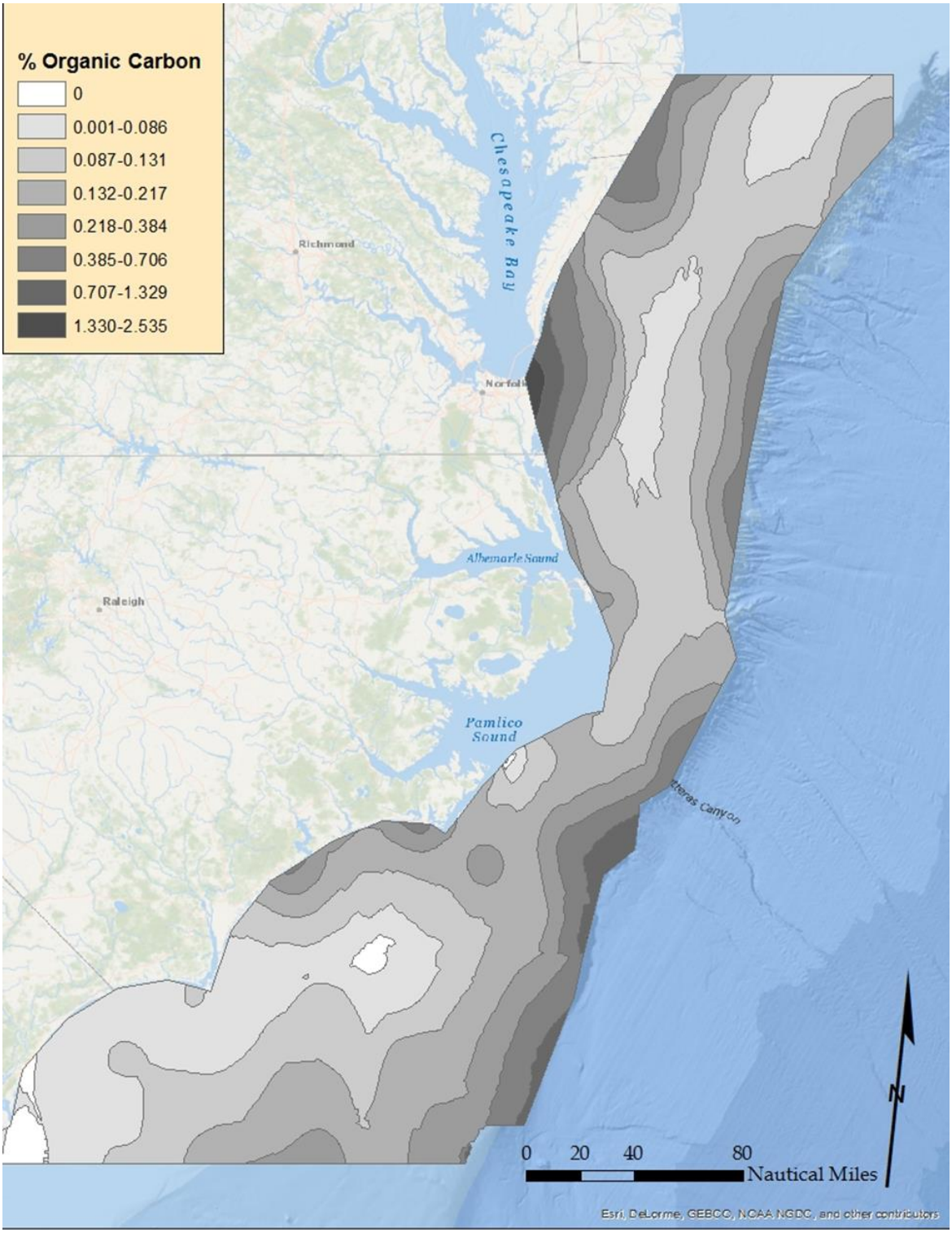

Figure 8. Local polynomial interpolation sediment percent organic carbon content layer prediction map.

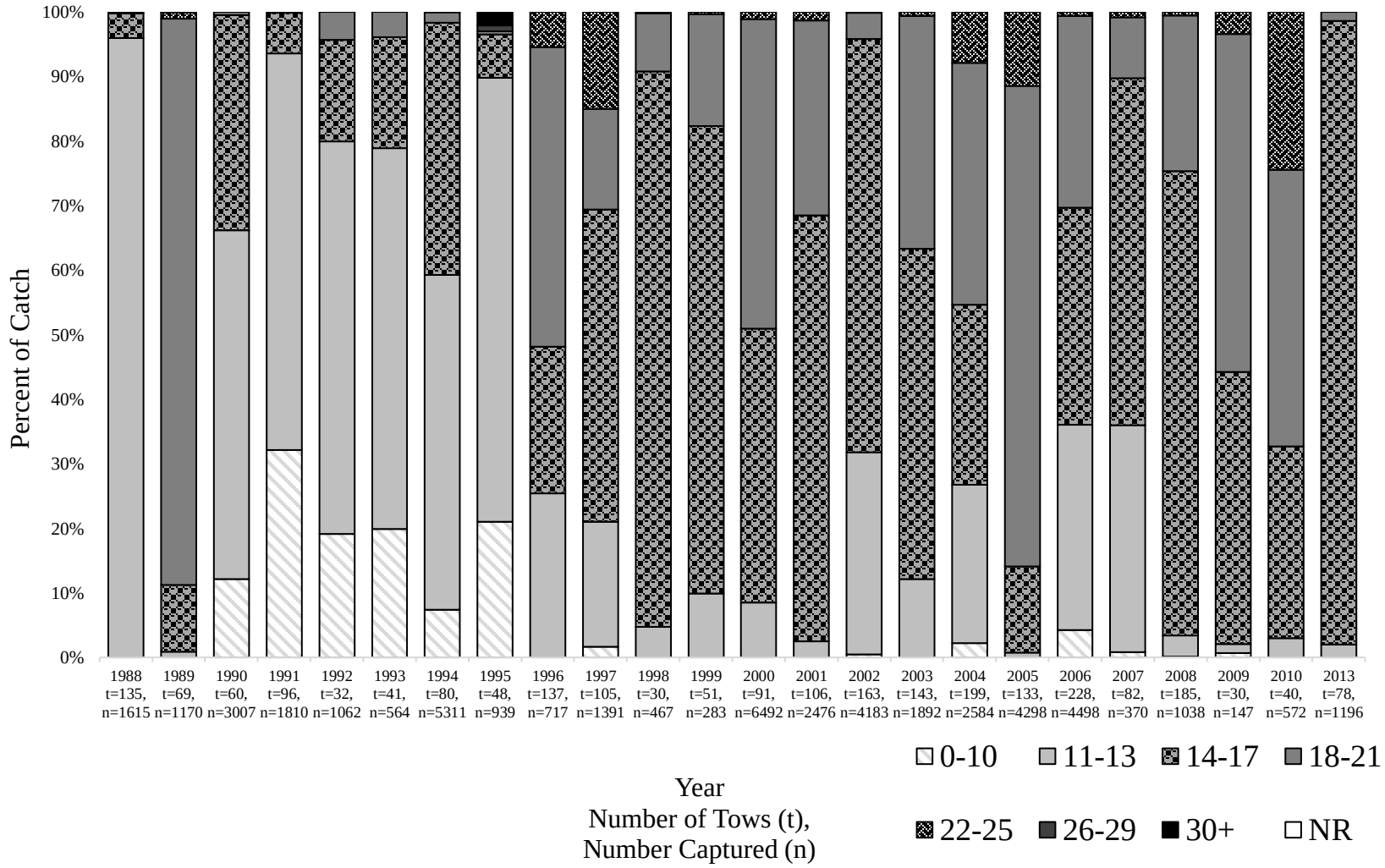

Figure 9. Percentages of striped bass catch from each Cruise year, according to the depth range (meters) at capture.

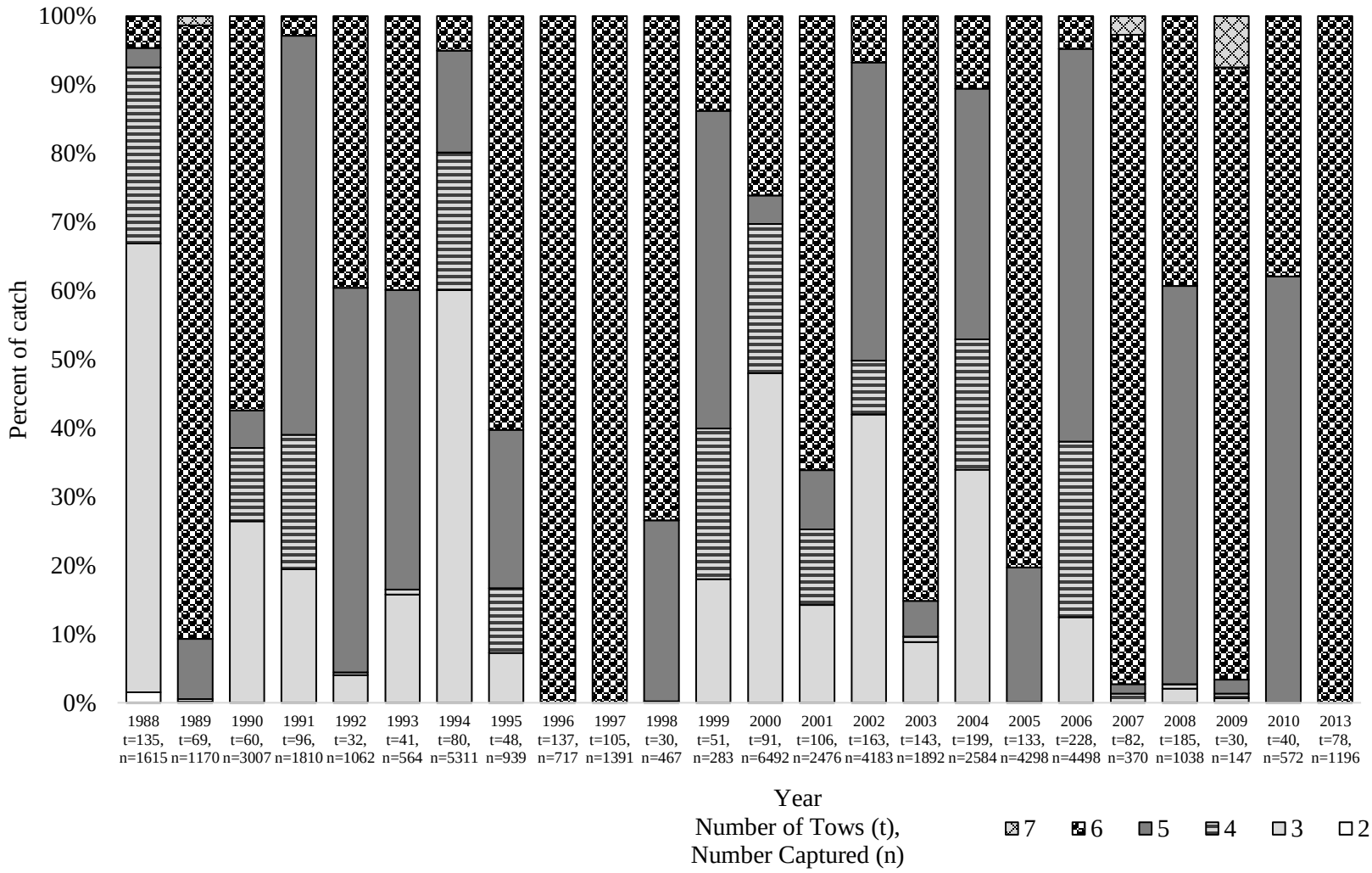

Figure 10. Percentages of striped bass catch from each Cruise year, according to the grain size range (phi) at capture.

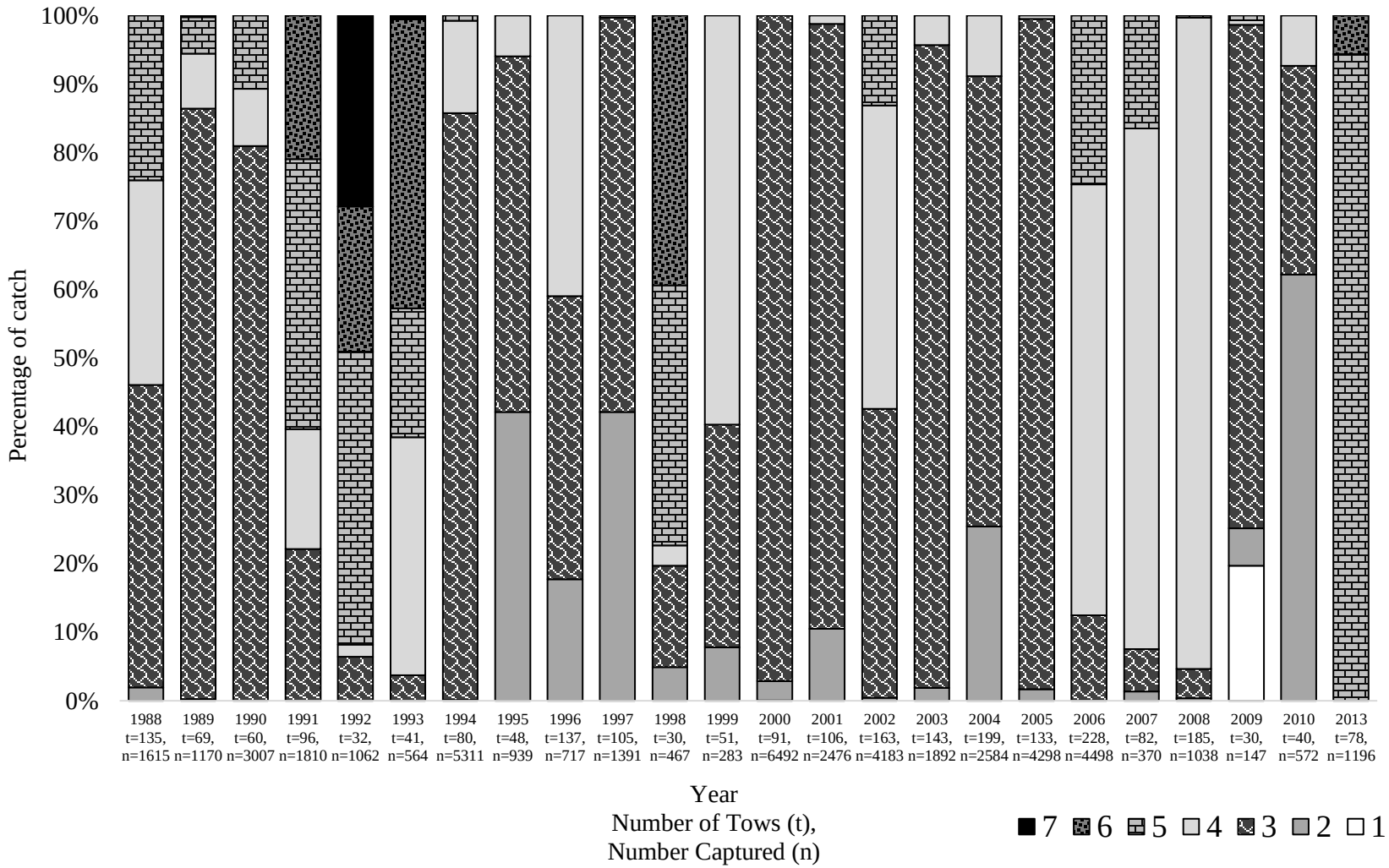

Figure 11. Percentages of striped bass catch from each Cruise year, according to the range of organic carbon content of the soil (ppm) at capture.

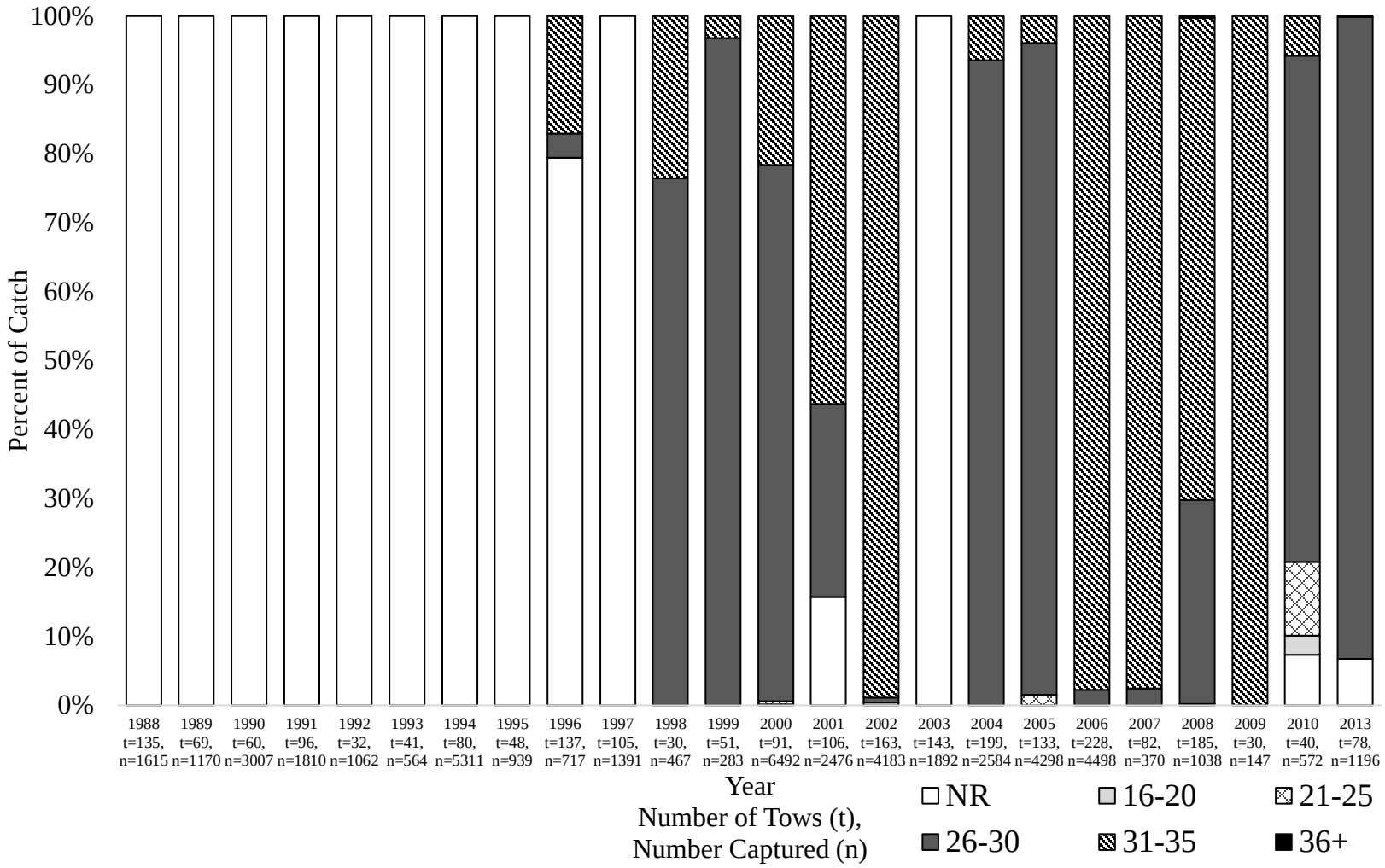

Figure 12. Percentages of striped bass catch from each Cruise year, according to the surface salinity range (ppt) at capture location.

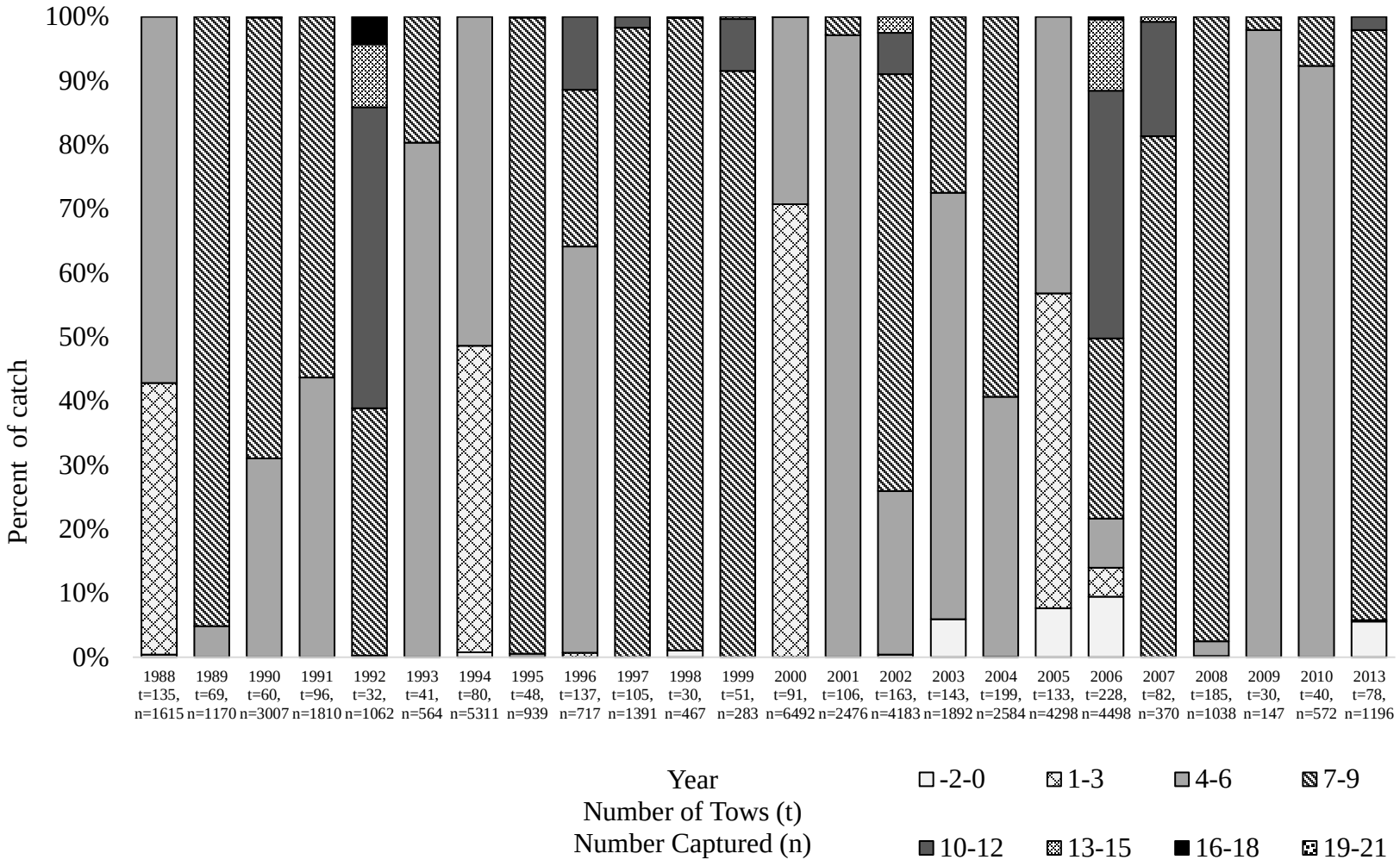

Figure 13. Percentages of striped bass catch from each Cruise year, according to the surface water temperature range (°C) at capture location.

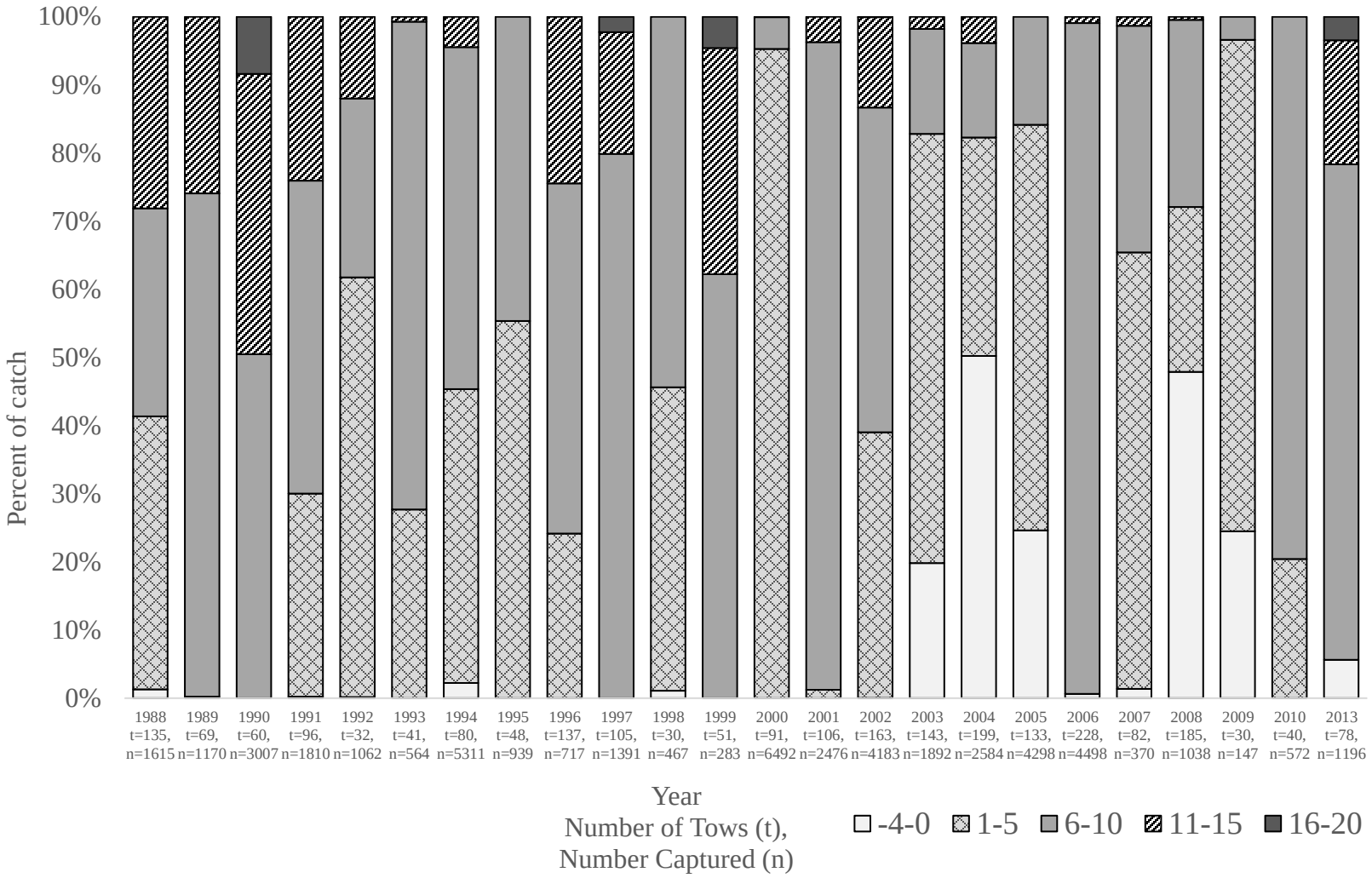

Figure 14. Percentages of striped bass catch from each Cruise year, according to the air temperature range (°C) at capture location.

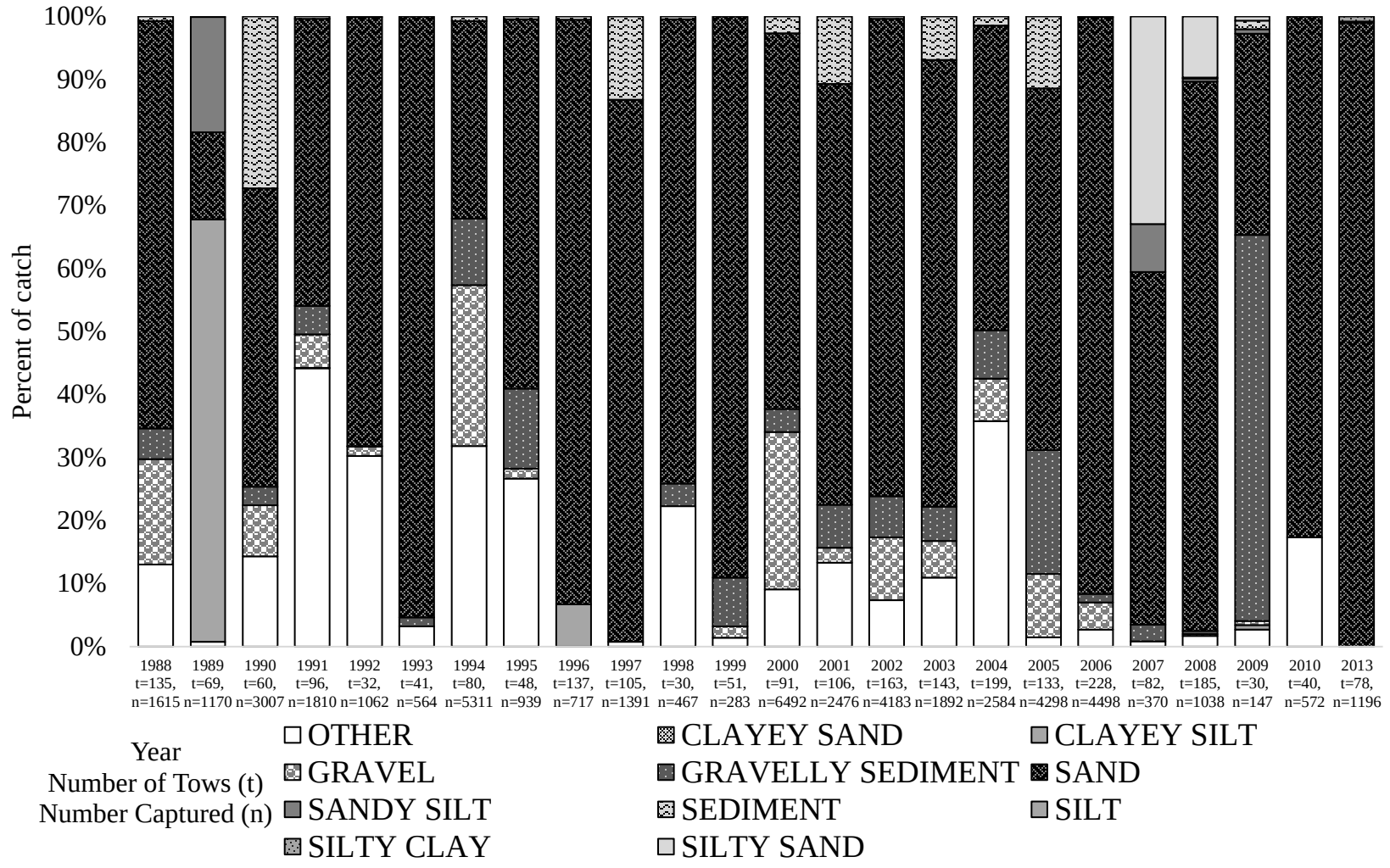

Figure 15. Percentages of striped bass catch from each Cruise year, according to the bottom type by Shepard Code at tow location.

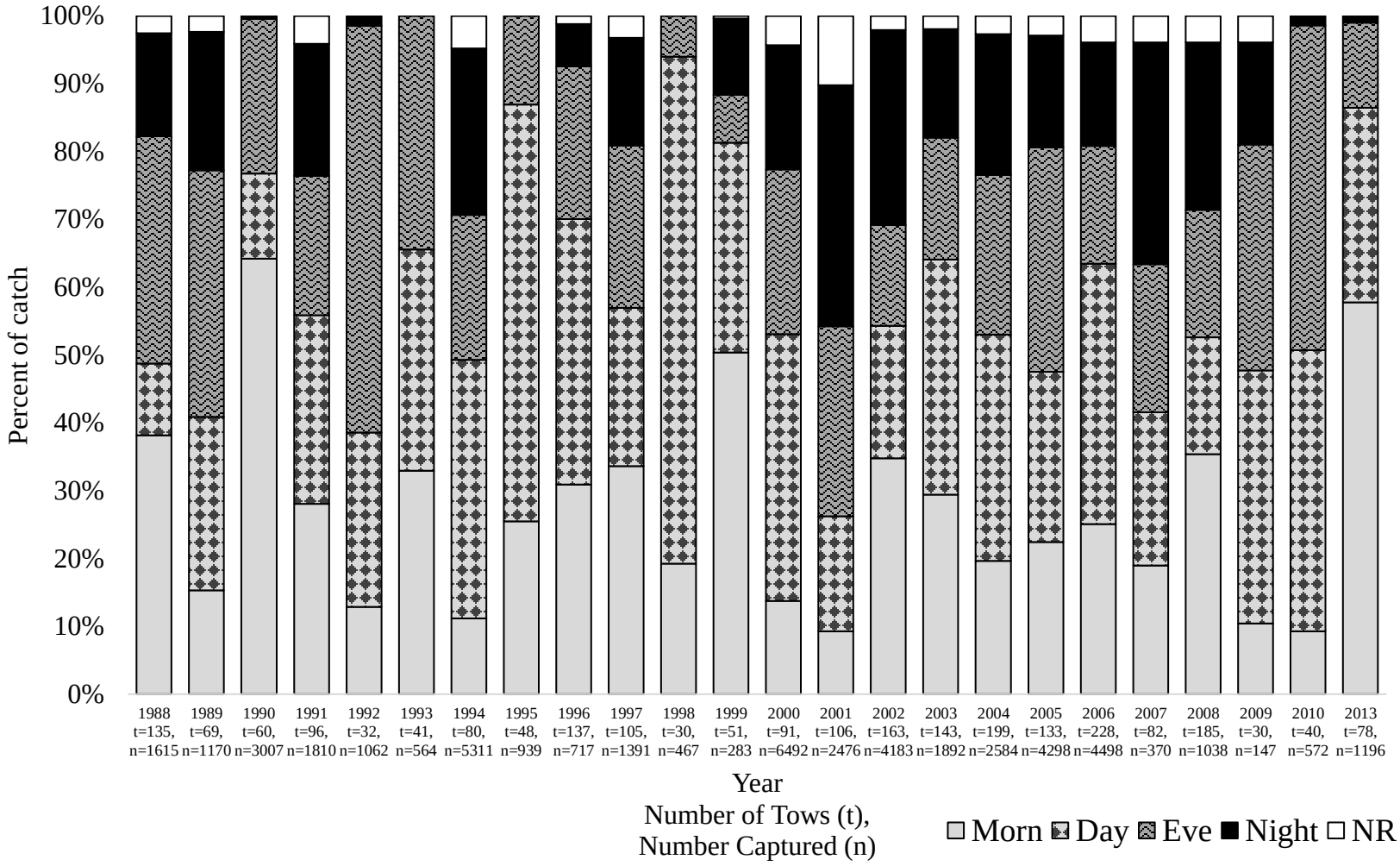

Figure 16. Percentages of striped bass catch from each Cruise year, according to the time of day at capture, where Morn represents the hours 4-9; Day: 10-15; Eve: 16-21; and Night: 22-3.

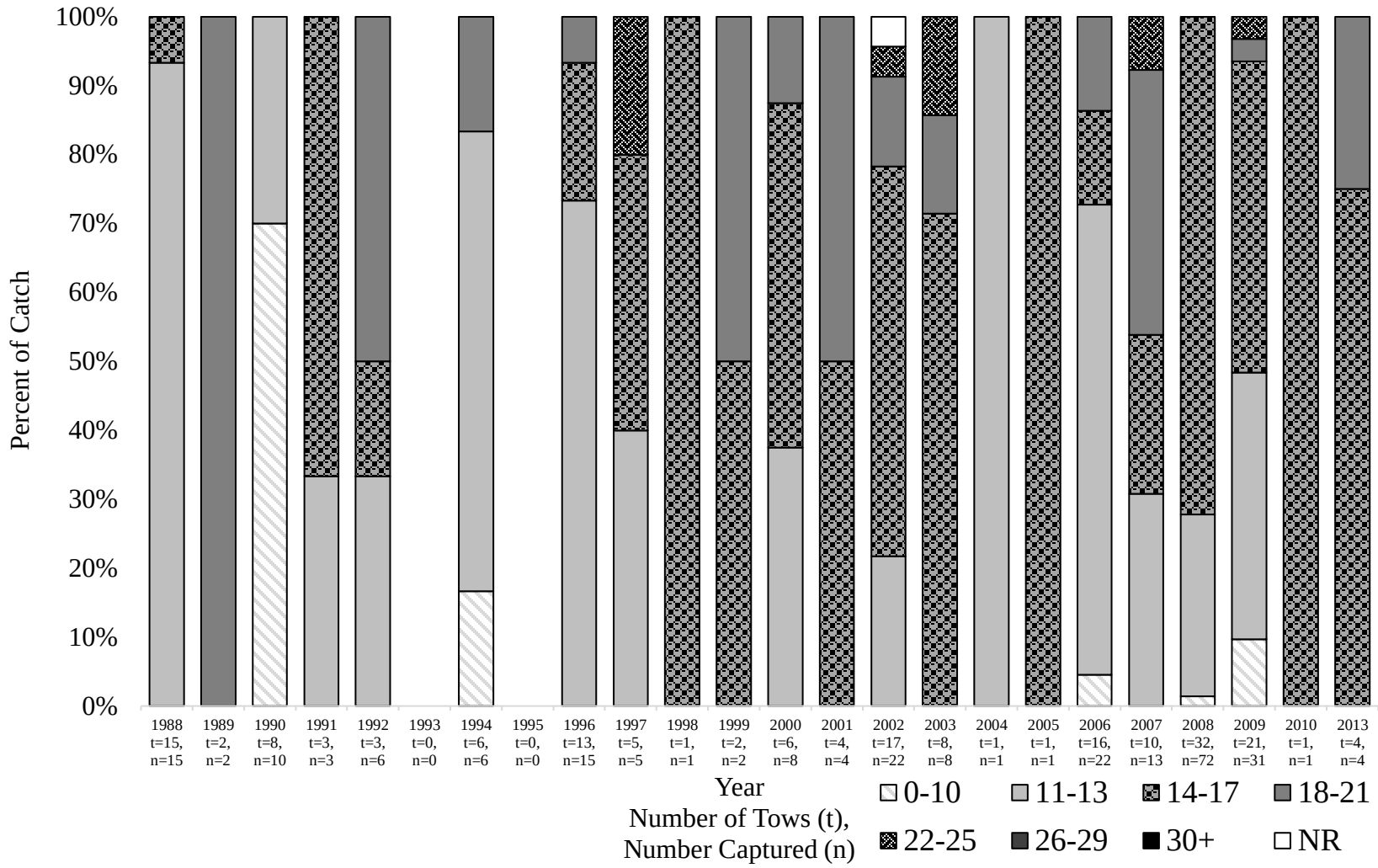

Figure 17. Percentages of Atlantic sturgeon catch from each Cruise year, according to the depth range (meters) at capture.

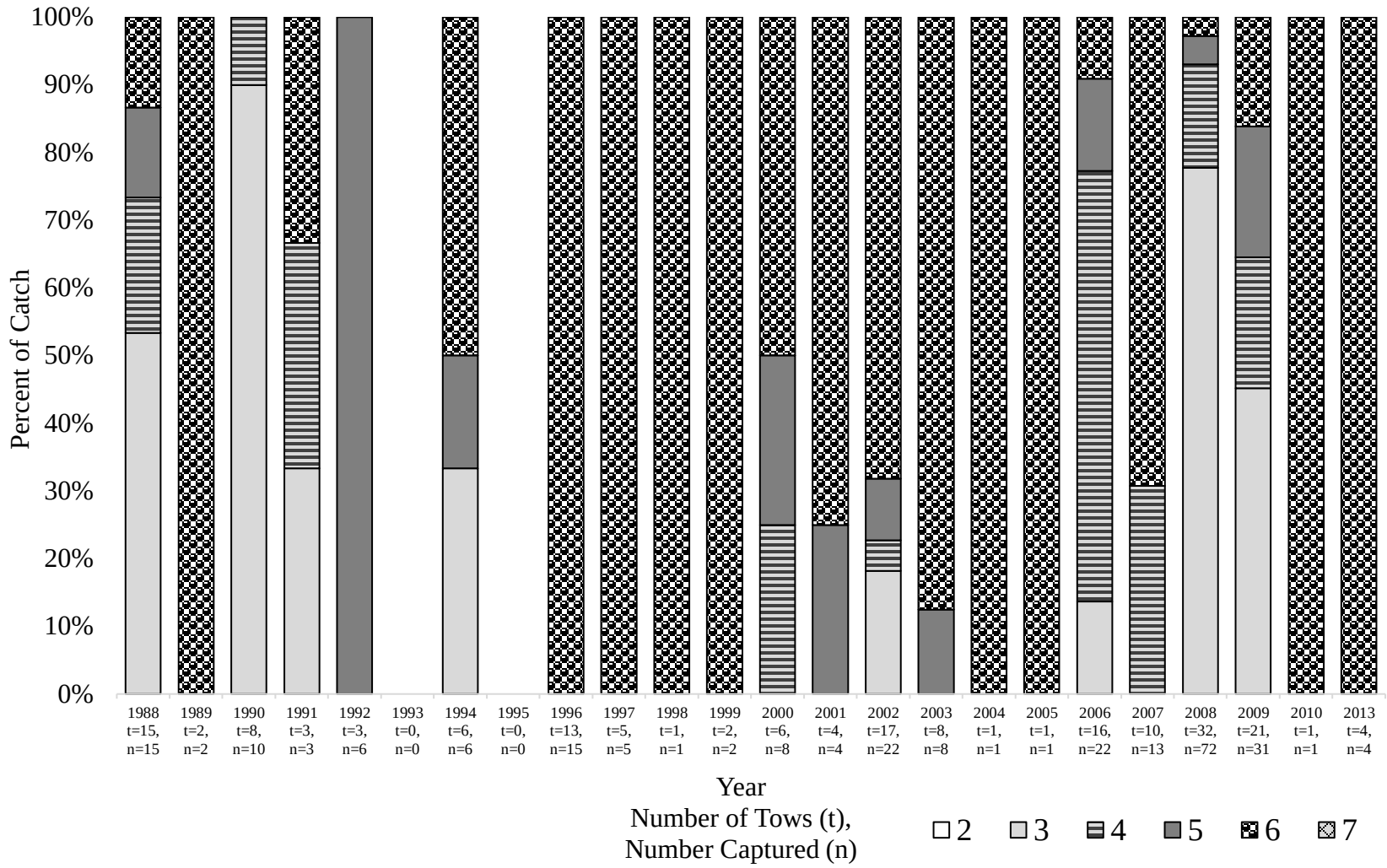

Figure 18. Percentages of Atlantic sturgeon catch from each Cruise year, according to the grain size range (phi) at capture.

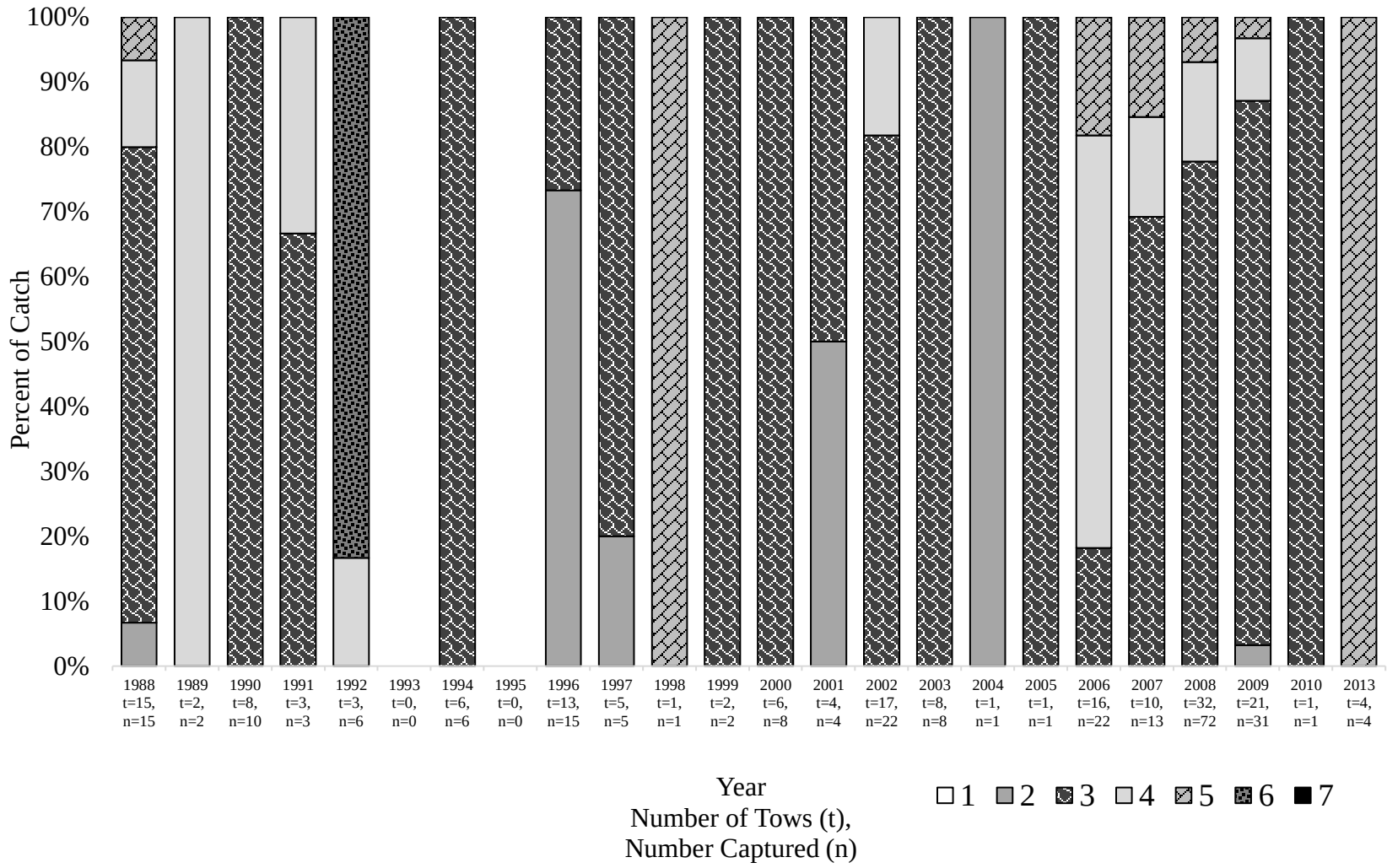

Figure 19. Percentages of Atlantic sturgeon catch from each Cruise year, according to the range of organic carbon content of the soil (ppm) at capture.

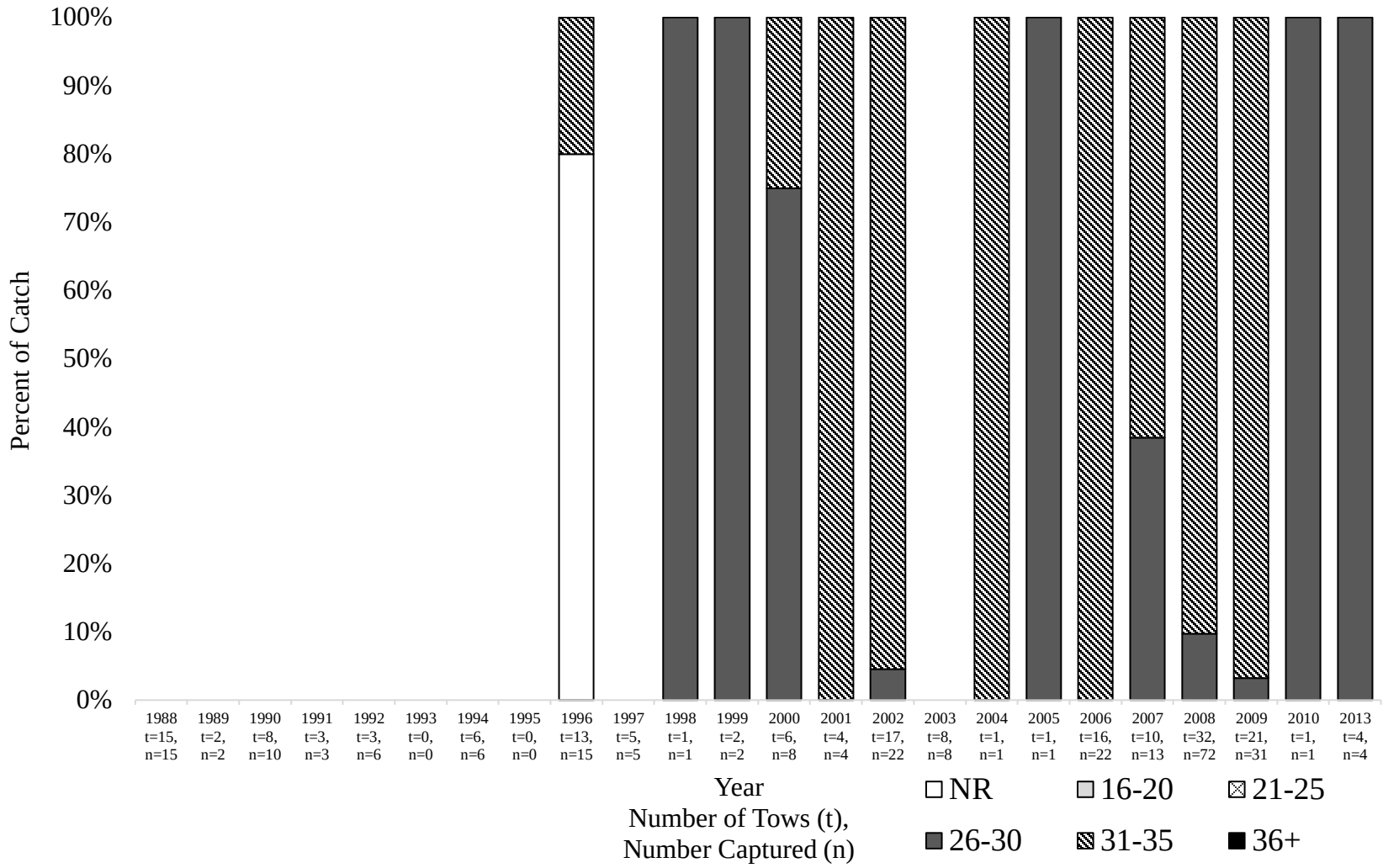

Figure 20. Percentages of Atlantic sturgeon catch from each Cruise year, according to the surface salinity range (ppt) at capture location.

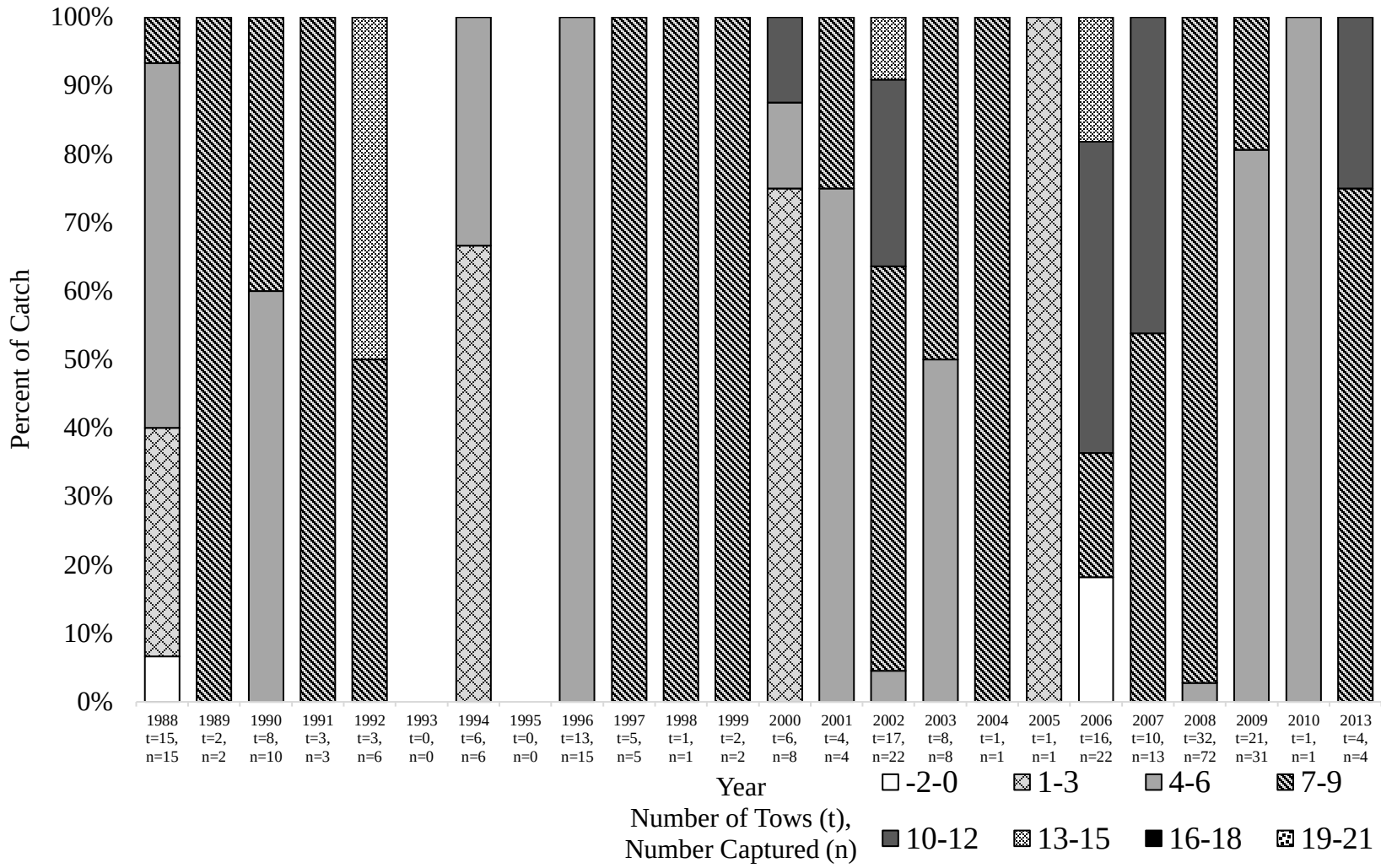

Figure 21. Percentages of Atlantic sturgeon catch from each Cruise year, according to the surface water temperature range (°C) at capture location.

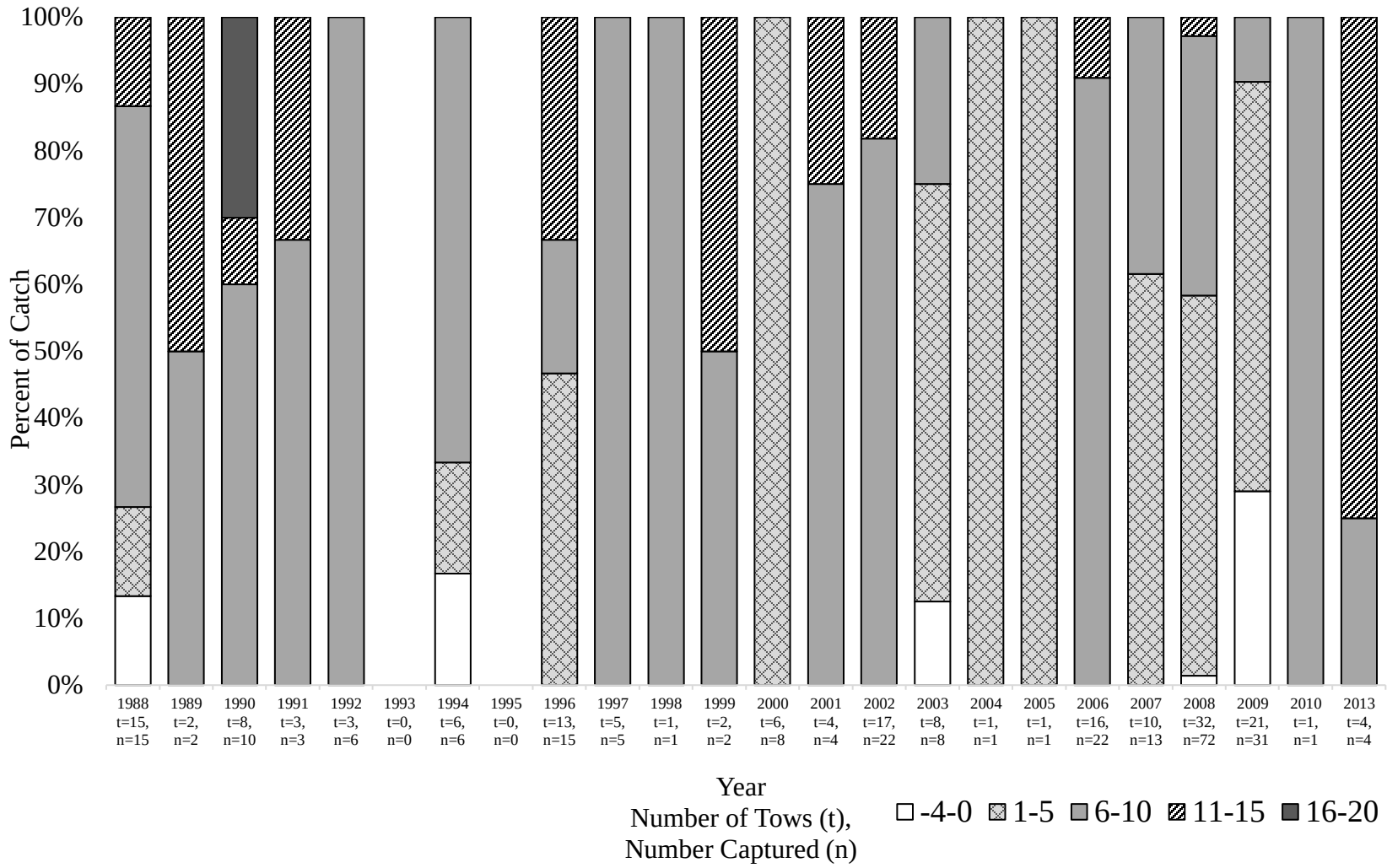

Figure 22. Percentages of Atlantic sturgeon catch from each Cruise year, according to the air temperature range (°C) at capture location.

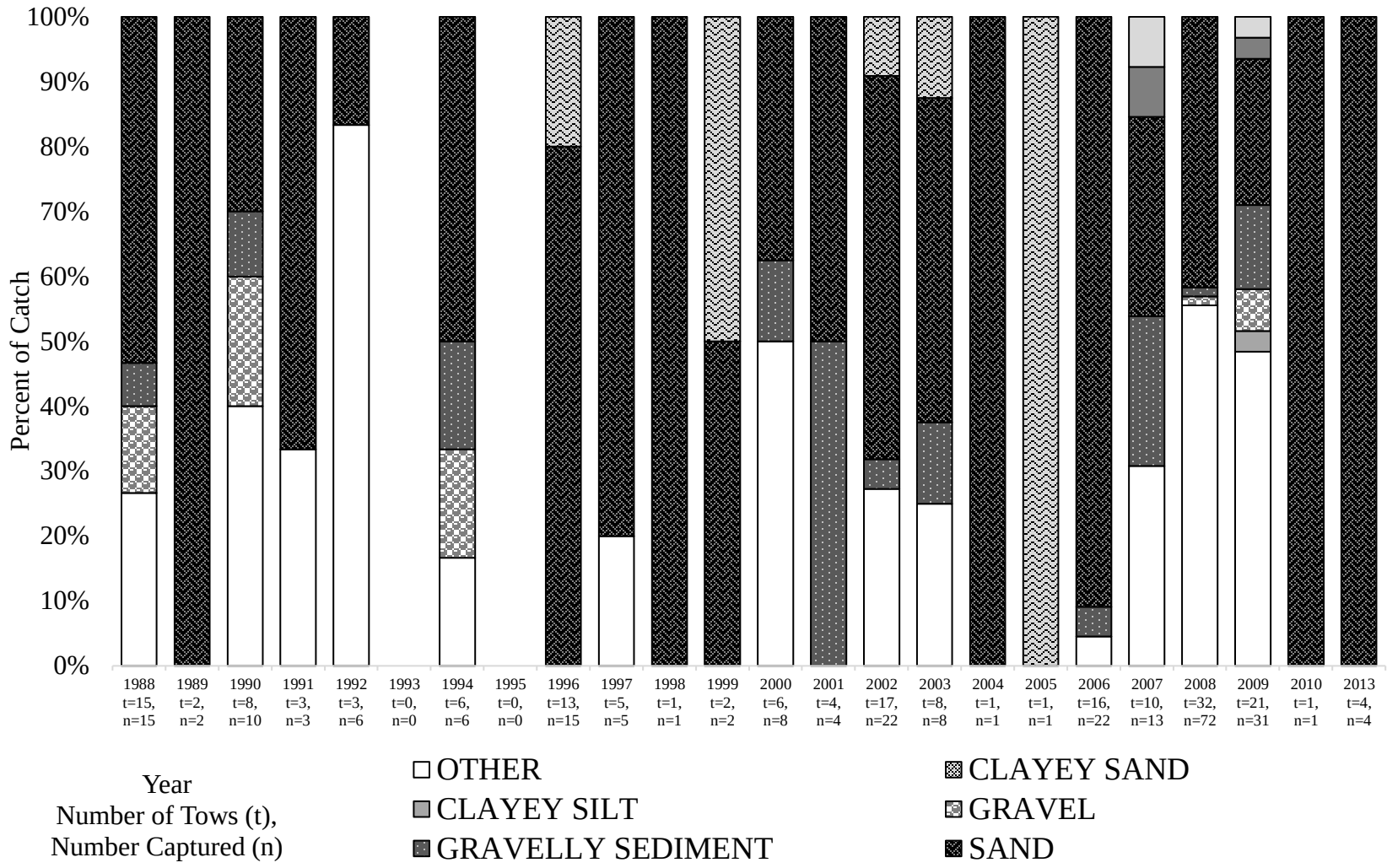

Figure 23. Percentages of Atlantic sturgeon catch from each Cruise year, according to the bottom type by Shepard Code at tow location.

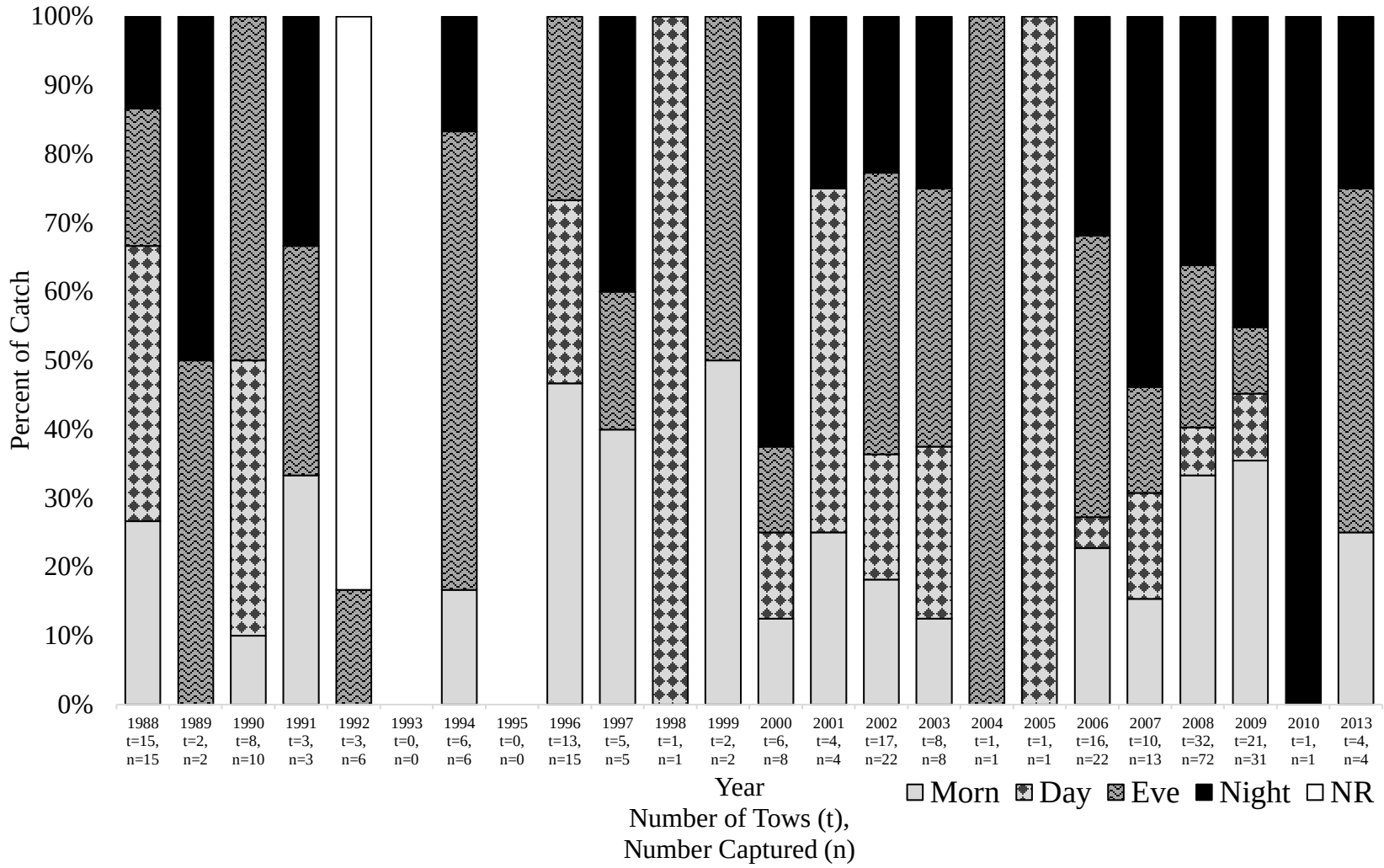

Figure 24. Percentages of Atlantic sturgeon catch from each Cruise year, according to the time of day at capture, where Morn represents the hours 4-9; Day: 10-15; Eve: 16-21; and Night: 22-3.

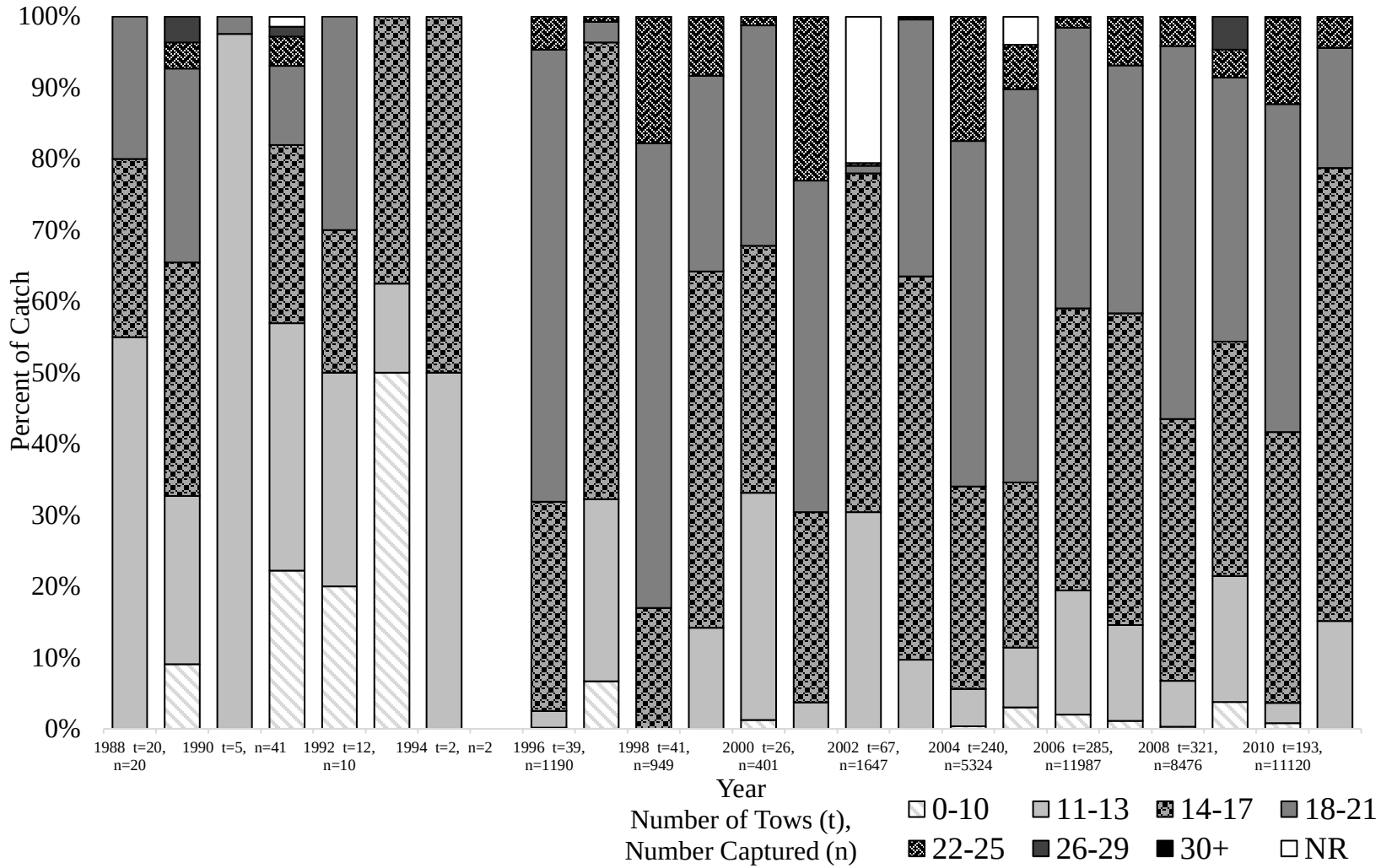

Figure 25. Percentages of spiny dogfish catch from each Cruise year, according to the depth range (meters) at capture.

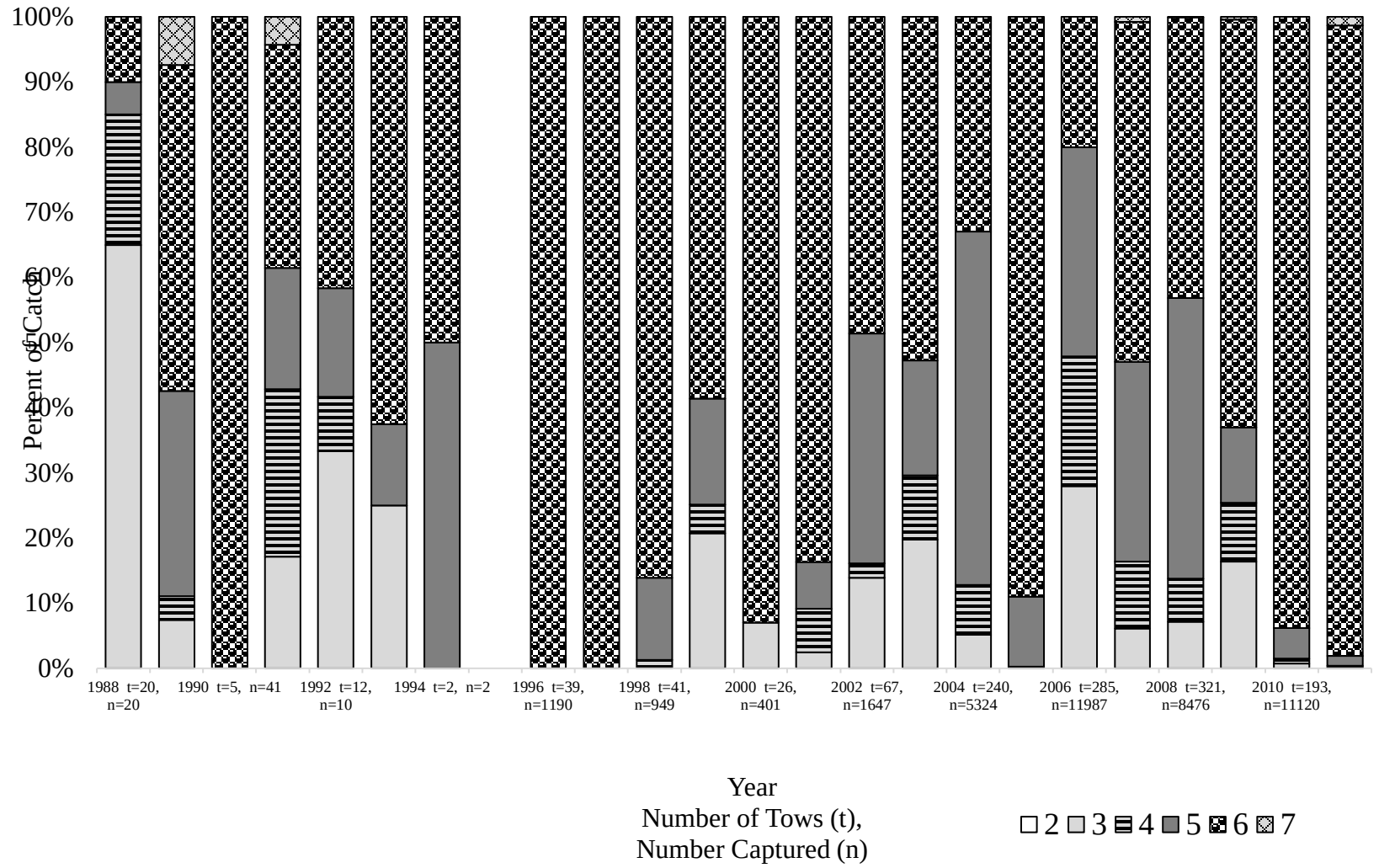

Figure 26. Percentages of spiny dogfish catch from each Cruise year, according to the grain size range (phi) at capture.

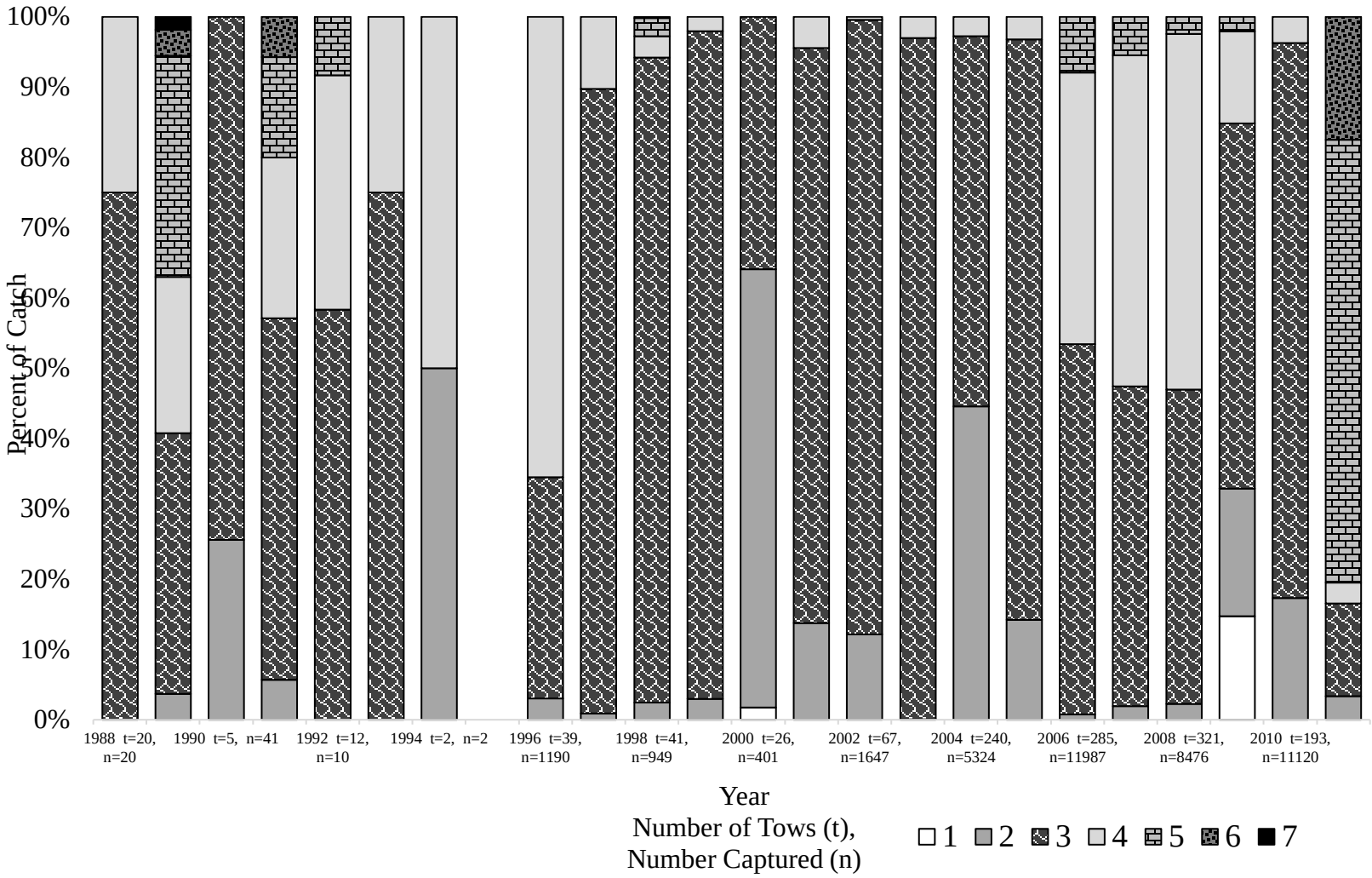

Figure 27. Percentages of spiny dogfish catch from each Cruise year, according to the range of organic carbon content of the soil (ppm) at capture.

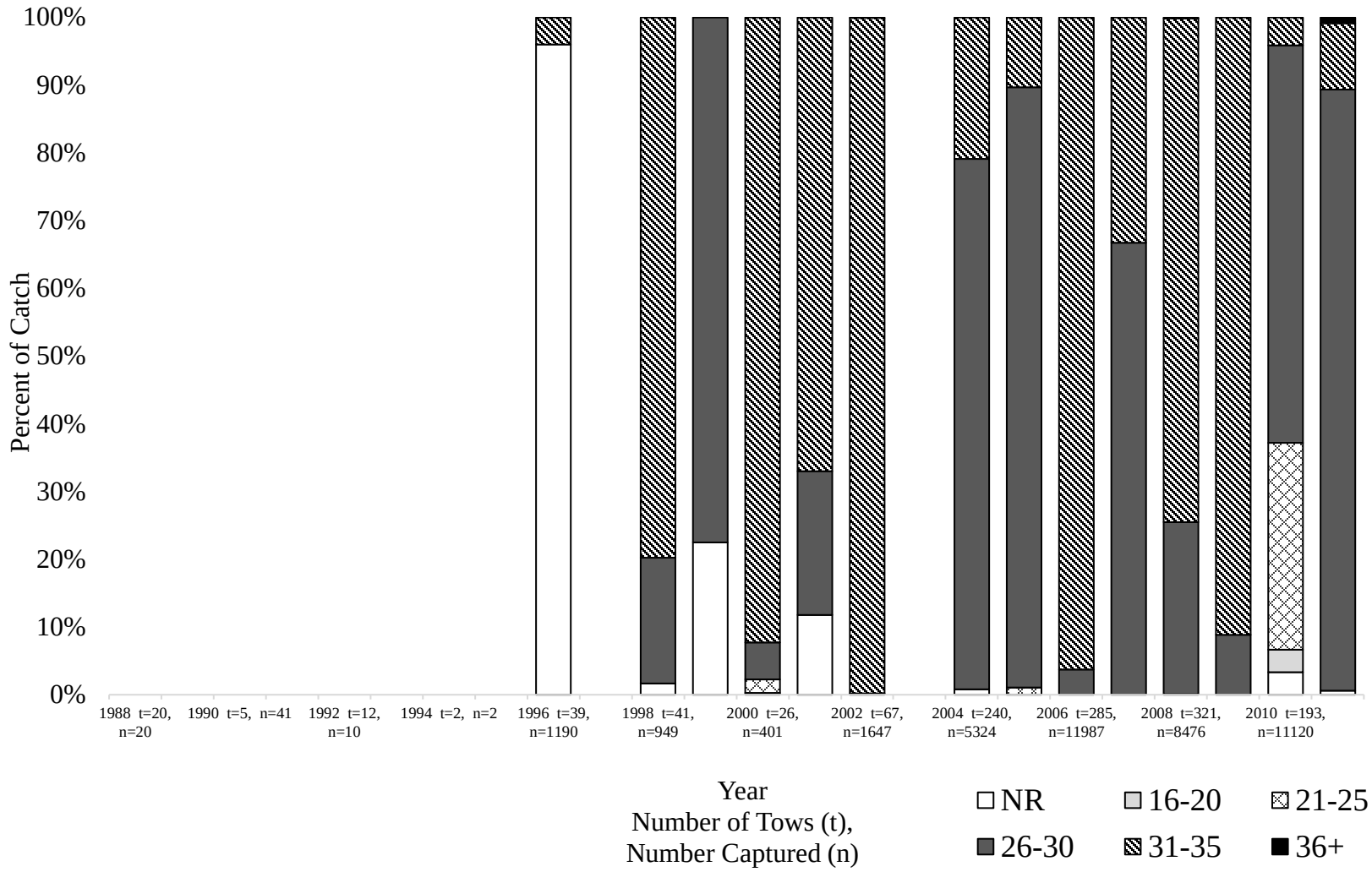

Figure 28. Percentages of spiny dogfish catch from each Cruise year, according to the surface salinity range (ppt) at capture location.

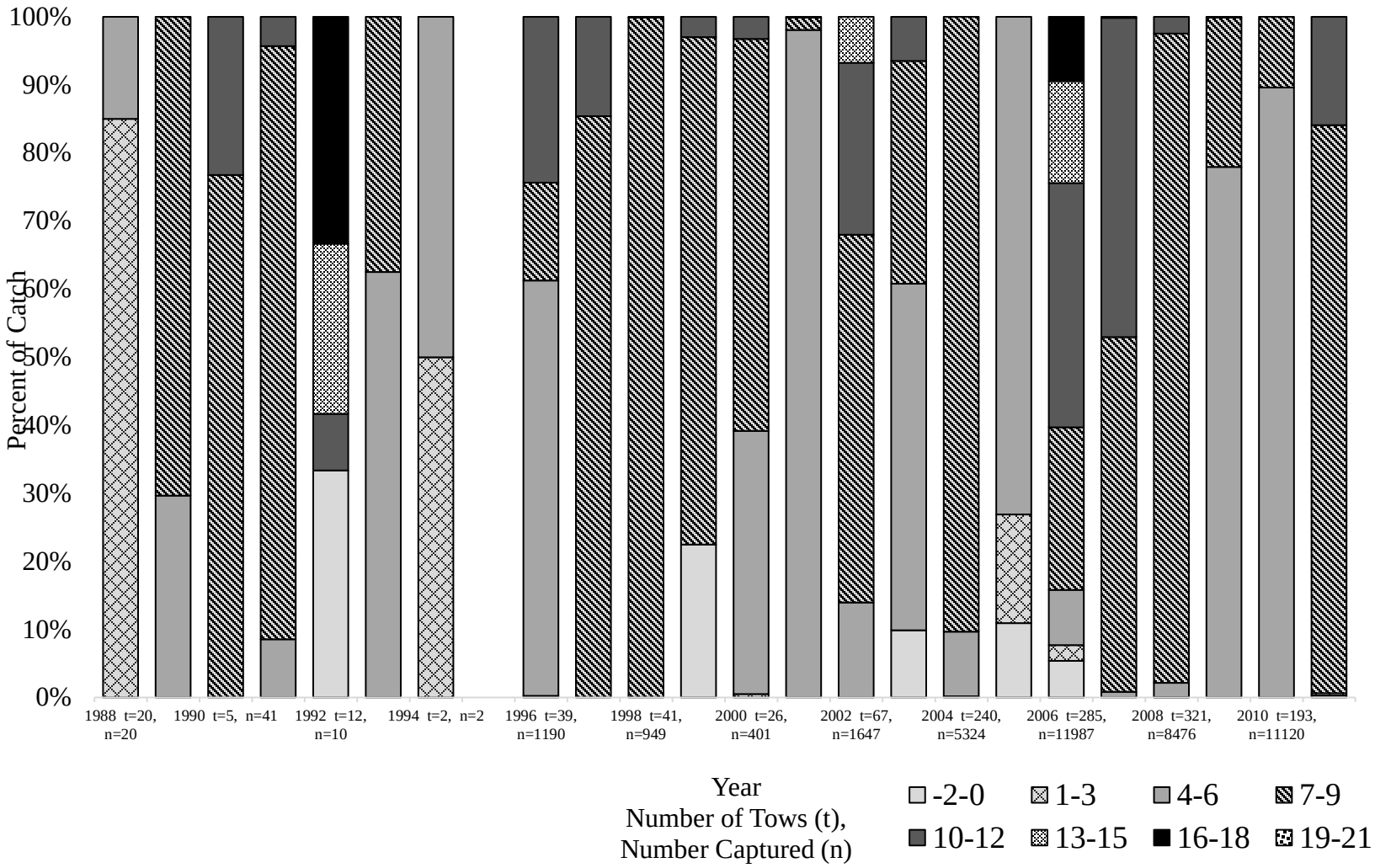

Figure 29. Percentages of spiny dogfish catch from each Cruise year, according to the surface water temperature range (°C) at capture location.

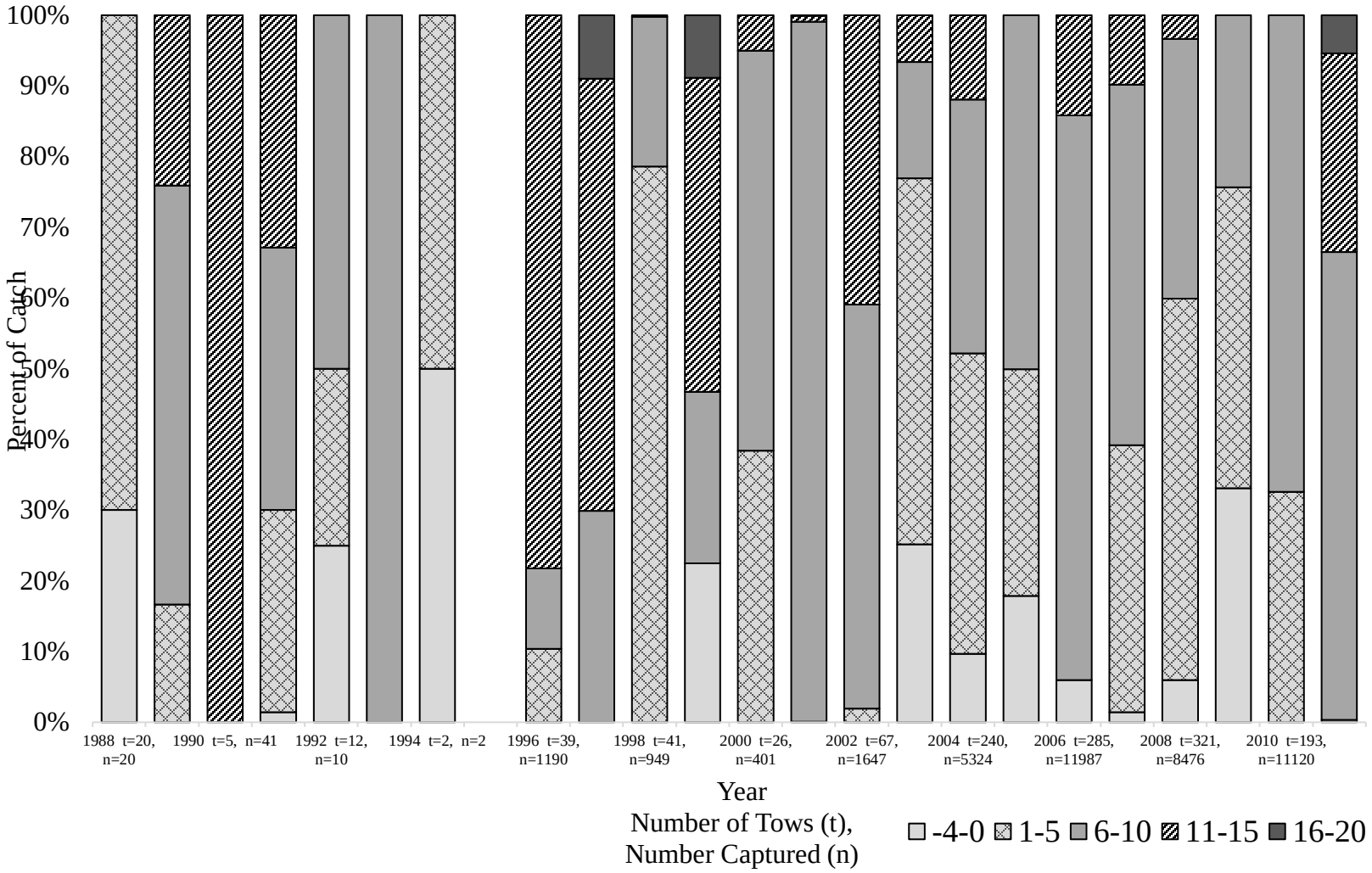

Figure 30. Percentages of spiny dogfish catch from each Cruise year, according to the air temperature range (°C) at capture location.

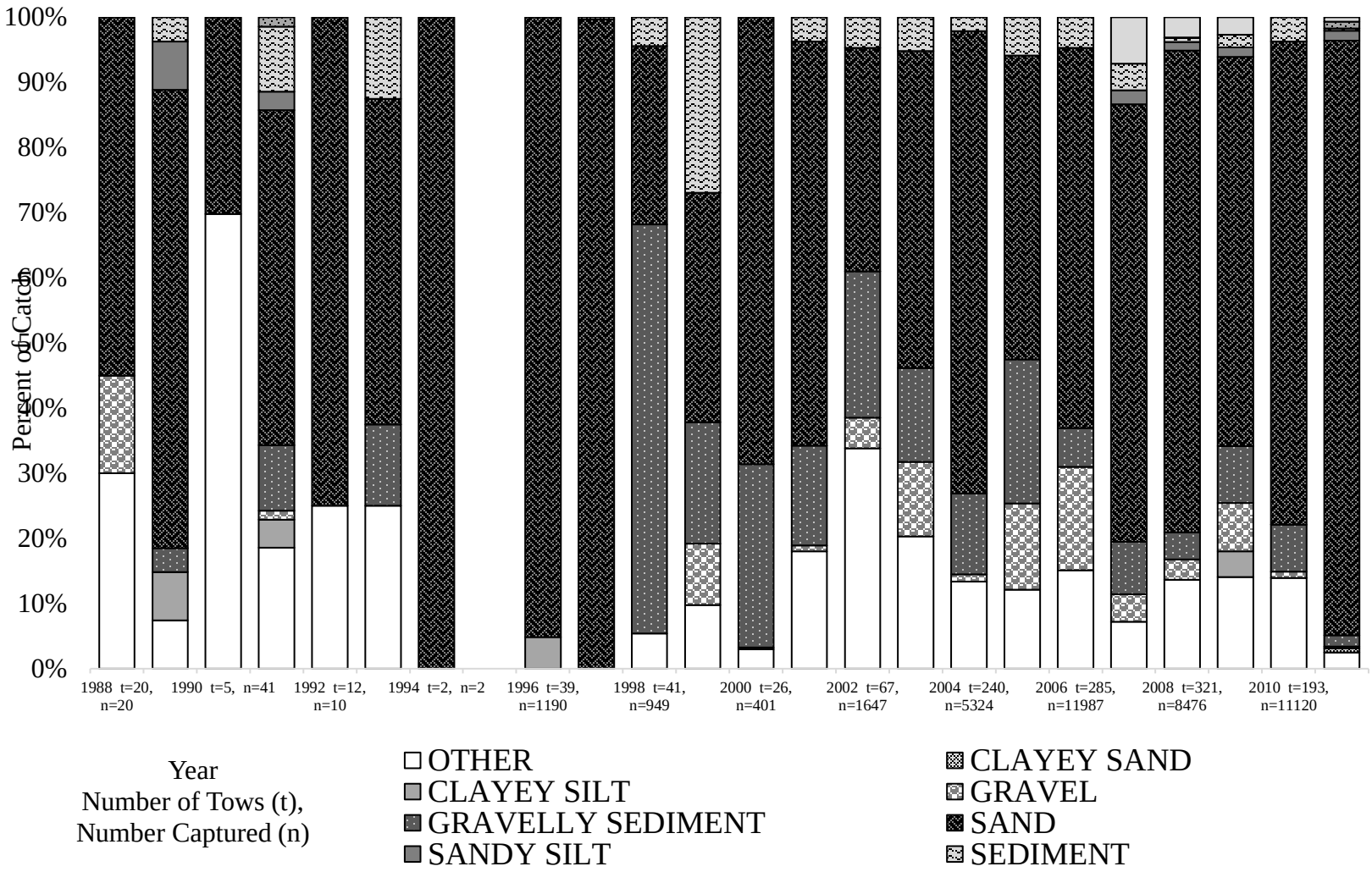

Figure 31. Percentages of spiny dogfish catch from each Cruise year, according to the bottom type by Shepard Code at tow location.

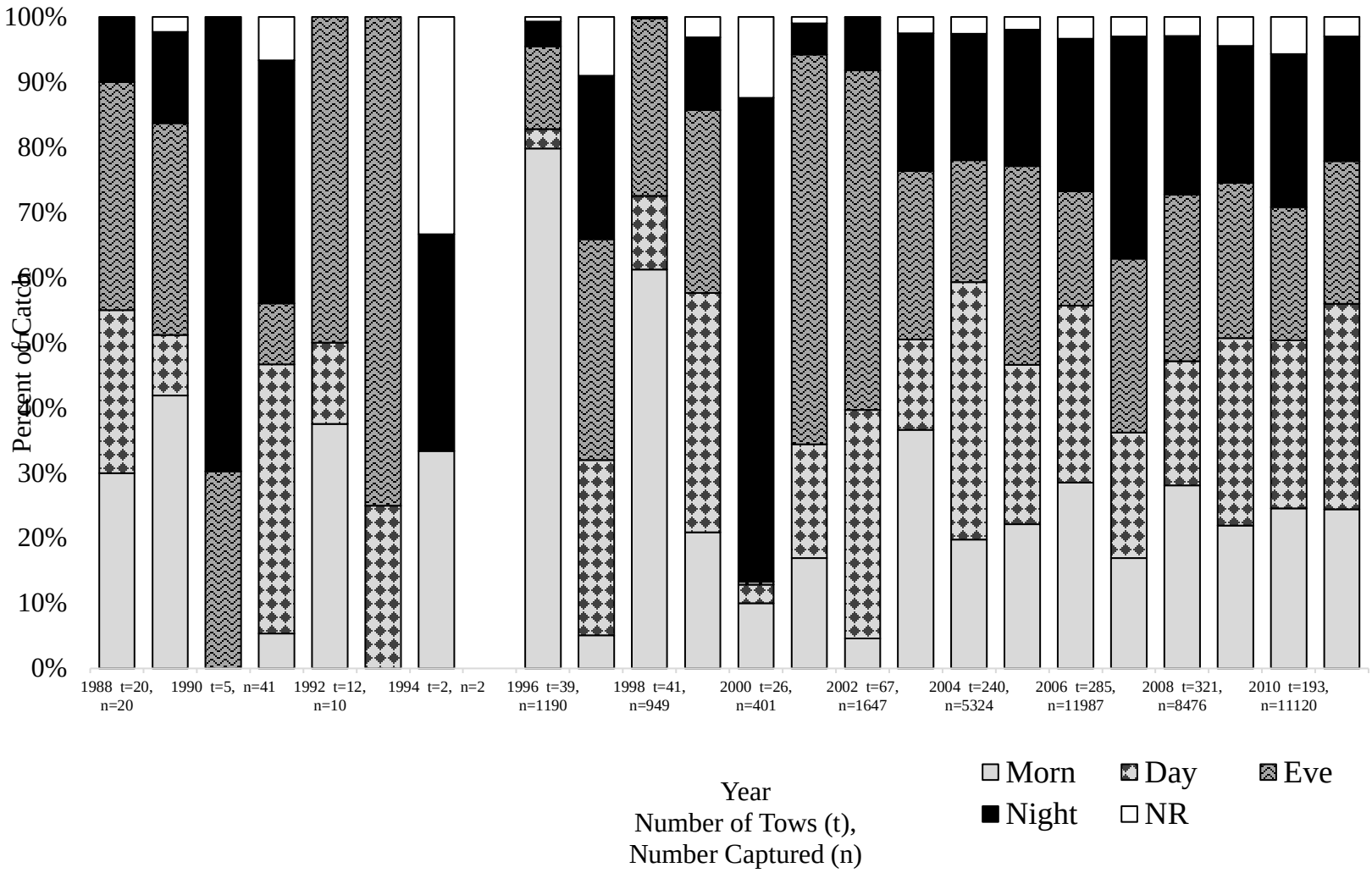

Figure 32. Percentages of spiny dogfish catch from each Cruise year, according to the time of day at capture, where Morn represents the hours 4-9; Day: 10-15; Eve: 16-21; and Night: 22-3.

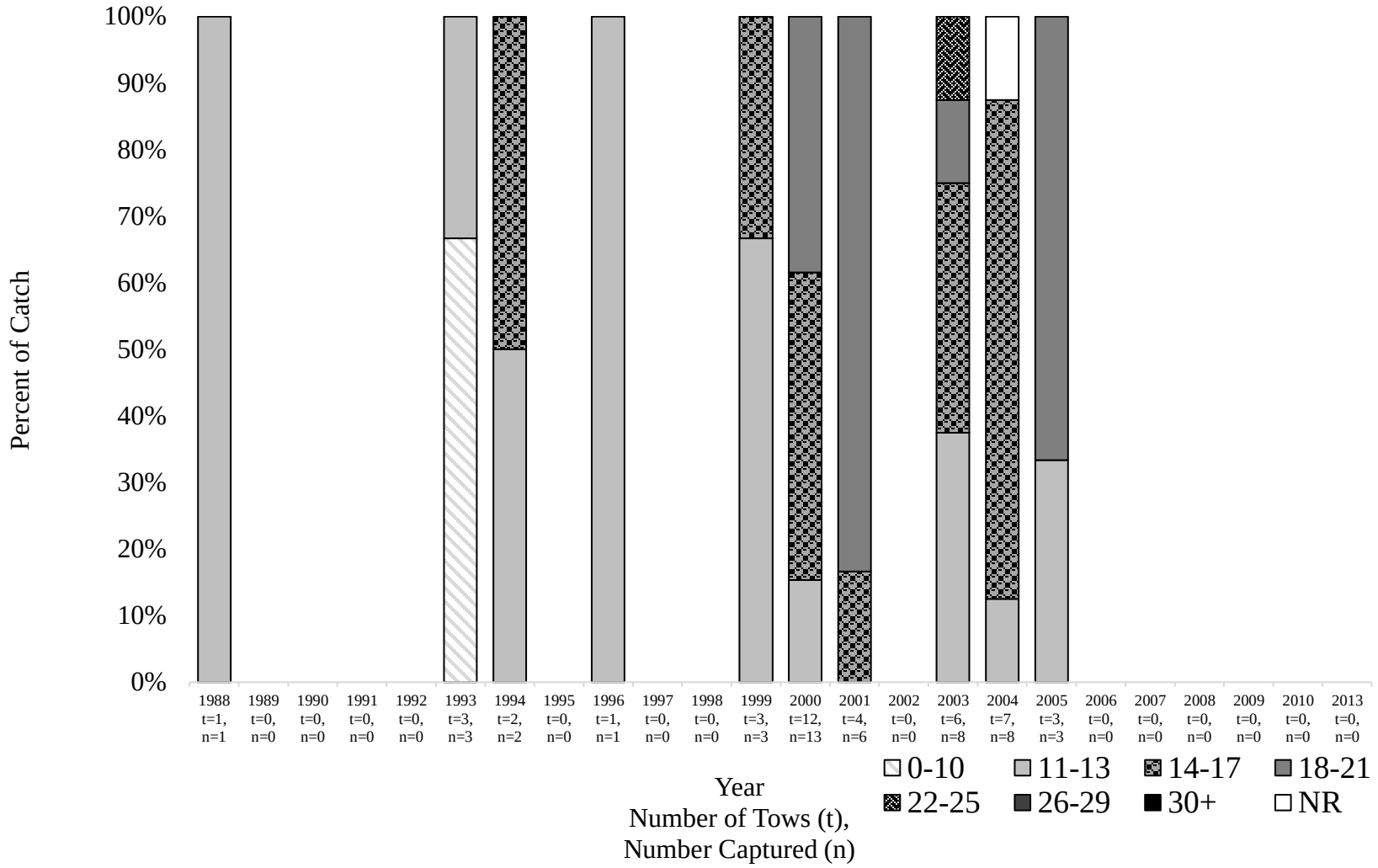

Figure 33. Percentages of red drum catch from each Cruise year, according to the depth range (meters) at capture.

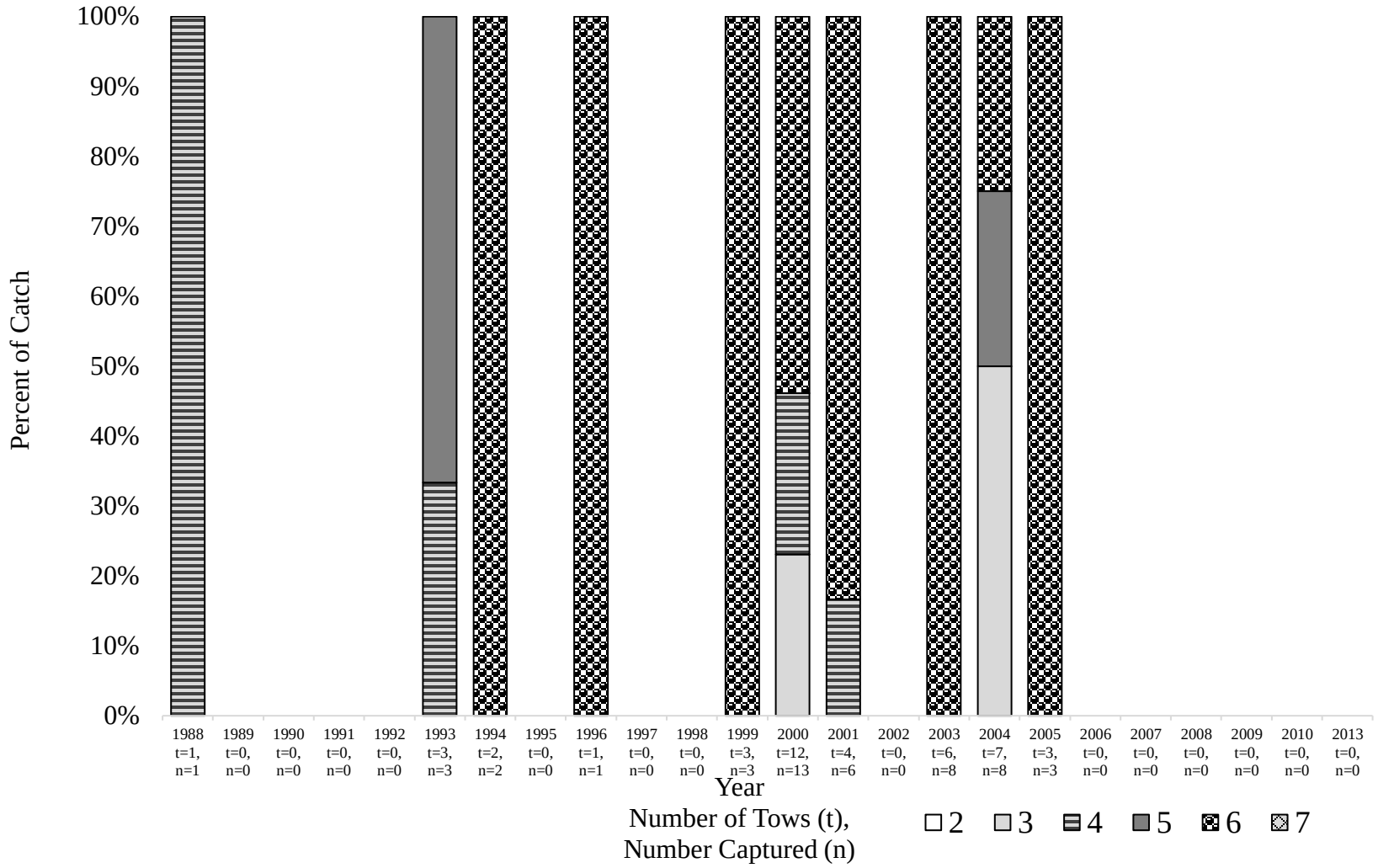

Figure 34. Percentages of red drum catch from each Cruise year, according to the grain size range (phi) at capture.

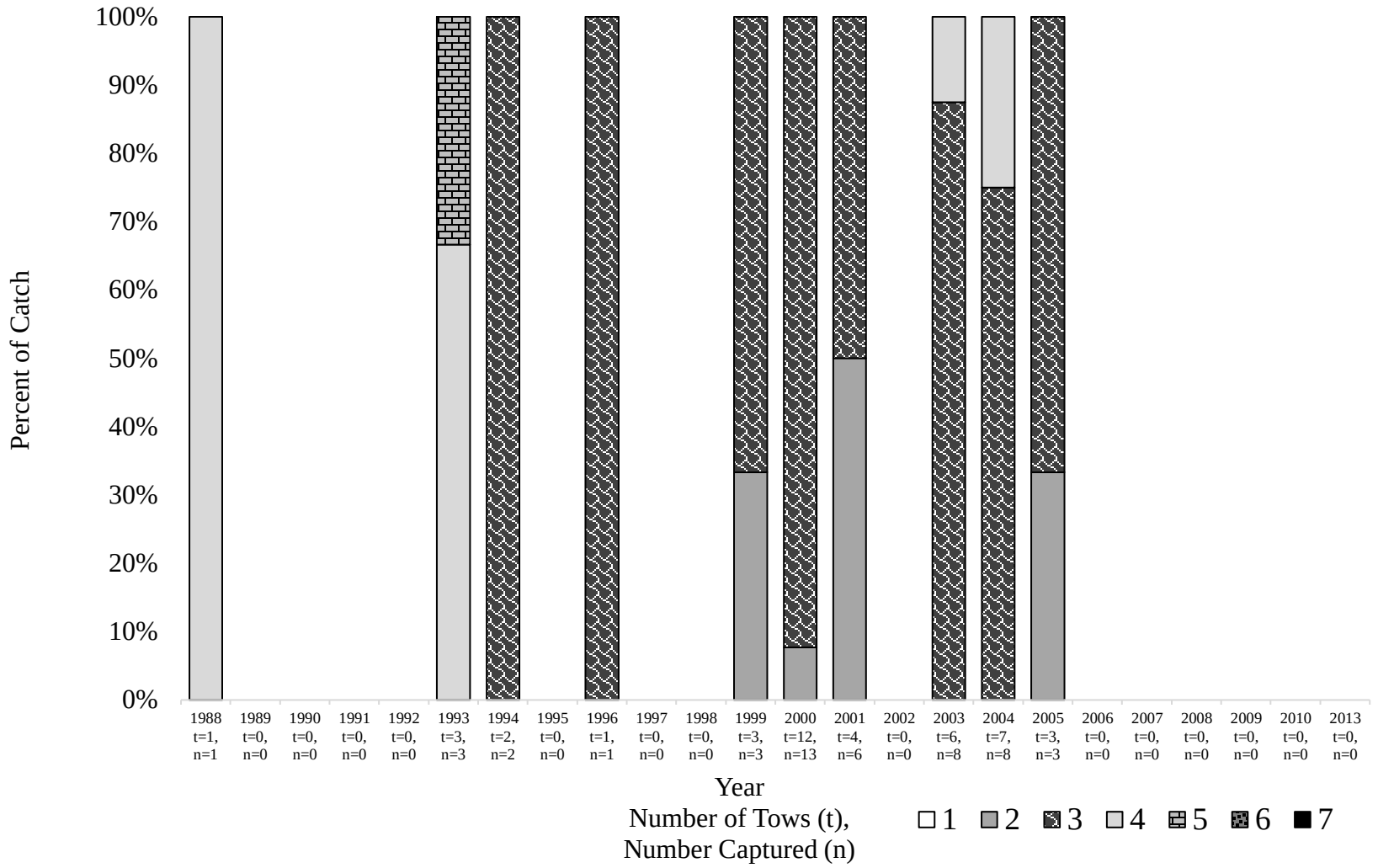

Figure 35. Percentages of red drum catch from each Cruise year, according to the range of organic carbon content of the soil (ppm) at capture.

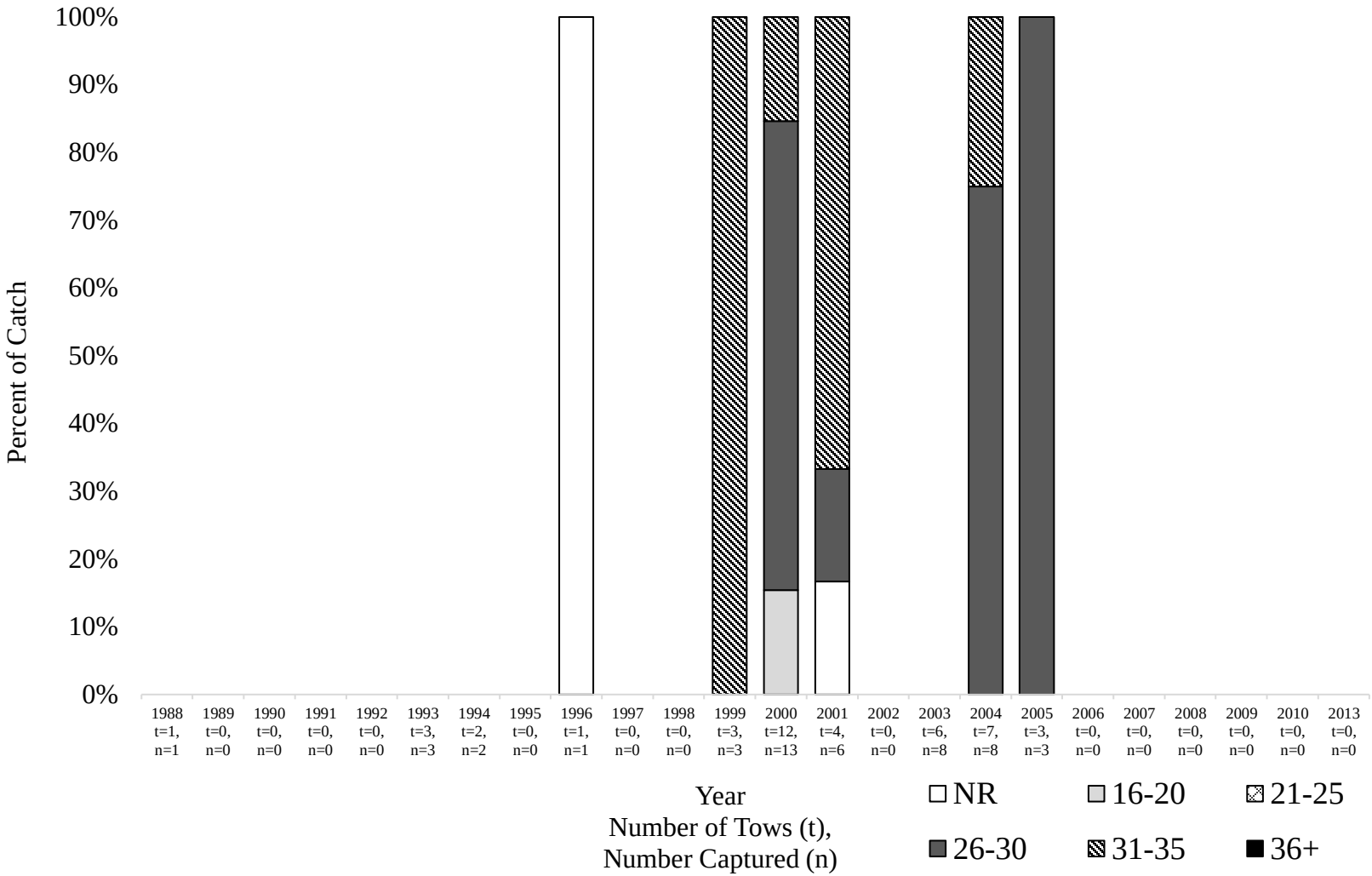

Figure 36. Percentages of red drum catch from each Cruise year, according to the surface salinity range (ppt) at capture location.

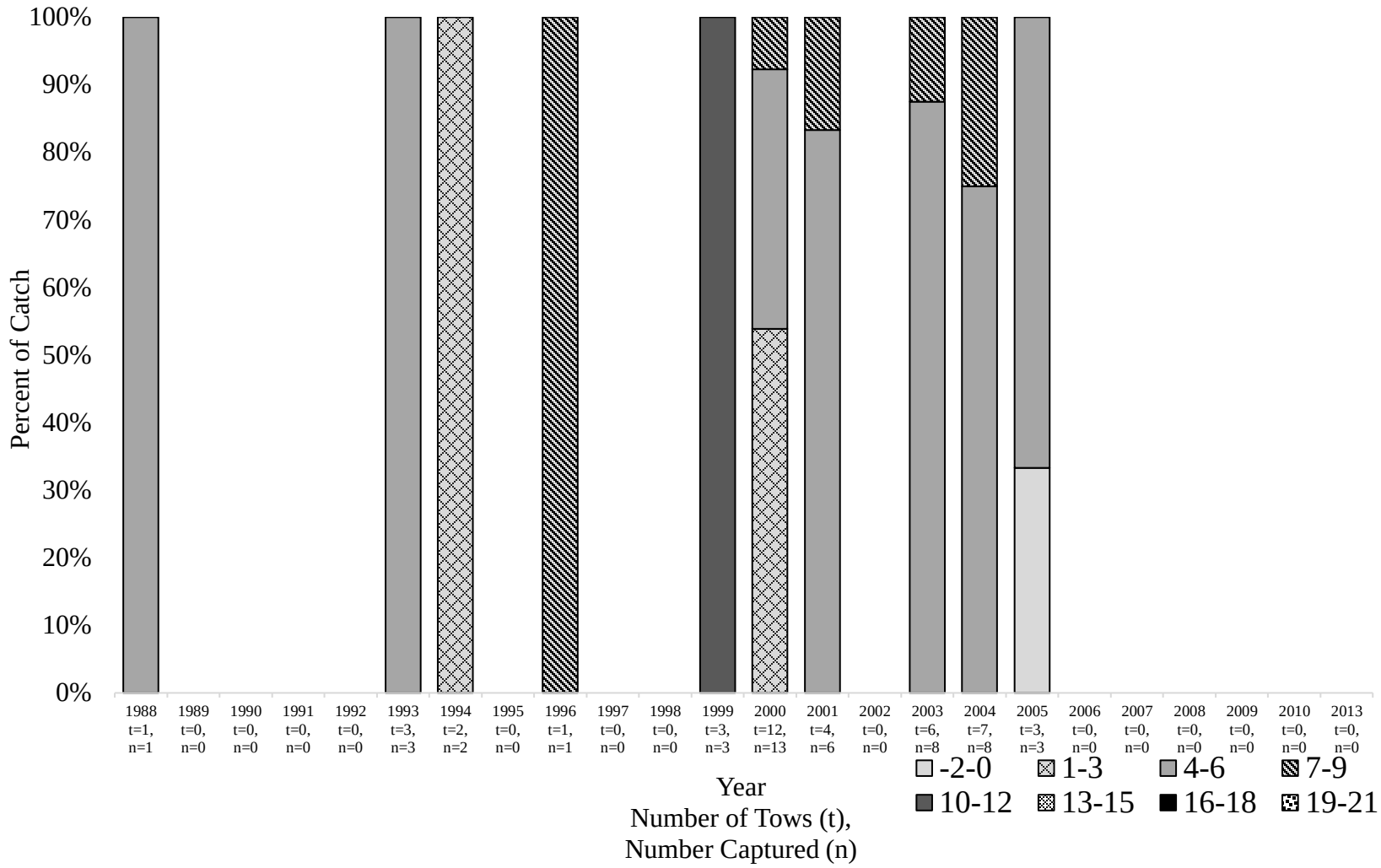

Figure 37. Percentages of red drum catch from each Cruise year, according to the surface water temperature range (°C) at capture location.

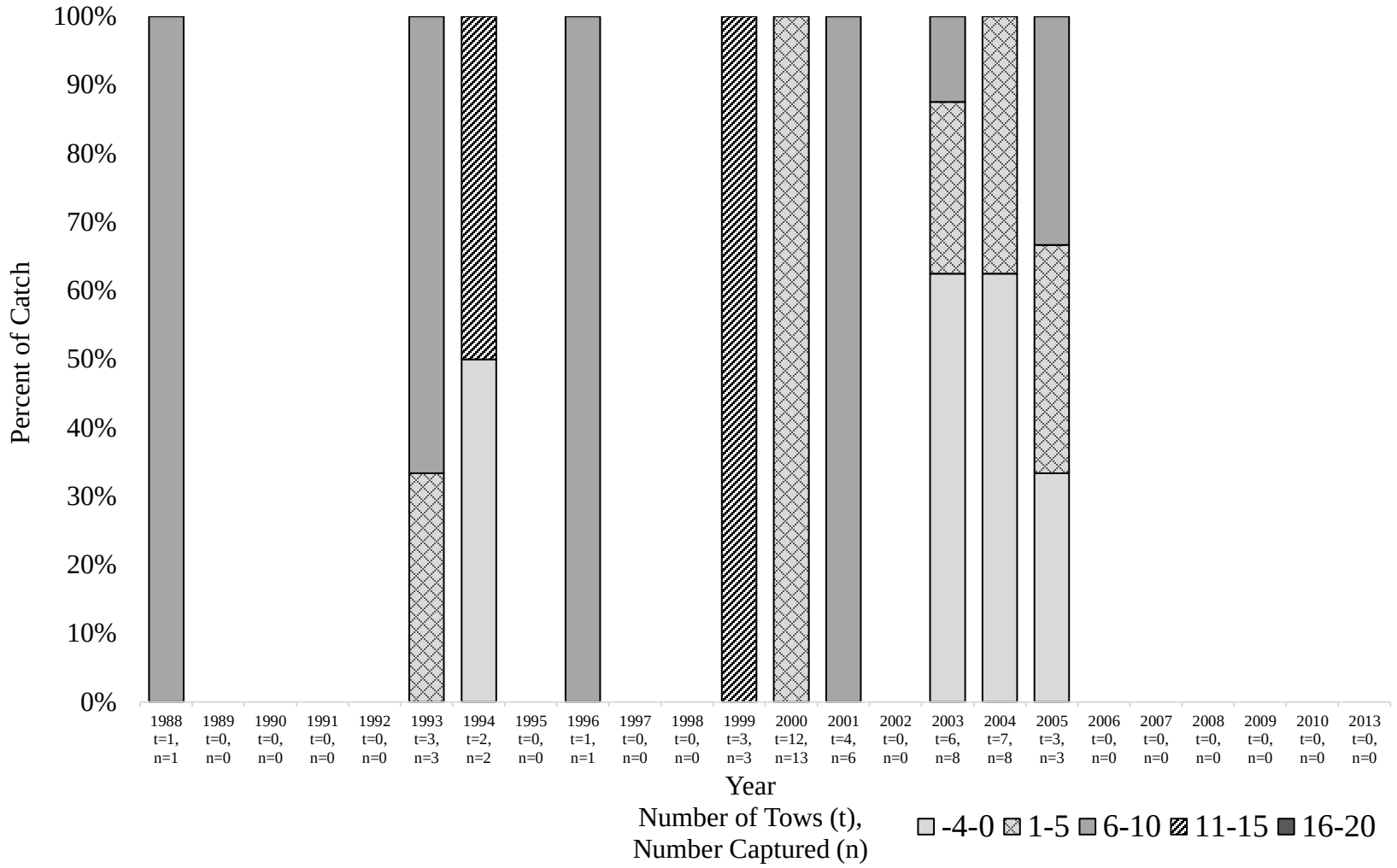

Figure 38. Percentages of red drum catch from each Cruise year, according to the air temperature range (°C) at capture location.

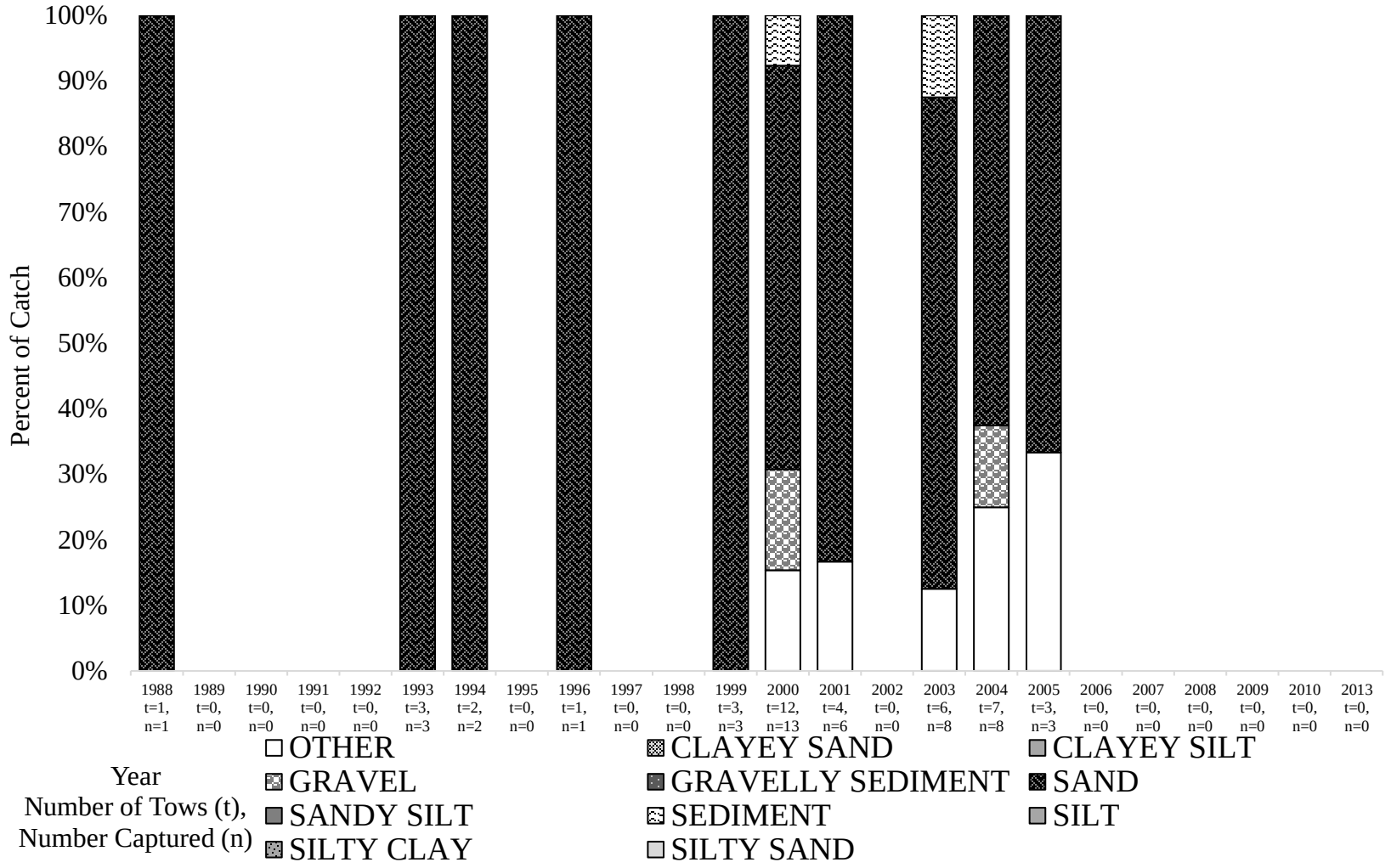

Figure 39. Percentages of red drum catch from each Cruise year, according to the bottom type by Shepard Code at tow location.

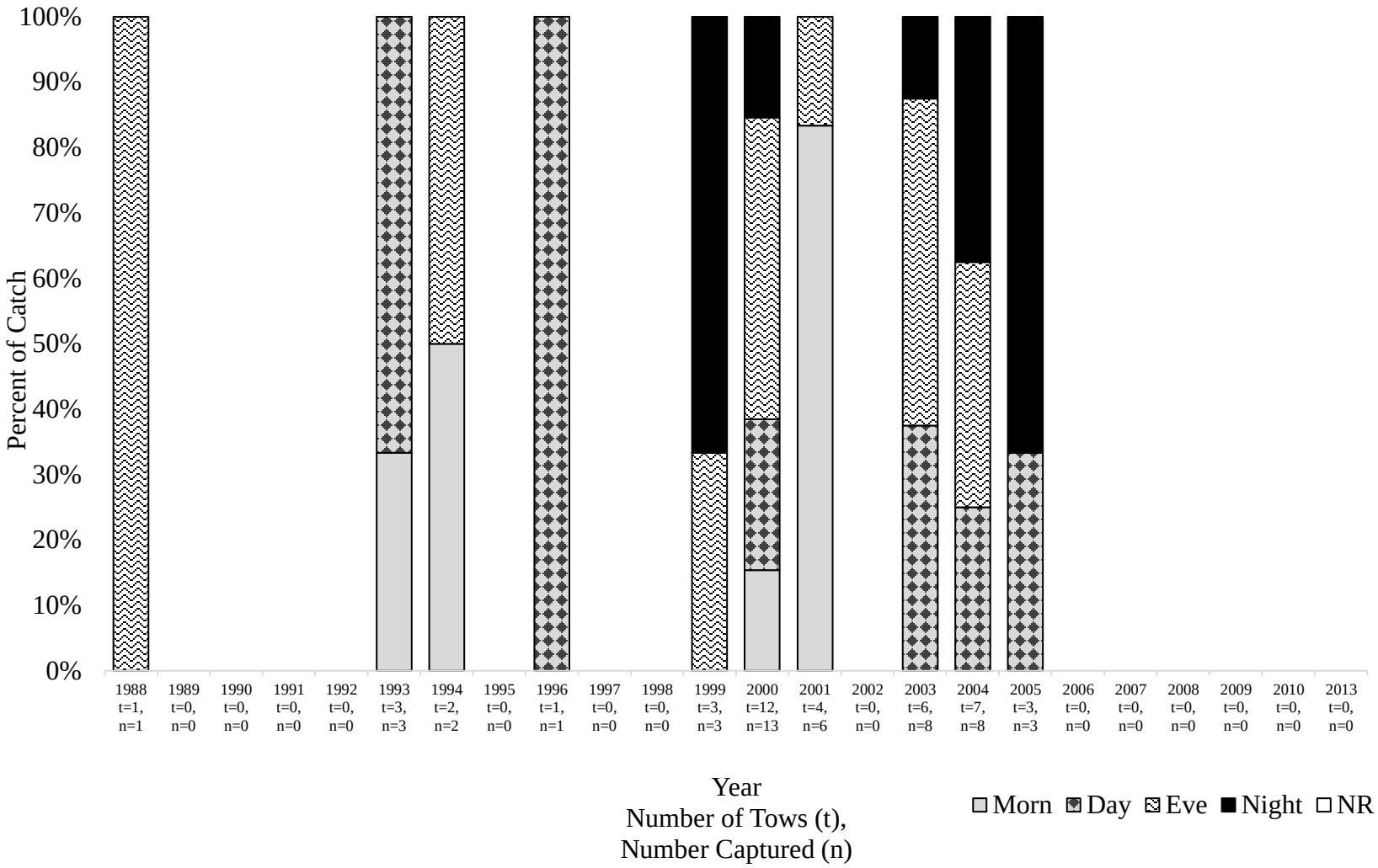

Figure 40. Percentages of red drum catch from each Cruise year, according to the time of day at capture, where Morn represents the hours 4-9; Day: 10-15; Eve: 16-21; and Night: 22-3.

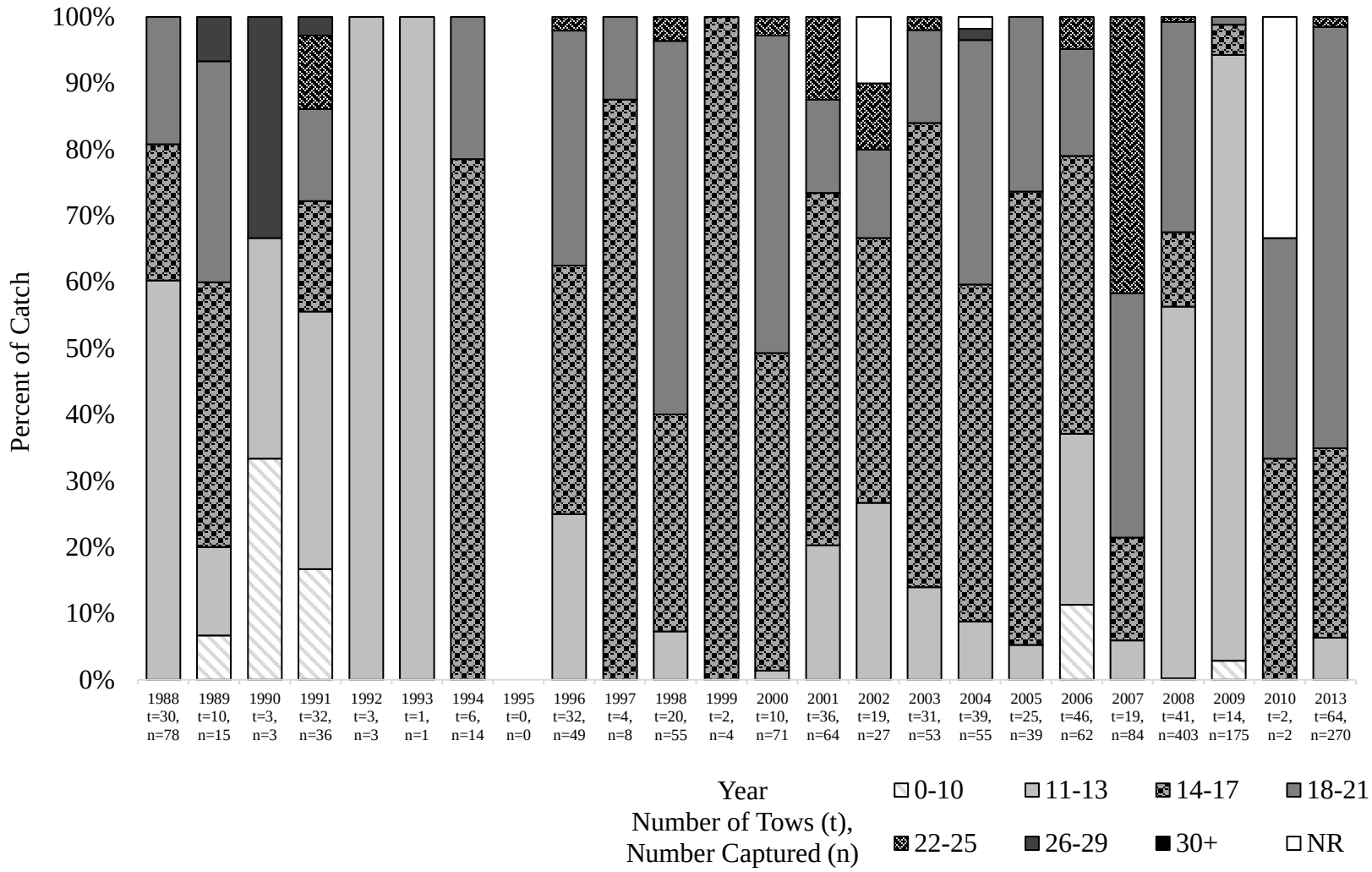

Figure 41. Percentages of sciaenid catch from each Cruise year, according to the depth range (meters) at capture.

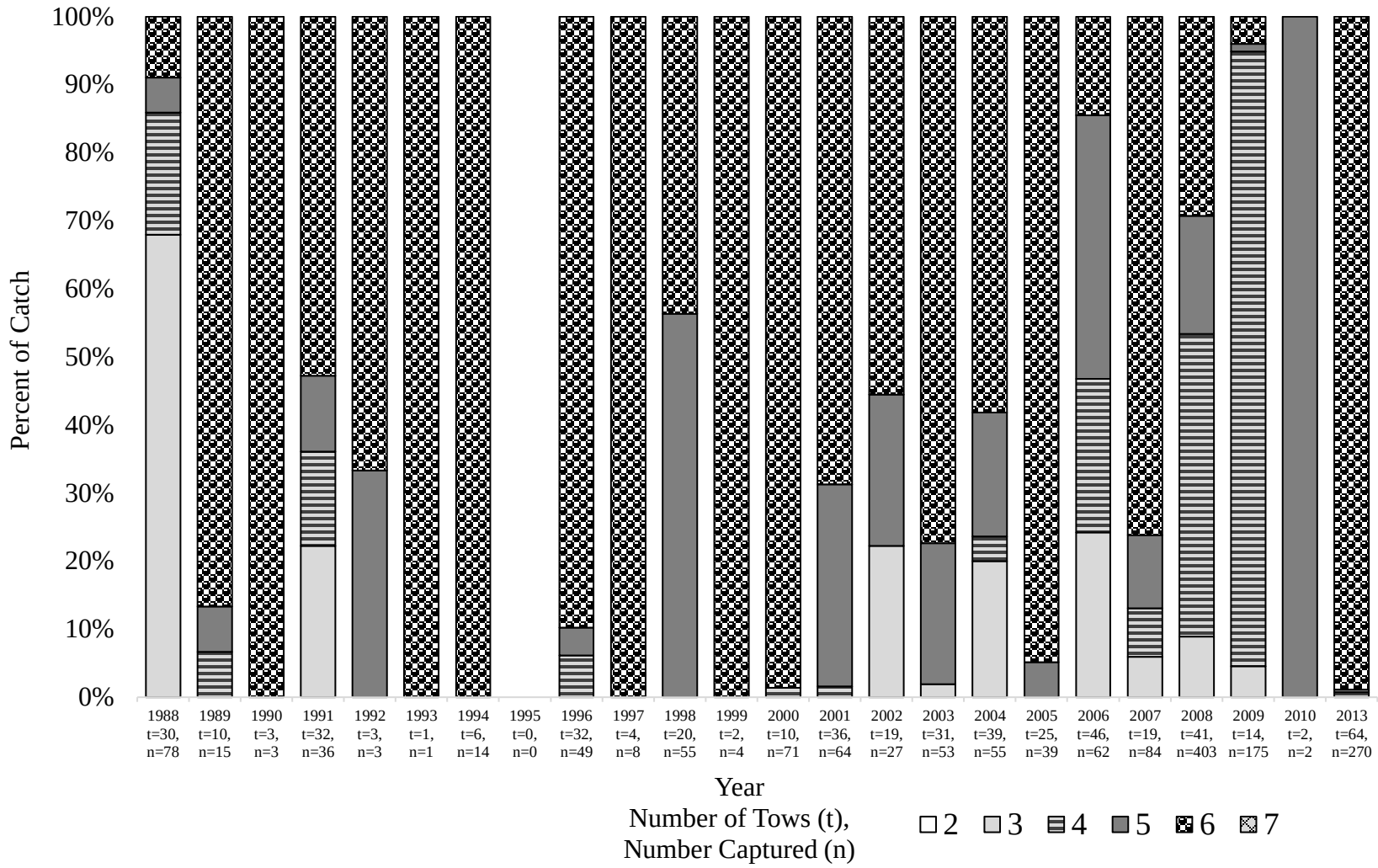

Figure 42. Percentages of sciaenid catch from each Cruise year, according to the grain size range (phi) at capture.

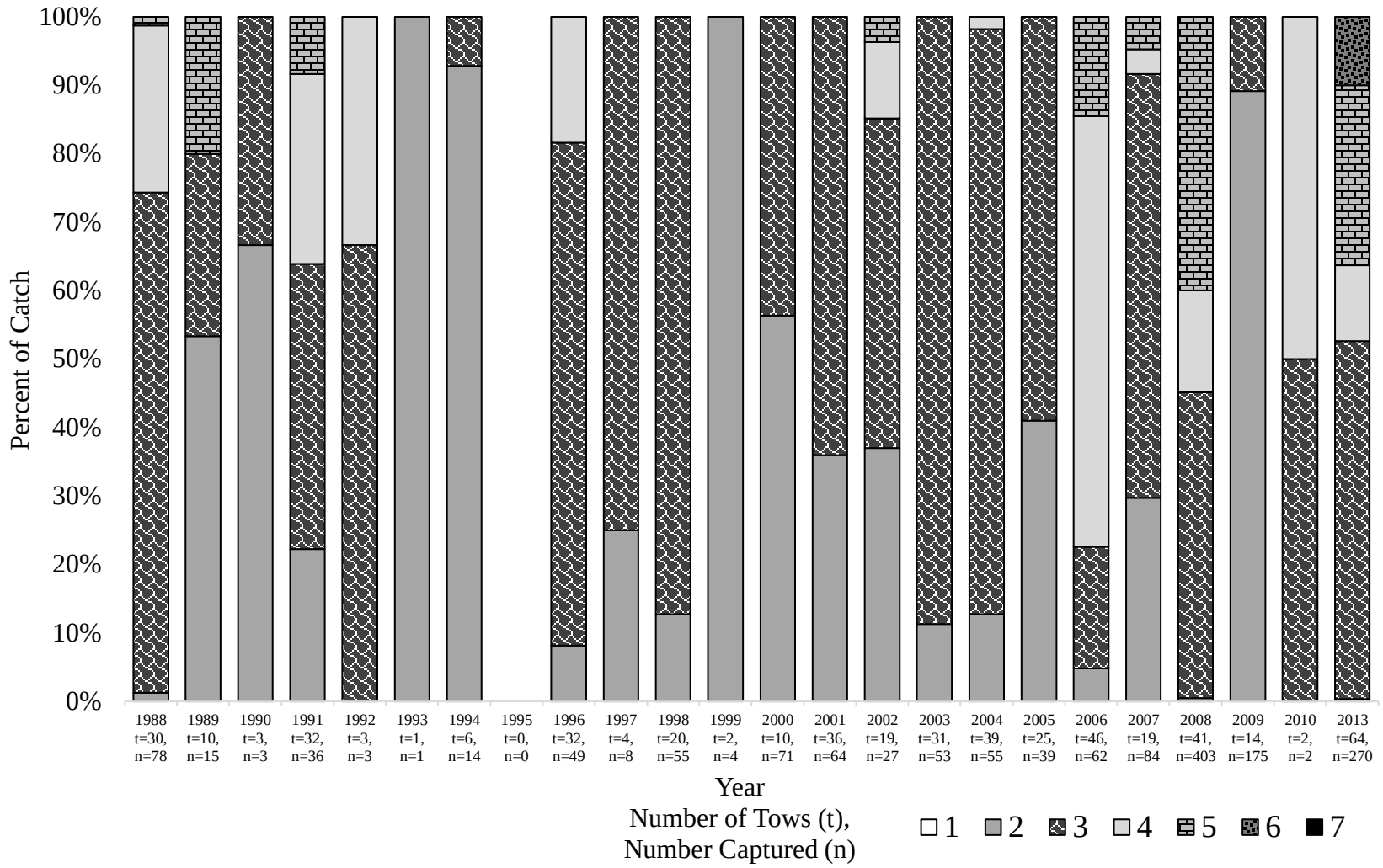

Figure 43. Percentages of sciaenid catch from each Cruise year, according to the range of organic carbon content of the soil (ppm) at capture.

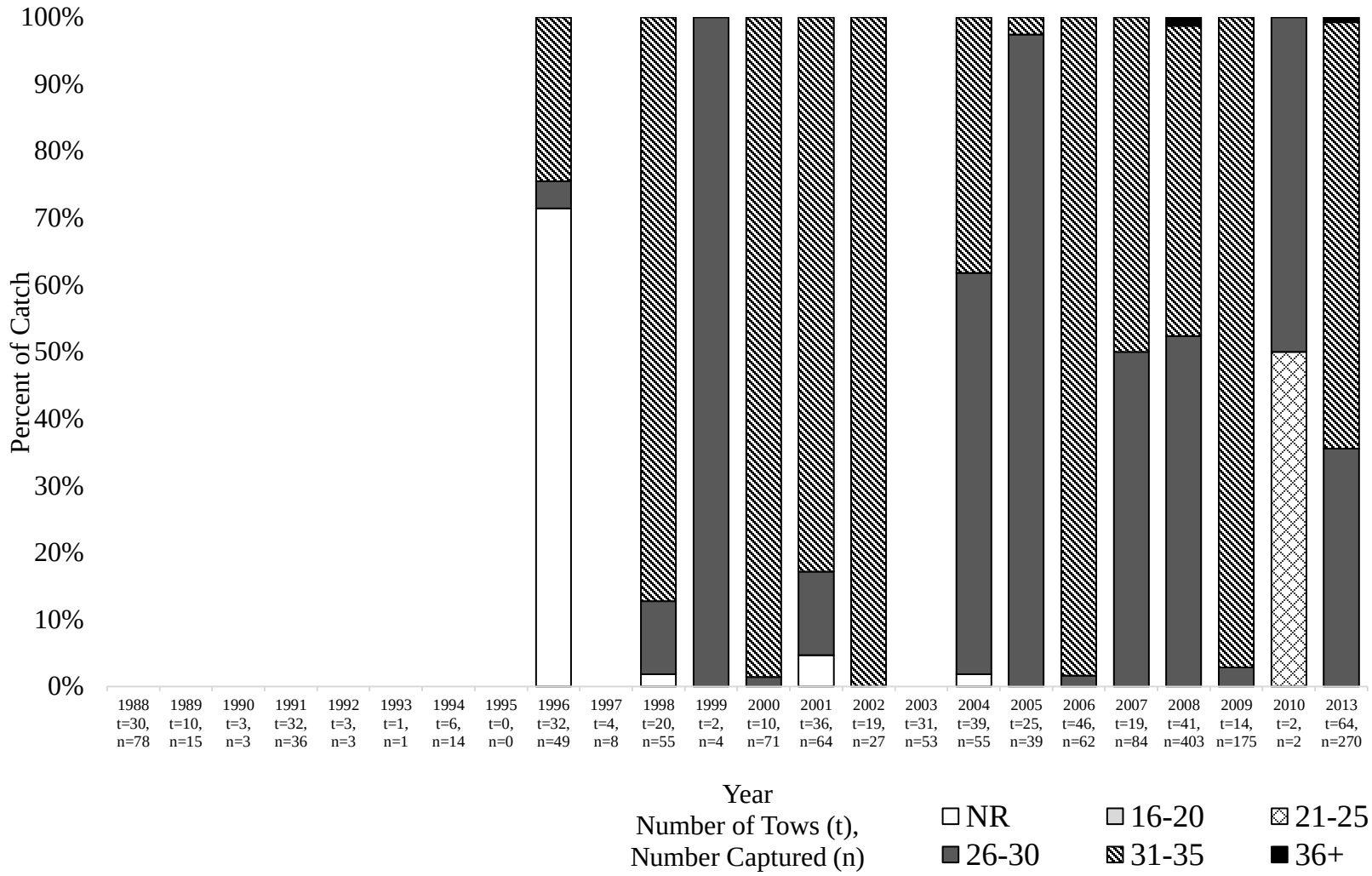

Figure 44. Percentages of sciaenid catch from each Cruise year, according to the surface salinity range (ppt) at capture location.

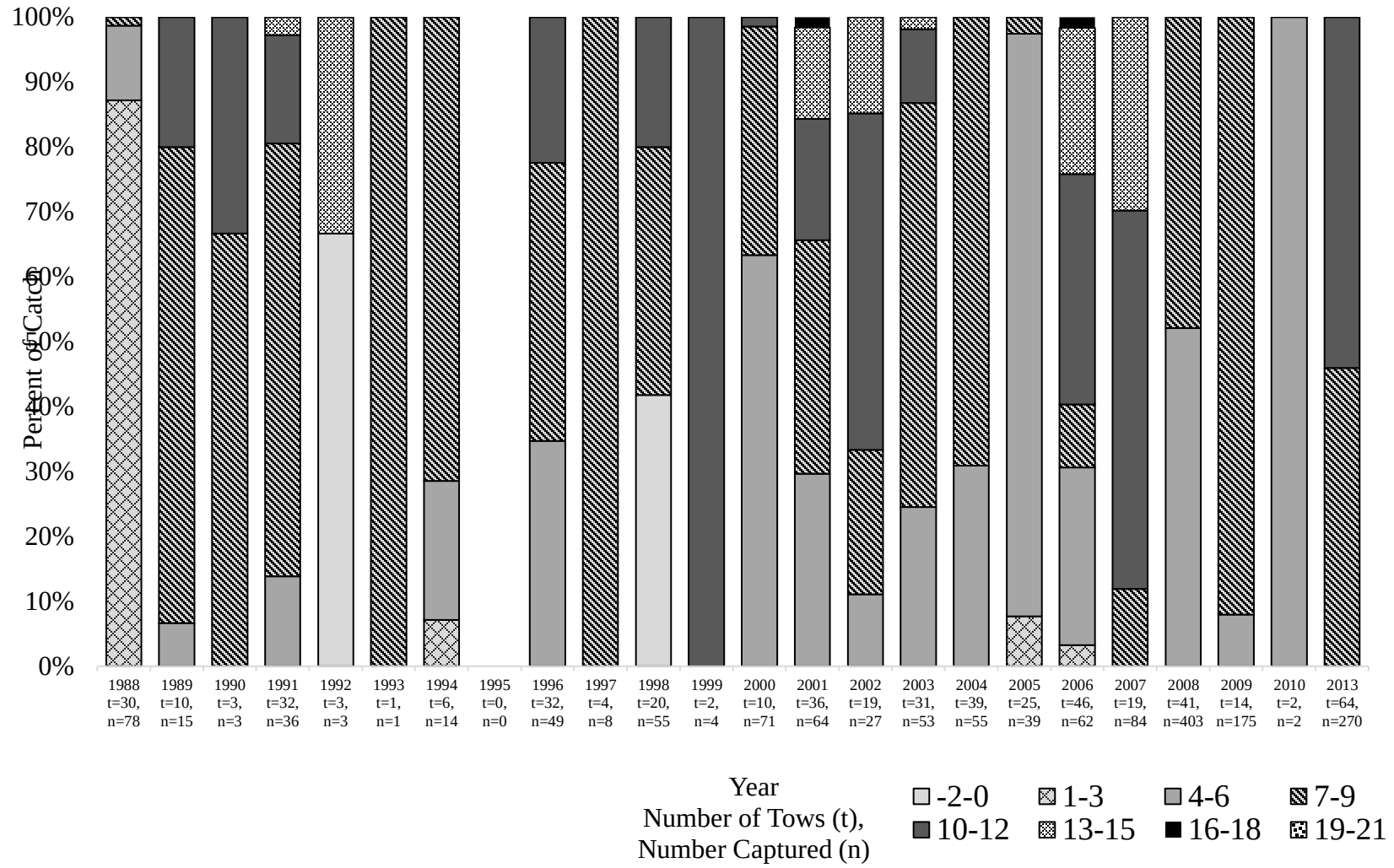

Figure 45. Percentages of sciaenid catch from each Cruise year, according to the surface water temperature range (°C) at capture location.

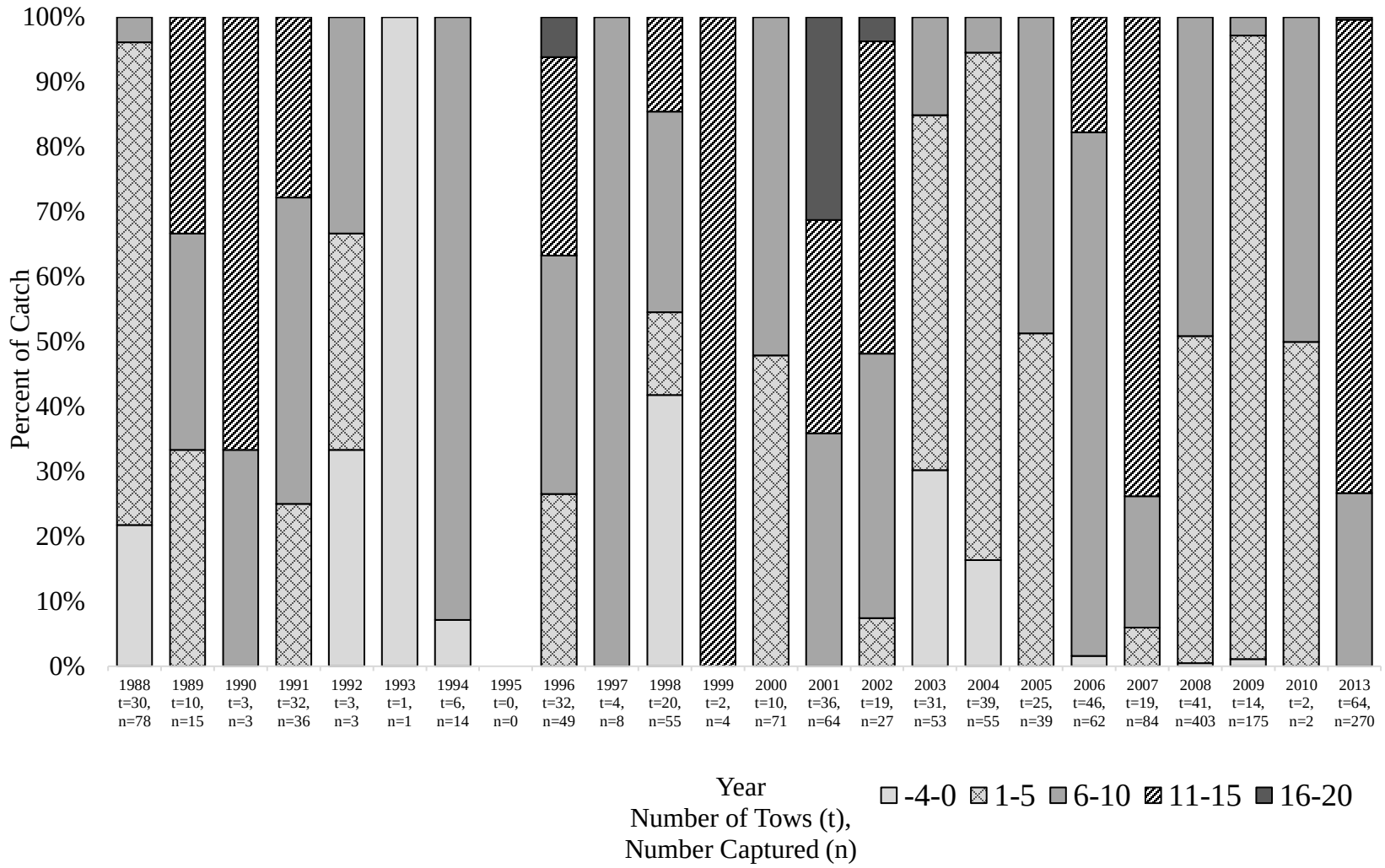

Figure 46. Percentages of sciaenid catch from each Cruise year, according to the air temperature range (°C) at capture location.

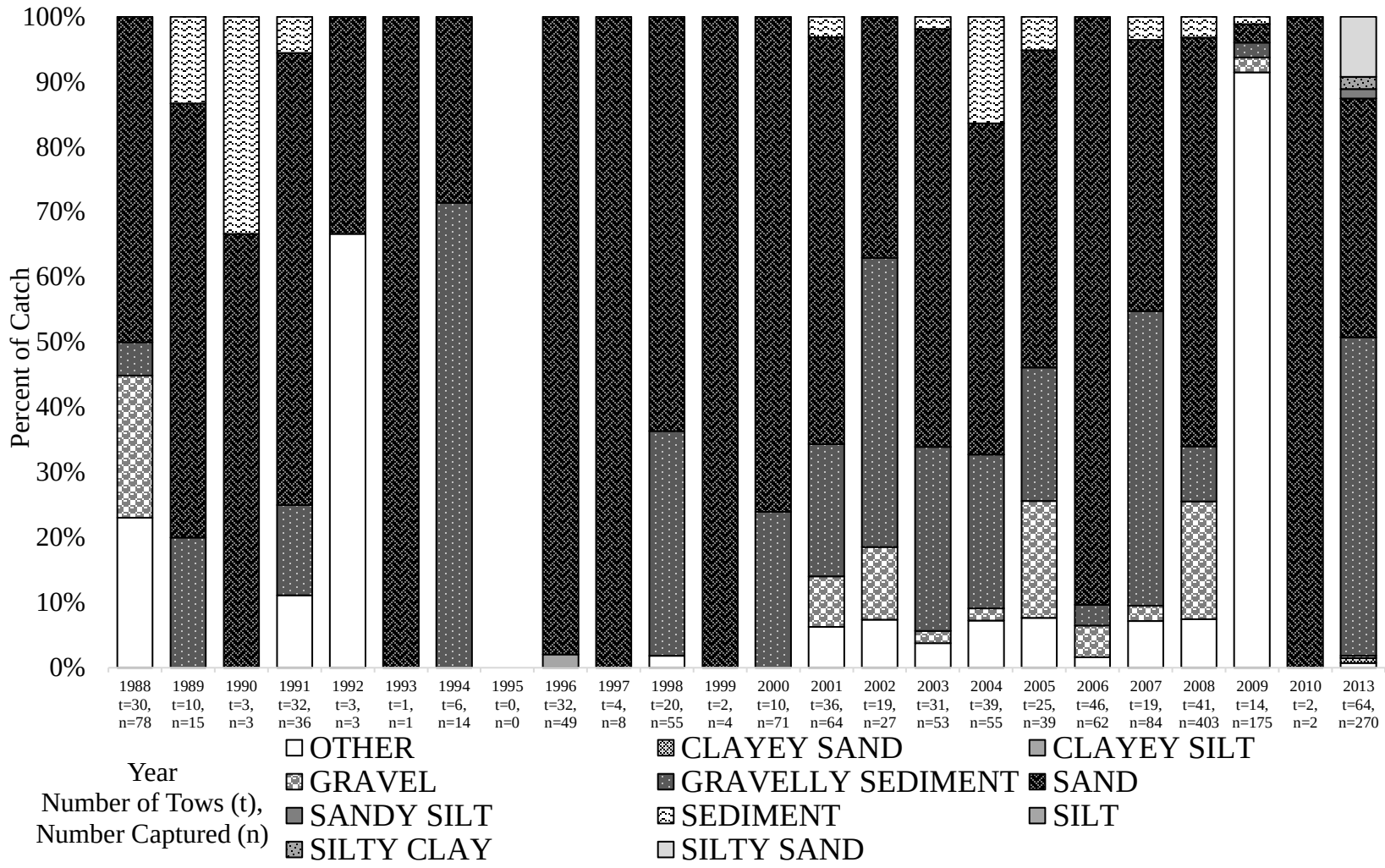

Figure 47. Percentages of sciaenid catch from each Cruise year, according to the bottom type by Shepard Code at tow location.

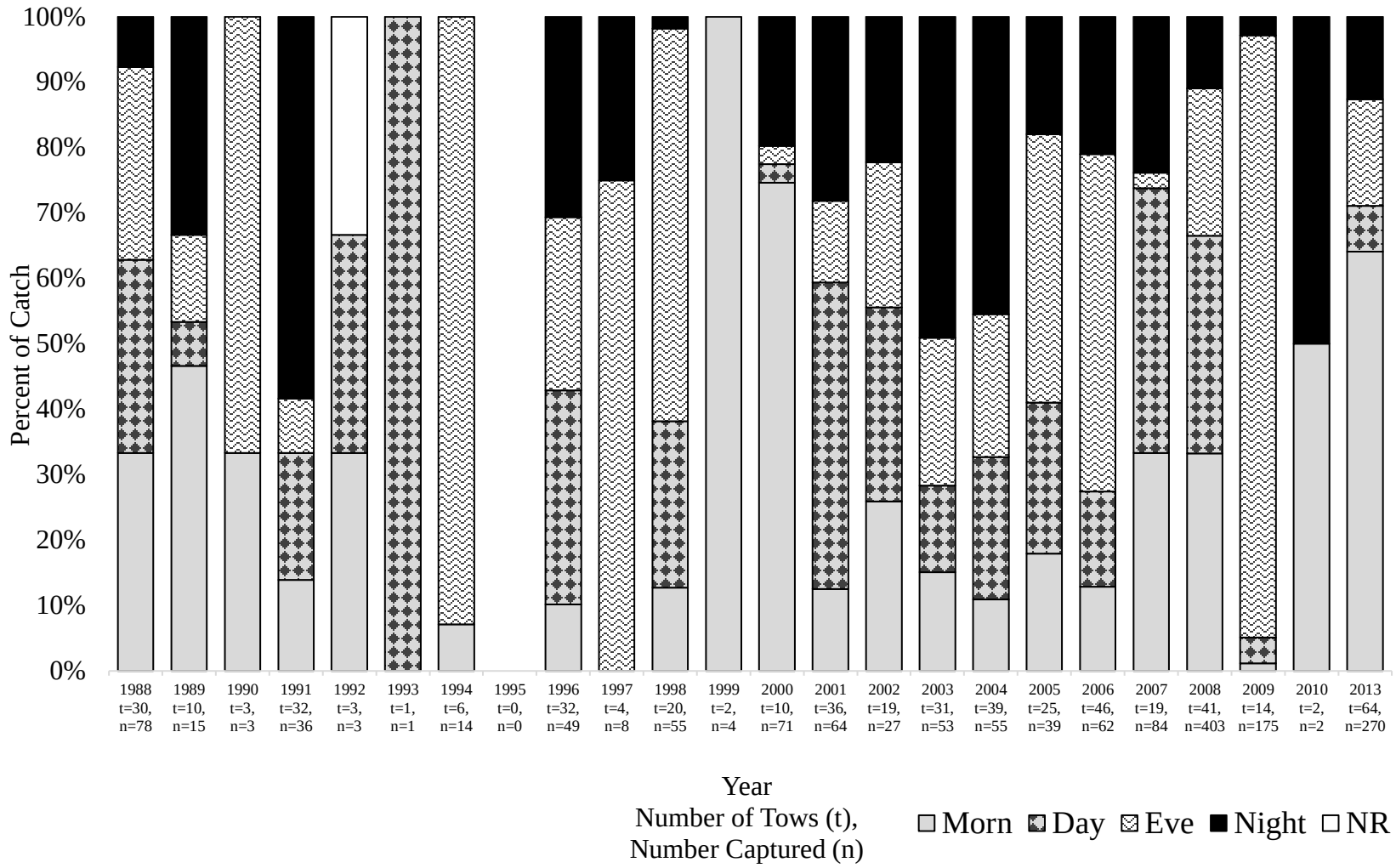

Figure 48. Percentages of sciaenid catch from each Cruise year, according to the time of day at capture, where Morn represents the hours 4-9; Day: 10-15; Eve: 16-21; and Night: 22-3.

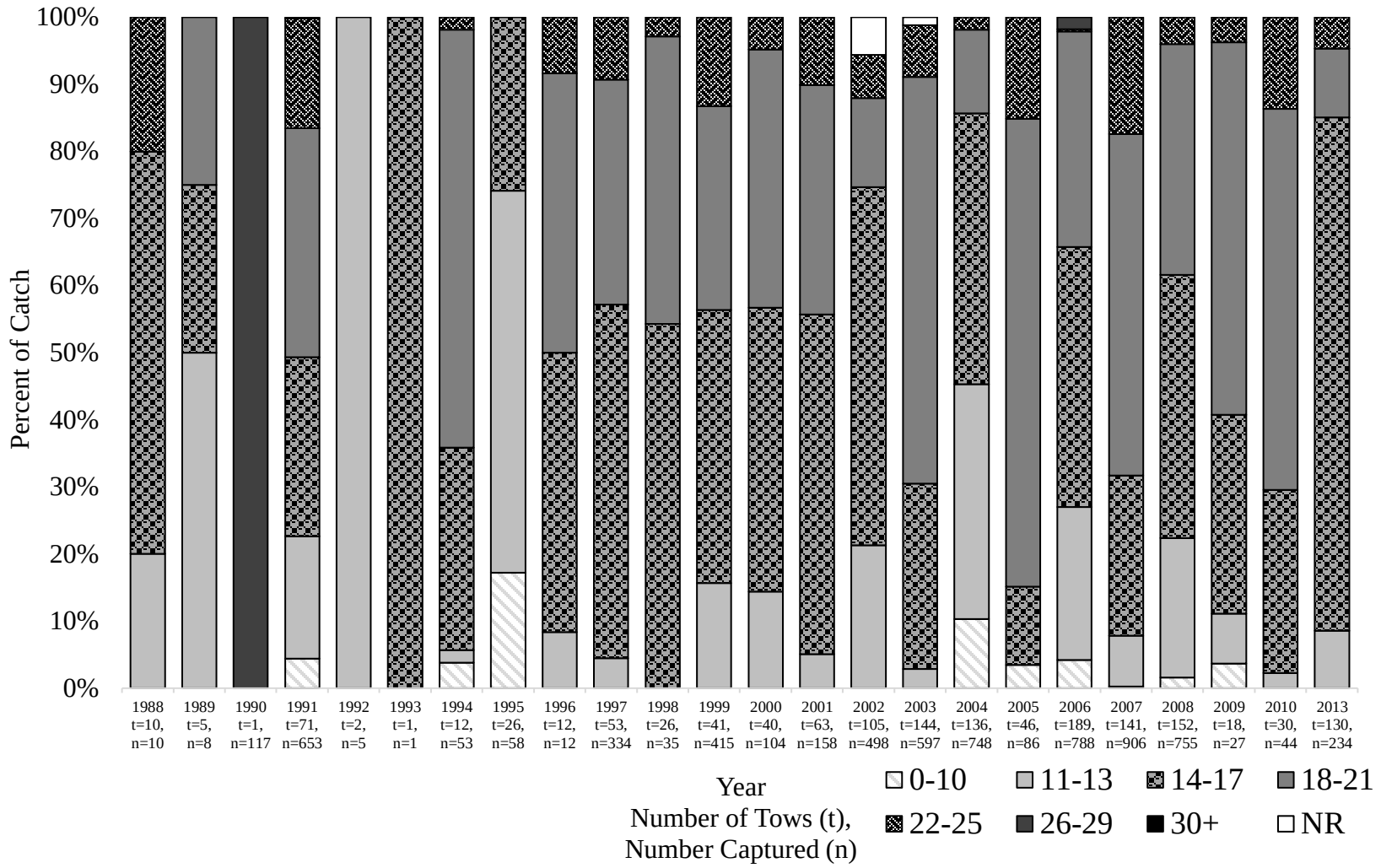

Figure 49. Percentages of flounder catch from each Cruise year, according to the depth range (meters) at capture.

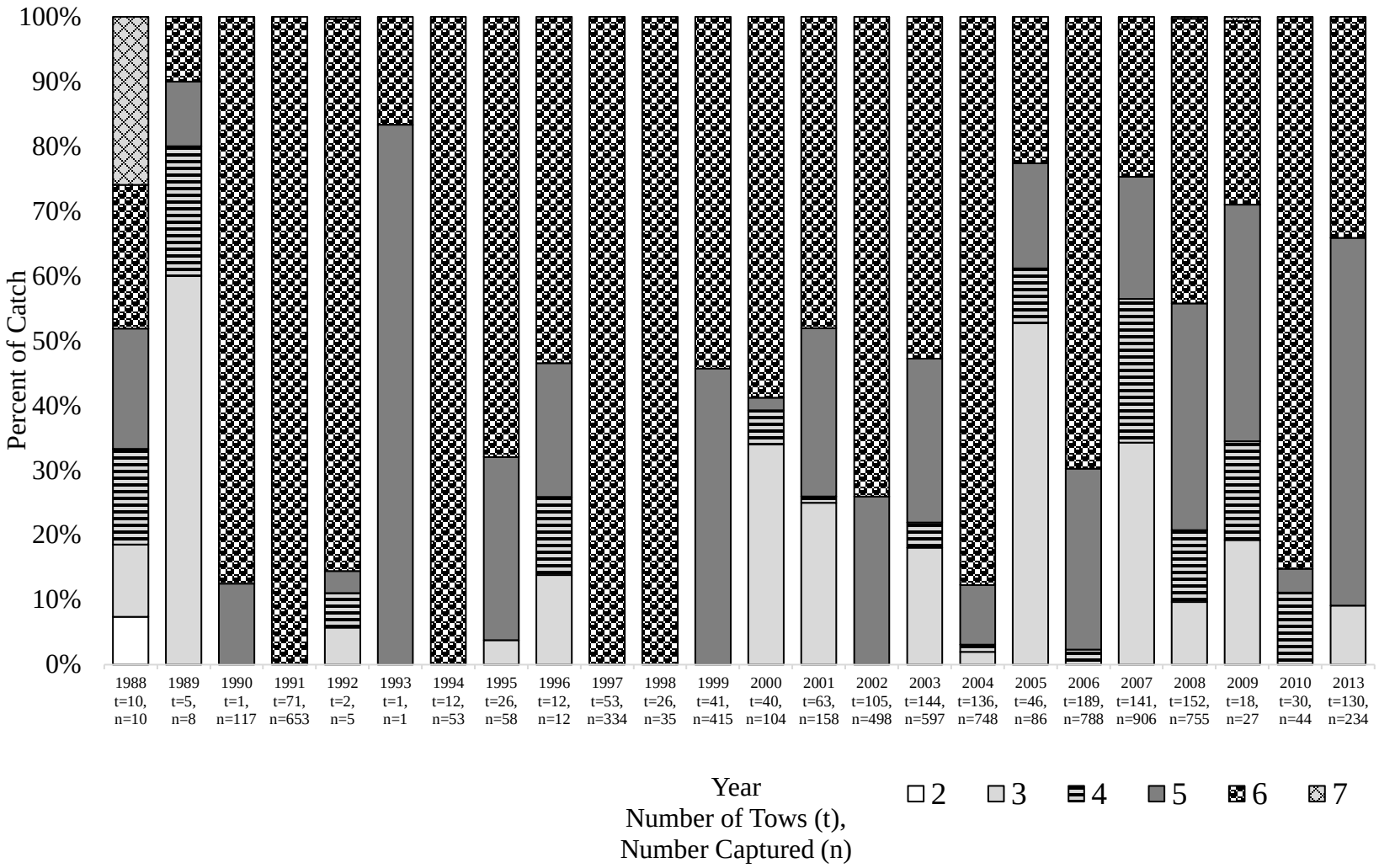

Figure 50. Percentages of flounder catch from each Cruise year, according to the grain size range (phi) at capture.

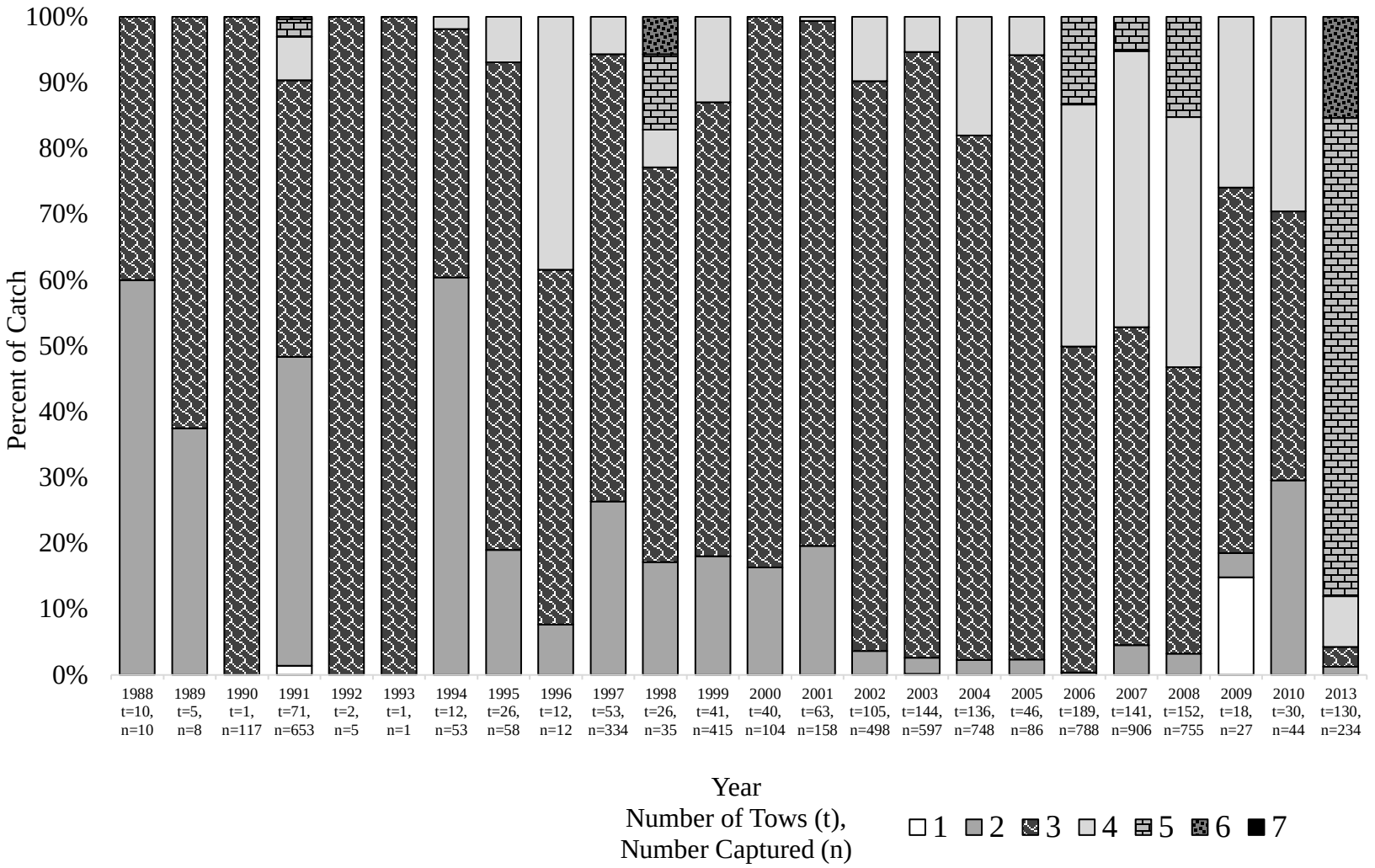

Figure 51. Percentages of flounder catch from each Cruise year, according to the range of organic carbon content of the soil (ppm) at capture.

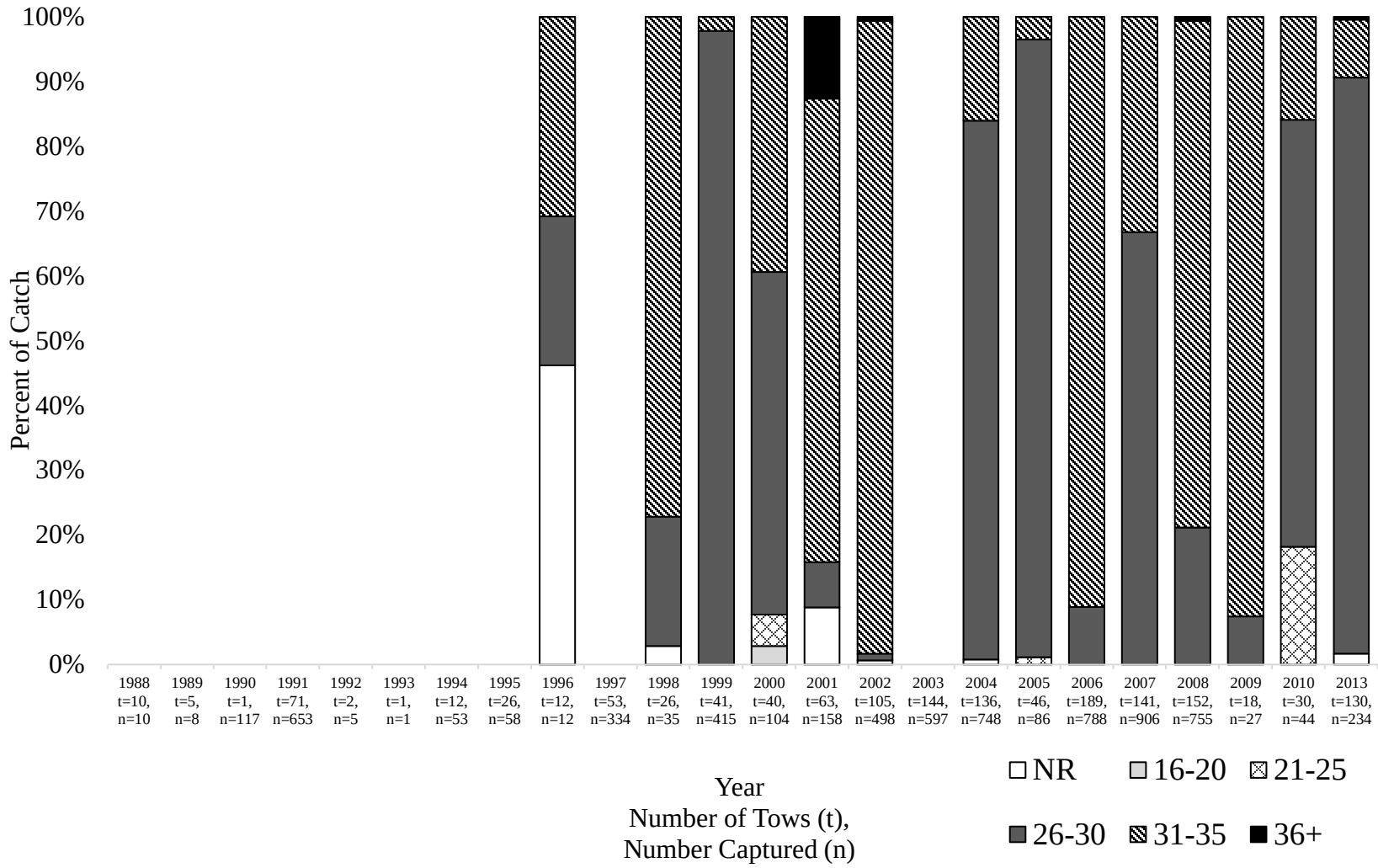

Figure 52. Percentages of flounder catch from each Cruise year, according to the surface salinity range (ppt) at capture location.

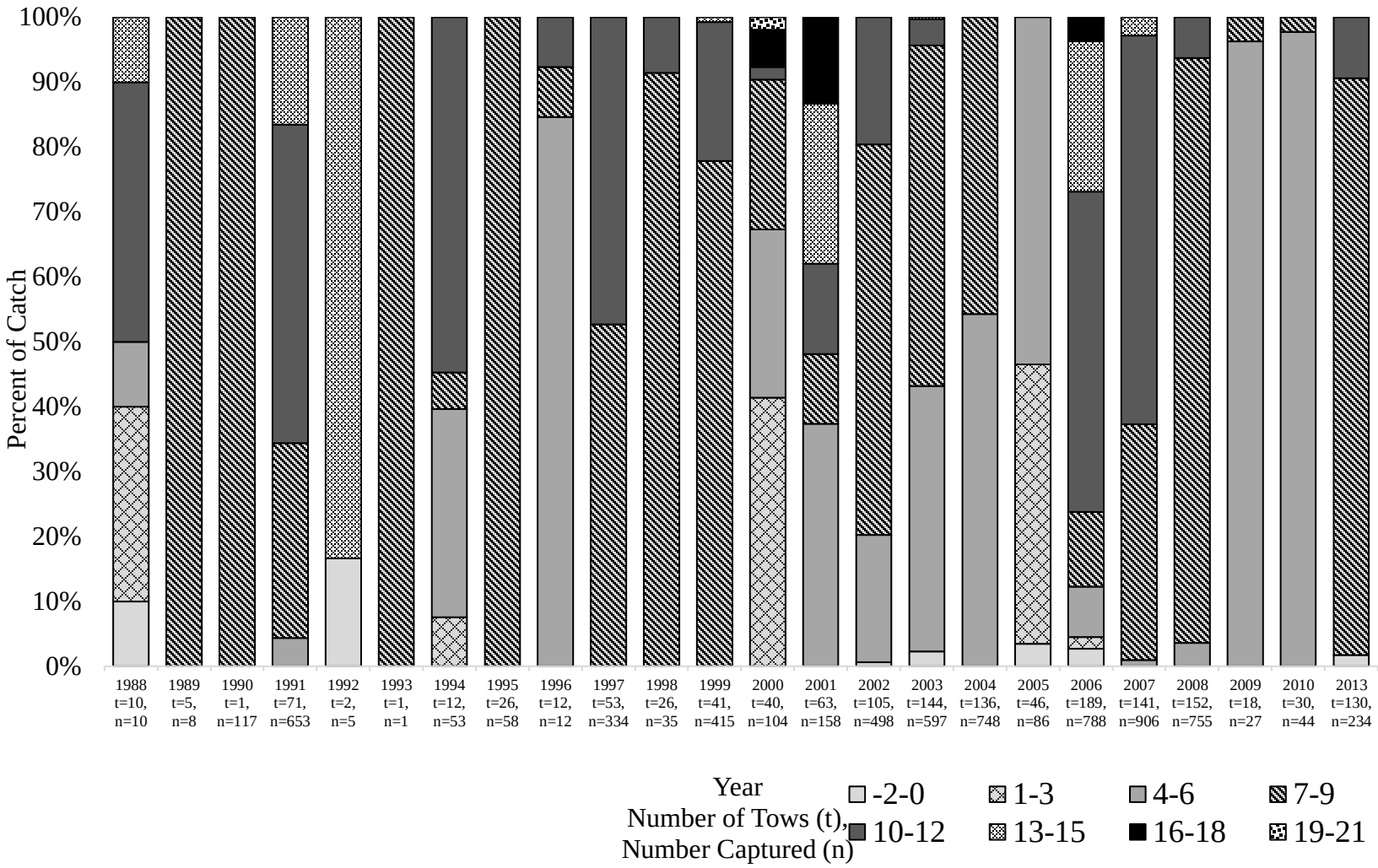

Figure 53. Percentages of flounder catch from each Cruise year, according to the surface water temperature range (°C) at capture location.

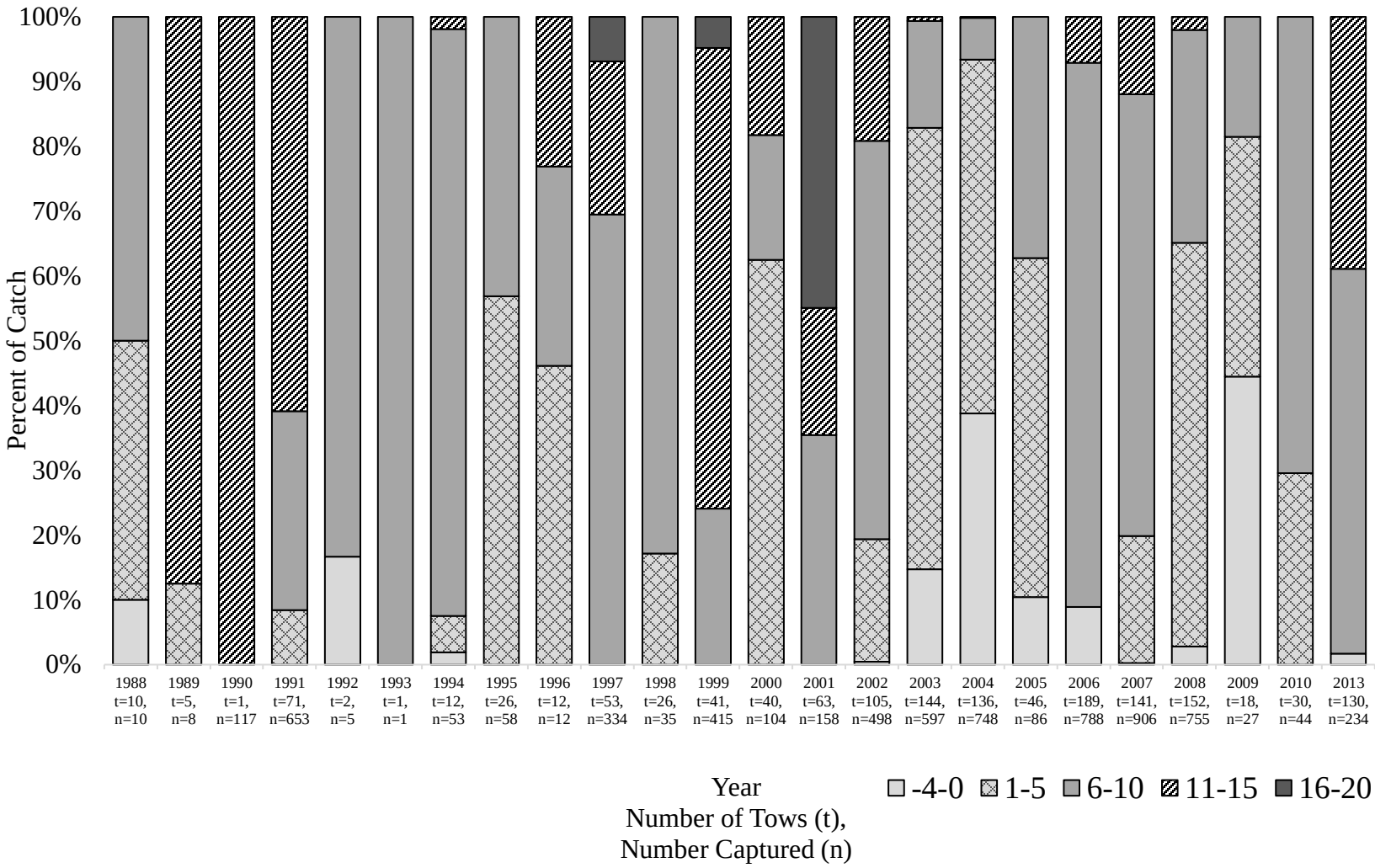

Figure 54. Percentages of flounder catch from each Cruise year, according to the air temperature range (°C) at capture location.

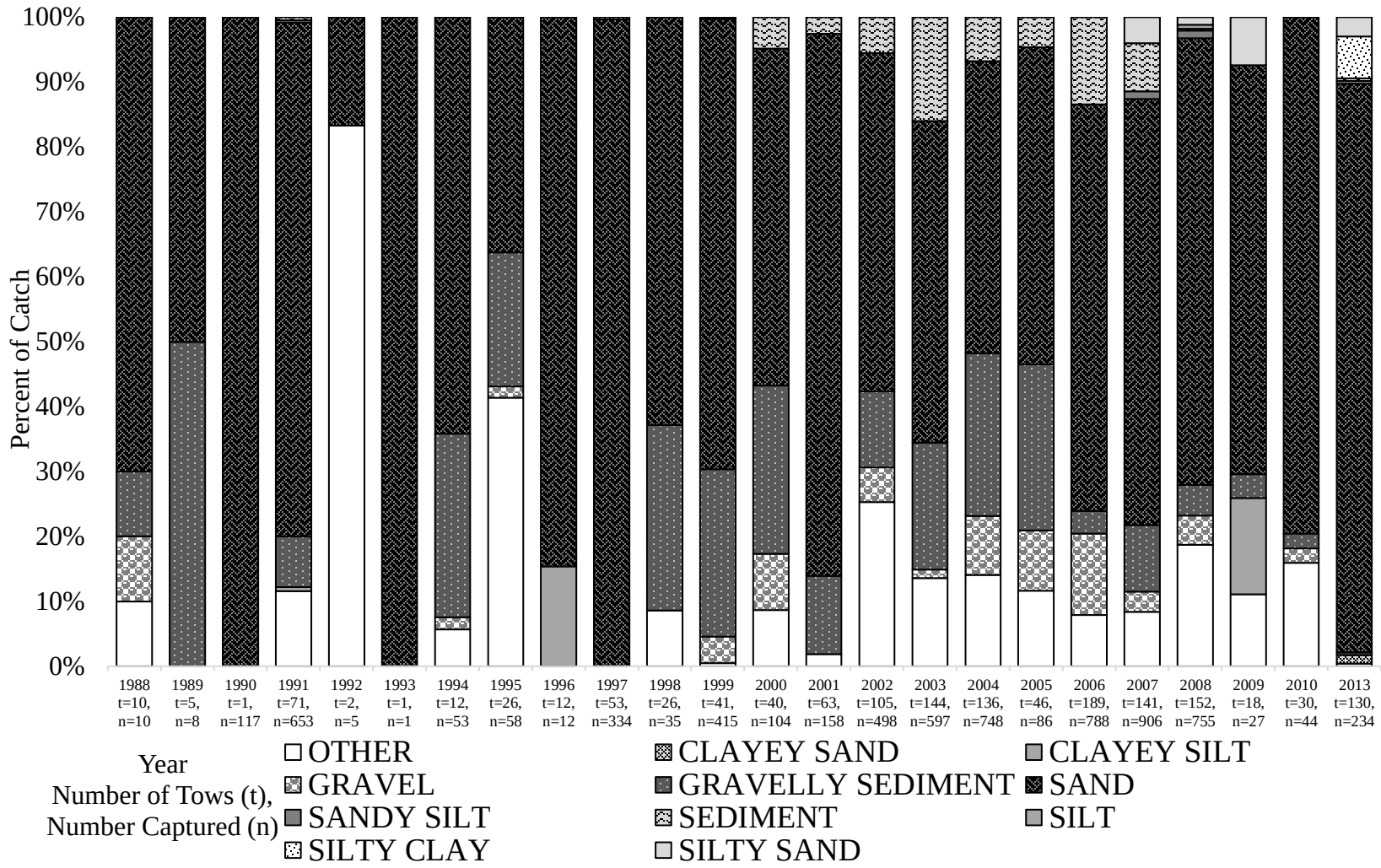

Figure 55. Percentages of flounder catch from each Cruise year, according to the bottom type by Shepard Code at tow location.

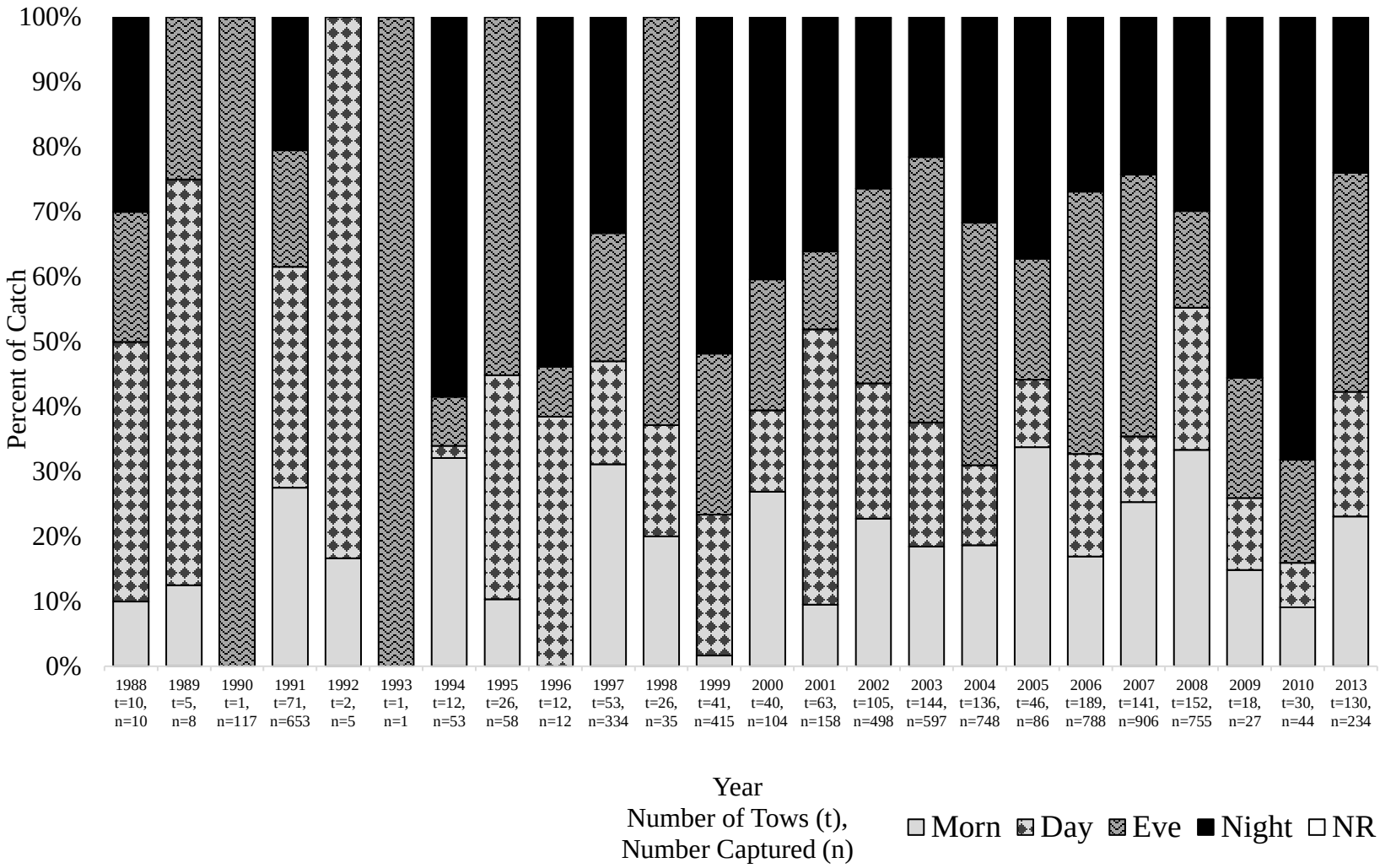

Figure 56. Percentages of flounder catch from each Cruise year, according to the time of day at capture, where Morn represents the hours 4-9; Day: 10-15; Eve: 16-21; and Night: 22-3.

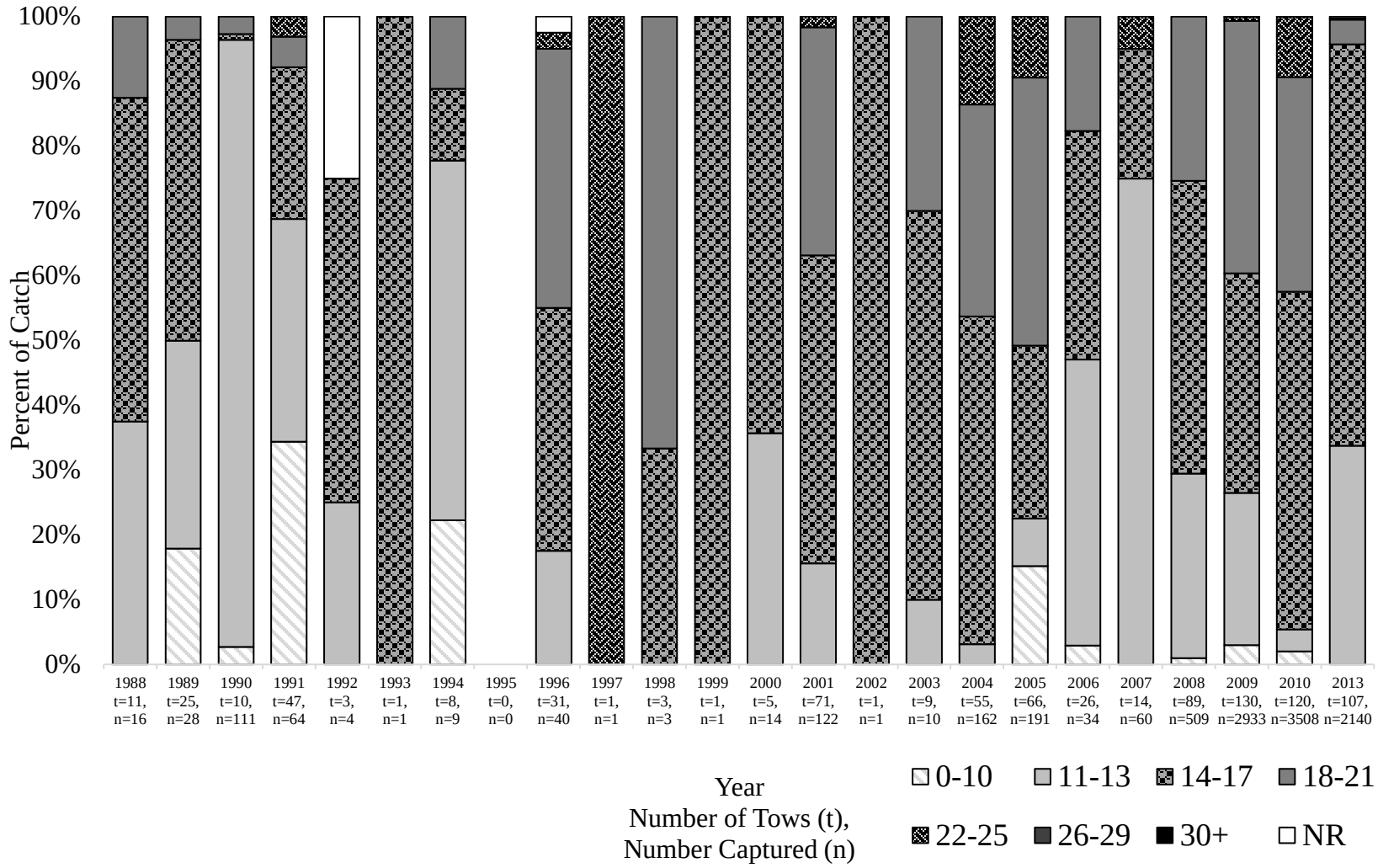

Figure 57. Percentages of clupeid catch from each Cruise year, according to the depth range (meters) at capture.

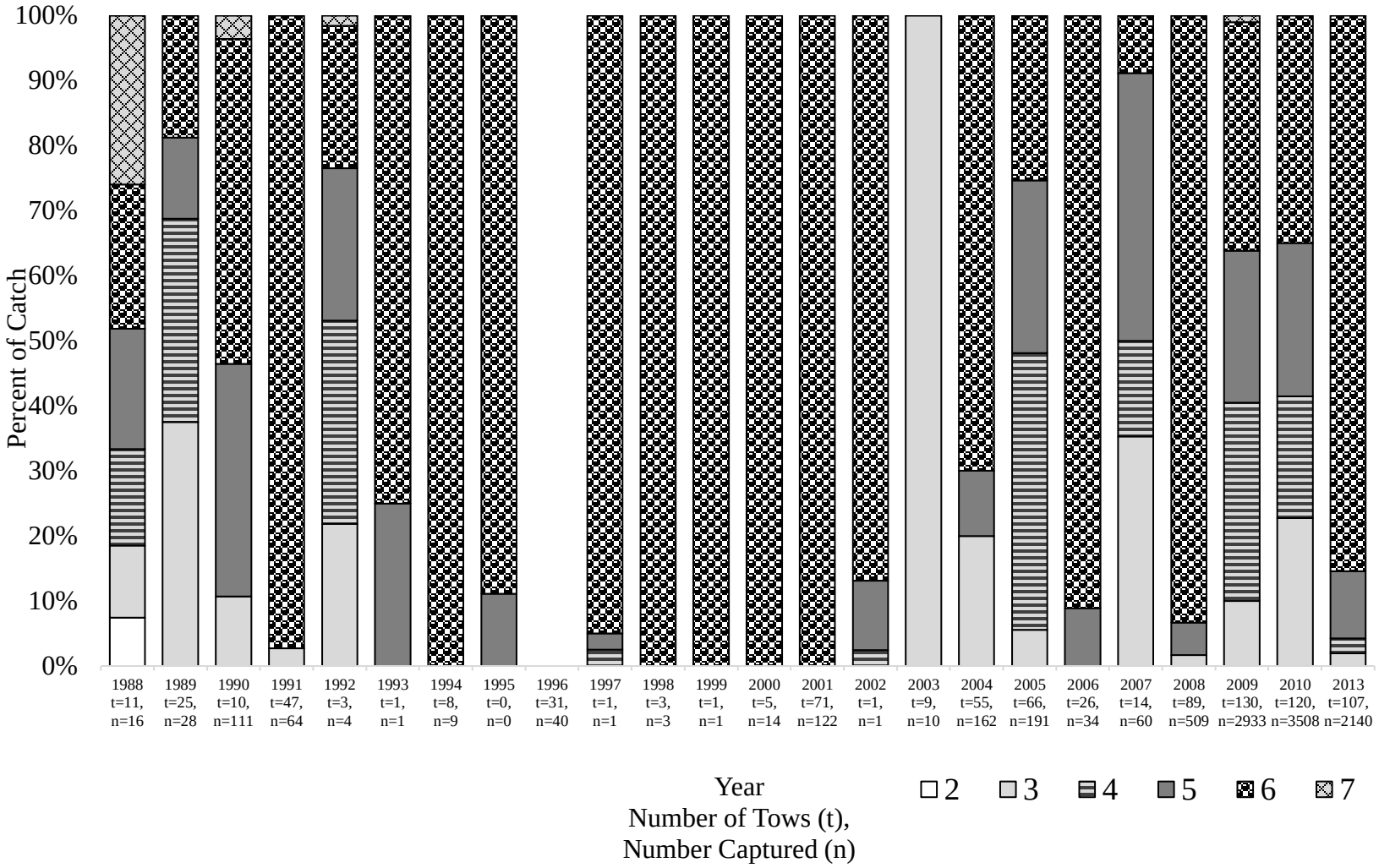

Figure 58. Percentages of clupeid catch from each Cruise year, according to the grain size range (phi) at capture.

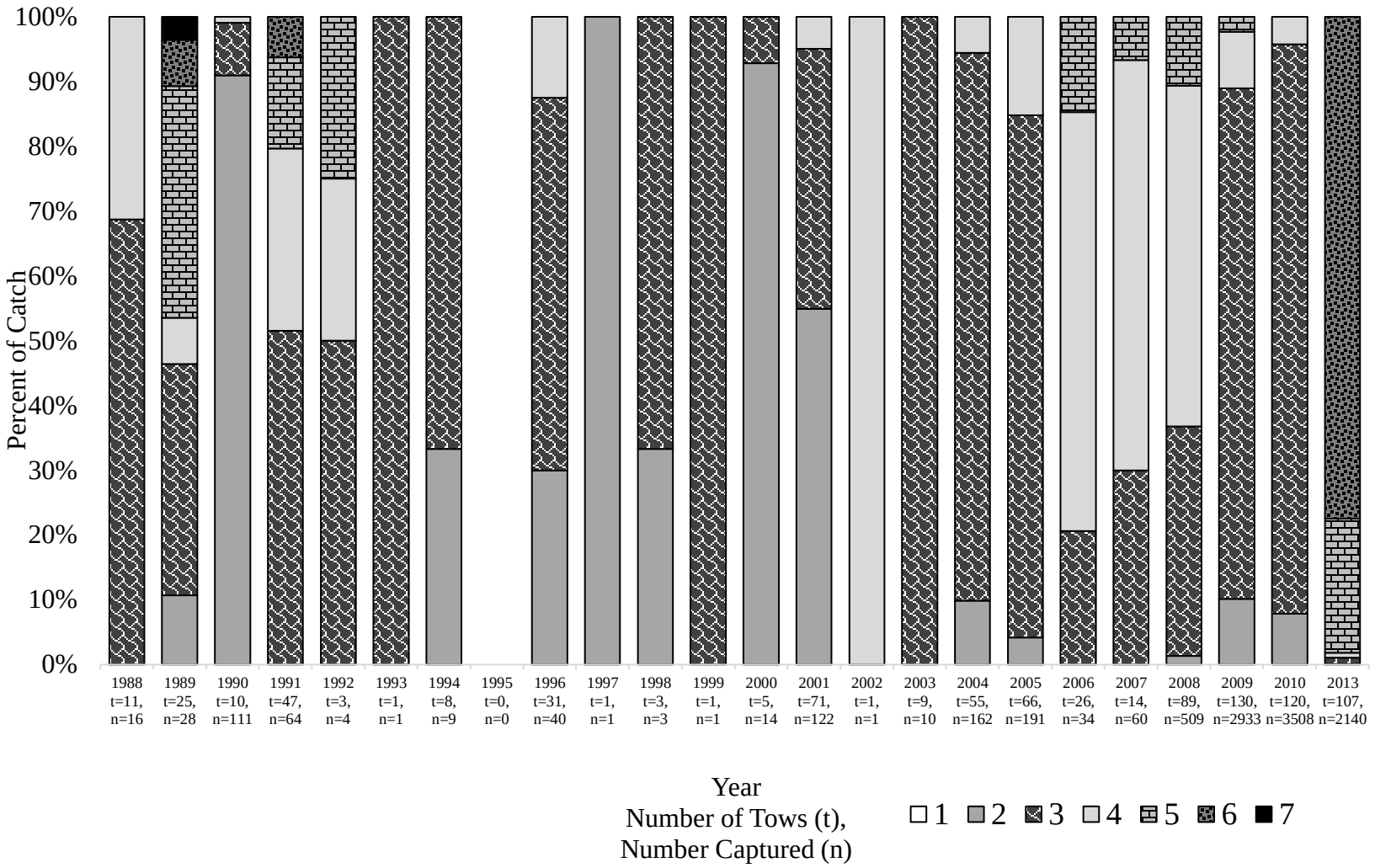

Figure 59. Percentages of clupeid catch from each Cruise year, according to the range of organic carbon content of the soil (ppm) at capture.

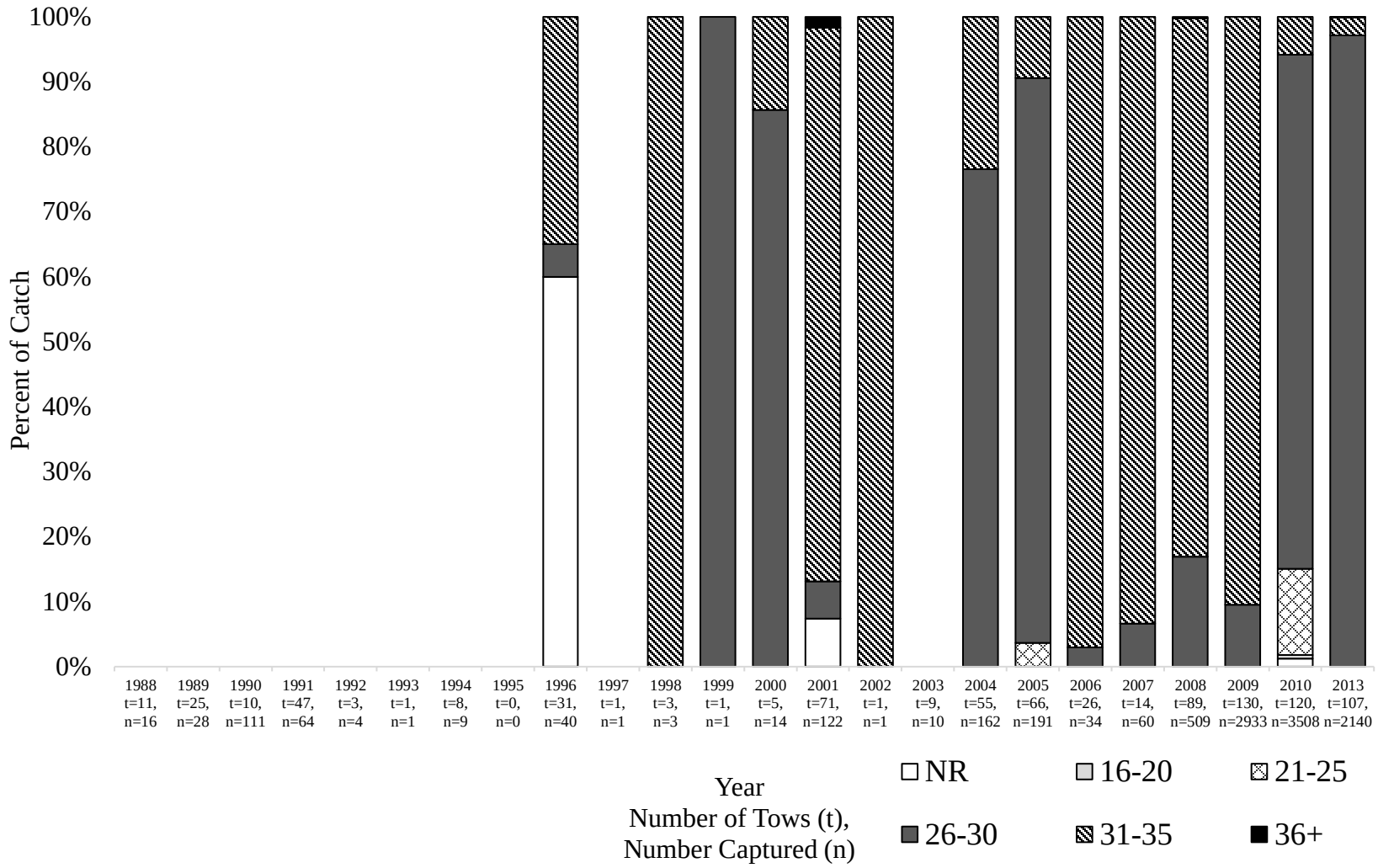

Figure 60. Percentages of clupeid catch from each Cruise year, according to the surface salinity range (ppt) at capture location.

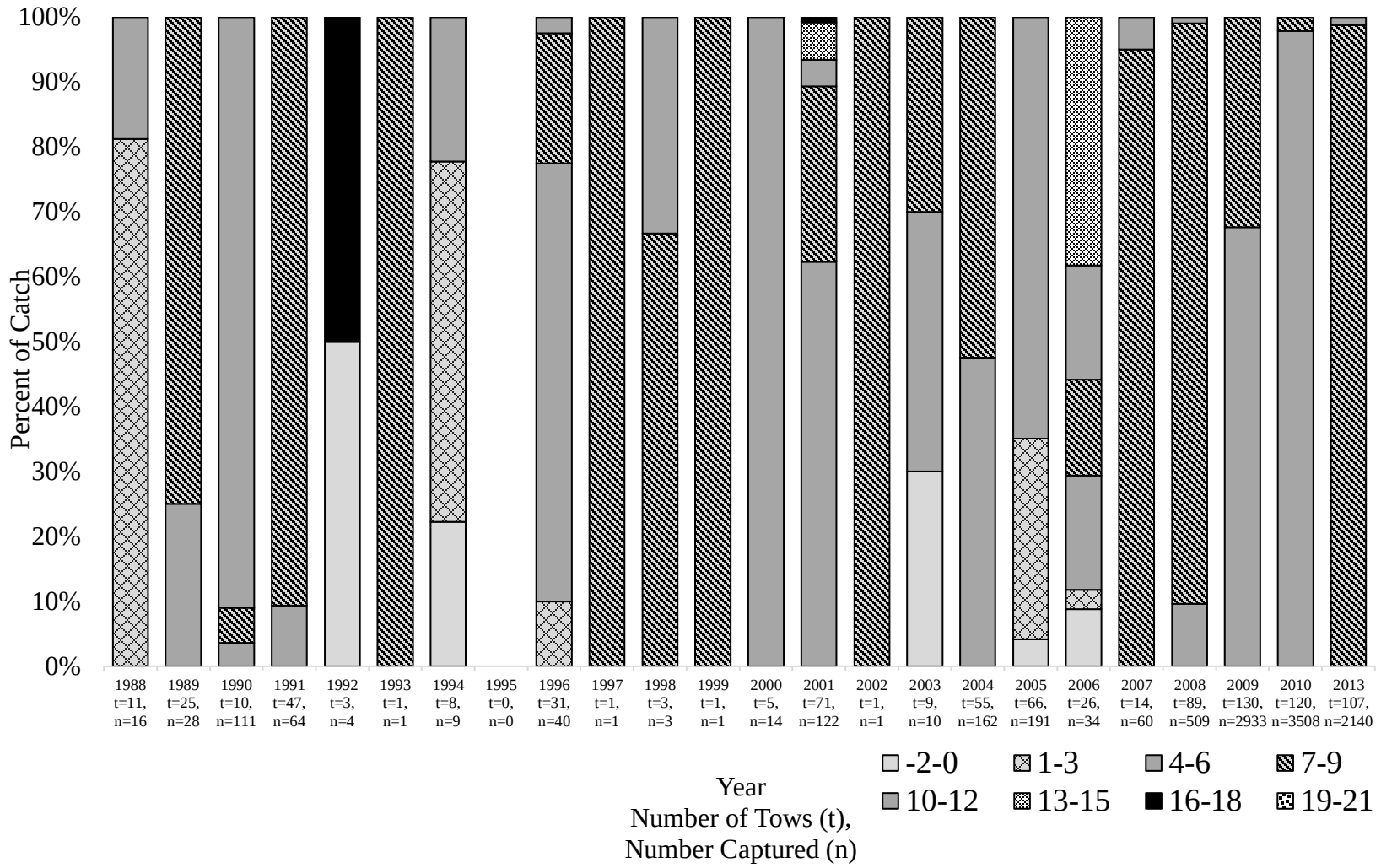

Figure 61. Percentages of clupeid catch from each Cruise year, according to the surface water temperature range (°C) at capture location.

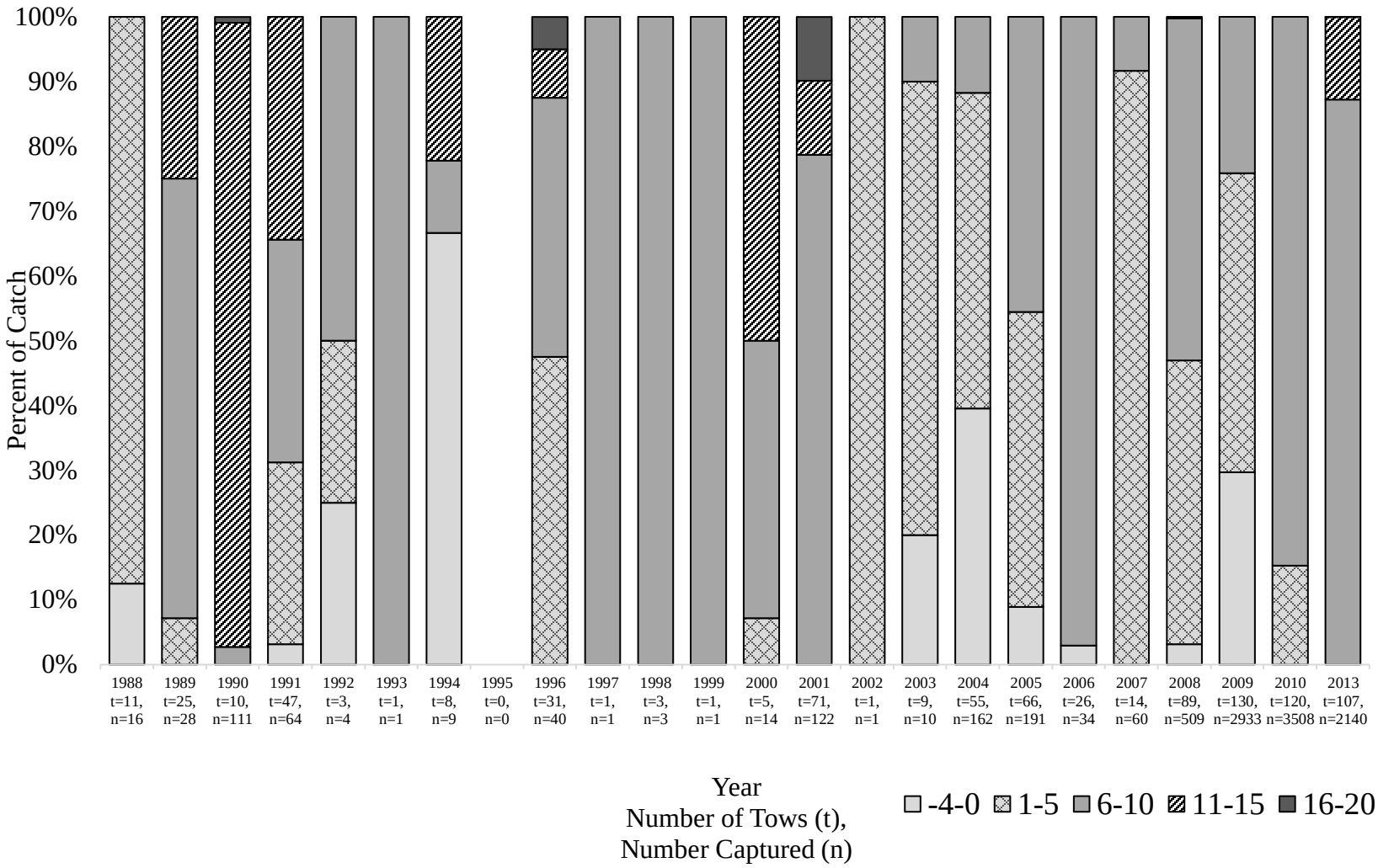

Figure 62. Percentages of clupeid catch from each Cruise year, according to the air temperature range (°C) at capture location.

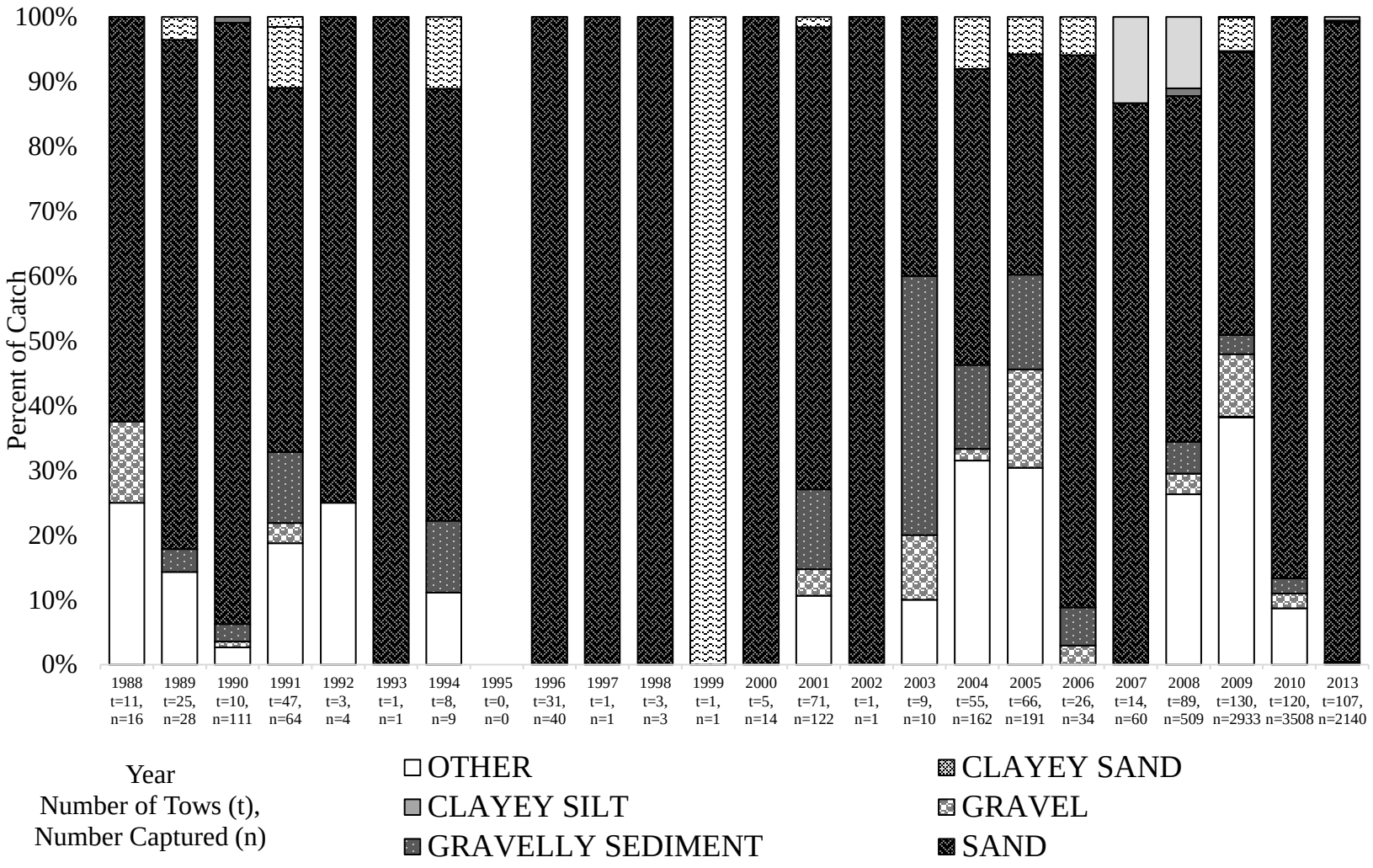

Figure 63. Percentages of clupeid catch from each Cruise year, according to the bottom type by Shepard Code at tow location.

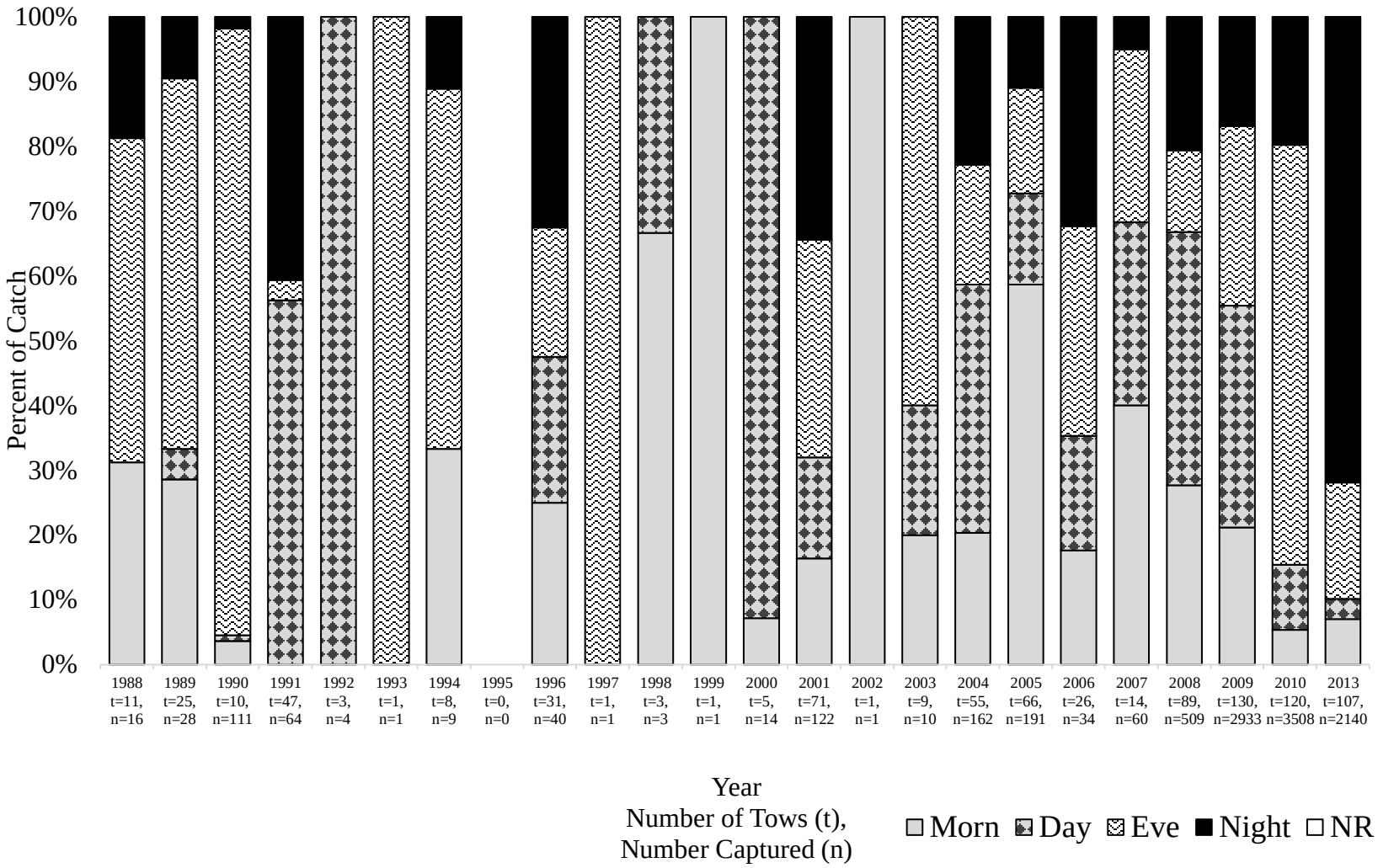

Figure 64. Percentages of clupeid catch from each Cruise year, according to the time of day at capture, where Morn represents the hours 4-9; Day: 10-15; Eve: 16-21; and Night: 22-3.

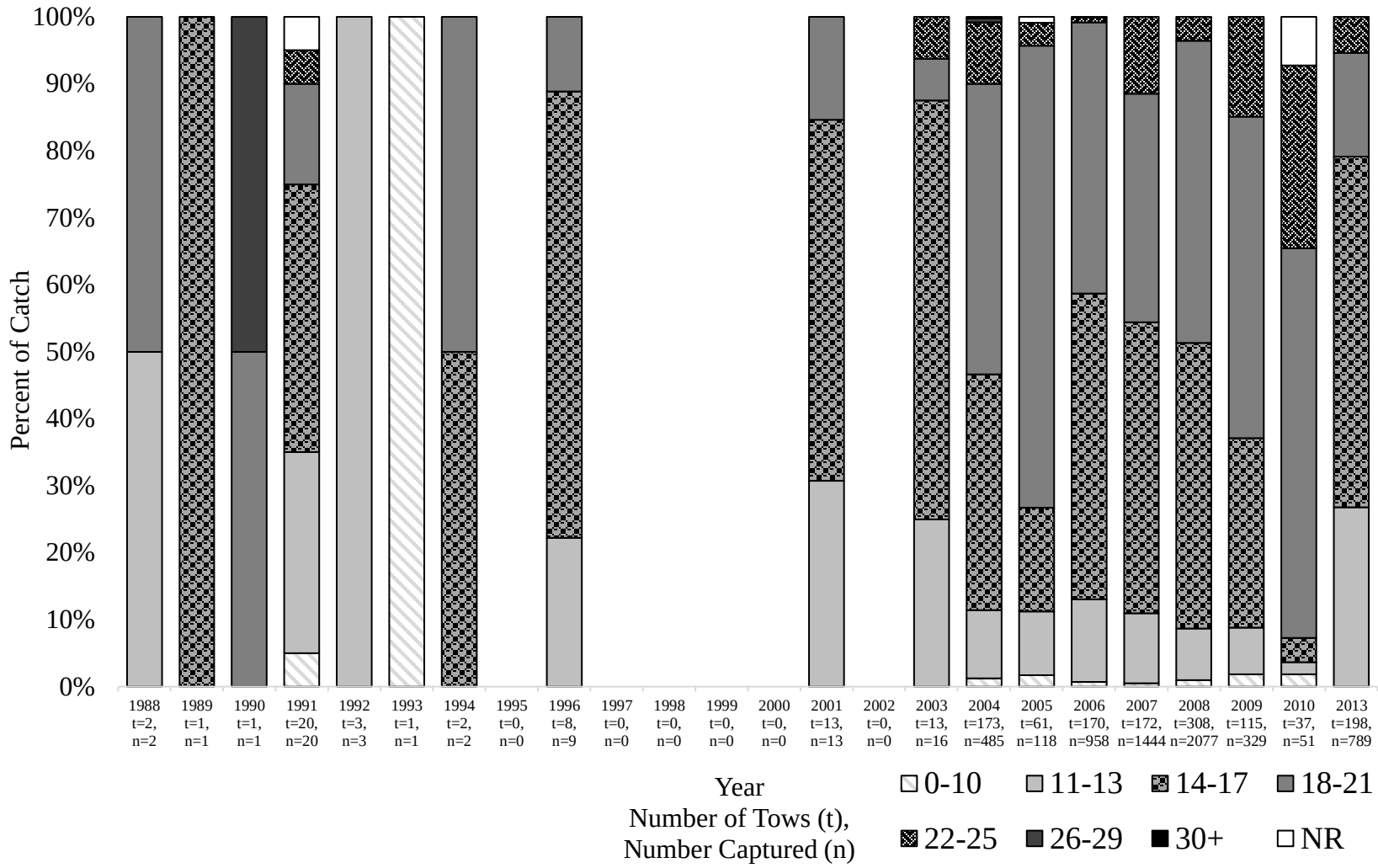

Figure 65. Percentages of skate catch from each Cruise year, according to the depth range (meters) at capture.

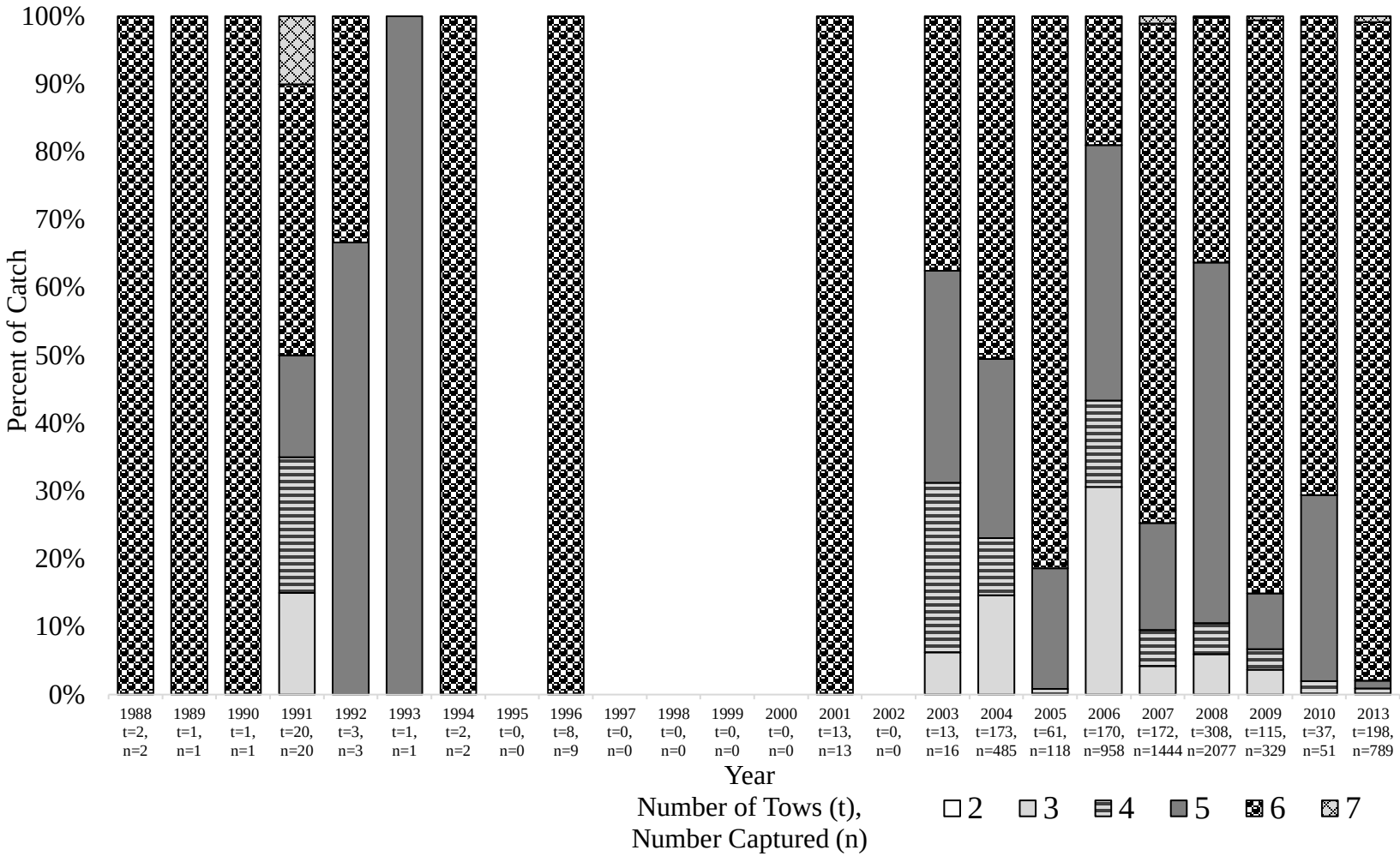

Figure 66. Percentages of skate catch from each Cruise year, according to the grain size range (phi) at capture.

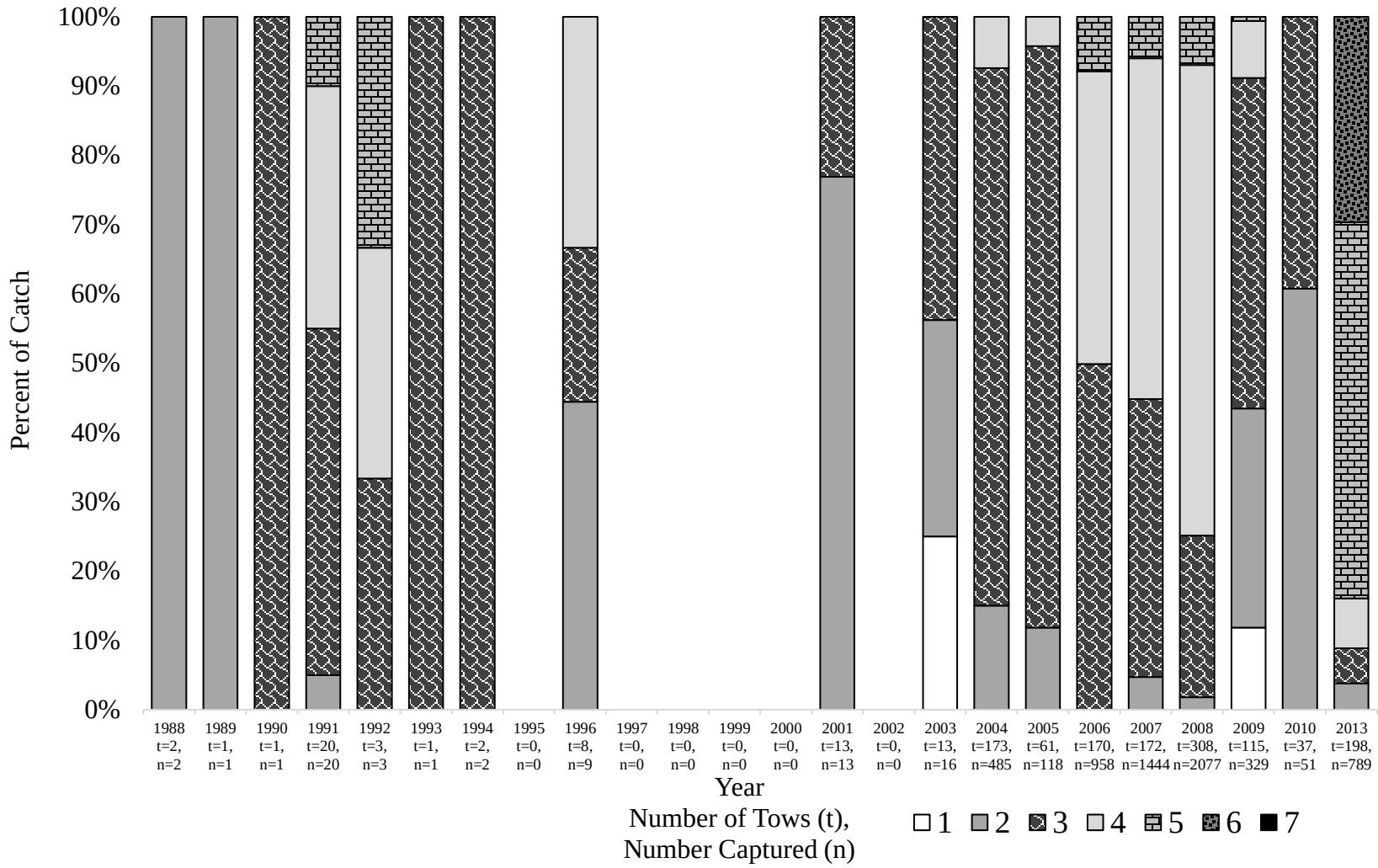

Figure 67. Percentages of skate catch from each Cruise year, according to the range of organic carbon content of the soil (ppm) at capture.

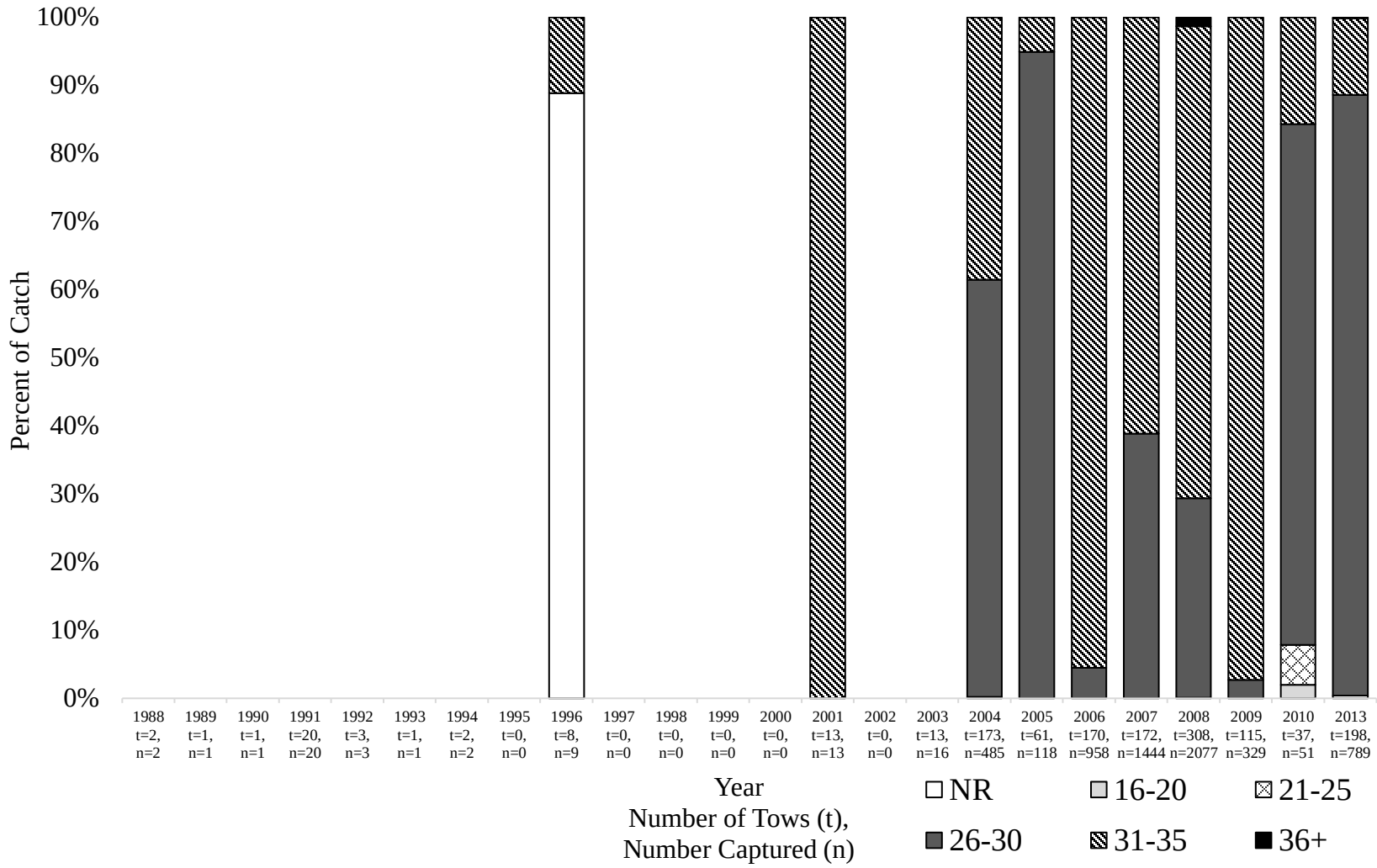

Figure 68. Percentages of skate catch from each Cruise year, according to the surface salinity range (ppt) at capture location.

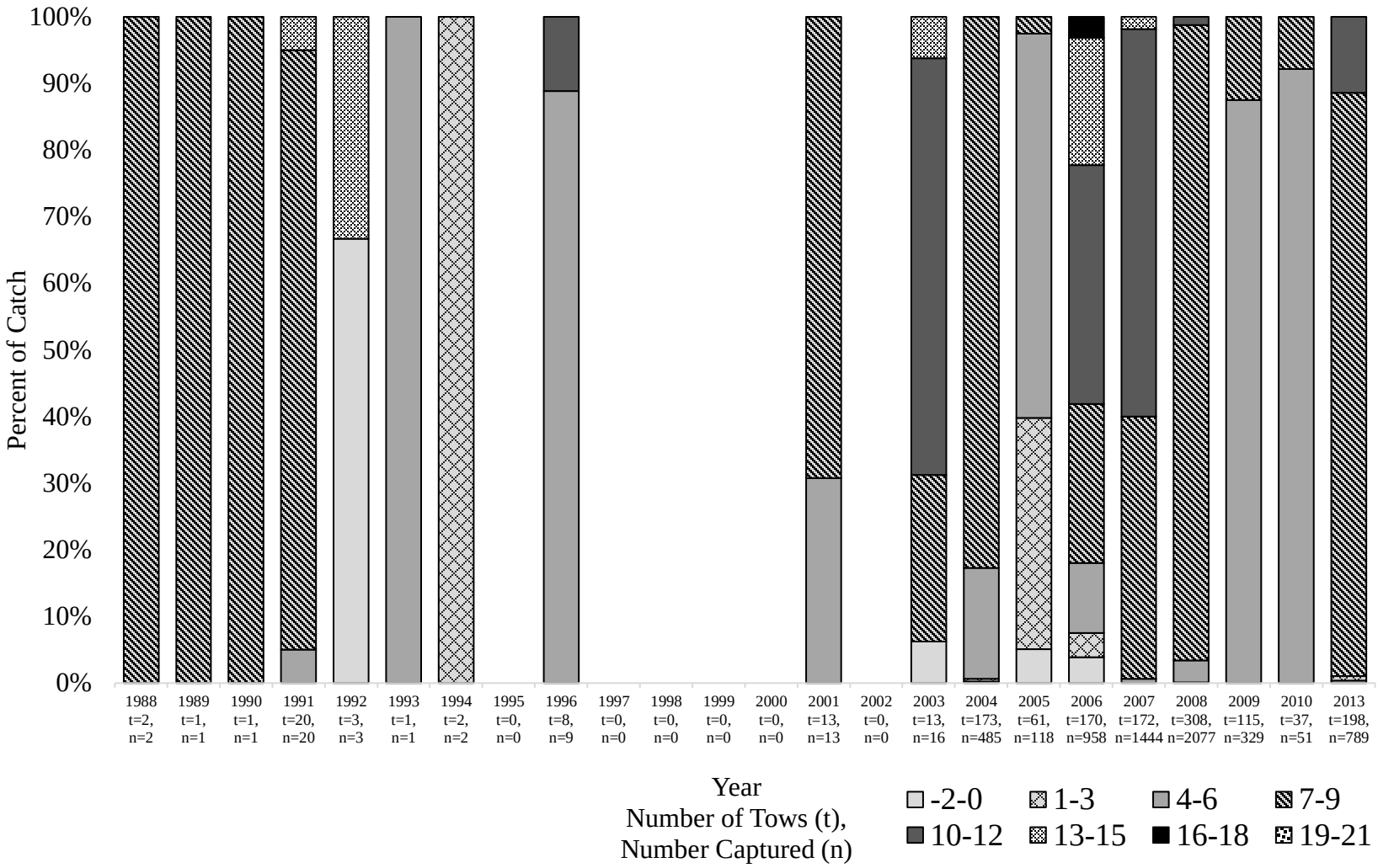

Figure 69. Percentages of skate catch from each Cruise year, according to the surface water temperature range (°C) at capture location.

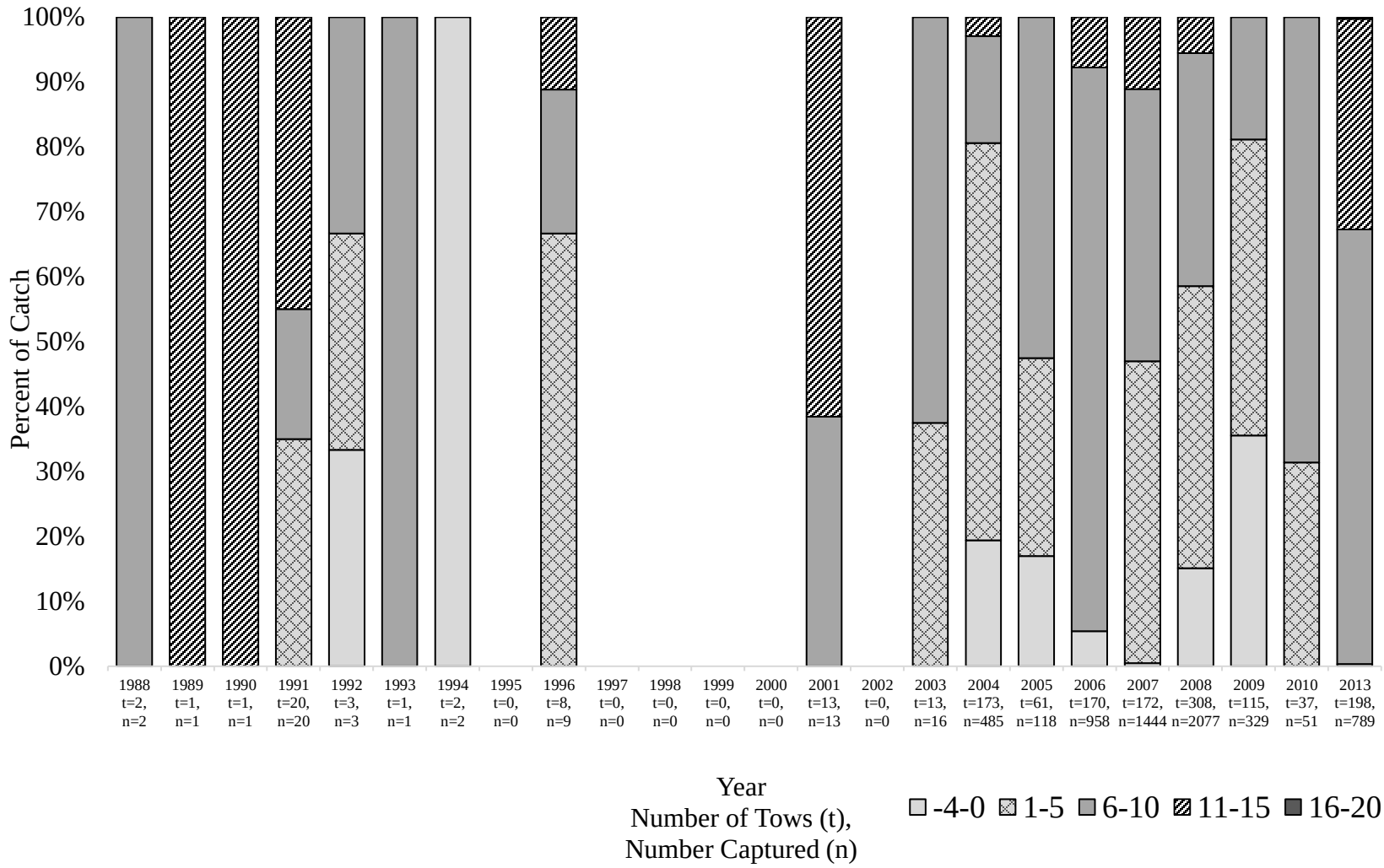

Figure 70. Percentages of skate catch from each Cruise year, according to the air temperature range (°C) at capture location.

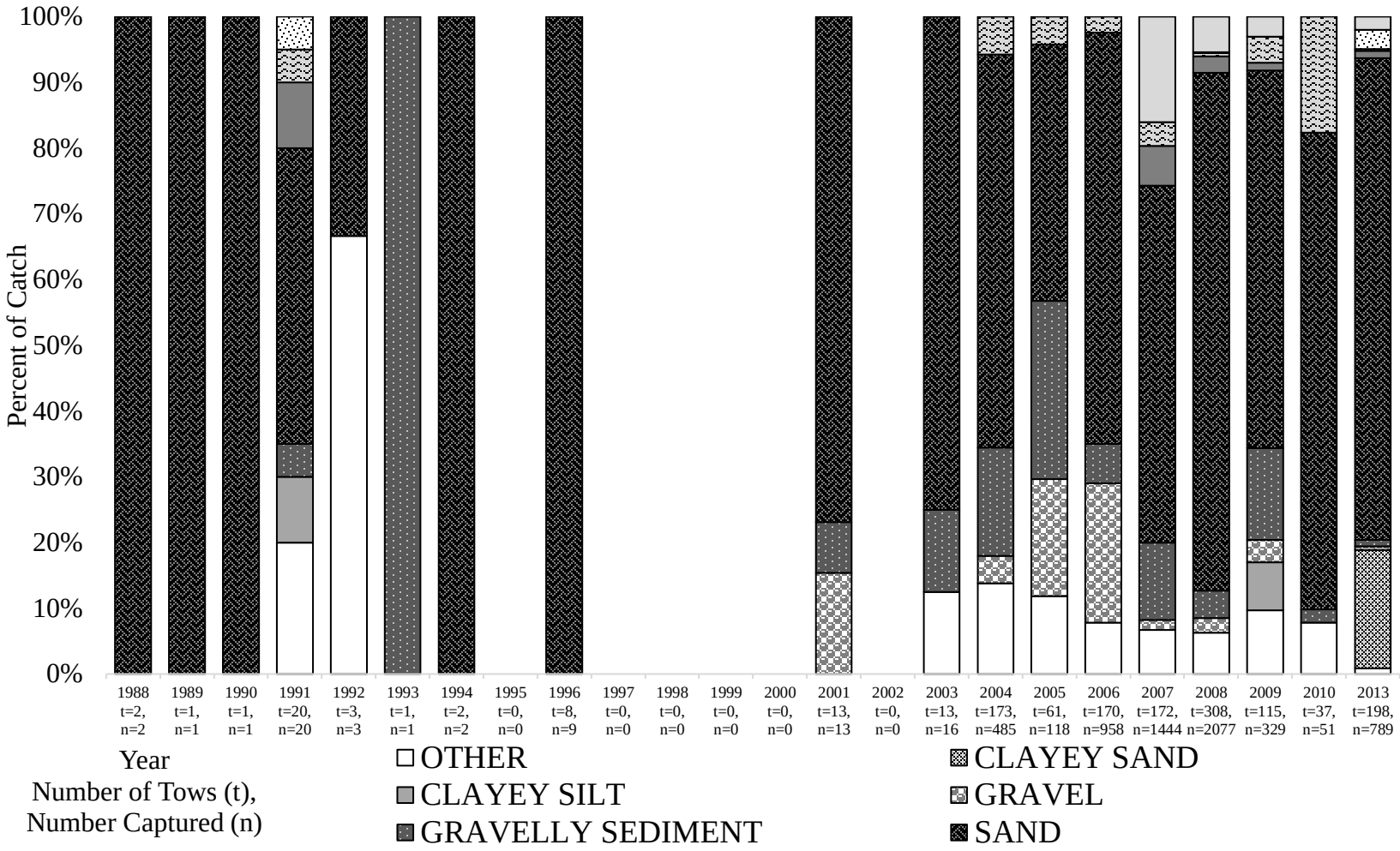

Figure 71. Percentages of skate catch from each Cruise year, according to the bottom type by Shepard Code at tow location.

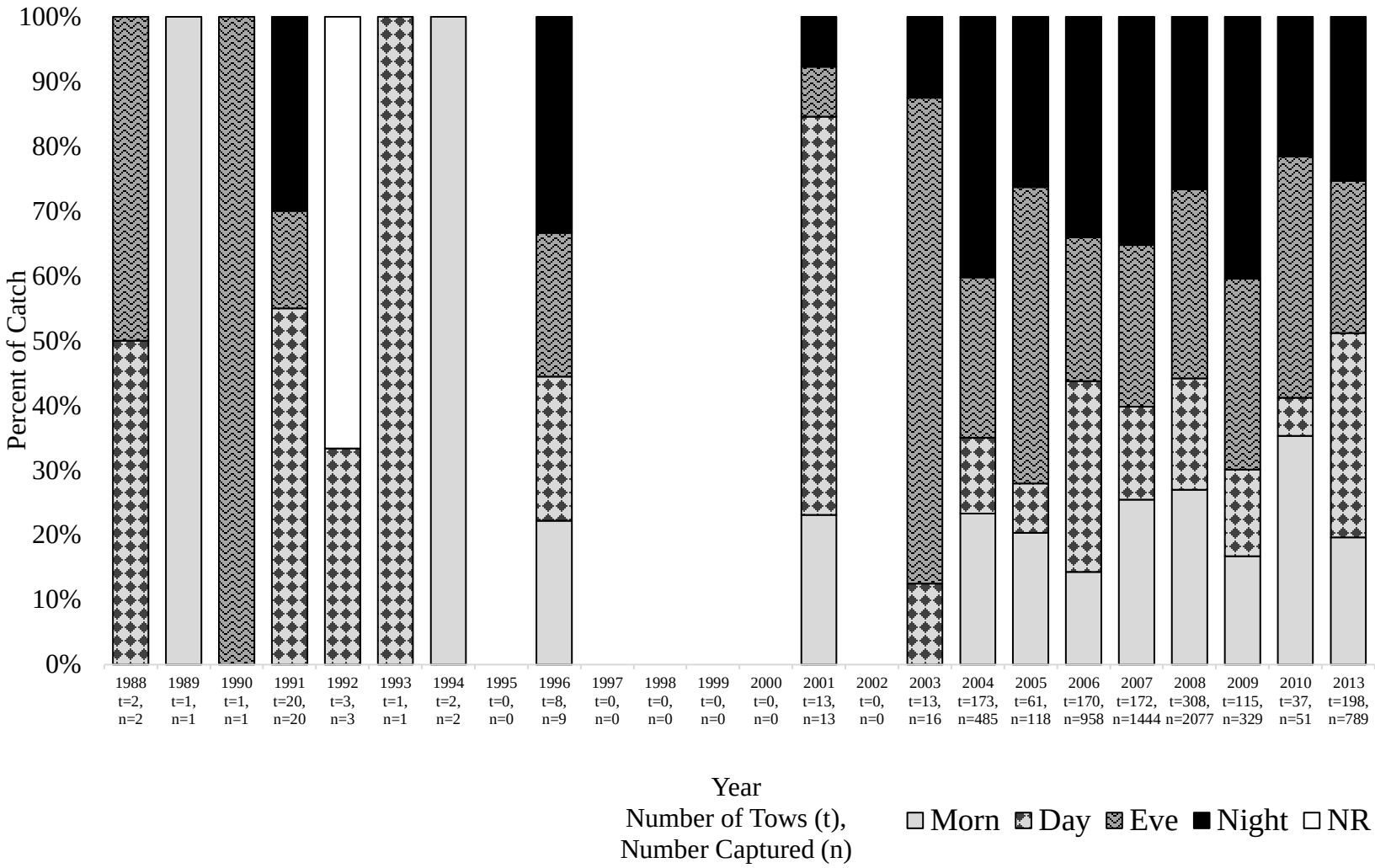

Figure 74. Percentages of skate catch from each Cruise year, according to the time of day at capture, where Morn represents the hours 4-9; Day: 10-15; Eve: 16-21; and Night: 22-3.

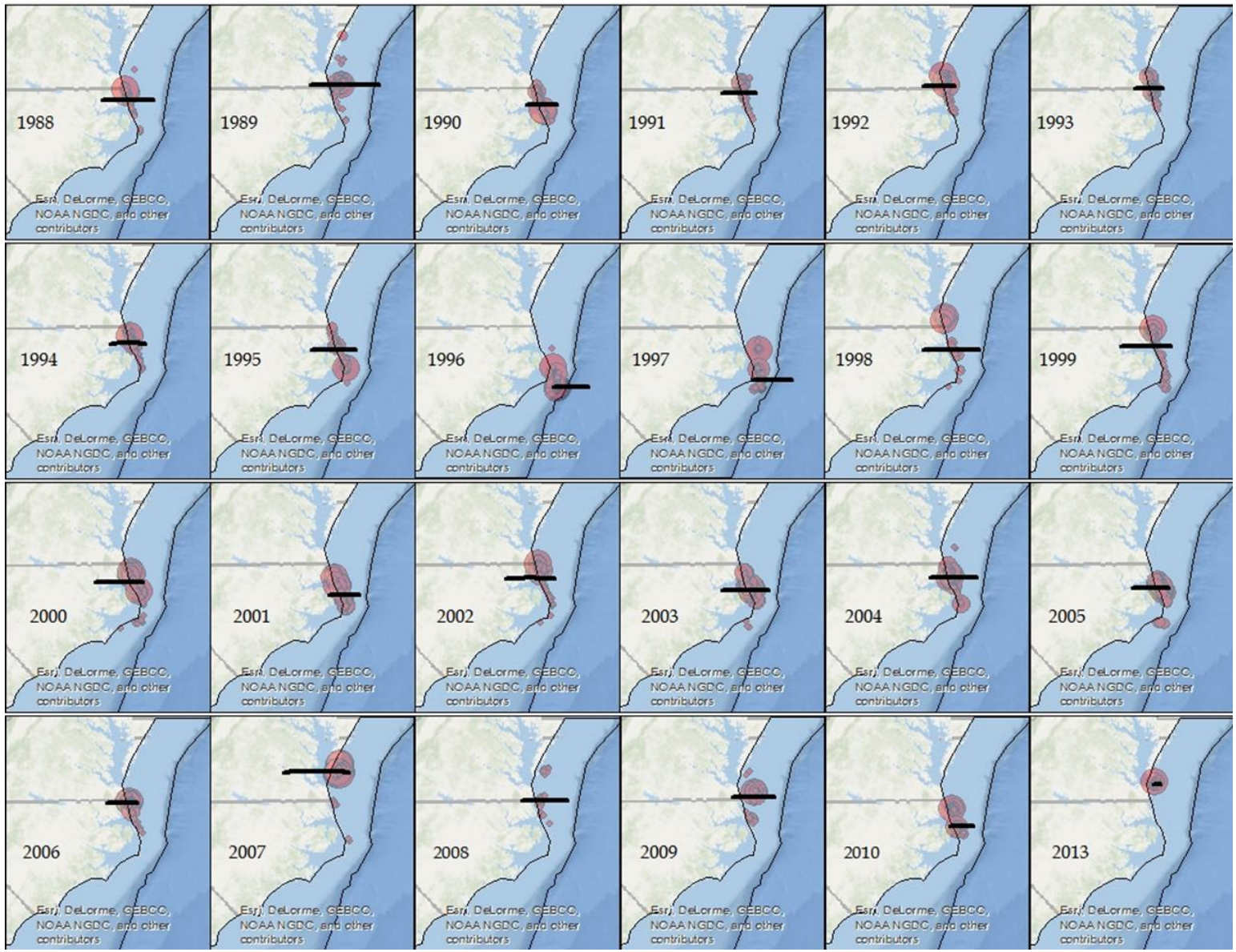
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Figure 75. Striped Bass latitudinal distributions for all years: where bubble size represents the relative abundance of striped bass in the tow, the location of the black line represents the latitudinal midpoint of the distribution, and the length of the line is equivalent to the North-South distance within which fish were captured.


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Figure 74. Atlantic Sturgeon latitudinal distributions for all years: where bubble size represents the relative abundance of Atlantic sturgeon in the tow, the location of the black line represents the latitudinal midpoint of the distribution, and the length of the line is equivalent to the North-South distance within which fish were captured. Empty maps are representative of those years where no fish were recorded as being captured.


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Esri, DeLorme, GEBCO, NOAA NGDC, and other contributors

Figure 75. Spiny Dogfish latitudinal distributions for all years: where bubble size represents the relative abundance of spiny dogfish in the tow, the location of the black line represents the latitudinal midpoint of the distribution, and the length of the line is equivalent to the North-South distance within which fish were captured. Empty maps are representative of those years where no fish were recorded as being captured.


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Figure 76. Red Drum latitudinal distributions for all years: where bubble size represents the relative abundance of red drum in the tow, the location of the black line represents the latitudinal midpoint of the distribution, and the length of the line is equivalent to the North-South distance within which fish were captured. Empty maps are representative of those years where no fish were recorded as being captured.

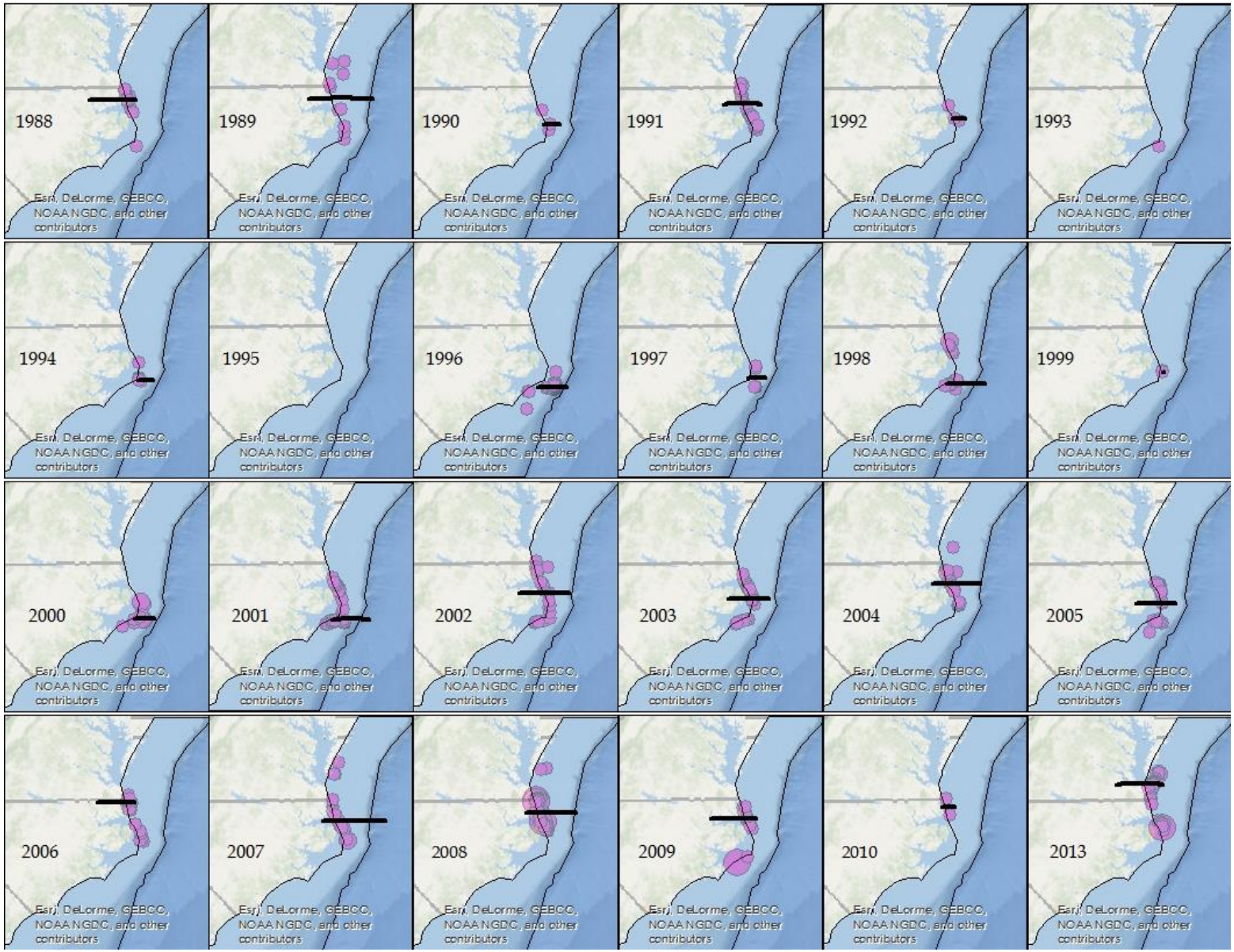
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Figure 77. Other sciaenid latitudinal distributions for all years: where bubble size represents the relative abundance of sciaenids in the tow, the location of the black line represents the latitudinal midpoint of the distribution, and the length of the line is equivalent to the North-South distance within which fish were captured. Empty maps are representative of those years where no fish were recorded as being captured.


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Esri, DeLorme, GEBCO, NOAA NGDC, and other contributors

Figure 78. Flounder latitudinal distributions for all years: where bubble size represents the relative abundance of flounders in the tow, the location of the black line represents the latitudinal midpoint of the distribution, and the length of the line is equivalent to the North-South distance within which fish were captured. Empty maps are representative of those years where no fish were recorded as being captured.

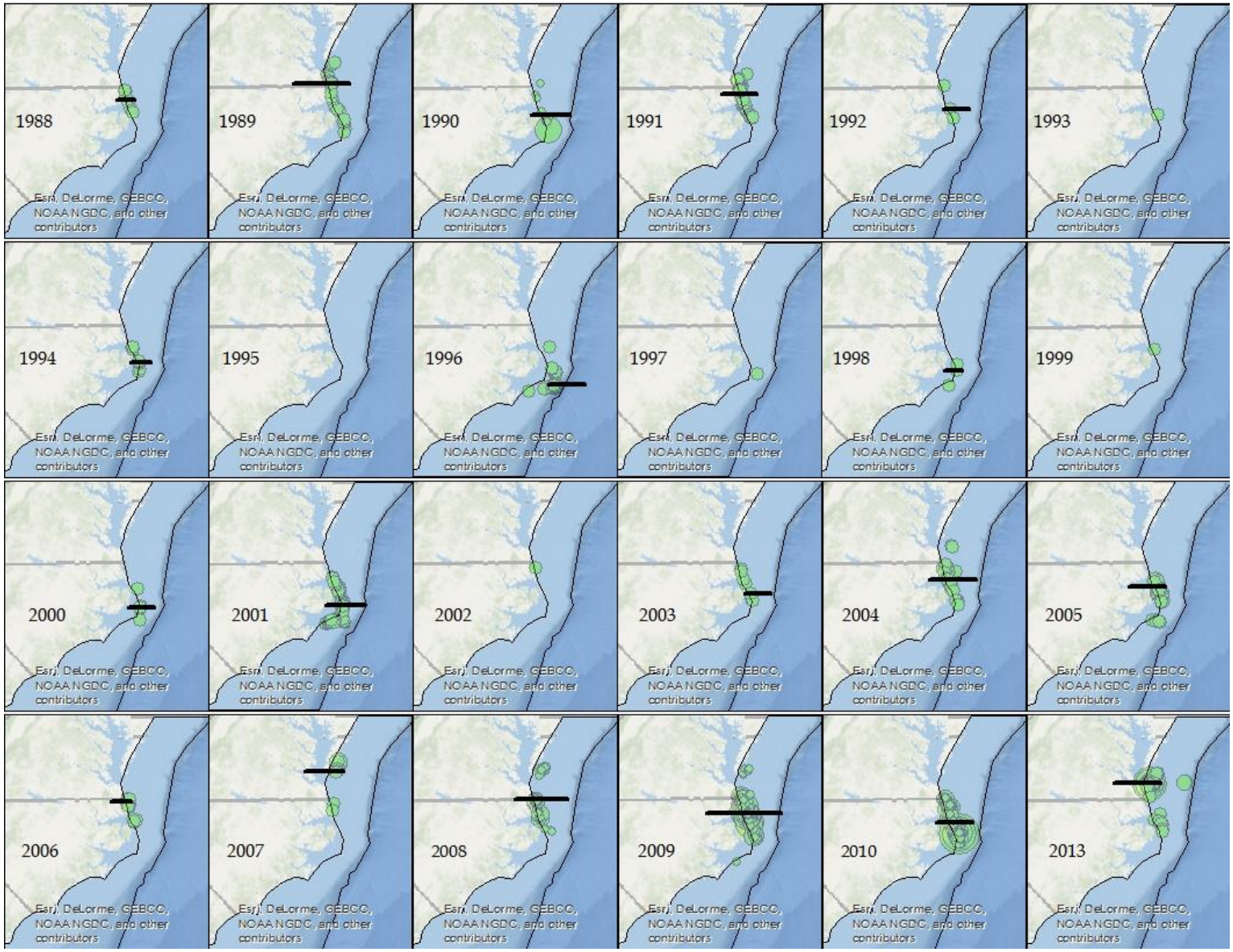
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Figure 79. Clupeid latitudinal distributions for all years: where bubble size represents the relative abundance of clupeids in the tow, the location of the black line represents the latitudinal midpoint of the distribution, and the length of the line is equivalent to the North-South distance within which fish were captured. Empty maps are representative of those years where no fish were recorded as being captured.


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Esri, DeLorme, GEBCO, NOAA NGDC, and other contributors

Figure 80. Skates latitudinal distributions for all years: where bubble size represents the relative abundance of clupeids in the tow, the location of the black line represents the latitudinal midpoint of the distribution, and the length of the line is equivalent to the North-South distance within which fish were captured. Empty maps are representative of those years where no fish were recorded as being captured.

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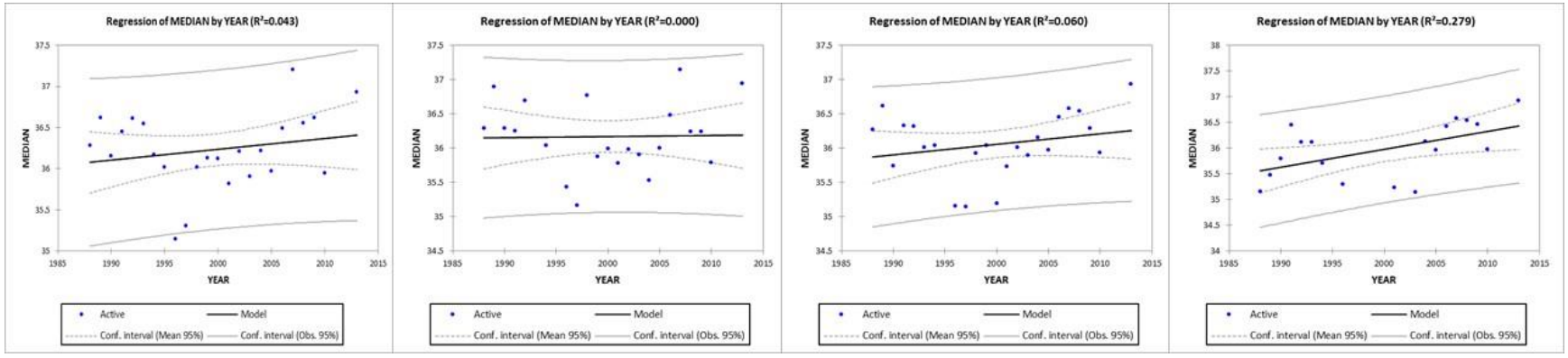
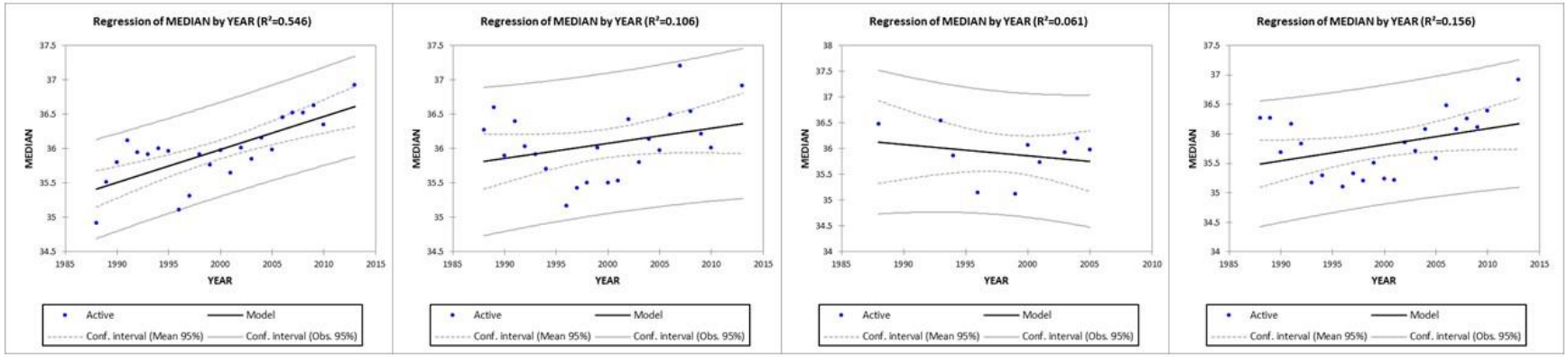
Esri, DeLorme, GEBCO, NOAA NGDC, and other contributors

Figure 81. Median latitudinal distributions for all taxa, all years.



a. Striped bass b. Atlantic Sturgeon c. Spiny Dogfish d. Skates



e. Flounder f. Clupeids g. Red drum h. Other Sciaenids

Figure 82. Linear regression models for latitudinal medians of all taxa.

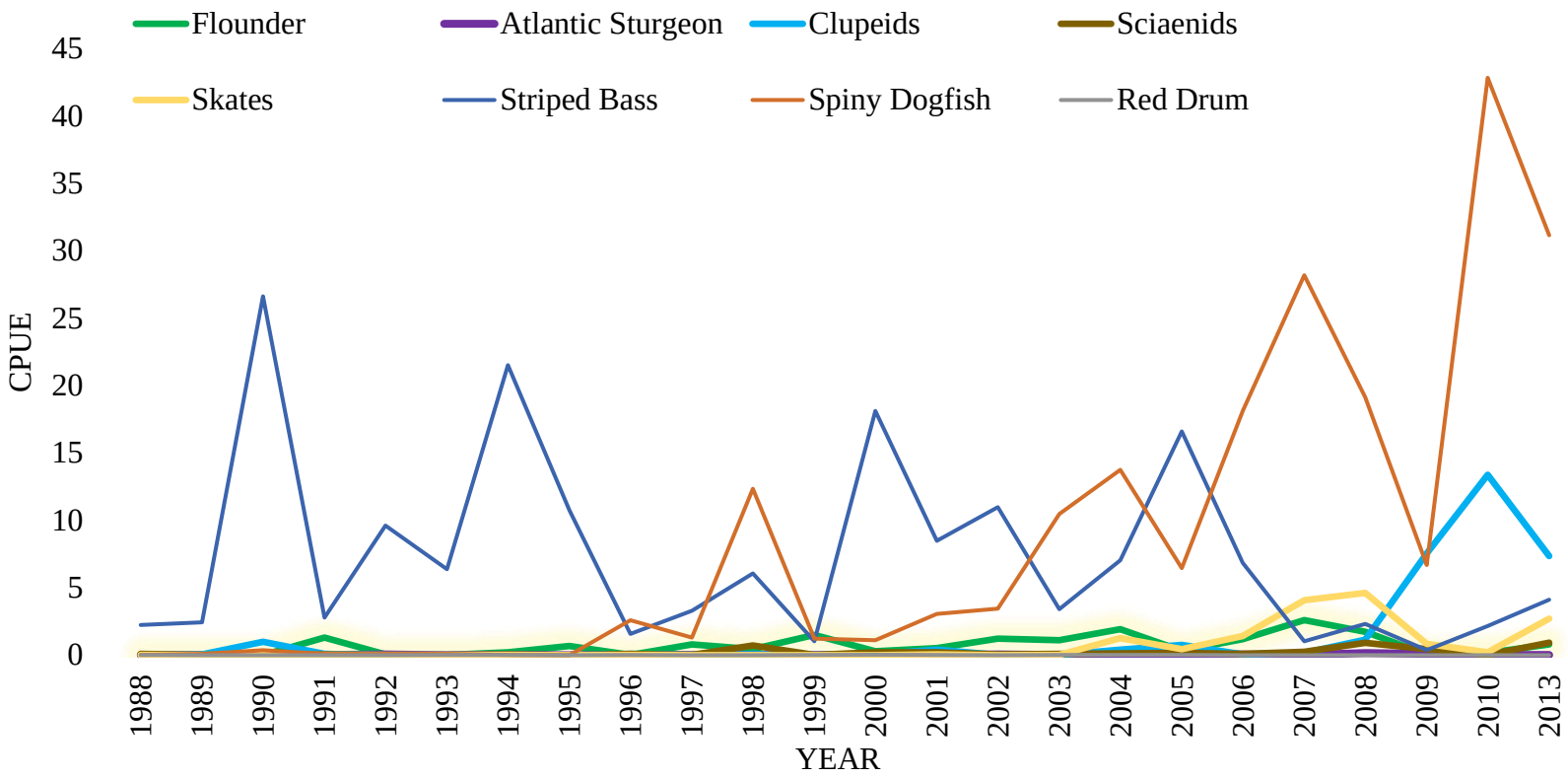


Figure 83. Catch per unit effort: all taxa, all years.

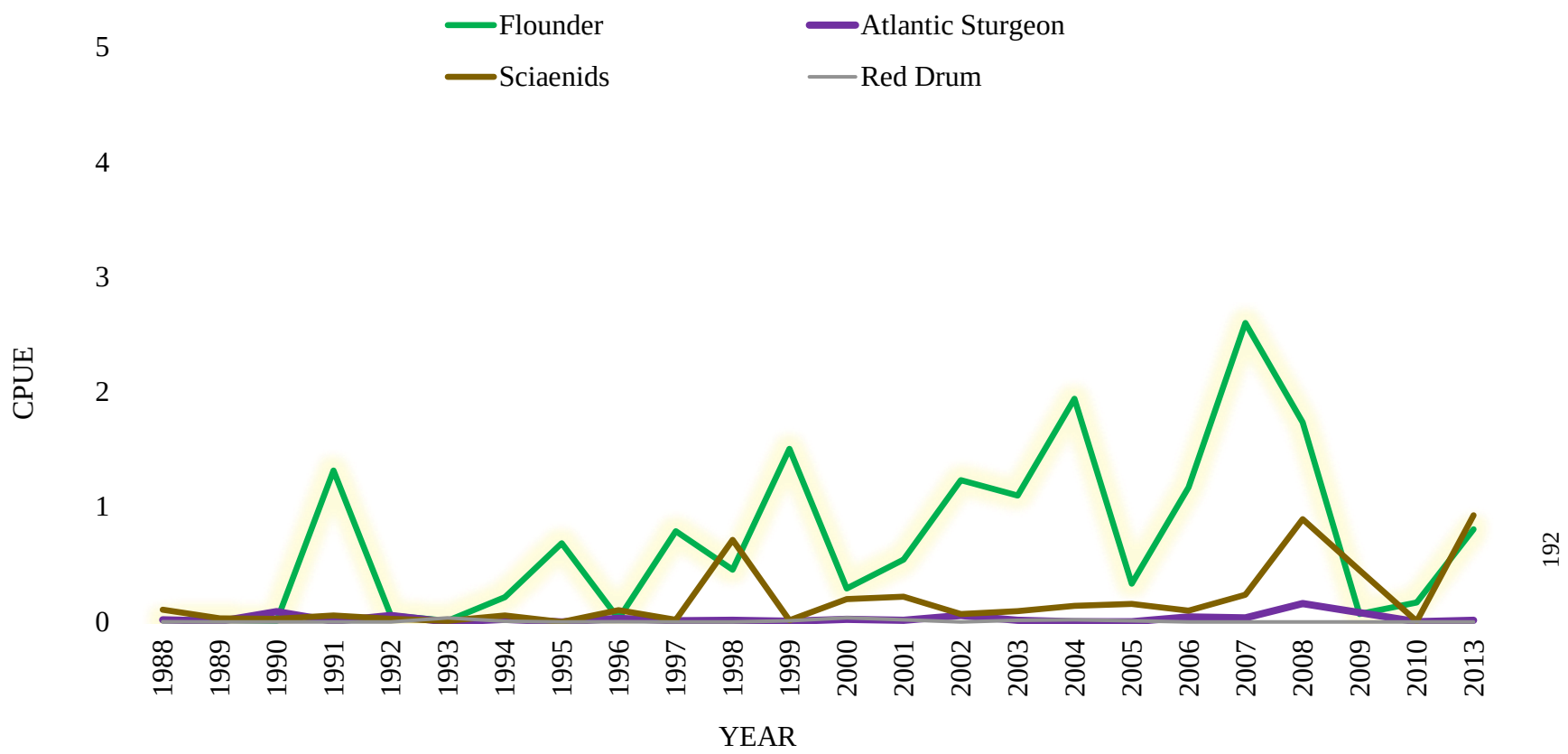


Figure 84. Catch per unit effort: Atlantic Sturgeon, Red Drum, flounders, and other sciaenids, all years.

APPENDIX A

THE COOPERATIVE WINTER TAGGING CRUISE SUMMARY DATASET, 1988-2013

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
A	8012013	1	7:32	7:50	3607.21	7531.09	2.2	2.2	2.2	9.7	9.0	32.0
A	8012013	2	8:37	8:54	3609.71	7531.53	2.4	2.4	2.4	9.5	9.0	31.8
A	8012013	3	9:16	9:31	3610.78	7532.42	3.2	3.2	3.2	9.4	10.0	31.8
B	8012013	4	14:26	14:41	3654.53	7545.73	2.6	2.9	2.8	8.4	9.0	29.4
B	8012013	5	15:06	15:21	3655.01	7546.84	2.9	3.0	3.0	8.5	8.3	29.5
B	8012013	6	16:00	16:16	3655.35	7546.17	2.7	2.8	2.8	8.4	9.0	29.3
B	8012013	7	17:04	17:19	3655.96	75417.50	2.7	2.7	2.7	8.4	9.0	29.4
B	8012013	8	17:45	18:00	3656.24	7548.25	2.6	2.6	2.6	8.3	9.0	29.4
A	8012013	9	18:44	19:00	3656.23	7546.29	2.8	2.8	2.8	8.5	9.0	29.1
A	8012013	10	19:20	19:36	3656.49	7545.31	2.5	2.7	2.6	8.5	9.0	29.1
A	8012013	11	19:51	20:07	3656.94	7546.24	2.8	3.3	3.1	8.3	9.0	29.1
A	8012013	12	20:25	20:42	3656.97	7545.64	2.2	3.2	2.7	8.4	9.0	29.4
A	8012013	13	21:07	21:26	3655.48	7546.44	2.7	3.0	2.9	8.4	9.0	29.5
A	8012013	14	21:41	22:02	3654.31	7546.09	2.4	3.0	2.7	8.3	10.0	29.9
A	8012013	15	22:18	22:39	3654.29	7548.01	2.6	2.7	2.7	8.4	10.0	29.4
A	8012013	16	22:57	23:18	3654.48	7549.66	3.0	3.2	3.1	8.3	10.0	29.4
A	8012013	17	23:48	0:08	3654.68	7551.29	3.4	3.4	3.4	8.0	9.0	27.2
B	9012013	18	0:53	1:08	3654.60	7551.03	2.5	2.5	2.5	8.4	8.0	28.9
B	9012013	19	1:52	2:07	3653.68	7549.61	2.9	3.0	3.0	8.4	8.0	29.1
B	9012013	20	2:51	3:06	3653.83	7547.89	2.9	3.1	3.0	8.2	9.0	29.5
B	9012013	21	3:51	4:06	3653.96	7546.56	2.6	2.6	2.6	8.4	9.0	29.8
B	9012013	22	4:34	4:49	3654.66	7545.66	2.7	2.8	2.8	8.4	9.0	29.6
B	9012013	23	5:16	5:31	3655.19	7544.56	2.9	2.9	2.9	8.2	9.0	29.4
A	9012013	24	5:50	6:05	3656.02	7544.37	2.5	2.9	2.7	8.1	9.0	29.3
A	9012013	25	6:23	6:43	3656.65	7545.22	2.8	3.1	3.0	8.1	10.0	29.2
A	9012013	26	7:00	7:21	3656.73	7543.81	2.9	3.1	3.0	8.1	9.0	29.4
A	9012013	27	7:40	8:00	3655.97	7543.81	2.9	3.1	3.0	7.9	11.0	29.3
A	9012013	28	8:14	8:35	3655.76	7542.74	2.9	3.3	3.1	8.1	10.0	29.0
A	9012013	29	8:53	9:14	3655.35	7540.70	2.9	3.1	3.0	8.1	10.0	29.0
A	9012013	30	9:28	9:49	3654.27	7540.70	2.8	3.2	3.0	8.5	9.0	28.9
A	9012013	31	10:02	10:23	3655.33	7541.53	2.8	2.9	2.9	8.2	10.0	29.3
A	9012013	32	10:37	10:58	3656.27	7542.95	2.9	3.2	3.1	8.6	9.0	29.5
A	9012013	33	11:13	11:35	3656.32	7544.55	2.7	3.4	3.1	8.5	10.0	30.0
B	9012013	34	11:50	12:10	3657.50	7545.81	2.8	3.5	3.2	8.6	10.0	29.9
B	9012013	35	12:32	12:52	3658.68	7545.11	2.9	3.0	3.0	8.8	9.0	29.9
B	9012013	36	13:13	13:33	3657.83	7545.64	2.5	2.8	2.7	8.6	10.0	29.5
B	9012013	37	14:09	14:29	3659.03	7545.51	2.7	2.9	2.8	8.9	10.0	29.5

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
B	9012013	38	14:53	15:03	3657.79	7546.63	2.6	2.9	2.8	9.2	11.0	29.9
B	9012013	39	15:41	16:01	3657.98	7546.91	3.0	3.1	3.1	9.1	10.0	29.9
B	9012013	40	16:18		3657.11	7545.54	2.8	3.1	3.0	9.0	10.0	29.3
B	9012013	41	16:59	17:19	3656.88	7544.53	2.9	3.1	3.0	8.9	11.0	29.9
B	9012013	42	17:41	18:01	3656.88	7545.48	2.9	2.9	2.9	8.9	12.0	30.2
A	9012013	43	18:22	18:43	3656.98	7544.14	3.2	3.3	3.3	2.9	13.0	30.2
A	9012013	44	19:10	19:31	3657.72	7545.27	2.8	3.1	3.0	8.7	12.0	30.1
A	9012013	45	19:46	20:07	3657.01	7544.31	3.0	3.2	3.1	8.9	13.0	29.6
A	9012013	46	20:34	20:55	3657.44	7545.91	3.1	3.5	3.3	8.8	14.0	29.6
A	9012013	47	21:12	21:33	3656.86	7544.28	2.9	3.2	3.1	8.7	13.0	29.4
A	9012013	48	21:47	22:08	3657.48	7545.54	2.4	4.2	3.3	8.6	13.0	29.4
A	9012013	49	22:25	22:47	3658.60	7544.57	2.4	2.7	2.6	8.6	13.0	29.4
A	9012013	50	23:01	23:22	3658.60	7544.57	2.4	2.7	2.6	8.9	13.0	29.6
A	9012013	51	23:40		3700.21	7545.02	4.1		4.1	8.4	10.0	29.3
B	10012013	53	3:38	3:48	3657.83	7536.51	2.5	2.9	2.7	8.4	10.0	29.3
B	10012013	54	4:52	5:10	3658.32	7538.06	2.8	2.9	2.9	8.6	10.0	29.5
B	10012013	55	5:27	5:48	3659.26	7538.22	3.0	3.1	3.1	8.6	10.0	29.7
A	10012013	56	6:10	6:31	3658.45	7540.06	2.9	3.5	3.2	8.6	10.0	29.5
A	10012013	57	6:48	7:08	3658.21	7542.52	2.8	3.3	3.1	8.6	9.0	29.6
A	10012013	58	7:24	7:29	3657.33	7543.76	2.9	3.1	3.0	8.6	9.0	29.6
A	10012013	59	8:00	8:15	3657.92	7545.18	2.8	3.9	3.4	8.6	10.0	29.7
A	10012013	60	9:03	9:18	3658.52	7546.78	2.1	3.7	2.9	8.6	9.0	29.7
A	10012013	61	10:54	11:04	3658.94	7546.28	2.8	3.1	3.0	8.7	9.0	29.9
A	10012013	62	11:20	11:35	3659.34	7545.56	2.7	3.4	3.1	8.6	9.0	30.1
B	10012013	63	11:52	12:07	3658.10	7545.68	2.8	3.0	2.9	8.7	9.0	29.9
B	10012013	64	12:33	12:46	3657.56	7546.08	2.4	2.8	2.6	8.7	9.0	29.9
B	10012013	65	13:14	13:29	3657.90	7545.06	2.7	3.1	2.9	8.8	9.0	29.8
B	10012013	66	13:55	14:10	3658.60	7545.50	2.9	3.0	3.0	8.8	9.0	29.8
B	10012013	67	14:33	14:48	3657.51	7545.16	3.0	3.0	3.0	8.8	9.0	29.9
B	10012013	68	15:15	15:35	3658.23	7544.33	2.7	2.9	2.8	8.8	9.0	29.9
B	10012013	69	16:05	16:25	3657.13	7543.19	2.5	3.2	2.9	8.8	8.0	29.7
B	10012013	70	16:48	17:08	3657.98	7543.06	2.8	2.8	2.8	8.7	9.0	29.7
B	10012013	71	17:31	17:51	3657.16	7543.13	3.1	3.2	3.2	8.8	8.0	30.2
A	10012013	72	18:14	18:34	3658.41	7544.18	3.1	3.2	3.2	8.7	8.0	29.7
A	10012013	73	18:49	19:09	3657.56	7543.97	3.4	3.6	3.5	8.6	8.0	29.5
A	10012013	74	21:01	21:21	3657.09	7544.33	2.8	3.1	3.0	8.6	8.0	30.0
A	10012013	75	21:35	21:55	3657.53	7545.12	2.9	3.4	3.2	8.7	9.0	29.9

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
A	10012013	76	22:11	22:31	3658.37	7546.80	2.9	3.2	3.1	8.7	8.0	29.9
A	10012013	77	22:48	23:08	3656.98	7545.64	2.9	3.2	3.1	8.6	8.0	30.1
A	10012013	78	23:26	23:46	3656.44	7544.28	2.7	3.0	2.9	8.7	8.0	30.1
B	11012013	79	0:08	0:28	3657.24	7545.00	2.6	3.1	2.9	8.7	9.0	30.2
B	11012013	80	0:50	1:10	3655.93	7546.55	2.7	2.9	2.8	8.5	8.0	29.7
B	11012013	81	1:34	1:54	3656.05	7548.16	2.7	3.0	2.9	7.9	8.0	28.5
B	11012013	82	2:15	2:35	3654.19	7547.41	2.9	3.0	3.0	7.4	8.0	28.6
B	11012013	83	2:58	3:18	3652.64	7546.84				8.4	8.0	28.4
B	11012013	84	3:42	4:02	3651.79	7545.11	2.9	3.1	3.0	8.5	8.0	29.9
B	11012013	85	4:20	4:40	3650.92	7545.55	2.8	3.2	3.0	8.5	8.0	29.9
B	11012013	86	4:58	5:18	3652.72	7545.94	3.0	3.2	3.1	8.6	8.0	29.6
A	11012013	87	5:49	6:09	3654.49	7545.26	2.7	2.9	2.8	8.4	8.0	29.6
A	11012013	88	6:29	6:49	3656.37	7545.21	2.8	3.4	3.1	8.4	8.0	30.1
A	11012013	89	7:07	7:25	3657.21	7546.06	2.3	3.4	2.9	8.6	8.0	30.0
A	11012013	90	7:45	7:57	3656.82	7546.49	2.4	3.4	2.9	8.5	9.0	29.3
A	11012013	91	8:27	8:42	3656.62	7546.74	2.8	3.0	2.9	8.6	9.0	29.7
A	11012013	92	8:59	9:14	3655.85	7547.28	2.9	3.7	3.3	8.6	9.0	29.6
A	11012013	93	9:31	9:46	3656.74	7547.28	2.7	3.6	3.2	8.6	10.0	29.5
A	11012013	94	10:03	10:18	3655.83	7547.72	3.1	3.6	3.4	8.7	10.0	29.6
A	11012013	95	10:34	10:49	3656.61	7546.89	2.9	3.2	3.1	8.6	9.0	29.7
A	11012013	96	11:03	11:19	3655.39	7547.28	2.9	3.1	3.0	8.6	9.0	29.7
A	11012013	97	11:36		3654.21	7547.74	2.5	2.9	2.7	8.7	9.0	29.7
B	11012013	98	12:49	12:59	3653.47	7548.04	2.6	3.1	2.9	8.7	10.0	29.3
B	11012013	99	12:49	12:59	3654.26	7548.23	2.7	3.2	3.0	8.7	10.0	29.3
B	11012013	100	13:21	13:41	3653.58	7548.33	2.6	3.1	2.9	8.7	10.0	29.3
B	11012013	101	14:20	14:40	3654.40	7546.08	2.5	2.7	2.6	8.6	11.0	29.5
B	11012013	102	15:02	15:27	3654.13	7548.22	2.9	3.2	3.1	8.8	12.0	28.8
B	11012013	103	15:48	16:13	3652.65	7548.71	2.8	3.1	3.0	8.7	11.0	28.4
B	11012013	104	16:33	16:53	3654.57	7547.73	2.9	3.3	3.1			
B	11012013	105	17:26	17:46	3655.92	7547.78	3.0	3.4	3.2	8.8	11.0	29.7
A	11012013	106	18:06	18:29	3654.13	7548.02	3.0	3.3	3.2	8.5	11.0	26.9
A	11012013	107	18:45	19:11	3653.12	7549.16	3.3	3.4	3.4	8.7	11.0	27.9
A	11012013	108	19:30	19:50	3654.56	7549.61	3.2	3.3	3.3	8.6	11.0	27.6
A	11012013	109	20:12	20:33	3653.69	7549.63	3.1	3.3	3.2	8.6	11.0	27.4
A	11012013	110	20:52	21:12	3655.00	7449.59	2.7	2.9	2.8	8.7	12.0	27.8
A	11012013	111	21:32	21:52	3653.94	7550.11	2.8	2.9	2.9	8.7	10.0	28.1
A	11012013	112	22:06	22:26	3654.67	7549.25	3.0	3.2	3.1	8.8	11.0	28.1

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
A	11012013	113	22:44	23:04	3653.76	7549.35	3.1	3.1	3.1	8.8	12.0	28.2
A	11012013	114	23:20	23:41	3655.20	7549.20	2.8	3.2	3.0	8.7	12.0	27.9
B	12012013	115	0:02	0:22	3655.12	7550.49	2.8	3.0	2.9	8.8	11.0	28.3
B	12012013	116	0:50	1:10	3654.70	7548.46	3.1	3.1	3.1	8.8	11.0	28.3
B	12012013	117	1:31	1:51	3656.10	7548.57	3.0	3.0	3.0	8.8	12.0	28.4
B	12012013	118	2:15	2:35	3654.10	7547.47	3.0	3.1	3.1	8.9	12.0	28.1
B	12012013	119	2:58	3:18	3652.70	7547.40	3.0	3.0	3.0	8.9	12.0	28.1
B	12012013	120	3:42	4:02	3654.19	7547.71	2.9	2.9	2.9	8.8	12.0	27.1
B	12012013	121	4:19	4:39	3653.11	7547.40	3.0	3.1	3.1	8.8	12.0	27.9
B	12012013	122	5:09	5:29	3654.71	7547.02	2.9	3.1	3.0	8.8	11.0	28.0
A	12012013	123	5:48	6:08	3655.50	7546.29	3.1	3.3	3.2	8.8	11.0	28.0
A	12012013	124	6:23	6:43	3655.37	7547.71	2.6	3.1	2.9	8.8	11.0	28.5
A	12012013	125	6:59	7:19	3656.39	7547.34	3.1	3.2	3.2	8.9	11.0	28.5
A	12012013	126	7:32	7:52	3656.49	7548.62	2.8	3.0	2.9	8.8	10.0	28.8
A	12012013	127	8:06	8:26	3656.24	7547.42	1.8	3.1	2.5	8.8	10.0	28.4
A	12012013	128	8:41	9:01	3656.52	7548.78	2.9	3.0	3.0	8.9	10.0	28.8
A	12012013	129	9:15	9:35	3656.94	7546.98	2.9	3.3	3.1	8.9	10.0	29.0
A	12012013	130	9:50	10:10	3657.41	7545.74	2.9	3.3	3.1	8.9	10.0	29.3
A	12012013	131	10:24	10:44	3656.00	7545.31	3.0	3.1	3.1	9.1	10.0	29.1
A	12012013	132	11:01	11:21	3655.19	7546.94	2.8	3.1	3.0	9.0	11.0	29.4
A	12012013	133	11:35	12:00	3653.83	7547.81	2.8	2.8	2.8	9.0	11.0	29.8
B	12012013	134	12:19	12:39	3652.55	7547.95	2.9	3.1	3.0	9.1	11.0	29.9
B	12012013	135	13:13	13:33	3653.50	7548.66	2.9	2.9	2.9	8.9	11.0	29.7
B	12012013	136	13:59	14:19	3652.94	7549.15	2.8	2.9	2.9	9.4	11.0	28.9
B	12012013	137	14:44	15:04	3653.83	7547.68	2.8	3.1	3.0	8.4	9.0	29.5
B	12012013	138	15:34	15:59	3651.89	7548.07	2.0	3.0	2.5	9.3	9.0	29.9
B	12012013	139	16:17	16:42	3653.78	7547.76	3.0	3.3	3.2	8.9	9.0	29.9
B	12012013	140	16:58	17:18	3655.07	7547.98	3.4	3.4	3.4	9.1	9.0	29.3
A	12012013	141	20:30	20:58	3702.94	7539.47	2.6	3.0	2.8	9.0	8.0	30.3
A	12012013	142	21:16	21:36	3703.06	7541.26	2.4	3.1	2.8	9.1	8.0	30.7
A	12012013	143	21:51	22:16	3603.89	7540.83	3.3	3.5	3.4	9.0	7.0	30.5
A	12012013	144	22:30	22:50	3702.56	7540.82	2.8	3.1	3.0	9.1	7.0	30.4
A	12012013	145	23:07		3703.50	7541.23	2.9	3.3	3.1	9.0	7.0	30.3
B	13012013	146	23:54	0:14	3702.03	7540.81	2.9	2.9	2.9	9.0	7.0	30.3
B	13012013	147	0:33	0:53	3704.19	7541.45	2.9	3.0	3.0	9.1	7.0	30.7
B	13012013	148	1:14	1:39	3706.01	7541.85	2.7	2.8	2.8	8.9	8.9	31.1
B	13012013	149	2:01	2:31	3707.32	7539.48	2.8	2.9	2.9	8.5	7.0	31.7

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
B	13012013	150	2:48	3:08	3708.50	7537.04	2.8	2.9	2.9	8.8	7.0	32.2
B	13012013	151	3:24	3:54	3708.87	7535.09	2.9	3.0	3.0	8.9	7.0	32.2
B	13012013	152	4:19	4:49	3709.79	7534.92	3.0	3.1	3.1	8.7	7.0	32.2
B	13012013	153	5:13	5:43	3708.34	7536.19	2.8	3.1	3.0	8.8	8.0	32.1
A	13012013	154	6:00	6:30	3709.15	7534.83	3.3	3.4	3.4	8.9	8.0	32.3
A	13012013	155	7:00	7:30	3706.62	7534.60	3.4	3.5	3.5	9.0	8.0	32.5
A	13012013	156	7:48	8:18	3706.14	7536.86	3.3	3.5	3.4	8.8	8.0	32.4
A	13012013	157	8:53	9:23	3706.87	7538.32	2.8	3.4	3.1	8.7	8.0	32.1
A	13012013	158	10:00	10:20	3704.23	7542.50	3.1	3.1	3.1	9.1	9.0	30.7
A	13012013	159	11:30	11:55	3659.49	7546.71	2.9	3.1	3.0	9.1	9.0	29.7
B	13012013	160	12:13		3658.73	7544.54				9.1	9.0	29.7
B	13012013	161	12:54	13:24	3656.92	7545.29	3.0	3.2	3.1	9.1	10.0	29.7
B	13012013	162	13:44	13:54	3655.19	7544.29	2.9	3.1	3.0	9.1	10.0	3.1
B	13012013	163	14:15	14:35	3656.15	7544.40	2.9	3.1	3.0	9.1	10.0	29.8
B	13012013	164	14:55	15:15	3654.79	7544.04	2.7	2.9	2.8	9.1	10.0	29.9
B	13012013	165	15:42	16:07	3655.98	7544.36	2.9	3.0	3.0	9.1	11.0	29.8
B	13012013	166	16:23	16:43	3654.53	7544.35	3.2	3.4	3.3	9.1	10.0	29.8
B	13012013	167	17:00	17:25	3655.59	7544.03	3.2	3.3	3.3	9.1	10.0	29.8
A	13012013	168	18:05	18:25	3653.60	7544.86	3.3	3.4	3.4	9.0	11.0	29.8
A	13012013	169	18:41	19:06	3654.46	7544.26	2.1	2.9	2.5	9.0	11.0	29.9
A	13012013	170	19:23	19:48	3653.68	7545.20	3.3	3.4	3.4	9.0	11.0	29.8
A	13012013	171	20:05	20:30	3654.89	7544.21	2.9	3.2	3.1	9.0	11.0	29.9
A	13012013	172	20:49	21:17	3653.84	7545.11	3.3	3.3	3.3	9.0	12.0	29.8
A	13012013	173	21:32	21:47	3655.65	7545.00	2.3	2.9	2.6	9.1	12.0	29.9
A	13012013	174	22:01	22:31	3656.36	7544.22	2.8	3.0	2.9	9.0	12.0	29.8
A	13012013	175	22:47	23:07	3656.93	7544.49	2.5	3.3	2.9	9.1	12.0	29.9
A	13012013	176	23:21	23:51	3655.93	7544.16	2.9	3.2	3.1	9.3	12.0	29.5
B	14012013	177	0:12	0:42	3654.53	7545.18	2.8	3.0	2.9	9.3	12.0	29.4
B	14012013	178	1:02	1:32	3655.03	7543.56	2.9	3.0	3.0	9.3	12.0	29.4
B	14012013	179	1:51	2:21	3654.56	7544.76	2.9	2.9	2.9	9.2	12.0	29.5
B	14012013	180	2:45	3:15	3655.95	7543.78	2.9	3.1	3.0	9.2	12.0	29.5
B	14012013	181	3:33	4:03	3654.29	7545.62	2.9	2.9	2.9	9.2	12.0	29.4
B	14012013	182	4:18	4:48	3655.09	7547.45	3.0	3.4	3.2	9.2	12.0	29.3
B	14012013	183	5:07	5:37	3656.73	7545.63	3.0	3.1	3.1	9.2	12.0	29.7
A	14012013	184	5:56	6:26	3656.54	7543.83	3.0	3.1	3.1	9.2	12.0	29.4
A	14012013	185	6:43	7:03	3655.09	7544.18	3.2	3.2	3.2	9.1	12.0	29.3
A	14012013	186	7:23	7:45	3655.58	7544.15	3.3	3.4	3.4	9.1	12.0	29.3

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
A	14012013	187	8:01	8:20	3654.59	7544.43	2.8		2.8	9.1	12.0	29.3
A	14012013	188	8:38	9:03	3655.48	7544.39	2.7	3.4	3.1	9.2	12.0	29.3
A	14012013	189	9:16	9:36	3654.64	7545.03	3.1	3.3	3.2	9.2	13.0	29.4
A	14012013	190	9:53	10:13	3655.70	7544.54	3.1	3.3	3.2	9.2	13.0	29.3
A	14012013	191	10:30	10:50	3655.67	7545.68	3.1	3.3	3.2	9.2	14.0	29.5
A	14012013	192	11:06	11:26	3655.00	7544.70	3.1	3.2	3.2	9.2	13.0	29.3
A	14012013	193	11:40		3656.03	7545.48	3.1	3.1	3.1			
B	14012013	194	12:48	13:08	3654.78	7544.37	2.9	3.1	3.0	9.2	15.0	29.3
B	14012013	195	13:28	13:53	3656.15	7545.03	3.2	3.4	3.3	9.4	19.0	29.2
B	14012013	196	14:12	14:37	3654.86	7544.11	2.7	3.1	2.9	9.6	18.0	29.4
B	14012013	197	14:57	15:22	3655.95	7545.41	2.9	3.1	3.0	9.4	15.0	29.2
B	14012013	198	15:45	16:10	3654.66	7543.74	3.2	3.3	3.3	9.4	11.0	29.3
B	14012013	199	16:25	16:50	3655.68	7544.62	3.2	3.3	3.3	9.7	11.0	29.4
B	14012013	200	17:11	17:31	3654.68	7543.98	3.0	3.3	3.2	9.6	12.0	29.3
B	14012013	201	17:46	18:06	3655.47	7544.66	2.9	3.2	3.1	9.6	12.0	29.2
A	14012013	202	18:21	18:51	3654.37	7544.87	3.3	3.3	3.3	9.4	13.0	29.9
A	14012013	203	19:06	19:37	3655.99	7545.27	2.8	3.1	3.0	9.5	11.0	29.2
A	14012013	204	20:04	20:34	3655.16	7542.21	2.9	3.3	3.1	9.5	10.0	29.5
A	14012013	205	20:50	21:20	3656.04	7543.63	3.0	3.1	3.1	9.4	10.0	29.6
A	14012013	206	21:35	22:05	3655.81	7541.52	2.9	3.2	3.1	9.3	10.0	29.7
A	14012013	207										
A	14012013	208	23:00	23:30	3652.70	7542.81	2.8	2.9	2.9	9.3	10.0	29.5
A	15012013	209	23:48	0:18	3653.71	7541.96	2.9	3.4	3.2	9.3	9.0	29.7
B	15012013	210	0:39	1:09	3652.55	7544.32	3.0	3.1	3.1	9.2	9.0	29.7
B	15012013	211	8:14	8:20	3654.63	7549.32	2.6	3.2	2.9	9.3	9.0	29.6
A	15012013	212	8:37	9:02	3655.34	7548.62	3.1	3.3	3.2	9.3	9.0	31.2
A	15012013	213	9:35	9:55	3655.68	7545.90	2.8	3.2	3.0	9.1	9.0	31.4
A	15012013	214	10:09	10:34	3654.54	7544.71	2.7	3.3	3.0	9.2	8.0	31.0
A	15012013	215	10:49	11:12	3654.15	7547.02	2.8	3.4	3.1	9.3	8.0	31.0
B	15012013	216	12:21	12:41	3651.11	7554.13	2.8	3.2	3.0	8.8	7.0	27.6
B	15012013	217	13:16	13:31	3648.53	7554.08	2.9	3.1	3.0	8.9	7.0	27.4
B	15012013	218	14:18	14:33	3644.23	7551.33	3.0	3.1	3.1	8.9	7.0	27.7
B	15012013	219	15:10	15:25	3640.97	7548.93	3.0	3.1	3.1	9.1	8.0	30.0
B	15012013	220	16:05	16:25	3637.15	7549.78	3.1	3.3	3.2	9.1	9.0	28.7
B	15012013	221	17:12	17:27	3632.29	7549.82	3.5	3.5	3.5	9.2	9.0	28.6
A	15012013	222	18:21	18:39	3626.63	7548.07	3.4	3.8	3.6	9.2	9.0	29.0
A	15012013	223	19:00	20:15	3618.14	7545.45	2.9	3.1	3.0	9.3	9.0	30.4

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
A	15012013	224	21:46	22:01	3609.55	7541.11	3.0	3.1	3.1	9.6	9.0	31.4
A	15012013	225	23:04	23:21	3604.41	7538.17	3.3	3.4	3.4	9.7	10.0	31.4
A	15012013	226	23:36	23:51	3602.92	7537.22	3.0	3.6	3.3	9.6	10.0	31.2
B	16012013	227	0:18	0:33	3601.69	7535.05	2.9	3.1	3.0	9.8	10.0	31.5
B	16012013	228	0:48	1:08	3601.44	7533.17	2.9	3.2	3.1	9.9	10.0	31.8
B	16012013	229	1:25	1:45	3601.50	7531.94	2.9	3.0	3.0	10.1	12.0	32.4
B	16012013	230	2:01	2:21	3601.42	7528.72	2.8	3.0	2.9	10.1	12.0	32.4
B	16012013	231	2:36	2:56	3601.23	7526.62	2.9	3.0	3.0	10.1	13.0	32.7
B	16012013	232	3:10	3:30	3600.08	7525.21	3.0	3.1	3.1	10.1	15.0	32.7
B	16012013	233	3:45	4:05	3559.05	7524.13	3.0	3.4	3.2	10.1	14.0	32.7
B	16012013	234	4:22	4:42	3559.01	7525.71	3.0	3.1	3.1	10.1	13.0	32.6
B	16012013	235	4:57	5:17	3558.70	7527.41	3.2	3.2	3.2	10.1	12.0	32.5
B	16012013	236	5:30	5:50	3558.35	7529.12	2.9	3.2	3.1	10.1	12.0	32.4
A	16012013	237	6:05	6:30	3557.75	7530.42	3.2	3.2	3.2	9.9	13.0	31.8
A	16012013	238	6:51	7:21	3555.48	7530.03	3.0	3.4	3.2	9.5	13.0	31.0
A	16012013	239	7:39	8:09	3553.59	7529.05	3.2	3.4	3.3	9.6	12.0	31.1
A	16012013	240	8:54	9:24	3549.71	7527.86	2.8	2.8	2.8	9.7	14.0	38.2
A	16012013	241	9:40	10:10	3547.74	7527.45	2.8	3.0	2.9	9.8	15.0	30.4
A	16012013	242	10:28	10:58	3545.82	7527.80	2.9	3.0	3.0	9.7	16.0	29.8
A	16012013	243	11:30	11:45	3547.16	7528.36	3.1	3.3	3.2	9.8	15.0	29.8
B	16012013	244	12:00	12:15	3548.08	7527.96	3.1	3.3	3.2	9.8	15.0	30.1
B	16012013	245	12:32	12:17	3547.59	7526.18	2.8	3.3	3.1	9.9	14.0	30.1
	18022010	1	21:31	21:49	35.5406	-75.4203	2.7	2.7	2.7	4.5	5.6	28.1
	18022010	2	22:07	22:29	35.5501	-75.3986	2.8	2.8	2.8	4.9	5.4	30.5
	18022010	3	22:41	22:58	35.5869	-75.3764	3.1	3.1	3.1	5.3	5.4	31.1
	18022010	4	23:18	23:37	35.6022	-75.3544	2.9	2.9	2.9	5.1	5.1	30.9
	18022010	5	23:56	0:13	35.6322	-75.3503	3.3	3.3	3.3	4.5	4.7	30.1
	19022010	6	0:34	0:55	35.6642	-75.3686	3.1	3.1	3.1	4.4	4.3	29.6
	19022010	7	1:23	1:43	35.6775	-75.3856	2.9	2.9	2.9	4.3	4.1	29.3
	19022010	8	2:06	2:23	35.6835	-75.4133	3.1	3.1	3.1	4.1	3.8	28.2
	19022010	9	2:41	3:01	35.7169	-75.4233	3.1	3.1	3.1	4	3.7	26.7
	19022010	10	3:20	3:40	35.7334	-75.4108	3	3.2	3.1	4.1	3.5	26.6
	19022010	11	3:57	4:16	35.7703	-75.4086	3	3.2	3.1	4	3.4	27.3
	19022010	12	4:28	4:47	35.7919	-75.3992	3.2	3.4	3.3	4.1	3.4	27.9
	19022010	13	5:18	5:36	35.8094	-75.3706	3.1	3.4	3.3	4	3.3	28.5
	19022010	14	6:00	6:18	35.7675	-75.3544	3.2	3.6	3.4	4	3.1	28.4
	19022010	15	6:33	6:50	35.7514	-75.3672	3	3.4	3.2	4	3	28.1

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
	19022010	16	7:08	7:25	35.7850	-75.3725	3.1	3.3	3.2	4	3.1	28.6
	19022010	17	7:38	7:56	35.8094	-75.3928	3	3.1	3.1	3.9	3.2	28.9
	19022010	18	8:09	8:28	35.8164	-75.3836	3	3.1	3.1	4	3.2	29
	19022010	19	8:40	8:58	35.8200	-75.4264	3	3.3	3.2	4	3.1	28.7
	19022010	20	9:09	9:27	35.8275	-75.4603	2.6	2.8	2.7	4	3	25.3
	19022010	21	9:36	9:59	35.8344	-75.4697	2.8	3	2.9	4.1	3.1	29.2
	19022010	22	10:07	10:30	35.8581	-75.5019	2.7	2.7	2.7	4.2	3.4	29.4
	19022010	23	10:38	11:02	35.8644	-75.5392	2.8	3.3	3.1	4.2	3.5	30.3
	19022010	24	11:11	11:34	35.8803	-75.5489	3.1	3.1	3.1	4	4	30.3
	19022010	25	11:43	12:00	35.9044	-75.5706	3.2	3.2	3.2	4.1	4.8	30.2
	19022010	26	12:12	12:32	35.9197	-75.5769	3.1	3.5	3.3	4.1	4.8	30.3
	19022010	27	12:50	13:13	35.9511	-75.5842	2.8	3.3	3.1	4.1	5.5	30.3
	19022010	28	13:23	13:46	35.9419	-75.5533	3	3.4	3.2	4.2	5.7	30.4
	19022010	29	13:56	14:19	35.9319	-75.5214	2.9	4	3.5	4.2	6.2	30.1
	19022010	30	14:30	14:53	35.9022	-75.5017	2.8	3.2	3.0	4.5	7.1	30.4
	19022010	31	15:02	15:26	35.8668	-75.4667	2.9	3.7	3.3	4.5	7.5	30.4
	19022010	32	15:36	16:00	35.8606	-75.4453	3	3.6	3.3	4.4	5.8	30.7
	19022010	33	16:13	16:35	35.8464	-75.4136	3.1	3.4	3.3	4.7	5.3	30.1
	19022010	34	16:50	17:15	35.8153	-75.3834	3	3.4	3.2	4.8	5.6	29.7
	19022010	35	17:43	18:01	35.7761	-75.3775	3.1	3.9	3.5	4.6	6.5	29.3
	19022010	36	18:20	18:38	35.7508	-75.3636	3.1	3.2	3.2	4.8	6.3	29.3
	19022010	37	19:07	19:19	35.7322	-75.3756	3	3.7	3.4	4.9	7.3	29.1
	19022010	38	19:47	19:54	35.7253	-75.3831	3.2	3.7	3.5	4.8	7.5	29
	19022010	39	20:10	20:23	35.7547	-75.3869	3.1	3.4	3.3	4.7	6.8	29.1
	19022010	40	20:49	20:57	35.7847	-75.3881	2.8	3.4	3.1	4.7	6.4	29.1
	19022010	41	21:09	21:18	35.7728	-75.3769	3.7	3.9	3.8	4.8	6.6	29.3
	19022010	42	21:28	21:41	35.7692	-75.3502	3	3.5	3.3	4.9	5.9	29.3
	19022010	43	22:02	22:15	35.7586	-75.3597	3.1	3.4	3.3	4.9	6.4	29.5
	19022010	44	22:28	22:40	35.7733	-75.3511	2.5	3.5	3.0	4.9	6	29.5
	19022010	45	22:52	23:05	35.7581	-75.3642	2.8	3.5	3.2	4.8	5.9	29.5
	19022010	46	23:18	23:31	35.7431	-75.3717	3.1	3.8	3.5	4.8	5.8	29.4
	19022010	47	23:44	23:58	35.7747	-75.3717	3	3.7	3.4	4.9	5.6	29.3
	20022010	48	0:13	0:27	35.7953	-75.3819	3	3.5	3.3	4.8	5.2	29.3
	20022010	49	0:50	1:03	35.8106	-75.3697	3	3.5	3.3	4.7	5.1	29.4
	20022010	50	1:09	1:22	35.7997	-75.3508	3	3.1	3.1	4.7	5.1	29.6
	20022010	51	1:31	1:49	35.7853	-75.3533	2.9	3.2	3.1	4.9	5	30.2
	20022010	52	2:01	2:21	35.7617	-75.3403	2.9	3.1	3.0	5	5	30.3

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
	20022010	53	2:40	3:00	35.7339	-75.3531	3	3	3.0	5.1	5.1	30.2
	20022010	54	3:16	3:34	35.7501	-75.3603	3	3.2	3.1	5.1	5.1	30.3
	20022010	55	3:50	4:08	35.7631	-75.3850	3.5	3.5	3.5	5.3	4.9	30.7
	20022010	56	6:11	6:28	35.7519	-75.3900	3.1	3.8	3.5	6.1	4.5	31.4
	20022010	57	7:31	7:49	35.7914	-75.4197	3.1	3.8	3.5	4.8	4.2	29.1
	20022010	58	7:59	8:16	35.8197	-75.4408	3.2	3.9	3.6	4.7	4.1	28.6
	20022010	59	9:51	10:08	35.8678	-75.4667	2.7	2.9	2.8	4.6	4.2	27.2
	20022010	60	10:21	10:38	35.8756	-75.5006	2.9	3	3.0	4.8	4.2	21.6
	20022010	61	11:02	11:15	35.8756	-75.5461	3.3	3.9	3.6	4.9	4.3	29.3
	20022010	62	11:27	11:39	35.9014	-75.5631	3.3	3.9	3.6	5	4.4	23.1
	20022010	63	12:14	12:23	35.9192	-75.5506	3	3.3	3.2	5.1	4.5	23.6
	20022010	64	12:35	12:52	35.9308	-75.5603	3	3.3	3.2	5.6	6.9	24.7
	20022010	65	13:18	13:37	35.9172	-75.5542	3.6	3.7	3.7	5.8	5.2	27.1
	20022010	66	14:14	14:28	35.9303	-75.5334	3	3.5	3.3	6	5.6	23.9
	20022010	67	14:45	15:04	35.9211	-75.5658	3	3.2	3.1	5.8	5.8	24
	20022010	68	15:21	15:39	35.8834	-75.5511	2.6	2.8	2.7	6.2	6.1	20.7
	20022010	69	15:52	16:09	35.8706	-75.5381	3.1	3.3	3.2	6.2	6	17.6
	20022010	70	16:22	16:39	35.8553	-75.5247	3.2	3.5	3.4	6.9	5.9	11.2
	20022010	71	17:12	17:29	35.8578	-75.5267	3.3	3.6	3.5	5.8	6.9	21.1
	20022010	72	17:53	18:06	35.8867	-75.5383	3	3.2	3.1	6.6	5.9	16.4
	20022010	73	18:21	18:38	35.8703	-75.5375	3.3	4.2	3.8	5	5.8	24.8
	20022010	74	18:49	19:06	35.8936	-75.5375	3.7	4.2	4.0	5.6	5.8	19.9
	20022010	75	19:17	19:34	35.9081	-75.5508	3.8	4.2	4.0	6.2	5.9	18.3
	20022010	76	22:07	22:25	36.1800	-75.7225	3	3.2	3.1	3.7	4.4	24.1
	20022010	77	22:35	22:59	36.2086	-75.7403	2.7	3.5	3.1	4	4.4	24
	20022010	78	23:14	23:47	36.2233	-75.7411	3.3	3.7	3.5	4.1	4.4	24.1
	21022010	79	0:06	0:29	36.2550	-75.7367	3	3.8	3.4	4.3	4.7	25.3
	21022010	80	0:46	1:19	36.2286	-75.7403	2.5	2.8	2.7	3.5	5.3	22.9
	21022010	81	2:01	2:34	36.2697	-75.7628	3	3.2	3.1	3.8	4.8	24.7
	21022010	82	2:57	3:30	36.2344	-75.7334	2.9	3.1	3.0	3.7	4.4	24
	21022010	83	3:46	4:18	36.2086	-75.8431	2.7	3.1	2.9	4.3	5.2	30
	21022010	84	4:30	5:01	36.2008	-75.6792	3.4	3.9	3.7	3.7	4.5	29.8
	21022010	85	8:53	9:11	35.8581	-75.5168	3	3.5	3.3	4.8	5.6	22.1
	21022010	86	9:23	9:38	35.8692	-75.5467	2.8	2.9	2.9	4.9	5.7	22.3
	21022010	87	9:48	10:00	35.8892	-75.5547	2.8	3.5	3.2	5.3	5.7	24.8
	21022010	88	10:22	10:34	35.9161	-75.5717	2.9	3	3.0	5.6	6.9	26.1
	21022010	89	10:50	11:02	35.9422	-75.5803	3	3.1	3.1	5.5	7.2	26.4

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
	21022010	90	11:14	11:21	35.9558	-75.5800	2.9	3.2	3.1	5.7	6.1	26.2
	21022010	91	11:32	11:50	35.9519	-75.5581	3.2	3.7	3.5	5.6	7.3	26.3
	21022010	92	12:07	12:15	35.9172	-75.5511	2.7	3.2	3.0	6.7	7.2	25.5
	21022010	93	12:35	12:43	35.9011	-75.5394	2.7	2.9	2.8	6.7	7.1	23.9
	21022010	94	12:53	13:16	35.8883	-75.5275	3.5	3.9	3.7	7.3	7.2	23.1
	21022010	95	13:41	13:59	35.8719	-75.5353	3.4	3.6	3.5	5.4	8.3	23.2
	21022010	96	14:40	14:48	35.8842	-75.5292	2.9	3.4	3.2	7.8	7.5	23.3
	21022010	97	16:36	16:59	35.9844	-75.3203	3.4	3.7	3.6	6.5	7	28.1
	21022010	98	17:11	17:33	35.9501	-75.3550	3.2	3.7	3.5	6.4	7	28.3
	21022010	99	17:44	18:01	35.9397	-75.3672	3.8	3.9	3.9	6.5	7.1	28.5
	21022010	100	18:13	18:30	35.9403	-75.4017	3.5	3.6	3.6	6.3	7.1	28.5
	21022010	101	18:41	18:58	35.9501	-75.4003	3.5	3.6	3.6	6.2	7.4	28.4
	21022010	102	19:11	19:34	35.9831	-75.3847	3.7	3.8	3.8	5.9	7.1	29.5
	21022010	103	19:48	20:12	35.9758	-75.3578	3.2	3.5	3.4	5.6	7.2	28.7
	21022010	104	20:24	20:49	35.9669	-75.3358	3.1	3.8	3.5	5.4	7	28.7
	21022010	105	20:59	21:22	35.9747	-75.3658	2.7	3.2	3.0	5.5	7.1	28.7
	21022010	106	21:32	21:55	35.9558	-75.3739	3.2	3.7	3.5	5.7	6.6	28.7
	21022010	107	22:04	22:26	35.9397	-75.4081	2.9	3.6	3.3	5.7	7	29.1
	21022010	108	23:28	23:51	35.8708	-75.4728	3.2	3.7	3.5	5.7	8.3	16.6
	22022010	109	0:26	0:49	35.8335	-75.4669	2.9	3.5	3.2	5.9	8.6	22
	22022010	110	1:12	1:25	35.8228	-75.4942	3	3.5	3.3	5.6	8.7	26.4
	22022010	111	1:46	1:59	35.7992	-75.4931	2.9	3.3	3.1	6	8.4	29.1
	22022010	112	2:33	2:37	35.7931	-75.4619	3.5	3.7	3.6	6.4	8.6	27.6
	22022010	113	2:45	3:04	35.7967	-75.4167	3.2	3.5	3.4	6.1	8.7	27.3
	22022010	114	3:19	3:37	35.7939	-75.4006	3.3	3.8	3.6	6.2	9.1	16.4
	22022010	115	3:48	4:05	35.7906	-75.4336	3.2	3.2	3.2	6.3	9	21.4
	22022010	116	4:20	4:39	35.7986	-75.4592	3.2	3.7	3.5	6.3	8.7	26.7
	22022010	117	4:53	5:13	35.7939	-75.4236	3.7	4.5	4.1	5.6	9.6	21.7
	22022010	118	5:29	5:46	35.8200	-75.4219	2.6	3.3	3.0	5.6	9.3	28.8
	22022010	119	6:30	6:47	35.8169	-75.3669	3.2	3.7	3.5	5.8	8.8	26.2
	22022010	120	7:11	7:23	35.8353	-75.3758	3	3.8	3.4	5.6	9.4	25.2
	22022010	121	8:24	8:36	35.9225	-75.3678	3.2	3.8	3.5	5.9	10.1	28
	22022010	122	8:52	9:06	35.9436	-75.3578	2.9	3	3.0	5.8	9.6	28.6
	22022010	123	9:19	9:31	35.9564	-75.3681	3.3	3.7	3.5	5.9	8.1	28.5
	22022010	124	10:00	10:13	35.9758	-75.4175	3.1	3.6	3.4	6.1	7.9	29
	22022010	125	10:32	10:44	35.9919	-75.4706	2.9	3.8	3.4	5.7	8.1	28.7
	22022010	126	11:30	11:42	36.0181	-75.5608	2.8	3.3	3.1	5.9	8.6	26.3

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
	22022010	127	12:15	12:28	36.0335	-75.6100	3.2	3.4	3.3	4.6	8.5	23.1
	22022010	128	12:50	13:07	36.0692	-75.6575	3	3.3	3.2	4.9	7.8	23.5
	22022010	129	13:48	14:00	36.1033	-75.6908	3.1	3.4	3.3	4.9	8.3	23.3
	22022010	130	14:10	14:27	36.1272	-75.7006	3.2	3.5	3.4	5	8	23.4
	22022010	131	14:43	15:00	36.1481	-75.7211	3	3.6	3.3	5	8.2	23.8
	22022010	132	15:29	15:52	36.2006	-75.7478	3.1	3.3	3.2	4.9	8.2	24.7
	22022010	133	16:03	16:29	36.2439	-75.7553	3.5	4.3	3.9	4.8	8.1	24.6
	22022010	134	16:40	17:01	36.2678	-75.7756	3.2	3.5	3.4	4.8	8	23.2
	22022010	135	17:11	17:33	36.3014	-75.7667	2.9	3.3	3.1	4.8	9.6	23.6
	22022010	136	17:43	18:10	36.3244	-75.7850	3	3.1	3.1	4.4	9.7	25
	22022010	137	18:21	18:38	36.3589	-75.7822	3.1	3.2	3.2	4.6	8.5	24.8
	22022010	138	18:49	19:08	36.3894	-75.7781	3.1	3.5	3.3	4.5	8.7	24.8
	22022010	139	19:22	19:44	36.4072	-75.7878	3.5	3.7	3.6	4.4	8.3	25
	22022010	140	19:55	20:18	36.4386	-75.7906	2.9	2.9	2.9	4.5	8.8	25.5
	22022010	141	20:30	21:02	36.4772	-75.7906	3.3	3.5	3.4	4.5	9.3	25
	22022010	142	21:40	22:14	36.5031	-75.7669	3.3	3.5	3.4	4.5	9	24.3
	22022010	143	22:24	22:57	36.5442	-75.7869	2.9	3.2	3.1	4.6	8	27.4
	22022010	144	23:07	23:39	36.5719	-75.7931	3.2	3.2	3.2	4.6	7.1	23.8
	22022010	145	23:49	0:21	36.5478	-75.8178	2.8	3.7	3.3	4.5	7.5	24.2
	23022010	146	0:35	1:07	36.5158	-75.8267	3.2	3.3	3.3	4.5	9.1	24.7
	23022010	147	1:19	1:52	36.5061	-75.7836	3.1	3.5	3.3	4.7	9.6	29
	23022010	148	2:08	2:44	36.5439	-75.7792	3.1	3.1	3.1	5.3	8.8	25.7
	23022010	149	2:57	3:30	36.5001	-75.7475	3.4	3.8	3.6	4.8	8.3	30.8
	23022010	150	3:42	4:15	36.4708	-75.7181	3.2	3.7	3.5	4.6	6.7	31.1
	23022010	151	4:29	5:02	36.4344	-75.7058	3.2	3.8	3.5	4.7	6	31.1
	23022010	152	5:21	5:35	36.4100	-75.6502	2.9	3.5	3.2	4.8	5.6	31.2
	23022010	153	5:28	6:21	36.3834	-75.6506	2.8	3.2	3.0	4.5	5.4	31
	23022010	154	6:35	6:48	36.3747	-75.6189	3.1	3.4	3.3	4.6	5.5	30.9
	23022010	155	6:59	7:31	36.3878	-75.6256	3.2	3.6	3.4	4.5	5.4	31
	23022010	156	7:51	8:23	36.4008	-75.6592	3.1	3.7	3.4	4.1	4.8	30.3
	23022010	157	8:36	9:10	36.4144	-75.6364	3.2	3.4	3.3	4.4	5.1	30.6
	23022010	158	9:21	9:54	36.3900	-75.6506	2.7	2.9	2.8	4.1	5.1	30.4
	23022010	159	10:03	10:36	36.3794	-75.6219	3	3.1	3.1	4.2	5.5	30.2
	23022010	160	10:45	11:18	36.3964	-75.6394	3.2	3.3	3.3	4.2	5.9	29.8
	23022010	161	11:29	11:52	36.3692	-75.6169	2.9	3.2	3.1	4.2	5.9	30.1
	23022010	162	12:13	12:35	36.3878	-75.6501	2.9	3.6	3.3	4.3	6.2	29.7
	23022010	163	12:57	13:25	36.3525	-75.6334	2.9	3.2	3.1	4.3	6.2	29.7

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
	23022010	164	13:40	14:09	36.3836	-75.6492	3.4	3.5	3.5	4.5	6.2	29.3
	23022010	165	14:29	14:56	36.3336	-75.6197	2.9	3.2	3.1	4.4	5.7	29.1
	23022010	166	15:12	15:40	36.3875	-75.6272	3.1	3.2	3.2	4.4	5.6	29.2
	23022010	167	15:50	16:22	36.3942	-75.6431	3.1	3.3	3.2	4.4	6.4	29.1
	23022010	168	16:41	17:13	36.3547	-75.6428	3.5	3.5	3.5	4.4	6.4	29.3
	23022010	169	17:30	18:03	36.3669	-75.6867	3	3.6	3.3	4.5	6.7	30.2
	23022010	170	18:45	19:03	36.4128	-75.6975	3.5	3.6	3.6	4.4	5.7	29.9
	23022010	171	19:12	19:37	36.3894	-75.6858	3.6	3.9	3.8	4.3	5.8	29.4
	23022010	172	19:45	20:08	36.3650	-75.6906	3.4	3.4	3.4	4.3	5.7	29.2
	23022010	173	20:16	20:38	36.3856	-75.6697	3	3.1	3.1	4.4	6.1	29.6
	23022010	174	20:46	21:09	36.4072	-75.6834	2.5	3	2.8	4.4	5.8	30
	23022010	175	21:19	21:41	36.4203	-75.7075	3.1	3.6	3.4	4.4	5.8	20.4
	23022010	176	21:53	22:15	36.4383	-75.7117	3.1	3.6	3.4	4.5	6	30.4
	23022010	177	22:31	23:04	36.4192	-75.7225	3.5	3.6	3.6	4.3	6	29.8
	23022010	178	23:21	23:54	36.3764	-75.7081	3.1	3.5	3.3	4.3	5.5	29.2
	24022010	179	0:22	0:55	36.3261	-75.6767	3.2	3.3	3.3	4.4	5.5	29.2
	24022010	180	1:10	1:42	36.3322	-75.6228	3.1	3.5	3.3	4.3	5.3	29.7
	24022010	181	2:00	2:18	36.3533	-75.6297	3.6	3.6	3.6	4.2	5	29.3
	24022010	182	2:37	3:10	36.3422	-75.6350	3.1	3.1	3.1	4.3	5	29.5
	24022010	183	3:25	3:57	36.3683	-75.6244	3.3	3.4	3.4	4.2	4.9	29.5
	24022010	184	4:10	4:32	36.3283	-75.6106	3.5	3.5	3.5	4.3	7.8	29.1
	24022010	185	4:44	5:06	36.3544	-75.6002	3.6	3.6	3.6	4.3	4.8	29.8
	24022010	186	8:07	8:30	36.3681	-75.6439	3.3	3.7	3.5	4.3	4.4	29.9
	24022010	187	8:41	9:04	36.3978	-75.6678	2.9	3.7	3.3	4.4	4.4	30.1
	24022010	188	9:14	9:47	36.4069	-75.6792	3.3	3.5	3.4	4.3	4.6	30
	24022010	189	10:46	11:19	36.3381	-75.6533	3.1	3.5	3.3	4.3	4.5	29.5
	24022010	190	11:33	11:55	36.2836	-75.6906	2.9	2.9	2.9	4.3	4.5	29.2
	24022010	191	12:14	12:37	36.2897	-75.7069	3	3.5	3.3	4.4	4.3	29.2
	24022010	192	12:53	13:16	36.2547	-75.6803	3.2	3.5	3.4	4.4	5	29.3
	24022010	193	13:41	14:04	36.2050	-75.6431	3	3.1	3.1	4.6	4.5	29.3
	24022010	194	14:28	14:53	36.1578	-75.6003	3	3.3	3.2	4.7	4.1	29.1
	24022010	195	15:17	15:40	36.1003	-75.6078	3.2	3.2	3.2	5.3	4	30.5
	24022010	196	15:55	16:18	36.0733	-75.5786	3	3.4	3.2	5.5	4.1	31.5
	24022010	197	16:43	17:06	36.0411	-75.5356	3.1	3.4	3.3	5.4	4.4	21.9
	24022010	198	17:31	17:55	35.9950	-75.5183	3.3	3.3	3.3	5.3	4.3	32.1
	24022010	199	18:16	18:33	35.9661	-75.5578	3.5	3.6	3.6	5.2	4.2	32
	24022010	200	18:45	19:03	35.9375	-75.5501	3.5	3.5	3.5	5.1	4.6	30.7

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
A	29012009	1	2010	2015	35.0725	-75.9586	2.9	2.9	2.9	8.9	5.0	32.5
A	29012009	2	2050	2110	35.0847	-75.9400	2.9	2.9	2.9	9.5	6.0	33.0
A	29012009	3	2304	2324	35.1811	-75.6964	3.1	3.1	3.1	8.7	6.0	32.5
A	29012009	4	2340	0	35.1936	-75.6700	3.2	3.2	3.2	8.5	6.0	32.3
A	30012009	5	641	656	35.6131	-75.3586	3.3	3.3	3.3	6.6	6.0	31.5
A	30012009	6	727	742	35.6050	-75.3728	3.0	3.0	3.0	6.7	6.0	31.5
A	30012009	7	759	819	35.6168	-75.3828	3.3	3.3	3.3	6.9	6.0	31.6
A	30012009	8	838	858	35.6519	-75.4114	3.0	3.0	3.0	6.5	6.0	31.1
A	30012009	9	918	938	35.6717	-75.4411	3.2	3.2	3.2	6.5	6.0	31.1
A	30012009	10	957	1017	35.6981	-75.4442	3.0	3.0	3.0	6.6	6.0	31.3
A	30012009	11	1036	1106	35.7275	-75.4392	3.2	3.2	3.2	6.6	6.0	31.5
A	30012009	12	1153	1208	35.7786	-75.4578	3.1	3.1	3.1	6.8	5.0	31.8
B	30012009	13	1233	1253	35.8017	-75.4539	3.6	3.6	3.6	6.9	5.0	31.9
B	30012009	14	1333	1353	35.8339	-75.4647	3.7	3.7	3.7	6.9	6.0	31.8
B	30012009	15	1411	1433	35.8536	-75.4900	3.1	3.7	3.4	7.1	6.0	31.3
B	30012009	16	1452	1510	35.8672	-75.5211	3.4	3.4	3.4	7.1	6.0	31.5
B	30012009	17	1534	1554	35.8911	-75.5453	3.4	3.4	3.4	7.0	6.9	31.0
B	30012009	18	1613	1633	35.9192	-75.5703	3.4	3.4	3.4	6.7	7.0	31.4
B	30012009	19	1651	1711	35.9453	-75.5867	3.5	3.5	3.5	6.7	7.0	31.2
B	30012009	20	1729	1749	35.9711	-75.5931	3.4	3.4	3.4	6.5	7.0	31.1
A	30012009	21	1808	1828	36.0064	-75.6047	3.4	3.4	3.4	6.4	7.0	31.0
A	30012009	22	1851	1911	36.0350	-75.6197	3.2	3.2	3.2	6.3	7.0	30.9
A	30012009	23	1931	1956	36.0669	-75.6086	3.2	3.2	3.2	6.3	6.0	30.9
A	30012009	24	2024	2044	36.0714	-75.6536	3.3	3.3	3.3	6.4	5.0	31.1
A	30012009	25	2101	2121	36.0844	-75.6502	3.2	3.2	3.2	6.2	5.0	30.9
A	30012009	26	2141	2202	36.0836	-75.6494	3.1	3.1	3.1	6.2	5.0	30.9
A	30012009	27	2219	2249	36.1186	-75.6353	3.2	3.2	3.2	6.1	4.0	31.1
A	30012009	28	2305	2335	36.1267	-75.6668	3.2	3.2	3.2	6.1	3.0	31.0
B	31012009	29	12	42	36.1414	-75.7061	3.2	3.2	3.2	6.1	3.0	31.2
B	31012009	30	105	135	36.1769	-75.7136	3.4	3.4	3.4	6.1	2.0	31.2
B	31012009	31	151	221	36.1936	-75.7053	3.4	3.4	3.4	6.1	2.0	31.3
B	31012009	32	244	314	36.2197	-75.6842	3.4	3.4	3.4	6.1	2.0	31.4
B	31012009	33	334	404	36.2331	-75.7272	3.3	3.3	3.3	6.0	1.0	31.3
B	31012009	34	436	506	36.2661	-75.7501	3.5	3.5	3.5	5.9	1.0	31.3
B	31012009	35	524	554	36.2167	-75.7442	3.5	3.5	3.5	5.9	0.0	31.4
A	31012009	36	613	643	36.2589	-75.7550	3.5	3.5	3.5	5.9	0.0	31.4
A	31012009	37	708	738	36.2261	-75.7419	3.5	3.5	3.5	5.9	0.0	31.4

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
A	31012009	38	756	826	36.2489	-75.7775	3.5	3.5	3.5	5.9	0.0	31.4
A	31012009	39	843	913	36.2206	-75.7403	3.2	3.2	3.2	5.9	0.0	31.4
A	31012009	40	1005	1035	36.2594	-75.7478	3.4	3.4	3.4	5.8	0.0	31.3
A	31012009	41	1048	1118	36.2794	-75.7706	3.3	3.3	3.3	4.8	0.0	29.2
A	31012009	42	1132	1203	36.3114	-75.7850	3.5	3.5	3.5	4.8	1.0	29.1
B	31012009	43	1302	1332	36.3069	-75.7617	3.2	3.2	3.2	5.7	2.0	31.0
B	31012009	44	1346	1416	36.2728	-75.7422	3.2	3.2	3.2	5.8	2.0	31.2
B	31012009	45	1432	1502	36.2736	-75.7703	3.2	3.2	3.2	5.0	3.0	29.0
B	31012009	46	1521	1551	36.3094	-75.7939	3.6	3.6	3.6	5.1	3.0	28.8
B	31012009	47	1608	1638	36.3486	-75.8019	3.2	3.2	3.2	5.0	3.5	28.5
B	31012009	48	1701	1731	36.3939	-75.8053	3.1	3.1	3.1	4.7	4.0	28.1
B	31012009	49	1753	1823	36.4247	-75.8133	3.2	3.2	3.2	4.5	4.0	28.0
A	31012009	50	1841	1911	36.4606	-75.8242	3.4	3.4	3.4	4.3	3.0	27.9
A	31012009	51	1930	2000	36.4994	-75.8161	3.5	3.5	3.5	4.3	3.0	28.3
A	31012009	52	2017	2047	36.5181	-75.8150	3.5	3.5	3.5	4.3	3.0	28.9
A	31012009	53	2102	2132	36.4834	-75.8044	3.5	3.5	3.5	4.3	4.0	29.3
A	31012009	54	2148	2218	36.5168	-75.7858	3.5	3.5	3.5	4.9	3.0	30.9
A	31012009	55	2234	2304	36.5501	-75.7900	3.5	3.5	3.5	4.8	3.0	30.9
A	31012009	56	2323	2353	36.5261	-75.7689	3.5	3.5	3.5	5.0	3.0	31.1
B	31012009	57	24	55	36.5033	-75.7728	3.7	3.7	3.7	4.1	3.0	28.0
B	31012009	58	119	149	36.5247	-75.8119	3.0	3.0	3.0	4.1	3.0	27.9
B	31012009	59	210	240	36.5594	-75.8014	2.8	2.8	2.8	4.1	3.0	27.6
A	1022009	60	635	705	36.6761	-75.6353	3.4	3.4	3.4	6.2	5.0	32.8
A	1022009	61	726	756	36.6335	-75.6678	3.2	3.2	3.2	5.1	4.0	31.7
A	1022009	62	846	916	36.6200	-75.7039	3.5	3.5	3.5	4.3	5.0	29.6
A	1022009	63	933	1003	36.5836	-75.7325	3.3	3.3	3.3	4.4	6.0	29.4
A	1022009	64	1053	1123	36.6069	-75.8197	3.8	3.8	3.8	5.3	8.0	30.7
A	1022009	65	1139	1211	36.5753	-75.8367	3.5	3.5	3.5	5.6	9.0	31.2
B	1022009	66	1230	1300	36.5422	-75.8425	3.4	3.4	3.4	5.7	10.0	31.3
B	1022009	67	1320	1350	36.5022	-75.8175	4.5	4.5	4.5	5.6	10.0	30.9
B	1022009	68	1403	1433	36.5286	-75.7711	3.0	3.0	3.0	5.5	10.0	30.8
A	1022009	69	1836	1856	37.0847	-75.8303	3.6	3.6	3.6	4.6	7.0	32.1
A	1022009	70	1919	1929	37.1086	-75.7956	3.0	3.0	3.0	4.7	7.0	32.1
A	1022009	71	1948	2013	37.1186	-75.7668	3.3	3.3	3.3	4.7	8.0	32.1
A	1022009	72	2134	2204	37.1225	-75.7650	3.5	3.5	3.5	5.2	7.0	32.2
A	1022009	73	2223	2253	37.1334	-75.7300	3.4	3.4	3.4	5.2	7.0	32.2
A	1022009	74	2309	2339	37.1619	-75.6908	3.5	3.5	3.5	4.8	7.0	32.1

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
B	2022009	75	2	32	37.2033	-75.7039	3.2	3.2	3.2	4.2	6.0	31.9
B	2022009	76	48	118	37.2403	-75.7072	3.2	3.2	3.2	4.3	7.0	32.0
B	2022009	77	135	205	37.2261	-75.6614	2.9	2.9	2.9	4.6	6.0	32.1
B	2022009	78	221	251	37.2294	-75.6168	2.8	2.8	2.8	4.5	6.0	32.1
B	2022009	79	305	335	37.2492	-75.6031	2.9	2.9	2.9	5.0	6.0	32.1
B	2022009	80	350	425	37.2225	-75.6200	3.0	3.0	3.0	5.2	7.0	32.2
B	2022009	81	438	508	37.1922	-75.6325	3.5	3.5	3.5	5.1	6.0	32.2
B	2022009	82	526	557	37.2225	-75.5983	3.4	3.4	3.4	5.3	6.0	32.2
A	2022009	83	614	644	37.1886	-75.6181	3.4	3.4	3.4	5.1	5.0	32.2
A	2022009	84	704	734	37.2369	-75.6233	3.3	3.3	3.3	4.3	5.0	32.0
B	2022009	85	1529	1559	36.1008	-75.5747	3.2	3.2	3.2	6.6	9.0	31.5
B	2022009	86	1613	1643	36.0668	-75.5502	3.2	3.2	3.2	6.5	10.0	31.4
B	2022009	87	1659	1729	36.0169	-75.5733	3.1	3.1	3.1	6.9	10.0	31.6
B	2022009	88	1744	1814	36.0047	-75.5692	2.9	2.9	2.9	7.0	10.0	31.8
A	2022009	89	1832	1902	35.9908	-75.5253	3.3	3.3	3.3	71.0	9.0	31.8
A	2022009	90	1917	1937	35.9822	-75.4672	3.2	3.2	3.2	7.1	9.0	31.7
A	2022009	91	1953	2023	36.0081	-75.4900	3.1	3.1	3.1	6.7	9.0	31.6
A	2022009	92	2042	2112	36.0433	-75.4836	3.6	3.6	3.6	6.6	10.0	31.6
A	2022009	93	2128	2158	36.0408	-75.5300	3.6	3.6	3.6	6.5	10.0	31.4
A	2022009	94	2213	2243	36.0350	-75.5756	3.4	3.4	3.4	6.5	9.0	31.6
A	2022009	95	2326	2356	36.0536	-75.5335	3.6	3.6	3.6	6.5	9.0	31.5
B	3022009	96	12	42	36.0886	-75.5594	2.8	2.8	2.8	6.2	7.0	31.3
B	3022009	97	57	132	36.1117	-75.5700	3.4	3.4	3.4	6.1	5.0	31.1
B	3022009	98	151	221	36.1483	-75.5728	3.5	3.5	3.5	6.1	5.0	31.2
B	3022009	99	256	324	36.1168	-75.5733	2.9	2.9	2.9	6.1	5.0	31.2
B	3022009	100	344	414	36.1419	-75.5783	3.3	3.3	3.3	6.1	5.0	31.3
B	3022009	101	437	507	36.1161	-75.5597	3.7	3.7	3.7	6.1	4.0	31.4
B	3022009	102	529	559	36.1567	-75.5753	3.5	3.5	3.5	6.2	4.0	31.5
A	3022009	103	722	752	36.2247	-75.7394	3.7	3.7	3.7	6.9	3.0	32.7
A	3022009	104	810	840	36.2553	-75.7489	4.0	4.0	4.0	6.7	3.0	32.5
A	3022009	105	855	925	36.2100	-75.7403	3.5	3.5	3.5	6.9	3.0	32.7
A	3022009	106	939	1009	36.2386	-75.7489	4.1	4.1	4.1	6.9	3.0	32.7
A	3022009	107	1024	1054	36.1994	-75.7168	3.5	3.5	3.5	6.8	3.0	32.6
A	3022009	108	1110	1140	36.2394	-75.7422	3.5	3.5	3.5	6.7	3.0	32.5
B	3022009	109	1203	1233	36.2501	-75.7589	3.5	3.5	3.5	6.7	3.0	32.4
B	3022009	110	1247	1317	36.2297	-75.7392	3.6	3.6	3.6	6.5	3.0	32.3
B	3022009	111	1339	1409	36.2428	-75.7531	3.3	3.3	3.3	6.8	3.0	32.5

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
B	3022009	112	1453	1523	36.2044	-75.6936	3.6	3.6	3.6	6.4	3.0	32.0
B	3022009	113	1540	1610	36.1853	-75.6667	3.4	3.4	3.4	6.5	3.0	32.2
B	3022009	114	1654	1724	36.1668	-75.6228	3.8	3.8	3.8	6.4	4.0	32.0
B	3022009	115	1740	1810	36.1403	-75.6089	3.2	3.2	3.2	6.3	4.0	32.0
A	3022009	116	1825	1855	36.1728	-75.6002	3.6	3.6	3.6	6.2	4.0	32.0
A	3022009	117	2044	2114	36.0086	-75.5692	3.4	3.4	3.4	6.4	4.0	32.0
A	3022009	118	2132	2202	36.0400	-75.5736				6.4	4.0	32.1
A	3022009	119	2325	2355	36.1403	-75.7014	3.5	3.5	3.5	6.4	3.0	32.3
B	4022009	120	13	33	36.1714	-75.7172	3.5	3.5	3.5	5.9	3.0	31.8
B	4022009	121	49	119	36.1872	-75.7186	3.5	3.5	3.5	6.2	3.0	32.2
B	4022009	122	133	203	36.1542	-75.7064	3.5	3.5	3.5	6.4	2.0	32.4
B	4022009	123	219	249	36.1153	-75.6853	3.5	3.5	3.5	6.2	2.0	32.0
B	4022009	124	304	324	36.0786	-75.6767	3.5	3.5	3.5	6.2	3.0	32.0
B	4022009	125	340	410	36.0506	-75.6581	3.5	3.5	3.5	6.2	3.0	32.0
B	4022009	126	425	455	36.0214	-75.6272	3.8	3.8	3.8	6.1	1.0	32.0
B	4022009	127	509	539	35.9700	-75.6153	3.8	3.8	3.8	6.2	1.0	32.0
B	4022009	128	555	625	35.9367	-75.5931	3.8	3.8	3.8	6.3	1.0	32.1
A	4022009	129	841	911	36.1203	-75.6914	3.2	3.2	3.2	5.6	0.0	31.2
A	4022009	130	926	956	36.1519	-75.7075	3.2	3.2	3.2	5.6	0.0	31.2
A	4022009	131	1013	1043	36.1842	-75.7181	3.2	3.2	3.2	5.3	-0.5	30.6
A	4022009	132	1117	1147	36.2025	-75.7319	3.4	3.4	3.4	5.2	0.0	30.3
B	4022009	133	1209	1239	36.2253	-75.7547	3.5	3.5	3.5	5.1	0.0	29.9
B	4022009	134	1259	1329	36.2544	-75.7547	3.5	3.5	3.5	5.6	0.0	31.1
B	4022009	135	1345	1415	36.2344	-75.7122	4.2	4.2	4.2	5.7	0.0	31.4
B	4022009	136	1429	1459	36.2144	-75.6739	3.8	3.8	3.8	5.9	0.0	31.6
B	4022009	137	1517	1547	36.1767	-75.6586	3.8	3.8	3.8	5.9	0.0	31.8
B	4022009	138	1603	1633	36.1414	-75.6422	3.5	3.5	3.5	6.0	0.0	31.9
B	4022009	139	1652	1722	36.1597	-75.6122	4.1	4.1	4.1	5.9	0.0	31.9
B	4022009	140	1741	1811	36.1002	-75.6247	4.1	4.1	4.1	5.8	0.0	31.8
A	4022009	141	1834	1904	36.1544	-75.6225	3.9	3.9	3.9	5.8	-0.5	31.6
A	4022009	142	1922	1952	36.1769	-75.6334	3.9	3.9	3.9	5.8	0.0	31.6
A	4022009	143	2011	2041	36.1342	-75.6392	3.7	3.7	3.7	5.5	-0.5	31.1
A	4022009	144	2058	2128	36.1464	-75.6886	3.7	3.7	3.7	5.2	-0.5	30.5
A	4022009	145	2143	2213	36.1719	-75.7153	3.6	3.6	3.6	5.1	-0.5	30.5
A	4022009	146	2228	2258	36.2061	-75.7217	3.7	3.7	3.7	5.3	-0.5	30.8
A	4022009	147	2315	2347	36.2335	-75.7283	3.7	3.7	3.7	5.1	-0.5	30.5
B	5022009	148	7	37	36.2828	-75.7525	3.1	3.1	3.1	5.0	-0.5	30.2

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
B	5022009	149	53	123	36.3000	-75.7603	3.5	3.5	3.5	4.9	-1.0	30.1
B	5022009	150	139	209	36.3169	-75.7711	3.5	3.5	3.5	4.7	-1.0	29.9
B	5022009	151	226	256	36.3550	-75.7931	3.3	3.3	3.3	4.9	-2.0	30.8
B	5022009	152	317	347	36.3803	-75.7775	3.5	3.5	3.5	4.8	-2.0	30.9
B	5022009	153	406	436	36.4019	-75.7839	3.8	3.8	3.8	4.9	-3.0	31.2
B	5022009	154	453	523	36.4336	-75.7836	3.8	3.8	3.8	4.9	-3.0	31.6
B	5022009	155	539	609	36.4747	-75.7906	3.8	3.8	3.8	4.9	-3.0	31.6
A	5022009	156	625	655	36.5178	-75.8039	3.8	3.8	3.8	4.8	-4.0	31.2
A	5022009	157	712	721	36.5572	-75.8261	3.8	3.8	3.8	4.9	-4.0	31.4
A	5022009	158	815	845	36.4502	-75.8022	3.7	3.7	3.7	5.1	-5.0	32.2
A	5022009	159	901	901	36.5075	-75.7794				5.3	-4.0	32.4
A	5022009	160	912	942	36.5081	-75.7811	3.8	3.8	3.8	5.3	-4.0	32.4
B	5022009	161	1221	1251	36.2819	-75.7502	4.0	4.0	4.0	4.9	-4.0	30.7
B	5022009	162	1304	1335	36.3225	-75.7706	4.0	4.0	4.0	4.9	-3.0	30.8
B	5022009	163	1351	1421	36.3494	-75.7822	3.7	3.7	3.7	5.1	-3.0	31.9
B	5022009	164	1435	1505	36.3744	-75.7336	3.2	3.2	3.2	5.5	-3.0	32.5
B	5022009	165	1520	1550	36.3835	-75.7122	3.6	3.6	3.6	5.8	-3.0	32.7
B	5022009	166	1605	1635	36.4256	-75.6728	3.9	3.9	3.9	6.0	-2.0	32.9
B	5022009	167	1651	1721	36.4408	-75.6281	3.6	3.6	3.6	6.0	-2.0	32.9
B	5022009	168	1736	1804	36.4581	-75.5875	3.5	3.5	3.5	6.0	-2.0	32.9
A	5022009	169	1819	1849	36.4869	-75.5511	3.6	3.6	3.6	6.0	-2.0	32.9
A	5022009	170	1907	1937	36.5253	-75.5369	3.5	3.5	3.5	5.9	-2.0	32.9
A	5022009	171	1954	2024	36.5364	-75.5539	3.5	3.5	3.5	6.0	-2.0	32.9
A	5022009	172	2050	2120	36.5272	-75.5456	3.8	3.8	3.8	5.8	-2.0	32.9
A	5022009	173	2138	2208	36.5522	-75.5672	3.6	3.6	3.6	5.7	-2.0	32.7
A	5022009	174	2224	2254	36.5953	-75.5897	3.6	3.6	3.6	5.4	-2.0	32.5
A	5022009	175	2314	2344	36.6314	-75.5747	3.7	3.7	3.7	5.5	-1.0	32.6
B	6022009	176	9	39	36.5867	-75.6050	3.7	3.7	3.7	5.6	-1.0	32.7
B	6022009	177	54	124	36.5558	-75.6003	3.9	3.9	3.9	5.5	-1.0	32.6
B	6022009	178	137	207	36.5975	-75.6094	3.7	3.7	3.7	5.4	-1.0	32.6
B	6022009	179	221	251	36.6350	-75.5911	4.2	4.2	4.2	5.4	-1.0	32.6
B	6022009	180	305	335	36.6453	-75.5464	4.1	4.1	4.1	5.6	-1.0	32.7
B	6022009	181	349	419	36.6086	-75.5431	3.8	3.8	3.8	5.7	-1.0	32.8
B	6022009	182	433	508	36.6168	-75.5092	4.0	4.0	4.0	5.6	-0.5	32.7
B	6022009	183	528	558	36.6589	-75.4578				5.7	-1.0	32.8
A	6022009	184	613	643	36.6172	-75.4608	3.2	3.2	3.2	5.7	-1.0	32.8
A	6022009	185	709	739	36.6542	-75.4501	3.1	3.1	3.1	5.7	-0.5	32.8

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
A	6022009	186	755	825	36.6239	-75.4500	3.3	3.3	3.3	5.5	0.0	32.7
A	6022009	187	845	915	36.6589	-75.4514	3.1	3.1	3.1	5.6	0.0	32.7
A	6022009	188	932	1001	36.6372	-75.4506	3.5	3.5	3.5	5.6	0.0	32.8
A	6022009	189	1023	1053	36.6501	-75.4335	3.1	3.1	3.1	5.6	0.0	32.7
A	6022009	190	1113	1143	36.6292	-75.4335	3.1	3.1	3.1	5.6	1.0	32.7
B	6022009	191	1201	1221	36.6514	-75.4334	3.3	3.3	3.3	5.6	1.0	32.7
B	6022009	192	1239	1259	36.6367	-75.4489	3.2	3.2	3.2	5.6	1.0	32.7
B	6022009	193	1316	1346	36.6711	-75.4506	3.3	3.3	3.3	5.4	2.0	32.5
B	6022009	194	1408	1438	36.6950	-75.4835	3.7	3.7	3.7	5.4	3.8	32.5
B	6022009	195	1456	1526	36.7231	-75.5275	3.5	3.5	3.5	5.3	3.0	32.4
B	6022009	196	1608	1638	36.7500	-75.4872	2.7	2.7	2.7	5.3	4.0	32.5
B	6022009	197	1657	1727	36.7386	-75.5217	2.9	2.9	2.9	5.2	4.0	32.4
B	6022009	198	1746	1816	36.7706	-75.4931	3.5	3.5	3.5	5.3	5.0	32.4
A	6022009	199	1835	1905	36.7456	-75.5133	3.3	3.3	3.3	5.2	5.0	32.4
A	6022009	200	1924	1954	36.7656	-75.4931	3.6	3.6	3.6	5.2	5.0	32.4
A	6022009	201	2018	2048	36.7458	-75.5244	3.2	3.2	3.2	5.2	5.0	32.4
A	6022009	202	2103	2133	36.7502	-75.4947	3.1	3.1	3.1	5.3	5.0	32.5
A	6022009	203	2156	2226	36.7481	-75.5197	3.0	3.0	3.0	5.2	5.0	32.5
A	6022009	204	2242	2312	36.7706	-75.4834	3.1	3.1	3.1	5.3	5.0	32.5
A	6022009	205	2327	2357	36.7336	-75.5225	3.1	3.1	3.1	5.1	5.0	32.4
B	7022009	206	16	48	36.7733	-75.5044	3.5	3.5	3.5	5.3	5.0	32.5
B	7022009	207	103	133	36.7439	-75.5406	3.2	3.2	3.2	5.3	4.0	32.5
B	7022009	208	150	220	36.7269	-75.5503	2.8	2.8	2.8	5.3	4.0	32.5
B	7022009	209	238	309	36.7356	-75.5286	3.2	3.2	3.2	5.2	4.0	32.4
B	7022009	210	323	353	36.7561	-75.5019	3.2	3.2	3.2	5.3	4.0	32.5
B	15012008	1	5:19	5:34	35.8106	-75.2689	2.9	2.9	2.9	10.2	4.3	32.8
A	15012008	2	6:06	6:21	35.8397	-75.2600	2.8	2.8	2.8	10.2	4.2	32.8
A	15012008	3	7:30	7:45	35.8092	-75.3668	2.6	2.6	2.6	9.7	3.7	32.5
A	15012008	4	8:18	8:33	35.8168	-75.3839	2.9	2.9	2.9	9.6	3.7	32.6
A	15012008	5	9:10	9:25	35.7897	-75.4439	2.7	2.7	2.7	9.3	3.8	32.3
A	15012008	6	9:58	10:13	35.8175	-75.5011	2.8	2.8	2.8	9.2	4.1	32.2
A	15012008	7	10:44	10:59	35.8575	-75.5425	2.9	2.9	2.9	9.2	4.3	32.2
A	15012008	8	11:24	11:39	35.8761	-75.5334	2.9	2.9	2.9	9.2	5.4	32.1
B	15012008	9	12:00	12:15	35.8667	-75.5053	2.7	2.7	2.7	9.3	5.4	32.2
B	15012008	10	13:34	13:49	35.8567	-75.4758	2.8	2.8	2.8	9.4	5.5	32.2
B	15012008	11	14:14	14:30	35.8600	-75.5106	2.9	2.9	2.9	9.2	4.9	32.2
B	15012008	12	14:51	15:06	35.8850	-75.5158	2.9	2.9	2.9	9.3	6.0	32.2

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
B	15012008	13	15:42	15:57	35.9094	-75.4992	2.7	2.7	2.7	9.3	5.9	32.3
B	15012008	14	16:20	16:35	35.9219	-75.5283	2.9	2.9	2.9	9.1	4.9	32.3
B	15012008	15	17:00	17:16	35.9328	-75.5744	2.9	2.9	2.9	9.1	4.9	32.1
B	15012008	16	17:38	17:53	35.9578	-75.5858	2.6	2.6	2.6	9.1	5.1	32.1
A	15012008	17	18:14	18:29	35.9786	-75.6078	2.9	2.9	2.9	9.2	4.6	32.1
A	15012008	18	18:48	19:03	35.9989	-75.5835	2.5	2.5	2.5	9.2	4.5	32.2
A	15012008	19	19:26	19:41	36.0078	-75.6275	2.8	2.8	2.8	9.2	4.5	32.2
A	15012008	20	20:01	20:16	36.0381	-75.6172	2.8	2.8	2.8	9.3	4.5	32.4
A	15012008	21	20:44	21:00	36.0436	-75.6531	2.9	2.9	2.9	8.9	3.6	32.2
A	15012008	22	21:16	21:31	36.0717	-75.6728	3.1	3.1	3.1	8.9	3.4	32.1
A	15012008	23	21:53	22:08	36.0933	-75.6853	2.9	2.9	2.9	8.8	3.2	32.1
A	15012008	24	22:25	22:40	36.1206	-75.7019	2.9	2.9	2.9	8.8	3.1	32.0
A	15012008	25	22:56	23:16	36.0392	-75.7001	2.9	2.9	2.9	8.9	2.8	31.9
A	15012008	26	23:42	23:57	36.1711	-75.6761	2.9	2.9	2.9	9.1	2.8	32.1
B	16012008	27	0:37	0:59	36.1911	-75.6928	2.9	2.9	2.9	8.9	2.9	32.0
B	16012008	28	1:19	1:34	36.2133	-75.7242	2.7	2.7	2.7	8.7	2.9	31.7
B	16012008	29	1:57	2:18	36.2303	-75.7550	2.8	2.8	2.8	8.5	2.9	31.5
B	16012008	30	3:29	3:48	36.2383	-75.7522	2.7	2.7	2.7	8.4	2.9	31.5
B	16012008	31	4:13	4:28	36.2275	-75.7383	2.8	2.8	2.8	8.4	2.9	31.6
B	16012008	32	5:15	5:30	36.2508	-75.7335	2.9	2.9	2.9	8.3	2.9	31.6
A	16012008	33	6:02	6:17	36.2131	-75.7356	2.6	2.6	2.6	8.3	2.9	31.6
A	16012008	34	6:47	7:02	36.2469	-75.7569	2.8	2.8	2.8	8.3	2.9	31.5
A	16012008	35	7:18	7:33	36.2761	-75.7736	2.7	2.7	2.7	8.0	1.8	31.3
A	16012008	36	8:25	8:42	36.3122	-75.7836	2.9	2.9	2.9	8.0	1.8	31.3
A	16012008	37	8:58	9:13	36.3334	-75.8003	2.8	2.8	2.8	7.9	1.9	31.3
A	16012008	38	9:31	9:46	36.3708	-75.8097	2.9	2.9	2.9	8.1	3.1	31.3
A	16012008	39	10:01	10:21	36.3844	-75.7947	3.0	3.0	3.0	8.1	2.9	31.5
A	16012008	40	10:35	10:53	36.4001	-75.8164	3.0	3.0	3.0	8.0	2.8	31.4
A	16012008	41	11:09	11:24	36.4381	-75.8267	2.9	2.9	2.9	8.0	2.9	31.4
A	16012008	42	11:41	12:01	36.4714	-75.8283	2.8	2.8	2.8	7.9	3.0	31.3
B	16012008	43	12:21	12:41	36.4956	-75.8334	2.9	2.9	2.9	7.9	3.1	31.2
B	16012008	44	12:57	13:17	36.5183	-75.8347	2.8	2.8	2.8	7.8	3.1	31.1
B	16012008	45	13:33	13:54	36.5575	-75.8436	2.8	2.8	2.8	7.4	3.3	30.9
B	16012008	46	14:12	14:33	36.5819	-75.8378	2.8	2.8	2.8	7.4	3.3	30.9
B	16012008	47	14:58	15:20	36.5925	-75.8411	2.8	2.8	2.8	7.6	4.0	40.7
B	16012008	48	15:41	16:01	36.5617	-75.8036	2.9	2.9	2.9	7.8	4.5	30.8
B	16012008	49	16:20	16:40	36.5492	-75.7744	2.7	2.7	2.7	8.1	4.1	31.8

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
B	16012008	50	16:59	17:19	36.5675	-75.7867	2.9	2.9	2.9	7.9	4.1	31.3
B	16012008	51	17:39	17:59	36.5353	-75.7878	2.7	2.7	2.7	7.8	4.1	31.3
A	16012008	52	18:18	18:38	36.5531	-75.7928	2.6	2.6	2.6	7.8	4.1	31.0
A	16012008	53	18:55	19:15	36.5225	-75.7814	2.9.	2.9	2.9	7.8	4.1	31.3
A	16012008	54	19:33	19:48	36.5186	-75.8067	2.9	2.9	2.9	7.8	4.1	31.3
A	16012008	55	20:05	20:20	36.5367	-75.8061	3.0	3.0	3.0	7.6	4.5	30.3
A	16012008	56	20:37	20:52	36.5550	-75.8211	3.0	3.0	3.0	7.6	4.6	30.3
A	16012008	57	21:07	21:22	36.5228	-75.8356	2.9	2.9	2.9	7.8	4.9	30.8
A	16012008	58	21:38	21:53	36.4961	-75.8433	3.0	3.0	3.0	7.9	4.9	30.9
A	16012008	59	22:16	22:31	36.4875	-75.8108	3.0	3.0	3.0	7.9	4.8	31.1
A	16012008	60	22:49	23:04	36.5069	-75.7914	3.0	3.0	3.0	7.9	4.8	31.1
A	16012008	61	23:20	23:35	36.5319	-75.7731	3.0	3.0	3.0	7.8	4.9	31.0
A	17012008	62	23:58	0:13	36.5664	-75.7683	2.8	2.8	2.8	7.6	4.9	30.4
B	17012008	63	0:38	0:53	36.5744	-75.7550	2.9	2.9	2.9	7.7	5.0	30.7
B	17012008	64	1:13	1:28	36.5433	-75.7501	2.8	2.8	2.8	8.3	5.3	32.0
B	17012008	65	1:47	2:02	36.5169	-75.7575	2.8	2.8	2.8	8.3	5.7	31.9
B	17012008	66	2:22	2:37	36.5086	-75.7594	2.8	2.8	2.8	8.2	5.3	31.9
B	17012008	67	2:56	3:11	36.5303	-75.7686	2.9	2.9	2.9	7.6	5.3	30.4
B	17012008	68	3:29	3:44	36.5517	-75.7689	2.8	2.8	2.8	7.6	5.4	30.3
B	17012008	69	4:01	4:16	36.5739	-75.7544	2.9	2.9	2.9	7.7	5.7	30.4
B	17012008	70	5:25	5:40	36.4911	-75.7501	2.6	2.6	2.6	7.8	6.2	31.1
B	17012008	71	5:55	6:10	36.5264	-75.7553	2.8	2.8	2.8	7.7	6.2	30.8
B	17012008	72	6:25	6:40	36.5428	-75.7578	2.9	2.9	2.9	7.8	6.2	30.8
B	17012008	73	6:55	7:10	36.5717	-75.7061	2.8	2.8	2.8	7.8	6.3	30.7
B	17012008	74	7:46	8:01	36.5772	-75.7667	3.0	3.0	3.0	7.9	6.4	30.9
B	17012008	75	8:21	8:56	36.5772	-75.7531	3.0	3.0	3.0	7.9	6.5	30.9
B	17012008	76	8:55	9:11	36.5667	-75.7667	3.0	3.0	3.0	7.9	6.9	30.7
B	17012008	77	9:27	9:42	36.5483	-75.7819	3.0	3.0	3.0	7.9	6.9	30.8
B	17012008	78	9:57	10:12	36.5336	-75.7992	2.9	2.9	2.9	7.8	6.7	30.5
B	17012008	79	10:27	10:42	36.5531	-75.7911	2.9	2.9	2.9	7.8	6.6	30.5
B	17012008	80	10:58	11:13	36.5775	-75.7650	3.0	3.0	3.0	7.8	6.1	30.4
B	17012008	81	11:32	11:47	36.5925	-75.7706	2.9	2.9	2.9	7.9	6.2	30.3
A	17012008	82	12:06	12:21	36.5567	-75.7922	2.8	2.8	2.8	7.7	7.1	30.5
A	17012008	83	12:46	13:01	36.5425	-75.7978	2.7	2.7	2.7	7.9	7.6	31.1
A	17012008	84	13:45	14:06	36.5622	-75.7436	2.9	2.9	2.9	8.8	7.6	32.4
A	17012008	85	15:00	15:20	36.5334	-75.8406	2.8	2.8	2.8	8.0	8.2	31.6
A	17012008	86	15:37	15:57	36.5739	-75.8406	2.7	2.7	2.7	7.4	10.0	29.3

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
A	17012008	87	16:19	16:39	36.5786	-75.8168	2.8	2.8	2.8	7.4	10.9	29.4
A	17012008	88	17:17	17:37	36.5553	-75.8168	2.6	2.6	2.6	7.5	11.5	29.4
A	17012008	89	17:58	18:18	36.5217	-75.8311	2.9	2.9	2.9	7.6	11.7	29.7
B	17012008	90	18:34	18:54	36.5168	-75.8047	2.6	2.6	2.6	7.7	11.9	30.2
B	17012008	91	19:11	19:31	36.5508	-75.8247	2.8	2.8	2.8	7.9	12.1	30.8
B	17012008	92	19:51	20:06	36.5708	-75.7675	3.1	3.1	3.1	8.4	11.8	31.8
B	17012008	93	20:23	20:43	36.5425	-75.7553	2.9	2.9	2.9	8.6	11.6	32.1
B	17012008	94	21:06	21:27	36.5236	-75.7378	3.0	3.0	3.0	8.8	11.5	32.4
B	17012008	95	21:49	22:09	36.5153	-75.7575	2.9	2.9	2.9	8.8	10.9	32.3
B	17012008	96	22:27	22:48	36.4872	-75.7356	2.9	2.9	2.9	8.8	9.7	32.4
B	17012008	97	23:14	23:34	36.4761	-75.7000	3.0	3.0	3.0	8.8	9.1	32.3
A	18012008	98	0:04	0:24	36.4875	-75.7517	2.8	2.8	2.8	8.1	6.8	31.1
A	18012008	99	0:41	1:01	36.4881	-75.7875	2.8	2.8	2.8	7.4	5.8	29.3
A	18012008	100	1:28	1:48	36.4939	-75.8033	2.7	2.7	2.7	7.7	5.6	29.8
A	18012008	101	2:05	2:25	36.4797	-75.7683	3.0	3.0	3.0	8.4	5.0	31.8
A	18012008	102	2:42	3:02	36.4736	-75.7322	2.9	2.9	2.9	8.9	4.7	32.4
A	18012008	103	3:24	3:44	36.4517	-75.7103	2.8	2.8	2.8	8.9	4.5	32.4
A	18012008	104	4:01	4:21	36.6261	-75.7456	2.9	2.9	2.9	7.6	3.7	30.2
A	18012008	105	4:38	4:58	36.4753	-75.7675	2.7	2.7	2.7	7.6	3.7	30.2
A	18012008	106	5:37	5:57	36.5064	-75.7947	2.8	2.8	2.8	7.3	3.6	29.2
A	18012008	107	6:13	6:33	36.5397	-75.7981	2.6	2.6	2.6	7.3	3.6	29.3
A	18012008	108	6:48	7:08	36.5572	-75.7900	2.8	2.8	2.8	7.5	3.9	29.9
A	18012008	109	7:22	7:42	36.5719	-75.7689	2.8	2.8	2.8	7.7	3.6	30.3
A	18012008	110	7:58	8:18	36.5433	-75.7819	2.9	2.9	2.9	7.4	3.9	30.0
A	18012008	111	8:33	8:53	36.5117	-75.7878	2.9	2.9	2.9	7.2	3.6	29.1
A	18012008	112	9:26	9:47	36.5006	-75.8175	3.0	3.0	3.0	7.1	4.9	28.7
A	18012008	113	15:00	15:20	37.1414	-75.6501	2.9	2.9	2.9	7.1	7.4	32.3
A	18012008	114	15:39	15:54	37.1428	-75.6233	2.8	2.8	2.8	7.3	9.0	33.4
B	18012008	115	18:16	18:31	37.0856	-75.7136	2.8	2.8	2.8	7.3	8.3	32.4
B	18012008	116	19:19	19:39	37.1519	-75.6069	2.7	2.7	2.7	7.8	8.3	32.5
B	18012008	117	19:52	20:12	37.1808	-75.5897	3.0	3.0	3.0	7.8	8.3	32.6
B	18012008	118	20:28	20:48	37.2067	-75.6067	2.9	2.9	2.9	7.5	8.1	32.5
B	18012008	119	21:01	21:21	37.2208	-75.6428	3.0	3.0	3.0	7.0	8.2	32.1
B	18012008	120	21:32	21:52	37.2431	-75.6500	3.0	3.0	3.0	6.9	8.1	31.9
B	18012008	121	22:05	22:25	37.2553	-75.6686	3.0	3.0	3.0	7.1	8.1	31.9
B	18012008	122	22:36	22:56	37.2553	-75.6686	3.0	3.0	3.0	7.2	8.2	31.9
B	18012008	123	23:09	23:29	37.2375	-75.6275	2.9	2.9	2.9	7.3	7.8	32.8

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
B	18012008	124	23:43	0:04	37.2589	-75.6033	2.8	2.8	2.8	7.1	7.7	32.1
A	19012008	125	0:20	0:40	37.2847	-75.5931	3.0	3.0	3.0	7.2	7.6	32.1
A	19012008	126	0:53	1:14	37.2942	-75.5544	2.9	2.9	2.9	7.2	7.6	32.1
A	19012008	127	1:28	1:48	37.2836	-75.5256	2.9	2.9	2.9	7.4	7.4	32.3
A	19012008	128	2:06	2:26	37.2864	-75.5128	3.0	3.0	3.0	7.4	7.4	32.3
A	19012008	129	2:41	3:01	37.3025	-75.5347	2.8	2.8	2.8	7.3	7.3	32.2
A	19012008	130	3:37	3:57	37.3175	-75.5372	2.6	2.6	2.6	7.4	7.4	32.2
A	19012008	131	4:10	4:30	37.2834	-75.5378	2.5	2.5	2.5	7.3	7.3	32.2
A	19012008	132	4:42	5:02	37.2903	-75.5711	2.9	2.9	2.9	7.2	7.2	32.3
A	19012008	133	5:13	5:33	37.2814	-75.6100	2.8	2.8	2.8	7.1	6.9	32.2
A	19012008	134	5:44	6:04	37.2731	-75.6403	2.7	2.7	2.7	7.1	6.7	32.3
B	19012008	135	6:14	6:34	37.2744	-75.6689	2.8	2.8	2.8	6.8	6.5	32.1
B	19012008	136	6:45	7:05	37.2642	-75.6947	2.5	2.5	2.5	6.7	6.4	31.8
B	19012008	137	7:15	7:35	37.2369	-75.6886	2.7	2.7	2.7	6.9	6.4	32.0
B	19012008	138	7:46	8:06	37.2281	-75.6592	3.0	3.0	3.0	7.3	6.8	32.3
B	19012008	139	8:18	8:38	37.2086	-75.6331	2.9	2.9	2.9	7.3	6.5	32.4
B	19012008	140	8:49	9:09	37.1835	-75.6001	2.9	2.9	2.9	7.3	6.3	32.6
B	19012008	141	9:23	9:47	37.2225	-75.6001	3.0	3.0	3.0	7.3	6.2	32.5
B	19012008	142	9:59	10:19	37.1978	-75.6431	3.0	3.0	3.0	7.2	6.4	32.5
B	19012008	143	10:32	10:52	37.1733	-75.6492	2.9	2.9	2.9	7.0	5.4	32.3
A	19012008	144	12:16	12:36	37.2219	-75.6197	2.9	2.9	2.9	7.2	4.4	32.4
A	19012008	145	12:56	13:16	37.2375	-75.6092	3.1	3.1	3.1	7.2	4.1	32.5
A	19012008	146	13:38	13:58	37.2192	-75.6258	3.0	3.0	3.0	7.3	3.8	32.5
A	19012008	147	14:17	14:37	37.2192	-75.6131	3.1	3.1	3.1	7.3	3.6	32.5
A	19012008	148	14:53	15:13	37.2172	-75.6378	3.1	3.1	3.1	7.3	2.8	32.5
A	19012008	149	15:34	15:54	37.2131	-75.6239	2.9	2.9	2.9	7.3	2.4	32.5
A	19012008	150	16:07	16:27	37.1947	-75.6397	2.8	2.8	2.8	7.3	2.4	32.5
A	19012008	151	16:40	17:00	37.2150	-75.6047	2.6	2.6	2.6	7.6	2.2	32.5
A	19012008	152	17:24	17:44	37.2001	-75.6103	3.0	3.0	3.0			
B	19012008	153	18:08	18:28	37.2011	-75.6342	2.9	2.9	2.9	7.3	1.4	32.5
B	19012008	154	18:43	19:03	37.1842	-75.6600	2.8	2.8	2.8	7.4	1.7	32.5
B	19012008	155	19:16	19:36	37.2022	-75.6264	2.6	2.6	2.6	7.4	1.7	32.5
B	19012008	156	19:50	20:10	37.2125	-75.5925	2.9	2.9	2.9	7.5	2.0	37.6
B	19012008	157	20:24	20:44	37.2142	-75.5697	3.2	3.2	3.2	7.6	2.3	32.7
B	19012008	158	21:02	21:22	37.2017	-75.6100	2.9	2.9	2.9	7.2	2.3	32.4
B	19012008	159	21:35	21:55	37.2108	-75.6369	3.1	3.1	3.1	7.2	2.1	32.4
B	19012008	160	22:07	22:27	37.2206	-75.6675	2.8	2.8	2.8	6.9	2.2	32.2

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
B	19012008	161	22:41	23:01	37.2364	-75.6572	2.8	2.8	2.8	7.0	2.2	32.2
B	19012008	162	23:13	23:33	37.2169	-75.6358	2.9	2.9	2.9	7.0	1.8	32.3
B	19012008	163	23:47	0:07	37.2367	-75.6742	3.0	3.0	3.0	6.8	1.4	32.2
A	20012008	164	0:25	0:45	37.2168	-75.6692	2.9	2.9	2.9	7.1	1.7	32.3
A	20012008	165	0:59	1:19	37.2192	-75.6567	3.0	3.0	3.0	7.1	1.7	32.3
A	20012008	166	1:30	1:45	37.2308	-75.6886	2.8	2.8	2.8	6.7	1.6	32.0
A	20012008	167	2:34	2:54	37.2347	-75.6335	3.1	3.1	3.1	7.0	2.4	32.2
A	20012008	168	3:16	3:36	37.2353	-75.6842	2.9	2.9	2.9	7.1	2.1	32.2
A	20012008	169	3:50	4:10	37.2425	-75.6514	2.8	2.8	2.8	7.1	2.3	32.2
A	20012008	170	4:22	4:42	37.2342	-75.6668	2.7	2.7	2.7	7.1	2.4	32.3
A	20012008	171	4:53	5:13	37.2394	-75.6589	2.9	2.9	2.9	7.1	1.4	32.3
A	20012008	172	5:24	5:44	37.2314	-75.6669	2.8	2.8	2.8	7.1	1.7	32.3
A	20012008	173	5:54	6:16	37.2369	-75.6633	2.9	2.9	2.9	7.1	1.7	32.3
B	20012008	174	6:32	6:52	37.2289	-75.6803	2.8	2.8	2.8	7.1	0.8	32.3
B	20012008	175	7:06	7:26	37.2408	-75.6606	2.7	2.7	2.7	7.1	0.4	32.3
B	20012008	176	12:28	12:48	36.5422	-75.7668	2.8	2.8	2.8	7.3	-1.4	30.3
B	20012008	177	13:05	13:25	36.5464	-75.7992	3.0	3.0	3.0	7.5	-0.6	30.2
B	20012008	178	14:40	15:00	36.5989	-75.6692	2.9	2.9	2.9	8.3	-0.9	32.4
B	20012008	179	15:15	15:35	36.6203	-75.6667	2.8	2.8	2.8	8.3	-0.9	32.4
B	20012008	180	15:50	16:10	36.6553	-75.6706	2.8	2.8	2.8	8.4	-0.5	32.4
B	20012008	181	16:23	16:43	36.6733	-75.6594	2.9	2.9	2.9	8.4	0.1	32.5
B	20012008	182	16:55	17:15	36.6536	-75.6334	2.7	2.7	2.7	8.3	-0.8	32.5
B	20012008	183	17:29	17:49	36.6167	-75.6511	2.8	2.8	2.8	8.3	-0.6	32.5
B	20012008	184	18:00	18:20	36.6017	-75.6501	2.6	2.6	2.6	8.3	-0.1	32.4
A	20012008	185	18:59	19:19	36.5719	-75.7567	2.8	2.8	2.8	7.6	-0.9	31.1
A	20012008	186	19:32	19:52	36.5433	-75.7606	2.8	2.8	2.8	7.3	-0.6	30.5
A	20012008	187	20:06	20:26	36.5281	-75.7725	2.9	2.9	2.9	7.4	-0.8	30.6
A	20012008	188	20:37	20:57	36.5561	-75.7625	3.0	3.0	3.0	7.4	-0.9	30.7
A	20012008	189	21:09	21:24	36.5667	-75.7578	2.9	2.9	2.9	7.6	-0.3	31.1
A	20012008	190	21:35	21:55	36.5928	-75.7642	3.1	3.1	3.1	7.6	-0.6	31.3
A	20012008	191	22:11	22:31	36.5592	-75.7736	3.1	3.1	3.1	7.1	-0.9	30.2
A	20012008	192	22:47	23:07	36.5397	-75.7711	3.0	3.0	3.0	6.9	-0.9	29.8
A	20012008	193	23:23	23:43	36.5594	-75.7847	2.9	2.9	2.9	6.8	-1.2	29.5
B	21012008	194	0:01	0:21	36.5206	-75.7700	2.9	2.9	2.9	6.9	-1.2	30.0
B	21012008	195	0:46	1:06	36.5519	-75.7689	2.9	2.9	2.9	7.1	-1.3	30.3
B	21012008	196	1:31	1:51	36.5494	-75.7550	2.8	2.8	2.8	7.1	-1.5	30.8
B	21012008	197	2:09	2:29	36.5501	-75.7678	2.9	2.9	2.9	7.0	-1.4	30.5

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
B	21012008	198	2:49	3:14	36.5419	-75.7675	2.9	2.9	2.9	7.3	-1.5	31.0
B	21012008	199	3:36	3:56	36.5664	-75.7719	2.9	2.9	2.9	7.4	-1.8	31.3
B	21012008	200	4:14	4:34	36.5378	-75.7597	2.6	2.6	2.6	7.3	-2.1	32.5
B	21012008	201	4:48	5:08	36.5575	-75.7744	2.7	2.7	2.7	7.3	-1.9	31.2
B	21012008	202	5:22	5:42	36.5408	-75.7619	2.9	2.9	2.9	7.6	-2.2	31.4
A	21012008	203	6:00	6:20	36.5572	-75.7681	2.8	2.8	2.8	7.7	-2.1	31.6
A	21012008	204	6:35	6:55	36.5347	-75.7542	2.6	2.6	2.6	7.7	-2.1	31.6
A	21012008	205	7:07	7:27	36.5506	-75.7650	2.8	2.8	2.8	7.5	-1.8	31.4
A	21012008	206	7:38	7:58	36.5350	-75.7683	3.1	3.1	3.1	7.3	-2.7	31.3
A	21012008	207	8:14	8:34	36.5072	-75.7747	2.8	2.8	2.8	7.3	-1.6	30.7
A	21012008	208	8:46	9:06	36.5400	-75.7661	2.9	2.9	2.9	7.3	-1.4	30.8
A	21012008	209	9:18	9:38	36.5675	-75.7501	3.0	3.0	3.0	7.5	-2.0	31.4
A	21012008	210	9:57	10:17	36.5839	-75.7642	3.1	3.1	3.1	7.2	-1.7	31.2
A	21012008	211	10:32	10:48	36.5953	-75.7569	2.9	2.9	2.9	7.4	-1.8	31.4
A	21012008	212	11:06	11:26	36.5822	-75.7614	3.0	3.0	3.0	7.2	-1.8	30.9
B	21012008	213	12:04	12:24	36.5553	-75.7600	2.8	2.8	2.8	7.2	-1.8	31.0
B	21012008	214	12:46	13:06	36.5625	-75.7631	2.9	2.9	2.9	7.3	-1.7	30.7
B	21012008	215	13:21	13:41	36.5411	-75.7678	3.0	3.0	3.0	6.9	-1.8	30.3
B	21012008	216	14:00	14:20	36.5586	-75.7633	3.0	3.0	3.0	7.1	-0.3	30.4
B	21012008	217	14:35	14:55	36.5433	-75.7739	2.9	2.9	2.9	7.3	-1.3	30.7
B	21012008	218	15:07	15:22	36.5572	-75.7622	3.0	3.0	3.0	7.4	0.3	30.8
B	21012008	219	15:39	15:59	36.5347	-75.7736	2.6	2.6	2.6	7.2	-1.0	30.9
B	21012008	220	16:10	16:30	36.5567	-75.7661	2.8	2.8	2.8	7.2	-1.1	30.8
B	21012008	221	16:43	17:02	36.5756	-75.7764	2.9	2.9	2.9	7.2	-0.5	30.8
B	21012008	222	17:35	17:55	36.5169	-75.7683	2.9	2.9	2.9	6.9	-0.9	30.4
A	21012008	223	18:09	18:29	36.5335	-75.7714	2.7	2.7	2.7	6.9	-0.8	30.2
A	21012008	224	18:42	19:02	36.5168	-75.7683	2.8	2.8	2.8	6.8	-0.5	30.3
A	21012008	225	19:12	19:27	36.5575	-75.7503	2.7	2.7	2.7	6.9	-0.4	30.4
A	21012008	226	19:43	20:03	36.5647	-75.7800	3.0	3.0	3.0	6.5	-0.2	30.3
A	21012008	227	20:15	20:35	36.5403	-75.7903	2.9	2.9	2.9	6.2	0.0	28.7
A	21012008	228	20:46	21:01	36.5178	-75.8064	2.9	2.9	2.9	6.4	0.1	28.9
A	21012008	229	21:18	21:33	36.5136	-75.7668	3.1	3.1	3.1	6.1	0.3	29.3
A	21012008	230	21:52	22:12	36.5334	-75.7661	3.1	3.1	3.1	6.8	0.6	30.1
A	21012008	231	22:23	22:43	36.5672	-75.7606	3.1	3.1	3.1	7.0	0.9	30.7
A	21012008	232	22:56	23:16	36.5914	-75.7644	3.0	3.0	3.0	6.8	1.0	30.7
A	21012008	233	23:33	23:53	36.5664	-75.7714	2.9	2.9	2.9	6.7	1.3	30.4
B	22012008	234	0:09	0:29	36.5669	-75.7586	2.9	2.9	2.9	6.9	1.8	30.6

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
B	22012008	235	0:45	1:05	36.5650	-75.7703	2.8	2.8	2.8	6.4	2.3	30.4
B	22012008	236	1:29	1:49	36.5502	-75.7656	2.8	2.8	2.8	6.3	3.0	30.2
B	22012008	237	2:04	2:24	36.5414	-75.7692	2.9	2.9	2.9	6.2	3.6	29.8
B	22012008	238	2:42	3:02	36.5261	-75.7708	2.9	2.9	2.9	6.2	3.9	30.0
B	22012008	239	3:35	3:55	36.5103	-75.7406	2.9	2.9	2.9	6.3	5.0	31.0
B	22012008	240	4:05	4:25	36.4906	-75.7300	2.9	2.9	2.9	6.1	5.9	30.8
B	22012008	241	4:59	5:19	36.4600	-75.8122	2.8	2.8	2.8	6.5	6.0	29.2
B	22012008	242	5:29	5:49	36.4881	-75.8167	2.7	2.7	2.7	6.3	5.9	29.0
B	22012008	243	5:59	6:19	36.5128	-75.8364	2.9	2.9	2.9	6.3	46.0	29.1
A	22012008	244	6:34	6:54	36.5367	-75.8242	2.8	2.8	2.8	5.9	5.8	28.9
A	22012008	245	7:35	7:55	36.5817	-75.7675	2.9	2.9	2.9	6.6	6.8	29.9
A	22012008	246	8:00	8:26	36.5608	-75.7503	3.1	3.1	3.1	6.7	7.9	29.9
A	22012008	247	8:38	8:58	36.5169	-75.7502	3.0	3.0	3.0	6.6	9.1	29.9
A	22012008	248	9:09	9:29	36.5614	-75.7683	3.1	3.1	3.1	6.1	8.1	28.9
A	22012008	249	9:47	10:07	36.5517	-75.8150	3.1	3.1	3.1	6.4	8.1	28.9
A	22012008	250	10:30	10:50	36.5125	-75.8367	3.1	3.1	3.1	6.2	8.1	28.7
A	22012008	251	11:01	11:21	36.4903	-75.8342	3.0	3.0	3.0	6.3	8.2	29.0
A	22012008	252	14:02	14:17	36.4625	-75.7508	3.0	3.0	3.0	6.9	9.4	29.6
A	22012008	253	14:35	14:55	36.4353	-75.7514	2.9	2.9	2.9	6.9	9.5	29.6
A	22012008	254	15:17	15:37	36.4002	-75.7903	2.9	2.9	2.9	7.1	9.5	29.9
A	22012008	255	15:52	16:12	36.4011	-75.7703	2.8	2.8	2.8	7.0	9.4	29.8
A	22012008	256	16:29	16:54	36.4375	-75.7400	2.7	2.7	2.7	7.0	8.8	29.6
A	22012008	257	17:24	17:44	36.4668	-75.7133	2.7	2.7	2.7	7.0	9.0	29.6
A	22012008	258	17:57	18:17	36.4606	-75.7367	2.9	2.9	2.9	7.0	9.4	29.7
B	22012008	259	18:31	18:51	36.4486	-75.7531	2.8	2.8	2.8	7.0	9.5	29.7
B	22012008	260	19:03	19:23	36.4644	-75.7168	2.6	2.6	2.6	6.9	9.2	31.9
B	22012008	261	19:39	19:59	36.4668	-75.7131	3.1	3.1	3.1	6.9	9.4	29.5
B	22012008	262	20:13	20:33	36.4668	-75.7131	3.1	3.1	3.1	6.9	9.1	29.7
B	22012008	263	20:47	21:02	36.4567	-75.7228	2.9	2.9	2.9	7.0	9.0	29.8
B	22012008	264	21:25	21:45	36.4597	-75.7228	2.9	2.9	2.9	7.1	8.8	29.8
B	22012008	265	21:59	22:19	36.4364	-75.7103	3.0	3.0	3.0	7.0	8.8	30.0
B	22012008	266	22:45	23:05	36.4103	-75.7517	2.9	2.9	2.9	7.1	8.6	30.2
B	22012008	267	23:18	23:38	36.3900	-75.7517	3.0	3.0	3.0	7.1	9.7	30.7
A	23012008	268	0:07	0:27	36.3558	-75.7928	3.0	3.0	3.0	7.0	9.9	29.9
A	23012008	269	1:52	2:12	36.5372	-75.8289	3.0	3.0	3.0	7.0	7.8	29.7
A	23012008	270	2:51	3:14	36.5553	-75.7502	3.0	3.0	3.0	6.8	7.6	29.6
A	23012008	271	3:37	3:57	36.5522	-75.7553	2.9	2.9	2.9	6.9	7.4	29.6

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
A	23012008	272	4:12	4:30	36.5414	-75.7742	2.7	2.7	2.7	6.9	7.3	29.7
A	23012008	273	4:43	5:03	36.5186	-75.7714	2.9	2.9	2.9	6.9	7.2	29.7
A	23012008	274	5:15	5:35	36.5428	-75.7550	2.7	2.7	2.7	6.8	7.1	29.6
A	23012008	275	5:53	6:13	36.5600	-75.7286	2.6	2.6	2.6	6.9	6.8	29.5
B	23012008	276	6:25	6:45	36.5511	-75.7603	2.9	2.9	2.9	6.9	6.5	29.7
B	23012008	277	7:16	7:38	36.5211	-75.7892	2.8	2.8	2.8	6.9	6.5	29.7
B	23012008	278	7:49	8:09	36.5461	-75.7736	3.1	3.1	3.1	7.0	6.3	29.7
B	23012008	279	8:22	8:37	36.5689	-75.7586	3.2	3.2	3.2	6.9	6.0	29.6
B	23012008	280	8:49	9:09	36.5867	-75.7631	2.9	2.9	2.9	7.0	6.0	29.7
B	23012008	281	9:20	9:40	36.5650	-75.7672	2.8	2.8	2.8	7.0	6.0	29.8
B	23012008	282	9:52	10:17	36.5347	-75.7753	3.0	3.0	3.0	7.1	6.3	29.8
B	23012008	283	10:31	10:53	36.5158	-75.7667	3.1	3.1	3.1	7.0	6.4	29.8
B	23012008	284	11:06	11:26	36.5419	-75.7683	3.2	3.2	3.2	7.1	7.3	29.9
B	23012008	285	11:42	11:57	36.5108	-75.7667	3.1	3.1	3.1	7.1	6.5	29.9
A	23012008	286	12:18	12:38	36.5003	-75.7728	3.0	3.0	3.0	7.2	6.3	29.9
A	23012008	287	13:11	13:31	36.5219	-75.7733	2.9	2.9	2.9	7.2	6.8	29.9
A	23012008	288	13:48	14:13	36.5353	-75.7703	3.2	3.2	3.2	7.2	7.4	29.8
A	23012008	289	14:27	14:42	36.5108	-75.7756	3.0	3.0	3.0	7.3	6.3	30.0
A	23012008	290	14:59	15:21	36.5314	-75.7669	2.9	2.9	2.9	7.3	6.7	29.9
A	23012008	291	15:36	15:56	36.5372	-75.7642	2.7	2.7	2.7	7.2	7.6	29.8
A	23012008	292	16:07	16:27	36.5200	-75.7847	2.8	2.8	2.8	7.3	7.6	30.0
A	23012008	293	16:37	16:57	36.4953	-75.7864	2.9	2.9	2.9	7.2	6.6	30.0
B	23012008	294	18:37	18:57	36.2542	-75.7335	2.7	2.7	2.7	7.5	6.9	30.5
B	23012008	295	19:06	19:26	36.2350	-75.7508	2.8	2.8	2.8	7.6	6.9	30.5
B	23012008	296	19:39	19:59	36.2172	-75.7431	2.9	2.9	2.9	7.5	6.9	30.5
B	23012008	297	20:09	20:29	36.2431	-75.7544	2.9	2.9	2.9	7.5	6.9	30.5
B	23012008	298	20:42	21:02	36.2608	-75.7581	2.8	2.8	2.8	7.6	7.2	30.6
B	23012008	299	21:13	21:33	36.2272	-75.7547	2.9	2.9	2.9	7.6	7.2	30.6
B	23012008	300	21:47	22:07	36.2001	-75.7406	3.1	3.1	3.1	7.6	7.3	30.6
B	23012008	301	22:19	22:39	36.2356	-75.7442	2.8	2.8	2.8	7.5	7.4	30.6
B	23012008	302	22:52	23:12	36.2631	-75.7536	2.9	2.9	2.9	7.6	7.6	30.8
B	23012008	303	23:30	23:50	36.2558	-75.7336	3.0	3.0	3.0	7.6	7.7	30.6
A	24012008	304	0:02	0:22	36.2317	-75.7586	2.8	2.8	2.8	7.6	7.7	30.5
A	24012008	305	0:42	1:02	36.2203	-75.7431	2.9	2.9	2.9	7.6	7.7	31.5
A	24012008	306	1:13	1:33	36.2486	-75.7334	2.9	2.9	2.9	7.4	7.7	30.5
A	24012008	307	1:52	2:12	36.2631	-75.7558	2.9	2.9	2.9	7.5	7.7	30.5
A	24012008	308	2:25	2:45	36.2169	-75.7561	3.1	3.1	3.1	7.6	7.6	30.6

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
A	24012008	309	3:01	3:21	36.2239	-75.7483	2.8	2.8	2.8	7.6	6.7	30.6
A	24012008	310	3:32	3:52	36.2419	-75.7567	3.0	3.0	3.0	7.5	6.7	30.6
A	24012008	311	4:02	4:22	36.2603	-75.7572	2.8	2.8	2.8	7.5	6.5	30.6
A	24012008	312	4:32	4:52	36.2425	-75.7547	2.9	2.9	2.9	7.6	6.7	30.6
A	24012008	313	5:04	5:24	36.2264	-75.7406	2.7	2.7	2.7	7.5	7.1	30.6
A	24012008	314	5:33	5:53	36.2456	-75.7536	2.9	2.9	2.9	9.5	7.3	30.6
B	24012008	315	6:03	6:23	36.2550	-75.7575	2.6	2.6	2.6	7.4	7.6	30.6
B	24012008	316	6:33	6:53	36.2406	-75.7581	2.9	2.9	2.9	7.4	7.7	30.7
B	24012008	317	7:24	7:49	36.2153	-75.6886	2.8	2.8	2.8	7.3	8.3	30.8
B	24012008	318	8:01	8:21	36.2181	-75.6672	2.8	2.8	2.8	7.3	8.6	30.6
B	24012008	319	8:33	8:53	36.2036	-75.6711	2.9	2.9	2.9	7.3	8.5	30.4
B	24012008	320	9:14	9:34	36.1758	-75.7144	2.9	2.9	2.9	7.3	8.5	30.4
B	24012008	321	9:45	10:05	36.1442	-75.7089	3.0	3.0	3.0	7.3	8.3	30.4
B	24012008	322	10:19	10:39	36.1231	-75.7075	3.1	3.1	3.1	7.4	9.0	30.5
B	24012008	323	10:50	11:10	36.0969	-75.6922	2.9	2.9	2.9	7.4	9.4	30.5
A	24012008	324	12:02	12:22	36.0533	-75.5536	2.9	2.9	2.9	7.8	9.0	30.9
A	24012008	325	12:38	12:58	36.0419	-75.5336	2.9	2.9	2.9	7.7	9.4	30.7
A	24012008	326	13:13	13:33	36.0506	-75.5664	3.0	3.0	3.0	7.8	10.9	30.7
A	24012008	327	13:50	14:10	36.0192	-75.5503	2.9	2.9	2.9	7.9	9.9	31.1
A	24012008	328	14:25	14:46	36.0189	-75.5002	2.9	2.9	2.9	7.8	9.4	30.8
A	24012008	329	15:03	15:18	35.9835	-75.5183	3.0	3.0	3.0	7.9	9.1	31.1
	18012007	1	7:25	7:40	35.6001	-75.3681	2.3	2.7	2.5	13.1	13.2	32.9
	18012007	2	8:12	8:27	35.6328	-75.3903	2.3	2.7	2.5	12.8	14.8	32.8
	18012007	3	8:49	9:04	35.6519	-75.4006	2.3	2.7	2.5	12.6	14.1	32.6
	18012007	4	9:31	9:46	35.6747	-75.4081	2.3	2.7	2.5	12.5	14	32.6
	18012007	5	10:15	10:30	35.7100	-75.3686	2.3	2.7	2.5	12.4	13.6	32.6
	18012007	6	10:46	11:01	35.7328	-75.3756	2.3	2.7	2.5	12.3	13.6	32.6
	18012007	7	11:41	11:56	35.7658	-75.3756	2.3	2.7	2.5	12.2	13.3	32.4
	18012007	8	14:18	14:33	35.8431	-75.4525	2.3	2.7	2.5	12.2	11.5	32.1
	18012007	9	14:50	15:05	35.8672	-75.4742	2.5	2.7	2.6	12.1	11.5	32.2
	18012007	10	15:23	15:38	35.8875	-75.4892	2.3	2.7	2.5	11.1	11.3	29.5
	18012007	11	15:57	16:12	35.9011	-75.5242	2.7	2.7	2.7	10.9	11.3	29.2
	18012007	12	18:04	18:19	35.9419	-75.5501	2.3	2.7	2.5	10.9	11.3	29.2
	18012007	13	18:56	19:11	35.9625	-75.5864	2.3	2.7	2.5	10.6	10.6	28
	18012007	14	19:37	19:52	35.9911	-75.6036	2.3	2.7	2.5	10.6	10.5	27.7
	18012007	15	20:20	20:35	36.0064	-75.6225	2.5	2.7	2.6	10.6	10.5	27.6
	18012007	16	21:01	21:16	36.0328	-75.6419	2.5	2.7	2.6	10.6	10.6	27.3

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
	18012007	17	21:35	21:50	36.0542	-75.6594	2.3	2.7	2.5	10.5	10.6	27.1
	18012007	18	22:08	22:23	36.0683	-75.6501	2.7	2.7	2.7	10.4	10.6	27
	18012007	19	22:48	23:03	36.1017	-75.6697	2.6	2.7	2.7	10.4	10.5	26.9
	19012007	20	0:15	0:30	36.1481	-75.7092	2.3	2.7	2.5	10.2	9.7	26.5
	19012007	21	12:53	1:08	36.1694	-75.7122	2.3	2.7	2.5	10.2	9.6	26.7
	19012007	22	1:28	1:43	36.1850	-75.7002	2.3	2.7	2.5	10.7	9.7	29
	19012007	23	2:01	2:16	36.2036	-75.7150	2.4	2.7	2.6	10.7	9.3	28.6
	19012007	24	2:36	2:51	36.2214	-75.7217	2.4	2.7	2.6	10.5	8.1	27.9
	19012007	25	3:14	3:29	36.2478	-75.7358	2.6	2.7	2.7	10.4	7.2	27.6
	19012007	26	3:47	4:07	36.2644	-75.7342	2.6	2.7	2.7	10.9	7.7	30.9
	19012007	27	4:31	4:51	36.2742	-75.7069	2.7	2.7	2.7	11.3	7.2	31.5
	19012007	28	5:11	5:31	36.3050	-75.7186	2.7	2.7	2.7	11.3	7	31.5
	19012007	29	5:51	6:11	36.3169	-75.7247	2.7	2.7	2.7	11.3	6.7	31.3
	19012007	30	6:47	7:07	36.3681	-75.7714	2.3	2.7	2.5	10.1	6.4	25.8
	19012007	31	7:30	7:50	36.3834	-75.7834	2.3	2.7	2.5	9.8	6.5	26.4
	19012007	32	15:54	16:14	36.3834	-75.7769	2.7	2.7	2.7	10.5	8.7	28.1
	19012007	33	16:34	16:59	36.4086	-75.7335	2.5	2.7	2.6	10.5	8.7	28.1
	19012007	34	17:22	17:42	36.4161	-75.7069	2.5	2.7	2.6	10.5	8.7	28.1
	19012007	35	18:09	18:29	36.4408	-75.7219	2.8	2.8	2.8	10.8	10.5	30.1
	19012007	36	18:51	19:11	36.4483	-75.7511	2.8	2.8	2.8	10.5	10.1	29
	19012007	37	19:34	19:54	36.4733	-75.7614	2.5	2.5	2.5	10.4	10.1	28.8
	19012007	38	20:14	20:34	36.4667	-75.7308	2.8	2.8	2.8	10.7	9.5	30.2
	19012007	39	20:59	21:19	36.5064	-75.7403	2.7	2.7	2.7	10.6	8.8	30
	19012007	40	21:47	22:07	36.5175	-75.7922	2.9	2.9	2.9	10.3	8.7	28.7
	19012007	41	22:44	23:04	36.5372	-75.8150	2.8	2.8	2.8	10.1	7.4	27.7
	19012007	42	23:45	0:00	36.5239	-75.8050	2.5	2.5	2.5	9.9	6.5	27.5
	20012007	43	0:24	0:39	36.5536	-75.8053	2.7	2.7	2.7	10.4	6.1	29.6
	20012007	44	1:14	1:29	36.5589	-75.7653	2.6	2.6	2.6	10.4	5.2	29.7
	20012007	45	1:55	2:10	36.5347	-75.7900	2.7	2.7	2.7	10.3	5.1	29.2
	20012007	46	2:32	2:47	36.5186	-75.7728	2.5	2.7	2.6	10.6	4.6	30.1
	20012007	47	3:07	3:22	36.5458	-75.7501	2.5	2.6	2.6	10.6	4.3	30.2
	20012007	48	3:43	3:58	36.5747	-75.7569	2.6	2.7	2.7	10.7	4.6	30.4
	20012007	49	4:22	4:37	36.5706	-75.7206	2.7	2.7	2.7	10.7	4.6	30.7
	20012007	50	4:59	5:14	36.5669	-75.6925	2.7	2.7	2.7	10.7	4.9	30.7
	20012007	51	5:33	5:53	36.6006	-75.6711	2.9	2.9	2.9	10.7	4.6	31.3
	20012007	52	6:16	6:36	36.6256	-75.6372	2.8	2.8	2.8	10.7	4.6	31.4
	20012007	53	18:11	18:31	37.0786	-75.6258	2.8	2.8	2.8	10.6	4.3	31.8

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
	20012007	54	18:48	19:08	37.1025	-75.6275	2.8	2.8	2.8	10.6	4.2	31.9
	20012007	55	19:28	19:48	37.1228	-75.5925	2.8	2.8	2.8	10.7	4.2	32.3
	20012007	56	20:05	20:25	37.1525	-75.5808	2.8	2.8	2.8	10.7	4.2	32.4
	20012007	57	20:46	21:06	37.1744	-75.5539	2.8	2.8	2.8	10.7	4.2	32.7
	20012007	58	21:26	21:46	37.1675	-75.5181	2.7	2.7	2.7	10.9	4.2	33
	20012007	59	22:15	22:30	37.2133	-75.5183	2.8	2.8	2.8	10.5	4.2	32.7
	20012007	60	22:50	23:10	37.2364	-75.5481	2.9	2.9	2.9	10.2	4.2	32.7
	20012007	61	23:36	23:56	37.2575	-75.5883	2.7	2.7	2.7	9.9	4.2	32.6
	21012007	62	0:25	0:45	37.2669	-75.6217	2.5	2.6	2.6	9.7	4.2	32.6
	21012007	63	1:10	1:30	37.3128	-75.6364	2.5	2.6	2.6	9.4	4.2	32.7
	21012007	64	1:53	2:13	37.3358	-75.6286	2.5	2.5	2.5	9.4	4.2	32.6
	21012007	65	2:30	2:50	37.3481	-75.5942	2.6	2.6	2.6	9.5	4.2	32.8
	21012007	66	3:06	3:26	37.3364	-75.5689	2.7	2.7	2.7	9.7	4.2	32.8
	21012007	67	3:54	4:14	37.3178	-75.5275	2.9	2.9	2.9	9.8	4.2	32.7
	21012007	68	4:38	4:58	37.2883	-75.5172	3	3	3.0	9.8	4.2	32.7
	21012007	69	5:42	6:02	37.3256	-75.5950	2.8	2.8	2.8	9.5	4.2	32.7
	21012007	70	6:26	6:46	37.3168	-75.6369	2.8	2.8	2.8	9.2	4.2	32.7
	21012007	71	7:18	7:38	37.3334	-75.6169	2.8	2.8	2.8	9.2	4.2	32.6
	21012007	72	7:59	8:19	37.3667	-75.6231	2.8	2.8	2.8	8.4	4.2	32.1
	21012007	73	8:39	8:59	37.4039	-75.6168	2.8	2.8	2.8	8.3	4.2	32
	21012007	74	9:14	9:34	37.4397	-75.6208	2.9	2.9	2.9	8.6	0.1	32.3
	21012007	75	9:55	10:15	37.4606	-75.6228	2.6	2.6	2.6	8.5	1	32.2
	21012007	76	10:30	10:50	37.4168	-75.6372	2.8	2.8	2.8	8.3	1.7	32.1
	21012007	77	11:06	11:26	37.4031	-75.6336	2.9	2.9	2.9	8.2	1	32
	21012007	78	11:48	12:08	37.3708	-75.6603	2.6	2.6	2.6	8.2	1.3	32.1
	21012007	79	12:25	12:45	37.3425	-75.6501	2.8	2.8	2.8	8.7	1.3	32.4
	21012007	80	13:01	13:21	37.3002	-75.6669	2.7	2.7	2.7	8.6	0.5	32.4
	21012007	81	13:41	14:01	37.2897	-75.6875	2.8	2.8	2.8	8.2	0.1	32.3
	21012007	82	14:17	14:37	37.2725	-75.7089	2.6	2.8	2.7	8.2	-0.3	32.2
	21012007	83	14:52	15:12	37.2442	-75.7189	2.6	2.6	2.6	8.1	-0.4	32.2
	21012007	84	17:39	17:59	37.2058	-75.6717	2.8	2.8	2.8	9.1	1.3	32.4
	21012007	85	18:17	18:38	37.2017	-75.7078	2.7	2.7	2.7	8.3	1.1	32.4
	21012007	86	19:05	19:25	37.2169	-75.6994	3	3	3.0	8.3	1.4	32.4
	21012007	87	19:45	20:05	37.2022	-75.6736	2.9	2.9	2.9	8.6	2.6	32.4
	21012007	88	20:24	20:44	37.1886	-75.7019	2.9	2.9	2.9	9	2.9	32.3
	21012007	89	21:06	21:26	37.1831	-75.7394	2.9	2.9	2.9	8.8	3.4	32.3
	21012007	90	21:41	22:01	37.2075	-75.7161	2.9	2.9	2.9	8.8	3.7	32.3

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
	21012007	91	22:14	22:34	37.2097	-75.6822	2.9	2.9	2.9	8.7	4.1	32.3
	21012007	92	22:56	23:15	37.2003	-75.6469	2.9	2.9	2.9	9.2	4.7	32.5
	21012007	93	23:37	23:57	37.1697	-75.6334	2.7	2.7	2.7	9.4	5.6	31.9
	22012007	94	0:17	0:37	37.1439	-75.6334	2.6	2.6	2.6	9.7	5.9	31.8
	22012007	95	0:56	1:16	37.1189	-75.6550	2.8	2.8	2.8	9.5	6.8	31.8
	22012007	96	1:34	1:54	37.1514	-75.6525	2.9	2.9	2.9	9.5	6.8	31.8
	22012007	97	2:16	2:36	37.1694	-75.6168	2.7	2.7	2.7	9.5	7.2	31.9
	22012007	98	3:04	3:24	37.1958	-75.6231	2.6	2.6	2.6	9	7	32.4
	22012007	99	3:48	4:08	37.2169	-75.6539	2.7	2.7	2.7	8.8	7	32.3
	22012007	100	4:26	4:46	37.1986	-75.6825	2.7	2.7	2.7	8.6	6.8	32.2
	22012007	101	5:06	5:26	37.1978	-75.7192	2.9	2.9	2.9	8.2	6.9	32.3
	22012007	102	6:02	6:25	37.2069	-75.6336	2.7	2.7	2.7	8.8	7.2	32.4
	22012007	103	8:09	8:29	37.2002	-75.6092	2.9	2.9	2.9	9.1	7.2	32.4
	22012007	104	8:49	9:09	37.1908	-75.6001	2.8	2.8	2.8	9.1	7.2	32.4
	22012007	105	9:28	9:48	37.2053	-75.6256	2.9	2.9	2.9	9.6	7.8	32.5
	22012007	106	10:07	10:27	37.1903	-75.6392	2.9	2.9	2.9	9.5	6.8	32.5
	22012007	107	10:44	11:04	37.2092	-75.6269	2.9	2.9	2.9	9.6	6.9	32.5
	22012007	108	11:32	11:52	37.2075	-75.6092	2.7	2.7	2.7	9.7	5.8	32.5
	22012007	109	12:07	12:27	37.2192	-75.6261	2.5	2.5	2.5	9.3	5.2	32.6
	22012007	110	12:48	13:08	37.2392	-75.6586	2.6	2.6	2.6	9.1	5	32.5
	22012007	111	13:27	13:47	37.2511	-75.6858	2.8	2.8	2.8	8.5	5.1	32.2
	22012007	112	14:03	14:23	37.2711	-75.6906	2.8	2.8	2.8	8.3	5.2	32.1
	22012007	113	14:36	14:56	37.2939	-75.6764	2.7	2.7	2.7	7.7	5	31.9
	22012007	114	15:11	15:31	37.3133	-75.6633	2.6	2.6	2.6	8.2	5.9	32
	22012007	115	15:47	16:07	37.2847	-75.6406	2.8	2.8	2.8	8.5	5.9	32.2
	22012007	116	16:30	16:50	37.2603	-75.6258	2.8	2.8	2.8	8.9	5.2	32.6
	22012007	117	17:09	17:29	37.2168	-75.6169	2.8	2.8	2.8	8.9	5.2	32.6
	22012007	118	17:46	18:09	37.2394	-75.6597	2.8	2.8	2.8	8.9	5.4	32.5
	22012007	119	19:43	20:03	37.2233	-75.6367	2.8	2.8	2.8	9.2	5.4	32.7
	22012007	120	20:56	21:16	37.2356	-75.6719	2.9	2.9	2.9	8.8	6	32.5
	22012007	121	21:30	21:50	37.2200	-75.6594	2.9	2.9	2.9	9.2	5.4	32.6
	22012007	122	22:05	22:25	37.2008	-75.6697	2.9	2.9	2.9	9.3	5.4	32.5
	22012007	123	22:40	23:00	37.1753	-75.6975	3	3	3.0	8.9	5.3	32.4
	22012007	124	23:15	23:35	37.1531	-75.7253	2.9	2.9	2.9	8.4	5.2	32.4
	22012007	125	23:51	0:11	37.1422	-75.7492	2.7	2.7	2.7	8.7	5.2	32.3
	23012007	126	0:30	0:50	37.1736	-75.7428	2.6	2.6	2.6	8.3	5.2	32.2
	23012007	127	1:02	1:22	37.1334	-75.7481	2.9	2.9	2.9	8.8	5.1	32.2

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
	23012007	128	1:36	1:56	37.1002	-75.7447	2.8	2.8	2.8	8.9	5.6	32.4
	23012007	129	2:10	2:30	37.1303	-75.7153	2.9	2.9	2.9	8.7	5.8	32.4
	23012007	130	2:44	3:04	37.1378	-75.6919	2.7	2.7	2.7	8.6	5.1	32.4
	23012007	131	3:19	3:39	37.1739	-75.7064	2.7	2.7	2.7	8.7	5.1	32.5
	23012007	132	3:57	4:17	37.1834	-75.7208	2.7	2.7	2.7	8.2	5	32.3
	23012007	133	4:31	4:51	37.1719	-75.7439	2.7	2.7	2.7	8.1	5.1	32.2
	23012007	134	5:05	5:25	37.1453	-75.7531	2.7	2.7	2.7	7.7	5	32.1
	23012007	135	7:08	7:31	37.1744	-75.6597	2.7	2.7	2.7	9.3	5.4	32.5
	23012007	136	7:52	8:12	37.1835	-75.6525	3	3	3.0	9.1	5	32.5
	23012007	137	8:26	8:46	37.2067	-75.6839	2.8	2.8	2.8	9	5.1	32.5
	23012007	138	9:01	9:21	37.2131	-75.6542	2.8	2.8	2.8	9.2	5.1	32.6
	23012007	139	9:36	9:56	37.2261	-75.6275	2.9	2.9	2.9	8.9	5.1	32.5
	23012007	140	10:11	10:31	37.2525	-75.6353			2.8	8.8	5	32.4
	23012007	141	10:47	11:07	37.2358	-75.6761	2.9	2.9	2.9	8.8	5.6	32.4
	23012007	142	14:59	15:19	36.5756	-75.8169	2.8	2.8	2.8	8.6	5.2	26.1
	23012007	143	15:36	15:55	36.5428	-75.8381	2.8	2.8	2.8	8.7	5.8	26.7
	23012007	144	16:14	16:29	36.5175	-75.8001	2.8	2.8	2.8	9	6	28.1
	23012007	145	16:47	17:02	36.4906	-75.8025	2.7	2.7	2.7	8.8	5.4	28
	23012007	146	17:19	17:34	36.4592	-75.8042	2.8	2.8	2.8	8.8	5.4	28
	23012007	147	17:56	18:13	36.4419	-75.7878	2.9	2.9	2.9	9.9	5.5	30.6
	23012007	148	18:30	18:45	36.4225	-75.7558	2.8	2.8	2.8	9.8	5.6	30.6
	23012007	149	19:06	19:21	36.4047	-75.7289	2.7	2.7	2.7	10.2	5.5	30.9
	23012007	150	19:40	19:55	36.3994	-75.7003	2.9	2.9	2.9	10.3	5.8	30.9
	23012007	151	20:15	20:36	36.3761	-75.7267	3	3	3.0	9.7	5.8	29.7
	23012007	152	20:52	21:12	36.3606	-75.7569	3	3	3.0	8.8	5.6	27.8
	23012007	153	21:36	21:56	36.3168	-75.7686	2.9	2.9	2.9	8.6	5.8	25.9
	23012007	154	22:14	22:29	36.2961	-75.7797	2.9	2.9	2.9	8.2	5.5	26.3
	23012007	155	22:44	22:59	36.2756	-75.7758	2.9	2.9	2.9	8.2	5.5	26.4
	23012007	156	23:15	23:30	36.2336	-75.7508	2.8	2.8	2.8	8.2	5.8	26.4
	23012007	157	23:45	0:00	36.2350	-75.7256	2.9	2.9	2.9	8.1	6	27.9
	24012007	158	0:14	0:29	36.2267	-75.6994	2.8	2.8	2.8	9.2	6.3	30.9
	24012007	159	1:39	1:54	36.2064	-75.6253	2.7	2.7	2.7	10.6	6.4	31.4
	24012007	160	2:10	2:25	36.2044	-75.6578	2.8	2.8	2.8	8.7	6.4	28
	24012007	161	2:41	2:56	36.1950	-75.6792	2.6	2.6	2.6	8.1	6	26.6
	24012007	162	3:13	3:28	36.1789	-75.6956	2.9	2.9	2.9	8.2	6.1	26.8
	24012007	163	3:45	4:00	36.1608	-75.6769	2.7	2.7	2.7	8.9	6	27.4
	24012007	164	4:18	4:38	36.1369	-75.6522	2.7	2.7	2.7	8.2	6.3	27.1

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
	24012007	165	5:26	5:46	36.0725	-75.6211	2.7	2.7	2.7	8.4	6.3	27.2
	24012007	166	6:06	6:27	36.0334	-75.6006	2.8	2.8	2.8	8.3	6.7	29.1
	24012007	167	6:48	7:03	36.0258	-75.5617	2.8	2.8	2.8	8.4	6.7	28.7
	24012007	168	7:22	7:39	36.0289	-75.5289	2.8	2.8	2.8	8.4	6.7	28.7
	24012007	169	7:56	8:11	36.0136	-75.5001	2.9	2.9	2.9	8.4	6.7	28.7
	24012007	170	8:31	8:47	35.9900	-75.5239	2.8	2.8	2.8	8.4	6.7	28.7
	24012007	171	9:04	9:19	35.9733	-75.5447	2.8	2.8	2.8	8.4	6.7	28.7
	24012007	172	9:48	10:03	35.9336	-75.5744	3	3	3.0	8.4	6.7	28.7
	24012007	173	10:22	10:32	35.9169	-75.5668	2.8	2.8	2.8	8.4	6.7	28.7
	24012007	174	10:51	11:06	35.9342	-75.5686	2.8	2.8	2.8	8.4	6.7	28.7
	24012007	175	11:23	11:38	35.9586	-75.5931	2.9	2.9	2.9	8.4	6.7	28.7
	24012007	176	11:55	12:05	35.9553	-75.6078	2.8	2.8	2.8	8.4	6.7	28.7
	24012007	177	12:20	12:35	35.9411	-75.6019	2.9	2.9	2.9	8.4	6.7	28.7
	24012007	178	12:49	13:04	35.9133	-75.5669	2.7	2.7	2.7	9.1	7.7	28.1
	24012007	179	14:20	14:35	35.9075	-75.5168	2.9	2.9	2.9	8.8	6.7	27.5
	24012007	180	14:50	15:05	35.8753	-75.5369	2.8	2.8	2.8	9.2	7.2	28.1
	24012007	181	15:20	15:35	35.8586	-75.5436	2.8	2.8	2.8	9.3	7	28.5
	24012007	182	16:08	16:23	35.8158	-75.4834	2.7	2.7	2.7	5.3	6.9	28.5
	24012007	183	16:53	17:08	35.7853	-75.4358	2.8	2.8	2.8	9.4	7.4	28.9
	24012007	184	17:25	17:40	35.7502	-75.4168	2.7	2.7	2.7	9.4	7.4	29
	24012007	185	17:59	18:14	35.7428	-75.4197	2.7	2.7	2.7	9.6	7.2	29.3
	19012006	1	22:06	22:26	35.57	-75.37	3.1	3.1	3.1	14.0	13.6	35.0
	19012006	2	22:52	23:12	35.62	-75.39	3.2	3.2	3.2	12.9	12.5	34.5
	19012006	3	23:53	0:03	35.60	-75.46	3.2	3.2	3.2	12.3	12.5	34.0
	20012006	4	1:01	1:20	35.75	-75.44	3.2	3.2	3.2	12.3	11.0	32.0
	20012006	5	1:36	1:58	35.78	-75.44	3.2	3.2	3.2	12.3	11.0	31.0
	20012006	6	2:21	2:41	35.83	-75.45	3.2	3.2	3.2		11.0	30.0
	20012006	7	3:00	3:27	35.83	-75.49	3.2	3.2	3.2		10.0	30.0
	20012006	8	4:26	4:46	35.95	-75.58	3.2	3.2	3.2		10.0	30.0
	20012006	9	5:37	5:52	36.00	-75.62	3.0	3.0	3.0		9.5	30.0
	20012006	10	6:32	6:47	36.05	-75.64	3.1	3.1	3.1	9.8	9.8	33.0
	20012006	11	7:13	7:28	36.07	-75.61	3.0	3.0	3.0	9.8	9.0	33.0
	20012006	12	7:52	8:07	36.07	-75.58	3.0	3.0	3.0	9.8	9.0	33.0
	20012006	13	8:31	8:46	36.04	-75.56	3.0	3.0	3.0		9.0	33.0
	20012006	14	9:15	9:25	36.03	-75.55	3.0	3.0	3.0	10.7	11.0	33.0
	20012006	15	9:46	9:56	36.04	-75.57	3.0	3.0	3.0	10.7	14.5	33.0
	20012006	16	10:17	10:27	36.05	-75.67	3.1	3.1	3.1	10.7	14.5	33.0

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
	20012006	17	11:07	11:10	36.08	-75.67	3.1	3.1	3.1	10.7	17.0	33.0
	20012006	18	11:34	11:44	36.11	-75.70	3.2	3.2	3.2	10.7	17.0	33.0
	20012006	19	11:58	12:10	36.13	-75.71	3.2	3.2	3.2	10.2	16.0	33.0
	20012006	20	12:22	12:34	36.14	-75.72	3.2	3.2	3.2	10.2	16.0	33.0
	20012006	21	12:47	12:59	36.15	-75.73	3.2	3.2	3.2	10.2	16.0	33.0
	20012006	22	13:11	13:23	36.17	-75.74	3.2	3.2	3.2	10.7	16.3	33.0
	20012006	23	13:35	13:52	36.19	-75.74	3.2	3.2	3.2	10.7	16.3	33.0
	20012006	24	14:11	14:28	36.23	-75.75	3.2	3.2	3.2	10.7	16.0	33.0
	20012006	25	14:47	15:04	36.23	-75.77	3.2	3.2	3.2	10.7	16.0	33.0
	20012006	26	15:25	15:38	36.29	-75.77	3.2	3.2	3.2	10.7		33.0
	20012006	27	16:01	16:13	36.32	-75.78	3.2	3.2	3.2	10.7	16.0	33.0
	20012006	28	16:30	16:42	36.34	-75.78	3.2	3.2	3.2	10.7	16.0	33.0
	20012006	29	16:55	17:12	36.37	-75.79	3.2	3.2	3.2	10.7	14.5	33.0
	20012006	30	17:25	17:42	36.39	-75.79	3.2	3.2	3.2	10.7	14.5	33.0
	20012006	31	18:01	18:11	36.42	-75.81	3.1	3.1	3.1	10.7	12.5	33.0
	20012006	32	18:28	18:38	36.44	-75.81	3.0	3.0	3.0	10.7	12.5	33.0
	20012006	33	19:02	19:17	36.47	-75.78	3.0	3.0	3.0	10.7	12.0	33.0
	20012006	34	19:32	19:47	36.49	-75.79	3.3	3.3	3.3	10.7	12.0	33.0
	20012006	35	20:03	20:18	36.52	-75.79	3.0	3.0	3.0	10.7	12.0	33.0
	20012006	36	20:33	20:53	36.53	-75.82	3.0	3.0	3.0	10.7	11.0	33.0
	20012006	37	21:09	21:29	36.55	-75.84	3.0	3.0	3.0	8.7	11.5	33.0
	20012006	38	21:58	22:18	36.51	-75.83	2.8	2.8	2.8	8.6	11.0	33.0
	20012006	39	22:31	22:56	36.49	-75.83	3.0	3.0	3.0	8.6	10.8	33.0
	20012006	40	23:16	23:31	36.47	-75.83	3.0	3.0	3.0	8.6	10.8	33.0
	20012006	41	23:57	0:12	36.51	-75.82	3.2	3.2	3.2	8.6	10.8	33.0
	21012006	42	0:40	0:58	36.54	-75.81	3.2	3.2	3.2	8.8	10.8	33.0
	21012006	43	1:17	1:40	36.53	-75.77	3.2	3.2	3.2	8.8	11.0	33.0
	21012006	44	1:56	2:19	36.52	-75.76	3.2	3.2	3.2	8.8	10.8	33.0
	21012006	45	2:35	2:58	36.54	-75.78	3.2	3.2	3.2	8.7	10.8	33.0
	21012006	46	3:12	3:35	36.50	-75.75	3.2	3.2	3.2	8.7	10.7	33.0
	21012006	47	3:51	4:15	36.47	-75.77	3.2	3.2	3.2	8.7	10.7	33.0
	21012006	48	4:41	5:05	36.46	-75.72	3.2	3.2	3.2	8.9	10.5	33.0
	21012006	49	5:25	5:49	36.42	-75.72	3.2	3.2	3.2	8.9	11.0	33.0
	21012006	50	6:12	6:27	36.41	-75.70	3.2	3.2	3.2	8.8	11.0	34.0
	21012006	51	6:51	7:06	36.44	-75.71	3.0	3.0	3.0	8.8	11.0	34.0
	21012006	52	7:35	7:50	36.45	-75.74	3.0	3.0	3.0	8.9	11.0	33.0
	21012006	53	8:20	8:35	36.45	-75.75	3.0	3.0	3.0	8.8	11.0	34.0

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
	21012006	54	9:01	9:16	30.46	-75.76	3.2	3.2	3.2	8.0	12.0	34.0
	21012006	55	9:41	9:56	36.46	-75.74	3.0	3.0	3.0	8.8	12.0	34.0
	21012006	56	10:22	10:37	36.49	-75.74	3.0	3.0	3.0	8.8	12.0	34.0
	21012006	57	11:00	11:15	36.51	-75.73	3.0	3.0	3.0	8.8	12.0	34.0
	21012006	58	11:36	11:51	36.49	-75.74	3.1	3.1	3.1	8.8	13.5	34.0
	21012006	59	12:04	12:21	36.46	-75.73	3.2	3.2	3.2	8.8	15.0	33.0
	21012006	60	12:37	12:54	36.45	-75.74	3.2	3.2	3.2	8.8	15.0	33.0
	21012006	61	13:08	13:26	36.46	-75.74	3.2	3.2	3.2	8.8	15.1	33.0
	21012006	62	13:39	13:56	36.44	-75.74	3.2	3.2	3.2	9.0	15.1	33.0
	21012006	63	14:09	14:27	36.42	-75.74	3.2	3.2	3.2	9.0	14.5	33.0
	21012006	64	14:40	14:57	36.44	-75.77	3.2	3.2	3.2	9.0	14.5	33.0
	21012006	65	15:10	15:27	36.46	-75.77	3.2	3.2	3.2	9.0	14.0	33.0
	21012006	66	16:02	16:17	36.48	-75.76	3.1	3.1	3.1	9.0	14.0	33.0
	21012006	67	16:31	16:46	36.49	-75.78	3.1	3.1	3.1	8.9	14.0	33.0
	21012006	68	17:14	17:29	36.52	-75.77	3.2	3.2	3.2	8.9	14.0	33.0
	21012006	69	17:43	17:59	36.53	-75.80	3.0	3.0	3.0	8.9	14.0	33.0
	21012006	70	18:13	18:28	36.54	-75.83	3.1	3.1	3.1	8.9	14.0	33.0
	21012006	71	18:46	19:01	36.54	-75.84	3.0	3.0	3.0	8.9	14.0	33.0
	21012006	72	19:14	19:31	36.52	-75.83	3.0	3.0	3.0	8.9	14.0	33.0
	21012006	73	19:45	20:00	36.48	-75.71	3.0	3.0	3.0	8.9	14.0	33.0
	21012006	74	20:26	20:46	36.47	-75.83	3.0	3.0	3.0	8.9	14.0	33.0
	21012006	75	21:00	21:20	36.44	-75.82	3.0	3.0	3.0	8.9	15.0	33.0
	21012006	76	21:34	21:54	36.42	-75.82	3.0	3.0	3.0	9.1	15.0	33.0
	21012006	77	22:12	22:32	36.39	-75.82	3.0	3.0	3.0	8.9	15.0	33.0
	21012006	78	22:51	23:11	36.36	-75.80	3.0	3.0	3.0	9.1	11.0	33.0
	21012006	79	23:28	23:48	36.40	-75.80	3.0	3.0	3.0	8.8	11.0	33.0
	22012006	80	0:04	0:27	36.43	-75.81	3.1	3.1	3.1	8.8	10.2	33.0
	22012006	81	0:42	1:05	36.46	-75.82	3.0	3.0	3.0	8.9		33.0
	22012006	82	1:22	1:44	36.47	-75.84	3.1	3.1	3.1	8.9		33.0
	22012006	83	2:06	2:29	36.52	-75.84	3.1	3.1	3.1	8.9		33.0
	22012006	84	3:26	3:48	36.44	-75.78	3.1	3.1	3.1	8.9		33.0
	22012006	85	4:03	4:26	36.47	-75.82	3.0	3.0	3.0	8.9		33.0
	22012006	86	4:40	5:03	36.50	-75.83	3.0	3.0	3.0	8.9		33.0
	22012006	87	5:23	5:47	36.53	-75.84	3.0	3.0	3.0	8.9		33.0
	22012006	88	7:18	7:38	36.48	-75.81	3.1	3.1	3.1	8.9	8.0	33.0
	22012006	89	8:04	8:24	36.46	-75.81	3.0	3.0	3.0	8.5	8.5	33.0
	22012006	90	8:45	9:05	36.49	-75.82	3.0	3.0	3.0	8.5	8.4	33.0

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
	22012006	91	9:25	9:45	36.52	-75.82	3.0	3.0	3.0	8.5	8.4	33.0
	22012006	92	10:09	10:24	36.54	-75.82	3.0	3.0	3.0	8.0	9.1	30.0
	22012006	93	10:56	11:16	36.52	-75.83	3.0	3.0	3.0	7.8	9.0	33.0
	22012006	94	11:37	11:54	36.53	-75.82	3.0	3.0	3.0	7.8	9.0	33.0
	22012006	95	12:09	12:24	36.54	-75.84	3.0	3.0	3.0	7.8	9.0	33.0
	22012006	96	12:46	13:06	36.55	-75.82	3.0	3.0	3.0	7.8	8.5	33.0
	22012006	97	12:28	13:49	36.52	-75.82	3.0	3.0	3.0	8.9	8.5	33.0
	22012006	98	14:03	14:19	36.55	-75.83	3.0	3.0	3.0	8.9	9.0	33.0
	22012006	99	14:36	14:57	36.55	-75.82	3.0	3.0	3.0	8.9	9.0	33.0
	22012006	100	15:11	15:33	36.53	-75.84	3.0	3.0	3.0	8.9	9.0	33.0
	22012006	101	15:51	16:13	36.53	-75.83	3.0	3.0	3.0	8.9	9.5	33.0
	22012006	102	16:31	16:52	36.52	-75.84	3.1	3.1	3.1	8.9	9.5	33.0
	22012006	103	17:13	17:29	36.55	-75.84	3.0	3.0	3.0	8.9	9.5	33.0
	22012006	104	17:50	18:12	36.55	-75.84	3.0	3.0	3.0	8.9	9.5	33.0
	22012006	105	18:31	18:51	36.52	-75.80	3.0	3.0	3.0	7.6	9.5	33.0
	22012006	106	19:10	19:30	36.49	-75.82	3.0	3.0	3.0	7.7	9.0	33.0
	22012006	107	19:45	20:05	36.50	-75.80	3.0	3.0	3.0	7.7	10.5	33.0
	22012006	108	20:21	20:41	36.48	-75.83	3.2	3.2	3.2	7.7	10.5	33.0
	22012006	109	20:57	21:17	36.50	-75.83	3.2	3.2	3.2	7.7	10.5	33.0
	22012006	110	21:25	21:55	36.52	-75.83	3.2	3.2	3.2	7.6	10.0	33.0
	22012006	111	22:10	22:30	35.49	-75.83	3.2	3.2	3.2	7.7	10.2	33.0
	22012006	112	22:43	23:03	36.47	-75.74	3.2	3.2	3.2	7.7	10.2	33.0
	22012006	113	23:18	23:38	36.43	-75.81	3.2	3.2	3.2	7.6	10.1	33.0
	23012006	114	0:10	0:34	36.39	-75.80	3.1	3.1	3.1	8.9	7.8	33.0
	23012006	115	1:07	1:30	36.35	-75.78	3.2	3.2	3.2	8.9	11.0	33.0
	23012006	116	2:10	2:28	36.29	-75.77	3.0	3.0	3.0	8.9	12.5	33.0
	23012006	117	3:08	3:26	36.27	-75.76	3.0	3.0	3.0	8.9	13.0	33.0
	23012006	118	3:47	4:06	36.31	-75.77	3.0	3.0	3.0	8.9	13.0	33.0
	23012006	119	4:34	4:43	36.34	-75.78	3.1	3.1	3.1	8.9	14.0	33.0
	23012006	120	5:15	5:33	36.38	-75.77	3.1	3.1	3.1	8.9	12.0	33.0
	23012006	121	5:50	6:08	36.41	-75.79	3.2	3.2	3.2	8.9	12.0	33.0
	23012006	122	6:25	6:38	36.42	-75.80	3.0	3.0	3.0	7.8	12.0	33.0
	23012006	123	6:57	7:12	36.45	-75.80	3.0	3.0	3.0	7.8	10.5	33.0
	23012006	124	7:31	7:46	36.45	-75.80	3.0	3.0	3.0	7.8	10.5	33.0
	23012006	125	8:15	8:30	36.51	-75.82	3.3	3.3	3.3	7.8	9.5	33.0
	23012006	126	8:49	9:04	36.52	-75.82	3.2	3.2	3.2	7.6	9.5	33.0
	23012006	127	9:26	9:41	36.54	-75.81	3.0	3.0	3.0	7.6	9.5	33.0

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
	23012006	128	10:02	10:17	36.04	-75.79	3.3	3.3	3.3	7.6	10.0	33.0
	23012006	129	10:34	10:50	36.53	-75.82	3.2	3.2	3.2	7.6	10.0	33.0
	23012006	130	11:10	11:25	36.55	-75.83	3.2	3.2	3.2	7.7	10.0	33.0
	23012006	131	11:43	11:58	36.52	-75.82	3.0	3.0	3.0	7.8	11.2	33.4
	23012006	132	12:16	12:33	36.51	-75.81	3.0	3.0	3.0	8.9	11.2	33.0
	23012006	133	12:59	13:16	36.53	-75.82	3.0	3.0	3.0	8.9	12.0	33.0
	23012006	134	13:29	13:45	36.55	-75.84	3.0	3.0	3.0	8.9	12.0	33.0
	23012006	135	14:04	14:21	36.55	-75.83	3.0	3.0	3.0	8.9	13.0	33.0
	23012006	136	14:40	14:57	36.53	-75.82	3.0	3.0	3.0	8.9	13.0	33.0
	23012006	137	15:15	15:32	36.54	-75.80	3.0	3.0	3.0	8.9	13.0	33.0
	23012006	138	15:47	16:04	36.56	-75.83	3.0	3.0	3.0	8.9	13.0	33.0
	23012006	139	16:18	16:35	36.55	-75.80	3.0	3.0	3.0	8.9	13.0	33.0
	23012006	140	16:48	17:06	36.54	-75.83	3.0	3.0	3.0	8.9	13.0	33.0
	23012006	141	17:21	17:27	36.54	-75.84	3.0	3.0	3.0	8.9	13.0	33.0
	23012006	142	17:50	18:07	36.52	-75.82	3.0	3.0	3.0	8.9	13.0	33.0
	23012006	143	18:19	18:34	36.50	-75.84	3.0	3.0	3.0	8.1	13.5	33.0
	23012006	144	18:48	19:03	36.49	-75.82	3.2	3.2	3.2	8.1	13.5	33.0
	23012006	145	19:16	19:31	36.45	-75.82	3.1	3.1	3.1	8.1	13.5	33.0
	23012006	146	19:44	20:04	36.43	-75.81	3.1	3.1	3.1	8.1	13.5	33.0
	23012006	147	20:16	20:36	36.41	-75.80	3.1	3.1	3.1	8.3	13.5	33.0
	24012006	148	3:10	3:28	36.02	-75.62	3.0	3.0	3.0	8.3	10.0	33.0
	24012006	149	4:01	4:19	36.05	-75.64	3.0	3.0	3.0	8.2		33.0
	24012006	150	4:54	5:12	36.09	-75.67	3.0	3.0	3.0	8.2	9.0	33.0
	24012006	151	5:41	5:56	36.15	-75.71	3.0	3.0	3.0	8.2	9.0	33.0
	24012006	152	6:33	6:48	36.19	-75.70	3.0	3.0	3.0	8.2	8.5	33.0
	24012006	153	7:16	7:31	36.23	-75.71	3.0	3.0	3.0	8.1	8.0	33.0
	24012006	154	7:48	8:03	36.25	-75.71	3.1	3.1	3.1	8.1	8.0	33.0
	24012006	155	8:22	8:37	36.26	-75.69	3.1	3.1	3.1	8.6	8.0	33.0
	24012006	156	9:30	9:45	36.22	-75.69	3.1	3.1	3.1	8.8	8.0	33.0
	24012006	157	10:08	10:23	36.24	-75.72	3.1	3.1	3.1	8.3	9.5	33.0
	24012006	158	10:30	10:54	36.26	-75.73	3.1	3.1	3.1	8.3	9.5	33.0
	24012006	159	11:10	11:25	36.27	-75.74	3.1	3.1	3.1	7.9	9.0	33.0
	24012006	160	11:43	11:58	36.30	-75.76	3.0	3.0	3.0	7.9	9.0	33.0
	24012006	161	12:10	12:25	36.32	-75.77	3.0	3.0	3.0	7.9	9.0	33.0
	24012006	162	12:40	12:55	36.34	-75.78	3.0	3.0	3.0	7.9	9.0	33.0
	24012006	163	13:25	13:42	36.34	-75.76	3.0	3.0	3.0	7.9	9.2	33.0
	24012006	164	13:56	14:14	36.30	-75.74	3.0	3.0	3.0	7.9	9.2	33.0

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
	24012006	165	14:26	14:44	36.29	-75.72	3.0	3.0	3.0	8.2	9.0	33.0
	24012006	166	15:22	15:39	36.27	-75.77	3.0	3.0	3.0	8.2	10.0	33.0
	24012006	167	15:52	16:08	36.28	-75.77	3.0	3.0	3.0	8.1	13.0	33.0
	24012006	168	16:21	16:43	36.32	-75.77	3.0	3.0	3.0	8.1	13.0	33.0
	24012006	169	16:55	17:12	36.34	-75.78	3.0	3.0	3.0	7.9	14.0	33.0
	24012006	170	17:24	17:41	36.36	-75.79	3.0	3.0	3.0	7.9	14.0	33.0
	24012006	171	17:54	18:11	36.39	-75.81	3.2	3.2	3.2	7.8	9.5	33.0
	24012006	172	18:23	18:38	36.41	-75.82	3.2	3.2	3.2	7.8	9.5	33.0
	24012006	173	18:52	19:07	36.43	-75.82	3.0	3.0	3.0	7.7	9.0	33.0
	24012006	174	19:50	20:05	36.52	-75.84	3.1	3.1	3.1	7.7	9.0	33.0
	24012006	175	20:20	20:35	36.53	-75.84	3.1	3.1	3.1	7.7	9.0	33.0
	24012006	176	20:50	21:05	36.54	-75.80	3.2	3.2	3.2	7.7	9.0	33.0
	24012006	177	21:20	21:35	36.55	-75.80	3.1	3.1	3.1	7.7	9.0	33.0
	24012006	178	21:50	22:20	36.66	-75.79	3.1	3.1	3.1	7.7	9.0	33.0
	24012006	179	22:40	23:00	36.53	-75.77	3.2	3.2	3.2	7.7	9.0	33.0
	24012006	180	23:18	23:38	36.51	-75.77	3.1	3.1	3.1	7.8	9.3	33.0
	25012006	181	0:11	0:33	36.55	-75.76	3.0	3.0	3.0	7.8	10.0	33.0
	25012006	182	0:53	1:18	36.57	-75.77	3.2	3.2	3.2	7.9	10.0	33.0
	25012006	183	1:41	2:04	36.55	-75.76	3.0	3.0	3.0	7.9	9.9	33.0
	25012006	184	2:34	2:56	36.57	-75.77	3.2	3.2	3.2	7.9	9.8	33.0
	25012006	185	3:21	3:44	36.56	-75.76	3.1	3.1	3.1			33.0
	25012006	186	4:03	4:26	36.57	-75.75	3.0	3.0	3.0	7.8	8.5	33.0
	25012006	187	4:43	5:06	36.54	-75.76	3.2	3.2	3.2	7.8	8.5	33.0
	25012006	188	5:42	6:06	36.57	-75.77	3.0	3.0	3.0	7.7	8.0	33.0
	25012006	189	6:21	6:41	36.55	-75.76	3.1	3.1	3.1	7.7	8.0	33.0
	25012006	190	6:59	7:19	36.56	-75.77	3.1	3.1	3.1	7.6	8.0	33.0
	25012006	191	7:37	7:57	36.54	-75.77	3.1	3.1	3.1	7.6	8.0	33.0
	25012006	192	8:16	8:36	36.54	-75.78	3.3	3.3	3.3	7.7	8.5	33.0
	25012006	193	8:57	9:17	36.53	-75.75	3.2	3.2	3.2	7.7	11.5	33.0
	25012006	194	9:39	9:59	36.55	-75.78	3.2	3.2	3.2	7.7	11.5	33.0
	25012006	195	10:17	10:37	36.54	-75.75	3.3	3.3	3.3	7.8	10.0	33.0
	25012006	196	10:52	11:12	36.54	-75.79	3.2	3.2	3.2	7.7	10.0	33.0
	25012006	197	12:02	12:19	36.53	-75.77	3.0	3.0	3.0	7.8	10.0	33.0
	25012006	198	12:38	12:55	36.55	-75.78	3.0	3.0	3.0	7.8	10.0	33.0
	25012006	199	13:20	13:38	36.55	-75.77	3.0	3.0	3.0	8.0	11.5	33.0
	25012006	200	14:09	14:31	36.52	-75.76	3.1	3.1	3.1	8.0	11.5	33.0
	25012006	201	15:06	15:28	36.53	-75.77	3.0	3.0	3.0	8.0	11.5	33.0

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
	25012006	202	15:41	16:04	36.52	-75.79	3.0	3.0	3.0	8.2	11.5	33.0
	25012006	203	16:17	16:40	36.49	-75.80	3.0	3.0	3.0	7.9	10.0	33.0
	25012006	204	16:59	17:00	36.44	-75.79			#DIV/0!	7.2	9.0	
	25012006	205	17:09	17:31	36.43	-75.80	3.0	3.0	3.0	7.9	8.0	33.0
	25012006	206	17:45	18:07	36.41	-75.78	3.0	3.0	3.0	7.9	9.0	33.0
	25012006	207	18:21	18:45	36.37	-75.78	3.2	3.2	3.2	7.9	8.0	33.0
	25012006	208	19:04	19:24	36.35	-75.75	3.0	3.0	3.0	8.0	8.0	33.0
	25012006	209	19:38	19:58	36.37	-75.76	3.1	3.1	3.1	8.0	8.0	33.0
	25012006	210	20:11	20:31	36.40	-75.76	3.1	3.1	3.1	8.0	8.0	33.0
	25012006	211	21:02	21:22	36.44	-75.75	3.1	3.1	3.1	8.1	8.5	33.0
	25012006	212	21:40	22:00	36.45	-75.73	3.2	3.2	3.2	8.1	6.5	33.0
	25012006	213	22:15	22:35	36.43	-75.73	3.1	3.1	3.1	8.2	6.5	33.0
	25012006	214	22:51	23:11	36.48	-75.74	3.2	3.2	3.2	8.1	7.5	33.0
	25012006	215	23:26	23:46	36.42	-75.74	3.1	3.1	3.1	8.1	7.5	33.0
	26012006	216	0:03	0:23	36.45	-75.75	3.0	3.0	3.0	7.9	5.5	33.0
	26012006	217	0:45	1:18	36.42	-75.77	3.0	3.0	3.0	7.9	5.0	33.0
	26012006	218	1:38	1:56	36.46	-75.78	3.0	3.0	3.0	7.9	5.0	33.0
	26012006	219	2:12	2:45	36.47	-75.81	3.0	3.0	3.0	7.8	4.0	33.0
	26012006	220	3:03	3:36	36.50	-75.82	3.1	3.1	3.1	7.1	3.5	33.0
	26012006	221	3:49	4:22	36.54	-75.78	3.0	3.0	3.0	7.7	4.0	33.0
	26012006	222	4:37	5:10	36.56	-75.75	3.0	3.0	3.0	7.7	4.0	33.0
	26012006	223	5:29	6:03	36.56	-75.73	3.0	3.0	3.0	7.8	4.0	33.0
	26012006	224	6:37	7:07	36.55	-75.77	3.0	3.0	3.0	7.3	3.3	33.0
	26012006	225	7:30	7:50	36.56	-75.80	3.2	3.2	3.2	7.3	3.0	33.0
	26012006	226	8:10	8:30	36.53	-75.80	3.1	3.1	3.1	7.5	3.5	33.0
	26012006	227	8:45	9:05	36.55	-75.79	3.1	3.1	3.1	7.3	3.8	33.0
	26012006	228	10:03	10:23	36.50	-75.82	3.2	3.2	3.2	7.6	5.0	33.0
	26012006	229	10:43	11:03	36.53	-75.83			#DIV/0!	7.7	5.0	33.0
	26012006	230	13:54	14:09	36.32	-75.77	3.2	3.2	3.2	8.5	7.2	33.0
	26012006	231	14:31	14:53	36.35	-75.77	3.0	3.0	3.0	8.5	7.2	33.0
	26012006	232	15:25	15:48	36.33	-75.76	3.0	3.0	3.0	8.5	7.9	33.0
	26012006	233	16:02	16:25	36.29	-75.75	3.1	3.1	3.1	6.0	7.9	33.0
	26012006	234	16:43	17:05	36.25	-75.75	3.1	3.1	3.1	6.0	7.9	33.0
	26012006	235	17:39	18:01	36.26	-75.75	3.0	3.0	3.0	6.0	7.9	33.0
	26012006	236	18:14	18:34	36.28	-75.76	3.2	3.2	3.2	7.9	6.0	33.0
	26012006	237	18:50	19:05	36.31	-75.73	3.0	3.0	3.0	7.9	6.0	33.0
	26012006	238	19:30	19:51	36.34	-75.75	3.0	3.0	3.0	8.0	6.0	33.0

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
	26012006	239	23:23	23:33	36.13	-75.65	3.1	3.1	3.1	8.1	4.5	33.0
	26012006	240	23:51	0:01	36.14	-75.67	3.1	3.1	3.1	8.1	4.5	33.0
	27012006	241	0:19	0:34	36.15	-75.68	3.1	3.1	3.1	8.0	4.1	33.0
	27012006	242	1:03	1:21	36.18	-75.68	3.0	3.0	3.0	8.0	4.0	33.0
	27012006	243	1:37	2:01	36.21	-75.70	3.0	3.0	3.0	8.0	4.0	33.0
	27012006	244	2:17	2:41	36.24	-75.71	3.0	3.0	3.0	7.9	3.5	33.0
	27012006	245	2:57	3:21	36.27	-75.73	3.0	3.0	3.0	7.5	3.0	33.0
	27012006	246	3:47	4:11	36.28	-75.75	3.0	3.0	3.0	7.5	3.0	33.0
	27012006	247	4:31	4:56	36.33	-75.77	3.0	3.0	3.0	7.2	3.0	33.0
	27012006	248	7:10	7:30	36.37	-75.77	3.0	3.0	3.0	6.9	3.0	33.0
	27012006	249	7:49	8:09	36.38	-75.77	3.1	3.1	3.1	6.8	3.0	33.0
	27012006	250	8:27	8:47	36.43	-75.78	3.1	3.1	3.1	6.8	3.0	33.0
	27012006	251	9:24	9:44	36.50	-75.78	3.1	3.1	3.1	6.7	3.0	33.0
	27012006	252	10:01	10:21	36.53	-75.78	3.1	3.1	3.1	6.8	3.0	33.0
	27012006	253	10:50	11:10	36.55	-75.78	3.1	3.1	3.1	6.7	5.0	33.0
	27012006	254	11:32	11:52	36.52	-75.78	3.1	3.1	3.1	6.7	5.0	33.0
	27012006	255	12:07	12:27	36.55	-75.78	3.1	3.1	3.1	6.8	8.5	33.0
	27012006	256	12:48	13:11	36.56	-75.70	3.0	3.0	3.0	7.2	8.0	33.0
	27012006	257	13:26	13:48	36.52	-75.77	3.0	3.0	3.0	7.2	8.0	33.0
	27012006	258	14:02	14:25	36.55	-75.75	3.0	3.0	3.0	7.5	10.0	33.0
	27012006	259	14:38	15:01	36.52	-75.75	3.0	3.0	3.0	7.0	9.0	33.0
	27012006	260	15:16	15:38	36.54	-75.77	3.0	3.0	3.0	7.0	9.0	33.0
	27012006	261	15:52	16:15	36.57	-75.76	3.0	3.0	3.0	7.6	13.0	33.0
	27012006	262	16:29	16:52	36.59	-75.76	3.0	3.0	3.0	7.0	13.0	33.0
	27012006	263	17:07	17:31	36.56	-75.76	3.0	3.0	3.0	7.4	8.0	33.0
	27012006	264	17:45	18:08	36.58	-75.76	3.1	3.1	3.1	7.6	6.0	33.0
	27012006	265	18:25	18:45	36.56	-75.78	3.0	3.0	3.0	7.6	6.0	33.0
	27012006	266	19:00	19:20	36.52	-75.77	3.0	3.0	3.0	6.7	5.5	33.0
	27012006	267	19:36	19:56	36.50	-75.79	3.1	3.1	3.1	6.4	5.0	33.0
	27012006	268	20:09	20:29	36.53	-75.81	3.2	3.2	3.2	6.4	5.0	33.0
	27012006	269	20:44	20:56	36.54	-75.84	3.1	3.1	3.1	6.4	5.0	33.0
	27012006	270	21:11	21:31	36.53	-75.81	3.1	3.1	3.1	6.3	5.5	33.0
	27012006	271	21:45	22:05	36.53	-75.77	3.1	3.1	3.1	6.3	5.5	33.0
	27012006	272	22:26	22:46	36.58	-75.75	3.1	3.1	3.1	6.3	5.0	33.0
	27012006	273	23:04	23:24	36.57	-75.76	3.1	3.1	3.1	6.8	5.0	33.0
	27012006	274	23:41	0:01	36.54	-75.75	3.0	3.0	3.0	6.8	5.0	33.0
	28012006	275	0:20	0:40	36.51	-75.77	3.0	3.0	3.0	6.2	5.0	33.0

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
	28012006	276	0:58	1:21	36.49	-75.80	3.0	3.0	3.0	6.4	5.0	33.0
	28012006	277	1:37	2:00	36.45	-75.81	3.0	3.0	3.0	6.4	5.0	33.0
	28012006	278	2:16	2:38	36.42	-75.83	3.0	3.0	3.0	6.4	5.0	33.0
	28012006	279	2:52	3:14	36.39	-75.79	3.0	3.0	3.0	6.5	5.0	33.0
	28012006	280	3:29	3:52	36.37	-75.76	3.1	3.1	3.1	6.5	5.0	33.0
	28012006	281	4:06	4:26	36.34	-75.75	3.2	3.2	3.2	6.5	7.5	33.0
	28012006	282	11:16	11:19	36.28	-75.75	3.1	3.1	3.1	6.7	10.5	33.0
	28012006	283	11:35	11:55	36.27	-75.75	3.0	3.0	3.0	6.7	10.5	33.0
	28012006	284	12:08	12:28	36.26	-75.73	3.0	3.0	3.0	6.9	10.0	33.0
	28012006	285	12:41	13:03	36.23	-75.71	3.0	3.0	3.0	6.9	10.0	33.0
	28012006	286	13:25	13:48	36.20	-75.70	3.0	3.0	3.0	7.1	10.0	33.0
	28012006	287	14:00	14:24	36.17	-75.69	3.0	3.0	3.0	7.2	10.0	33.0
	28012006	288	14:35	14:58	36.15	-75.67	3.0	3.0	3.0	7.2	10.0	33.0
	28012006	289	15:09	15:32	36.12	-75.66	3.0	3.0	3.0	7.2	11.0	33.0
	28012006	290	15:44	16:07	36.09	-75.66	3.0	3.0	3.0	7.2	11.0	33.0
	28012006	291	16:19	17:34	36.05	-75.64	3.0	3.0	3.0	7.2	11.5	33.0
	28012006	292	16:56	17:16	36.03	-75.62	3.0	3.0	3.0	7.3	11.0	33.0
	28012006	293	17:30	17:50	36.00	-75.62	3.0	3.0	3.0	7.3	11.0	33.0
	28012006	294	18:06	18:26	35.97	-75.60	3.0	3.0	3.0	7.3	10.0	33.0
	28012006	295	18:41	19:01	35.93	-75.57	3.0	3.0	3.0	7.4	9.0	33.0
	28012006	296	19:16	19:36	35.94	-75.55	3.0	3.0	3.0	7.4	9.0	33.0
	28012006	297	19:50	20:05	35.91	-75.53	3.1	3.1	3.1	7.4	9.5	33.0
	28012006	298	20:19	20:39	35.90	-75.51	3.2	3.2	3.2	7.4	9.5	33.0
	28012006	299	20:53	21:13	35.87	-75.49	3.1	3.1	3.1	7.6	9.5	33.0
	28012006	300	21:27	21:47	35.85	-75.48	3.1	3.1	3.1	7.6	9.5	33.0
	28012006	301	22:01	22:21	35.82	-75.47	3.1	3.1	3.1	7.7	9.5	33.0
	28012006	302	22:38	22:58	35.78	-75.44	3.1	3.1	3.1	7.9	10.0	33.0
	25012005	1	1833	1838	34.8981	-75.8239	2.4	2.6	2.5	8.2	6.3	33.6
	25012005	2	2114	2129	35.1358	-75.5419	3.5	3.5	3.5	5.7	4.8	30.2
	25012005	3	2154	2209	35.1244	-75.5064	2.5	2.9	2.7	4.9	5.1	29.7
	25012005	4	2232	2242	35.1200	-75.4767	3.1	3.5	3.3	5.1	5.5	29.8
	26012005	5	256	311	35.5853	-75.4497	3.2	3.2	3.2	4.3	5.8	29.8
	26012005	6	328	338	35.6211	-75.4550	3.2	3.2	3.2	4.5	6	29.8
	26012005	7	355	410	35.6339	-75.4517	3.1	3.1	3.1	5.9	4.2	29.9
	26012005	8	514	524	35.7811	-75.5075	3.3	3.3	3.3			30.1
	26012005	9	545	600	35.8064	-75.5008	3.1	3.3	3.2	4.2	5.9	28.8
	26012005	10	621	641	35.8239	-75.5369	3.3	3.3	3.3	4.1	5.9	28.7

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
	26012005	11	657	717	35.8569	-75.5364	3.1	3.1	3.1	4.2	5.9	28.7
	26012005	12	741	801	35.8711	-75.4835	2.4	3.6	3	4.2	6.5	28.8
	26012005	13	825	845	35.8753	-75.4747	3.2	3.3	3.25	4.3	6.5	29.1
	26012005	14	920	940	35.8786	-75.5089	3	3.1	3.05	4.3	7.2	28.8
	26012005	15	1002	1022	35.9047	-75.5001	3.1	3.2	3.15	4.4	7.4	28.3
	26012005	16	1055	1115	35.8853	-75.5275	2.9	3.1	3	4.1	8.4	28.4
	26012005	17	1139	1159	35.9281	-75.5328	3.2	3.2	3.2	4.1	8.4	28.4
	26012005	18	1257	1317	35.9406	-75.5672	3.2	3.2	3.2			29
	26012005	19	1342	1402	35.9436	-75.5403	3.1	3.2	3.15			29
	26012005	20	1425	1445	35.9335	-75.5731	3.1	3.2	3.15			28.9
	26012005	21	1517	1537	35.9753	-75.5647	3.2	3.2	3.2			28.8
	26012005	22	1607	1627	35.9742	-75.5403	3.1	3.1	3.1			29
	26012005	23	1647	1707	35.9514	-75.5586	3.2	3.2	3.2	4.3	8	28.1
	26012005	24	1724	1744	35.9906	-75.5519	3.2	3.2	3.2	4.1	8.7	28
	26012005	25	1759	1819	36.0203	-75.5642	3.2	3.2	3.2	4.1	9.6	27.8
	26012005	26	1835	1855	36.0414	-75.5942	3.1	3.2	3.15	4	6.8	27.8
	26012005	27	1915	1935	36.0203	-75.5689	3	3.2	3.1	4.1	6.9	27.9
	26012005	28	1957	2017	36.0258	-75.5378	3.2	3.3	3.25	4	7.1	27.7
	26012005	29	2037	2057	36.0242	-75.5733	3	3.2	3.1	4	7.3	27.7
	26012005	30	2137	2157	36.0319	-75.5708	3	3.1	3.05	3.9	5.7	27.6
	26012005	31	2213	2233	36.0617	-75.5936	3.2	3.2	3.2	3.9	6.4	27.6
	26012005	32	2256	2316	36.0897	-75.6142	3.2	3.2	3.2	3.9	6	27.6
	26012005	33	2334	2354	36.0850	-75.6536	3.2	3.2	3.2	4	5.7	27.8
	27012005	34	24	44	36.1178	-75.6869	3.1	3.2	3.15	3.9	5.3	27.8
	27012005	35	103	123	36.1422	-75.6711	3.2	3.2	3.2	3.8	5.1	27.6
	27012005	36	142	202	36.1197	-75.6853	3.3	3.4	3.35	3.9	5.1	28
	27012005	37	219	239	36.0931	-75.6669	3	3.1	3.05	4	5	27.9
	27012005	38	256	316	36.0669	-75.6367	3.1	3.2	3.15	3.9	5	27.8
	27012005	39	335	337	36.0364	-75.6369	3.2	3.2	3.2	3.9	5	27.9
	27012005	40	602	622	36.0319	-75.6200	3.2	3.2	3.2	3.8	2.8	27.6
	27012005	41	718	738	36.0001	-75.5969	3.1	3.3	3.2	3.8	1.9	27.5
	27012005	42	807	827	36.0414	-75.6203	3.2	3.2	3.2	3.8	0.8	27.5
	27012005	43	911	931	36.1044	-75.6339	3.3	3.3	3.3	3.9	-0.05	28.3
	27012005	44	1003	1006	36.1334	-75.6289	3.1	3.1	3.1	4.3	-1.7	29.1
	27012005	45	1040	1100	36.1739	-75.6214	3.1	3.1	3.1	4.3	-1.7	29.1
	27012005	46	1532	1552	35.9508	-75.5617	3.3	3.3	3.3	3.9	-2.2	28.5
	27012005	47	1651	1711	35.9331	-75.5669	3.7	3.7	3.7	3.7	-1.4	27.9

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
	27012005	48	1730	1750	35.9647	-75.5753	3.1	3.2	3.15	3.8	-1.2	28.2
	27012005	49	1831	1851	36.0050	-75.5719	3	3.2	3.1	4.3	-1.7	29.4
	27012005	50	1925	1945	36.0519	-75.5711	3	3.3	3.15	4.4	-1.7	29.7
	27012005	51	2119	2139	35.9394	-75.5783	3	3.1	3.05	3.7	-1.2	27.7
	27012005	52	2203	2223	35.9703	-75.5731	3.1	3.2	3.15	3.9	-1.7	28.5
	27012005	53	2259	2319	36.1142	-75.5564	3.1	3.1	3.1	4.4	-2.4	30.3
	28012005	54	28	58	35.9558	-75.5594	3.2	3.2	3.2	3.8	-2.4	28.2
	28012005	55	145	200	35.9839	-75.5456	3.2	3.2	3.2	4	-1	28
	29012005	56	635	655	35.9211	-75.5708	2.8	3.3	3.05	2.8	1.5	27.8
	29012005	57	719	749	35.9506	-75.5661	3	3.2	3.1	3.5	1.5	29.7
	29012005	58	838	908	35.9928	-75.5881	3.2	3.5	3.35	2.6	1.5	26.9
	29012005	59	926	956	36.0002	-75.5603	3.3	3.3	3.3	3.9	1.5	30.6
	29012005	60	1048	1118	36.0103	-75.6114	3.3	3.3	3.3	3.1	1.5	28.9
	29012005	61	1146	1216	36.0358	-75.5553	3.2	3.2	3.2	4.6	1.5	31.4
	29012005	62	1233	1253	36.0594	-75.5419	3.2	3.2	3.2	4.1	1.4	30.6
	29012005	63	1307	1327	36.0675	-75.5689	3.2	3.2	3.2	4.1	1.5	30.6
	29012005	64	1341	1401	36.0400	-75.6350	3.2	3.2	3.2	3.7	1.5	29.7
	29012005	65	1414	1434	36.0525	-75.6186	3.2	3.2	3.2	3.3	1.5	28.8
	29012005	66	1446	1506	36.0656	-75.6517	3.2	3.2	3.2	2.9	1.5	27.5
	29012005	67	1518	1538	36.0931	-75.6494	3.2	3.2	3.2	2.9	1.5	27.4
	29012005	68	1553	1613	36.1000	-75.6719	2.8	2.8	2.8	2.7	1.5	26.4
	29012005	69	1624	1644	36.1236	-75.6628	3.4	3.4	3.4	4.3	1.5	29.1
	29012005	70	1657	1717	36.1144	-75.6772	3.2	3.2	3.2	2.6	1.5	25.9
	29012005	71	1728	1748	36.1378	-75.6769	3	3	3	2.5	1.5	25.7
	29012005	72	1802	1822	35.1519	-75.6672	3.4	3.4	3.4	2.5	4.5	25.7
	29012005	73	1834	1854	36.1294	-75.6542	2.9	3.2	3.05	2.5	4.1	25.8
	29012005	74	1906	1926	36.1069	-75.6581	3.1	3.3	3.2	2.5	3.8	25.8
	29012005	75	1954	2014	36.0822	-75.6411	3.2	3.3	3.25	2.5	3.4	25.8
	29012005	76	2029	2049	36.1003	-75.6517	3.3	3.3	3.3	2.3	3.4	25.6
	29012005	77	2105	2125	36.1247	-75.6717	3.1	3.3	3.2	2.4	4.7	25.6
	29012005	78	2148	2208	36.0933	-75.6756	3.2	3.3	3.25	2.4	4.1	25.8
	29012005	79	2225	2245	36.0608	-75.6436	3	3.2	3.1	2.4	4.7	25.5
	29012005	80	2302	2322	36.0369	-75.6003	3	3.3	3.15	2.6	5	26.1
	29012005	81	2336	2356	36.0014	-75.6002	3.2	3.2	3.2	2.6	4.6	26.5
	30012005	82	8	28	35.9736	-75.5950	3.2	3.2	3.2	2.7	5.5	25.9
	30012005	83	39	59	35.9628	-75.5661	3.2	3.2	3.2	2.7	5.5	26.9
	30012005	84	124	144	35.9500	-75.5686	3.2	3.2	3.2	2.7	6.4	26.6

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
	30012005	85	155	215	35.9350	-75.5819	3.2	3.2	3.2	2.8	5.4	27.1
	30012005	86	227	247	35.9144	-75.5511	3.2	3.2	3.2	2.8	5.9	27.3
	30012005	87	300	330	35.9050	-75.5197	3.2	3.2	3.2	3	6.2	27.7
	30012005	88	342	412	35.8678	-75.5172	3.3	3.3	3.3	3.6	7	26.5
	30012005	89	424	454	35.8728	-75.4772	4.3	4.3	4.3	3.8	7.2	30.2
	30012005	90	511	541	35.8931	-75.5022	3.5	3.5	3.5	3.1	7.1	27.8
	30012005	91	553	623	35.8500	-75.5086	3	3	3	3.4	7	27.7
	30012005	92	651	721	35.8672	-75.5033	3.2	3.3	3.25	3.1	7.3	27.9
	30012005	93	734	804	35.9019	-75.5189	3	3.1	3.05	3	7	27.5
	30012005	94	818	848	35.9369	-75.5331	3.2	3.2	3.2	2.8	8.2	26.3
	30012005	95	904	934	35.9334	-75.5928	3.1	3.1	3.1	2.8	8.8	26.1
	30012005	96	949	1019	35.9842	-75.6017	3.3	3.3	3.3	2.8	7.9	25.8
	30012005	97	1036	1106	36.0256	-75.6178	3.2	3.2	3.2	2.6	3.4	25.2
	30012005	98	1120	1150	36.0336	-75.5835	3.2	3.2	3.2	2.6	3.6	25.3
	30012005	99	1202	1232	36.0575	-75.6450	3.2	3.2	3.2	2.7	3.4	25.2
	30012005	100	1245	1315	36.0886	-75.6719	3.2	3.2	3.2	2.6	3.4	25.1
	30012005	101	1328	1358	36.1425	-75.6767	3.2	3.2	3.2	3.3	2.7	29.3
	30012005	102	1411	1441	36.1675	-75.6668	3.2	3.2	3.2	3.2	2.9	28.6
	30012005	103	1452	1522	36.1928	-75.6919	3.2	3.2	3.2	3.2	2.9	28.7
	30012005	104	1532	1602	36.1589	-75.6589	3.7	3.7	3.7	3.5	2.9	29.5
	31012005	105	746	801	35.1834	-75.6425	3.2	3.2	3.2	4.7	3.1	29.1
	31012005	106	813	828	35.2044	-75.6133	3.2	3.2	3.2	4.7	2.9	29.1
	31012005	107	853	903	35.2002	-75.6064	3.2	3.4	3.3	4.6	2.9	29.1
	31012005	108	913	923	35.2186	-74.6353	3.1	3.2	3.15	4.5	2.8	29.1
	31012005	109	1005	1015	35.1753	-75.7228	3.1	3.1	3.1	4.9	3.2	29.5
	31012005	110	1055	1115	35.1381	-75.6419	3.2	3.2	3.2	4.7	3.7	29.1
	31012005	111	1125	1135	35.1442	-75.6058	2.8	3.2	3	4.4	4.1	28.9
	31012005	112	1215	1225	35.1372	-75.5386	3.2	3.2	3.2	3.7	4.2	28.4
	1022005	113	1425	1445	35.6258	-75.3856	3.2	3.2	3.2	4.2	6.1	31.4
	1022005	114	1506	1521	35.6372	-75.3869	3.2	3.2	3.2	3.9	6.1	30.7
	1022005	115	1600	1620	35.6467	-75.4514	3.2	3.2	3.2	3.4	5.9	29.9
	1022005	116	1631	1649	35.6567	-75.4172	3.2	3.2	3.2	3.9	6	30.9
	1022005	117	1728	1748	35.6542	-75.4383	3.3	3.3	3.3	3.6	5.7	30.3
	1022005	118	1856	1911	35.7647	-75.4336	3	3.2	3.1	3.4	5.7	30.5
	1022005	119	2010	2030	35.8168	-75.6758	3.4	3.4	3.4	3.1	5.1	29.8
	1022005	120	2041	2101	35.8442	-75.4875	3.1	3.2	3.15	3.8	5.4	31.1
	1022005	121	2143	2203	35.8856	-75.5189	3.1	3.2	3.15	3.2	5	30.5

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
	1022005	122	2219	2239	35.9042	-75.4897	3.2	3.4	3.3	3.3	5	30.7
	1022005	123	2323	2343	35.9244	-75.5294	3.2	3.2	3.2	3.3	4.6	30.4
	2022005	124	20	50	35.9244	-75.5489	3.2	3.2	3.2	2.8	4.7	29.3
	2022005	125	131	201	35.9475	-75.5733	3.2	3.2	3.2	2.6	4.9	28.1
	2022005	126	229	259	35.9606	-75.5717	3.2	3.2	3.2	2.9	4.9	28.8
	2022005	127	329	359	35.9544	-75.5772	3.2	3.2	3.2	2.4	4.6	27.6
	2022005	128	441	511	35.9594	-75.5883	3.4	3.4	3.4	2.3	4.6	27.4
	2022005	129	553	613	35.9553	-75.5842	3.4	3.4	3.4	2.4	5	27.4
	2022005	130	633	653	35.9503	-75.5931	3.1	3.1	3.1	2.3	4.5	26.7
	2022005	131	703	723	35.9672	-75.5981	3.1	3.1	3.1	2.3	4.5	26.8
	2022005	132	749	809	35.9767	-75.5781	3.3	3.3	3.3	2.6	4.8	28.3
	2022005	133	821	841	35.9672	-75.5531	3.3	3.3	3.3	3.8	4.7	31.2
	2022005	134	854	914	35.9600	-75.5697	2.8	3.2	3	2.5	4.6	26.6
	2022005	135	925	955	35.9742	-75.5731	2.8	3.2	3	4.2	5.2	31.9
	2022005	136	1008	1038	36.0067	-75.5519	3.2	3.3	3.25	4.4	5.1	31.9
	2022005	137	1051	1121	36.0347	-75.5636	2.9	3.4	3.15	4.2	3.6	31.2
	2022005	138	1250	1320	35.9550	-75.5781	3.2	3.2	3.2	3.3	3	30.3
	2022005	139	1332	1402	35.9725	-75.5867	3.2	3.2	3.2	3.7	4.2	31.2
	2022005	140	1424	1454	35.9334	-75.5669	3.2	3.2	3.2	3.1	3.3	29.9
	2022005	141	1506	1536	35.9769	-75.6006	3.2	3.2	3.2	2.9	3.4	29.6
	2022005	142	1548	1618	36.0019	-75.6236	3.2	3.2	3.2	2.9	3.5	29.9
	2022005	143	1629	1659	36.0322	-75.6328	3.2	3.2	3.2	2.7	3.6	29.4
	2022005	144	1710	1740	36.0558	-75.6592	3.2	3.2	3.2	2.6	3.7	29.1
	2022005	145	1815	1845	36.0181	-75.6322	4.7	4.7	4.7	2.9	4.3	29.8
	2022005	146	1855	1925	35.9711	-75.6014	4.7	4.7	4.7	2.9	4.7	29.5
	2022005	147	1938	2008	35.9200	-75.5697	3.5	3.5	3.5	3.1	5.1	29.8
	2022005	148	2019	2049	35.8875	-75.5569	4.7	4.7	4.7	3.2	5.1	30.1
	2022005	149	2103	2133	35.8458	-75.5283	3.3	3.3	3.3	3.4	5.1	30.7
	16012004	1	22:55	23:09	35.5236	-75.4186	3.0	3.2	3.1	7.5	1.8	29.5
	16012004	2	23:25	23:50	35.5422	-75.4008	3.0	3.2	3.1	7.4	1.7	
	17012004	3	0:06	0:26	35.5617	-75.3836	3.4	3.4	3.4	7.4	1.7	29.6
	17012004	4	0:45	1:10	35.5950	-75.3733	3.4	3.4	3.4	7.5	2	29.6
	17012004	5	1:29	1:49	35.6272	-75.4022	3.0	3.0	3.0	7.3	2	29.5
	17012004	6	2:00	2:30	35.6358	-75.4217	3.0	3.0	3.0	7.2	1.3	29.1
	17012004	7	2:45	3:15	36.3272	-75.4506	3.0	3.0	3.0	6.9	1.1	28.7
	17012004	8	3:30	4:00	35.6925	-75.4569	3.0	3.0	3.0	6.8	1.1	28.6
	17012004	9	4:20	4:50	35.7289	-75.4686	3.0	3.0	3.0	6.9	0.7	28.7

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
	17012004	10	5:10	5:45	35.7772	-75.4683	3.0	3.0	3.0	6.9	0.5	28.9
	17012004	11	6:00	6:30	35.8044	-75.4764	3.0	3.1	3.1	6.7	1.3	28.6
	17012004	12	6:48	7:14	35.8289	-75.5067	3.0	3.0	3.0	6.7	0.2	
	17012004	13	7:30	8:00	35.8561	-75.5175	3.0	3.0	3.0	6.8	0.2	
	17012004	14	8:28	9:00	35.8835	-75.5425	3.0	3.0	3.0	7.3	0.7	27.5
	17012004	15	9:17	9:46	35.9253	-75.5592	3.1	3.1	3.1	6.9	0.7	27.6
	17012004	16	9:58	10:27	35.9506	-75.5936	3.1	3.1	3.1	6.9	0.1	29.3
	17012004	17	10:42	11:11	35.9786	-75.6033	3.1	3.1	3.1	7.1	0.4	29.6
	17012004	18	11:24	11:55	36.0014	-75.6167	3.1	3.1	3.1	7.1	0.8	29.7
	17012004	19	12:08	12:38	36.0369	-75.6350	3.0	3.0	3.0	7.2	1.2	29.6
	17012004	20	12:57	13:27	36.0828	-75.6383	3.0	3.0	3.0	7.5	1.6	29.8
	17012004	21	13:38	14:08	36.1001	-75.6542	3.0	3.0	3.0	7.5	2.1	29.8
	17012004	22	14:28	14:58	36.1339	-75.6664	3.0	3.0	3.0	7.4	2.7	29.8
	17012004	23	15:17	15:50	36.1078	-75.6608	3.0	3.0	3.0	7.6	3.3	29.8
	17012004	24	16:04	16:34	36.1461	-75.6731	3.0	3.0	3.0	7.5	3.7	29.7
	17012004	25	16:48	17:18	36.1753	-75.6878	3.0	3.0	3.0	7.5	3.8	29.8
	17012004	26	17:32	17:47	36.2081	-75.6700	2.8	3.1	3.0	7.5	4	29.9
	17012004	27	18:06	18:16	36.2267	-75.6522	2.8	3.1	3.0	7.4	4.3	29.9
	17012004	28	18:30	18:45	36.2381	-75.6725	3.0	3.2	3.1	7.4	4.5	29.9
	17012004	29	19:04	19:25	36.2422	-75.6897	3.0	3.2	3.1	7.4	4.8	29.8
	17012004	30	19:40	19:55	36.2575	-75.7153	3.0	3.2	3.1	7.3	4.2	29.8
	17012004	31	20:08	20:25	36.2668	-75.7236	3.0	3.2	3.1	7.3	4.3	29.8
	17012004	32	20:40	20:55	36.3019	-75.7189	3.0	3.2	3.1	7.4	4.3	29.8
	17012004	33	21:10	21:25	36.3192	-75.7258	3.0	3.2	3.1	7.4	4.6	29.8
	17012004	34	21:40	22:00	36.3406	-75.7042	3.0	3.2	3.1	7.4	4.9	29.9
	17012004	35	22:15	22:35	36.3600	-75.6792	3.0	3.2	3.1	7.6	5.1	30
	17012004	36	23:00	23:15	36.3547	-75.6669	3.0	3.2	3.1	7.6	5.4	30.3
	17012004	37	23:39	23:50	36.3442	-75.6744	3.0	3.2	3.1	7.4	5.3	30.1
	18012004	38	0:22	0:38	36.3661	-75.6900	3.0	3.2	3.1	7.5	4.6	29.9
	18012004	39	0:52	1:07	36.3606	-75.6761	3.0	3.0	3.0	7.5	5	30.3
	18012004	40	1:27	1:47	36.3336	-75.6728	3.0	3.0	3.0	7.5	4.8	30.1
	18012004	41	2:02	2:19	36.3575	-75.6800	3.0	3.0	3.0	7.5	4.1	30
	18012004	42	2:33	2:50	36.3800	-75.6783	3.0	3.0	3.0	7.5	4	30.1
	18012004	43	3:06	3:22	36.3894	-75.7003	3.0	3.0	3.0	7.3	3.7	29.9
	18012004	44	3:39	3:56	36.4086	-75.7103	3.0	3.0	3.0	7.3	3.9	29.8
	18012004	45	4:12	4:28	36.4214	-75.7094	3.0	3.0	3.0	7.2	4.4	29.7
	18012004	46	4:43	5:04	36.4339	-75.6835	3.0	3.0	3.0	7.3	4.8	29.7

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
	18012004	47	5:18	5:42	36.4517	-75.7039	3.0	3.0	3.0	7.3	5.3	29.8
	18012004	48	5:59	6:14	36.4172	-75.7200	3.0	3.1	3.1	7.2	6.4	29.7
	18012004	49	6:27	6:43	36.4017	-75.7311	3.0	3.2	3.1	7.3	6.9	29.7
	18012004	50	7:00	7:17	36.3834	-75.7181	3.0	3.2	3.1	7.3	7.2	29.8
	18012004	51	7:29	7:49	36.3767	-75.6950	3.0	3.0	3.0	7.3	7.3	29.8
	18012004	52	8:08	8:13	36.3619	-75.6769	2.4	2.7	2.6	8.1	7.6	29.9
	18012004	53	8:23	8:43	36.3761	-75.6678	3.0	3.2	3.1	7.3	7.6	29.9
	18012004	54	8:52	9:07	36.3433	-75.6775	3.0	3.2	3.1	7.3	7.8	29.9
	18012004	55	9:29	9:45	36.3386	-75.6764	3.0	3.2	3.1	7.3	8	29.9
	18012004	56	10:03	10:22	36.3589	-75.6739	3.0	3.2	3.1	7.4	8.9	29.8
	18012004	57	10:47	10:56	36.3697	-75.6511	3.0	3.0	3.0	7.4	9.6	30
	18012004	58	11:19	11:29	36.3522	-75.6764	3.0	3.0	3.0	7.4	9.6	29.9
	18012004	59	11:46	12:02	36.3431	-75.6867	3.0	3.0	3.0	7.3	10.4	29.8
	18012004	60	12:16	12:35	36.3168	-75.6761	3.0	3.0	3.0	7.4	11.8	29.9
	18012004	61	12:54	13:04	36.3561	-75.6497	3.0	3.0	3.0	7.5	12.4	30.1
	18012004	62	13:19	13:34	36.3672	-75.6369	3.0	3.0	3.0	7.7	11.9	30.4
	18012004	63	14:23	14:38	36.3733	-75.6731	3.0	3.0	3.0	7.6	10.7	29.9
	18012004	64	14:54	15:12	36.3697	-75.6869	3.0	3.0	3.0	7.5	11.4	29.8
	18012004	65	15:24	15:39	36.3606	-75.6697	3.0	3.0	3.0	7.6	12.2	29.9
	18012004	66	15:55	16:07	36.3550	-75.6717	3.0	3.0	3.0	7.5	11.6	29.8
	18012004	67	16:25	16:45	36.3661	-75.6761	3.0	3.0	3.0	7.5	11.9	29.8
	18012004	68	17:00	17:20	36.3436	-75.6681	3.0	3.0	3.0	7.5	12.6	29.7
	18012004	69	17:37	17:52	36.3728	-75.6678	3.0	3.0	3.0	7.5	13.2	29.8
	18012004	70	18:07	18:24	36.3506	-75.6672	2.9	3.1	3.0	7.6	13	29.8
	18012004	71	18:36	18:55	36.3342	-75.6681	3.0	3.1	3.1	7.5	11.3	29.7
	18012004	72	19:10	19:28	36.3558	-75.6886	3.0	3.0	3.0	7.4	6.7	29.7
	18012004	73	19:54	20:12	36.3728	-75.6717	3.0	3.0	3.0	7.5	6.1	29.8
	18012004	74	20:59	21:25	36.3567	-75.7561	3.0	3.0	3.0	7.5	5.1	29.9
	18012004	75	21:37	21:57	36.3644	-75.7864	3.0	3.1	3.1	7.8	4.5	30.3
	18012004	76	22:08	22:25	36.3736	-75.8069	3.0	3.0	3.0	7.8	4.5	30.4
	18012004	77			36.3867	-75.8039	3.0	3.0	3.0	7.8	4.1	30.3
	18012004	78	23:10	23:30	36.3502	-75.8006	3.0	3.0	3.0	7.8	4.4	30.3
	18012004	79	23:44	0:15	36.3400	-75.7864	2.7	3.0	2.9	7.8	4.2	30.4
	19012004	80	0:28	0:58	36.3700	-75.7853	3.0	3.0	3.0	7.8	3.8	30.5
	19012004	81	1:11	1:41	36.4047	-75.7942	3.0	3.0	3.0	7.3	3.4	29.9
	19012004	82	2:00	2:30	36.4469	-75.7931	3.0	3.0	3.0	7.4	3.2	29.9
	19012004	83	2:45	3:15	36.4878	-75.7856	3.0	3.0	3.0	7.5	2.3	29.9

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
	19012004	84	3:30	4:00	36.5133	-75.7786			#DIV/0!	7.3	1.8	29.7
	19012004	85	4:15	4:50	36.4631	-75.7864	3.0	3.0	3.0	7.4	1.5	29.9
	19012004	86	5:05	5:39	36.4128	-75.7886	3.0	3.0	3.0	7.3	1	29.9
	19012004	87	6:01	6:24	36.3506	-75.7800	3.0	3.0	3.0	7.2	0.9	29.7
	19012004	88	8:47	9:06	35.9967	-75.6197	3.0	3.0	3.0	7.3	0.7	29.9
	19012004	89	9:50	10:10	36.0292	-75.6344	3.0	3.0	3.0	7.4	0.6	30
	19012004	90	10:23	10:50	36.0458	-75.6335	2.4	3.0	2.7	7.6	0.6	30.3
	19012004	91	11:04	11:30	36.0678	-75.6589	3.0	3.0	3.0	7.7	0.5	30.4
	19012004	92	11:40	12:10	36.0839	-75.6408	3.0	3.0	3.0	7.5	1.1	30.1
	19012004	93	12:25	12:53	36.1128	-75.6675			#DIV/0!	7.6	0.8	30.3
	19012004	94	13:06	13:36	36.1414	-75.6775	3.0	3.0	3.0	7.6	1.3	30.5
	19012004	95	13:50	14:20	36.1086	-75.6767	3.0	3.0	3.0	7.6	1.3	30.4
	19012004	96	14:36	15:06	36.1325	-75.7000	3.0	3.0	3.0	7.8	1.7	30.7
	19012004	97	15:23	15:37	36.1658	-75.7002	3.0	3.0	3.0	7.7	1.9	30.7
	19012004	98	15:45	16:15	36.1822	-75.6978			#DIV/0!	7.4	1.9	30.4
	19012004	99	16:31	17:01	36.2100	-75.6669	3.0	3.0	3.0	7.5	2.2	30.5
	19012004	100	17:10	17:44	36.2294	-75.7033	3.0	3.0	3.0	7.5	2.6	30.4
	19012004	101	17:56	18:31	36.2375	-75.7481	2.6	3.0	2.8	7.1	2.2	29.9
	19012004	102	18:44	19:04	36.2856	-75.7828	3.0	3.0	3.0	7.1	2.1	29.9
	19012004	103	19:33	19:52	36.3022	-75.7908	3.0	3.0	3.0	7.1	1.9	30
	19012004	104	20:11	20:31	36.3203	-75.7947	3.0	3.0	3.0	6.6	2	29.8
	19012004	105	20:45	21:07	36.3503	-75.8061	3.2	3.2	3.2	6.3	2	29.4
	19012004	106	21:21	21:41	36.3703	-75.8011	3.1	3.1	3.1	6.2	3.1	29.3
	19012004	107	21:50	22:10	36.3864	-75.7828	3.0	3.0	3.0	6	0.7	29.1
	19012004	108	22:19	22:49	36.4042	-75.8001	3.3	3.3	3.3	5.8	0.2	29.2
	19012004	109	22:57	23:29	36.4356	-75.8119	2.8	3.1	3.0	6	-0.2	28.9
	19012004	110	23:45	0:15	36.4628	-75.8217	2.2	2.9	2.6	5.7	0.7	28.6
	20012004	111	0:33	1:02	36.4958	-75.8002	3.0	3.0	3.0	5.5	-1.2	28.4
	20012004	112	1:28	1:36	36.5272	-75.7842	3.0	3.0	3.0	5.7	-2	28.5
	20012004	113	1:57	2:27	36.4942	-75.7836	3.0	3.0	3.0	5.5	-2.7	28.4
	20012004	114	2:47	3:17	36.4386	-75.8058			#DIV/0!	5.6	-3	28.6
	20012004	115	3:37	4:07	36.3931	-75.8025	3.0	3.0	3.0	5.7	-3.2	28.8
	20012004	116	4:19	4:49	36.3514	-75.7856	3.0	3.0	3.0	5.9	-3.2	29
	20012004	117	5:04	5:34	36.3008	-75.7742	3.0	3.0	3.0	6.1	-3.2	29.3
	20012004	118	5:44	5:59	36.2758	-75.7761	3.0	3.0	3.0	6.4	-3.5	29.7
	20012004	119	6:09	6:28	36.2522	-75.7572	2.3	3.0	2.7	6.8	-3	29.9

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal

0012004	120	6:42	7:03	36.2247	-75.7469		3.3	3.3	6.8	-3	29.9
20012004	121	7:15	7:45	36.2256	-75.7342	3.4	3.5	3.5	6.9	-3.4	30
20012004	122	8:09	8:39	36.1436	-75.7022	3.7	3.8	3.8	7.2	-3.3	30.4
20012004	123	8:52	9:24	36.1044	-75.6881	2.3	3.0	2.7	7.2	-3.3	30.5
20012004	124	9:36	9:54	36.1168	-75.7050	2.3	3.0	2.7	7	-3.1	30.3
20012004	125	10:07	10:37	36.1531	-75.7169		3.3	3.3	6.9	-3.2	30.1
20012004	126	11:02	11:30	36.1964	-75.7408	3.0	3.2	3.1	6.1	-2.8	29.7
20012004	127	11:53	12:25	36.2369	-75.7522	3.6		3.6	6.1	-2.5	29.5
20012004	128	12:45	13:18	36.2728	-75.7728	3.0	3.0	3.0	5.8	-2	29.1
20012004	129	13:27	13:48	36.2835	-75.7864	3.0	3.0	3.0	5.8	-1.5	29.1
20012004	130	13:58	14:28	36.3175	-75.7931	3.0	3.0	3.0	5.8	-1.4	29.1
20012004	131	14:39	15:09	36.2869	-75.7775	3.0	3.0	3.0	5.9	-0.5	29.1
20012004	132	15:27	15:57	36.2439	-75.7608	3.0	3.0	3.0	6	0	29.3
20012004	133	16:20	16:50	36.2047	-75.7334	3.0	3.0	3.0	6.1	0.2	29.5
20012004	134	17:04	17:30	36.1839	-75.7314	3.0	3.0	3.0	6.6	0.5	29.8
20012004	135	17:45	18:15	36.1335	-75.7264	3.0	3.0	3.0	6.2	0.6	29.8
20012004	136	18:29	18:59	36.1192	-75.7003	2.8		2.8	6.7	0.5	29.9
20012004	137	19:14	19:45	36.0794	-75.6714	3.3	4.2	3.8	6.9	0.3	30.1
20012004	138	20:04	20:31	36.0358	-75.6511	3.3	3.6	3.5	7	0.3	30.4
20012004	139	20:46	21:14	36.0506	-75.6597	3.0	3.5	3.3	7	0.1	30.3
20012004	140	21:26	21:44	36.0267	-75.6408	3.0	3.3	3.2	7	0.2	30.5
20012004	141	21:54	22:24	35.9939	-75.6200	3.2	3.5	3.4	7	-0.1	30.5
20012004	142	22:31	23:03	35.9569	-76.6006	3.0	4.5	3.8	6.9	-0.5	30.6
20012004	143	23:14	23:36	35.9233	-75.5911	2.9	3.3	3.1	7	-0.4	30.5
20012004	144	23:46	0:14	35.9339	-75.5592	3.3	3.6	3.5	7.1	0	30.7
21012004	145	0:24	0:54	36.9022	-75.5772	3.0	4.0	3.5	7	-0.6	30.6
21012004	146	1:08	1:38	36.9344	-75.5919	3.0	3.0	3.0	6.9	-0.8	30.6
21012004	147	1:49	2:19	35.9828	-75.6122	3.0	3.0	3.0	6.9	-1.2	30.5
21012004	148	2:32	3:00	35.9894	-75.6208	3.0	3.0	3.0	6.8	-1.9	30.5
21012004	149	3:22	3:57	36.0406	-75.6335	3.0	3.0	3.0	6.7	-1.3	30.2
21012004	150	4:09	4:39	36.0744	-75.6502	3.0	3.0	3.0	6.6	-2.3	30.1
21012004	151	4:50	5:20	36.0975	-75.6844	3.0	3.0	3.0	6.5	-2.5	29.9
21012004	152	5:35	6:05	36.1297	-75.7036	3.0	3.0	3.0	6	-3.4	29.7
21012004	153	6:17	6:41	36.1594	-75.7168	3.0	3.0	3.0	5.8	-3.7	29.5
21012004	154	6:50	7:22	36.1936	-75.7339	3.1	3.3	3.2	5.8	-3.5	29.4
21012004	155	7:32	8:02	36.2228	-75.7414	3.1	3.3	3.2	5.9	-3.4	29.2
21012004	156	8:12	8:46	36.2411	-75.7092	3.0	3.2	3.1	6.4	-3.1	29.8
21012004	157	8:53	9:22	36.2608	-75.6717	3.0	3.7	3.4	6.2	-2.8	30.1

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
	21012004	158	9:43	10:14	36.2550	-75.7153	3.1		3.1	6.3	-2.9	29.8
	21012004	159	10:47	11:12	36.2669	-75.7172	3.3	5.3	4.3	6.3	-2.6	29.7
	21012004	160	11:24	11:54	36.2544	-75.7183	3.0	3.3	3.2	6.3	-2.4	29.7
	21012004	161	12:06	12:26	36.2247	-75.7094	3.0	3.2	3.1	6.5	-2.2	29.8
	21012004	162	12:37	13:09	36.2406	-75.7267	3.0	3.0	3.0	6.4	-2	29.8
	21012004	163	13:44	14:14	36.3168	-75.6772	3.0	3.0	3.0	6.2	-1.5	29.6
	21012004	164	14:27	14:57	36.3731	-75.6667	3.0	3.0	3.0	6	-1	29.4
	21012004	165	15:09	15:42	36.3506	-75.6717	3.0	3.0	3.0	6.2	-0.5	29.4
	21012004	166	15:52	16:22	36.3714	-75.7275	2.8	3.0	2.9	6	0.2	29.3
	21012004	167	16:34	17:04	36.3858	-75.7633	3.0	3.0	3.0	5.9	0.6	29.2
	21012004	168	17:15	17:47	36.4044	-75.8133	3.0	3.0	3.0	5.3	0.3	28.8
	21012004	169	17:59	18:29	36.4242	-75.8211	2.3	4.2	3.3	5.1	0.4	28.6
	21012004	170	18:38	19:08	36.4031	-75.7835	3.0	3.3	3.2		0.4	28.7
	21012004	171	19:27	19:47	36.3767	-75.7786	2.0	5.0	3.5	5.6	0.5	29
	21012004	172	19:57	20:06	36.3464	-75.7575	2.5	3.8	3.2	5.9	0.9	29.4
	21012004	173	21:44	22:15	36.1933	-75.7264	3.1	3.3	3.2	6.7	1.2	29.6
	21012004	174	22:25	22:54	36.1542	-75.7025	2.5	4.0	3.3	5.8	1	29.6
	21012004	175	23:04	23:31	36.1233	-75.6842	3.0	3.7	3.4	5.8	0.8	29.8
	21012004	176	23:41	0:10	36.0936	-75.6928	3.0	3.3	3.2	5.5	1	29.4
	22012004	177	0:25	1:05	36.0756	-75.6572	2.9	3.2	3.1	6.2	1.5	29.7
	22012004	178	1:20	1:50	36.0353	-75.6264	2.8	3.2	3.0	6.3	1.5	30.1
	22012004	179	2:05	2:35	36.0058	-75.6183	2.9	3.2	3.1	6.1	1.6	30.2
	22012004	180	2:49	3:19	35.9697	-75.6061	3.0	3.0	3.0	6.1	1.9	30.2
	22012004	181	3:37	3:50	35.9658	-75.5500	3.0	3.0	3.0	6.9	2.1	30.7
	22012004	182	4:05	4:23	35.9581	-75.5394	3.0	3.0	3.0	6.9	2.6	30.7
	22012004	183	4:40	5:00	35.9536	-75.5744	3.0	3.0	3.0	6.6	2.5	30.6
	22012004	184	5:15	5:29	35.9383	-75.5772	3.0	3.0	3.0	6.6	1.9	30.7
	22012004	185	5:42	6:12	35.9258	-75.5708	3.0	3.0	3.0	6.4	1.9	30.5
	22012004	186	6:24	6:56	35.9664	-75.5753	3.0	3.7	3.4	6.6	2.2	30.5
	22012004	187	7:08	7:28	36.0031	-75.5925	3.0	4.5	3.8	6.6	2.1	30.5
	22012004	188	7:35	7:58	35.9897	-75.5903	3.0	4.1	3.6	6.4	2	30.5
	22012004	189	13:13	13:35	36.3400	-75.7400	3.0	3.0	3.0	5.9	7	29.5
	22012004	190	14:22	14:52	36.3425	-75.7656	3.0	3.0	3.0	6.9	8.3	30
	22012004	191	15:05	15:35	36.2569	-75.7502	3.0	3.0	3.0	7	8.2	30.2
	22012004	192	15:47	16:19	36.2214	-75.7367	3.0	3.0	3.0	7	8.2	30.4
	22012004	193	16:37	17:07	36.1834	-75.7036	3.0	3.0	3.0	6.5	8.6	30
	22012004	194	17:20	17:54	36.1572	-75.7175	3.0	3.0	3.0	7.1	8.8	30.4

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
	22012004	195	18:25	18:55	36.1281	-75.6922	3.0	4.4	3.7	6.2	9	30
	22012004	196	19:08	19:38	36.1064	-75.6511	3.0	3.3	3.2	6.4	7.5	30.1
	22012004	197	19:49	20:19	36.1322	-75.6606	2.8	3.3	3.1	6.5	7.4	30.2
	22012004	198	20:31	21:00	36.1572	-75.6519	2.6	3.0	2.8	6.5	8.2	30.3
	22012004	199	21:09	21:39	36.1233	-75.6708	3.0	3.2	3.1	6.4	8	30.2
	22012004	200	21:50	22:19	36.0981	-75.6794	2.9	3.0	3.0	5.8	7.6	29.9
	22012004	201	22:30	23:00	36.0700	-75.6764	3.0	3.3	3.2	6.5	6.7	30.1
	22012004	202	23:10	23:38	36.0364	-75.6506	3.0	3.3	3.2	7	5.9	30.8
	22012004	203	23:49	0:14	36.0002	-75.6247	3.0	3.6	3.3	6.8	6.6	30.5
	23012004	204	0:27	0:59	35.9919	-75.6161	3.0	3.6	3.3	6.8	6.7	30.5
	23012004	205	1:14	1:48	35.9335	-75.5967	3.0	3.0	3.0	6.8	6.1	30.6
	23012004	206	2:01	2:31	35.9494	-75.5550	3.0	3.0	3.0	6.8	6.2	30.7
	23012004	207	2:46	3:17	35.9228	-75.5158	3.0	3.0	3.0	8.7	5.7	30.6
	23012004	208	3:39	4:09	35.9383	-75.4883	3.0	3.0	3.0	7	3.4	30.4
	23012004	209	4:25	4:51	35.9706	-75.4672	3.0	3.0	3.0	7	2.2	30.4
	23012004	210	5:29	5:59	35.9367	-75.5168	3.0	3.0	3.0	6.9	1.5	30.7
	23012004	211	6:14	6:44	35.9001	-75.5272	3.0	3.3	3.2	7.1	0.6	30.7
	23012004	212	8:55	9:27	36.0168	-75.5672	2.4	3.0	2.7	6.9	-1.6	31.1
	23012004	213	9:53	10:22	36.0536	-75.6367		4.3	4.3	6.5	-1.6	30.7
	23012004	214	10:33	11:02	36.0717	-75.6650	3.0	3.1	3.1	6.4	-1.9	30.5
	23012004	215	11:12	11:41	36.0897	-75.6919	2.6	3.0	2.8	6.6	-2.3	30.4
	23012004	216	11:51	12:21	36.1206	-75.6847	2.4	2.9	2.7	6.5	-2.1	30.3
	23012004	217	13:18	13:50	36.1653	-75.6981	3.1	3.4	3.3	6.6	-0.6	30.4
	23012004	218	14:05	14:35	36.1206	-75.6834	3.0	3.0	3.0	6.6	-0.5	30.4
	23012004	219	15:08	15:38	36.0975	-75.6561	3.0	3.0	3.0	3.3	-0.1	30.5
	23012004	220	15:50	16:20	36.0725	-75.6456	3.0	3.0	3.0	6.7	0.6	30.6
	23012004	221	16:32	17:06	36.0422	-75.6403	3.0	3.0	3.0	6.6	1	30.6
	23012004	222	17:20	17:55	36.0067	-75.6211	3.0	3.0	3.0	6.5	0.8	30.5
	23012004	223	18:06	18:34	35.9697	-75.6042	3.0	3.0	3.0	6.5	1.7	30.5
	23012004	224	19:00	19:28	35.9350	-75.5733	3.3	4.2	3.8	6.6	2.5	30.7
	23012004	225	19:41	20:09	35.9292	-75.5419	3.0	3.6	3.3	6.9	2.3	31.1
	23012004	226	20:22	20:50	35.9186	-75.5006	3.0	3.3	3.2	7	2.5	31.1
	23012004	227	21:02	21:31	35.8867	-75.4989	3.0	3.2	3.1	6.8	2.1	30.6
	23012004	228	21:44	22:15	35.8664	-75.5192	3.0	3.6	3.3	6.8	2	30.5
	23012004	229	22:27	22:56	35.9006	-75.5219	3.2	3.5	3.4	6.7	2.2	30.9
	23012004	230	23:10	23:34	35.9342	-75.5228	3.0	3.0	3.0	6.9	2.3	31.1
	23012004	231	23:44	0:12	35.9428	-75.5517	2.4	3.4	2.9	6.6	2.5	31

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
	24012004	232	0:25	0:55	35.9436	-75.5875	3.0	3.0	3.0	6.5	2.6	30.6
	24012004	233	1:10	1:42	35.9272	-75.5753	3.0	3.4	3.2	6.5	3.2	30.7
	24012004	234	1:57	2:27	35.9606	-75.6086	3.0	3.0	3.0	6.3	3.5	30.5
	24012004	235	2:39	3:10	35.9928	-75.6186	3.0	3.0	3.0	6.3	3.7	30.5
	24012004	236	3:23	3:45	35.9892	-75.6014	3.0	3.0	3.0	6.3	4.8	30.5
	24012004	237	3:56	4:06	35.9725	-75.6086	3.0	3.0	3.0	6.4	4.9	30.6
	24012004	238	4:18	4:40	35.9781	-75.6022	3.0	3.0	3.0	6.4	5.2	30.6
	24012004	239	4:51	5:21	35.9544	-75.6011	3.0	3.0	3.0	6.5	5.6	30.6
	24012004	240	5:36	6:06	35.9353	-75.5697			#DIV/0!	6.6	6	30.7
	24012004	241	6:20	6:45	35.9119	-75.5367	3.0	3.1	3.1	6.5	6.1	30.7
	24012004	242	6:58	7:14	35.8847	-75.5186	2.9	3.0	3.0	6.7	5.7	30.8
	24012004	243	7:26	7:56	35.8764	-75.5228	2.2	3.4	2.8	6.7	5.7	30.8
	24012004	244	8:08	8:40	35.8494	-75.5086	3.0	3.9	3.5	6.9	5.3	30.8
	24012004	245	8:57	9:29	35.8406	-75.5100	3.0	3.3	3.2	6.7	5.6	30.6
	24012004	246	9:43	10:07	35.8050	-75.4942	2.9	3.1	3.0	8.2	6	29
	24012004	247	10:30	10:58	35.7847	-75.4744	3.0	3.1	3.1	7.3	6.9	30.7
	24012004	248	11:47	12:22	35.7525	-75.4442	2.4	3.0	2.7	7.2	7.6	30.4
	24012004	249	12:38	13:08	35.7002	-75.4536	3.0	3.0	3.0	7.3	6.7	30.4
	24012004	250	13:21	13:51	35.6867	-75.4531	3.0	3.0	3.0	7.7	7.7	30.6
	24012004	251	14:02	14:26	35.6581	-75.4586	3.0	3.0	3.0	7.8	7.1	30.7
	24012004	252	14:37	15:00	35.6169	-75.4369	3.0	3.0	3.0	7.7	6.9	30.4
	24012004	253	15:14	15:33	35.6208	-75.4002	3.0	3.0	3.0	7.6	7.5	30.2
	24012004	254	15:45	16:10	35.6236	-75.3834	3.0	3.0	3.0	7.6	7.7	30.3
	24012004	255	16:24	16:46	35.5939	-75.3906	3.0	3.0	3.0	7.4	8.1	30.1
	24012004	256	17:05	17:25	35.5739	-75.3867	3.0	3.0	3.0	7.3	8	30.3
	24012004	257	17:39	18:09	35.5431	-75.4106	3.0	3.0	3.0	7.5	8	30.3
	24012004	258	18:32	19:02	35.5272	-75.4353	3.0	3.3	3.2	7.7	5.2	30.8
	14012003	1	1703	1718	35.01	-76.05	2.8	2.8	2.8	10.8	6.3	
	14012003	2	1747	1802	35.01	-76.04	2.8	2.8	2.8	10.8	5.7	
	14012003	3	1832	1847	35.02	-76.06	2.8	2.8	2.8	10.1	5.7	
	14012003	4	1902	1917	35.02	-76.03	2.8	2.8	2.8	9.6	5.9	
	14012003	5	1936	1951	35.04	-76.00	2.4	2.4	2.4	11.0	6.5	
	14012003	6	2101	2106	35.08	-75.95	2.5	2.5	2.5	12.3	6.3	
	14012003	7	2136	2156	35.10	-75.92	2.5	2.5	2.5	12.6	6.3	
	14012003	8	2211	2241	35.14	-75.88	2.5	2.5	2.5	11.3	7.1	
	14012003	9	2255	2325	35.14	-75.87	2.4	2.4	2.4	11.3	7.1	
	14012003	10	2339	9	35.13	-75.82	2.5	2.5	2.5	10.2	6.5	

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
	15012003	11	24	54	35.17	-75.79	2.5	2.5	2.5	7.4	6.4	
	15012003	12	108	138	35.17	-75.77	2.5	2.5	2.5	6.8	6.4	
	15012003	13	154	224	35.18	-75.73	2.5	2.5	2.5	8.5	8.0	
	15012003	14	239	254	35.18	-75.71	2.5	2.5	2.5	11.3	9.6	
	15012003	15	1035	1045	35.50	-75.44	2.5	2.5	2.5	9.5	2.6	
	15012003	16	1059	1114	35.54	-75.44	2.5	2.5	2.5	9.2	2.5	
	15012003	17	1128	1143	35.55	-75.41	2.5	2.5	2.5	9.5	2.5	
	15012003	18	1158	1218	35.57	-75.37	2.6	2.6	2.6	9.7	2.4	
	15012003	19	1233	1300	35.59	-75.37	2.6	2.6	2.6	10.9	2.0	
	15012003	20	1315	1335	35.62	-75.45	2.9	2.9	2.9	10.6	1.5	
	15012003	21	1350	1410	35.64	-75.41	2.9	2.9	2.9	9.8	1.5	
	15012003	22	1425	1440	35.64	-75.44	2.9	2.9	2.9	9.3	1.5	
	15012003	23	1458	1507	35.66	-75.46	2.9	2.9	2.9	8.8	2.0	
	15012003	24	1523	1532	35.65	-75.46	2.9	2.9	2.9	8.5	2.5	
	15012003	25	1558	1613	35.67	-75.46	2.8	2.8	2.8	8.5	3.0	
	15012003	26	1653	1713	35.63	-75.46	2.8	2.8	2.8	8.4	3.5	
	15012003	27	1728	1748	35.66	-75.46	2.8	2.8	2.8	8.2	2.9	
	15012003	28	1805	1825	35.68	-75.47	2.8	2.8	2.8	8.3	2.9	
	15012003	29	1841	1901	35.70	-75.47	2.8	2.8	2.8	7.2	2.9	
	15012003	30	1921	1941	35.74	-75.49	2.8	2.8	2.8	7.5	2.9	
	15012003	31	2011	2056	35.75	-75.48	2.9	2.9	2.9	7.9	2.9	
	15012003	32	2100	2110	35.72	-75.48	2.7	2.7	2.7	7.7	2.9	
	15012003	33	2200	2210	35.75	-75.49	2.5	2.5	2.5	7.1	2.9	
	15012003	34	2237	2247	35.78	-75.50	2.5	2.5	2.5	6.7	2.9	
	15012003	35	2317	2327	35.81	-75.50	2.5	2.5	2.5	7.2	2.9	
	15012003	36	2348	2358	35.82	-75.51	2.8	2.8	2.8	7.2	2.9	
	16012003	37	49	59	35.83	-75.52	2.8	2.8	2.8	7.0	2.9	
	16012003	38	118	128	35.87	-75.53	2.8	2.8	2.8	6.9	2.9	
	16012003	39	150	200	35.89	-75.52	2.8	2.8	2.8	7.3	2.9	
	16012003	40	224	239	35.90	-75.52	2.8	2.8	2.8	7.6	2.9	
	16012003	41	324	334	35.95	-75.55	2.8	2.8	2.8	7.1	2.9	
	16012003	42	358	408	35.97	-75.57	2.9	2.9	2.9	6.8	2.5	
	16012003	43	435	445	35.99	-75.60	2.9	2.9	2.9	6.7	2.6	
	16012003	44	525	535	36.02	-75.62	2.9	2.9	2.9	6.3	2.7	
	16012003	45	556	606	36.04	-75.63	2.9	2.9	2.9	6.4	2.1	
	16012003	46	627	637	36.06	-75.63	2.8	2.8	2.8	6.3	2.0	
	16012003	47	700	710	36.05	-75.65	2.8	2.8	2.8	6.2	1.3	

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
	16012003	48	726	741	36.04	-75.64	2.8	2.8	2.8	6.3	1.2	
	16012003	49	758	813	36.02	-75.62	2.4	2.4	2.4	6.4	1.0	
	16012003	50	829	844	35.99	-75.61	2.4	2.4	2.4	6.6	1.5	
	16012003	51	902	916	35.97	-75.59	2.4	2.4	2.4	6.8	1.5	
	16012003	52	935	950	35.94	-75.58	2.4	2.4	2.4	6.8	1.5	
	16012003	53	1009	1024	35.93	-75.57	2.5	2.5	2.5	6.9	1.5	
	16012003	54	1055	1119	35.91	-75.57	2.5	2.5	2.5	6.8	1.1	
	16012003	55	1152	1212	35.94	-75.59	2.8	2.8	2.8	6.8	1.1	
	16012003	56	1227	1247	35.96	-75.61	2.8	2.8	2.8	6.5	1.2	
	16012003	57	1303	1323	35.97	-75.62	2.8	2.8	2.8	6.3	1.3	
	16012003	58	1339	1359	36.00	-75.62	2.8	2.8	2.8	6.3	1.4	
	16012003	59	1414	1434	36.03	-75.63	2.8	2.8	2.8	6.2	1.5	
	16012003	60	1452	1523	36.06	-75.63	2.8	2.8	2.8	6.1	1.6	
	16012003	61	1539	1609	36.07	-75.68	2.8	2.8	2.8	5.8	2.2	
	16012003	62	1626	1656	36.10	-75.69	2.8	2.8	2.8	5.7	2.8	
	16012003	63	1712	1742	36.13	-75.71	2.8	2.8	2.8	5.6	3.0	
	16012003	64	1757	1827	36.17	-75.72	2.8	2.8	2.8	5.4	3.4	
	16012003	65	1845	1915	36.20	-75.73	2.8	2.8	2.8	5.4	3.8	
	16012003	66	1930	2000	36.17	-75.72	2.7	2.7	2.7	5.6	5.5	
	16012003	67	2016	2046	36.14	-75.70	2.5	2.5	2.5	5.6	5.8	
	16012003	68	2102	2119	36.11	-75.69	2.5	2.5	2.5	5.7	6.1	
	16012003	69	2139	2209	36.09	-75.66	2.6	2.6	2.6	5.8	7.1	
	16012003	70	2226	2256	36.05	-75.63	2.8	2.8	2.8	5.9	7.5	
	16012003	71	2315	2345	36.01	-75.62	2.5	2.5	2.5	6.0	7.7	
	17012003	72	3	23	35.99	-75.58	2.8	2.8	2.8	6.3	6.5	
	17012003	73	44	114	35.96	-75.58	2.8	2.8	2.8	6.5	6.5	
	17012003	74	138	208	35.92	-75.53	2.8	2.8	2.8	6.8	5.4	
	17012003	75	230	300	35.90	-75.52	2.8	2.8	2.8	6.9	4.5	
	17012003	76	317	347	35.86	-75.52	2.8	2.8	2.8	7.0	4.8	
	17012003	77	404	434	35.82	-75.51	3.0	3.0	3.0	6.7	5.1	
	17012003	78	458	533	35.78	-75.50	2.9	2.9	2.9	6.8	4.3	
	17012003	79	552	612	35.74	-75.49	2.9	2.9	2.9	7.1	4.7	
	17012003	80	631	651	35.71	-75.47	2.8	2.8	2.8	7.2	4.0	
	17012003	81	713	733	35.67	-75.45	2.8	2.8	2.8	7.3	3.4	
	17012003	82	755	815	35.64	-75.45	2.7	2.7	2.7	7.3	3.2	
	17012003	83	832	853	35.66	-75.45	2.7	2.7	2.7	7.2	2.8	
	17012003	84	912	921	35.68	-75.46	2.7	2.7	2.7	7.0	2.3	

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
	17012003	85	939	1000	35.71	-75.47	2.4	2.4	2.4	6.9	1.9	
	17012003	86	1018	1045	35.73	-75.42	2.6	2.6	2.6	7.0	1.5	
	17012003	87	1111	1132	35.77	-75.49	2.4	2.4	2.4	6.8	1.1	
	17012003	88	1153	1214	35.77	-75.49	2.8	2.8	2.8	6.8	0.7	
	17012003	89	1237	1257	35.74	-75.48	2.8	2.8	2.8	6.9	0.6	
	17012003	90	1315	1335	35.70	-75.45	2.8	2.8	2.8	6.9	0.3	
	17012003	91	1353	1410	35.67	-75.41	2.8	2.8	2.8	6.8	0.0	
	17012003	92	1433	1453	35.67	-75.46	2.8	2.8	2.8	6.9	0.3	
	17012003	93	1510	1530	35.69	-75.46	2.8	2.8	2.8	6.8	0.7	
	17012003	94	1516	1606	35.71	-75.47	2.9	2.9	2.9	6.7	0.5	
	17012003	95	1622	1642	35.74	-75.48	2.9	2.9	2.9	6.6	0.9	
	17012003	96	1702	1722	35.75	-75.49	2.8	2.8	2.8	6.3	1.1	
	17012003	97	1744	1804	35.77	-75.48	2.8	2.8	2.8	6.5	0.8	
	17012003	98	1826	1846	35.74	-75.47	3.0	3.0	3.0	6.6	0.5	
	17012003	99	1902	1922	35.71	-75.47	3.0	3.0	3.0	6.7	0.5	
	17012003	100	1938	2008	35.69	-75.45	2.6	2.6	2.6	6.8	0.5	
	17012003	101	2031	2101	35.63	-75.44	2.5	2.5	2.5		0.5	
	17012003	102	2118	2148	35.69	-75.45	2.5	2.5	2.5	6.4	0.5	
	17012003	103	2207	2237	35.71	-75.45	2.5	2.5	2.5	5.9	0.5	
	17012003	104	2252	2322	35.74	-75.49	2.5	2.5	2.5	5.8	0.5	
	17012003	105	2340	10	35.78	-75.50	2.8	2.8	2.8	5.7	0.5	
	18012003	106	27	57	35.81	-75.49	2.8	2.8	2.8	5.7	0.0	
	18012003	107	118	148	35.84	-75.52	2.8	2.8	2.8	5.6	0.0	
	18012003	108	211	241	35.85	-75.53	2.8	2.8	2.8	5.7	0.0	
	18012003	109	257	327	35.91	-75.52	2.8	2.8	2.8	6.0	-0.6	
	18012003	110	344	414	35.94	-75.52	3.0	3.0	3.0	5.9	-0.6	
	18012003	111	442	512	35.95	-75.55	2.9	2.9	2.9	5.9	-1.1	
	18012003	112	528	608	35.91	-75.55	2.9	2.9	2.9	5.6	-0.6	
	18012003	113	642	712	35.87	-75.54	3.0	3.0	3.0	5.4	-1.1	
	18012003	114	926	956	35.74	-75.49	2.8	2.8	2.8	5.6	-0.6	
	18012003	115	1035	1058	35.70	-75.46	2.8	2.8	2.8	5.5	-1.7	
	18012003	116	1153	1223	35.73	-75.46	2.8	2.8	2.8	5.5	-2.2	
	18012003	117	1400	1429	35.80	-75.49	2.8	2.8	2.8	5.4	-2.2	
	18012003	118	1447	1457	35.68	-75.49	2.8	2.8	2.8	5.4	-2.2	
	18012003	119	1500	1526	35.76	-75.51	2.8	2.8	2.8	5.3	-2.2	
	18012003	120	1545	1615	35.86	-75.53	2.9	2.9	2.9	5.1	-2.2	
	18012003	121	1631	1701	35.89	-75.56	2.9	2.9	2.9	4.9	-2.2	

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
	18012003	122	1717	1747	35.91	-75.58	2.9	2.9	2.9	4.9	-2.2	
	18012003	123	1804	1834	35.94	-75.60	2.7	2.7	2.7	4.7	-2.2	
	18012003	124	1850	1920	35.97	-75.62	2.8	2.8	2.8	4.7	-2.2	
	18012003	125	1936	2008	36.01	-75.63	2.5	2.5	2.5	4.6	-2.2	
	18012003	126	2020	2040	35.04	-75.64	2.5	2.5	2.5	4.2	-2.2	
	18012003	127	2058	2108	35.06	-75.66	2.5	2.5	2.5	3.9	-1.7	
	18012003	128	2134	2204	35.05	-75.66	2.6	2.6	2.6	4.9	-1.7	
	18012003	129	2219	2249	35.04	-75.62	2.8	2.8	2.8	4.3	-1.7	
	18012003	130	2306	2336	36.00	-75.62	2.8	2.8	2.8	4.1	-1.1	
	19012003	131	24	54	35.94	-75.59	2.8	2.8	2.8	4.4	-1.7	
	19012003	132	115	145	35.92	-75.58	2.8	2.8	2.8	3.9	-1.1	
	19012003	133	204	234	35.95	-75.60	2.8	2.8	2.8	4.7	-1.6	
	19012003	134	254	324	35.97	-75.58	2.8	2.8	2.8	4.7	-0.6	
	19012003	135	348	418	35.92	-75.56	2.9	2.9	2.9	4.3	-1.6	
	19012003	136	433	503	35.89	-75.53	2.9	2.9	2.9	4.8	0.5	
	19012003	137	519	549	35.85	-75.52	2.8	2.8	2.8	4.8	1.0	
	19012003	138	608	638	35.83	-75.53	2.8	2.8	2.8	5.8	1.0	
	19012003	139	704	734	35.88	-75.54	2.8	2.8	2.8	5.3	-0.6	
	19012003	140	802	825	35.89	-75.55	2.8	2.8	2.8	5.3	-1.1	
	19012003	141	1056	1126	35.80	-75.50	2.8	2.8	2.8	5.4	1.1	
	19012003	142	1152	1212	35.84	-75.50	2.8	2.8	2.8	5.4	0.5	
	19012003	143	1227	1257	35.83	-75.52	2.8	2.8	2.8	5.8	1.0	
	19012003	144	1313	1343	35.87	-75.53	2.8	2.8	2.8	6.2	1.5	
	19012003	145	1405	1435	35.91	-75.58	2.8	2.8	2.8	6.2	1.5	
	19012003	146	1450	1520	35.95	-75.59	2.8	2.8	2.8	6.0	2.0	
	19012003	147	1535	1605	35.98	-75.61	2.8	2.8	2.8	5.8	2.5	
	19012003	148	1620	1650	36.00	-75.62	3.0	3.0	3.0	5.4	2.0	
	19012003	149	1721	1735	36.02	-75.63	2.8	2.8	2.8	5.4	2.0	
	19012003	150	1802	1832	36.03	-75.63	3.0	3.0	3.0	5.4	2.5	
	19012003	151	1851	1906	35.03	-75.62	3.0	3.0	3.0	5.4	2.0	
	19012003	152	1924	1954	36.03	-75.63	2.8	2.8	2.8	5.4	1.5	
	19012003	153	2018	2038	36.06	-75.65	2.7	2.7	2.7	5.3	1.5	
	19012003	154	2057	2128	36.08	-75.65	2.4	2.4	2.4	5.3	1.5	
	19012003	155	2153	2223	36.07	-75.67	2.4	2.4	2.4	4.6	0.5	
	19012003	156	2244	2314	36.06	-75.66	2.6	2.6	2.6	4.2	1.5	
	19012003	157	2338	8	36.14	-75.68	2.8	2.8	2.8	4.2	2.5	
	20012003	158	24	54	36.12	-75.68	2.8	2.8	2.8	4.4	3.0	

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
	20012003	159	115	145	36.18	-75.71	2.8	2.8	2.8	3.9	4.0	
	20012003	160	203	233	36.18	-75.71	2.8	2.8	2.8	4.7	3.5	
	20012003	161	255	325	36.23	-75.74	2.8	2.8	2.8	4.7	4.0	
	20012003	162	342	413	36.27	-75.75	3.0	3.0	3.0	4.4	4.0	
	20012003	163	432	502	36.30	-75.73	2.9	2.9	2.9	4.8	4.5	
	20012003	164	521	555	36.34	-75.76	2.9	2.9	2.9	5.3	4.5	
	20012003	165	624	654	36.38	-75.78	2.8	2.8	2.8			
	20012003	166	714	745	36.35	-75.79	2.9	2.9	2.9			
	20012003	167	805	835	36.31	-75.77	2.7	2.7	2.7			
	20012003	168	851	921	36.28	-75.73	2.6	2.6	2.6			
	20012003	169	941	1011	36.25	-75.75	2.8	2.8	2.8			
	20012003	170	1055	1128	36.23	-75.73	2.7	2.7	2.7			
	20012003	171	1138	1208	36.27	-75.76	2.8	2.8	2.8	6.2	7.8	
	20012003	172	1223	1236	36.31	-75.76	2.8	2.8	2.8	6.1	10.0	
	20012003	173	1255	1329	36.32	-75.75	2.8	2.8	2.8	6.1	11.1	
	20012003	174	1347	1417	36.30	-75.77	2.8	2.8	2.8	6.3	11.6	
	20012003	175	1433	1450	36.27	-75.75	2.8	2.8	2.8	6.4	11.3	
	20012003	176	1510	1540	36.23	-75.72	2.8	2.8	2.8	6.5	11.2	
	20012003	177	1603	1633	36.27	-75.76	2.8	2.8	2.8	6.6	11.1	
	20012003	178	1649	1719	36.24	-75.75	2.8	2.8	2.8	6.6	10.0	
	20012003	179	1736	1806	36.21	-75.72	2.9	2.9	2.9	6.6	9.7	
	20012003	180	1823	1853	36.17	-75.68	2.8	2.8	2.8	6.5	9.7	
	20012003	181	1908	1938	36.14	-75.71	2.9	2.9	2.9	6.4	9.7	
	20012003	182	1954	2024	36.11	-75.69	2.5	2.5	2.5	6.5	7.0	
	20012003	183	2039	2109	36.07	-75.69	2.9	2.9	2.9	6.4	6.5	
	20012003	184	2123	2153	36.05	-75.64	2.7	2.7	2.7	6.4	6.7	
	20012003	185	2208	2237	36.02	-75.63	2.8	2.8	2.8	6.2	6.5	
	20012003	186	2254	2324	36.98	-75.62	2.8	2.8	2.8	6.2	6.1	
	20012003	187	2340	10	35.95	-75.59	2.8	2.8	2.8			
	20012003	188	25	45	35.94	-75.52	2.8	2.8	2.8			
	20012003	189	59	129	35.93	-75.52	2.8	2.8	2.8			
	20012003	190	147	225	35.91	-75.52	2.8	2.8	2.8			
	21012003	191	246	306	35.94	-75.53	2.8	2.8	2.8	6.2	5.0	
	21012003	192	325	355	35.96	-75.52	2.8	2.8	2.8	6.2	4.5	
	21012003	193	410	440	35.92	-75.52	3.0	3.0	3.0	6.1	3.5	
	21012003	194	502	532	35.89	-75.53	2.8	2.8	2.8	6.1	4.5	
	21012003	195	611	641	35.92	-75.53	3.0	3.0	3.0	6.1	4.0	

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
	21012003	196	711	741	35.90	-75.54	2.9	2.9	2.9	6.2	4.0	
	21012003	197	810	830	35.87	-75.54	2.7	2.7	2.7	6.2	4.0	
	21012003	198	848	908	35.89	-75.54	2.6	2.6	2.6	6.1	4.0	
	21012003	199	934	954	35.89	-75.53	2.6	2.6	2.6	6.1		
	21012003	200	1009	1029	35.88	-75.53	2.5	2.5	2.5	6.2		
	21012003	201	1049	1119	35.86	-75.54	2.7	2.7	2.7	6.3		
	21012003	202	1134	1154	35.89	-75.56	2.7	2.7	2.7	6.2	5.5	
	21012003	203	1212	1228	35.89	-75.56	2.8	2.8	2.8	6.1	5.5	
	21012003	204	1254	1317	35.94	-75.55	2.8	2.8	2.8	6.1	5.5	
	21012003	205	1356	1416	35.92	-75.53	2.8	2.8	2.8	6.1	3.5	
	21012003	206	1437	1507	35.94	-75.52	2.8	2.8	2.8	6.0	3.5	
	21012003	207	1526	1556	35.89	-75.52	2.8	2.8	2.8	6.1	3.5	
	21012003	208	1617	1647	35.85	-75.52	2.9	2.9	2.9	6.2	2.5	
	22012003	209	101	111	35.19	-75.59	2.8	2.8	2.8	7.6		
	22012003	210	211	223	35.19	-75.63	2.8	2.8	2.8	8.2	2.0	
	22012003	211	246	256	35.17	-75.68	2.8	2.8	2.8	8.6	2.6	
	22012003	212	327	337	35.17	-75.71	2.8	2.8	2.8	8.5	1.5	
	22012003	213	356	411	35.17	-75.73	2.9	2.9	2.9	8.3	1.5	
	22012003	214	428	445	35.19	-75.72	2.8	2.8	2.8	8.4	1.5	
	22012003	215	508	538	35.16	-75.74	2.8	2.8	2.8	8.2	1.0	
	22012003	216	606	636	35.17	-75.72	3.0	3.0	3.0	8.3		
	22012003	217	654	724	35.17	-75.78	2.8	2.8	2.8	7.3		
	22012003	218	749	752	35.15	-75.83	2.8	2.8	2.8	7.2		
	22012003	219	834	854	35.11	-75.80	2.7	2.7	2.7	10.0	0.5	
	22012003	220	914	929	35.13	-75.78	2.5	2.5	2.5	9.5	1.5	
	22012003	221	947	1003	35.14	-75.76		2.7	2.7	9.3	0.5	
	22012003	222	1018	1033	35.13	-75.74		2.7	2.7	8.6	0.5	
	22012003	223	1047	1058	35.17	-75.73		2.7	2.7	8.1	0.5	
	22012003	224	1113	1124	35.17	-75.70		2.7	2.7	7.9	0.5	
	22012003	225	1138	1148	35.20	-75.70	2.8	2.8	2.8	7.8	0.5	
	22012003	226	1203	1213	35.20	-75.68	2.8	2.8	2.8	7.8	0.5	
	22012003	227	1228	1238	35.20	-75.65		2.8	2.8	7.8	1.0	
	14012002	1	1938	1953	35.11	-75.86	3.0			11.8	15.0	35.3
	14012002	2	2020	2035	35.14	-75.84	3.0			11.8	15.0	35.2
	14012002	3	2057	2102	35.14	-75.80	3.0			12.3	15.5	35.4
	14012002	4	2119	2127	35.15	-75.78	3.0			12.2	15.0	35.4
	14012002	5	2144	2152	35.16	-75.76	3.0			12.5	15.0	35.3

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
	14012002	6	2209	2221	35.17	-75.73	3.0			12.4	16.0	35.3
	14012002	7	2237	2247	35.18	-75.71	3.0			12.4	16.5	35.0
	14012002	8	2302	2312	35.19	-75.68	3.0			12.5	16.5	34.7
	14012002	9	2329	2342	35.20	-75.66	3.0			12.4	16.4	34.7
	15012002	10	0002	0012	35.21	-75.62	3.0			12.3	16.5	34.7
	15012002	11	0034	0049	35.20	-75.59	3.0			13.2	12.0	35.2
	15012002	12	0113	128	35.17	-75.56	3.0			13.1	12.0	35.0
	15012002	13	0148	2030	35.14	-75.54	3.0			11.9	11.5	36.0
	15012002	14	427	442	35.20	-75.39	3.0			11.0	11.5	35.9
	15012002	15	520	540	35.24	-75.42	3.0			11.4	11.5	35.1
	15012002	16	556	616	35.26	-75.44	3.0			11.4	11.5	35.3
	15012002	17	645	705	35.29	-75.46	3.0			11.4	11.0	35.0
	15012002	18	731	751	35.32	-75.44	3.0			11.1	11.0	34.5
	15012002	19	808	828	35.34	-75.41	3.0			11.9	11.0	34.6
	15012002	20	844	854	35.37	-75.41	3.0			12.1	10.4	34.5
	15012002	21	1022	1042	35.46	-75.44	3.0			11.4		33.9
	15012002	22	1114	1134	35.50	-75.43	3.0			10.4	10.0	34.0
	15012002	23	1154	1214	35.53	-75.42	3.0			10.6	11.4	34.0
	15012002	24	1232	1242	35.55	-75.40	3.0			11.8	11.5	34.5
	15012002	25	1308	1328	35.58	-75.38	3.0			11.7	11.5	34.3
	15012002	26	1346	1406	35.61	-75.39	3.0			12.0	11.5	34.2
	15012002	27	1423	1443	35.63	-75.41	3.0			12.3	12.0	33.7
	15012002	28	1501	1528	35.64	-75.44	3.0			11.6	11.5	33.7
	15012002	29	1542	1602	35.67	-75.46	3.0			12.5	12.0	33.5
	15012002	30	1627	1642	35.71	-75.47	3.0			11.8	11.5	33.4
	15012002	31	1819	1834	35.79	-75.49	3.0			10.6	10.1	29.8
	15012002	32	1926	1941	35.81	-75.48	3.0			10.2	10.5	27.3
	15012002	33	2013	2028	35.83	-75.50	3.0			9.3	10.1	28.2
	15012002	34	2102	2117	35.85	-75.53	3.0			10.4	10.0	29.9
	15012002	35	2148	2203	35.88	-75.54	3.0			10.7	10.8	31.5
	15012002	36	2230	2310	35.90	-75.51	3.0			10.8	11.5	32.2
	15012002	37	2300	2310	35.89	-75.48	3.0			11.1	10.5	32.7
	15012002	38	2325	2335	35.87	-75.46	3.0			11.4	11.0	32.1
	15012002	39	2352	0002	35.85	-75.44	3.0			10.9	11.0	32.3
	16012002	40	0022	0032	35.84	-75.42	3.0			11.0	11.0	32.8
	16012002	41	0052	102	35.81	-75.41	3.0			10.7	10.5	32.5
	16012002	42	0126	141	35.78	-75.41	3.0			10.5	10.5	32.9

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
	16012002	43	0158	213	35.76	-75.41	3.0			10.5	10.0	32.9
	16012002	44	235	250	35.73	-75.41	3.0			10.0	10.0	33.8
	16012002	45	310	325	35.69	-75.43	3.0			10.0	10.0	33.0
	16012002	46	357	417	35.68	-75.44	3.0			9.6	9.5	33.0
	16012002	47	438	458	35.71	-75.45	3.0			8.4	9.0	32.7
	16012002	48	517	537	35.73	-75.47	3.0			8.2	8.5	29.5
	16012002	49	557	612	35.76	-75.48	3.0			7.8	8.0	30.0
	16012002	50	641	656	35.79	-75.49	3.0			7.5	8.0	33.0
	16012002	51	920	935	35.87	-75.55	3.0			10.7	7.0	33.3
	16012002	52	955	1005	35.89	-75.57	3.0			10.6	7.0	33.2
	16012002	53	1026	1036	35.91	-75.58	3.0			10.3	7.0	33.0
	16012002	54	1056	1106	35.93	-75.59	3.0			10.1	7.0	32.8
	16012002	55	1122	1132	35.95	-75.60	3.0			10.0	7.0	32.8
	16012002	56	1147	1157	35.97	-75.61	3.0			7.0	7.0	32.9
	16012002	57	1212	1222	35.98	-75.62	3.0			6.9	6.5	32.9
	16012002	58	1242	1252	35.99	-75.62	3.0			7.7	11.0	32.9
	16012002	59	1308	1318	35.97	-75.61	3.0			8.0	10.5	32.9
	16012002	60	1335	1345	35.95	-75.60	3.0			8.1	10.0	32.9
	16012002	61	1408	1418	35.94	-75.59	3.0			7.9	10.0	32.8
	16012002	62	1435	1455	35.90	-75.58	3.0			8.0	10.0	32.9
	16012002	63	1652	1707	35.87	-75.55	3.0			7.3	9.5	33.0
	16012002	64	1724	1734	35.89	-75.57	3.0			7.3	9.0	32.9
	16012002	65	1803	1813	35.91	-75.58	3.0			7.3	8.0	32.9
	16012002	66	1826	1836	35.93	-75.59	3.0			7.1	8.0	32.8
	16012002	67	1854	1909	35.94	-75.59	3.0			7.3	7.5	32.9
	16012002	68	1922	1937	35.92	-75.58	3.0			7.4	7.5	33.0
	16012002	69	1951	2006	35.90	-75.57	3.0			10.2	7.5	33.0
	16012002	70	2022	2037	35.89	-75.57	3.0			9.9	7.5	32.8
	16012002	71	2052	2107	35.91	-75.58	3.0			9.8	7.0	32.8
	16012002	72	2122	2137	35.94	-75.59	3.0			9.9	7.5	32.8
	16012002	73	2157	2122	35.96	-75.61	3.0			9.8	7.0	32.8
	16012002	74	2226	2241	35.99	-75.62	3.0			9.9	7.0	32.8
	16012002	75	2254	2314	36.01	-75.62	3.0			10.1	7.0	33.0
	16012002	76	2328	2338	36.03	-75.61	3.0			10.4	6.5	33.4
	16012002	77	2357	0012	36.06	-75.61	3.0			8.3	6.5	32.9
	17012002	78	0029	0044	36.07	-75.64	3.0			8.4	6.5	32.9
	17012002	79	0102	117	36.08	-75.66	3.0			8.4	8.0	32.8

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
	17012002	80	0134	149	36.09	-75.68	3.0			8.3	8.0	32.8
	17012002	81	206	221	36.11	-75.69	3.0			8.0	8.5	32.8
	17012002	82	237	252	36.13	-75.68	3.0			8.2	8.5	32.9
	17012002	83	308	325	36.15	-75.66	3.0			8.6	8.5	32.9
	17012002	84	342	357	36.17	-75.68	3.0			8.6	8.5	33.0
	17012002	85	416	431	36.19	-75.72	3.0			8.0	8.0	32.9
	17012002	86	447	502	36.21	-75.72	3.0			8.0	8.0	32.8
	17012002	87	447	502	36.22	-75.74	3.0			8.2	8.0	32.8
	17012002	88	547	602	36.24	-75.72	3.0			8.6	8.5	32.8
	17012002	89	618	648	36.27	-75.71	3.0			8.6	8.5	32.8
	17012002	90	700	715	36.30	-75.71	3.0			8.6	8.5	32.9
	17012002	91	731	756	36.32	-75.72	3.0			8.2	8.0	32.8
	17012002	92	834	854	36.35	-75.76	3.0			9.2	7.0	32.6
	17012002	93	928	938	36.38	-75.80	3.0			7.7	8.0	31.3
	17012002	94	950	1005	36.39	-75.80	3.0			7.6	9.0	31.1
	17012002	95	1027	1042	36.42	-75.81	3.0			7.3	9.0	30.7
	17012002	96	1110	1125	36.41	-75.81	3.0			7.6	10.0	31.5
	17012002	97	1212	1227	36.39	-75.80	3.0			11.4	11.0	31.6
	17012002	98	1240	1255	36.41	-75.81	3.0			11.6	11.5	31.3
	17012002	99	1315	1330	36.43	-75.81	3.0			12.4	12.0	31.1
	17012002	100	1349	1404	36.40	-75.80	3.0			12.8	13.0	31.9
	17012002	101	1426	1441	36.41	-75.80	3.0			12.8	13.0	32.1
	17012002	102	1459	1514	36.41	-75.81	3.0			12.8	13.0	31.5
	17012002	103	1545	1600	36.43	-75.81	3.0			12.9	13.0	31.5
	17012002	104	1619	1631	36.41	-75.81	3.0			12.9	13.0	31.5
	17012002	105	1707	1727	36.42	-75.81	3.0			12.4	12.0	32.1
	17012002	106	1742	1757	36.42	-75.81	3.0			11.4	11.5	31.4
	17012002	107	1808	1818	36.44	-75.82	3.0			11.0	11.0	31.5
	17012002	108	1830	1845	36.46	-75.46	3.0			11.0	11.0	31.5
	17012002	109	1901	1916	36.48	-75.83	3.0			10.5	10.5	34.6
	17012002	110	1933	1948	36.50	-75.83	3.0			11.0	11.0	31.6
	17012002	111	2000	2015	36.52	-75.83	3.0			7.9	11.5	31.4
	17012002	112	2053	2108	36.55	-75.81	3.0			7.8	10.5	34.6
	17012002	113	2201	2211	36.53	-75.81	3.0			7.7	9.5	30.9
	17012002	114	2249	2259	36.56	-75.80	3.0			7.2	9.5	30.5
	17012002	115	2319	2331	36.54	-75.81	3.0			7.6	10.0	30.9
	18012002	116	0033	109	36.53	-75.81	3.0			9.1	9.0	30.7

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
	18012002	117	0109	119	36.55	-75.81	3.0			9.2	9.0	30.6
	18012002	118	0144	154	36.52	-75.83	3.0			9.5	9.5	30.9
	18012002	119	215	225	36.52	-75.83	3.0			9.2	9.5	30.9
	18012002	120	241	256	36.54	-75.83	3.0			10.1	10.0	31.0
	18012002	121	316	326	36.56	-75.83	3.0			9.3	9.5	31.0
	18012002	122	350	400	36.58	-75.82	3.0			8.3	8.5	30.9
	18012002	123	418	428	36.55	-75.83	3.0			8.6	9.0	31.1
	18012002	124	458	508	36.53	-75.82	3.0			9.7	9.0	31.0
	18012002	125	523	533	36.55	-75.83	3.0			8.7	9.0	31.1
	18012002	126	554	609	36.57	-75.83	3.0			8.7	8.5	31.1
	18012002	127	627	642	36.59	-75.83	3.0			8.3	8.5	30.5
	18012002	128	701	716	36.56	-75.83	3.0			8.8	9.0	31.3
	18012002	129	730	745	36.54	-75.84	3.0			8.0	8.0	31.4
	18012002	130	759	814	36.51	-75.84	3.0			7.8	8.5	31.2
	18012002	131	827	837	36.49	-75.83	3.0			7.7	8.5	31.2
	18012002	132	852	907	36.47	-75.83	3.0			7.8	8.5	31.3
	18012002	133	921	936	36.45	-75.82	3.0			7.8	8.0	31.3
	18012002	134	954	1009	36.42	-75.80	3.0			8.1	8.0	31.8
	18012002	135	1021	1031	36.40	-75.81	3.0			8.6	8.0	32.1
	18012002	136	1044	1059	36.38	-75.81	3.0			8.5	8.5	32.0
	18012002	137	1111	1126	36.36	-75.79	3.0			8.7	8.0	32.1
	18012002	138	1150	1205	36.32	-75.79	3.0			8.0	8.5	32.1
	18012002	139	1223	1238	36.30	-75.78	3.0			8.1	7.5	32.2
	18012002	140	1307	1322	36.27	-75.77	3.0			7.8	7.5	32.3
	18012002	141	1343	1358	36.30	-75.78	3.0			7.1	7.0	32.1
	18012002	142	1418	1433	36.30	-75.78	3.0			6.9	7.0	32.1
	18012002	143	1448	1507	36.29	-75.78	3.0			6.9	8.5	32.1
	18012002	144	1524	1537	36.26	-75.77	3.0			8.6	8.5	32.4
	18012002	145	1550	1600	36.24	-75.72	3.0			8.7	9.0	32.5
	18012002	146	1614	1624	36.23	-75.75	3.0			8.3	8.5	32.5
	18012002	147	1639	1649	36.21	-75.74	3.0			9.0	8.5	32.6
	18012002	148	1704	1714	36.19	-75.73	3.0			9.4	8.5	32.7
	18012002	149	1728	1738	36.17	-75.72	3.0			8.2	8.5	32.8
	18012002	150	1800	1810	36.15	-75.71	3.0			8.2	8.5	32.8
	18012002	151	1827	1837	36.13	-75.71	3.0			8.3	8.5	32.8
	18012002	152	1850	1900	36.11	-75.70	3.0			8.2	8.5	32.8
	18012002	153	1913	1923	36.09	-75.69	3.0			8.3	8.5	32.8

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
	18012002	154	1935	1950	36.07	-75.68	3.0			8.3	11.0	32.8
	18012002	155	2001	2013	36.06	-75.67	3.0			9.8	11.5	32.8
	18012002	156	2026	2041	36.04	-75.65	3.0			9.2	10.5	32.8
	18012002	157	2053	2108	36.02	-75.63	3.0			10.0	10.5	32.9
	18012002	158	2124	2130	36.01	-75.60	3.0			10.3	10.5	33.0
	19012002	159	2256	2306	36.53	-75.78	3.0			8.4	7.0	32.4
	19012002	160	2323	2333	36.51	-75.76	3.0			8.7	7.0	32.5
	19012002	161	2351	0001	36.50	-75.75	3.0			7.0	7.0	32.5
	20012002	162	0016	0025	36.51	-75.77	3.0			7.1	6.5	30.6
	20012002	163	0040	0053	36.51	-75.79	3.0			6.6	6.5	30.7
	20012002	164	0113	128	36.51	-75.79	3.0			6.1	6.5	30.3
	20012002	165	0150	205	36.50	-75.79	3.0			5.1	4.5	30.5
	20012002	166	227	242	36.48	-75.80	3.0			4.9	4.5	31.0
	20012002	167	308	323	36.50	-75.81	3.0			4.9	4.5	31.0
	20012002	168	344	359	36.52	-75.81	3.0			4.1	4.0	31.2
	20012002	169	447	457	36.45	-75.79	3.0			3.9	4.0	30.5
	20012002	170	515	525	36.42	-75.80	3.0			4.1	4.5	30.6
	20012002	171	551	608	36.39	-75.80	3.0			4.2	4.5	30.7
	20012002	172	623	633	36.36	-75.79	3.0			4.5	4.5	30.7
	20012002	173	654	709	36.34	-75.79	3.0			4.7	4.5	30.7
	20012002	174	724	742	36.36	-75.79	3.0			4.7	5.0	30.8
	20012002	175	826	841	36.40	-75.80	3.0			7.4	4.5	31.3
	20012002	176	918	933	36.42	-75.80	3.0			7.7	4.5	31.3
	20012002	177	953	1008	36.39	-75.80	3.0			7.5	4.5	31.0
	20012002	178	1111	1121	36.33	-75.78	3.0			7.3	4.5	30.8
	20012002	179	1145	1150	36.30	-75.78	3.0			4.6	4.5	30.6
	20012002	180	1205	1215	36.28	-75.78	3.0			4.5	4.5	32.5
	20012002	181	1234	1249	36.26	-75.77	3.0			4.6	4.5	30.5
	20012002	182	1331	1341	36.22	-75.74	3.0			4.8	4.5	32.9
	20012002	183	1405	1425	36.20	-75.72	3.0			4.9	4.5	30.7
	20012002	184	1443	1446	36.17	-75.72	3.0			5.1	4.5	30.8
	20012002	185	1512	1523	36.14	-75.71	3.0			5.6	5.0	30.9
	20012002	186	1544	1559	36.12	-75.70	3.0			5.5	5.5	30.9
	20012002	187	1615	1630	36.09	-75.68	3.0			5.6	5.5	30.9
	20012002	188	1646	1701	36.07	-75.66	3.0				5.5	
	20012002	189	1719	1734	36.05	-75.65	3.0			7.7	5.5	31.2
	20012002	190	1802	1820	36.03	-75.63	3.0			5.5	5.5	31.3

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
	20012002	191	1831	1846	36.05	-75.65	3.0			5.6	5.5	31.0
	20012002	192	1903	1918	36.07	-75.67	3.0			5.5	5.5	30.8
	20012002	193	1932	1947	36.09	-75.69	3.0			5.6	5.5	30.7
	20012002	194	2003	2018	36.10	-75.69	3.0			7.3	5.5	30.8
	20012002	195	2031	2046	36.08	-75.68	3.0			7.2	6.0	30.9
	20012002	196	2100	2115	36.06	-75.66	3.0			7.4	6.0	31.0
	20012002	197	2130	2145	36.03	-75.64	3.0			7.6	6.0	31.1
	20012002	198	2204	2219	36.00	-75.63	3.0			7.6	6.5	31.0
	20012002	199	2233	2248	35.98	-75.62	3.0			7.6	6.5	31.1
	20012002	200	2306	2321	35.95	-75.60	3.0			7.7	7.0	31.2
	20012002	201	2337	2352	35.93	-75.59	3.0			7.8	7.5	31.3
	21012002	202	0006	0021	35.90	-75.58	3.0			7.8	7.0	30.9
	21012002	203	39	0054	35.87	-75.56	3.0			7.8	7.5	31.5
	21012002	204	0111	126	35.85	-75.55	3.0			7.8	8.0	31.5
	21012002	205	0148	203	35.83	-75.54	3.0			7.4	7.0	31.6
	21012002	206	222	237	35.85	-75.54	3.0			7.2	8.0	31.6
	21012002	207	313	328	35.89	-75.56	3.0			7.9	8.0	31.4
	21012002	208	347	402	35.91	-75.57	3.0			7.8	8.0	31.1
	21012002	209	422	437	35.93	-75.57	3.0			7.4	7.0	31.2
	21012002	210	456	511	35.95	-75.58	3.0			6.5	6.5	31.0
	21012002	211	0527	0554	35.97	-75.60	3.0			6.0		30.0
	21012002	212	612	627	35.97	-75.61	3.0			6.1	6.0	30.9
	21012002	213	641	701	35.96	-75.60	3.0			6.4	6.0	30.9
	21012002	214	717	737	35.95	-75.57	3.0			6.6	6.5	31.3
	21012002	215	759	814	35.93	-75.57	3.0			7.3	6.5	31.3
	21012002	216	833	853	35.95	-75.57	3.0			7.4	7.0	31.0
	21012002	217	910	930	35.97	-75.59	3.0			7.4	7.0	30.9
	21012002	218	944	1004	35.94	-75.60	3.0			7.6	8.0	31.0
	21012002	219	1016	1036	35.92	-75.59	3.0			7.7	9.0	31.0
	21012002	220	1120	1140	35.84	-75.51	3.0			8.4	9.0	31.8
	21012002	221	1156	1216	35.81	-75.49	3.0			9.1	9.0	31.7
	21012002	222	1232	1246	35.79	-75.48	3.0			9.2	9.5	31.5
	21012002	223	1302	1322	35.77	-75.49	3.0			9.3	9.5	31.5
	21012002	224	1338	1358	35.74	-75.41	3.0			10.0	10.0	31.6
	21012002	225	1456	1516	35.64	-75.40	3.0			9.5	9.5	32.6
	21012002	226	1533	1543	35.61	-75.39	3.0			10.0	10.0	32.6
	14012001	1	21:09	21:24	35.09083	-75.9192	2.9			13.3	15.8	35.0

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
	14012001	2	22:43	22:58	35.08317	-75.8452	2.9			13.5	18	34.1
	14012001	3	23:15	23:30	35.11183	-75.8443	2.5			11.3	17.5	34.1
	14012001	4	23:47	0:03	35.13433	-75.8380	2.6			11.4	17.8	33.7
	15012001	5	0:21	0:41	35.13133	-75.8072	3.5			12.4	17.5	34.2
	15012001	6	0:57	1:22	35.14600	-75.7772	2.7			11.5	15.5	36.2
	15012001	7	1:56	2:20	35.12250	-75.7428	2.7			18	16.8	32.4
	15012001	8	2:32	2:47	35.14883	-75.7210	2.8			10	14.3	32.1
	15012001	9	3:01	3:28	35.17283	-75.7050	2.6			9.4	13.8	32.2
	15012001	10	7:43	7:58	35.16233	-75.6070	2.9			10.4	13.2	32.7
	15012001	11	8:18	8:33	35.17683	-75.5860	2.9			9.2	12.1	32.8
	15012001	12	10:12	10:27	35.11433	-75.3923	3			9.1	11.1	32.9
	15012001	13	10:47	11:02	35.13117	-75.3710	3			8.3	11.3	32.5
	15012001	14	11:18	11:33	35.15100	-75.3875	3			7.7	11.5	32.1
	15012001	15	11:49	12:04	35.17017	-75.4120	2.8			8.1	11.7	31.3
	15012001	16	12:18	12:33	35.19000	-75.4235	2.7			8	10.9	31
	15012001	17	13:04	13:23	35.21517	-75.4660	2.8			7	10.4	31
	15012001	18	13:33	13:48	35.23100	-75.4892	2.8			7.9	11.8	31.4
	15012001	19	14:09	14:24	35.26250	-75.4958	2.8			7.9	11.8	31.2
	15012001	20	14:36	14:45	35.28433	-75.4838	2.8			7.6	11.7	31
	15012001	21	16:18	16:22	35.45183	-75.4473	3			8.8	7.4	31.2
	15012001	22	16:41	16:51	35.47250	-75.4425	3			9.2	7.4	31.2
	15012001	23	17:12	17:27	35.46450	-75.4208	3			6.7	10	31.2
	15012001	24	20:37	20:52	35.48383	-75.4128	2.6			6.4	9	31.2
	15012001	25	21:38	21:53	35.51250	-75.4315	2.9			6.7	9.3	31.2
	15012001	26	22:07	22:22	35.53117	-75.4088	2.8			5.8	8.6	31.2
	15012001	27	22:40	23:00	35.55617	-75.3995	2.8			6.3	8.7	31.2
	15012001	28	23:31	23:51	35.56450	-75.3687	2.9			5.5	8.7	31.2
	16012001	29	0:06	0:21	35.53683	-75.3803	2.9			6.3	9.5	31.2
	16012001	30	0:36	0:56	35.51000	-75.3917	3			6.1	9.7	31.3
	16012001	31	1:09	1:25	35.49217	-75.4017	3			6.2	9.6	31.3
	16012001	32	1:37	1:58	35.51900	-75.3987	3			6	9.6	31.3
	16012001	33	2:08	2:25	35.54683	-75.3925	3			6.2	9.6	31.3
	16012001	34	2:37	2:53	35.57333	-75.3838	2.7			5.9	9.2	31.3
	16012001	35	3:07	3:24	35.60100	-75.3845	2.8			6	8.7	31.2
	16012001	36	3:43	4:03	35.60500	-75.4163	2.9			6	8.7	31.2
	16012001	37	4:20	4:41	35.63517	-75.4202	3			6	8.3	31.2
	16012001	38	5:08	5:22	35.61883	-75.4015	3			5.9	8.4	31.2

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
	16012001	39	5:37	5:55	35.63267	-75.4265	3			5.8	8.1	31.2
	16012001	40	6:15	6:31	35.66750	-75.4506	3			5.8	8.2	31.2
	16012001	41	6:46	7:01	35.67433	-75.4337	3			6.6	8.8	31.2
	16012001	42	7:42	7:57	35.65650	-75.4123	3			6	9.1	31.2
	16012001	43	8:19	8:34	35.67250	-75.4340	3			5.3	9.2	31.2
	16012001	44	9:23	9:38	35.69667	-75.4528	3			6	6	31.2
	16012001	45	10:14	10:24	35.68600	-75.4538	3			6	5.1	31.3
	16012001	46	10:58	11:13	35.70317	-75.4537	3			6	6.3	31.2
	16012001	47	11:34	11:49	35.68033	-75.4513	3			5.6	6.4	31.3
	16012001	48	12:03	12:18	35.70200	-75.4393	3			6.2	6.4	31.3
	16012001	49	12:34	12:49	35.72917	-75.4333	2.9			6	6.3	31.3
	16012001	50	13:06	13:21	35.74967	-75.4403	2.8			6	6	31.1
	16012001	51	13:39	13:54	35.75633	-75.4713	2.7			6.2	5.9	31
	16012001	52	14:20	14:35	35.78883	-75.4733	2.8			6	5.9	30.8
	16012001	53	14:52	15:07	35.81233	-75.4747	2.9			5.6	5.6	30.6
	16012001	54	15:22	15:37	35.82533	-75.5035	2.9			5.7	5.9	30.5
	16012001	55	15:51	16:06	35.84000	-75.5267	3			5.9	5.9	31.3
	16012001	56	16:22	16:37	35.85267	-75.5278	3			5.8	6	31
	16012001	57	16:58	17:13	35.85800	-75.4945	3			5.8	6	30.4
	16012001	58	17:29	17:44	35.88167	-75.4988	3			5.7	6.3	30.4
	16012001	59	18:01	18:16	35.91083	-75.5070	3			5.8	6	30.4
	16012001	60	18:31	18:46	35.93500	-75.5118	3			5.7	7	30.4
	16012001	61	19:01	19:16	35.95850	-75.5163	3			5.6	7.1	30.8
	16012001	62	19:31	19:46	35.97900	-75.5293	3			5.6	7.1	31.1
	16012001	63	20:00	20:15	35.99017	-75.5555	2.7			5.8	7.3	31.1
	16012001	64	20:29	20:44	36.00300	-75.5793	2.7			5.7	7.1	30.7
	16012001	65	20:59	21:14	36.01983	-75.6037	2.8			5.1	7.1	30.7
	16012001	66	21:28	21:43	36.03417	-75.6305				5.7	7.1	
	16012001	67	22:31	22:41	36.04033	-75.6373	2.9			5.2	6.8	30.5
	16012001	68	23:00	23:08	36.04100	-75.6357	3			5.5	6.6	
	16012001	69	23:38	23:48	36.04683	-75.6467	3			5.5	6.6	
	17012001	70	0:17	0:29	36.04583	-75.6467	3			5.5	6.5	30.6
	17012001	71	0:58	1:09	36.02083	-75.6222	3			5.4	6.6	30.5
	17012001	72	1:35	1:47	36.05250	-75.6350	3			4.9	6.5	30.6
	17012001	73	2:09	2:19	36.06850	-75.6480	3			5.5	6.6	30.6
	17012001	74	2:34	2:49	36.04733	-75.6397	3.1			5	6.5	30.6
	17012001	75	3:28	3:44	35.99783	-75.6208	3			5	6.3	30.7

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
	17012001	76	4:01	4:24	35.97250	-75.6060	3			5.4	6.3	30.6
	17012001	77	4:38	5:01	35.93833	-75.5865	3			5.6	6.3	30.7
	17012001	78	5:18	5:37	35.90483	-75.5687	3			5.6	6.3	30.7
	17012001	79	5:51	6:14	35.89200	-75.5527	2.9			5.6	6.5	30.7
	17012001	80	6:24	6:49	35.90967	-75.5512	2.9			5.6	6.5	30.6
	17012001	81	6:58	7:18	35.89267	-75.5215	3			5.4	6.5	30.7
	17012001	82	7:29	7:54	35.86833	-75.5117	3			5.4	6.6	30.5
	17012001	83	8:28	8:48	35.85517	-75.5377	3			5.2	6.3	30.7
	17012001	84	9:13	9:28	35.88433	-75.5587	3			5.6	6.3	30.6
	17012001	85	11:08	11:23	36.01550	-75.6223	3			4.9	6.1	30.5
	17012001	86	11:37	11:52	36.04067	-75.6350	2.9			4.9	6	30.6
	17012001	87	12:18	12:33	36.07317	-75.6480	3			4.9	6	30.7
	17012001	88	13:00	13:15	36.09550	-75.6523	2.9			4.9	7.9	30.6
	17012001	89	13:35	13:50	36.06233	-75.6477	2.9			4.9	7.9	30.6
	17012001	90	14:17	14:34	36.04667	-75.6317	3			5.1	6	30.5
	17012001	91	14:50	15:05	36.06167	-75.6323	2.9			5.1	6	30.2
	17012001	92	15:20	15:43	36.08250	-75.6485	2.9			5.4	6	30.5
	17012001	93	16:04	16:27	36.11017	-75.6738	2.9			5.2	5.9	
	17012001	94	16:38	17:03	36.14267	-75.6877	2.9			5.1	6.1	
	17012001	95	17:17	17:41	36.16833	-75.7043	3			5.4	6.1	
	17012001	96	17:52	18:16	36.19333	-75.7133	3			5.3	6.1	
	17012001	97	18:29	18:53	36.21850	-75.7248	3			5.2	6.1	29.9
	17012001	98	19:11	19:21	36.24850	-75.7345	3			4.7	6	29.9
	17012001	99	19:35	19:45	36.26633	-75.7475	3			5	6	29.9
	17012001	100	20:02	20:17	36.29933	-75.7525	3			5	6	29.9
	17012001	101	20:32	20:42	36.25250	-75.7427	3			5	6.1	30
	17012001	102	20:58	21:08	36.22733	-75.7388	3			4.7	6.3	30.1
	17012001	103	21:45	21:55	36.18650	-75.7185	3			4.9	6.5	30.3
	17012001	104	22:17	22:25	36.15600	-75.7052	3			4.9	6.8	30.3
	17012001	105	22:39	22:49	36.13433	-75.6967	3			4.8	6.6	30.3
	17012001	106	23:02	23:10	36.11267	-75.6887	3			5.2	6.8	
	17012001	107	23:24	23:34	36.09150	-75.6800	3			5.3	6.6	
	17012001	108	23:51	0:06	36.07133	-75.6675	2.9			5.1	6.8	30.3
	18012001	109	0:27	0:42	36.04683	-75.6608	2.9			5.1	7	30.4
	18012001	110	0:57	1:04	36.02750	-75.6240	2.9			5.1	7.1	34
	18012001	111	1:21	1:47	36.01633	-75.6143	2.9			5.1	7.2	30.5
	18012001	112	2:03	2:18	36.04417	-75.6378	2.9			4.9	7	30.5

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
	18012001	113	2:32	2:47	36.06050	-75.6577	2.9			4.8	7.3	30.3
	18012001	114	3:00	3:15	36.08217	-75.6717	2.8			4.7	7.3	30.3
	18012001	115	3:31	3:48	36.09817	-75.6783	3			4.7	7.3	30.3
	18012001	116	7:50	8:04	35.79667	-75.4747	3			5.4	8.7	30.4
	18012001	117	8:24	8:39	35.77117	-75.4892	3			5.9	8.4	30.4
	18012001	118	9:06	9:21	35.75317	-75.4875	3			5.9	8.4	32.2
	18012001	119	9:35	9:55	35.73483	-75.4710	3			5.4	8.8	30.6
	18012001	120	10:12	10:32	35.71583	-75.4518	3			5.8	9.8	30.6
	18012001	121	10:53	11:13	35.69467	-75.4647	3			5.3	9.8	30.6
	18012001	122	11:27	11:47	35.71717	-75.4698	3			5.4	10.7	30.6
	18012001	123	12:05	12:28	35.72567	-75.4458	2.9			5.3	13.2	30.7
	18012001	124	12:43	12:58	35.69217	-75.4382	2.8			5.4	12	30.8
	18012001	125	13:12	13:28	35.67300	-75.4562	3			5.4	14.5	30.8
	18012001	126	13:53	14:08	35.64667	-75.4535	3.1			5.4	14.5	30.9
	18012001	127	14:25	14:40	35.67300	-75.4575	2.9			5.7	12.1	30.8
	18012001	128	14:58	15:20	35.69517	-75.4593	2.8			5.4	8.7	34.1
	18012001	129	15:35	15:55	35.66383	-75.4518	3			5.4	9.5	30.9
	18012001	130	16:11	16:27	35.63517	-75.4462	3			5.8	8.8	30.9
	18012001	131	16:39	16:53	35.60800	-75.4400	2.8			6	8.2	30.7
	18012001	132	17:04	17:23	35.59717	-75.4285	2.8			5.9	8.7	30.7
	18012001	133	17:35	17:52	35.62267	-75.4173	3			5.8	8	30.7
	18012001	134	18:05	18:21	35.64633	-75.4138	3			5.6	7	30.9
	18012001	135	18:38	18:58	35.65833	-75.4293	2.9			5.2	7	30.9
	18012001	136	19:15	19:33	35.63117	-75.4392	3			5.7	7.3	31
	18012001	137	19:46	20:01	35.60567	-75.4225	2.8			5.6	7.3	
	18012001	138	20:19	20:34	35.59367	-75.3907	3			5.3	7.3	31.2
	18012001	139	20:48	21:03	35.58150	-75.3637	3			5.3	7.5	31.3
	18012001	140	21:17	21:37	35.55600	-75.3793	3			5.5	7.3	31.4
	18012001	141	21:54	22:09	35.52850	-75.3932	2.9			5.4	7.1	31.4
	18012001	142	22:22	22:37	35.54867	-75.3785	2.9			5.3	7	31.3
	18012001	143	23:04	23:19	35.55550	-75.3823	3			5.3	7.4	31.1
	18012001	144	23:33	23:48	35.52850	-75.3967	3			5.4	9.1	31.5
	19012001	145	0:08	0:18	35.50167	-75.4160	3			5.6	8.4	31
	19012001	146	0:26	0:51	35.40600	-75.4267	2.8			5.6	8.4	31.1
	19012001	147	1:05	1:20	35.50583	-75.4045	2.9			5.4	7.5	31.2
	19012001	148	1:37	1:52	35.52617	-75.3850	2.9			5.3	7.4	31.2
	19012001	149	2:08	2:23	35.55050	-75.3780	2.9			5.3	7.8	31.2

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
	19012001	150	2:40	3:00	35.54867	-75.3967	3			5.3	7.7	31.1
	19012001	151	3:14	3:34	35.52083	-75.4028	3			5.2	7.5	31.1
	19012001	152	8:30	8:45	35.20683	-75.5858	3			11.2	16.9	33.2
	19012001	153	8:58	9:13	35.20683	-75.6160	3			10.9	17	33.5
	19012001	154	9:29	9:44	35.20150	-75.6440	2.5			12.5	18	34.2
	19012001	155	9:56	9:58	35.18667	-75.6597	2.5			13.2	17.8	
	19012001	156	10:10	10:25	35.17883	-75.6677	3			13.4	18	
	19012001	157	10:58	11:13	35.12883	-75.6668	3			14.2	18.6	35.1
	19012001	158	11:28	11:43	35.10833	-75.6733	3			15.3	18.9	35.7
	19012001	159	12:00	12:15	35.12417	-75.7033	2.9			15.1	18.8	35.5
	19012001	160	12:30	12:45	35.14000	-75.7278	3			15.9	18.3	
	19012001	161	13:02	13:17	35.15817	-75.7540	2.8			13.3	17.9	34.2
	19012001	162	13:33	13:48	35.15600	-75.7857	2.9			12.7	17.3	29.9
	19012001	163	14:08	14:23	35.14117	-75.8177	2.9			12.4	17	30.7
	29012000	1	15:09	15:39	35.01467	-76.0655	3.1			5.7	2.5	22.5
	29012000	2	16:46	17:16	35.05917	-75.9612	3.0			9.0	4.2	31.6
	29012000	3	18:47	19:17	35.14950	-75.7975	3.0			7.4	2.4	28.4
	29012000	4	20:05	20:35	35.18700	-75.7018	2.8			10.1	2.9	33.1
	29012000	5	21:05	21:25	35.19867	-75.6483	2.8			10.4	3.3	33.4
	29012000	6	21:46	21:57	35.20350	-75.6080	3.0			11.7	3.6	33.6
	29012000	7	22:24	22:29	35.19217	-75.5702	3.0			6.3	3.8	31.1
	29012000	8	22:47	22:52	35.18150	-75.5518	3.0			6.4	4.2	31.0
	29012000	9	23:11	23:16	35.16250	-75.5462	3.1			6.6	4.6	31.0
	29012000	10	23:35	23:40	35.14400	-75.5330	3.0			6.8	5.0	31.3
	30012000	11	0:02	0:12	35.12467	-75.6007	2.9			6.4	5.4	31.2
	30012000	12	0:29	0:49	35.11600	-75.4910	3.0			7.3	6.0	31.6
	30012000	13	1:07	1:27	35.11433	-75.4538	3.0			6.7	6.8	31.3
	30012000	14	1:45	2:05	35.11200	-75.4153	3.1			7.2	7.3	31.5
	30012000	15	4:17	4:37	35.18667	-75.3443	3.0			7.7	9.3	31.7
	30012000	16	4:53	5:03	35.21333	-75.3308	3.0			6.6	9.1	31.3
	30012000	17	5:29	5:50	35.21250	-75.3342	3.0			6.2	9.8	31.4
	30012000	18	6:55	7:15	35.15767	-75.3928	2.9			6.2	9.2	31.2
	30012000	19	7:41	8:01	35.18600	-75.4215	2.9			5.5	8.6	30.6
	30012000	20	8:19	8:29	35.21067	-75.4480	3.0			4.6	7.9	29.9
	30012000	21	8:44	8:49	35.23167	-75.4565	2.9			4.8	7.9	30.0
	30012000	22	9:17	9:31	35.26917	-75.4362	3.0			5.0	8.4	30.2
	30012000	23	11:30	11:50	35.44583	-75.4553	3.0			4.6	9.7	29.1

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
	30012000	24	12:05	12:25	35.47683	-75.4520	3.0			4.6	9.8	29.2
	30012000	25	12:40	13:00	35.50583	-75.4520	3.0			4.7	9.5	29.5
	30012000	26	13:14	13:29	35.52150	-75.4170	3.1			5.1	10.9	30.4
	30012000	27	13:44	14:01	35.51750	-75.4022	3.1			5.1	10.9	30.4
	30012000	28	14:15	14:45	35.54033	-75.4045	3.0			5.0	10.2	30.8
	30012000	29	15:00	15:30	35.57150	-75.3763	3.1			5.5	11.1	31.9
	30012000	30	15:46	15:59	35.61533	-75.3813	3.0			5.1	11.9	31.7
	30012000	31	16:15	16:45	35.63583	-75.4052	3.0			4.7	10.9	31.5
	30012000	32	17:01	17:31	35.66083	-75.4438	2.9			3.6	11.4	30.6
	30012000	33	17:48	18:08	35.69967	-75.4607	2.9			3.4	10.1	30.4
	30012000	34	20:01	20:31	35.83850	-75.5247	3.1			3.2	10.4	29.9
	30012000	35	20:47	21:17	35.86450	-75.5052	3.0			3.3	10.4	29.8
	30012000	36	21:45	22:15	35.89767	-75.5190	3.0			3.2	9.7	29.7
	30012000	37	22:31	23:01	35.92650	-75.5525	3.0			3.0	7.9	29.5
	30012000	38	23:16	23:46	35.95400	-75.5787	3.0			3.0	5.4	29.6
	31012000	39	0:24	0:54	35.99933	-75.5960	3.8			3.0	3.2	29.5
	31012000	40	1:47	2:07	36.04350	-75.6278	3.0			2.8	2.5	29.2
	31012000	41	2:45	3:05	36.07433	-75.6285	3.0			2.6	2.0	28.7
	31012000	42	3:27	3:47	36.09767	-75.6583	2.9			2.5	2.0	28.5
	31012000	43	4:06	4:26	36.12433	-75.6772	2.9			2.6	1.9	28.8
	31012000	44	4:48	5:08	36.15200	-75.7045	3.0			2.6	1.9	28.8
	31012000	45	5:27	5:57	36.18150	-75.7100	3.0			2.5	1.8	28.5
	31012000	46	6:14	6:44	36.22233	-75.7127	3.0			2.4	1.6	28.3
	31012000	47	7:00	7:30	36.25683	-75.7222	3.0			2.4	1.6	28.3
	31012000	48	7:47	8:07	36.28150	-75.7590	2.9			2.3	2.4	28.4
	31012000	49	8:27	8:57	36.31500	-75.7710	3.1			2.3	2.4	28.2
	31012000	50	9:39	10:09	36.32750	-75.7057	3.0			3.2	2.9	29.7
	31012000	51	11:06	11:23	36.36867	-75.7480	3.0			2.9	5.1	28.8
	31012000	52	11:47	12:10	36.38817	-75.7963	3.0			2.9	5.1	28.8
	31012000	53	12:25	12:50	36.37467	-75.7327	3.1			3.3	4.6	29.4
	31012000	54	13:55	14:15	36.36400	-75.6883	2.9			4.2	5.2	30.9
	31012000	55	15:00	15:20	36.35200	-75.7167	3.1			3.6	5.2	29.7
	31012000	56	16:00	16:20	36.37033	-75.7710	3.0			2.9	5.2	28.8
	31012000	57	16:46	17:01	36.36933	-75.8265	3.0			2.9	4.8	28.4
	31012000	58	17:23	17:48	36.34767	-75.7622	3.1			3.0	4.6	28.8
	31012000	59	18:04	18:35	36.32183	-75.7113	3.0			3.3	4.2	29.3
	31012000	60	19:12	19:42	36.29167	-75.7000	3.0			3.6	3.6	29.9

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
	31012000	61	20:08	20:28	36.31450	-75.7397	3.0			3.0	2.8	28.9
	31012000	62	21:20	21:43	36.33233	-75.7607	3.0			2.8	2.2	28.6
	31012000	63	22:26	22:35	36.32333	-75.7748	3.0			2.6	1.6	28.4
	31012000	64	23:22	23:32	36.31383	-75.7617	3.1			2.7	1.5	28.6
	1022000	65	0:25	0:33	36.28800	-75.7317	3.1			3.0	1.6	29.1
	1022000	66	1:03	1:08	36.26667	-75.7772	2.9			2.6	1.4	28.6
	1022000	67	1:29	1:37	36.26450	-75.7555	3.1			2.7	1.1	28.6
	1022000	68	2:00	2:08	36.25983	-75.7398	3.1			2.8	1.3	28.9
	1022000	69	3:10	3:15	36.28833	-75.7450	3.1			2.9	1.0	29.1
	1022000	70	4:50	5:00	36.16917	-75.7052	3.0			2.6	1.6	28.8
	1022000	71	5:18	5:38	36.15217	-75.6863	3.0			2.7	1.7	28.9
	1022000	72	5:55	6:25	36.12917	-75.6953	3.0			2.6	0.9	28.7
	1022000	73	6:44	7:14	36.11783	-75.6517	3.1			2.9	0.9	29.3
	1022000	74	7:32	8:02	36.08500	-75.6742	3.0			2.6	0.9	28.8
	1022000	75	8:18	8:48	36.07433	-75.6280	3.1			2.8	1.8	29.3
	1022000	76	9:02	9:32	36.10850	-75.6108	3.0			3.2	2.0	30.0
	1022000	77	9:49	10:19	36.14450	-75.6392	3.1			3.2	2.8	29.6
	1022000	78	10:40	11:10	36.18350	-75.6605	3.0			3.1	2.2	29.5
	1022000	79	11:29	11:59	36.21717	-75.6852	3.0			2.8	2.5	29.1
	1022000	80	12:16	12:46	36.22783	-75.7313	3.1			3.0	3.8	28.9
	1022000	81	13:22	13:52	36.28633	-75.7275	3.1			2.0	5.0	29.2
	1022000	82	15:08	15:23	36.30167	-75.7497	3.1			3.2	5.7	29.3
	1022000	83	15:47	16:02	36.26200	-75.7472	3.0			3.9	5.9	30.4
	1022000	84	16:20	16:35	36.23050	-75.7382	2.9			3.5	6.1	29.2
	1022000	85	18:33	18:53	36.24333	-75.7597	3.0			4.5	5.5	31.8
	1022000	86	19:10	19:30	36.27600	-75.7615	3.0			4.5	5.2	31.8
	1022000	87	19:45	20:05	36.29683	-75.7342	2.9			3.5	5.7	30.1
	1022000	88	20:23	20:53	36.19833	-75.7135	3.0			3.3	4.8	30.2
	1022000	89	21:06	21:36	36.26250	-75.7195	3.0			3.2	4.5	29.5
	1022000	90	21:49	22:19	36.22833	-75.7257	2.9			3.3	3.9	29.5
	1022000	91	22:34	23:04	36.18983	-75.7247	2.9			3.3	3.6	29.7
	1022000	92	23:18	23:48	36.15233	-75.7115	3.0			3.1	3.2	29.4
	2022000	93	0:13	0:43	36.10900	-75.6877	3.1			2.9	2.9	29.3
	2022000	94	1:02	1:32	36.06900	-75.6688	3.0			3.0	2.9	29.5
	2022000	95	1:47	2:17	36.03733	-75.6425	2.9			3.2	2.7	29.9
	2022000	96	2:31	3:01	36.00950	-75.6195	3.0			3.2	2.6	29.6
	2022000	97	3:16	3:46	35.97417	-75.6118	3.0			3.0	2.3	29.5

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
	2022000	98	4:00	4:30	35.94117	-75.5858	3.0			3.1	2.2	29.6
	2022000	99	4:51	5:21	35.91917	-75.5627	2.9			3.4	2.0	30.0
	2022000	100	5:37	6:08	35.95667	-75.5793	3.0			3.3	1.9	29.9
	2022000	101	6:23	6:43	35.98583	-75.6085	2.9			3.0	1.8	29.6
	2022000	102	7:03	7:23	36.01550	-75.6300	3.0			3.0	1.5	29.5
	2022000	103	7:49	8:19	36.02017	-75.6187	3.0			3.0	1.5	29.5
	2022000	104	8:36	9:06	35.97983	-75.6178	3.0			3.0	1.5	29.6
	2022000	105	9:13	9:48	35.94400	-75.6005	3.1			3.1	1.5	29.6
	2022000	106	10:08	10:38	35.89883	-75.5633	3.0			3.4	3.2	30.4
	2022000	107	10:55	11:25	35.88000	-75.5203	3.0			4.5	2.9	30.9
	2022000	108	11:42	13:03	35.90417	-75.5212	3.0			4.0	3.6	30.8
	2022000	109	13:02	13:22	35.92500	-75.5175	3.1			4.0	2.9	30.7
	2022000	110	13:51	14:06	35.90300	-75.5247	3.1			4.1	3.8	30.7
	2022000	111	14:37	14:52	35.91750	-75.5408	2.9			3.9	4.1	30.6
	2022000	112	15:17	15:32	35.89417	-75.5182	2.9			4.7	4.5	30.8
	2022000	113	16:03	16:18	35.89767	-75.5358	3.0			4.1	4.1	30.7
	2022000	114	16:40	16:52	35.87250	-75.5310	3.0			4.7	3.8	30.9
	2022000	115	17:20	17:35	35.88817	-75.5237	3.1			4.5	4.1	30.1
	2022000	116	18:00	18:15	35.87917	-75.5225	3.1			4.5	3.8	30.2
	2022000	117	18:37	18:52	35.90967	-75.5263	3.0			4.5	3.9	30.5
	2022000	118	19:10	19:30	35.88483	-75.5320	3.1			4.5	3.8	30.1
	2022000	119	19:46	20:16	35.89267	-75.5002	3.0			3.7	3.9	25.2
	2022000	120	20:30	21:00	35.85900	-75.5150	3.0			3.7	3.7	25.2
	2022000	121	21:15	21:45	35.82517	-75.5050	3.0			3.8	3.3	24.1
	2022000	122	23:45	0:05	35.79200	-75.4592	2.9			3.8	3.3	18.4
	3022000	123	0:18	0:48	35.76483	-75.4517	2.9			4.1	3.4	20.4
	3022000	124	1:05	1:35	35.73000	-75.4342	3.0			4.5	3.2	18.9
	3022000	125	1:56	2:26	35.68867	-75.4572	2.9			4.2	3.1	23.9
	3022000	126	2:44	3:14	35.65167	-75.4460	2.9			3.8	2.9	29.1
	3022000	127	3:36	4:06	35.63417	-75.3952	3.0			5.1	1.4	30.7
	3022000	128	4:32	5:17	35.58767	-75.3733	3.0			5.1	3.5	31.1
	3022000	129	7:37	8:07	35.31033	-75.4552	3.0			6.4	5.2	30.9
	3022000	130	8:25	8:40	35.27433	-75.4520	3.0			6.8	6.4	31.2
	3022000	131	10:26	10:36	35.32150	-75.3802	3.0			8.7	6.8	32.1
	3022000	132	11:04	11:14	35.32117	-75.3802	3.0			9.3	7.5	32.3
	3022000	133	15:20	15:40	35.16983	-75.3503	3.0			18.4	13.4	35.3
	3022000	134	16:00	16:20	35.14050	-75.3757	3.0			18.6	14.2	35.3

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
	3022000	135	23:29	23:39	34.66200	-76.4233	3.0			13.1	11.6	34.7
	3022000	136	23:51	0:06	34.64650	-76.4373	3.1			13.5	11.0	35.0
	4022000	137	0:17	0:37	34.62967	-76.4557	2.9			13.4	11.4	34.8
	4022000	138	0:48	1:08	34.61100	-76.4763	3.0			12.2	11.4	34.5
	4022000	139	1:19	1:39	34.58550	-76.4662	3.0			11.5	11.8	34.3
	4022000	140	2:13	2:33	34.51517	-76.4518	3.0			9.3	11.9	34.2
	4022000	141	2:57	3:17	34.47033	-76.4302	3.0			9.4	12.2	34.5
	3021999	1	15:55	16:13	35.1402	-75.8295	3.0			13.9	13.4	32.4
	3021999	2	17:01	17:31	35.1527	-75.7657	3.0			13.4	12.0	32.9
	3021999	3	18:11	18:26	35.1948	-75.6848	3.0			13.1	10.4	31.0
	3021999	4	18:52	19:02	35.1875	-75.6557	2.9			12.8	10.4	31.6
	3021999	5	19:31	19:41	35.2125	-75.6227	2.9			12.6	9.8	31.7
	3021999	6	20:03	20:13	35.2160	-75.5813	2.9			12.1	9.7	31.4
	3021999	7	20:34	20:44	35.2033	-75.5498	2.8			11.9	10.1	31.5
	3021999	8	21:06	21:26	35.1780	-75.5282	2.8			11.9	10.6	31.5
	3021999	9	21:47	22:02	35.1447	-75.5173	2.7			12.1	11.0	31.7
	3021999	10	22:27	22:42	35.1283	-75.4752	2.8			12.2	11.1	31.6
	3021999	11	23:03	23:19	35.1212	-75.4338	2.8			11.3	11.5	30.9
	3021999	12	23:49	0:01	35.1090	-75.4017	2.8			11.0	11.6	30.9
	4021999	13	0:34	0:44	35.1208	-75.4010	3.0			10.7	11.9	30.9
	4021999	14	1:08	1:13	35.1313	-75.3925	2.9			11.0	12.0	30.9
	4021999	15	1:35	1:45	35.1505	-75.3917	2.7			10.7	12.5	30.8
	4021999	16	2:02	2:17	35.1662	-75.3862	2.7			10.3	12.3	30.5
	4021999	17	2:44	2:59	35.1542	-75.3763	2.9			10.6	13.0	30.5
	4021999	18	3:16	3:31	35.1742	-75.3513	2.8			12.8	13.6	30.7
	4021999	19	3:58	4:18	35.2015	-75.3498	2.9			11.8	14.1	31.1
	4021999	20	4:40	4:55	35.1777	-75.3682	2.9			11.3	14.3	30.9
	4021999	21	5:14	5:24	35.1585	-75.4033	2.9			11.3	13.7	30.8
	4021999	22	5:44	6:39	35.1782	-75.4183	2.9			10.9	14.2	30.7
	4021999	23	6:29	6:44	35.2078	-75.4510	2.9			10.2	14.8	30.3
	4021999	24	7:06	7:21	35.2295	-75.4832	2.9			9.8	15.2	30.1
	4021999	25	7:41	7:58	35.2543	-75.4928	2.8			9.6	15.5	30.0
	4021999	26	8:22	8:32	35.2885	-75.4785	2.6			9.6	15.4	30.0
	4021999	27	8:53	9:08	35.2947	-75.4475	2.8			9.5	15.1	30.0
	4021999	28	9:29	9:39	35.3005	-75.4117	2.8			9.6	13.8	29.9
	4021999	29	11:08	11:19	35.4230	-75.4663	2.7			9.3	12.9	29.7
	4021999	30	11:38	11:53	35.4495	-75.4643	2.8			9.3	13.2	29.6

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
	4021999	31	12:11	12:26	35.4792	-75.4582	2.8			9.4	13.2	28.6
	4021999	32	12:44	12:54	35.5072	-75.4435	2.8			9.2	15.5	29.2
	4021999	33	13:11	13:26	35.5298	-75.4068	2.8			9.2	14.6	29.0
	4021999	34	13:43	13:59	35.5490	-75.3982	2.8			9.1	14.3	29.0
	4021999	35	14:18	14:33	35.5652	-75.3697	2.9			9.1	13.0	29.8
	4021999	36	14:51	15:21	35.5607	-75.3592	2.9			9.1	12.4	29.6
	4021999	37	15:39	15:49	35.5993	-75.3830	2.9			9.8	12.8	28.4
	4021999	38	16:08	16:24	35.6152	-75.3962	2.9			9.8	13.3	27.7
	4021999	39	16:41	16:56	35.6200	-75.4283	2.9			9.9	13.9	27.6
	4021999	40	17:15	17:30	35.6388	-75.4590	2.9			9.7	14.2	28.2
	4021999	41	17:48	18:04	35.6698	-75.4607	2.9			9.8	12.4	28.6
	4021999	42	18:24	18:39	35.6997	-75.4612	2.9			9.7	12.1	29.0
	4021999	43	18:59	19:19	35.7227	-75.4280	2.9			9.5	11.8	29.1
	4021999	44	19:37	20:01	35.7680	-75.4183	2.9			9.1	12.8	29.0
	4021999	45	20:28	20:48	35.7785	-75.4340	2.7			9.1	12.5	28.7
	4021999	46	21:34	21:54	35.7815	-75.4173	2.8			8.9	11.8	29.3
	4021999	47	22:26	22:41	35.7695	-75.4493	2.4			8.9	11.6	28.2
	4021999	48	23:00	23:20	35.7897	-75.4633	2.7			8.9	11.4	29.0
	5021999	49	23:44	0:04	35.8162	-75.4855	2.8			8.7	11.1	29.4
	5021999	50	0:19	0:39	35.8367	-75.5162	2.8			8.7	11.0	29.7
	5021999	51	0:35	1:15	35.8555	-75.5393	2.8			8.7	10.6	29.8
	5021999	52	1:33	1:53	35.8815	-75.5575	2.8			8.6	10.4	29.5
	5021999	53	2:08	2:28	35.9067	-75.5358	2.8			8.6	10.0	29.7
	5021999	54	2:44	3:04	35.9307	-75.5248	2.8			8.6	9.7	29.9
	5021999	55	5:57	6:17	36.0488	-75.6225	2.9			8.8	8.8	29.8
	5021999	56	6:41	6:58	36.0708	-75.6545	2.9			8.7	8.3	29.5
	5021999	57	7:27	7:47	36.0955	-75.6827	2.9			8.7	8.3	29.6
	5021999	58	8:33	8:54	36.1313	-75.7070	3.0			8.3	8.2	29.9
	5021999	59	9:13	9:33	36.1562	-75.6910	2.8			8.3	8.2	29.9
	5021999	60	9:53	10:13	36.1810	-75.6878	2.7			8.3	7.8	29.6
	5021999	61	10:36	10:47	36.2007	-75.7122	2.6			8.3	8.0	30.0
	5021999	62	11:45	12:05	36.2395	-75.7158	2.5			8.4	7.8	29.6
	5021999	63	12:25	12:45	36.2770	-75.7068	2.7			8.4	7.5	29.2
	5021999	64	13:01	13:21	36.3030	-75.7342	2.7			8.4	7.7	29.2
	6021999	65	6:29	6:59	36.5218	-75.7717	2.8			8.0	8.2	28.0
	6021999	66	7:54	8:14	36.4997	-75.7785	2.7			7.7	9.3	28.1
	6021999	67	8:32	8:52	36.5310	-75.7642	2.9			7.6	8.9	28.3

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
	6021999	68	9:11	9:31	36.5485	-75.7725	2.9			7.5	8.8	28.3
	6021999	69	9:48	10:08	36.5170	-75.7723	2.7			7.7	9.1	28.3
	6021999	70	10:36	10:58	36.4792	-75.7892	2.8			7.9	10.1	28.2
	6021999	71	11:16	11:36	36.4473	-75.8030	2.0			7.8	11.4	28.3
	6021999	72	11:55	12:15	36.4257	-75.8068	2.7			7.8	11.4	28.3
	6021999	73	12:31	12:52	36.4325	-75.7710	2.7			7.9	12.3	28.3
	6021999	74	13:06	13:26	36.4025	-75.7708	2.8			7.9	13.2	28.6
	6021999	75	13:49	14:09	36.3943	-75.7713	2.9			8.0	14.5	28.5
	6021999	76	14:35	14:55	36.4332	-75.8032	2.7			8.0	15.2	28.3
	6021999	77	15:10	15:30	36.4530	-75.8075	2.7			8.0	15.2	28.5
	6021999	78	15:48	16:08	36.4248	-75.7805	2.8			8.0	15.2	28.3
	6021999	79	16:25	16:35	36.3963	-75.7977	2.8			8.6	16.9	28.6
	6021999	80	17:58	18:18	36.4067	-75.8025	2.8			8.5	16.2	28.6
	6021999	81	18:35	18:58	36.3745	-75.8003	2.8			8.6	15.9	28.6
	6021999	82	19:15	19:35	36.3377	-75.7930	2.8			8.6	15.1	28.9
	6021999	83	19:53	20:23	36.3017	-75.7783	2.9			8.6	14.5	29.1
	6021999	84	20:40	20:58	36.2842	-75.7652	2.9			8.6	14.2	29.0
	6021999	85	21:16	21:31	36.3140	-75.7650	2.9			8.5	13.6	28.8
	6021999	86	23:07	23:22	36.4072	-75.7747	2.9			7.9	11.1	28.2
	6021999	87	23:40	0:00	36.4338	-75.7722	2.8			7.9	11.4	28.2
	7021999	88	0:17	0:42	36.4540	-75.7560	2.8			7.9	11.4	28.2
	7021999	89	0:59	1:29	36.4438	-75.7248	2.6			7.8	11.3	28.5
	7021999	90	1:46	2:06	36.4053	-75.7628	2.7			8.0	10.3	28.5
	7021999	91	2:34	2:54	36.3753	-75.7992	2.7			8.0	10.4	28.5
	7021999	92	3:11	3:31	36.3553	-75.7992	2.6			8.4	9.7	28.5
	7021999	93	3:46	4:06	36.3333	-75.7648	2.8			8.4	9.7	28.5
	7021999	94	4:23	4:43	36.3012	-75.7660	2.9			8.3	9.8	28.5
	7021999	95	7:26	7:41	36.0667	-75.6502	2.9			8.7	10.2	29.9
	7021999	96	8:02	8:21	36.0363	-75.6377	2.8			8.4	10.5	29.8
	7021999	97	8:38	8:53	36.0090	-75.6232	2.7			8.4	10.4	29.8
	7021999	98	9:11	9:36	35.9875	-75.6138	3.0			8.4	10.2	29.8
	7021999	99	10:02	10:22	36.0153	-75.5505	2.9			8.6	10.5	30.4
	7021999	100	10:45	11:05	36.0225	-75.5425	2.9					
	7021999	101	11:53	12:23	36.0480	-75.6337	2.8			8.0	11.1	29.8
	7021999	102	12:39	12:59	36.0112	-75.6168	2.7			8.9	10.9	29.9
	7021999	103	13:14	13:34	35.9833	-75.6207	2.7			8.7	11.0	29.8
	7021999	104	13:50	14:20	35.9515	-75.6053	2.7			8.7	10.9	29.7

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
	7021999	105	14:35	14:55	35.9238	-75.5790	2.6			8.9	12.0	29.8
	7021999	106	15:12	15:32	35.9202	-75.5573	2.9			8.9	12.0	29.9
	7021999	107	15:50	16:12	35.9380	-75.5785	2.8			9.2	11.9	29.8
	7021999	108	16:29	17:00	35.9092	-75.5730	2.9			9.0	16.0	29.8
	7021999	109	17:26	17:50	35.9008	-75.5235	2.7			9.3	13.9	30.0
	7021999	110	18:16	18:37	35.8660	-75.5423	2.7			9.1	15.1	29.8
	7021999	111	18:55	19:15	35.8503	-75.5068	2.6			9.0	14.3	29.9
	7021999	112	20:32	20:50	35.7462	-75.4287	2.9			9.3	15.5	25.8
	7021999	113	21:16	21:36	35.7355	-75.3832	2.9			9.3	15.4	30.0
	7021999	114	22:00	22:20	35.7635	-75.3883	2.9			9.2	14.8	30.4
	7021999	115	23:14	23:34	35.6895	-75.4527	2.9			9.1	15.4	29.8
	7021999	116	23:50	0:09	35.6605	-75.4547	2.6			8.6	14.6	29.7
	8021999	117	0:25	0:40	35.6367	-75.4448	2.7			8.8	14.8	29.5
	8021999	118	0:57	1:12	35.6202	-75.4218	2.7			9.1	15.0	29.8
	8021999	119	1:28	1:44	35.6032	-75.3935	2.7			9.0	14.5	29.8
	8021999	120	2:04	2:19	35.5808	-75.3780	2.7			9.0	14.5	30.0
	8021999	121	2:40	2:55	35.5678	-75.3740	2.8			9.1	14.2	29.7
	8021999	122	3:13	3:28	35.5462	-75.3823	2.6			9.1	14.2	29.7
	8021999	123	3:45	4:00	35.5220	-75.3983	2.8			9.5	14.3	29.7
	8021999	124	4:21	4:36	35.5147	-75.4200	2.8			9.5	13.9	29.9
	8021999	125	5:03	5:19	35.5158	-75.4230	2.8			9.5	14.3	29.7
	8021999	126	5:36	5:51	35.4885	-75.4207	2.9			9.5	14.2	29.7
	8021999	127	6:11	6:21	35.4595	-75.4168	2.7			9.6	13.7	29.7
	8021999	128	6:43	6:53	35.4375	-75.3930	2.7			9.7	13.2	29.8
	8021999	129	7:14	7:29	35.4250	-75.3832	2.8			9.7	12.5	29.8
	8021999	130	7:49	8:04	35.4525	-75.4025	2.8			9.2	12.9	29.7
	8021999	131	8:26	8:42	35.4657	-75.3977	2.8			9.2	9.6	29.7
	8021999	132	9:08	9:29	35.4198	-75.3988	3.0			9.4	9.8	29.8
	8021999	133	9:47	10:07	35.3863	-75.3967	3.0			9.7	10.1	29.9
	8021999	134	10:26	10:47	35.3492	-75.3943	2.8			9.3	10.7	30.0
	8021999	135	11:16	11:26	35.3085	-75.4248	3.0			9.4	10.2	30.1
	8021999	136	11:53	12:04	35.2782	-75.4368	2.8			9.6	9.8	30.2
	8021999	137	12:20	12:30	35.2553	-75.4503	2.8			9.6	10.2	30.2
	8021999	138	12:55	13:05	35.2217	-75.4443	2.8			9.8	10.0	30.1
	8021999	139	13:34	13:54	35.2022	-75.4198	3.0			10.7	9.7	30.4
	8021999	140	14:26	14:36	35.2310	-75.3992	2.7			10.4	10.2	30.7
	8021999	141	14:53	15:03	35.2035	-75.3998	2.7			10.4	10.2	30.7

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
	8021999	142	15:20	15:30	35.1737	-75.4008	2.7			10.7	10.6	30.5
	8021999	143	15:53	16:08	35.1370	-75.3887	2.8			11.1	10.2	30.5
	8021999	144	16:49	16:59	35.0990	-75.4103	2.7			10.8	9.2	30.4
	8021999	145	17:21	17:31	35.1132	-75.4295	2.9			10.8	9.2	30.4
	8021999	146	17:49	17:54	35.0845	-75.4562	2.9			11.7	9.2	30.8
	16011998	1	19:32	19:52	35.1475	-75.8008	3.0		3.0	11.7	8.0	34.0
	17011998	2	7:18	7:41	35.1550	-75.7553	3.5		3.5	10.7	6.1	32.0
	17011998	3	8:05	8:25	35.155	-75.70166667	3.0		3.0	10.8	6.2	34.0
	17011998	4	8:54	9:04	35.165	-75.65	3.2	3.9	3.6	10.7	6.4	34.0
	17011998	5	9:46	10:07	35.193333	-75.64	3.0		3.0	10.7	6.4	34.0
	17011998	6	10:28	10:45	35.181667	-75.6	3.3		3.3	10.1	6.1	33.0
	17011998	7	16:07	16:27	35.182833	-75.34233333	3.3		3.3	10.3	8.6	35.0
	17011998	8	17:29	17:54	35.194833	-75.40983333	3.3		3.3	9.9	7.9	34.0
	17011998	9	19:17	19:32	35.204667	-75.40266667	3.7		3.7	9.9	8.8	34.0
	17011998	10	20:59	21:17	35.26	-75.415	2.5		2.5	9.0	8.0	33.0
	17011998	11	22:01	22:16	35.288667	-75.4735	2.8	3	2.9	9.4	8.4	33.0
	18011998	12	7:23	7:48	35.5045	-75.43633333	2.4	2.8	2.6	8.8	7.3	32.0
	18011998	13	8:05	8:36	35.525667	-75.4145	2.4	3	2.7	8.8	7.1	32.0
	18011998	14	9:12	9:32	35.568333	-75.37583333	2.3	2.8	2.6	8.9	6.9	32.0
	18011998	15	10:28	10:48	35.619	-75.418	2.5		2.5	8.8	6.9	32.0
	18011998	16	11:09	11:39	35.641667	-75.43166667	2.5	3	2.8	8.8	6.8	32.0
	18011998	17	14:12	14:42	35.826667	-75.51533333	2.3	2.8	2.6	8.7	7.1	31.0
	18011998	18	15:12	15:42	35.854167	-75.5375	2.5	3	2.8	8.7	7.0	31.0
	18011998	19	15:58	16:28	35.8835	-75.54133333	2.5	2.8	2.7	8.7	6.5	31.0
	18011998	20	16:44	17:20	35.913333	-75.55216667	2.5	3	2.8	8.8	6.5	31.0
	18011998	21	17:31	18:01	35.943167	-75.565	2.6		2.6	8.6	6.7	31.0
	18011998	22	18:21	18:51	35.971833	-75.59766667	2.6	2.9	2.8	8.6	6.7	31.0
	18011998	23	19:32	20:02	36.043333	-75.63333333	2.5	3	2.8	8.5	6.3	31.0
	18011998	24	20:17	20:47	36.0725	-75.65433333	2.5	3	2.8	8.4	6.2	31.0
	18011998	25	21:04	21:34	36.101333	-75.67166667	2.5		2.5	8.4	6.1	31.0
	19011998	26	7:14	7:45	36.665667	-75.83833333	2.6	2.9	2.8	7.6	6.1	30.0
	19011998	27	8:04	8:36	36.705167	-75.8595	2.3	3	2.7	7.6	6.6	30.0
	19011998	28	9:07	9:37	36.7535	-75.85833333	2.3	3	2.7	7.6	6.0	31.0
	19011998	29	10:07	10:37	36.768167	-75.84366667	2.4	2.7	2.6	7.4	6.0	30.0
	19011998	30	12:27	12:57	36.7715	-75.8475	2.6	2.9	2.8	7.2	5.0	30.0
	20011998	31	15:09	15:39	36.735167	-75.898	2.9		2.9	7.4	5.0	30.0
	20011998	32	15:59	16:29	36.687333	-75.88516667	2.7	2.9	2.8	7.6	5.0	29.0

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
	20011998	33	17:52	18:22	36.6165	-75.81883333	2.9		2.9	7.7	4.4	30.0
	20011998	34	20:28	20:58	36.483333	-75.78333333	2.2	2.9	2.6	7.7	4.3	34.0
	20011998	35	21:24	21:49	36.481667	-75.81	2.3	2.8	2.6	7.6	4.3	34.0
	21011998	36	7:17	7:47	35.858167	-75.455	2.7	2.9	2.8	8.3	4.0	34.0
	21011998	37	8:48	9:18	35.8935	-75.44233333	2.5	2.8	2.7	8.5	4.3	34.0
	21011998	38	10:48	11:12	35.879333	-75.54933333	2.3	2.5	2.4	7.8	4.2	33.0
	21011998	39	11:24	11:54	35.9015	-75.55016667	2.2	2.6	2.4	7.8	4.2	33.0
	21011998	40	13:03	13:33	35.920833	-75.563	2.3	2.7	2.5	7.8	4.2	30.0
	21011998	41	13:48	14:18	35.948	-75.57666667	2.2	2.7	2.5	7.8	4.6	30.0
	21011998	42	14:31	15:01	35.973167	-75.58483333	2.5	2.8	2.7	7.8	4.7	30.0
	21011998	43	15:40	16:10	36.004833	-75.61933333	2.5	2.7	2.6	7.7	3.9	30.0
	21011998	44	16:28	17:03	36.034833	-75.6335	2.5	2.7	2.6	7.6	3.8	30.0
	21011998	45	17:40	18:10	36.0825	-75.668	2.7		2.7	7.6	3.6	30.0
	21011998	46	18:31	19:01	36.116333	-75.68183333	2.7		2.7	7.6	3.6	
	21011998	47	19:14	19:44	36.143833	-75.66566667	2.7		2.7	7.3	3.0	33.0
	21011998	48	20:09	20:14	36.193167	-75.67033333	2.2		2.2			32.0
	21011998	49	21:29	21:45	36.089667	-75.6505	2.4	2.8	2.6	7.4	4.7	31.0
	22011998	50	7:18	7:38	35.29	-75.46783333	2.6		2.6	8.0	7.0	32.0
	22011998	51	10:31	10:54	35.075	-75.5	2.2	2.9	2.6	8.6	8.8	33.0
	22011998	52	11:36	11:51	35.119833	-75.5895	2.3	3	2.7	8.5	8.6	33.0
	22011998	53	12:51	13:01	35.191667	-75.67066667	2.4		2.4	8.4	11.0	32.0
	22011998	54	13:14	13:29	35.197333	-75.66633333	2.2		2.2	8.4	11.5	32.0
	22011998	55	13:41	14:01	35.2015	-75.62633333	2.0		2.0	8.4	12.0	31.0
	22011998	56	14:19	14:39	35.2045	-75.60666667	2.2		2.2	8.1	12.4	32.0
	22011998	57	15:06	15:31	35.212	-75.59133333	2.2		2.2	8.1	12.0	32.0
	22011998	58	15:49	16:19	35.205167	-75.5695	2.6		2.6	8.1	10.7	32.0
	22011998	59	17:52	18:12	35.155	-75.78866667	2.9		2.9	8.3	9.0	31.0
	22011998	60	18:26	18:46	35.1385	-75.82	2.9		2.9	8.4	9.1	31.0
	22011998	61	18:59	19:29	35.116	-75.83566667	2.9		2.9	8.4	10.0	31.0
	22011998	62	19:42	19:58	35.087167	-75.86766667	2.2		2.2	8.3	10.0	32.0
	22011998	63	20:16	20:50	35.0735	-75.881	2.2	3	2.6	8.6	10.2	33.0
	22011998	64	21:02	21:37	35.07	-75.83166667	2.5	3	2.8	8.6	10.2	33.0
	1021997	1	23:41	23:51	35.0793	-75.4708	3.7	3.7	3.7	11	10.2	
	2021997	2	0:14	0:34	35.0733	-75.4534	3.7	3.7	3.7	10	8.6	
	2021997	3	0:53	1:23	35.0889	-75.4402	3.5	3.5	3.5	9.9	8.6	
	2021997	4	2:06	2:21	35.0974	-75.4030	3.5	3.5	3.5	9.5	8.6	
	2021997	5	2:51	3:21	35.0954	-75.4133	3.6	3.6	3.6	10.2	8.4	

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
	2021997	6	3:45	4:15	35.0878	-75.4372	3	3	3	10	8.1	
	2021997	7	4:39	5:09	35.0881	-75.4522	3	3	3	9.7	8.4	
	2021997	8	5:45	6:15	35.0975	-75.4130	3	3	3	10	9	
	2021997	9	6:36	7:06	35.0888	-75.3852	3	3	3	9.9	9.5	
	2021997	10	7:33	8:03	35.1004	-75.3561	3	3	3	9.9	10.7	
	2021997	11	8:27	8:57	35.0964	-75.3273	3	3	3	9.5	12.2	
	2021997	12	10:07	10:37	35.0702	-75.2464	3	3	3	10.4	13.3	
	2021997	13	11:03	11:33	35.0832	-75.3132	3	3	3	9.8	14.8	
	2021997	14	11:52	12:22	35.0878	-75.1914	3.5	3.5	3.5	11.7	14.7	
	2021997	15	13:29	13:44	35.0967	-75.2380	3.2	3.2	3.2	10.2	18.7	
	2021997	16	14:00	14:30	35.1080	-75.2466	3.2	3.2	3.2	10.2	18.7	
	2021997	17	14:45	15:15	35.1218	-75.2663	3.2	3.2	3.2	8.3	13	
	2021997	18	15:52	16:02	35.1445	-75.2901	3.2	3.2	3.2	8.3	10.9	
	2021997	19	16:46	17:01	35.1635	-75.2867	3.2	3.2	3.2	8.3	10.2	
	2021997	20	17:29	17:44	35.1444	-75.2894	3.2	3.2	3.2	8.3	10.1	
	2021997	21	18:17	18:37	35.1336	-75.2745	3.2	3.2	3.2	8.2	9.5	
	2021997	22	19:08	19:28	35.1467	-75.2878	3.2	3.2	3.2	8.2	10.7	
	2021997	23	19:58	20:18	35.1493	-75.2719	3.2	3.2	3.2	8.2	11.2	
	2021997	24	20:46	21:06	35.1502	-75.2855	3.2	3.2	3.2	8.1	11.2	
	2021997	25	21:30	21:50	35.1632	-75.2819	3.2	3.2	3.2	8.2	11.3	
	2021997	26	22:16	22:36	35.1559	-75.2929	3.2	3.2	3.2	8.2	10.5	
	2021997	27	22:58	23:18	35.1500	-75.2972	3.2	3.2	3.2	8	10.6	
	2021997	28	23:37	23:57	35.1665	-75.2925	3	3	3	8.2	10.9	
	3021997	29	0:17	0:37	35.1768	-75.2773	3.1	3.1	3.1	8.2	10.1	
	3021997	30	0:56	1:16	35.1836	-75.2883	3.2	3.2	3.2	8	11.5	
	3021997	31	1:39	2:09	35.1698	-75.2949	3.1	3.1	3.1	8	9.1	
	3021997	32	2:25	2:45	35.1868	-75.2889	3.2	3.2	3.2	8.1	9.2	
	3021997	33	3:01	3:31	35.18114	-75.2724	3.2	3.2	3.2	8.1	8	
	3021997	34	3:53	4:23	35.1642	-75.2851	3.2	3.2	3.2	7.9	8.1	
	3021997	35	4:45	5:11	35.1884	-75.2806	3.2	3.2	3.2	7.8	8	
	3021997	36	5:40	6:10	35.2136	-75.2634	3.2	3.2	3.2	7.9	8	
	3021997	37	6:30	7:00	35.2337	-75.2481	3.2	3.2	3.2	7.5	8.3	
	3021997	38	7:43	8:03	35.2573	-75.2645	3.2	3.2	3.2	7.5	8.5	
	3021997	39	8:32		35.2718	-75.2550	3.2	3.2	3.2	7.3	9.8	
	3021997	40	12:26	12:46	35.3051	-75.2460	3.3	3.3	3.3	8	15.8	
	3021997	41	13:02	13:22	35.3031	-75.2661	3	3	3	8	15.9	
	3021997	42	13:36	13:51	35.3174	-75.2653	3.2	3.2	3.2	7.9	14	

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
	3021997	43	14:05	14:20	35.3289	-75.2567	3.2	3.2	3.2	7.9	14.2	
	3021997	44	14:37	14:57	35.3424	-75.2519	3.2	3.2	3.2	8	12	
	3021997	45	15:18	15:48	35.3586	-75.2641	3.1	3.1	3.1	7.9	12.4	
	3021997	46	16:05	16:35	35.3807	-75.2680	3.2	3.2	3.2	7.8	9.1	
	3021997	47	16:50	17:20	35.4015	-75.2686	3.2	3.2	3.2	7.7	9.1	
	3021997	48	17:34	18:04	35.4222	-75.2732	3.1	3.1	3.1	7.5	10	
	3021997	49	18:24	18:54	35.4423	-75.2791	3.2	3.2	3.2	7.5	8	
	3021997	50	19:15	19:46	35.4630	-75.2862	3.2	3.2	3.2	7.4	8.3	
	3021997	51	20:08	20:38	35.4836	-75.2902	3.2	3.2	3.2	7.3	8.3	
	3021997	52	21:00	21:30	35.4944	-75.3113	3.2	3.2	3.2	7.2	8.5	
	3021997	53	22:14	22:44	35.5025	-75.2978	3.2	3.2	3.2	7.6	8.4	
	3021997	54	23:05	23:35	35.5126	-75.3220	3.2	3.2	3.2	7.1	8.2	
	4021997	55	0:00	0:30	35.5316	-75.3352	2.8	2.8	2.8	6.9	8.1	
	4021997	56	0:45	1:15	35.5466	-75.3440	3	3	3	7.2	8.1	
	4021997	57	1:31	2:01	35.5631	-75.3525	2.8	2.8	2.8	7	8.1	
	4021997	58	2:16	2:46	35.5794	-75.3631	3	3	3	7	8.1	
	4021997	59	3:02	3:32	35.5958	-75.3702	3	3	3	7.1	8	
	4021997	60	4:08	4:33	36.2013	-75.3659	3.2	3.2	3.2	7.5	8.3	
	4021997	61	5:09	5:40	35.5914	-75.3485	3	3	3	7.1	8.3	
	4021997	62	6:17	6:47	36.0105	-75.3260	3.1	3.1	3.1	7.8	8.5	
	4021997	63	8:32	8:52	36.0169	-75.3288	3.2	3.2	3.2	7.6	9.3	
	4021997	64	9:54	10:14	36.0202	-75.3355	3.2	3.2	3.2	7.5	11.3	
	4021997	65	10:42	11:02	36.0321	-75.3275	3.2	3.2	3.2	7.5	11.9	
	4021997	66	11:26	11:56	36.0159	-75.3510	3.2	3.2	3.2	7.6	9.6	
	4021997	67	12:21	12:41	35.5923	-75.3593	3.3	3.3	3.3	7.6	9.6	
	4021997	68	13:07	13:37	35.5808	-75.3420	3	3	3	7.8	12	
	4021997	69	13:55	14:25	35.5646	-75.3418	3	3	3	7.8	12.7	
	4021997	70	14:55	15:25	35.5516	-75.3268	3	3	3	7.7	10	
	4021997	71	15:52	16:07	35.5661	-75.3330	3	3	3	7.6	9.8	
	4021997	72	16:38	17:08	35.5612	-75.3107	3	3	3	7.6	9.3	
	4021997	73	17:34	18:04	35.5391	-75.3217	3	3	3	7.7	9.8	
	4021997	74	18:50	19:07	35.5272	-75.2922	3.5	3.5	3.5	7.7	9.8	
	4021997	75	19:52	20:12	35.5103	-75.2902	3.2	3.2	3.2	7.7	9.9	
	4021997	76	20:37	20:57	35.5076	-75.2717	3.2	3.2	3.2	7.7	10.2	
	4021997	77	21:26	21:56	35.5185	-75.2878	3.2	3.2	3.2	7.4	10.7	
	4021997	78	22:23	22:53	35.4922	-75.3012	3.2	3.2	3.2	7.7	11.6	
	4021997	79	23:15	23:45	35.4752	-75.2748	3	3	3	7.7	11	

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
	5021997	80	0:04	0:34	35.4639	-75.2547	3.1	3.1	3.1	7.8	12.1	
	5021997	81	0:52	1:22	35.4777	-75.2679	3.2	3.2	3.2	7.8	12.1	
	5021997	82	1:41	2:11	35.4653	-75.2435	3.3	3.3	3.3	7.8	11.5	
	5021997	83	2:27	2:57	35.4461	-75.2280	3	3	3	7.8	11.5	
	5021997	84	3:15	3:46	35.4370	-75.2102	3	3	3	7.8	11.9	
	5021997	85	4:13	4:43	35.4490	-75.2102	3	3	3	7.9	10.9	
	5021997	86	5:13	5:43	35.4466	-75.2597	3	3	3	7.6	11.4	
	5021997	87	6:10	6:40	35.4530	-75.2840	3	3	3	7.5	11.5	
	5021997	88	7:01	7:31	35.4306	-75.2707	3	3	3	7.7	11.8	
	5021997	89	8:01	8:31	35.4036	-75.2726	3.2	3.2	3.2	7.8	13.5	
	5021997	90	9:01	9:36	35.3742	-75.2659	3.2	3.2	3.2	7.9	12.6	
	5021997	91	10:01	10:23	35.3439	-75.2615	3.2	3.2	3.2	7.9	14.7	
	5021997	92	10:46	11:16	35.3384	-75.2640	3.2	3.2	3.2	7.9	14.9	
	5021997	93	11:38	12:08	35.3527	-75.2410	3	3	3	7.9	14.4	
	5021997	94	12:32	13:02	35.3465	-75.2274	3.2	3.2	3.2	8.1	16.3	
	5021997	95	13:22	13:37	35.3310	-75.2273	3	3	3	8.2	14	
	5021997	96	13:54	14:25	35.3434	-75.2228	3.2	3.2	3.2	8.2	19.1	
	5021997	97	14:50	15:35	35.3506	-75.2215	3	3	3	8.3	13.7	
	5021997	98	15:55	16:25	35.3217	-75.2282	3	3	3	8.3	13.5	
	5021997	99	16:44	17:14	35.3242	-75.2425	3	3	3	8.3	12.1	
	5021997	100	17:31	18:01	35.3077	-75.2277	3	3	3	8.2	12.5	
	5021997	101	18:38	19:08	35.3162	-75.2482	3	3	3	8.2	11.2	
	5021997	102	19:30	20:00	35.2950	-75.2501	3	3	3	8.1	10.7	
	5021997	103	20:33	21:03	35.2951	-75.2656	3.2	3.2	3.2	7.9	9.1	
	5021997	104	21:23		35.2876	-75.2347	3.2	3.2	3.2	8.2	8.6	
	5021997	105	23:33	0:03	35.1887	-75.2742	3.2	3.2	3.2	7.9	7.2	
	6021997	106	0:20	0:50	35.1729	-75.2924	3	3	3	7.8	7.5	
	6021997	107	1:07	1:37	35.1712	-75.2720	3.4	3.4	3.4	7.7	8.5	
	6021997	108	2:05	2:35	35.1683	-75.2939	3.2	3.2	3.2	7.7	7.6	
	6021997	109	3:01	3:31	35.1494	-75.2982	3	3	3	7.8	7.9	
	6021997	110	4:03	4:33	35.1595	-75.2811	3	3	3	7.7	7.5	
	6021997	111	5:02	5:32	35.1486	-75.2948	3	3	3	7.7	6.4	
	6021997	112	5:53	6:23	35.1668	-75.2902	3	3	3	7.6	7.2	
	6021997	113	6:47	7:17	35.1475	-75.2905	3.2	3.2	3.2	7.9	6.3	
	6021997	114	7:43	8:13	35.1637	-75.2818	3.2	3.2	3.2	8	6.8	
	6021997	115	8:43	9:13	35.1415	-75.2918	3.2	3.2	3.2	7.7	7.6	
	6021997	116	9:32	10:02	35.1323	-75.2737	3.2	3.2	3.2	7.9	10.4	

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
	6021997	117	10:29	10:59	35.1537	-75.2713	3.2	3.2	3.2	8	9.7	
	6021997	118	11:25	11:55	35.1339	-75.2843	3.2	3.2	3.2	8	12.1	
	6021997	119	12:12	12:42	35.1537	-75.2823	3.1	3.1	3.1	8	10.7	
	6021997	120	13:02	13:32	35.1358	-75.2798	3	3	3	8.1	8	
	6021997	121	14:09	14:45	35.1193	-75.2441	3.1	3.1	3.1	8.1	8.2	
	6021997	122	15:10	15:40	35.1037	-75.2358	3.3	3.3	3.3	8.2	9	
	6021997	123	16:00	16:30	35.0821	-75.2280	3	3	3	9.5	6.5	
	6021997	124	16:54	17:21	35.0613	-75.2409	3	3	3	8.5	6.5	
	6021997	125	18:11	18:41	35.0822	-75.3118	3	3	3	8.2	5.8	
	6021997	126	19:14	19:44	35.1043	-75.3421	3	3	3	8.1	5.9	
	6021997	127	20:22	20:42	35.0984	-75.3872	3.2	3.2	3.2	8.1	6.1	
	6021997	128	21:02	21:22	35.1015	-75.4088	3.2	3.2	3.2	8.2	6.1	
	6021997	129	21:48	22:18	35.0961	-75.4293	3.2	3.2	3.2	8.2	6.2	
	6021997	130	22:39	23:09	35.0770	-75.4456	3.2	3.2	3.2	8.7	6.3	
	6021997	131	23:30	0:00	35.0852	-75.4679	3.2	3.2	3.2	8.3	6.2	
	23011996	1	19:31	19:41	34.5982	-76.0634	3			11.3	14.2	
	23011996	2	21:10	21:30	35.0040	-76.0250	3			11.1	16.3	
	23011996	3	21:52	22:07	35.0090	-76.0060	3			10.9	16.9	
	23011996	4	22:59	23:14	35.0420	-75.5800	3			9.1	15.9	
	24011996	5	0:47	0:57	35.0820	-75.4960	2.9			7.4	12.8	
	24011996	6	1:26	1:31	35.0890	-75.4770	3			7.7	12.8	
	24011996	7	3:54	3:59	35.0730	-75.3310	3.1			5.8	14.5	
	24011996	8	6:25	6:30	35.1270	-75.2150	3			5.4	12.7	
	24011996	9	6:59	7:09	35.1420	-75.2240	2.9			5.1	11.4	
	24011996	10	7:36	7:46	35.1530	-75.2330	2.9			5.1	11.8	
	24011996	11	8:53	9:03	35.1690	-75.2510	3			5	12.4	
	24011996	12	9:31	9:36	35.1890	-75.2520	2.7			4.1	12.4	
	24011996	13	9:57	10:07	35.2010	-75.2510	3.2			4.1	13.3	
	24011996	14	10:27	10:37	35.2170	-75.2530	2.8			4.1	13.3	
	24011996	15	11:00	11:10	35.2330	-75.2530	2.9			4	12.2	
	24011996	16	12:11	12:26	35.2850	-75.2710	3			4.1	12.2	
	24011996	17	12:46	13:06	35.2950	-75.2630	3			4.1	11.1	
	24011996	18	13:37	13:57	35.3070	-75.2620	3			4.3	11.1	
	24011996	19	14:20	14:40	35.3190	-75.2460	3			4.3	11	
	24011996	20	15:00	15:20	35.3320	-75.2350	3			4.3	11	
	24011996	21	15:40	15:55	35.3460	-75.2300	3			4.4	9	
	24011996	22	16:12	16:32	35.3620	-75.2350	3			4.4	9	

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
	24011996	23	16:49	17:09	35.3710	-75.2410	3			4.3	9.1	
	24011996	24	17:28	17:48	35.3890	-75.2520	3			4.3	9.1	
	24011996	25	18:26	18:46	35.4180	-75.2820	3			4.3	9.1	
	24011996	26	19:06	19:26	35.4390	-75.2890	3			4.6	11.1	
	24011996	27	19:37	19:57	35.4550	-75.2950	3			4.6	11.1	
	24011996	28	20:11	20:41	35.4630	-75.2820	3			4.5	10.2	
	24011996	29	20:58	21:13	35.4580	-75.2580	3			4.7	11.4	
	24011996	30	21:27	21:58	35.4630	-75.2450	3			4.9	11.9	
	24011996	31	22:13	22:43	35.4710	-75.2210	3			4.9	11.9	
	25011996	32	0:29	0:49	35.4840	-75.3140	2.9			4.5	9.4	
	25011996	33	1:07	1:37	35.4990	-75.3190	2.9			4.4	7.1	
	25011996	34	1:51	2:21	35.5160	-75.3320	3			4.2	5.9	
	25011996	35	2:39	3:10	35.5350	-75.3390	3			4.2	5	
	25011996	36	3:33	4:03	35.5520	-75.3340	3			4.1	4.2	
	25011996	37	4:24	4:54	35.5700	-75.3560	3			4.1	4.2	
	25011996	38	5:13	5:43	35.5880	-75.3700	3			4.2	3.7	
	25011996	39	6:02	6:17	36.0090	-75.3830	3			4.2	3.3	
	25011996	40	7:25	7:40	35.5880	-75.3690	3			4.1	2.8	
	25011996	41	8:24	8:44	36.0210	-75.3900	2.9			4.1	2.8	
	25011996	42	9:00	9:20	36.0350	-75.4010	3			4.1	2.8	
	25011996	43	9:34	10:04	36.0470	-75.4190	3			4.3	3.1	
	7021996	44	9:35	10:05	35.0650	-75.4970	3			3.3	1.9	32
	7021996	45	10:34	11:04	35.0870	-75.4640	2.9			4.1	2.8	
	7021996	46	11:31	12:01	35.0950	-75.4360	3.1			4.3	3.3	30
	7021996	47	12:18	12:24	35.1100	-75.4160	3			4.3	3.3	30
	7021996	48	12:41	13:01	35.1130	-75.4050	3			4.7	4.2	
	7021996	49	14:05	14:37	35.0870	-75.3690	3			4.6	5.1	
	7021996	50	14:58	15:13	35.0750	-75.3320	3			4.4	5.1	
	7021996	51	15:35	15:45	35.0630	-75.3210	3			4.4	5.1	32
	7021996	52	16:12	16:22	35.0600	-75.2990	3			4.2	4.7	
	7021996	53	16:51	17:01	35.0570	-75.2850	3			4.2	4.7	
	7021996	54	17:30	17:40	35.0310	-75.2620	3			4.3	4.2	
	7021996	55	17:57	18:02	35.0510	-75.2470	3			4.1	4.1	
	7021996	56	18:21	18:36	35.0600	-75.2330	3			4.1	4.1	
	7021996	57	18:52	19:12	35.0740	-75.2270	3			4.6	4.6	32
	7021996	58	19:40	20:00	35.0950	-75.2100	3			4.6	4.6	
	7021996	59	20:18	20:38	35.1100	-75.1980	3			5.6	5.8	

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
	7021996	60	20:56	21:16	35.1270	-75.1930	3			4.3	5.3	30
	7021996	61	21:36	21:56	35.1450	-75.1930	3			3.8	4.4	30
	7021996	62	22:13	22:43	35.1420	-75.2100	3			3.8	4.5	30
	7021996	63	23:05	23:35	35.1220	-75.2170	3			3.8	4.5	30
	7021996	64	23:57	0:17	35.0980	-75.2210	3			5.2	6.8	31
	8021996	65	0:37	1:07	35.1420	-75.2100	3			5.2	8.1	
	8021996	66	1:36	2:06	35.1220	-75.2170	3			4.7	7.1	
	8021996	67	2:35	2:55	35.1340	-75.1860	3			4.6	6.8	
	8021996	68	3:19	3:39	35.1210	-75.2030	3			4.6	6.8	32
	8021996	69	3:58	4:18	35.1090	-75.2180	3			4.6	6.8	
	8021996	70	4:52	5:12	35.1000	-75.2390	3			4	6.3	
	8021996	71	5:34	5:54	35.1170	-75.2370	3			4	6.3	
	8021996	72	6:11	6:31	35.1340	-75.2320	3			4	6.3	30
	8021996	73	6:47	7:07	35.1510	-75.2320	3			3.4	6.2	
	8021996	74	7:26	7:46	35.1620	-75.2440	2.9			3.4	6.2	
	8021996	75	8:06	8:26	35.1450	-75.2480	2.7			3.4	6.4	30
	8021996	76	8:47	9:07	35.1280	-75.2480	3			3.6	6.4	30
	8021996	77	9:24	9:44	35.1140	-75.2360	2.9			3.6	6.4	30
	8021996	78	9:59	10:16	35.1000	-75.2250	2.8			4.1	6.7	
	8021996	79	10:44	10:59	35.0920	-75.2180	3			5.1	7	
	8021996	80	11:21	11:36	35.0990	-75.2280	2.9			4.5	7.3	
	8021996	81	12:03	12:28	35.0890	-75.2150	3			4.5	7.6	
	8021996	82	12:50	13:06	35.1000	-75.2230	3			4.2	8.2	31
	8021996	83	15:00	15:15	35.0860	-75.2180	3			5.3	9.7	
	8021996	84	15:39	15:54	35.0980	-75.2230	2.9			5.2	9.7	
	8021996	85	16:19	16:35	35.0890	-75.2170	3			5.4	9.2	
	8021996	86	16:57	17:27	35.1020	-75.2200	3			5.3	9.9	
	8021996	87	17:53	18:14	35.0870	-75.2190	3			5.4	9.1	
	8021996	88	18:43	19:03	35.0990	-75.2210	3			5.6	10.1	
	8021996	89	20:19	20:39	35.0900	-75.1990	3			4.6	9.5	
	8021996	90	21:34	21:54	35.1150	-75.2210	3			4.8	9.7	
	8021996	91	22:16	22:36	35.1190	-75.2390	3			5.2	10	31
	9021996	92	23:57	0:27	35.1730	-75.2500	3			4.1	9.5	31
	9021996	93	0:47	1:17	35.2000	-75.2490	3			4.3	9.4	31
	9021996	94	1:36	2:06	35.2280	-75.2460	3.2			5.4	9.9	31
	9021996	95	2:38	3:08	35.2610	-75.2490	3.1			5.1	9.5	31
	9021996	96	3:32	4:02	35.2780	-75.2480	3			4.7	8.6	

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
	9021996	97	7:17	7:47	35.2760	-75.2700	3			4.7	7.6	
	9021996	98	8:10	8:40	35.3020	-75.2730	3			5.1	7.3	
	9021996	99	8:55	9:25	35.3220	-75.2620	2.8			5.2	7.4	35
	9021996	100	9:40	10:20	35.3410	-75.2460	3			5.1	8.2	35
	9021996	101	10:37	11:07	35.3610	-75.2280	3			5.4	8.1	
	9021996	102	12:36	12:46	35.3590	-75.2700	3			5.1	11.5	34
	9021996	103	13:08	13:18	35.3730	-75.2720	3			5.1	11.5	34
	9021996	104	13:37	13:52	35.3770	-75.2710	3.2			5.1	11.5	34
	9021996	105	14:09	14:29	35.3610	-75.2710	3			5.2	11.8	34
	9021996	106	14:49	15:19	35.3710	-75.2650	3			4.9	7.6	34
	9021996	107	15:36	16:06	35.3700	-75.2720	3			4.9	7.6	34
	9021996	108	16:22	16:52	35.3910	-75.2730	3			4.9	7.6	34
	9021996	109	17:09	17:39	35.4120	-75.2780	3			4.9	7.2	31
	9021996	110	17:54	18:24	35.4320	-75.2850	3			5.4	6.7	35
	9021996	111	18:56	19:26	35.4510	-75.2950	3			5.4	7.3	
	9021996	112	19:41	20:11	35.4340	-75.2840	3			5.1	6.5	
	9021996	113	20:26	20:56	35.4270	-75.2630	3			5	6.7	33
	9021996	114	21:13	21:43	35.4400	-75.2440	3			4.8	6.7	
	9021996	115	22:02	22:32	35.4560	-75.2290	3			4.2	6.4	34
	9021996	116	22:50	23:20	35.4490	-75.2040	3			3.8	5.9	
	9021996	117	23:38	0:08	35.4380	-75.1870	3			3.9	5.8	33
	10021996	118	0:30	1:00	35.4510	-75.1930	3			3.9	5.4	
	10021996	119	1:20	1:50	35.4520	-75.2160	3			4.1	5.4	
	10021996	120	2:09	2:39	35.4690	-75.2340	3			4.1	5.1	33
	10021996	121	2:58	3:28	35.4720	-75.2590	3			4.7	3.6	
	10021996	122	3:49	4:19	35.4910	-75.2810	3			4.9	5.1	
	10021996	123	4:36	5:06	35.4900	-75.3080	3			4.9	5.1	
	10021996	124	5:24	5:54	35.5050	-75.3240	3			5.1	4.4	31
	10021996	125	6:09	6:39	35.5230	-75.3350	3			4.4	3.2	
	10021996	126	6:53	7:23	35.5420	-75.3460	3			4.4	3.2	
	10021996	127	7:37	8:03	35.5600	-75.3570	3			3.8	5	
	10021996	128	10:02	10:32	35.4690	-75.2990	2.9			5.1	6.3	
	10021996	129	10:47	11:17	35.4480	-75.2940	2.9			5.4	8.2	32
	10021996	130	11:34	12:04	35.4290	-75.2850	3			5.7	8.3	33
	10021996	131	12:22	12:52	35.4080	-75.2790	3			5.7	13	
	10021996	132	13:17	13:47	35.3850	-75.2740	3			6	7.9	
	10021996	133	14:05	14:35	35.3640	-75.2720	3			5.6	8	

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
	10021996	134	14:54	15:24	35.3450	-75.2640	3			5.8	9.6	33
	10021996	135	15:44	16:14	35.3400	-75.2350	3			6.3	9.2	
	10021996	136	16:38	17:08	35.3610	-75.2270	3			6.3	9.2	
	10021996	137	17:28	17:58	35.3460	-75.2400	3			6	9.6	
	10021996	138	21:52	22:22	35.1060	-75.2240	3			6.9	10.4	32
	10021996	139	22:48	23:03	35.0900	-75.2120	3			6.1	11.4	
	10021996	140	23:31	23:46	35.1080	-75.1950	3			6.1	12	
	11021996	141	0:06	0:21	35.1150	-75.1790	3			6.2	11	32
	11021996	142	0:43	0:58	35.1070	-75.1720	3			6.2	11	32
	11021996	143	1:18	1:33	35.0940	-75.1700	3			9.9	12.4	32
	11021996	144	2:29	2:44	35.0820	-75.1790	3			6.4	11.4	32
	11021996	145	3:06	3:21	35.0820	-75.1940	3			6.4	11.4	32
	11021996	146	3:56	4:11	35.1030	-75.2080	3.1			10.1	12.4	32
	11021996	147	4:31	4:46	35.1240	-75.2090	3.1			10.1	12.4	
	11021996	148	5:29	5:39	35.1420	-75.1910	3.1			9.6	12.7	
	11021996	149	6:04	6:14	35.1590	-75.1870	3			8.4	10.8	34
	11021996	150	6:53	7:03	35.1520	-75.2210	3			7.9	10.8	
	11021996	151	7:21	7:31	35.1460	-75.2300	3			7.9	10.8	
	11021996	152	7:48	7:58	35.1360	-75.2300	2.7			7.4	10.8	
	11021996	153	8:18	8:28	35.1280	-75.2320	3			7.4	10.8	
	11021996	154	8:48	8:58	35.1200	-75.2340	2.9			7	10.1	
	11021996	155	9:16	9:26	35.1210	-75.2470	2.8			7.6	10.8	33
	11021996	156	10:03	10:08	35.1210	-75.2590	3.2			8.2	11	
	11021996	157	10:39	10:49	35.1220	-75.2590	2.5			8.6	11	
	11021996	158	11:10	11:25	35.1220	-75.2690	3.2			7.7	11.4	34
	11021996	159	11:42	11:57	35.1390	-75.2680	3.1			6.7	11	34
	11021996	160	12:38	12:58	35.1550	-75.2630	3			6.7	11.3	
	11021996	161	13:21	13:31	35.1660	-75.2750	3.1			7.3	11.9	
	11021996	162	14:24	14:44	35.1520	-75.2590	3.1			7.4	11.4	
	11021996	163	15:08	15:23	35.1580	-75.2560	3			7.4	11.4	
	11021996	164	15:46	16:01	35.1420	-75.2570	3			7.4	12	
	11021996	165	16:26	16:41	35.1270	-75.2520	3			7.4	12	
	11021996	166	17:10	17:21	35.1150	-75.2430	3			8	12	
	11021996	167	17:43	17:53	35.1300	-75.2370	2.9			8	12	
	11021996	168	18:13	18:23	35.1200	-75.2420	3			8.5	11.3	
	11021996	169	18:46	19:01	35.1170	-75.2420	3			8.4	11.6	34
	11021996	170	19:25	19:40	35.1370	-75.2330	3			8.1	11	

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
	11021996	171	19:57	20:12	35.1320	-75.2430	3			8.1	11	
	11021996	172	20:29	20:44	35.1450	-75.2380	3			7.8	11	35
	11021996	173	21:04	21:19	35.1550	-75.2340	3			7.6	10	
	11021996	174	22:02	22:22	35.1520	-75.2730	3			7.8	9.9	34
	11021996	175	22:48	23:08	35.1710	-75.2910	3			8.2	8.2	
	11021996	176	23:24	23:44	35.1820	-75.2960	3			8.4	8.5	
	12021996	177	0:04	0:14	35.1920	-75.2920	3			8.8	8.2	35
	12021996	178	0:35	0:50	35.1780	-75.2970	3			8.8	8.3	35
	12021996	179	1:09	1:29	35.1630	-75.3010	3			8.1	8.3	
	12021996	180	1:50	2:10	35.1460	-75.2960	3.1			7.9	7.8	
	12021996	181	2:48	3:08	35.1430	-75.2840	2.8			8	7.4	
	12021996	182	3:28	3:48	35.1540	-75.2930	3			8	7.4	
	12021996	183	4:11	4:31	35.1660	-75.2780	3			8.9	6.8	
	12021996	184	4:59	5:19	35.1690	-75.2600	3			10.1	6.3	
	12021996	185	5:42	6:02	35.1630	-75.2780	3			9.6	5.8	
	12021996	186	6:17	6:27	35.1770	-75.2760	3			9.6	5.8	
	12021996	187	7:30	7:45	35.1780	-75.2810	3			9.6	5.8	
	12021996	188	9:10	9:25	35.1550	-75.2930	3			10.1	4.9	
	12021996	189	9:42	10:12	35.1410	-75.2960	3			9.3	5.1	
	12021996	190	10:40	11:10	35.1240	-75.2800	3			9.2	5.6	
	12021996	191	11:32	11:52	35.1140	-75.2630	3			9.2	5.5	
	12021996	192	12:15	12:45	35.1090	-75.2530	3			9.8	5.4	
	12021996	193	13:12	13:32	35.1200	-75.2690	3			10.7	6.9	
	12021996	194	13:51	14:11	35.1230	-75.2770	3.2			9.9	6.7	35
	12021996	195	14:34	14:54	35.1190	-75.2670	3			9.9	6.7	
	12021996	196	15:14	15:34	35.1280	-75.2800	3			9.7	5.7	
	12021996	197	15:55	16:15	35.1390	-75.2860	3			9.4	5.5	
	12021996	198	16:41	17:01	35.1260	-75.2890	3			9.8	4.9	
	12021996	199	17:28	17:58	35.1170	-75.2660	3			9.8	4.9	31
	12021996	200	18:15	18:35	35.1060	-75.2510	3			8.3	4.5	
	12021996	201	18:51	19:11	35.1160	-75.2650	3			7.9	4.4	
	12021996	202	19:36	19:56	35.1270	-75.2810	3			7.9	4.4	
	12021996	203	21:41	21:51	35.1160	-75.2440	3			7.8	4.5	
	12021996	204	22:28	22:48	35.0950	-75.2240	3			10.2	4.8	
	24011995	1	20:49	21:19	35.2231	-75.3953	3.0	3.0	3.0	12.0	6.1	
	25011995	2	7:11	7:41	35.5169	-75.4236	3.0	3.0	3.0	8.7	3.0	
	25011995	3	8:06	8:36	35.5675	-75.4169	3.0	3.0	3.0	8.6	2.8	

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
	25011995	4	9:07	9:30	35.6092	-75.4533	3.0	3.0	3.0	8.5	2.8	
	25011995	5	9:48	10:18	35.6347	-75.4502	3.0	3.0	3.0	8.4	4.8	
	25011995	6	10:38	11:08	35.6725	-75.4725	3.0	3.0	3.0	8.4	4.6	
	25011995	7	12:23	12:53	35.7168	-75.4669	3.0	3.0	3.0	7.5	5.2	
	25011995	8	13:27	13:57	35.7501	-75.4502	3.0	3.0	3.0	8.8	5.9	
	25011995	9	14:18	14:48	35.7835	-75.4669	3.0	3.0	3.0	8.8	7.0	
	25011995	10	15:11	15:42	35.8168	-75.5002	3.0	3.0	3.0	7.7	7.0	
	25011995	11	16:05	16:35	35.8335	-75.5501	3.0	3.0	3.0	7.7	7.7	
	25011995	12	17:48	18:18	35.9000	-75.5669	3.0	3.0	3.0	7.6	5.9	
	25011995	13	18:45	19:15	35.9335	-75.6001	3.0	3.0	3.0	7.6	5.8	
	25011995	14	19:36	20:06	35.9867	-75.6283	3.0	3.0	3.0	7.4	5.0	
	25011995	15	20:25	20:55	36.0150	-75.6369	3.0	3.0	3.0	7.4	5.0	
	26011995	16	7:40	8:10	36.0089	-75.6381	3.0	3.0	3.0	7.0	2.9	
	26011995	17	8:37	9:07	36.0339	-75.6586	3.0	3.0	3.0	7.0	3.2	
	26011995	18	9:41	10:01	36.0336	-75.6502	3.0	3.0	3.0	7.0	2.8	
	26011995	19	10:28	10:48	36.0767	-75.6939	3.0	3.0	3.0	6.9	2.8	
	26011995	20	11:05	11:25	36.1081	-75.6931	3.0	3.0	3.0	6.9	3.9	
	26011995	21	12:45	13:05	36.1169	-75.7003	3.0	3.0	3.0	6.9	4.4	
	26011995	22	13:26	13:46	36.1502	-75.7168	3.0	3.0	3.0	7.2	4.4	
	26011995	23	14:10	14:30	36.1835	-75.7169	3.0	3.0	3.0	7.2	4.4	
	26011995	24	15:01	15:21	36.2167	-75.7501	3.0	3.0	3.0	7.1	4.6	
	26011995	25	15:44	16:14	36.2501	-75.7711	3.2	3.2	3.2	7.1	6.3	
	26011995	26	17:25	17:55	36.3219	-75.7953	3.4	3.4	3.4	6.9	3.3	
	26011995	27	18:19	18:49	36.3642	-75.8119	3.4	3.4	3.4	6.9	4.7	
	26011995	28	19:11	19:41	36.4022	-75.8219	3.4	3.4	3.4	6.9	4.0	
	26011995	29	20:10	20:30	36.4717	-75.8319	3.4	3.4	3.4	6.9	3.8	
	26011995	30	21:32	21:47	36.5169	-75.8200	3.4	3.4	3.4	7.1	3.8	
	27011995	31	7:05	7:35	35.9953	-75.6397	3.3	3.3	3.3	6.8	3.6	
	27011995	32	7:57	8:27	36.0428	-75.6692	3.4	3.4	3.4	6.8	3.4	
	27011995	33	8:50	9:10	36.0733	-75.6758	3.4	3.4	3.4	6.7	3.4	
	27011995	34	9:34	9:54	36.0514	-75.6501	3.4	3.4	3.4	6.7	3.4	
	27011995	35	10:17	10:37	36.0764	-75.6719	3.4	3.4	3.4	7.1	3.5	
	27011995	36	10:56	11:26	36.0514	-75.6697	3.4	3.4	3.4	7.1	3.7	
	27011995	37	12:26	12:56	36.0836	-75.6834	3.0	3.0	3.0	7.0	5.2	
	27011995	38	13:18	13:48	36.1334	-75.7286	3.0	3.0	3.0	6.9	5.9	
	27011995	41	17:39	17:59	36.1697	-75.7169	3.1	3.1	3.1	7.1	5.4	
	27011995	42	18:37	18:51	36.1408	-75.7002	3.1	3.1	3.1	6.8	5.4	

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
	27011995	43	19:09	19:25	36.1122	-75.7108	3.1	3.1	3.1	6.9	5.4	
	27011995	44	19:49	20:09	36.0906	-75.6850	3.3	3.3	3.3	6.9	4.3	
	27011995	45	20:28	20:48	36.0536	-75.6669	3.2	3.2	3.2	6.8	4.3	
	27011995	46	21:06	21:26	36.0317	-75.6561	3.2	3.2	3.2	6.8	4.3	
	28011995	47	7:14	7:29	35.8003	-75.4667	3.1	3.1	3.1	6.3	7.2	
	28011995	48	7:47	8:17	35.7881	-75.4547	3.2	3.2	3.2	6.6	7.2	
	28011995	49	8:40	9:10	35.7931	-75.4208	3.2	3.2	3.2	6.5	8.4	
	28011995	50	9:42	10:12	35.7501	-75.4936	3.3	3.3	3.3	7.1	8.9	
	28011995	51	11:11	11:31	35.7297	-75.4669	3.1	3.1	3.1	7.3	8.9	
	28011995	52	12:31	13:01	35.6668	-75.4336	3.0	3.0	3.0	7.3	8.3	
	28011995	53	13:22	13:52	35.6169	-75.4501	3.0	3.0	3.0	7.3	8.5	
	28011995	54	14:15	14:35	35.5834	-75.4334	3.0	3.0	3.0	7.5	8.5	
	28011995	55	17:36	17:51	35.5334	-75.4001	3.1	3.1	3.1	7.6	7.9	
	28011995	56	18:13	18:26	35.5669	-75.4167	3.1	3.1	3.1	7.5	7.9	
	28011995	57	18:44	19:04	35.5575	-75.4167	3.0	3.0	3.0	7.7	7.9	
	28011995	58	19:40	20:04	35.5386	-75.4342	3.4	3.4	3.4	7.7	8.6	
	28011995	59	20:20	20:40	35.5617	-75.4358	3.2	3.2	3.2	7.6	8.0	
	22011994	1	0:58	1:28	35.5372	-75.4253	3.0			4.1	-2.0	
	22011994	2	2:34	3:04	35.5772	-75.3936	3.0			4.0	-2.0	
	22011994	3	3:29	3:59	35.6011	-75.3967	3.0			3.3	-3.0	
	22011994	4	4:25	4:55	35.6303	-75.4397	3.0			3.0	-2.0	
	22011994	5	5:21	5:51	35.6589	-75.4536	3.0			3.0	-2.0	
	22011994	6	6:09	6:39	35.6881	-75.4772	3.0			2.9	-1.5	
	22011994	7	7:03	7:33	35.7272	-75.4867	3.0			2.7	-1.5	
	22011994	8	8:36	8:51	35.8144	-75.5200	3.0			3.1	-1.0	
	22011994	9	9:10	9:47	35.8169	-75.5378	3.0			2.1	-1.0	
	22011994	10	10:05	10:43	35.8758	-75.5461	3.0			2.0	2.0	
	22011994	11	11:12	11:42	35.9017	-75.5069	2.2			2.4	3.0	
	22011994	12	12:07	12:29	35.9261	-75.5289	2.5			2.4	3.0	
	22011994	13	13:03	13:33	35.9334	-75.5775	2.5			2.4	4.0	
	22011994	14	14:10	14:40	35.9686	-75.5864	2.8			2.4	5.7	
	22011994	15	15:14	15:44	35.9922	-75.6186	2.8			2.1	6.5	
	22011994	16	16:13	16:43	36.0231	-75.6536	2.9			2.1	6.5	
	22011994	17	17:12	17:42	36.0501	-75.6761	2.9			1.9	5.8	
	22011994	18	18:02	18:32	36.0906	-75.6872	3.0			2.1	4.5	
	22011994	19	19:52	19:32	36.1386	-75.7219	2.8			2.7	3.2	
	22011994	20	20:21	20:46	36.1864	-75.7317	2.8			3.0	4.0	

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
	22011994	21	21:07	21:37	36.2233	-75.7372				3.0	3.0	
	22011994	22	22:17	22:47	36.2669	-75.7669	2.8			3.5	3.3	
	22011994	23	23:38	23:58	36.3203	-75.7881	2.8			2.5	3.0	
	22011994	24	0:27	0:47	36.3586	-75.7881	2.8			3.1	3.0	
	23011994	25	1:36	1:51	36.4072	-75.8147	2.8			3.3	3.8	
	23011994	26	2:29	2:44	36.4531	-75.8269	2.8			3.6	3.5	
	23011994	27	4:09	4:26	36.5033	-75.8436	2.7			3.5	3.5	
	23011994	28	4:47	5:07	36.5367	-75.8503	2.8			3.3	3.0	
	23011994	29	5:57	6:27	36.5464	-75.8119	2.8			3.0	3.0	
	23011994	30	6:50	7:20	36.5058	-75.8019	2.8			3.3	3.5	
	23011994	31	8:00	8:30	36.4501	-75.8125	2.6			2.5	3.5	
	23011994	32	9:13	9:43	36.4200	-75.8103	2.6			2.7	2.0	
	23011994	33	10:04	10:35	36.3842	-75.8053	2.6			3.5	3.0	
	23011994	34	11:21	11:43	36.3381	-75.7858				3.3	5.5	
	23011994	35	12:31	12:41	36.3050	-75.7803	2.8			3.8	7.0	
	23011994	36	13:32	13:47	36.3036	-75.7672	2.8			3.8	7.0	
	23011994	37	14:27	14:37	36.2419	-75.7522	2.8			3.2	7.8	
	23011994	38	14:48	15:03	36.2439	-75.7334	2.8			3.2	7.8	
	23011994	39	15:15	15:30	36.2253	-75.7394	2.8			3.1	8.0	
	23011994	40	15:44	15:59	36.1986	-75.7283	2.8			2.8	7.0	
	23011994	41	16:37	16:52	36.1731	-75.7236	2.8			2.9	5.3	
	23011994	42	17:29	17:49	36.2117	-75.7478				3.5	5.8	
	23011994	43	18:10	18:30	36.2572	-75.7725	2.8					
	23011994	44	18:52	19:12	36.2747	-75.7786	2.8			4.5	4.5	
	23011994	45	19:42	20:02	36.3261	-75.7886	2.8			4.5	4.5	
	23011994	46	20:20	20:50	36.3508	-75.8033	2.8			2.1	6.0	
	23011994	47	21:12	21:42	36.3856	-75.8014	2.8			1.5	6.0	
	23011994	48	22:05	22:42	36.4181	-75.7872	2.8			3.8	6.0	
	23011994	49	23:01	23:31	36.3650	-75.8019	2.8			2.7		
	24011994	50	0:00	0:20	36.3203	-75.7897	2.8			3.9	4.9	
	24011994	51	0:43	1:13	36.2894	-75.7772	2.8			3.9	4.9	
	24011994	52	1:42	2:12	36.2758	-75.7519	2.8			4.0	6.0	
	24011994	53	2:39	3:09	36.2411	-75.7578	2.8			4.0	6.0	
	24011994	54	3:42	4:12	36.2239	-75.7272	2.8			3.4	7.5	
	24011994	55	5:33	6:03	36.1514	-75.7019	2.8			3.5	7.5	
	24011994	56	5:33	6:03	36.1419	-75.7036	2.8			4.2	7.2	
	24011994	57	8:29	8:59	36.2219	-75.7339	2.8			4.5	6.0	

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
	24011994	58	9:33	10:03	36.2483	-75.7335	2.8			3.4	6.1	
	24011994	59	10:35	11:06	36.2033	-75.7358	2.8			3.7	6.5	
	24011994	60	11:32	12:02	36.1742	-75.7231	2.8			4.7	8.9	
	24011994	61	12:50	13:10	36.1308	-75.7100				4.9	12.1	
	24011994	62	13:36	13:58	36.1086	-75.6834	2.8			4.8	14.2	
	24011994	63	14:29	14:49	36.0742	-75.6683	2.8			4.8	14.2	
	24011994	64	15:09	15:29	36.0592	-75.6592	2.8			3.9	9.0	
	24011994	65	15:58	16:18	36.0119	-75.6511				3.9	9.0	
	24011994	66	16:38	16:58	36.0058	-75.6408	2.8			4.2	12.0	
	24011994	67	17:54	18:14	36.0128	-75.6369				4.3	10.0	
	24011994	68	18:34	18:54	36.0386	-75.6501	2.8			3.4	11.0	
	24011994	69	19:13	19:45	36.0686	-75.6756	3.0			3.4	11.0	
	24011994	70	20:08	20:38	36.1033	-75.7011	2.8			4.0	10.0	
	24011994	71	21:06	21:36	36.1408	-75.7214	2.8			4.4	9.5	
	24011994	72	22:09	22:26	36.1892	-75.7364	2.8			4.6	9.5	
	24011994	73	23:09	23:39	36.1672	-75.7317	2.8			4.6	8.5	
	25011994	74	23:59	0:19	36.1386	-75.7125	2.8			4.4	8.0	
	25011994	75	1:23	1:48	36.0347	-75.6542	3.0			3.5	7.6	
	25011994	76	2:35	2:50	35.9647	-75.6172	3.0			3.5	7.7	
	25011994	77	3:11	3:26	35.9453	-75.6017				3.5	7.7	
	25011994	78	4:00	4:14	35.9283	-75.5747				3.7	7.5	
	25011994	79	4:55	5:16	35.8850	-75.5433	3.0			3.5	7.2	
	25011994	80	5:52	6:22	35.8703	-75.5325	3.0			3.6	6.5	
	25011994	81	6:44	7:14	35.8378	-75.5272	3.0			4.0	7.2	
	25011994	82	7:34	8:06	35.8100	-75.4850				4.0	5.5	
	25011994	83	8:27	8:57	35.7744	-75.4764				4.0	6.6	
	25011994	84	9:27	9:47	35.7378	-75.4608	2.9			4.2	7.0	
	25011994	85	10:07	10:37	35.7181	-75.4614	2.6			4.5	7.3	
	25011994	86	12:05	12:20	35.5903	-75.4453	2.6			5.6	11.7	
	25011994	87	13:19	13:34	35.5906	-75.3850	3.0			5.8	10.8	
	25011994	88	14:11	14:26	35.5572	-75.3969	3.0			6.4	10.8	
	25011994	89	15:22	15:37	35.5019	-75.4658	3.0			6.9	11.2	
	25011994	90	16:00	16:30	35.4747	-75.4769						
	25011994	91	17:58	18:13	35.3322	-75.4742	3.0			6.9	8.5	
	25011994	92	18:51	19:01	35.3017	-75.4783	3.0			6.8	8.5	
	25011994	93	19:47	19:57	35.2764	-75.4769	2.8			6.8	7.5	
	25011994	94	20:20	20:35	35.2747	-75.4428	2.8			6.1	8.0	

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
	25011994	95	21:03	21:23	35.2706	-75.4061	2.8			6.7	8.5	
	25011994	96	22:02	22:32	35.2431	-75.3772	2.8			9.6	8.8	
	2021993	1	10:36	11:05	35.1694	-75.5501	3.0	3.5	3.3	8.9	-2.2	
	3021993	2	15:52	16:22	35.8334	-75.5334	3.0	3.5	3.3	6.9	6.7	
	3021993	3	19:20	19:35	35.9168	-75.5668	3.0	3.5	3.3	6.8	5.9	
	3021993	4	20:50	20:55	35.9668	-75.6269	3.0	3.5	3.3	6.5	6.0	
	3021993	5	21:15	21:27	36.0000	-75.6334	3.0	3.5	3.3	6.4	6.0	
	3021993	6	21:52	22:02	36.0169	-75.6501	3.0	3.5	3.3	6.4	5.7	
	4021993	7	7:17	7:32	36.0502	-75.6667	3.0	3.5	3.3	6.1	4.9	
	4021993	8	11:56	12:11	36.0835	-75.6835	3.0	3.5	3.3	6.2	7.2	
	4021993	9	12:34	12:50	36.1168	-75.7002	3.0	3.5	3.3	6.2	6.8	
	4021993	10	14:05	14:13	36.1834	-75.6835	3.0	3.5	3.3	6.2	6.1	
	4021993	11	14:47	14:59	36.1834	-75.6668	3.0	3.5	3.3	6.3	7.0	
	4021993	12	17:00	17:30	36.3558	-75.8000	3.0	3.5	3.3	6.1	6.9	
	4021993	13	18:10	18:20	36.3834	-75.8303	3.0	3.5	3.3	6.4	7.0	
	4021993	14	18:39	19:09	36.4001	-75.8002	3.0	3.5	3.3	6.4	7.0	
	4021993	15	19:58	20:30	36.4334	-75.8168	3.0	3.5	3.3	6.4	6.5	
	4021993	16	20:49	21:24	36.4668	-75.8472	3.0	3.5	3.3	6.1	6.1	
	5021993	17	7:10	7:40	36.5169	-75.8336	3.0	3.5	3.3	5.9	2.2	
	5021993	18	8:03	8:33	36.5668	-75.8336	3.0	3.5	3.3	5.6	4.5	
	5021993	19	9:22	9:52	36.5502	-75.8169	3.0	3.5	3.3	5.5	4.0	
	5021993	20	10:29	10:52	36.5501	-75.8169	3.0	3.5	3.3	5.9	5.0	
	5021993	21	11:59	12:31	36.5334	-75.8334	3.0	3.5	3.3	6.3	7.5	
	5021993	22	13:16	13:32	36.5422	-75.8002	3.0	3.5	3.3	6.3	7.9	
	5021993	23	14:12	14:28	36.5168	-75.8001	3.0	3.5	3.3	6.3	7.7	
	5021993	24	15:13	15:31	36.5335	-75.8334	3.0	3.5	3.3	6.4	7.0	
	5021993	25	16:16	16:46	36.5334	-75.8501	3.0	3.5	3.3	6.7	6.6	
	5021993	26	17:51	18:21	36.5668	-75.7286	3.0	3.5	3.3	6.7	6.6	
	5021993	27	19:34	20:04	36.6168	-75.8334	3.0	3.5	3.3	6.1	6.9	
	5021993	28	20:35	21:05	36.6334	-75.8335	3.0	3.5	3.3	6.1	5.5	
	5021993	29	21:22	21:52	36.6502	-75.8642	3.0	3.5	3.3	6.1	5.5	
	6021993	30	7:13	7:43	36.5500	-75.7834	3.0	3.5	3.3	6.2	5.6	
	6021993	31	8:22	8:52	36.5501	-75.7834	3.0	3.5	3.3	6.1	5.5	
	6021993	32	9:20	9:50	36.5336	-75.7503	3.0	3.5	3.3	6.2	6.2	
	6021993	33	10:19	10:49	36.5667	-75.7503	3.0	3.5	3.3	6.4	6.0	
	6021993	34	11:21	11:51	36.5335	-75.7667	3.0	3.5	3.3	6.5	10.9	
	6021993	35	12:32	12:59	36.5168	-75.7668	3.0	3.5	3.3	7.2	8.1	

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
	6021993	36	13:32	14:02	36.4835	-75.7669	3.0	3.5	3.3	6.7	8.1	
	6021993	37	14:50	15:15	36.4668	-75.8334	3.0	3.5	3.3	6.7	6.0	
	6021993	38	16:08	16:38	36.4503	-75.8169	3.0	3.5	3.3	6.7	6.0	
	6021993	39	18:04	18:34	36.4503	-75.8002	3.0	3.5	3.3	6.6	5.0	
	7021993	40	7:21	7:50	36.8334	-75.9169	3.0	3.5	3.3	6.1	0.5	
	7021993	41	8:27	8:54	36.8335	-75.9167	3.0	3.5	3.3	6.1	1.5	
	7021993	42	9:29	9:59	36.8334	-75.9168	3.0	3.5	3.3	6.1	1.6	
	7021993	43	10:36	11:06	36.8334	-75.9168	3.0	3.5	3.3	6.0	1.8	
	7021993	44	12:23	12:48	36.8334	-75.9168	3.0	3.5	3.3	6.2	2.6	
	7021993	45	13:28	13:58	36.8334	-75.9169	3.0	3.5	3.3	6.1	3.0	
	7021993	46	14:38	15:05	36.8334	-75.9169	3.0	3.5	3.3	6.1	4.0	
	7021993	47	15:44	16:10	36.8334	-75.9169	3.0	3.5	3.3	6.0	4.8	
	7021993	48	17:10	17:42	36.8472	-75.9169	3.0	3.5	3.3	6.1	5.7	
	7021993	49	18:17	18:47	36.8472	-75.9335	3.0	3.5	3.3	6.1	5.7	
	7021993	50	19:40	20:10	36.7834	-75.9319	3.0	3.5	3.3	6.1	5.6	
	7021993	51	20:41	21:11	36.8002	-75.9002	3.0	3.5	3.3	6.1	5.8	
	7021993	52	21:45	22:19	36.8167	-75.9319	3.0	3.5	3.3	6.1	6.0	
	8021993	53	7:17	7:52	36.5501	-75.8334	3.0	3.5	3.3	6.1	5.6	
	8021993	54	8:30	9:00	36.5502	-75.8334	3.0	3.5	3.3	5.9	6.4	
	8021993	55	9:32	10:04	36.5503	-75.8168	3.0	3.5	3.3	6.0	6.2	
	18011992	1	7:18	7:48	35.9489	-75.5761	4.0	4.0	4.0	17.1	6.0	
	18011993	2			35.9828	-75.6100	4.0	4.0	4.0	16.4	6.0	
	18011994	3	12:09	12:39	36.0339	-75.6439	4.0	4.0	4.0	15.6	6.0	
	18011995	4	14:46	15:16	36.1186	-75.7117	4.0	4.0	4.0	15.3	6.0	
	18011996	5	16:08	16:38	36.2203	-75.7286	4.0	4.0	4.0	16.1	6.9	
	18011997	6	17:28	17:48	36.2881	-75.7794	4.0	4.0	4.0	15.8	6.4	
	18011998	7	19:02	19:32	36.3728	-75.8133	4.0	4.0	4.0	15.8	6.6	
	18011999	8	20:23	20:53	36.4406	-75.8303	4.0	4.0	4.0	11.1	7.1	
	18012000	9	21:54	22:24	36.5253	-75.7964	4.0	4.0	4.0	15.1	6.2	
	18012001	10	23:13	23:43	36.5931	-75.7964	4.0	4.0	4.0	15.1	4.0	
	18012002	11	0:35	1:05	36.6778	-75.7964	4.0	4.0	4.0	14.6	3.0	
	18012003	12	2:11	2:41	36.7456	-75.7625	4.0	4.0	4.0	13.8	4.0	
	18012004	13	3:28	3:58	36.6778	-75.7456	4.0	4.0	4.0	14.1	0.0	
	18012005	14	4:48	5:18	36.6778	-75.7964	4.0	4.0	4.0	14.0	-1.4	
	18012006	15			36.5761	-75.8133	4.0	4.0	4.0			
	18012007	16			36.4236	-75.7625	4.0	4.0	4.0	13.6		
	18012008	17			36.3558	-75.7456	4.0	4.0	4.0	13.3	1.0	

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
	18012009	18	5:26	5:56	35.7625	-75.4067	3.5	3.5	3.5			
	18012010	19			35.8303	-75.5253	3.5	3.5	3.5		4.6	
	18012011	20	8:31	9:01	35.8811	-75.5592	3.5	3.5	3.5		4.0	
	18012012	21			35.9489	-75.5931	3.5	3.5	3.5	9.6	5.3	
	18012013	22			35.9828	-75.6100	3.5	3.5	3.5	9.7	5.3	
	18012014	23			36.0339	-75.6439	3.5	3.5	3.5	9.7	5.0	
	18012015	24			36.0847	-75.6947	3.5	3.5	3.5	9.4	5.4	
	18012016	25	17:35	18:05	36.1356	-75.7286	3.5	3.5	3.5	9.2	5.3	
	18012017	26			36.2372	-75.7625	3.5	3.5	3.5	9.6	5.3	
	18012018	27	20:49	21:19	36.3050	-75.7794	3.5	3.5	3.5	9.7	5.3	
	18012019	28	22:09	22:39	36.3558	-75.8133	3.5	3.5	3.5	9.2	4.6	
	18012020	29			36.3897	-75.7964	3.5	3.5	3.5	9.6	4.3	
	18012021	30			36.4406	-75.8303	3.5	3.5	3.5	4.0	9.2	
	18012022	31			36.5083	-75.8472	3.5	3.5	3.5	10.0	3.8	
	18012023	32			36.5761	-75.8472	3.5	3.5	3.5	11.2	3.6	
	18012024	33			36.6269	-75.8472	3.5	3.5	3.5	9.3	3.9	
	18012025	34			36.6778	-75.8642	3.5	3.5	3.5	9.8	4.2	
	18012026	35			36.7117	-75.8981	3.5	3.5	3.5	9.2	3.3	
	18012027	36			36.6608	-75.8642	3.5	3.5	3.5	9.1	4.0	
	18012028	37			36.6269	-75.8472	3.5	3.5	3.5	9.1	6.0	
	18012029	38			36.6947	-75.8981	4.0	4.0	4.0	9.3	7.0	
	18012030	39			36.7625	-75.9319	3.5	3.5	3.5	9.5	11.0	
	18012031	40			36.8133	-75.9150	3.5	3.5	3.5	9.9	11.0	
	18012032	41			36.7117	-75.9150	3.5	3.5	3.5	9.5	11.0	
	18012033	42	17:20	17:50	36.6439	-75.8642	3.5	3.5	3.5	9.8	8.8	
	18012034	43	18:21	18:51	36.5761	-75.8472	3.5	4.0	3.8	10.0	9.9	
	18012035	44	19:29	19:59	36.5253	-75.8303	3.5	3.5	3.5	13.2	9.2	
	18012036	45	20:57	21:27	36.5592	-75.8133	3.5	3.5	3.5	13.2	9.1	
	18012037	46			36.5931	-75.7964	3.5	3.5	3.5	13.3	9.7	
	18012038	47			36.6778	-75.8811	3.5	3.5	3.5	13.4	9.1	
	18012039	48			36.7286	-75.9319	3.5	3.5	3.5	13.2	6.0	
	18012040	49			36.7964	-75.9319	3.5	3.5	3.5	13.1	5.0	
	18012041	50			36.8133	-75.9319	3.5	3.5	3.5	13.2	5.0	
	18012042	51			36.7456	-75.8981	3.5	3.5	3.5	13.1	4.7	
	18012043	52			36.7625	-75.8472	3.5	3.5	3.5	14.3	4.4	
	18012044	53			36.8472	-75.9319	3.5	3.5	3.5	11.3	4.0	
	24011991	1	5:06	5:36	35.5335	-75.3500	3.0	3.0	3.0	10.2	8.0	

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
	24011991	2	5:56	6:26	35.5502	-75.3503	2.8	2.8	2.8	11.0	7.8	
	24011991	3	6:51	7:21	35.6002	-75.3669	3.0	3.0	3.0	9.7	7.5	
	24011991	4	7:48	8:21	35.6001	-75.4169	3.0	3.0	3.0	9.7	7.8	
	24011991	5	8:53	9:24	35.6335	-75.4000	3.0	3.0	3.0	8.9	6.9	
	24011991	6	11:25	11:55	35.8001	-75.5001	3.0	3.0	3.0	7.5	8.1	
	24011991	7	13:30	14:00	35.9167	-75.5669	3.0	3.0	3.0	7.8	7.6	
	24011991	8	14:14	14:47	35.9336	-75.6001	3.5	3.5	3.5	7.8	7.1	
	24011991	9	15:30	16:00	36.0002	-75.6168	3.3	3.3	3.3	7.6	3.3	
	24011991	10	16:28	16:58	36.0678	-75.6169	3.5	3.5	3.5	7.4	4.5	
	24011991	11	17:17	17:47	36.0835	-75.6502	3.5	3.5	3.5	7.2	3.8	
	24011991	12	18:08	18:38	36.1168	-75.6836	3.2	3.2	3.2	7.2	3.8	
	24011991	13	19:02	19:32	36.1667	-75.7003	3.3	3.3	3.3	7.3	3.9	
	24011991	14	19:55	20:26	36.2003	-75.7168	3.5	3.5	3.5	7.3	3.9	
	24011991	15	20:54	21:24	36.2502	-75.7501	3.5	3.5	3.5	7.4	5.5	
	24011991	16	21:46	22:16	36.3001	-75.7834	3.5	3.5	3.5	7.7	5.5	
	24011991	17	22:42	23:12	36.3501	-75.8000	3.5	3.5	3.5	8.4	5.3	
	24011991	18	23:36	0:11	36.4001	-75.8002	3.5	3.5	3.5	8.4	5.0	
	25011991	19	0:42	1:16	36.4502	-75.8168	3.0	3.0	3.0	8.4	5.3	
	25011991	20	1:33	2:05	36.5083	-75.8472	3.0	3.0	3.0	8.5	6.2	
	25011991	21	2:29	3:05	36.5334	-75.8335	3.5	3.5	3.5	8.5	7.1	
	25011991	22	3:28	4:03	36.5503	-75.8336	3.0	3.0	3.0	7.6	7.1	
	25011991	23	4:29	4:59	36.5834	-75.8002	3.0	3.0	3.0	8.1	5.0	
	25011991	24	10:53	11:23	36.8500	-75.6335	3.5	3.5	3.5	7.8	2.5	
	25011991	25	12:55	13:15	36.7668	-75.6167	3.0	3.0	3.0	7.8	2.0	
	25011991	26	13:32	14:04	36.8000	-75.6167	3.0	3.0	3.0	7.8	2.0	
	25011991	27	17:39	18:19	36.6668	-75.6168	3.0	3.0	3.0	7.9	2.0	
	25011991	28	19:01	19:31	36.6668	-75.5503	3.0	3.0	3.0	7.8	1.5	
	25011991	29	20:19	20:49	36.6778	-75.5422	3.5	3.5	3.5	8.1	1.8	
	25011991	30	21:17	21:47	36.6169	-75.5668	3.5	3.5	3.5	7.8	3.0	
	25011991	31	22:11	22:42	36.6167	-75.6269	3.5	3.5	3.5	7.6	2.5	
	25011991	32	23:05	23:25	36.6168	-75.6668	3.5	3.5	3.5	7.5	2.8	
	26011991	33	0:16	0:51	36.5836	-75.7669	3.5	3.5	3.5	6.1	4.7	
	26011991	34	1:07	1:40	36.5667	-75.8002	3.5	3.5	3.5	5.9	4.7	
	26011991	35	2:08	2:43	36.5168	-75.8336	3.5	3.5	3.5	6.2	3.7	
	26011991	36	2:55	3:30	36.4835	-75.8169	3.5	3.5	3.5	6.2	3.2	
	26011991	37	3:50	4:20	36.4503	-75.7835	3.3	3.3	3.3	6.6	2.5	
	26011991	38	4:37	5:07	36.4003	-75.7834	3.2	3.2	3.2	6.5	2.5	

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
	26011991	39	5:30	6:00	36.3667	-75.7834	3.1	3.1	3.1	6.4	3.0	
	26011991	40	6:22	6:52	36.3168	-75.7669	3.2	3.2	3.2	6.4	3.5	
	26011991	41	8:06	8:36	36.2336	-75.7501	3.5	3.5	3.5	6.4	4.7	
	26011991	42	10:50	11:20	36.1000	-75.6835	3.5	3.5	3.5	7.5	7.0	
	26011991	43	11:32	12:08	36.1017	-75.6501	3.5	3.5	3.5	6.5	5.3	
	26011991	44	12:23	13:02	36.1001	-75.6836	3.5	3.5	3.5	7.8	5.3	
	26011991	45	13:22	13:58	36.1356	-75.6500	3.0	3.0	3.0	7.0	5.2	
	26011991	46	14:12	14:47	36.1334	-75.7501	3.0	3.0	3.0	7.0	5.2	
	26011991	47	14:59	15:33	36.1502	-75.7169	3.0	3.0	3.0	6.9	5.1	
	26011991	48	16:10	16:40	36.2001	-75.7334	3.2	3.2	3.2	6.7	5.0	
	26011991	49	17:13	17:43	36.2501	-75.7502	3.3	3.3	3.3	5.1	6.6	
	26011991	50	18:24	18:54	36.3001	-75.7669	3.5	3.5	3.5	5.0	6.0	
	26011991	51	19:19	19:49	36.3335	-75.7835	3.5	3.5	3.5	6.1	5.7	
	26011991	52	20:36	21:06	36.4001	-75.8002	3.5	3.5	3.5	6.1	4.2	
	26011991	53	21:30	22:00	36.4575	-75.8168	3.5	3.5	3.5	6.3	3.1	
	26011991	54	22:24	22:54	36.4835	-75.8334	3.5	3.5	3.5	6.1	3.4	
	27011991	55	23:34	0:07	36.5501	-75.8642	3.5	3.5	3.5	5.9	4.9	
	27011991	56	0:21	0:59	36.5835	-75.8335	3.5	3.5	3.5	6.0	4.8	
	27011991	57	2:17	2:51	36.6778	-75.8502	3.3	3.3	3.3	6.0	4.2	
	27011991	58	3:24	3:54	36.7001	-75.9002	3.5	3.5	3.5	5.8	3.7	
	27011991	59	4:40	5:10	36.6836	-75.9001	3.4	3.4	3.4	6.0	4.0	
	27011991	60	5:33	6:03	36.6668	-75.8669	3.5	3.5	3.5	5.8	3.6	
	27011991	61	6:56	7:06	36.6669	-75.8835	3.5	3.5	3.5	5.6	2.5	
	27011991	62	8:21	8:54	36.6501	-75.8502	3.5	3.5	3.5	5.6	6.9	
	27011991	63	9:44	10:14	36.6667	-75.8669	3.5	3.5	3.5	5.7	8.1	
	27011991	64	11:00	11:30	36.6835	-75.9001	3.5	3.5	3.5	7.7	7.2	
	27011991	65	12:22	12:56	36.7286	-75.9002	3.5	3.5	3.5	7.6	6.0	
	27011991	66	13:18	13:52	36.7168	-75.9169	3.5	3.5	3.5	8.1	6.0	
	27011991	67	14:29	15:03	36.7503	-75.8669	3.5	3.5	3.5	6.6	7.2	
	27011991	68	15:27	15:57	36.7167	-75.9001	3.5	3.5	3.5	6.4	8.0	
	27011991	69	16:39	17:09	36.6834	-75.8669	3.5	3.5	3.5	6.6	7.8	
	27011991	70	17:58	18:28	36.6503	-75.8669	3.5	3.5	3.5	6.8	7.5	
	27011991	71	19:06	19:36	36.6835	-75.9001	3.5	3.5	3.5	7.0	8.2	
	27011991	72	20:00	20:30	36.6778	-75.8667	3.5	3.5	3.5	7.0	9.5	
	27011991	73	20:59	21:29	36.6169	-75.8335	3.5	3.5	3.5	7.1	9.5	
	27011991	74	22:09	22:39	36.5836	-75.8334	3.5	3.5	3.5	7.3	10.5	
	27011991	75	23:04	23:34	36.5501	-75.8336	3.5	3.5	3.5	7.6	10.3	

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
	28011991	76	23:57	0:30	36.5253	-75.8334	3.5	3.5	3.5	7.7	10.9	
	28011991	77	0:45	1:19	36.4914	-75.8168	3.0	3.0	3.0	7.7	10.6	
	28011991	78	1:37	2:12	36.4336	-75.8169	3.0	3.0	3.0	7.2	10.8	
	28011991	79	2:32	3:06	36.4003	-75.8001	3.0	3.0	3.0	7.3	11.1	
	28011991	80	3:26	4:00	36.3669	-75.8002	3.0	3.0	3.0	7.5	11.1	
	28011991	81	4:21	4:51	36.3335	-75.7835	3.4	3.4	3.4	7.4	10.0	
	28011991	82	5:17	5:47	36.3001	-75.7834	3.5	3.5	3.5	7.4	10.0	
	28011991	83	6:25	6:55	36.2501	-75.7667	3.5	3.5	3.5	7.6	9.9	
	28011991	84	7:21	7:51	36.2003	-75.7336	3.5	3.5	3.5	7.3	8.8	
	28011991	85	8:12	8:42	36.1669	-75.7169	3.5	3.5	3.5	7.3	8.8	
	28011991	86	8:56	9:26	36.1501	-75.7003	3.5	3.5	3.5	7.0	8.3	
	28011991	87	9:47	10:16	36.1168	-75.6834	3.5	3.5	3.5	6.9	8.3	
	28011991	88	10:34	11:04	36.0834	-75.6835	3.5	3.5	3.5	6.8	8.7	
	28011991	89	11:30	12:05	36.0678	-75.6501	3.5	3.5	3.5	7.1	8.7	
	28011991	90	12:19	12:57	36.0169	-75.6501	3.5	3.5	3.5	7.3	8.2	
	28011991	91	13:14	13:48	36.0001	-75.6169	3.5	3.5	3.5	7.3		
	28011991	92	14:01	14:37	36.0334	-75.6500	3.2	3.2	3.2	7.3	9.2	
	28011991	93	14:51	15:25	36.0002	-75.6168	3.0	3.0	3.0	7.4	10.9	
	28011991	94	19:07	19:37	35.9168	-75.5501	3.5	3.5	3.5	7.0	9.4	
	28011991	95	20:00	20:30	35.8835	-75.5002	3.2	3.2	3.2	7.9	8.9	
	28011991	96	20:58	21:18	35.8668	-75.4502	3.2	3.2	3.2	8.6	9.4	
	28011991	97	21:41	22:01	35.8336	-75.4668	3.4	3.4	3.4	7.6	9.8	
	28011991	98	22:25	22:46	35.8336	-75.5167	3.2	3.2	3.2	7.6	9.8	
	28011991	99	23:08	23:28	35.8667	-75.5500	3.2	3.2	3.2	7.2	9.0	
	28011991	100	23:57	0:13	35.9150	-75.5501	3.5	3.5	3.5	7.1	9.3	
	29011991	101	0:27	0:52	35.9002	-75.5169	3.5	3.5	3.5	7.4	9.6	
	29011991	102	1:00	1:33	35.8836	-75.5083	3.2	3.2	3.2	7.4	9.6	
	29011991	103	1:53	2:18	35.8502	-75.5083	3.5	3.5	3.5	7.7	10.0	
	29011991	104	2:36	3:01	35.8334	-75.4834	3.5	3.5	3.5	7.5	9.8	
	29011991	105	3:19	3:36	35.8642	-75.4501	3.2	3.2	3.2	7.5	9.8	
	29011991	106	3:57	4:17	35.8668	-75.4668	3.5	3.5	3.5	7.6	9.1	
	29011991	107	5:28	5:48	35.9001	-75.5002	3.1	3.1	3.1	8.1	9.2	
	29011991	108	6:24	6:44	35.8668	-75.4669	3.3	3.3	3.3	9.8	10.1	
	29011991	109	7:09	7:29	35.8334	-75.4501	3.3	3.3	3.3	9.8	10.1	
	29011991	110	7:52	8:27	35.8001	-75.4168	3.5	3.5	3.5	11.6	13.0	
	29011991	111	8:57	9:27	35.7668	-75.3669	3.5	3.5	3.5	11.6	14.0	
	29011991	112	9:57	10:27	35.7169	-75.3836	3.5	3.5	3.5	11.9	14.2	

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
	29011991	113	11:19	11:49	35.6834	-75.3668	3.5	3.5	3.5	12.5	13.5	
	29011991	114	12:20	12:55	35.6501	-75.3169	3.0	3.0	3.0	12.7	15.1	
	29011991	115	13:46	14:21	35.6100	-75.3669	3.5	3.5	3.5	11.2	14.3	
	29011991	116	14:50	15:25	35.5334	-75.3668	3.5	3.5	3.5	10.8	13.3	
	29011991	117	15:57	16:27	35.4914	-75.3336	3.3	3.3	3.3	10.1	14.2	
	29011991	118	17:00	17:30	35.4334	-75.3168	3.2	3.2	3.2	18.7	15.3	
	29011991	119	17:53	18:24	35.4001	-75.3000	3.3	3.3	3.3	18.6	15.9	
	29011991	120	18:57	19:27	35.4168	-75.3502	3.3	3.3	3.3	14.6	11.7	
	29011991	121	19:56	20:26	35.4335	-75.4169	3.2	3.2	3.2	10.2	13.0	
	29011991	122	21:10	21:40	35.4669	-75.4336	3.2	3.2	3.2	8.6	11.9	
	29011991	123	22:08	22:25	35.5002	-75.4236	3.0	3.0	3.0	10.5	10.5	
	30011991	124	1:41	2:05	35.7794	-75.5334	3.0	3.0	3.0	7.7	11.9	
	30011991	125	2:29	2:55	35.8811	-75.5500	3.5	3.5	3.5	7.7	11.7	
	30011991	126	3:21	3:46	35.8668	-75.5422	3.5	3.5	3.5	7.7	11.7	
	30011991	127	4:01	4:31	35.9001	-75.5502	3.3	3.3	3.3	7.4	10.1	
	30011991	128	5:25	5:55	36.0001	-75.6169	3.3	3.3	3.3	7.4	11.5	
	30011991	129	6:16	6:46	36.0335	-75.6501	3.3	3.3	3.3	7.4	11.5	
	30011991	130	7:10	7:40	36.0503	-75.6669	3.5	3.5	3.5	7.5	12.0	
	30011991	131	8:12	8:42	36.1167	-75.7117	3.5	3.5	3.5	7.7	12.0	
	30011991	132	11:12	11:27	36.2001	-75.6336	3.0	3.0	3.0	7.9	11.1	
	30011991	133	11:50	12:13	36.2169	-75.6778	3.5	3.5	3.5	7.7	12.2	
	30011991	134	12:26	13:01	36.2336	-75.6835	3.5	3.5	3.5	7.5	12.2	
	30011991	135	13:15	13:40	36.2503	-75.7334	3.5	3.5	3.5	7.5	11.2	
	30011991	136	13:57	14:18	36.2668	-75.7667	3.5	3.5	3.5	7.4	11.3	
	30011991	137	14:48	15:12	36.3050	-75.7834	3.5	3.5	3.5	7.4	13.4	
	30011991	138	15:45	16:15	36.3334	-75.7835	3.5	3.5	3.5	7.3	13.0	
	30011991	139	16:38	17:14	36.3667	-75.8001	3.5	3.5	3.5	7.4	12.1	
	30011991	140	17:53	18:13	36.4167	-75.8303	3.5	3.5	3.5	7.6	12.1	
	30011991	141	18:45	19:15	36.4502	-75.8168	3.5	3.5	3.5	7.5	11.6	
	30011991	142	19:36	20:06	36.5001	-75.8334	3.5	3.5	3.5	7.5	11.6	
	30011991	143	20:29	20:54	36.5335	-75.8334	3.5	3.5	3.5	7.4	12.0	
	30011991	144	22:01	22:31	36.6334	-75.8334	3.5	3.5	3.5	7.6	11.0	
	31011991	145	1:28	1:46	36.5169	-75.8334	3.5	3.5	3.5	7.7	14.3	
	31011991	146	2:02	2:20	36.5003	-75.8472	3.5	3.5	3.5	7.7	14.6	
	31011991	147	2:34	2:59	36.4834	-75.8303	3.5	3.5	3.5	7.7	14.0	
	31011991	148	3:30	3:55	36.4501	-75.8133	3.1	3.1	3.1	8.0	14.0	
	31011991	149	4:16	4:36	36.4168	-75.8001	3.5	3.5	3.5	8.0	13.7	

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
	31011991	150	4:52	5:12	36.3836	-75.8001	3.4	3.4	3.4	8.2	13.9	
	31011991	151	5:56	6:27	36.4169	-75.7836	3.4	3.4	3.4	8.2	14.0	
	31011991	152	6:46	7:16	36.4667	-75.8001	3.5	3.5	3.5	8.1	13.7	
	31011991	153	8:07	8:37	36.5002	-75.8169	3.5	3.5	3.5	8.1	9.0	
	31011991	154	9:22	9:52	36.4834	-75.8167	3.5	3.5	3.5	8.1	11.0	
	31011991	155	10:10	10:40	36.4502	-75.8002	3.5	3.5	3.5	8.3	12.0	
	31011991	156	11:06	11:36	36.4835	-75.8303	3.5	3.5	3.5	8.2	13.2	
	31011991	157	11:57	12:20	36.5169	-75.8168	3.5	3.5	3.5	8.0	11.0	
	31011991	158	12:43	13:06	36.5335	-75.8168	3.5	3.5	3.5	8.3	11.3	
	31011991	159	13:27	13:51	36.5002	-75.8169	3.5	3.5	3.5	8.4	11.3	
	31011991	160	14:01	14:24	36.4669	-75.8168	3.5	3.5	3.5	8.4	13.3	
	31011991	161	14:37	15:01	36.4575	-75.8001	3.5	3.5	3.5	8.5	11.0	
	31011991	162	15:21	15:43	36.4002	-75.8002	3.5	3.5	3.5	8.4	11.0	
	1021991	163	8:47	9:07	35.0169	-75.9835	3.5	3.5	3.5	13.6	6.2	
	1021991	164	9:39	10:09	35.0002	-75.9834	3.5	3.5	3.5	14.4	7.0	
	1021991	165	10:28	10:58	34.9834	-76.0168	3.5	3.5	3.5	14.7	8.0	
	1021991	166	11:18	11:48	34.9503	-76.0668	3.5	3.5	3.5	14.8	8.0	
	1021991	167	12:04	12:41	34.9169	-76.1000	3.0	3.5	3.3	14.8	8.0	
	1021991	168	13:00	13:35	34.8669	-76.1334	3.1	3.1	3.1	14.8	11.3	
	1021991	169	13:48	14:23	34.9167	-76.1002	3.1	3.1	3.1	15.0	10.4	
	1021991	170	14:36	15:11	34.9335	-76.0834	3.2	3.2	3.2	15.2	9.1	
	1021991	171			#VALUE!	#VALUE!			#DIV/0!			
	1021991	172			#VALUE!	#VALUE!			#DIV/0!			
	1021991	173			#VALUE!	#VALUE!			#DIV/0!			
	1021991	174			#VALUE!	#VALUE!			#DIV/0!			
	1021991	175			#VALUE!	#VALUE!			#DIV/0!			
	1021991	176	19:59	20:29	34.9334	-76.0339	3.5	3.5	3.5	14.5	9.3	
	1021991	177	20:52	21:22	34.8836	-76.0668	3.4	3.4	3.4	15.2	9.3	
	1021991	178	0:06	0:42	34.4502	-76.2168	3.2	3.2	3.2	19.1	13.3	
	1021991	179	1:04	1:41	34.4575	-76.2501	3.2	3.2	3.2	19.2	13.2	
	1021991	180	2:00	2:38	34.4668	-76.2169	3.2	3.2	3.2	19	12.9	
	17011990	1	16:21	16:31	35.5342	-75.4422	3.2			9.7	14.3	
	17011990	2	17:35	17:45	35.6819	-75.4081	3.1			8.6	11.9	
	17011990	3	18:31	18:46	35.7725	-75.3994	3			8.2	11.9	
	17011990	4	19:34	19:49	35.8022	-75.4331	3			8.2	11	
	17011990	5	20:36	20:56	35.8008	-75.3835	3.1			8	11.6	
	17011990	6	22:06	22:26	35.7397	-75.4936	3.1			8	11.5	

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
	18011990	7	7:12	7:32	36.3669	-75.8001	3			6	11.4	
	18011990	8	8:05	8:25	36.3500	-75.8001	3.2			6	16.1	
	18011990	9	8:54	9:14	36.3167	-75.7834	3.1			6.3	12.4	
	18011990	10	9:56	10:16	36.2668	-75.7501	3.1			6	12.4	
	18011990	11	10:55	11:15	36.2169	-75.7334	3.1			6.4	13	
	18011990	12	12:45	13:05	36.1644	-75.7211	3.1			7.9	18.4	
	18011990	13	13:53	14:13	36.1169	-75.6834	3.1			7.2	17.7	
	18011990	14	15:21	15:41	36.1186	-75.6835	3.2			8	18.9	
	18011990	15	17:26	17:40	36.0169	-75.6608	3			7	18	
	18011990	16	18:29	18:49	35.9983	-75.6325	3.1			7	18	
	18011990	17	19:33	19:53	35.9335	-75.6067	3			8	15.5	
	18011990	18	20:26	20:46	35.9192	-75.5853	3			8	14	
	19011990	19	8:25	8:40	35.9167	-75.5835	3.1			7.5	7.9	
	19011990	20	9:07	9:22	35.9501	-75.6002	3.2			7	7.6	
	19011990	21	9:59	10:06	35.9835	-75.6334				6.8	7.6	
	19011990	22	14:34	14:49	36.1001	-75.6836	3.1			6.4	10.7	
	19011990	23	15:15	15:35	36.1334	-75.7001	3.1			6.1	8.5	
	19011990	24	16:29	16:49	36.2001	-75.7336				6.1	8.5	
	19011990	25	17:55	18:25	36.2400	-75.7502	3			6	6.1	
	19011990	26	19:28	19:58	36.2789	-75.7817	3			6	6.1	
	19011990	27	20:40	21:10	36.3239	-75.7939	3.1			5.6	6.5	
	20011990	28	7:34	8:04	36.3502	-75.8001	3			5.4	7.5	
	20011990	29	8:28	8:58	36.4001	-75.8002	3.1			5.4	8	
	20011990	30	9:38	10:08	36.4550	-75.8311	3.1			5.3	7	
	20011990	31	12:22	12:52	36.4911	-75.8378	3.2			5.4	11.3	
	20011990	32	14:05	14:35	36.5334	-75.8335	3.1			5.5	8.7	
	20011990	33	15:01	15:31	36.5669	-75.8336	3.1			5.3	9.4	
	20011990	34	17:02	17:32	36.6169	-75.7002	3			6	10.6	
	20011990	35	18:02	18:31	36.6300	-75.6539	3			6.4	7.5	
	20011990	36	19:56	20:26	36.6147	-75.8472	3.2			6	7.9	
	20011990	37	20:59	21:29	36.5394	-75.8519	3.1			6	10.8	
	21011990	38	7:23	7:53	36.5001	-75.8334	3			7.5	14.5	
	21011990	39	8:15	8:45	36.4914	-75.8472	3.1			6.9	14	
	21011990	40	9:20	9:50	36.4168	-75.8167	3.1			7.9	13.8	
	21011990	41	10:18	10:48	36.3836	-75.8072	3.1			7.9	13.8	
	21011990	42	11:11	11:41	36.3503	-75.8039	3			7	16.5	
	21011990	43	13:02	13:32	36.3061	-75.7922	3			7.5	16.5	

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
	21011990	44	13:58	14:28	36.2502	-75.7668	3			7	17.7	
	21011990	45	14:59	15:29	36.2168	-75.7501	3.2			7.2	18.5	
	21011990	46	16:00	16:30	36.1794	-75.7408	3			7.2	16.8	
	21011990	47	17:32	18:02	36.1514	-75.7281	3.1			7.7	16.9	
	21011990	48	18:28	18:58	36.1011	-75.7025	3.1			8	17.1	
	21011990	49	19:21	19:51	36.0706	-75.6819	3			7.9	17	
	21011990	50	20:24	20:54	36.0253	-75.6547	3.2			8.5	16.5	
	21011990	51	21:33	22:03	35.9811	-75.6168	3			9.2	15	
	22011990	52	7:40	8:10	35.9502	-75.6003				9.4	8.2	
	22011990	53	8:30	9:00	36.0000	-75.6334	3.1			9.4	8.2	
	22011990	54	9:21	9:51	36.0335	-75.6501	3.1			6.9	8.9	
	22011990	55	12:34	13:05	36.0906	-75.6867	3.2			7.9	12.5	
	22011990	56	14:04	14:34	36.1334	-75.7002	3.2			7.6	12.5	
	22011990	57	15:07	15:37	36.1834	-75.7334	3.2			7	16.1	
	22011990	58	17:35	18:05	36.2458	-75.7536	3			6.8	10.6	
	22011990	59	18:37	19:07	36.2669	-75.7783	3			7	10.6	
	22011990	60	20:07	20:37	36.3334	-75.8058	3.1			6.5	10.9	
	22011990	61	20:58	21:28	36.3783	-75.8086	3.1			7	11	
	23011990	62	7:27	7:57	36.0678	-75.6669				6.3	8	
	23011990	63	8:44	9:14	36.0169	-75.6335				6.8	10.4	
	23011990	64	9:46	10:16	36.0097	-75.6294	3.1			6.8	10.6	
	23011990	65	13:59	14:29	35.9667	-75.6002	3.2			8	12.7	
	23011990	66	14:58	15:28	35.9167	-75.5834	3.2			8.1	9.4	
	23011990	67	17:34	17:44	35.7456	-75.4914				7.7	10	
	23011990	68	20:39	20:49	35.9001	-75.5825	3.1			7.4	8.8	
	24011990	69	21:13	21:28	35.9314	-75.5956	3.2			9.6	8.8	
	24011990	70	7:24	7:54	35.9502	-75.6002	3.1			7.6	13	
	24011990	71	9:25	9:55	35.9668	-75.6001				8	13.4	
	24011990	72	11:13	11:43	35.8569	-75.5572	3.1			8	13.2	
	24011990	73	12:52	13:07	35.7503	-75.4958	3.2			8.2	15.3	
	24011990	74	13:27	13:29	35.7239	-75.4668	3.2			8.2	15.3	
	24011990	75	13:56	14:24	35.7000	-75.4668	3.2			8.2	15.3	
	24011990	76	14:49	15:19	35.6502	-75.4503	3.2			8.9	15.9	
	24011990	77	16:21	16:45	35.5500	-75.4168	3			9	13.7	
	16011989	1	1:27	1:53	35.3001	-75.4501	4.0	4.0	4.0	12.0	13.9	
	16011989	2	3:03	3:33	35.4334	-75.4501	4.0	4.0	4.0	9.0	11.1	
	16011989	3	4:02	4:32	35.4835	-75.4335	3.8	4.0	3.9	9.0	10.9	

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
	16011989	4	4:58	5:28	35.5422	-75.4002	3.8	4.0	3.9	9.0	10.9	
	16011989	5	7:26	7:56	35.6169	-75.4334	3.8	4.0	3.9	8.8	9.5	
	16011989	6	9:09	9:39	35.6834	-75.4502	3.8	4.0	3.9	8.5	12.5	
	16011989	7	10:00	10:30	35.7169	-75.4669	3.8	4.0	3.9	8.5	12.5	
	16011989	8	12:15	12:45	35.8169	-75.5335	3.8	4.0	3.9	7.8	7.3	
	16011989	9	13:07	13:37	35.8668	-75.5761	3.8	4.0	3.9	7.8	7.5	
	16011989	10	14:01	14:31	35.9168	-75.5834	3.8	4.0	3.9	7.6	6.9	
	16011989	11	15:23	15:53	35.9334	-75.5168	3.8	4.0	3.9	7.3	6.9	
	16011989	12	16:43	17:13	35.9668	-75.5836	3.8	4.0	3.9	7.3	7.1	
	16011989	13	17:47	18:17	36.0168	-75.6336	3.8	4.0	3.9	7.2	6.0	
	16011989	14	19:16	19:46	36.0668	-75.6947	3.8	4.0	3.9	7.0	6.5	
	16011989	15	20:05	20:35	36.1167	-75.7001	3.6	4.0	3.8	7.0	11.5	
	16011989	16	23:14	23:44	36.2001	-75.7169	3.8	4.0	3.9	6.3	5.9	
	17011989	17	0:22	0:52	36.2336	-75.7667	3.8	4.0	3.9	6.4	5.6	
	17011989	18	1:10	1:40	36.2835	-75.7964	3.8	4.0	3.9	6.4	5.6	
	17011989	19	2:09	2:39	36.3334	-75.7336	3.8	4.0	3.9	6.3	5.5	
	17011989	20	3:31	4:01	36.3501	-75.8001	3.8	4.0	3.9	6.0	4.8	
	17011989	21	4:28	4:58	36.4001	-75.8003	3.8	4.0	3.9	6.0	5.0	
	17011989	22	5:33	6:03	36.4502	-75.8168	3.8	4.0	3.9	5.7	4.8	
	17011989	23	6:43	7:13	36.5253	-75.8335	3.8	4.0	3.9	5.7	4.5	
	17011989	24	12:18	12:28	36.6167	-75.8667	3.8	4.0	3.9	6.7	10.2	
	17011989	25	14:36	15:06	36.8169	-75.9168	3.8	4.0	3.9	6.7	9.2	
	17011989	26	15:32	16:02	36.8811	-75.9334	3.8	4.0	3.9	7.2	10.0	
	17011989	27	16:25	16:55	36.8168	-75.9489	3.8	4.0	3.9	7.0	9.0	
	17011989	28	17:14	17:44	36.7964	-75.9003	3.8	4.0	3.9	7.0	7.6	
	17011989	29	18:11	18:26	36.7334	-75.8835	3.8	4.0	3.9	7.0	7.6	
	17011989	30	19:07	19:22	36.7117	-75.9001	3.8	4.0	3.9	6.6	6.7	
	17011989	31	19:53	20:18	36.6668	-75.8669	3.8	4.0	3.9	6.7	7.8	
	17011989	32	20:34	20:49	36.6502	-75.8334	4.0	4.0	4.0	5.0	11.7	
	17011989	33			36.6336	-75.8303	4.0	4.0	4.0	5.0	11.7	
	17011989	34			36.6335	-75.8334	4.0	4.0	4.0	6.1	9.4	
	17011989	35			36.6169	-75.8001	4.0	4.0	4.0	6.7	7.2	
	17011989	36			36.6167	-75.7668	4.0	4.0	4.0	6.7	6.7	
	17011989	37			36.6002	-75.8002	4.0	4.0	4.0	6.7	6.7	
	18011989	38	0:07	0:22	36.6167	-75.8169	4.0	4.0	4.0	6.3	6.4	
	18011989	39	0:40	0:55	36.6335	-75.8001	4.0	4.0	4.0	6.3	6.0	
	18011989	40	1:12	1:27	36.6501	-75.8334	4.0	4.0	4.0	6.3	6.0	

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
	18011989	41	1:53	2:08	36.6502	-75.8472	4.0	4.0	4.0	6.3	6.0	
	18011989	42	2:24	2:39	36.6335	-75.8001	4.0	4.0	4.0	6.3	5.6	
	18011989	43	2:58	3:13	36.6168	-75.7835	4.0	4.0	4.0	6.4	5.6	
	18011989	44	3:31	3:46	36.6168	-75.8169	4.0	4.0	4.0	6.7	5.6	
	18011989	45	4:15	4:30	36.6334	-75.8169	3.8	4.0	3.9	6.2	5.5	
	18011989	46	4:50	5:05	36.6003	-75.8167	3.8	4.0	3.9	6.0	5.2	
	18011989	47	5:29	5:39	36.5834	-75.8003	4.8	5.0	4.9	6.1	5.0	
	18011989	48	6:06	6:16	36.5667	-75.8168	3.8	4.0	3.9	6.1	4.9	
	18011989	49			36.6334	-75.8002	3.8	4.0	3.9	6.0	9.0	
	18011989	50			36.6503	-75.8003	4.0	4.0	4.0	6.0	9.0	
	18011989	51			36.6669	-75.8336	4.5	4.5	4.5	6.0	9.0	
	18011989	52			36.6834	-75.8669	4.0	4.0	4.0	6.0	9.0	
	18011989	53			36.6667	-75.8834	4.0	4.0	4.0	6.9	9.8	
	18011989	54			36.6835	-75.8667	4.0	4.0	4.0	6.9	9.8	
	18011989	55	11:51	12:06	36.6835	-75.8472	4.0	4.0	4.0	6.8	7.6	
	18011989	56	12:32	12:47	36.6835	-75.7835	4.0	4.0	4.0	6.8	7.6	
	18011989	57	13:03	13:18	36.7001	-75.7668	4.0	4.0	4.0	6.8	8.0	
	18011989	58	13:38	13:48	36.7002	-75.8001	4.0	4.0	4.0	6.8	8.0	
	18011989	59	14:04	14:19	36.7168	-75.8335	4.0	4.0	4.0	7.0	8.8	
	18011989	60	14:44	14:59	36.7169	-75.8668	4.0	4.0	4.0	7.0	8.8	
	18011989	61	15:37	15:53	36.7500	-75.8834	4.0	4.0	4.0	7.1	9.5	
	18011989	62			36.8001	-75.8336	3.8	4.0	3.9	7.3	8.0	
	18011989	63	19:36	19:51	37.0169	-75.8169	3.8	4.0	3.9	6.9	7.9	
	18011989	64	20:09	20:24	37.0501	-75.8000	3.8	4.0	3.9	6.5	8.5	
	18011989	65	20:50	21:20	37.0669	-75.7668	4.0	4.0	4.0	6.5	10.0	
	18011989	66	21:49	22:19	37.1001	-75.7002	4.0	4.0	4.0	6.5	10.0	
	18011989	67	22:41	23:11	37.1001	-75.6335	4.0	4.0	4.0	6.5	9.0	
	19011989	68	23:32	0:02	37.1001	-75.5834	4.0	4.0	4.0	7.3	8.3	
	19011989	69	0:21	0:50	37.1169	-75.5592	4.0	4.0	4.0	7.2	7.2	
	19011989	70			37.1668	-75.6168	4.0	4.0	4.0	6.7	7.2	
	19011989	71			37.2002	-75.6334	4.0	4.0	4.0	6.3	7.2	
	19011989	72			37.2169	-75.6778	4.0	4.0	4.0	6.1	7.5	
	19011989	73	3:36	4:06	37.2002	-75.5167	4.0	4.0	4.0	6.5	7.5	
	19011989	74	4:44	4:57	37.1834	-75.5335	3.8	4.0	3.9	7.4	7.8	
	19011989	75	5:21	5:36	37.1668	-75.5001	3.8	4.0	3.9	7.4	7.8	
	19011989	76	5:57	6:12	37.1502	-75.4667	3.8	4.0	3.9	8.0	8.0	
	19011989	77	6:38	6:53	37.1335	-75.4336	3.8	4.0	3.9	7.8	7.8	

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
	19011989	78	7:59	8:14	37.1169	-75.5667	4.0	4.4	4.2	7.0	11.0	
	19011989	79	8:37	8:52	37.1167	-75.6002	4.0	4.0	4.0	7.0	11.0	
	19011989	80	9:11	9:26	37.0836	-75.6334	4.0	4.0	4.0	8.0	13.0	
	19011989	81	9:44	9:59	37.0668	-75.6503	4.0	4.0	4.0	7.5	13.0	
	19011989	82	10:21	10:36	37.0335	-75.6336	4.0	4.0	4.0	8.3	12.2	
	19011989	83	12:38	13:08	37.7835	-75.5835	4.0	4.0	4.0	7.8	8.9	
	19011989	84	13:56	14:16	37.7286	-75.5422	4.0	4.0	4.0	7.8	9.4	
	19011989	85	14:41	15:11	36.6778	-75.5334	4.0	4.0	4.0	7.8	8.9	
	19011989	86	15:49	16:04	36.6334	-75.5501	4.0	4.0	4.0	8.5	10.0	
	19011989	87	16:34	16:54	36.6501	-75.5335	4.0	4.0	4.0	8.1	10.2	
	19011989	88	17:17	17:32	36.6334	-75.5592	4.0	4.0	4.0	8.1	10.2	
	19011989	89	17:59	18:19	36.6608	-75.5335	3.8	4.0	3.9	7.9	9.3	
	19011989	90	18:52	19:07	36.6168	-75.5501	3.8	4.0	3.9	7.8	9.0	
	19011989	91	19:34	19:49	36.6335	-75.5592	3.8	4.0	3.9	7.8	11.0	
	19011989	92			36.6169	-75.5836	4.0	4.0	4.0	7.8	10.0	
	19011989	93			36.6500	-75.5669	4.0	4.0	4.0	7.8	10.0	
	19011989	94			36.6168	-75.6100	4.0	4.0	4.0	7.2	10.0	
	19011989	95	23:24	23:39	36.6500	-75.5669	4.0	4.0	4.0	7.2	10.0	
	20011989	96	0:17	0:28	36.6669	-75.5503	4.0	4.0	4.0	7.3	8.5	
	20011989	97	1:36	1:51	36.6947	-75.5502	4.0	4.0	4.0	7.2	8.7	
	20011989	99	2:13	2:28	36.6502	-75.5668	4.0	4.0	4.0	7.2	8.3	
	20011989	100	2:50	2:59	36.6834	-75.5501	4.0	4.0	4.0	7.2	8.5	
	20011989	101	3:19	3:34	36.6668	-75.5501	4.0	4.0	4.0	7.3	8.0	
	20011989	102	4:43	4:58	36.6334	-75.6003	3.8	4.0	3.9	7.3	8.0	
	20011989	103	5:28	5:43	36.6169	-75.6334	3.8	4.0	3.9	7.3	8.0	
	20011989	104	6:11	6:26	36.6502	-75.6169	3.8	4.0	3.9	7.3	9.0	
	20011989	105	6:45	7:00	36.6669	-75.6269	3.8	4.0	3.9	7.1	8.5	
	20011989	106	7:18	7:33	36.6500	-75.6002	3.8	4.0	3.9	7.1	8.5	
	20011989	107	7:56	8:05	36.6167	-75.6002	4.0	4.0	4.0	7.5	10.0	
	20011989	108	8:35	8:50	36.5836	-75.6001	4.0	4.0	4.0	7.5	10.5	
	20011989	109	9:16	9:31	36.6002	-75.6002	4.0	4.0	4.0	7.5	12.0	
	20011989	110	9:54	10:09	36.5834	-75.6001	4.0	4.0	4.0	7.5	12.0	
	20011989	111	10:33	10:48	36.5835	-75.5669	4.0	4.0	4.0	7.4	10.0	
	20011989	112	11:15	11:30	36.6001	-75.6001	4.0	4.0	4.0	7.3	9.5	
	20011989	113	11:52	12:07	36.5834	-75.6167	4.0	4.0	4.0	7.3	9.5	
	20011989	114	12:32	12:47	36.6167	-75.6167	4.0	4.0	4.0	7.3	9.5	
	20011989	115	13:09	13:24	36.5836	-75.6002	4.0	4.0	4.0	7.3	9.7	

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
	20011989	116	13:42	13:52	36.6168	-75.6169	4.0	4.0	4.0	7.3	10.7	
	20011989	117	14:23	14:33	36.6169	-75.6334	4.0	4.0	4.0	7.3	10.7	
	20011989	118	15:00	15:10	36.6168	-75.6334	4.0	4.0	4.0	7.3	10.7	
	20011989	119	15:32	15:47	36.6169	-75.6501	4.0	4.0	4.0	7.3	11.5	
	20011989	120	16:06	16:21	36.6003	-75.6834	4.0	4.0	4.0	8.0	11.0	
	20011989	121	16:56	17:11	36.6000	-75.7002	3.8	4.0	3.9	7.7	11.0	
	20011989	122	17:57	18:12	36.5834	-75.7501	3.8	4.0	3.9	7.9	10.5	
	20011989	123	18:33	18:48	36.5501	-75.7501	3.8	4.0	3.9	7.9	10.0	
	20011989	124	19:12	19:27	36.5168	-75.7503	3.8	4.0	3.9	7.9	10.0	
	20011989	125			36.4834	-75.7335	4.0	4.0	4.0	7.2	14.4	
	20011989	126			36.4667	-75.7003	4.0	4.0	4.0	7.2	8.9	
	20011989	127			36.4668	-75.7334	4.0	4.0	4.0	7.2	8.3	
	20011989	128			36.4575	-75.7167	4.0	4.0	4.0	7.2	8.3	
	20011989	129			36.4335	-75.7334	4.0	4.0	4.0	7.2	7.2	
	21011989	130	23:50	0:05	36.4168	-75.7168	4.0	4.0	4.0	7.3	6.3	
	21011989	131	0:37	0:54	36.4001	-75.7500	4.0	4.0	4.0	7.3	6.3	
	21011989	132	1:16	1:31	36.3668	-75.7169	4.0	4.0	4.0	7.3	6.3	
	21011989	133	1:52	2:07	36.3834	-75.7503	4.0	4.0	4.0	7.3	6.3	
	21011989	134	2:36	2:51	36.3668	-75.8133	4.0	4.0	4.0	7.3	6.3	
	21011989	135	3:07	3:22	36.3500	-75.7667	4.0	4.0	4.0	7.3	6.3	
	21011989	136	3:43	3:58	36.3169	-75.7500	4.0	4.0	4.0	6.8	4.5	
	21011989	137	4:22	4:37	36.3336	-75.7669	3.8	4.0	3.9	6.8	4.5	
	21011989	138	5:17	5:32	36.3167	-75.7834	3.8	4.0	3.9	6.9	3.5	
	21011989	139	6:06	6:21	36.3002	-75.7501	3.8	4.0	3.9	6.8	3.5	
	21011989	140	12:57	13:12	36.1668	-75.6669	3.3	3.3	3.3	7.3	2.0	
	21011989	141	13:47	14:02	36.2001	-75.6669	5.0	5.0	5.0	7.2	0.8	
	21011989	142	14:22	14:37	36.2334	-75.6669	4.0	4.0	4.0	7.2	0.8	
	21011989	143	15:19	15:34	36.2203	-75.6667	4.0	4.0	4.0	7.3	1.4	
	21011989	144	15:58	16:06	36.1668	-75.6668	3.8	4.0	3.9	6.7	2.0	
	21011989	145	16:41	16:56	36.1168	-75.6778	3.8	4.0	3.9	6.6	2.1	
	21011989	146	17:15	17:30	36.0835	-75.6502	4.0	4.0	4.0	6.6	2.1	
	21011989	147	18:41	18:56	36.0502	-75.5667	3.8	4.0	3.9	6.5	2.0	
	21011989	148	19:23	19:38	36.0334	-75.5501	3.8	4.0	3.9	6.5	2.0	
	21011989	149	20:06	20:21	36.0500	-75.5335	4.0	4.0	4.0	7.2	2.5	
	21011989	150	20:55	21:10	36.0168	-75.5334	4.0	4.0	4.0	7.2	2.5	
	21011989	151	21:45	22:00	36.0168	-75.5336	4.0	4.0	4.0	7.0	2.9	
	21011989	152	22:48	22:59	36.0002	-75.6002	4.0	4.0	4.0	6.5	3.5	

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
	22011989	153	23:45	0:00	36.0169	-75.6335	4.0	4.0	4.0	7.1	3.5	
	22011989	154	0:18	0:33	36.0501	-75.6335	4.0	4.0	4.0	6.5	3.5	
	22011989	155	0:53	1:08	36.0669	-75.6668	4.0	4.0	4.0	6.8	2.7	
	22011989	156	1:25	1:40	36.1001	-75.6668	4.0	4.0	4.0	6.8	2.7	
	22011989	157	2:00	2:15	36.1168	-75.7117	4.0	4.0	4.0	7.0	3.1	
	22011989	158	6:04	6:24	36.8303	-75.4667	4.0	4.0	4.0	7.0	5.2	
	22011989	159	7:20	7:35	36.8002	-75.4667	3.8	4.0	3.9	7.0	5.5	
	22011989	160			35.7668	-75.4502	4.0	4.0	4.0	7.2	7.2	
	22011989	161			35.7501	-75.4667	4.0	4.0	4.0	7.2	7.8	
	22011989	162			35.7668	-75.4500	4.0	4.0	4.0	7.2	7.8	
	22011989	163		10:25	35.8001	-75.4334	4.0	4.0	4.0	7.2	8.9	
	22011989	164			35.8001	-75.4501	4.0	4.0	4.0	7.2	8.9	
	22011989	165	11:39	11:54	35.8002	-75.4336	4.0	4.0	4.0	7.4	10.0	
	22011989	166	12:14	12:29	35.7834	-75.4667	4.0	4.0	4.0	7.4	10.0	
	22011989	167	12:48	13:03	35.7669	-75.4335	4.0	4.0	4.0	7.6	9.4	
	22011989	168	13:22	13:36	35.7501	-75.4502	4.0	4.0	4.0	7.6	9.4	
	22011989	169	13:56	14:11	35.7667	-75.4335	4.0	4.0	4.0	7.6	8.9	
	22011989	170	14:50	15:05	35.7336	-75.4334	4.0	4.0	4.0	7.8	9.8	
	22011989	171	17:04	17:24	35.5836	-75.3668	3.8	4.0	3.9	8.2	11.0	
	22011989	172	17:42	17:57	35.5502	-75.3834	4.0	4.0	4.0	8.8	11.0	
	22011989	173	18:18	18:33	35.5169	-75.4001	3.8	4.0	3.9	8.8	11.0	
	22011989	174	18:55	19:13	35.5000	-75.4001	3.8	4.0	3.9	9.4	12.8	
	22011989	175	19:34	20:02	35.4669	-75.4334	3.8	4.0	3.9	9.4	12.8	
	22011989	176	20:10		35.4669	-75.4334	3.8	4.0	3.9	9.4	12.2	
	15011988	1	4:11	4:41	36.4503	-75.8001	3	3	3	2.4	-2.2	
	15011988	2	5:34	6:04	36.4502	-75.8133	3	3	3	3.0	0.5	
	15011988	3	7:12	7:42	36.4503	-75.8167	3	3	3	2.8	1.5	
	15011988	4	10:55	11:05	36.4136	-75.8094	2.8	3	2.9	3.0	1.5	
	15011988	5	11:59	12:09	36.4502	-75.8303	3	3	3	2.2	1.5	
	15011988	6	12:29	12:39	36.4169	-75.8001	2.2	2.2	2.2	2.2	0.8	
	15011988	7	12:52	13:02	36.4001	-75.8000	2.3	2.3	2.3	2.8	-1.3	
	15011988	8	13:53	14:08	36.3834	-75.8133	2.4	2.4	2.4	2.8	0.0	
	15011988	9	15:02	15:17	36.4502	-75.8167	2.4	2.4	2.4	2.2	0.0	
	15011988	10	16:21	16:36	36.3502	-75.7336	3	3	3	2.5	0.0	
	15011988	11	18:09	18:39	36.2001	-75.7168	3	3	3	2.5	0.8	
	15011988	12	20:30	20:45	36.0522	-75.6594	2.5	3	2.75	3.0	3.0	
	15011988	13	22:23	22:38	35.9731	-75.5903	2.8	3	2.9	4.1	3.5	

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
	15011988	14	23:36	23:51	35.9756	-75.5853	2.8	3	2.9	4.5	1.8	
	16011988	15	5:34	5:54	36.4503	-75.8167	3	3	3	2.2	0.5	
	16011988	16	7:05	7:35	36.4503	-75.8167			#DIV/0!	3.0	0.0	
	16011988	17	9:09	9:24	36.3539	-75.7097	2.8	3	2.9	3.7	1.6	
	16011988	18	11:01	11:16	36.2511	-75.7725	2.8	3	2.9	2.5	1.7	
	16011988	19	11:30	11:45	36.2668	-75.7747	3	3.5	3.25	2.8	1.3	
	16011988	20	12:08	12:38	36.2669	-75.7668	3	3.5	3.25	2.5	1.1	
	16011988	21	13:07	13:47	36.2334	-75.7501	3	3.5	3.25	2.5		
	16011988	22	14:09	14:34	36.2667	-75.7667	3	3.5	3.25	2.7	1.1	
	16011988	23	15:03	15:33	36.2335	-75.7502	3	3.5	3.25	2.5	1.1	
	16011988	24	15:53	16:23	36.2668	-75.7503	3.5	4	3.75	0.7	4.0	
	16011988	25	16:42	17:12	36.2334	-75.7625	3.5	4	3.75	3.0	2.7	
	16011988	26	18:04	18:34	36.2669	-75.7669	3.5	4	3.75	2.7	3.2	
	16011988	27	18:51	19:21	36.2336	-75.7625	3.5	4	3.75	1.8	4.0	
	16011988	28	19:44	20:14	36.2158	-75.7344	3.5	4	3.75	2.3	3.5	
	16011988	29	20:30	21:00	36.2336	-75.7501	3.5	3.7	3.6	2.4	3.5	
	16011988	30	21:18	21:48	36.2747	-75.7756	3.5	4	3.75	2.0	3.0	
	16011988	31	22:04	22:34	36.2358	-75.7536	3.5	4	3.75	2.0	3.0	
	16011988	32	22:53	23:23	36.2131	-75.7411	3.5	4	3.75	2.1	3.0	
	17011988	33	23:38	0:08	36.2335	-75.7564	3.5	3.7	3.6	3.4	3.8	
	17011988	34	0:29	0:59	36.2668	-75.7667	3.5	3.7	3.6			
	17011988	35	1:17	1:47	36.2334	-75.7667	3	3.5	3.25	3.3	4.3	
	17011988	36	2:08	2:38	36.2001	-75.7334	3	3.5	3.25	3.5	4.5	
	17011988	37	2:54	3:24	36.2335	-75.7501	3	3.5	3.25			
	17011988	38	3:40	4:10	36.2668	-75.7667	3	3.5	3.25	1.5	2.0	
	17011988	39	4:28	4:58	36.3001	-75.7669	3	3.5	3.25	1.2	2.6	
	17011988	40	5:16	5:46	36.3335	-75.7834	3	4	3.5	1.2	2.6	
	17011988	41	6:02	6:32	36.3669	-75.8000	3	4	3.5	1.0	2.8	
	17011988	42	6:48	7:18	36.4003	-75.8002	3	4	3.5	3.5	1.0	
	17011988	43	7:37	8:07	36.4336	-75.8167	3.5	4	3.75	1.3	2.6	
	17011988	44	8:21	8:51	36.4002	-75.8181	3.5	3.7	3.6	1.5	2.9	
	17011988	45	9:09	9:39	36.3797	-75.8036	3.5	3.7	3.6	1.5	2.9	
	17011988	46	9:54	10:24	36.3397	-75.7983	3.5	3.7	3.6	2.3	3.5	
	17011988	47	10:37	11:07	36.3031	-75.7908	3.5	3.7	3.6	3.3	5.0	
	17011988	48	11:21	11:51	36.2764	-75.7736	3.5	3.7	3.6	3.8	5.0	
	17011988	49	12:09	12:39	36.2334	-75.7501	3	3.5	3.25	3.3	5.0	
	17011988	50	12:57	13:27	36.2668	-75.7668	3.5	4	3.75	3.8	5.0	

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
	17011988	51	13:43	14:13	36.3001	-75.7669	3.5	3.5	3.5	5.5	5.9	
	17011988	52	14:32	15:02	36.3335	-75.7834	3.5	3.5	3.5	4.0	5.3	
	17011988	53	16:05	16:35	36.3834	-75.8001	3.5	3.5	3.5	4.0	5.9	
	17011988	54			36.4236	-75.8002	3.5	3.5	3.5	3.2	6.0	
	17011988	55	17:26	17:56	36.4744	-75.8167	3.5	3.5	3.5	3.0	5.3	
	17011988	56	18:10	18:40	36.5001	-75.8169	3.5	3.5	3.5	3.1	6.0	
	17011988	57	19:14	19:44	36.5335	-75.8169	3.5	3.5	3.5			
	17011988	58	20:40	21:10	36.5025	-75.8383	3.5	4	3.75	3.2	6.2	
	17011988	59	21:26	21:56	36.4744	-75.8281	3.5	3.7	3.6	3.6	6.9	
	17011988	60	22:17	22:47	36.4375	-75.8192	3.5	3.7	3.6	3.6	6.9	
	17011988	61	23:01	23:31	36.3978	-75.8097	3.5	3.7	3.6	3.5	6.8	
	18011988	62			36.3502	-75.7836	3.5	3.7	3.6	3.3	3.3	
	18011988	63	0:35	1:05	36.3168	-75.7834	3.5	3.5	3.5	3.5	6.8	
	18011988	64	1:24	1:54	36.3168	-75.7834	3.5	3.5	3.5	3.3	7.2	
	18011988	65	2:18	2:48	36.2334	-75.7501	3.5	3.5	3.5	3.6	6.7	
	18011988	66	3:24	3:44	36.2206	-75.7334	3.5	3.5	3.5	3.6	6.7	
	18011988	67	4:04	4:34	36.2336	-75.7501	3.5	3.5	3.5	3.3	6.8	
	18011988	68	4:54	5:24	36.2834	-75.7503	3.5	3.5	3.5	3.0	9.1	
	18011988	69	5:41	6:11	36.2501	-75.7501	3.5	3.5	3.5	3.3	9.0	
	18011988	70	6:26	6:56	36.2835	-75.7794	3.5	3.5	3.5	3.0	9.2	
	18011988	71	7:16	7:46	36.3389	-75.7834	3.5	3.5	3.5	3.0	9.2	
	18011988	72	8:01	8:31	36.3094	-75.7811	3.5	4	3.75	3.6	9.5	
	18011988	73	8:45	9:15	36.2742	-75.7744	3.5	3.7	3.6	3.5	9.5	
	18011988	74	9:30	10:00	36.2169	-75.7592	3.5	3.5	3.5	4.5	9.3	
	18011988	75	10:14	10:44	36.2033	-75.7169	3.5	3.5	3.5	4.5	9.3	
	18011988	76	10:57	11:27	36.1503	-75.7219	3.5	3.5	3.5	4.5	9.5	
	18011988	77	11:59	12:29	36.1356	-75.7001	3.5	3.5	3.5	3.8	10.1	
	18011988	78	12:47	13:17	36.1668	-75.7168	3.5	3.5	3.5	4.0	9.1	
	18011988	79	13:36	14:06	36.2002	-75.7335	3.5	3.5	3.5	4.0	9.6	
	18011988	80	14:22	14:52	36.2336	-75.7502	3.5	3.5	3.5	4.0	9.5	
	18011988	81	15:11	15:41	36.2834	-75.7668	3.5	3.5	3.5	4.3		
	18011988	82	15:56	16:26	36.3167	-75.7834	3.5	3.5	3.5	4.4	13.5	
	18011988	83	16:39	17:09	36.3501	-75.7835	3.5	3.5	3.5	3.8	9.6	
	18011988	84	17:50	18:20	36.4001	-75.8000	3.5	3.5	3.5	4.1	10.5	
	18011988	85	18:37	19:07	36.4335	-75.8303	3.5	3.5	3.5	4.0	10.5	
	18011988	86	19:40	20:10	36.3834	-75.8000	3.5	3.5	3.5	4.0	8.2	
	18011988	87	20:25	20:55	36.3753	-75.8003	3.5	3.6	3.55	4.0	8.3	

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
	18011988	88	21:10	21:40	36.3297	-75.7964	3.5	3.6	3.55	4.0	8.3	
	18011988	89	21:57	22:27	36.2933	-75.7764	3.5	3.6	3.55	4.0	8.3	
	18011988	90	22:44	23:14	36.2711	-75.7697	3.5	3.6	3.55	4.0	7.2	
	18011988	91	23:29	23:59	36.3044	-75.7808	3.5	3.6	3.55	4.0	7.2	
	19011988	92	0:22	0:52	36.3336	-75.7835	3.5	3.5	3.5	3.5	7.3	
	19011988	93	1:11	1:41	36.3834	-75.7835	3.5	3.5	3.5	3.6	6.6	
	19011988	94	2:02	2:32	36.4168	-75.8002	3.5	3.5	3.5	3.6	6.5	
	19011988	95	2:48	3:18	36.3834	-75.8001	3.5	3.5	3.5	3.6	6.5	
	19011988	96	3:36	4:06	36.3336	-75.7835	3.5	3.5	3.5	3.4	7.0	
	19011988	97	4:28	4:58	36.3003	-75.7834	3.5	3.5	3.5	3.4	7.0	
	19011988	98	5:14	5:44	36.2669	-75.7667	3.5	3.5	3.5	3.6	7.0	
	19011988	99	5:59	6:29	36.2336	-75.7501	3.5	3.5	3.5	3.6	5.0	
	19011988	100	6:45	7:15	36.2002	-75.7334	3.5	3.5	3.5	3.7	5.0	
	19011988	101	7:28	7:58	36.1669	-75.7168	3.5	3.5	3.5	4.0	5.5	
	19011988	102	8:12	8:42	36.1456	-75.7003	3.5	3.6	3.55	4.0	5.5	
	19011988	103	9:01	9:31	36.1097	-75.7050	3.5	3.6	3.55	4.0	6.0	
	19011988	104	9:46	10:16	36.0733	-75.6668	3.5	3.6	3.55	4.1	6.0	
	19011988	105	10:30	11:00	36.0334	-75.6594	3.5	3.6	3.55	4.1	6.0	
	19011988	106	11:15	11:45	36.0125	-75.6167	3.5	3.6	3.55	4.0	6.2	
	19011988	107	12:06	12:36	35.9502	-75.6001	3.5	3.5	3.5	4.1	6.3	
	19011988	108	12:55	13:25	35.9168	-75.5834	3.5	3.5	3.5	3.9	5.8	
	19011988	109	14:34	15:04	36.9828	-75.6001	3.5	3.5	3.5	4.0	6.3	
	19011988	110			36.0001	-75.6168	3.5	3.5	3.5	3.9	6.1	
	19011988	111	16:17	16:47	36.0335	-75.6334	3.5	3.5	3.5	4.2	6.2	
	19011988	112	17:21	17:51	36.0668	-75.6668	3.5	3.5	3.5	4.0	6.0	
	19011988	113	18:08	18:38	36.1001	-75.6835	3.5	4	3.75	3.8	7.3	
	19011988	114	18:54	19:20	36.1335	-75.7002	3.5	3.5	3.5	4.0	7.2	
	19011988	115	19:40	20:10	36.1669	-75.7169	3.5	3.5	3.5	4.4	6.3	
	19011988	116	20:27	20:57	36.2272	-75.7335	3.5	3.6	3.55	4.4	6.3	
	19011988	117	21:12	21:42	36.2589	-75.7686	3.5	3.6	3.55	4.4	6.3	
	19011988	118	21:56	22:26	36.2933	-75.7668	3.5	3.6	3.55	4.0	6.2	
	19011988	119	22:39	23:09	36.3178	-75.7925	3.5	3.6	3.55	4.0	6.0	
	19011988	120	23:23	23:53	36.3500	-75.8108	3.5	3.6	3.55	4.0	6.5	
	20011988	121	0:14	0:44	36.3835	-75.8002	3.5	3.5	3.5	4.0	6.5	
	20011988	122	1:04	1:34	36.4168	-75.8303	3.5	3.5	3.5	4.0	6.5	
	20011988	123	1:50	2:20	36.3834	-75.8001	3.5	3.5	3.5	4.0	7.6	
	20011988	124	2:35	3:05	36.3501	-75.7836	3.5	3.5	3.5	4.0	9.5	

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
	20011988	125	3:20	3:50	36.3168	-75.7834	3.5	3.5	3.5	3.8	9.4	
	20011988	126	4:07	4:37	36.2835	-75.8168	3.5	3.5	3.5	3.8	9.4	
	20011988	127	4:52	5:22	36.3389	-75.7834	3.5	3.5	3.5	4.0	10.0	
	20011988	128	5:38	6:08	36.3668	-75.7836	3.5	3.5	3.5	4.0	10.2	
	20011988	129	6:23	6:51	36.4002	-75.8001	3.5	3.5	3.5	4.0	10.2	
	20011988	130	7:08	7:38	36.4575	-75.8167	3.5	3.5	3.5	4.3	0.4	
	20011988	131	7:58	8:28	36.4669	-75.8353	3.5	3.6	3.55	4.5	9.5	
	20011988	132	8:42	9:12	36.4544	-75.8317	3.5	3.6	3.55	4.5	9.5	
	20011988	133	9:25	9:55	36.4219	-75.8242	3.5	3.6	3.55	4.7	12.5	
	20011988	134	10:11	10:41	36.3867	-75.8047	3.5	4	3.75	4.7	12.5	
	20011988	135	11:13	11:43	36.3581	-75.8061	3.5	3.6	3.55	4.7	12.5	
	20011988	136	11:58	12:28	36.3003	-75.7834	3.5	3.6	3.55	4.8	12.8	
	20011988	137	12:42	13:12	36.2669	-75.7668	3.5	3.6	3.55	4.8	12.8	
	20011988	138	13:26	13:58	36.2335	-75.7502	3.5	3.5	3.5	4.7	13.8	
	20011988	139	14:17	14:47	36.2167	-75.7334	3.5	3.5	3.5	4.7	13.8	
	20011988	140	15:06	15:13	36.2501	-75.7502	3.5	3.5	3.5	4.6	11.8	
	20011988	141	15:52	16:22	36.2835	-75.7669	3.5	3.5	3.5	5.0	11.7	
	20011988	142	16:38	17:08	36.3169	-75.7964	3.5	3.5	3.5	4.8	12.9	
	20011988	143	17:48	18:18	36.3669	-75.8133	3.5	3.5	3.5	4.8	13.7	
	20011988	144	18:32	19:02	36.4236	-75.8001	3.5	3.5	3.5	5.1	13.0	
	20011988	145	19:18	19:48	36.4500	-75.8168	3.5	3.5	3.5	4.7	12.6	
	20011988	146	20:03	20:33	36.4922	-75.8356	3.5	3.6	3.55	4.7	12.6	
	20011988	147	20:48	21:18	36.5168	-75.8486	3.5	3.6	3.55	4.7	12.5	
	20011988	148	22:30	23:00	36.5800	-75.8525	3.5	3.6	3.55	4.9	12.6	
	20011988	149	23:16	23:46	36.6147	-75.8494	3.5	3.6	3.55	4.9	12.6	
	21011988	150	0:01	0:31	36.6335	-75.8501	3.5	4	3.75			
	21011988	151	0:53	1:23	36.6502	-75.8669	3.5	3.5	3.5	4.2	5.9	
	21011988	152	1:41	2:11	36.6169	-75.8667	3.5	3.5	3.5	4.1	8.5	
	21011988	153	2:51	3:21	36.6100	-75.8334	3.5	3.5	3.5			
	21011988	154	3:38	4:08	36.5503	-75.8336	3.5	3.5	3.5	4.5	7.0	
	21011988	155	15:22	15:37	35.5334	-75.4406	3.5	3.5	3.5	6.0	9.8	
	21011988	156	15:56	16:26	35.5501	-75.4168	3.5	3.5	3.5	6.1	9.4	
	21011988	157	16:40	17:10	35.5168	-75.4335	3.5	3.5	3.5	6.3	8.0	
	21011988	158	18:10	18:40	35.5592	-75.4334	3.5	3.5	3.5	5.6	11.0	
	21011988	159	18:56	19:26	35.5834	-75.4334	3.5	3.5	3.5	5.4	11.3	
	21011988	160	20:30	21:00	35.5503	-75.4167	3.5	3.6	3.55	6.1	7.8	
	21011988	161	21:16	21:46	35.5436	-75.4419	3.5	3.6	3.55	6.1	8.0	

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
	21011988	162	22:01	22:31	35.5014	-75.4594	3.5	4	3.75	6.8	9.2	
	21011988	163	22:49	23:19	35.4756	-75.4686	3.5	4	3.75	6.8	9.2	
	22011988	164	1:15	1:30	35.5501	-75.4335	3.5	3.5	3.5	6.0	7.4	
	22011988	165	1:47	2:02	35.5669	-75.4335	3.5	3.5	3.5	5.8	8.3	
	22011988	166	2:18	2:33	35.6000	-75.4336	3.5	3.5	3.5			
	22011988	167	2:51	3:23	35.6167	-75.4336	3.5	3.5	3.5	5.9	7.6	
	22011988	168	3:52	4:22	35.5668	-75.4334	3.5	3.5	3.5	5.8	7.2	
	22011988	169	10:29	10:59	35.1478	-75.5039	3.5	4	3.75	8.4	8.0	
	22011988	170	11:50	12:20	35.1694	-75.5001	3.5	3.5	3.5	7.0	7.1	
	22011988	171	13:02	13:32	35.1336	-75.6100	3.5	3.5	3.5	7.7	7.2	
	22011988	172	14:09	14:39	35.1001	-75.6334	3.5	3.5	3.5	12.5	7.4	
	22011988	173	15:16	15:46	35.0502	-75.6502	3.5	3.5	3.5	14.1	7.3	
	22011988	174	16:50	17:20	35.1334	-75.5668	3.5	3.5	3.5	9.0	5.5	
	22011988	175	20:35	21:05	35.1494	-75.8553	3.5	3.6	3.55	10.6	5.7	
	22011988	176	21:40	22:10	35.1186	-75.9183	3.5	3.6	3.55	11.0	5.5	
	22011988	177	23:07	23:37	36.0403	-75.9736	3.3	3.6	3.45	11.0	5.6	
	23011988	178	0:15	0:45	34.8834	-75.9669	3.5	4	3.75	13.0	7.4	
	23011988	179	1:04	1:34	34.9334	-76.0169	3.3	3.3	3.3			
	23011988	180	1:50	2:20	34.8836	-76.0339	3.5	3.5	3.5	15.5	7.9	
	23011988	181	2:36	3:06	34.8501	-76.0334	3.5	3.5	3.5	17.0	8.7	
	23011988	182	3:24	3:54	34.8303	-76.0501	3.5	3.5	3.5	16.2	8.0	
	23011988	183	4:14	4:44	34.7834	-76.0834	3.5	3.5	3.5	16.2	8.0	
	23011988	184	6:09	6:39	34.9167	-76.1501	3.5	3.5	3.5	11.9	9.9	
	23011988	185	10:11	10:41	34.8400	-76.2731	3.3	3.6	3.45	12.3	9.9	
	23011988	186	10:59	11:29	34.8239	-76.2933	3.5	3.6	3.55	12.4	10.0	
	23011988	187	11:46	12:16	34.8336	-76.2500				11.8	9.9	
	23011988	188	12:32	13:02	34.8668	-76.2003	3.5	4	3.75	12.3	9.2	
	23011988	189	13:25	13:55	34.9031	-76.1834	3.3	3.3	3.3	12.0	7.8	
	23011988	190	14:13	14:43	34.8668	-76.2168	3.4	3.4	3.4	12.0	7.8	
	23011988	191	14:59	15:29	34.8642	-76.2501	3.4	3.4	3.4	11.5	9.0	
	23011988	192	16:10	16:40	34.8472	-76.3050	3.5	3.5	3.5	10.6	9.7	
	23011988	193	17:22	17:52	34.8502	-76.2667	2.5	2.5	2.5	11.0	9.2	
	23011988	194	19:18	19:48	34.9502	-76.2168	3	3	3	11.8	9.0	
	23011988	195	20:04	20:34	34.8381	-76.3344	3	3	3	11.5	9.0	
	23011988	196	20:45	21:15	34.8703	-76.2169	3	3.3	3.15	11.5	9.0	
	23011988	197	21:26	21:56	34.8903	-76.1900	3	3.2	3.1	11.5	9.0	
	23011988	198	22:07	22:37	34.9161	-76.1719	3	3.2	3.1	11.6	8.5	

Watch	Date	Tow	Starttime	Stoptime	Startlat	Startlong	Towspeed	Towspeed	TOWAVG	Wtemp	Atemp	Sal
	23011988	199	22:49	23:19	34.9375	-76.1339	3	3.2	3.1	11.5	8.5	
	23011988	200	23:33	0:03	34.9575	-76.1161	3	3.2	3.1	11.5	8.5	

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
8012013	1	23.0	25.0	22	6	32	1	60	0	6
8012013	2	25.0	26.1	28	1	18	2	49	0	2
8012013	3	22.7	25.2	26	6	37	3	72	0	1
8012013	4	15.1	16.2	29	4	0	0	33	0	2
8012013	5	15.1	16.9	50	0	23	2	75	3	2
8012013	6	13.8	16.7	40	8	21	5	74	3	1
8012013	7	14.9	14.1	33	4	0	0	37	0	7
8012013	8	13.5	14.0	33	7	163	12	215	3	2
8012013	9	15.0	15.8	17	0	0	0	17	0	8
8012013	10	16.2	14.6	11	1	0	0	12	0	10
8012013	11	14.9	15.2	10	1	0	0	11	0	1
8012013	12	14.9	15.0	21	0	0	0	21	0	5
8012013	13	14.8	16.6	34	5	6	1	46	0	3
8012013	14	15.0	16.3	36	1	17	3	57	0	3
8012013	15	13.0	14.3	19	5	0	0	24	0	5
8012013	16	11.3	12.7	38	2	83	2	125	0	5
8012013	17		11.3	37	2	148	4	191	0	0
9012013	18	11.5	12.1	43	2	7	1	53	0	6
9012013	19	13.5	14.7	37	6	0	0	43	0	2
9012013	20	15.9	16.3	17	0	0	0	17	0	9
9012013	21	16.2	17.3	38	4	51	9	102	0	4
9012013	22	18.7	19.5	40	2	102	8	152	0	2
9012013	23	16.7	18.8	8	0	0	0	8	0	5
9012013	24	17.0	17.0	12	0	0	0	12	0	5
9012013	25	16.4	17.0	10	2	0	0	12	0	7
9012013	26	16.9	18.0	10	1	0	0	11	0	1
9012013	27	17.7	19.0	2	1	0	0	3	0	1
9012013	28	18.3	20.2	7	1	0	0	8	0	1
9012013	29	16.2	18.3	5	2	0	0	0	0	0
9012013	30	19.6	21.4	24	1	0	0	25	0	0
9012013	31	17.1	17.1	3	1	0	0	4	0	1
9012013	32	14.7	16.1	10	1	0	0	11	0	0
9012013	33	15.8	17.4	33	6	21	0	60	0	1
9012013	34	14.8	16.8	31	7	0	0	38	6	3
9012013	35	14.6	17.4	31	6	0	0	37	3	2
9012013	36	16.0	17.0	41	3	24	3	71	0	5
9012013	37	15.9	16.2	42	6	6	51	105	0	0

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
9012013	38	15.2	15.2	29	2	0	0	31	0	4
9012013	39	17.2	17.2	39	2	23	2	66	0	1
9012013	40	16.6	17.3	37	0	41	7	85	6	0
9012013	41	16.2	17.0	41	1	14	1	57	5	3
9012013	42	14.8	16.7	21	2	0	0	23	1	1
9012013	43	14.0	16.9	25	3	0	0	28	2	5
9012013	44	14.7	16.6	30	2	0	0	32	1	3
9012013	45	16.6	16.9	15	1	0	0	16	0	4
9012013	46	14.8	15.9	22	1	0	0	23	0	6
9012013	47	15.5	16.2	32	2	0	0	34	0	3
9012013	48	15.5	16.1	30	4	0	0	34	0	1
9012013	49	14.7	16.5	27	2	0	0	29	0	3
9012013	50	14.7	16.5	25	3	0	0	28	0	0
9012013	51	14.0		4	0	0	0	4	1	4
10012013	53	20.7	21.6	10	2	0	0	12	0	17
10012013	54	22.7	25.2	15	0	0	0	15	0	9
10012013	55	23.2	23.8	14	2	0	0	16	0	4
10012013	56	19.7	20.4	30	1	0	0	31	0	3
10012013	57	16.8	20.0	32	1	0	0	33	0	2
10012013	58	16.6	17.3	28	3	38	2	71	0	1
10012013	59	16.3	17.7	47	3	0	0	50	93	1
10012013	60	14.8	15.4	43	3	0	0	46	537	3
10012013	61	14.8	15.0	33	1	45	4	83	2	1
10012013	62	14.5	16.2	32	1	82	5	120	7	0
10012013	63	14.8	15.0	38	1	50	1	90	4	0
10012013	64	14.0	15.9	39	0	43	3	85	1	2
10012013	65	16.6	16.6	35	1	15	2	53	9	5
10012013	66	16.8	16.8	34	7	7	1	49	4	1
10012013	67	13.6	16.4	31	6	33	3	73	1	1
10012013	68	14.8	16.0	36	1	23	2	62	19	1
10012013	69	14.8	20.2	34	2	40	5	81	4	0
10012013	70	18.5	19.5	33	3	2	41	79	7	1
10012013	71	15.2	17.0	36	2	34	1	73	2	2
10012013	72	16.6	18.3	32	5	26	2	65	0	0
10012013	73	16.0	18.0	31	3	21	2	57	0	4
10012013	74	15.3	16.3	33	0	0	0	33	1	3
10012013	75	15.5	16.5	32	1	6	0	39	0	4

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
10012013	76	14.5	15.7	18	2	0	0	20	0	4
10012013	77	14.0	16.8	23	0	0	0	23	0	5
10012013	78	15.0	15.5	20	0	0	0	20	0	1
11012013	79	14.2	14.8	38	0	21	0	59	0	6
11012013	80	12.0	13.0	34	4	44	0	82	0	2
11012013	81	12.6	14.3	31	3	0	0	34	0	0
11012013	82	14.5	16.7	36	3	29	4	72	0	0
11012013	83	17.6	18.6	32	0	25	4	61	0	1
11012013	84	18.6	18.7	22	3	0	0	25	0	3
11012013	85	18.9	19.9	34	7	0	0	41	0	5
11012013	86	17.9	18.5	19	0	177	15	211	0	2
11012013	87	20.2		33	2	18	2	55	0	4
11012013	88	15.4	17.0	28	3	0	0	31	7	0
11012013	89	15.5	17.0	32	4	3	1	40	2	2
11012013	90	13.6	16.3	36	2	43	5	86	0	0
11012013	91	12.9	13.9	29	8	48	2	87	4	2
11012013	92	11.4	17.9	32	3	27	2	64	4	1
11012013	93	12.7	13.7	30	3	50	1	84	4	3
11012013	94	13.0	13.4	30	3	39	2	74	1	0
11012013	95	13.4	13.7	26	2	0	0	28	0	1
11012013	96	15.3	15.9	34	4	19	1	58	5	4
11012013	97	15.0	15.0	17	2	0	0	19	4	0
11012013	98	14.3	14.6	38	1	0	0	39	0	0
11012013	99	14.0	14.1	20	1	0	0	21	0	2
11012013	100	14.3	14.6	34	3	15	0	52	12	0
11012013	101	13.8	14.6	34	2	0	0	36	5	2
11012013	102	14.2	15.9	35	0	30	1	66	1	3
11012013	103	15.0	16.6	33	2	40	3	78	2	3
11012013	104	14.9	15.2	17	2	0	0	19	8	1
11012013	105	15.1	15.4	22	2	0	0	24	0	1
11012013	106	15.8	17.0	25	1	8	0	34	1	1
11012013	107	12.9	13.0	37	3	20	1	61	5	1
11012013	108	13.9	14.4	28	1	28	1	58	7	3
11012013	109	13.6	14.0	30	2	2	0	34	1	2
11012013	110	12.9	13.0	30	0	12	0	42	0	0
11012013	111	13.0	13.5	26	1	0	0	27	0	4
11012013	112	13.3	14.3	29	2	0	0	31	0	2

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
11012013	113	13.2	13.6	24	1	8	0	33	1	3
11012013	114	11.6	13.4	25	1	0	0	26	0	4
12012013	115	12.4	12.8	16	2	0	0	18	0	8
12012013	116	13.7	14.3	3	0	0	0	3	0	0
12012013	117	10.6	13.7	25	1	0	0	26	1	4
12012013	118	13.8	16.4	35	2	29	4	70	0	1
12012013	119	15.8	17.0	32	2	0	0	34	2	4
12012013	120	15.2	16.9	24	1	0	0	25	0	3
12012013	121	17.1	17.2	17	1	0	0	18	0	2
12012013	122	15.0	16.3	21	3	0	0	24	1	1
12012013	123	15.9	16.6	27	1	0	0	28	0	0
12012013	124	15.6	15.7	34	4	7	0	45	0	1
12012013	125	12.5	15.0	34	2	0	0	36	1	0
12012013	126	14.6	15.0	23	1	0	0	24	1	3
12012013	127	14.0	15.3	32	2	0	0	34	0	0
12012013	128	14.0	14.2	18	3	0	0	21	0	1
12012013	129	14.6	17.1	26	1	0	0	27	0	2
12012013	130	16.7	17.8	32	1	7	0	40	0	2
12012013	131	16.2	17.6	31	1	5	0	37	0	1
12012013	132	15.0	15.9	26	3	0	0	29	0	4
12012013	133	15.0	17.0	18	2	0	0	20	13	2
12012013	134	15.4	16.5	23	3	0	0	26	11	1
12012013	135	13.4	14.5	20	1	0	0	21	1	0
12012013	136	14.6	14.9	24	4	0	0	28	0	2
12012013	137	15.7	16.5	23	1	0	0	24	1	4
12012013	138	16.5	18.0	37	2	38	4	81	0	3
12012013	139	14.5	15.0	36	1	0	0	37	0	2
12012013	140	14.0	14.7	20	2	0	0	22	0	0
12012013	141	17.0	19.2	24	1	0	0	25	0	3
12012013	142	17.5	20.3	17	0	0	0	17	0	3
12012013	143	17.2	17.5	21	2	0	0	23	0	3
12012013	144	18.0	20.0	28	0	0	0	28	0	1
12012013	145	17.9	18.6	14	1	0	0	15	0	7
13012013	146	17.5	18.6	18	0	0	0	18	0	0
13012013	147	15.3	15.9	9	1	0	0	10	0	0
13012013	148	17.0	17.9	6	1	0	0	7	0	0
13012013	149	17.0	17.0	18	0	0	0	18	0	1

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
13012013	150	16.6	17.2	5	1	0	0	6	0	1
13012013	151	20.5	21.7	14	0	0	0	14	0	3
13012013	152	17.0	18.0	12	0	0	0	12	0	7
13012013	153	18.1	18.2	15	0	0	0	15	0	6
13012013	154	21.1	22.5	19	1	1	0	21	0	0
13012013	155	12.3		28	5	0	0	33	0	0
13012013	156	20.4	21.0	37	0	3	0	40	0	2
13012013	157	18.0	19.9	28	2	0	0	30	0	1
13012013	158	13.0	13.5	7	2	0	0	9	2	1
13012013	159	13.5	15.9	11	2	0	0	13	0	0
13012013	160			19	0	0	0	19	0	4
13012013	161	14.0	14.8	24	2	0	0	26	0	2
13012013	162	14.5	15.9	23	0	0	0	23	14	0
13012013	163	15.0	18.0	18	1	0	0	19	0	3
13012013	164	15.0	16.9	16	1	0	0	17	36	0
13012013	165	14.8	15.3	14	0	0	0	14	4	0
13012013	166	16.3	16.5	11	0	0	0	11	12	0
13012013	167	14.7	17.9	25	0	0	0	25	45	1
13012013	168	17.0	17.1	19	2	0	0	21	2	4
13012013	169	18.0	18.5	16	1	0	0	17	10	2
13012013	170	15.9	18.7	21	0	0	0	21	16	2
13012013	171	15.6	18.5	12	2	0	0	14	0	5
13012013	172	13.5	17.3	16	0	0	0	16	2	2
13012013	173	16.4	18.5	8	0	0	0	8	2	0
13012013	174	15.0	17.7	29	1	0	0	30	0	3
13012013	175	15.7	16.7	26	0	0	0	26	1	2
13012013	176	16.1	17.0	30	3	0	0	33	0	6
14012013	177	14.7	20.5	13	3	0	0	16	3	4
14012013	178	14.6	17.2	12	0	0	0	12	0	3
14012013	179	15.6	16.9	5	0	0	0	5	0	5
14012013	180	15.7	16.7	16	0	0	0	16	0	2
14012013	181	15.7	15.8	16	0	0	0	16	0	10
14012013	182	15.0	15.7	11	1	0	0	12	0	11
14012013	183	15.2	16.3	11	1	0	0	12	0	7
14012013	184	17.0	17.0	12	0	0	0	12	0	2
14012013	185	14.2	15.0	14	2	0	0	16	0	2
14012013	186	15.7	20.2	0	0	0	0	0	0	0

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
14012013	187	17.0		6	0	0	0	6	0	1
14012013	188	16.3	17.7	8	1	0	0	9	4	4
14012013	189	17.3	17.9	12	4	0	0	16	25	2
14012013	190	17.2	17.9	12	1	0	0	13	10	2
14012013	191	16.3	19.9	5	0	1	0	6	7	3
14012013	192	16.8	19.8	9	0	0	0	9	41	1
14012013	193	17.0	17.0	11	0	0	0	11	59	2
14012013	194	15.0	17.5	14	0	0	0	14	15	2
14012013	195	14.8	17.1	6	1	0	0	7	19	0
14012013	196	15.0	16.9	9	1	0	0	10	22	0
14012013	197	15.0	16.0	25	1	0	0	26	6	0
14012013	198	17.1	19.2	21	2	0	0	23	4	0
14012013	199	16.0	19.6	8	0	0	0	8	3	3
14012013	200	16.0	18.0	18	0	0	0	18	0	3
14012013	201	15.0	16.1	14	2	0	0	16	0	2
14012013	202	15.8	16.7	24	1	0	0	25	1	12
14012013	203	16.5	19.0	14	0	0	0	14	0	11
14012013	204	17.5	17.8	14	1	0	0	15	0	5
14012013	205	16.3	18.5	4	1	0	0	5	0	11
14012013	206	17.5	17.7	23	3	0	0	26	0	5
14012013	207			0	0	0	0	0	0	0
14012013	208	19.0	21.7	3	0	0	0	3	0	2
15012013	209	20.1	20.5	15	1	0	0	16	0	10
15012013	210	18.4	20.0	16	1	0	0	17	0	5
15012013	211	13.5	14.4	23	1	0	0	24	0	4
15012013	212	13.0	14.3	5	0	0	0	5	0	1
15012013	213	16.2	17.2	4	1	0	0	5	0	1
15012013	214	16.9	17.2	4	0	0	0	4	0	3
15012013	215	15.0	17.0	1	0	0	0	1	0	1
15012013	216	13.0	13.5	32	2	22	2	58	0	142
15012013	217	12.0	12.7	22	0	0	0	22	0	8
15012013	218	13.7	14.0	13	3	0	0	16	0	4
15012013	219	17.7	18.0	10	2	0	0	12	0	0
15012013	220	12.8	14.6	38	2	15	4	59	0	3
15012013	221	11.0	11.8	15	0	2	0	17	0	4
15012013	222	15.2	15.9	13	2	0	0	15	0	3
15012013	223	17.2	17.8	1	0	0	0	1	0	0

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
15012013	224	20.7	21.4	18	0	0	0	18	0	3
15012013	225	21.5	21.8	12	2	0	0	14	0	1
15012013	226	22.7	23.7	9	1	0	0	10	0	2
16012013	227	19.7	22.7	9	1	0	0	10	0	3
16012013	228	16.6	21.7	14	1	0	0	15	0	1
16012013	229	23.7	24.7	26	5	0	0	31	0	5
16012013	230	21.1	24.2	34	6	0	0	40	0	4
16012013	231	20.9	25.6	7	3	0	0	10	0	7
16012013	232	23.3	27.4	21	5	4	0	30	0	4
16012013	233	23.6	26.9	25	8	0	0	33	0	2
16012013	234	18.1	25.5	10	2	0	0	12	0	4
16012013	235	18.5	25.8	22	8	0	0	30	0	0
16012013	236	23.2	25.9	26	1	0	0	27	0	4
16012013	237	18.0	26.1	16	1	0	0	17	0	1
16012013	238	23.6	26.9	27	8	2	0	37	0	2
16012013	239	19.6	21.0	30	1	67	2	100	0	3
16012013	240	21.2	22.8	30	4	39	6	79	0	1
16012013	241	14.7	19.6	24	3	5	0	32	0	2
16012013	242	14.0	22.0	31	1	422	18	472	0	2
16012013	243	19.2	19.8	29	7	50	4	90	0	2
16012013	244	15.8	17.3	26	5	0	0	31	0	3
16012013	245	21.4	24.5	32	1	72	9	114	0	2
18022010	1	12.7	18.4	4				4	0	
18022010	2	11.5	16.6	12				12	0	
18022010	3	20.9	25.3	69				69	0	
18022010	4	22.2	25.6	2				2	0	
18022010	5	26.7	27.3	126	1			127	0	
19022010	6	24.0	25.0	56	2			58	0	
19022010	7	22.2	25.0	90				90	0	
19022010	8	19.7	21.5	96				96	0	
19022010	9	9.0	19.2	86				86	0	
19022010	10	18.7	18.9	45	1			46	0	
19022010	11	20.0	24.4	0	0			0	0	0
19022010	12	18.0	26.4	162	2			164	0	
19022010	13	19.1	22.0	23				23	0	
19022010	14	18.0	22.9	161	3			164	0	
19022010	15	18.2	19.1	145				145	0	

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
19022010	16	22.4	24.4	77	1			78	0	
19022010	17	21.0	28.7	125				125	0	
19022010	18	21.0	28.7	71	1			72	0	
19022010	19	23.1	24.0	23	1			24	0	
19022010	20	18.0	20.0	5	1			6	0	
19022010	21	21.0	22.8	7				7	0	
19022010	22	20.0	22.7	6				6	0	
19022010	23	12.4	18.5					0	0	
19022010	24	12.3	18.7	5				5	0	
19022010	25	16.8	17.4	20				20	0	
19022010	26	15.6	16.2	13				13	0	
19022010	27	14.8	15.5	7				7	0	
19022010	28	14.5	14.5	5	1			6	0	
19022010	29	17.5	20.1	34	1			35	0	
19022010	30	20.0	20.7	8				8	0	
19022010	31	19.3	19.4	14				14	0	
19022010	32	21.3	22.5	76				76	0	
19022010	33	24.4	27.0	189	1			190	0	
19022010	34	16.8	21.0	220	2			222	1	
19022010	35	15.8	21.4	177	2			179	0	
19022010	36	18.9	20.0	328	5			333	21	
19022010	37	17.5	18.4	88				88	0	
19022010	38	19.4	20.0	39	1			40	0	
19022010	39	16.9	20.4	74	2			76	3	
19022010	40	19.5	28.8	19				19	0	
19022010	41	16.5	23.5	14				14	1	
19022010	42	19.2	20.3	41				41	1	
19022010	43	22.5	23.2	70				70	1	
19022010	44	23.2	24.3	99	2			101	0	
19022010	45	19.9	20.7	68				68	0	
19022010	46	18.8	19.5	103	2			105	1	
19022010	47	19.2	19.2	15				15	2	
20022010	48	16.2	16.5	34	1			35	0	
20022010	49	22.4	25.4	27	2			29	0	
20022010	50	20.4	22.9	32				32	0	
20022010	51	17.1	20.7	51	1			52	1	
20022010	52	17.5	17.7	142	4			146	0	

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
20022010	53	17.0	19.3	162	1			163	0	
20022010	54	14.0	19.8	53	3			56	0	
20022010	55	18.0	18.5	34				34	0	
20022010	56	18.7	25.5	33	1			34	0	
20022010	57	19.0	24.0	42	4			46	0	
20022010	58	20.3	24.5	51	1			52	0	
20022010	59	18.0	19.3	77	2			79	0	
20022010	60	18.3	20.0	381				381	0	
20022010	61	14.0	18.0	65				65	0	
20022010	62	18.3	19.3	94				94	0	
20022010	63	15.5	19.0	11				11	0	
20022010	64	14.6	17.0	144				144	22	
20022010	65	15.0	15.0	212				212	61	
20022010	66	15.5	16.5	97				97	5	
20022010	67	15.0	17.5	101				101	3	
20022010	68	12.6	14.3	29				29	1	
20022010	69	11.0	12.3	63				63	15	
20022010	70	16.1	16.7	373	3			376	42	
20022010	71	14.1	14.5	226	4			230	30	
20022010	72	11.4	13.4	30				30	1	
20022010	73	12.5	12.7	26				26	0	
20022010	74	11.6	15.1	7				7	0	
20022010	75	14.9	16.7	12				12	0	
20022010	76	15.0	15.6	5				5	0	
20022010	77	13.8	14.9	6				6	0	
20022010	78	13.9	16.9	5				5	0	
21022010	79	16.8	17.5	3				3	0	
21022010	80	14.4	14.5	3				3	0	
21022010	81	12.6	16.3	3				3	0	
21022010	82	13.8	15.2	1				1	0	
21022010	83	17.5	17.8	2				2	0	
21022010	84	18.1	20.6	3				3	0	
21022010	85	16.9	19.6	60				60	0	
21022010	86	15.1	18.0	59				59	0	
21022010	87	18.1	19.0	591	2			593	0	
21022010	88	17.5	19.2	356	1			357	0	
21022010	89	17.4	18.4	55				55	0	

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
21022010	90	17.6	21.5	46				46	0	
21022010	91	16.6	18.1	15				15	0	
21022010	92	14.9	14.9	134				134	0	
21022010	93	14.5	14.7	170	1			171	0	
21022010	94	16.3	20.0	333	1			334	0	
21022010	95	9.8	14.0	1				1	0	
21022010	96	14.9	18.3	53				53	0	
21022010	97	24.7	28.0	23	2			25	0	
21022010	98	16.7	17.8	66	2			68	1	
21022010	99	20.2	22.3	40	2			42	1	
21022010	100	18.0	18.4	50				50	2	
21022010	101	18.4	19.3	19				19	0	
21022010	102	18.2	23.3	11				11	0	
21022010	103	23.6	31.3	12				12	0	
21022010	104	20.1	30.9	15				15	0	
21022010	105	22.6	25.5	18				18	0	
21022010	106	20.4	29.6	45	2			47	0	
21022010	107	17.9	20.4	38	1			39	0	
21022010	108	19.8	20.6	201	1			202	0	
22022010	109	21.1	21.5	537	1			538	0	
22022010	110	21.5	22.2	111	2			113	0	
22022010	111	15.5	22.7	36	1			37	0	
22022010	112	14.7	21.2	43	1			44	0	
22022010	113	18.5	26.4	56	1			57	0	
22022010	114	18.8	27.7	48				48	0	
22022010	115	12.8	20.3	92				92	0	
22022010	116	17.5	19.5	33				33	0	
22022010	117	17.4	22.4	127	4			131	0	
22022010	118	18.3	26.7	34				34	0	
22022010	119	21.0	24.2	321				321	0	
22022010	120	22.9	26.9	64	1			65	0	
22022010	121	20.6	22.2	110	2			112	0	
22022010	122	17.3	18.0	156				156	0	
22022010	123	22.9	26.4	205				205	0	
22022010	124	19.1	22.9	2				2	0	
22022010	125	24.1	25.3	80	1			81	0	
22022010	126	16.7	19.3	32				32	0	

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
22022010	127	22.9	24.2					0	0	
22022010	128	14.4	18.0	18				18	0	
22022010	129	13.5	15.7	24				24	0	
22022010	130	14.1	14.4	22				22	0	
22022010	131	10.7	12.5	12				12	0	
22022010	132	11.5	11.7	10				10	0	
22022010	133	11.7	14.5	12				12	0	
22022010	134	12.5	13.8	7				7	0	
22022010	135	13.5	15.2	12				12	0	
22022010	136	14.1	16.6	16				16	0	
22022010	137	15.2	15.5	3				3	0	
22022010	138	15.5	16.3	2				2	0	
22022010	139	15.7	16.6	3				3	0	
22022010	140	17.8	18.0	3				3	0	
22022010	141	17.6	18.3	2				2	0	
22022010	142	18.6	18.3	1				1	0	
22022010	143	18.3	18.6	8				8	0	
22022010	144	15.0	19.7					0	0	
22022010	145	10.9	12.8	4				4	0	
23022010	146	12.3	18.8	4				4	0	
23022010	147	17.0	17.5	1				1	0	
23022010	148	18.4	18.5	6				6	0	
23022010	149	19.5	19.9	9				9	0	
23022010	150	19.0	20.2	3	1			4	0	
23022010	151	19.3	22.0	3				3	0	
23022010	152	22.7	25.1	4				4	0	
23022010	153	20.7	21.2	19				19	1	
23022010	154	24.9	26.7	12				12	0	
23022010	155	22.0	23.3	21				21	31	
23022010	156	21.2	22.9	9				9	19	
23022010	157	18.0	21.8	17				17	1	
23022010	158	21.3	23.5	9				9	0	
23022010	159	21.8	24.6	21				21	1	
23022010	160	20.9	24.7	11	1			12	0	
23022010	161	22.2	24.2	15				15	24	
23022010	162	24.2	24.9	8				8	23	
23022010	163	22.4	25.5	12				12	14	

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
23022010	164	19.5	22.0	15				15	26	
23022010	165	22.9	23.2	12				12	9	
23022010	166	22.4	24.0	10				10	7	
23022010	167	24.5	26.0	4				4	26	
23022010	168	20.0	23.2	13				13	10	
23022010	169	19.5	23.9	15				15	156	
23022010	170	20.5	20.8					0	3	
23022010	171	20.8	22.5					0	0	
23022010	172	20.0	20.5	4				4	0	
23022010	173	21.0	21.5	3				3	1	
23022010	174	19.1	20.6	15				15	0	
23022010	175	19.5	20.2	7				7	0	
23022010	176	18.6	22.0	5				5	0	
23022010	177	19.3	20.6	10				10	0	
23022010	178	19.7	20.5	6				6	0	
24022010	179	21.5	24.0	9				9	0	
24022010	180	22.4	23.9	1				1	0	
24022010	181	22.4	23.5	18				18	0	
24022010	182	23.5	23.6	12				12	2	
24022010	183	24.0	24.5	18				18	1	
24022010	184	24.1	25.0	5				5	1	
24022010	185	22.8	24.5					3	0	
24022010	186	21.0	22.7	12				12	0	
24022010	187	22.6	22.8	8				8	0	
24022010	188	21.2	22.8	14				14	0	
24022010	189	21.4	22.0	41				41	0	
24022010	190	21.0	21.6	9				9	0	
24022010	191	21.7	22.3	13				13	0	
24022010	192	22.3	23.5	32				32	0	
24022010	193	24.1	25.8	21				21	0	
24022010	194	22.7	23.1	20				20	0	
24022010	195	22.0	23.1	27				27	0	
24022010	196	19.4	20.1	40				40	0	
24022010	197	19.5	21.5	38				38	0	
24022010	198	21.3	21.9	31				31	0	
24022010	199	17.6	20.9	17				17	0	
24022010	200	17.9	18.0	34				34	0	

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
29012009	1	13.4	13.6	6	1	0	0	7	0	313
29012009	2	14.2	14.8	3	0	0	0	3	0	2
29012009	3	13.3	13.6	0	0	0	0	0	0	3
29012009	4	12.9	13.3	30	2	25	0	57	0	11
30012009	5	21.7	25.1	22	0	0	0	22	0	5
30012009	6	15.7	16.0	27	0	0	0	27	0	6
30012009	7	18.7	19.3	16	1	0	0	17	0	8
30012009	8	16.4	19.1	11	0	0	0	11	0	8
30012009	9	16.2	19.6	26	0	0	0	26	0	9
30012009	10	18.4	19.8	7	0	0	0	7	0	10
30012009	11	16.7	18.0	10	0	0	0	10	0	13
30012009	12	8.2	15.0	0	0	0	0	0	0	12
30012009	13	14.7	19.0	4	0	0	0	4	0	13
30012009	14	16.5	19.1	3	0	0	0	3	0	14
30012009	15	15.7	18.8	1	0	0	0	1	0	15
30012009	16	17.2		1	0	0	0	1	0	18
30012009	17	11.3	17.0	0	0	0	0	0	0	17
30012009	18	16.7	16.9	0	0	0	0	0	0	18
30012009	19	14.6	16.4	0	0	0	0	0	0	19
30012009	20	17.1	17.8	0	0	0	0	0	0	22
30012009	21	17.9	18.7	0	0	0	0	0	0	23
30012009	22	20.5		0	0	0	0	0	0	23
30012009	23	18.2	20.7	0	0	0	0	0	0	23
30012009	24	16.2	16.4	1	0	0	0	1	0	24
30012009	25	14.7	17.8	0	0	0	0	0	0	25
30012009	26	18.0	22.3	2	0	0	0	2	0	26
30012009	27	16.9	22.2	3	0	0	0	3	0	27
30012009	28	14.3	16.4	1	0	0	0	1	0	28
31012009	29	13.5	14.9	3	0	0	0	3	0	29
31012009	30	14.5	17.7	4	0	0	0	4	0	30
31012009	31	18.5	19.5	11	2	0	0	13	0	35
31012009	32	15.8	18.2	11	2	0	0	13	0	32
31012009	33	14.4	14.7	5	1	0	0	6	0	33
31012009	34	11.5	12.4	3	1	0	0	4	0	35
31012009	35	11.0	11.5	1	0	0	0	1	0	35
31012009	36	10.0	10.4	4	1	0	0	5	0	36
31012009	37	11.1	11.5	3	0	0	0	3	0	37

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
31012009	38	12.4	14.1	10	0	0	0	10	0	38
31012009	39	12.8	13.5	9	0	0	0	9	0	39
31012009	40	11.9	12.6	22	0	0	0	22	1	40
31012009	41	10.5	13.7	9	0	0	0	9	0	41
31012009	42	11.1	16.0	35	2	12	0	49	0	42
31012009	43	14.2	15.2	24	3	0	0	27	0	48
31012009	44	11.5	15.1	21	4	0	0	25	0	44
31012009	45	9.2	13.1	9	0	0	0	9	0	47
31012009	46	7.5	9.8	11	1	0	0	12	0	46
31012009	47	8.3	9.5	19	4	0	0	23	0	50
31012009	48	9.2	9.7	7	0	0	0	7	0	48
31012009	49	10.4	10.4	14	0	0	0	14	0	49
31012009	50	11.1	11.9	13	1	0	0	14	0	50
31012009	51	11.3	13.0	2	0	0	0	2	0	51
31012009	52	12.1	15.1	6	0	0	0	6	0	52
31012009	53	15.5	17.6	2	0	0	0	2	0	53
31012009	54	16.9	17.1	6	0	0	0	6	0	54
31012009	55	16.0	17.4	7	0	0	0	7	0	55
31012009	56	11.6	17.3	3	1	0	0	4	0	56
31012009	57	15.5	15.5	5	1	0	0	6	0	58
31012009	58	12.2	12.5	4	0	0	0	4	0	59
31012009	59	12.9	12.9	9	2	0	0	11	0	59
1022009	60	16.5	17.0	11	1	0	0	12	0	61
1022009	61	14.2	16.6	10	0	0	0	10	0	62
1022009	62	12.0	19.2	12	0	0	0	12	0	63
1022009	63	18.5	21.1	24	0	0	0	24	0	64
1022009	64	11.0	14.2	17	0	0	0	17	0	64
1022009	65	8.5	11.0	6	0	0	0	6	0	66
1022009	66	10.5	11.2	22	1	0	0	23	0	66
1022009	67	12.6	14.0	27	0	0	0	27	0	67
1022009	68	11.5	12.9	7	1	0	0	8	0	68
1022009	69	5.6	7.0							69
1022009	70	7.4	7.4							70
1022009	71	7.4	8.7	1	0	0	0	1	0	71
1022009	72	10.3	10.5	2	0	0	0	2	1	72
1022009	73	11.6	12.5	4	0	0	0	4	0	74
1022009	74	11.2	13.6	2	0	0	0	2	0	74

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
2022009	75	9.3	11.0	8	0	0	0	8	0	76
2022009	76	9.5	11.0	11	0	0	0	11	0	77
2022009	77	11.5	14.4	15	0	0	0	15	1	81
2022009	78	15.5	18.7	19	0	0	0	19	0	80
2022009	79	16.2	18.6	10	0	0	0	10	0	80
2022009	80	15.3	15.8	18	1	0	0	19	0	81
2022009	81	14.8	16.0	13	0	0	0	13	0	82
2022009	82	16.9	17.4	22	1	0	0	23	0	84
2022009	83	15.0	16.0	19	1	0	0	20	0	83
2022009	84	13.5	14.7	3	1	0	0	4	0	84
2022009	85	19.8	21.2	19	0	0	0	19	0	86
2022009	86	16.2	18.1	10	0	0	0	10	1	86
2022009	87	16.8	18.5	15	0	0	0	15	0	90
2022009	88	20.2	20.4	16	0	0	0	16	1	88
2022009	89	18.6	21.3	15	2	0	0	17	0	89
2022009	90	16.7	18.3	4	0	0	0	4	0	90
2022009	91	18.4	18.5	32	0	10	0	42	0	93
2022009	92	18.5	25.8	26	3	0	0	29	1	92
2022009	93	17.2	24.1	8	2	0	0	10	0	94
2022009	94	18.8	21.5	24	0	0	0	24	0	95
2022009	95	15.6	21.5	15	1	0	0	16	0	95
3022009	96	23.4	23.7	14	0	0	0	14	0	98
3022009	97	21.5	23.4	0	0	0	0	0	2	102
3022009	98	23.9	21.5	2	0	0	0	2	2	106
3022009	99	21.0	22.4	6	0	0	0	6	0	102
3022009	100	21.7	23.5	3	0	0	0	3	0	105
3022009	101	21.0	23.8	2	0	0	0	2	0	106
3022009	102	20.3	21.0	1	0	0	0	1	0	102
3022009	103	11.0	15.0	9	0	0	0	9	0	103
3022009	104	12.0	13.0	17	0	0	0	17	0	105
3022009	105	12.0	12.6	2	0	0	0	2	0	105
3022009	106	12.4	13.5	2	1	0	0	3	0	106
3022009	107	12.2	13.5	2	0	0	0	2	0	107
3022009	108	11.8	13.3	28	0	0	0	28	0	110
3022009	109	12.8	15.5	30	1	9	0	40	0	109
3022009	110	13.5	14.4	10	0	0	0	10	0	110
3022009	111	10.3	11.7	3	0	0	0	3	0	111

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
3022009	112	18.7	19.2	30	0	15	0	45	1	113
3022009	113	19.2	19.4	30	5	27	0	62	0	115
3022009	114	18.2	21.3	10	1	0	0	11	1	115
3022009	115	18.4	18.4	8	0	0	0	8	0	115
3022009	116	18.5	21.6	23	3	0	0	26	0	116
3022009	117	19.5	21.2	7	0	0	0	7	0	117
3022009	118	18.0	18.2	6	0	0	0	6	0	118
3022009	119	14.8	15.3	5	1	0	0	6	0	119
4022009	120	14.5	15.4	14	1	0	0	15	0	121
4022009	121	15.7	16.0	7	0	0	0	7	0	121
4022009	122	16.0	16.6	2	0	0	0	2	0	122
4022009	123	16.1	16.4	4	0	0	0	4	0	124
4022009	124	14.2	17.2	3	0	0	0	3	0	126
4022009	125	14.1	15.6	1	0	0	0	1	0	125
4022009	126	15.2	15.2	1	0	0	0	1	0	127
4022009	127	13.6		1	0	0	0	1	0	127
4022009	128	15.2	15.6	14	0	0	0	14	0	129
4022009	129	14.1	15.0	2	0	0	0	2	0	129
4022009	130	14.0	15.0	2	0	0	0	2	0	130
4022009	131	12.3	14.0	1	0	0	0	1	0	131
4022009	132	11.5	13.8	4	0	0	0	4	0	132
4022009	133	8.9	10.3	1	0	0	0	1	0	133
4022009	134	13.5	18.7	15	0	0	0	15	0	134
4022009	135	19.4	20.1	13	0	0	0	13	0	135
4022009	136	15.9	18.7	9	0	0	0	9	0	137
4022009	137	19.0	20.5	9	1	0	0	10	0	139
4022009	138	18.2	21.7	12	0	0	0	12	1	138
4022009	139	17.6	19.5	7	0	0	0	7	0	139
4022009	140	19.6	20.0	8	0	0	0	8	3	140
4022009	141	19.6	20.6	2	0	0	0	2	0	142
4022009	142	19.6	19.7	2	0	0	0	2	0	144
4022009	143	17.7	20.0	1	0	0	0	1	1	143
4022009	144	13.9	16.2	3	0	0	0	3	0	145
4022009	145	14.0	14.7	14	1	0	0	15	0	145
4022009	146	14.8	16.6	9	0	0	0	9	0	146
4022009	147	12.9	16.2	5	0	0	0	5	0	147
5022009	148	14.5	15.5	8	1	0	0	9	0	148

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
5022009	149	15.7	15.8	8	0	0	0	8	0	149
5022009	150	15.5	15.8	5	0	0	0	5	0	151
5022009	151	13.2	15.8	2	0	0	0	2	0	154
5022009	152	14.3	15.7	1	0	0	0	1	0	153
5022009	153	16.7	16.7	6	0	0	0	6	0	154
5022009	154	16.5	16.6	6	0	0	0	6	0	154
5022009	155	13.4	16.5	7	0	0	0	7	0	155
5022009	156	0.3	13.7	2	0	0	0	2	0	156
5022009	157	8.3	9.5	0	0	0	0	0	0	157
5022009	158	15.1	17.2	0	0	0	0	0	0	158
5022009	159	16.0	16.0	0	0	0	0	0	0	159
5022009	160	12.9	15.5	5	1	0	0	6	0	160
5022009	161	12.5	14.6	10	0	0	0	10	0	161
5022009	162	12.2	15.1	2	0	0	0	2	0	162
5022009	163	13.5	16.2	1	0	0	0	1	0	163
5022009	164	16.8	20.2	16	0	0	0	16	0	168
5022009	165	17.5	19.7	23	2	0	0	25	0	165
5022009	166	21.0	22.5	29	2	15	0	46	0	166
5022009	167	23.1	23.5	30	0	2	0	32	0	169
5022009	168	23.3	24.3	19	0	0	0	19	0	169
5022009	169	17.5	23.5	10	0	0	0	10	1	170
5022009	170	21.7	22.2	14	1	0	0	15	1	171
5022009	171	17.5	21.7	17	0	0	0	17	0	171
5022009	172	19.2	20.4	11	0	0	0	11	0	173
5022009	173	19.5	23.3	16	0	0	0	16	0	174
5022009	174	18.3	23.4	22	0	0	0	22	0	175
5022009	175	18.0	19.4	8	1	0	0	9	0	176
6022009	176	18.5	20.5	13	0	0	0	13	0	176
6022009	177	18.5	20.7	21	0	0	0	21	0	178
6022009	178	16.9	17.8	22	1	0	0	23	1	181
6022009	179	16.9	17.7	22	1	0	0	23	0	183
6022009	180	17.7	19.7	12	0	0	0	12	0	183
6022009	181	19.6	19.8	19	1	0	0	20	0	185
6022009	182	19.7	21.1	26	0	0	0	26	0	185
6022009	183	17.5	20.8	33	0	0	0	33	0	185
6022009	184	17.4	18.4	30	0	8	0	38	6	188
6022009	185	16.5	19.4	30	0	13	0	43	0	187

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
6022009	186	16.4	18.5	30	1	31	0	62	6	187
6022009	187	18.3	21.3	12	0	0	0	12	4	191
6022009	188	16.8	19.5	30	0	13	0	43	0	188
6022009	189	18.3	18.9	10	0	0	0	10	11	189
6022009	190	17.2	18.2	26	1	0	0	27	2	194
6022009	191	18.2	19.6	13	0	0	0	13	0	191
6022009	192	18.4	19.5	25	0	0	0	25	0	192
6022009	193	20.9	23.6	30	0	48	0	78	0	196
6022009	194	17.5	21.8	30	0	4	0	34	0	196
6022009	195	17.5	20.8	26	0	0	0	26	42	197
6022009	196	18.5	20.8	24	0	0	0	24	1	198
6022009	197	17.8	18.7	25	1	0	0	26	0	199
6022009	198	16.5	22.1	28	0	0	0	28	4	200
6022009	199	16.3	20.2	13	0	0	0	13	9	206
6022009	200	16.5	20.1	11	0	0	0	11	0	200
6022009	201	17.5	19.5	13	0	0	0	13	0	202
6022009	202	16.5	18.0	15	0	0	0	15	20	205
6022009	203	17.5	18.6	13	0	0	0	13	5	205
6022009	204	16.5	19.4	14	0	0	0	14	0	205
6022009	205	17.4	18.2	12	0	0	0	12	2	207
7022009	206	18.0	18.0	5	1	0	0	6	4	208
7022009	207	17.1	18.6	11	0	0	0	11	0	208
7022009	208	17.1	18.7	12	0	0	0	12	11	209
7022009	209	17.8	17.9	11	0	0	0	11	0	211
7022009	210	17.4	19.5	1	0	0	0	1	0	212
15012008	1	32.6	33.2	24	2	39	1	66	0	5
15012008	2	32.6	32.6	55	12			67	0	6
15012008	3	20.7	21.3	31	3			34	0	3
15012008	4	20.7	22.6	31	11			42	0	9
15012008	5	18.6	19.5	154	24			178	0	14
15012008	6	19.5	20.7	226	48			274	0	8
15012008	7	17.1	19.2	170	21			191	0	4
15012008	8	14.0	18.9	25	22	105		152	0	3
15012008	9	19.2	21.3	44	10			54	0	5
15012008	10	20.4	21.6	28	14			42	0	6
15012008	11	16.6	21.6	136	35			171	0	7
15012008	12	20.5	22.0	74	19			84	0	11

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
15012008	13	23.9	24.4	58	14			62	0	11
15012008	14	17.5	19.1	72	20			92	0	14
15012008	15	19.6	21.2	93	40			133	0	11
15012008	16	19.3	20.2	25	11			36	0	12
15012008	17	19.5	21.3	125	25			150	0	23
15012008	18	19.5	22.3	101	27			128	0	21
15012008	19	18.0	22.9	34	6			40	0	8
15012008	20	19.5	22.9	57	9			66	0	7
15012008	21	14.9	18.3	67	13			80	0	6
15012008	22	14.9	18.3	32	11			43	0	4
15012008	23	13.1	15.8	40	9			49	0	17
15012008	24	14.0	15.2	29	14			43	0	3
15012008	25	16.5	18.3	68	14			82	0	14
15012008	26	21.9	24.1	73	8			81	0	15
16012008	27	20.7	22.6	63	0			63	0	11
16012008	28	17.4	20.1	92	10			102	0	10
16012008	29	14.9	14.4	25	16			41	0	14
16012008	30	13.4	13.5	19	10			29	0	9
16012008	31	14.6	14.9	42	11			53	0	7
16012008	32	14.6	15.1	60	5			65	0	8
16012008	33	14.0	14.6	11	3			14	0	4
16012008	34	13.1	14.9	16	5			21	0	5
16012008	35	13.4	16.8	25	13			38	0	13
16012008	36	12.8	14.3	20	7			27	0	7
16012008	37	11.3	12.5	1	2			3	0	2
16012008	38	12.5	15.8	4	0			4	0	3
16012008	39	13.1	17.1	12	2			14	0	5
16012008	40	12.2	12.5	3	2			5	0	6
16012008	41	12.8	13.4	27	1			28	2	5
16012008	42	11.0	13.1	13	2			15	0	4
16012008	43	12.2	12.8	2	10			12	0	1
16012008	44	13.4	13.4	13	13			26	0	7
16012008	45	13.2	13.3	6	1			7	0	8
16012008	46	12.5	13.3	10	1			11	0	4
16012008	47	13.8	14.3	2	0			2	1	15
16012008	48	15.0	19.3	43	1			44	3	23
16012008	49	20.5	20.6	85	11			96	4	19

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
16012008	50	19.8	19.8	106	4			110	3	10
16012008	51	17.8	18.9	23	1			24	4	11
16012008	52	17.7	19.8	21	0			21	2	11
16012008	53	16.8	19.2	67	2			69	4	15
16012008	54	16.8	17.1	27	2			29	3	5
16012008	55	11.6	14.9	10	0			10	2	1
16012008	56	9.1	12.5	6	1			7	1	5
16012008	57	11.0	12.5	11	0			11	0	6
16012008	58	10.4	11.0	9	4			13	0	7
16012008	59	16.8	18.9	21	4			25	0	4
16012008	60	14.3	18.6	17	1			18	1	5
16012008	61	18.6	19.8	25	4			29	0	7
17012008	62	19.2	22.3	83	7			90	1	21
17012008	63	17.5	20.2	25	4			29	4	17
17012008	64	17.8	20.6	25	16			41	6	14
17012008	65	18.8	20.2	59	5			64	1	6
17012008	66	18.3	21.0	36	7			43	1	10
17012008	67	14.9	17.4	47	4			51	0	27
17012008	68	15.2	16.2	50	2			52	9	21
17012008	69	18.3	19.5	45	6			51	4	23
17012008	70	20.4	20.4	28	2			30	0	11
17012008	71	19.8	20.1	17	6			23	0	9
17012008	72	16.5	19.2	32	3			35	0	7
17012008	73	17.4	18.3	83	8			91	6	8
17012008	74	18.3	21.9	22	2			24	13	19
17012008	75	18.9	21.0	53	4			57	2	23
17012008	76	21.3	21.3	28	1			29	1	13
17012008	77	17.7	18.6	7	2			9	9	11
17012008	78	17.4	18.0	2	0			2	5	13
17012008	79	20.4	21.9	6	2			8	4	17
17012008	80	16.8	18.6	9	0			9	3	8
17012008	81	21.9	22.6	49	1			50	3	13
17012008	82	18.4	20.2	3	0			3	4	12
17012008	83	18.3	19.8	0	0			0	2	2
17012008	84	20.4	20.4	35	2			37	0	14
17012008	85	13.9	15.5	8	1			9	0	7
17012008	86	14.5	13.5	3	0			3	0	5

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
17012008	87	13.8	14.4	6	3			9	0	18
17012008	88	14.2	14.7	5	0			5	0	14
17012008	89	13.4	15.5	3	0			3	0	2
17012008	90	17.1	18.6	0	0			0	0	2
17012008	91	21.9	21.0	18	1			19	0	21
17012008	92	16.5	18.3	26	2			28	2	11
17012008	93	20.1	19.8	69	5			74	0	17
17012008	94	18.9	21.3	73	9			82	1	20
17012008	95	19.8	22.9	42	3			45	2	6
17012008	96	19.8	21.3	83	7			90	2	14
17012008	97	21.3	22.3	128	8			136	0	8
18012008	98	19.5	21.3	46	5			51	0	6
18012008	99	18.3	20.4	26	5			31	1	12
18012008	100	17.3	20.2	33	1			34	0	5
18012008	101	21.4	22.0	22	2			24	0	12
18012008	102	19.0	21.8	82	7			89	1	7
18012008	103	20.6	21.1	94	8			102	0	9
18012008	104	19.0	21.1	35	3			68	1	7
18012008	105	20.7	21.5	11	2			13	0	7
18012008	106	18.5	19.4	25	5			30	1	9
18012008	107	18.0	18.6	24	3			27	1	7
18012008	108	19.5	22.3	52	3			55	4	9
18012008	109	18.3	20.7	68	5			73	0	18
18012008	110	15.5	17.7	9	37			46	1	7
18012008	111	17.4	17.7	49	1			50	1	13
18012008	112	11.6	14.9	8	1			9	0	1
18012008	113	16.8	17.4	6	0			6	0	4
18012008	114	18.6	18.9	6	3			9	1	3
18012008	115	16.5	17.4	10	0			10	0	4
18012008	116	20.1	21.9	18	0			18	3	10
18012008	117	17.1	19.2	8	1			9	4	5
18012008	118	16.2	19.2	6	2			8	3	7
18012008	119	14.6	17.7	7	1			8	5	6
18012008	120	13.1	15.5	13	2			15	2	1
18012008	121	12.5	14.6	9	1			10	0	7
18012008	122	15.2	17.1	9	2			11	3	4
18012008	123	19.5	20.4	8	0			8	4	6

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
18012008	124	19.8	20.1	10	0			10	3	7
19012008	125	19.2	19.4	2	0			2	0	9
19012008	126	16.2	19.0	9	0			9	0	5
19012008	127	20.1	20.3	10	1			11	1	8
19012008	128	17.7	22.2	5	1			6	3	17
19012008	129	19.2	21.3	0	0			9	1	10
19012008	130	19.0	20.9	11	1			12	2	5
19012008	131	18.4	19.4	2	1			3	1	3
19012008	132	20.2	20.5	5	3			8	0	9
19012008	133	18.8	20.1	5	0			5	2	6
19012008	134	16.5	19.5	8	2			10	2	6
19012008	135	12.8	16.2	11	3			14	1	3
19012008	136	12.8	12.8	10	0			10	0	2
19012008	137	13.4	14.6	9	0			9	1	2
19012008	138	16.2	17.4	18	0			18	4	5
19012008	139	17.4	19.5	13	1			14	4	5
19012008	140	19.5	21.3	4	0			4	9	4
19012008	141	18.3	18.6	16	2			18	5	2
19012008	142	15.8	17.7	4	20			24	3	6
19012008	143	14.3	15.2	0	0			0	3	0
19012008	144	18.4	21.9	15	5			20	12	6
19012008	145	18.3	21.9	19	5			24	12	2
19012008	146	18.8	20.1	10	7			17	7	1
19012008	147	19.3	19.8	8	3			11	2	3
19012008	148	17.8	18.4	12	2			14	2	4
19012008	149	19.0	19.6	13	4			17	4	4
19012008	150	20.2	20.5	13	4			17	8	0
19012008	151	20.4	21.0	14	2			16	4	5
19012008	152	20.1	20.7	5	1			6	2	2
19012008	153	17.4	19.2	11	2			13	2	6
19012008	154	18.0	18.0	7	1			8	0	8
19012008	155	18.9	21.0	7	0			7	2	4
19012008	156	17.7	18.0	7	0			7	2	12
19012008	157	16.5	18.6	9	3			12	1	6
19012008	158	18.0	21.6	3	0			3	0	1
19012008	159	15.2	17.7	12	0			12	7	14
19012008	160	12.5	14.6	6	2			8	8	4

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
19012008	161	16.2	17.4	8	1			9	6	3
19012008	162	17.4	17.7	5	0			5	5	7
19012008	163	13.1	14.0	9	1			10	3	2
20012008	164	13.3	15.4	6	0			6	2	1
20012008	165	13.9	14.4	2	0			2	0	0
20012008	166	13.4	14.9	10	3			13	0	4
20012008	167	14.6	17.4	0	0			0	0	0
20012008	168	14.4	15.1	3	1			4	6	3
20012008	169	15.4	16.7	4	2			6	5	7
20012008	170	14.6	16.5	2	0			2	6	3
20012008	171	13.7	15.5	3	1			4	5	5
20012008	172	14.6	15.7	2	0			2	1	5
20012008	173	13.0	16.1	4	0			4	4	5
20012008	174	14.3	16.8	1	2			3	5	5
20012008	175	14.6	18.3	5	3			8	20	3
20012008	176	18.0	18.7	4	0			4	3	4
20012008	177	17.0	20.2	5	1			6	0	7
20012008	178	19.0	22.0	14	4			18	2	6
20012008	179	19.0	19.4	21	4			25	0	10
20012008	180	19.0	21.1	14	1			15	1	7
20012008	181	19.8	20.7	5	1			6	1	2
20012008	182	18.3	18.6	11	6			17	1	6
20012008	183	19.2	19.8	6	1			7	0	4
20012008	184	17.1	21.6	5	2			7	0	9
20012008	185	21.6	22.9	28	3			31	0	4
20012008	186	16.5	17.4	13	1			14	14	4
20012008	187	14.6	15.5	3	1			4	6	6
20012008	188	15.2	16.5	8	2			10	10	4
20012008	189	17.7	18.0	10	0			10	5	8
20012008	190	16.2	18.3	9	5			14	15	7
20012008	191	14.9	16.8	6	2			8	15	9
20012008	192	18.0	20.1	10	1			11	2	3
20012008	193	16.8	18.3	10	2			12	0	17
21012008	194	16.2	16.6	7	0			7	0	4
21012008	195	13.9	14.4	7	0			7	22	9
21012008	196	15.3	19.1	6	0			6	14	6
21012008	197	14.3	15.3	2	0			2	13	6

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
21012008	198	14.7	15.9	6	2			8	20	10
21012008	199	17.4	19.8	4	0			4	20	3
21012008	200	14.3	21.3	5	1			6	9	3
21012008	201	16.2	19.5	5	1			6	16	6
21012008	202	15.3	19.8	2	0			2	13	11
21012008	203	15.5	18.3	8	0			8	28	1
21012008	204	16.2	19.8	7	0			7	11	8
21012008	205	15.2	18.9	0	1			1	3	3
21012008	206	16.5	17.4	0	0			0	24	8
21012008	207	18.9	19.2	3	1			4	4	0
21012008	208	16.5	16.8	2	0			2	13	6
21012008	209	16.5	18.3	17	1			18	37	5
21012008	210	16.5	19.5	28	2			30	32	6
21012008	211	19.2	19.5	1	0			1	5	0
21012008	212	15.5	17.1	15	1			16	12	4
21012008	213	15.5	17.7	8	0			8	0	8
21012008	214	13.7	14.6	9	0			9	12	2
21012008	215	13.7	18.0	14	1			15	17	0
21012008	216	14.0	14.0	1	0			1	10	0
21012008	217	13.4	19.2	10	0			10	6	6
21012008	218	14.0	15.5	4	0			4	5	1
21012008	219	13.7	18.3	2	0			2	6	10
21012008	220	14.3	22.9	25	13			38	4	6
21012008	221	16.2	21.9	7	1			8	0	11
21012008	222	14.9	15.8	1	0			1	16	4
21012008	223	14.6	16.8	1	6			7	4	5
21012008	224	15.5	18.6	10	0			10	13	7
21012008	225	16.5	22.3	6	1			7	2	8
21012008	226	18.0	20.4	8	2			10	3	10
21012008	227	15.8	18.6	0	0			0	1	5
21012008	228	15.8	18.0	8	0			8	0	3
21012008	229	14.9	15.5	5	0			5	5	7
21012008	230	15.2	15.8	15	0			15	5	5
21012008	231	17.4	18.0	16	3			19	10	6
21012008	232	17.4	18.9	14	4			18	20	0
21012008	233	17.1	17.7	11	1			12	9	10
22012008	234	15.1	17.4	7	1			8	8	4

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
22012008	235	16.0	16.8	8	0			8	4	11
22012008	236	13.7	15.6	7	0			7	4	9
22012008	237	14.2	16.6	8	0			8	4	2
22012008	238	16.0	18.1	8	0			8	0	5
22012008	239	20.5	20.8	22	2			24	2	6
22012008	240	18.2	19.1	28	4			32	0	3
22012008	241	15.2	16.2	0	0			0	1	0
22012008	242	13.8	15.0	5	0			5	0	0
22012008	243	13.4	13.5	11	0			11	0	2
22012008	244	14.3	17.1	9	0			9	0	7
22012008	245	17.7	19.8	4	1			5	3	4
22012008	246	15.8	18.9	5	0			5	0	3
22012008	247	15.8	19.8	4	0			4	0	3
22012008	248	16.2	19.8	10	1			11	3	4
22012008	249	11.0	14.9	5	0			5	0	1
22012008	250	12.5	11.3	17	2			19	0	4
22012008	251	11.3	12.8	17	2			19	1	0
22012008	252	18.7	21.2	4	1			5	0	0
22012008	253	18.5	20.3	2	0			2	0	1
22012008	254	16.3	18.0	13	2			15	0	0
22012008	255	18.9	19.4	45	4			49	3	2
22012008	256	20.2	21.3	27	3			30	0	5
22012008	257	19.1	21.5	27	3			30	10	7
22012008	258	19.7	22.3	16	0			16	1	6
22012008	259	20.4	21.3	19	1			20	0	4
22012008	260	19.8	22.3	44	7			51	1	4
22012008	261	21.6	22.6	62	5			67	3	7
22012008	262	21.6	22.6	37	3			39	0	2
22012008	263	20.7	21.6	26	0			26	0	6
22012008	264	20.1	20.7	37	1			38	0	3
22012008	265	19.5	19.8	22	0			22	1	4
22012008	266	18.6	19.5	47	1			48	0	7
22012008	267	18.3	18.9	75	5			80	1	3
23012008	268	13.1	14.3	24	4			28	0	3
23012008	269	10.4	12.8	4	0			4	0	8
23012008	270	16.2	19.8	40	8			48	4	2
23012008	271	17.4	17.7	41	3			44	5	6

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
23012008	272	15.2	18.9	88	1			89	6	9
23012008	273	17.4	19.8	77	6			83	8	5
23012008	274	20.1	22.9	43	3			46	8	5
23012008	275	19.8	25.0	40	3			43	0	1
23012008	276	18.3	18.3	47	3			50	6	5
23012008	277	18.9	19.8	12	3			15	6	10
23012008	278	16.2	16.8	25	2			27	9	10
23012008	279	18.9	18.9	24	1			25	4	1
23012008	280	17.4	20.1	23	3			26	6	2
23012008	281	16.5	19.5	9	0			9	4	2
23012008	282	15.8	19.8	18	1			19	4	7
23012008	283	15.2	16.8	20	1			21	15	5
23012008	284	16.2	17.7	7	1			8	15	7
23012008	285	14.0	14.6	16	1			17	3	5
23012008	286	16.0	19.2	11	0			11	2	3
23012008	287	14.4	15.0	12	0			12	0	3
23012008	288	13.9	14.7	1	0			1	0	2
23012008	289	15.3	19.4	30	0			30	0	1
23012008	290	14.3	17.5	18	0			18	2	6
23012008	291	14.9	15.7	3	0			3	0	3
23012008	292	16.0	16.9	5	0			5	1	2
23012008	293	19.5	19.8	17	1			18	0	5
23012008	294	14.9	16.5	8	0			8	3	1
23012008	295	15.5	15.8	1	1			2	3	1
23012008	296	13.4	14.6	2	0			2	2	1
23012008	297	13.4	15.2	6	1			7	0	0
23012008	298	14.6	15.2	11	1			12	0	5
23012008	299	14.0	15.5	2	0			2	0	1
23012008	300	15.5	16.2	2	0			2	0	1
23012008	301	16.2	16.5	13	3			16	6	3
23012008	302	17.7	18.9	32	1			33	3	1
23012008	303	14.3	17.4	17	3			20	0	2
24012008	304	13.3	13.4	1	0			1	0	0
24012008	305	15.5	15.8	7	0			7	1	1
24012008	306	15.9	17.2	25	3			28	1	1
24012008	307	13.6	15.5	19	0			19	0	3
24012008	308	14.0	13.6	1	0			1	0	0

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
24012008	309	12.5	13.1	0	1			1	0	0
24012008	310	13.4	15.8	15	0			15	0	4
24012008	311	11.9	15.9	7	2			9	0	2
24012008	312	14.1	14.3	2	0			2	0	0
24012008	313	14.7	15.0	1	0			1	0	1
24012008	314	15.3	16.2	3	0			3	0	2
24012008	315	14.3	14.6	3	3			6	0	2
24012008	316	14.6	14.6	26	5			31	0	1
24012008	317	21.3	22.3	0	0			0	1	6
24012008	318	21.0	21.3	29	4			33	0	7
24012008	319	18.9	20.4	19	1			20	1	4
24012008	320	17.7	18.0	5	0			5	0	2
24012008	321	17.4	17.4	11	0			11	0	4
24012008	322	16.2	16.8	2	0			2	0	0
24012008	323	16.5	17.4	4	0			4	0	2
24012008	324	18.3	21.0	22	5			27	0	0
24012008	325	16.5	19.2	12	1			13	0	2
24012008	326	15.8	19.2	23	2			25	0	4
24012008	327	20.7	21.0	28	3			31	0	2
24012008	328	20.4	21.6	35	5			40	1	8
24012008	329	20.1	21.6	20	4			24	0	3
18012007	1	25.0	25.3					1	2	10
18012007	2	21.6	22.9					1	0	13
18012007	3	22.9	23.2					6	1	3
18012007	4	25.6	27.4					8	0	1
18012007	5	20.1	24.4					5	0	0
18012007	6	18.0	18.3						0	3
18012007	7	21.0	24.4					9	0	1
18012007	8	23.2	24.7					9	0	0
18012007	9	20.4	22.3					12	0	1
18012007	10	20.1	22.9					19	0	5
18012007	11	14.3	20.7					11	0	7
18012007	12	18.3	19.8					71	0	17
18012007	13	19.8	19.8					67	0	6
18012007	14	19.8	20.4					110	0	15
18012007	15	16.2	18.0					96	0	22
18012007	16	15.5	16.8					63	0	15

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
18012007	17	14.9	15.5					67	0	5
18012007	18	15.8	16.5					76	0	7
18012007	19	18.6	19.2					318	0	22
19012007	20	17.4	17.7					73	0	14
19012007	21	16.5	17.4					37	0	3
19012007	22	18.0	19.2					29	0	8
19012007	23	18.6	19.2					41	0	9
19012007	24	17.7	18.0					27	0	13
19012007	25	17.7	18.0					22	0	5
19012007	26	18.6	21.3					54	0	6
19012007	27	21.9	22.6					32	0	6
19012007	28	21.9	21.9					16	0	9
19012007	29	20.7	20.7					78	0	8
19012007	30	16.2	18.3					34	0	16
19012007	31	17.1	18.9					38	0	12
19012007	32	18.6	19.2					38	0	13
19012007	33	19.8	20.4					56	0	15
19012007	34	20.1	20.4					73	0	9
19012007	35	21.3	22.3					31	2	7
19012007	36	21.9	22.9					33	0	10
19012007	37	20.7	21.3					32	0	15
19012007	38	20.1	20.4					52	0	12
19012007	39	19.8	22.3					42	0	8
19012007	40	19.2	19.5					144	0	21
19012007	41	14.8	13.1					202	0	5
19012007	42	13.3	13.4					104	0	0
20012007	43	15.6	18.1					118	0	5
20012007	44	13.8	19.7					90	0	15
20012007	45	15.9	18.4					57	0	16
20012007	46	15.1	19.0					82	0	4
20012007	47	14.3	17.2					767	0	21
20012007	48	17.1	19.2					72	0	13
20012007	49	20.7	22.3					22	0	6
20012007	50	20.7	21.3					18	0	7
20012007	51	18.9	18.9					40	0	7
20012007	52	18.9	21.0					44	0	28
20012007	53	20.4	20.7					8	0	8

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
20012007	54	20.7	21.0					25	0	5
20012007	55	18.6	20.7					27	0	16
20012007	56	22.9	24.4					47	0	0
20012007	57	22.9	25.6					60	0	9
20012007	58	22.3	22.3					27	0	45
20012007	59	25.3	25.6					44	0	23
20012007	60	19.8	21.6					67	0	19
20012007	61	19.3	21.3					62	2	9
21012007	62	17.2	14.6					36	7	11
21012007	63	14.6	16.2					71	5	15
21012007	64	14.1	14.4					63	0	16
21012007	65	14.4	15.2					35	1	23
21012007	66	14.8	16.6					37	1	23
21012007	67	17.4	18.0					53	2	24
21012007	68	20.7	21.6					54	1	17
21012007	69	15.2	17.7					69	2	29
21012007	70	14.9	15.2					75	6	8
21012007	71	13.7	14.9					41	4	5
21012007	72	13.1	13.7					31	3	2
21012007	73	13.1	14.9					27	2	0
21012007	74	12.8	13.4					32	2	0
21012007	75	11.6	12.8					39	2	4
21012007	76	11.6	11.9					39	3	3
21012007	77	12.5	12.5					70	7	2
21012007	78	11.0	11.6					35	4	7
21012007	79	11.3	12.2					42	0	3
21012007	80	11.6	12.8					50	0	3
21012007	81	10.4	11.6					44	0	1
21012007	82	9.8	10.1					53	1	3
21012007	83	10.4	11.3					16	2	3
21012007	84	14.0	14.9					30	6	7
21012007	85	12.2	14.3					46	16	2
21012007	86	13.7	15.8					15	4	0
21012007	87	13.4	14.6					35	3	5
21012007	88	13.7	14.3					58	6	9
21012007	89	12.8	13.1					14	2	0
21012007	90	13.1	15.2					17	2	0

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
21012007	91	14.3	14.6					31	3	5
21012007	92	16.2	18.6					43	8	10
21012007	93	15.5	16.5					24	14	12
22012007	94	17.1	18.9					24	5	13
22012007	95	16.8	19.2					32	3	5
22012007	96	13.7	15.2						10	7
22012007	97	13.4	17.7					57	12	10
22012007	98	14.3	19.2					51	7	17
22012007	99	11.3	15.5					19	3	7
22012007	100	13.4	14.3					16	4	7
22012007	101	11.9	12.5					11	3	4
22012007	102	14.3	17.4					10	2	8
22012007	103	21.3	21.6					37	2	11
22012007	104	20.1	20.4					53	11	11
22012007	105	18.9	20.1					34	6	10
22012007	106	18.9	21.6					33	2	14
22012007	107	17.1	20.1					16	1	18
22012007	108	16.5	18.6					44	8	16
22012007	109	14.0	18.9					50	3	8
22012007	110	12.8	15.5					18	15	6
22012007	111	11.9	12.2					13	10	4
22012007	112	11.0	12.5					5	3	1
22012007	113	11.6	12.8					22	1	3
22012007	114	14.0	15.8					19	1	5
22012007	115	16.2	18.9					16	0	8
22012007	116	19.5	19.8					30	6	10
22012007	117	14.3	18.0					17	3	3
22012007	118	12.8	15.2					11	12	5
22012007	119	14.3	16.2					6	2	6
22012007	120	13.7	17.1					11	7	7
22012007	121	14.9	15.8					16	6	5
22012007	122	15.2	17.7					14	6	6
22012007	123	14.0	16.8					10	3	14
22012007	124	14.6	15.2					28	2	6
22012007	125	13.1	15.5					27	1	3
23012007	126	12.8	13.1					16	0	6
23012007	127	14.3	14.6					20	3	6

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
23012007	128	14.0	14.6					20	3	9
23012007	129	13.4	14.0					15	8	5
23012007	130	14.6	16.5					19	7	5
23012007	131	12.8	14.0					9	8	8
23012007	132	12.5	13.7					12	2	6
23012007	133	11.9	12.5					12	0	2
23012007	134	13.4	13.7					16	1	8
23012007	135	14.0	18.6					27	1	11
23012007	136	14.9	15.8					25	3	7
23012007	137	14.9	15.2					31	2	8
23012007	138	17.1	17.1					7	11	12
23012007	139	18.0	19.5					18	2	18
23012007	140	16.5	18.9					33	18	6
23012007	141	14.0	16.8					16	7	3
23012007	142	12.8	13.1					52	0	4
23012007	143	12.8	13.4					197	1	9
23012007	144	15.5	16.5					263	2	1
23012007	145	16.8	17.4					248	1	0
23012007	146	16.5	16.8					238	3	1
23012007	147	18.9	18.9					91	1	1
23012007	148	21.0	21.3					39	0	0
23012007	149	20.7	22.6					17	0	1
23012007	150	20.7	21.0					27	0	3
23012007	151	18.3	19.2					35	0	1
23012007	152	20.1	21.3					8	0	1
23012007	153	16.8	19.5					151	0	1
23012007	154	15.2	16.8					106	0	1
23012007	155	13.4	17.4					49	0	1
23012007	156	17.4	18.3					77	0	1
23012007	157	19.5	22.6					32	0	4
24012007	158	21.9	23.2					13	0	3
24012007	159	24.4	25.0					36	0	2
24012007	160	19.2	20.7					20	0	0
24012007	161	20.4	21.9					21	0	5
24012007	162	19.2	20.4					25	0	1
24012007	163	18.9	21.0					56	0	5
24012007	164	21.0	21.6					31	0	0

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
24012007	165	23.2	24.4					88	0	7
24012007	166	21.3	21.9					156	0	7
24012007	167	18.0	18.6					64	0	13
24012007	168	21.9	24.7					82	0	8
24012007	169	24.4	24.4					59	0	12
24012007	170	23.5	24.7					55	0	4
24012007	171	21.3	22.3					77	0	4
24012007	172	19.2	19.8					125	0	5
24012007	173	18.9	20.4					141	0	4
24012007	174	20.4	22.9					194	0	1
24012007	175	18.9	20.4					314	0	7
24012007	176	13.1	14.6					16	0	3
24012007	177	13.1	13.7					57	0	8
24012007	178	14.3	14.6					56	0	4
24012007	179	13.4	15.8					67	0	3
24012007	180	13.7	20.1					79	0	7
24012007	181	13.1	14.9					38	0	7
24012007	182	18.9	22.3					82	0	9
24012007	183	21.6	22.9					73	0	2
24012007	184	15.2	18.6					21	0	15
24012007	185	18.3	22.3					11	0	5
19012006	1	21.6	23.5					1	0	0
19012006	2	18.0	18.3					0	0	0
19012006	3	16.8	17.7						0	0
20012006	4	19.2	19.8					2	0	0
20012006	5	19.5	22.0					3	0	24
20012006	6	15.3	20.7					7	0	9
20012006	7	19.7	20.0					13	0	15
20012006	8	18.0	19.5	82	18			168	0	11
20012006	9	18.0	18.0	76	30			207	0	8
20012006	10	18.9	19.7	28	13	55	19	115	0	1
20012006	11	19.5	23.3	27	7	60	14	108	3	0
20012006	12	20.1	20.1			130	30	217	0	4
20012006	13	14.6	18.6			143	12	253	0	1
20012006	14	21.0	15.5			64	7	130	0	2
20012006	15	19.8	21.0					58	3	3
20012006	16	20.7	23.5					P	0	0

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
20012006	17	16.8	17.4					20	0	2
20012006	18	11.3	11.9					42	1	0
20012006	19	11.3	11.3					68	0	0
20012006	20	11.9	11.9	5				74	1	1
20012006	21	11.6	11.9					40	0	1
20012006	22	12.2	13.4					59	1	1
20012006	23	14.6	15.7					110	0	5
20012006	24	11.4	12.8			120	25	273	1	6
20012006	25	13.7	14.2			72	8	336	2	10
20012006	26	13.7	15.8			167	31	198	7	1
20012006	27	16.1	16.7					81	8	4
20012006	28	14.5	15.8					32	4	0
20012006	29	15.0	17.1			15	2	69	3	5
20012006	30	14.0	14.1					64	0	3
20012006	31	13.3	15.2					62	1	1
20012006	32	13.4	15.8					45	2	1
20012006	33	19.0	19.3					35	4	0
20012006	34	17.4	18.9					15	1	2
20012006	35	15.2	19.2					32	2	2
20012006	36	11.3	14.6					39	1	2
20012006	37	11.9	12.5					27	1	0
20012006	38	10.1	11.0					118	0	0
20012006	39	10.7	10.7					74	1	0
20012006	40	11.9	12.8					60	4	1
20012006	41	12.7	12.8					49	1	0
21012006	42	15.8	19.4					33	0	0
21012006	43	14.2	18.0					44	5	6
21012006	44	17.2	18.3					68	4	13
21012006	45	14.2	17.3					33	2	8
21012006	46	17.1	18.9					26	0	2
21012006	47	19.3	19.5					25	1	2
21012006	48	18.7	19.3					51	22	3
21012006	49	18.5	21.3					89	2	4
21012006	50	19.9	20.5					95	1	0
21012006	51	18.1	22.5					92	7	0
21012006	52	18.6	20.1					56	33	0
21012006	53	20.7	21.3					47	15	2

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
21012006	54	19.8	20.4					20	19	0
21012006	55	19.8	20.4			20	5	29	64	0
21012006	56	18.3	19.2	27	4			37	18	0
21012006	57	19.5	21.6					5	27	0
21012006	58	20.9	21.3			24	11	40	9	0
21012006	59	18.1	21.7					22	32	3
21012006	60	20.8	21.1					71	9	2
21012006	61	21.0	21.4					38	21	4
21012006	62	20.4	20.4					54	5	2
21012006	63	21.4	22.0					85	9	2
21012006	64	16.9	20.6					62	3	1
21012006	65	19.8	20.7					41	1	3
21012006	66	19.2	20.1					25	0	4
21012006	67	16.9	18.4					10	0	6
21012006	68	14.2	16.6					10	3	5
21012006	69	13.1	16.5					5	6	4
21012006	70	11.9	13.1					15	29	1
21012006	71	10.8	12.0					11	12	0
21012006	72	12.4	13.3					19	14	0
21012006	73	14.3	14.8					14	6	0
21012006	74	11.9	12.8			29	5	49	25	0
21012006	75	10.4	11.3					17	18	0
21012006	76	11.0	11.4					77	1	0
21012006	77	11.3	12.8					52	0	0
21012006	78	13.7	14.6					82	0	0
21012006	79	14.2	14.3					29	1	0
22012006	80	13.7	14.0					37	8	4
22012006	81	14.2	14.4					42	14	5
22012006	82	12.6	12.8					37	22	0
22012006	83	12.6	12.8					63	9	7
22012006	84	14.4	14.6					15	17	3
22012006	85	13.3	14.2					10	9	4
22012006	86	12.1	12.5					39	21	1
22012006	87	11.3	11.6			39	10	53	299	1
22012006	88	16.5	18.3					1	0	0
22012006	89	16.2	16.5					28	0	0
22012006	90	15.2	15.2					11	21	0

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
22012006	91	14.3	14.3					42	44	0
22012006	92	12.5	13.7					51	102	0
22012006	93	10.4	13.1					67	70	0
22012006	94	12.2	12.5					61	28	1
22012006	95	12.9	13.1					44	44	7
22012006	96	13.4	15.4					41	21	1
22012006	97	10.7	12.7					16	15	0
22012006	98	10.8	12.5					25	30	4
22012006	99	12.9	13.4					37	20	2
22012006	100	9.8	11.0					19	31	7
22012006	101	12.4	13.1					25	6	6
22012006	102	12.2	13.2					27	37	10
22012006	103	12.2	12.5					32	34	3
22012006	104	12.1	12.5					36	40	5
22012006	105	12.8	13.1						16	0
22012006	106	13.3	16.3					11	31	0
22012006	107	15.7	18.3					44	7	0
22012006	108	13.6	14.8					5	42	0
22012006	109	12.7	13.1					5	68	0
22012006	110	12.6	12.7					16	23	0
22012006	111	13.2	14.1					13	22	0
22012006	112	13.9	14.6					7	18	0
22012006	113	14.7	14.8			62	13	112	118	0
23012006	114	14.5	16.8					83	59	3
23012006	115	14.3	17.4					183	14	3
23012006	116	16.2	18.6			108	14	135	7	9
23012006	117	16.2	17.4			45	3	111	3	11
23012006	118	15.5	18.0					128	8	11
23012006	119	16.1	17.5					77	0	7
23012006	120	14.4	15.4					62	10	5
23012006	121	15.9	16.2					27	6	2
23012006	122	15.0	15.7					53	18	0
23012006	123	15.7	15.7					47	15	0
23012006	124	15.7	15.7					103	25	0
23012006	125	13.1	14.0					44	43	0
23012006	126	9.4	13.4					8	38	0
23012006	127	14.3	18.0					36	39	1

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
23012006	128	17.7	18.3					68	8	0
23012006	129	9.1	13.1					13	30	0
23012006	130	13.1	13.1					11	86	0
23012006	131	14.4	16.4					13	41	0
23012006	132	14.3	17.1					31	18	4
23012006	133	11.4	12.1					15	2	3
23012006	134	10.6	11.6					6	6	1
23012006	135	11.6	12.9					10	81	6
23012006	136	12.5	13.2					8	35	3
23012006	137	11.9	13.1					6	50	5
23012006	138	13.1	13.7					12	26	5
23012006	139	14.1	15.5					32	7	5
23012006	140	11.2	12.2					17	8	8
23012006	141	10.3	10.8						2	0
23012006	142	12.4	13.1					4	6	7
23012006	143	12.2	12.8					14	29	0
23012006	144	12.8	12.9					11	12	0
23012006	145	13.6	14.1					12	2	0
23012006	146	14.2	15.1					32	1	0
23012006	147	15.1	15.1					19	0	0
24012006	148	21.3	22.6			67	4	164	0	7
24012006	149	18.6	19.8			44	9	120	0	7
24012006	150	16.1	16.9			16	3	51	0	3
24012006	151	16.8	16.8					65	0	3
24012006	152	18.9	19.5					77	0	0
24012006	153	21.9	21.9					125	13	0
24012006	154	21.9	22.3					39	7	0
24012006	155	19.8	22.6					71	13	0
24012006	156	21.2	21.7					70	8	0
24012006	157	19.4	21.5					38	10	1
24012006	158	18.0	19.0					44	2	0
24012006	159	16.0	19.5					18	4	0
24012006	160	15.2	17.0					18	3	0
24012006	161	16.8	17.4					30	0	9
24012006	162	16.6	18.3					9	0	6
24012006	163	17.8	20.5					31	3	12
24012006	164	18.1	20.6					52	8	13

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
24012006	165	19.8	20.4					41	1	7
24012006	166	14.7	16.9					21	0	13
24012006	167	14.8	15.3					20	0	6
24012006	168	15.0	16.8					23	0	9
24012006	169	15.7	15.7					10	0	16
24012006	170	15.3	17.8					10	0	4
24012006	171	11.5	14.0					5	0	4
24012006	172	11.6	11.9					P	0	0
24012006	173	11.8	14.4						0	0
24012006	174	13.0	13.4					12	3	0
24012006	175	12.6	12.7					12	6	0
24012006	176	15.0	15.1					39	6	0
24012006	177	14.1	15.3					35	9	0
24012006	178	19.7	20.2					18	22	0
24012006	179							62	27	0
24012006	180	13.0	18.1					30	8	0
25012006	181	17.9	21.5					74	14	20
25012006	182	15.4	16.8					51	50	13
25012006	183	16.6	16.7					60	42	21
25012006	184	16.2	16.8					50	48	15
25012006	185	17.6	19.6					69	29	8
25012006	186	19.8	21.1					49	11	11
25012006	187	15.2	19.0					56	5	19
25012006	188	14.7	21.6					14	10	7
25012006	189	16.9	21.2					17	6	0
25012006	190	14.5	15.7					18	14	0
25012006	191	14.6	17.4					31	46	1
25012006	192	17.4	18.0					5	82	3
25012006	193	18.5	20.0					14	58	0
25012006	194	19.1	19.8					11	2	0
25012006	195	16.5	17.7					24	7	0
25012006	196	18.3	19.5						276	0
25012006	197	14.3	15.7						60	0
25012006	198	18.0	21.0						15	0
25012006	199	13.3	14.9						5	0
25012006	200	19.5	20.6					22	2	0
25012006	201	16.9	18.1					2	5	4

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
25012006	202	18.0	19.8					68	14	0
25012006	203	17.6	18.5					47	11	4
25012006	204								0	0
25012006	205	16.3	18.9					73	18	5
25012006	206	16.9	17.7					26	16	12
25012006	207	17.8	19.0					21	0	1
25012006	208	18.0	19.0					20	1	0
25012006	209	18.1	18.2					15	8	1
25012006	210	18.1	18.9					20	18	0
25012006	211	20.7	21.2					11	14	0
25012006	212	19.6	19.0					15	2	0
25012006	213	19.5	21.4					12	24	0
25012006	214	21.1	21.2					36	14	0
25012006	215	21.5	22.5					19	11	0
26012006	216	21.6	22.1					14	7	7
26012006	217	20.5	20.9					17	4	9
26012006	218	18.0	19.6					11	2	3
26012006	219	15.5	15.7					30	5	5
26012006	220	16.3	17.0					26	1	3
26012006	221	18.4	20.2					34	15	7
26012006	222	20.1	25.2					47	27	6
26012006	223	21.5	23.7					52	5	6
26012006	224	15.4	20.7					25	46	0
26012006	225	15.7	16.6					39	58	0
26012006	226	16.7	17.7					28	16	0
26012006	227	18.3	20.1					32	15	0
26012006	228	12.1	13.0					11	3	0
26012006	229							6	0	P
26012006	230	18.2	18.3					7	54	4
26012006	231	14.9	16.8					5	2	2
26012006	232	17.8	18.1					9	5	9
26012006	233	15.1	17.3					6	54	16
26012006	234	13.7	13.9					9	13	P
26012006	235	15.6	16.1					6	4	5
26012006	236	16.3	16.4					2	2	2
26012006	237	18.3	20.0					8	1	P
26012006	238	17.1	19.1					6	0	0

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
26012006	239	19.5	19.8					30	1	0
26012006	240	20.1	20.2					30	0	0
27012006	241	20.8	20.8					34	0	5
27012006	242	18.9	20.1					49	0	4
27012006	243	21.3	22.0					67	0	12
27012006	244	20.1	21.9					36	0	2
27012006	245	18.0	20.2					12	0	6
27012006	246	14.5	19.6					22	0	18
27012006	247	19.7	20.2					13	0	8
27012006	248	16.6	18.6					20	0	0
27012006	249	17.7	18.1					35	0	0
27012006	250	18.3	20.4					40	0	3
27012006	251	15.2	16.2					31	1	0
27012006	252	17.6	19.8					44	99	0
27012006	253	15.3	19.6					41	50	0
27012006	254	16.1	16.2					19	41	0
27012006	255	18.3	18.9					50	59	6
27012006	256	13.8	18.9					61	32	6
27012006	257	13.4	19.2					30	27	5
27012006	258	19.1	20.1					93	5	18
27012006	259	18.6	21.0					41	32	11
27012006	260	13.9	14.1					37	16	4
27012006	261	18.0	19.3					53	11	9
27012006	262	17.3	21.7					45	3	12
27012006	263	16.6	20.3					63	11	10
27012006	264	16.1	22.2					18	31	7
27012006	265	18.9	19.0					37	18	0
27012006	266	14.0	15.9					12	7	0
27012006	267	16.9	19.2			26	4	31	2	0
27012006	268	13.2	16.2						4	0
27012006	269	9.8	13.3						0	0
27012006	270	14.2	19.3			34	1	35	5	0
27012006	271	19.7	21.4			20	1	22	7	0
27012006	272	18.3	19.4			48	3	51	16	4
27012006	273	16.6	17.9			31	3	35	19	0
27012006	274	16.6	18.4					6	16	0
28012006	275	13.9	18.1			24	7	31	26	7

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
28012006	276	17.6	17.7					4	3	2
28012006	277	16.5	17.6					13	0	0
28012006	278	16.4	16.8					7	1	0
28012006	279	16.5	17.8			31	2	33	0	6
28012006	280	18.6	21.5			14	1	15	0	2
28012006	281								0	0
28012006	282	14.6	16.5						0	0
28012006	283	15.8	17.1			29	3	32	0	0
28012006	284	18.3	19.8			17	2	19	1	4
28012006	285	19.7	20.1			24	2	26	2	2
28012006	286	20.2	21.2			45	9	55	34	8
28012006	287	19.9	20.7			53	3	59	22	6
28012006	288	19.5	20.1			22	2	24	8	6
28012006	289	20.0	20.1			16	3	19	2	4
28012006	290	18.9	19.2			23	1	24	0	7
28012006	291	20.0	21.0			16	3	19	0	4
28012006	292	19.4	19.9			22	2	25	0	4
28012006	293	19.3	20.1			10	1	12	4	2
28012006	294	20.0	20.7			32	3	36	1	0
28012006	295	18.6	19.8			38	6	44	0	0
28012006	296	17.3	17.3			22	4	27	1	6
28012006	297	18.3	21.4			34	8	42	1	4
28012006	298	21.4				19	4	23	1	2
28012006	299	16.6	17.5			16	2	17	6	0
28012006	300	21.4	22.4			36	9	45	1	3
28012006	301	12.4	21.4			42	7	59	15	0
28012006	302	19.6	23.6			60	8	68	4	4
25012005	1	26.7	27.4					0	0	3
25012005	2	17.4	18.6					42	4	1
25012005	3	16.8	17.4					20	1	2
25012005	4	17.4	18.0					6	1	
26012005	5	11.0	15.0					66	0	6
26012005	6	11.6	12.8					43	0	3
26012005	7	15.2	15.8					32	0	1
26012005	8	11.0	13.1					18	0	2
26012005	9	15.9	16.9					27	0	
26012005	10	10.4	13.7					51	0	2

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
26012005	11	17.4	18.0	26	1			27	5	
26012005	12	20.4	23.2					20	15	
26012005	13	16.2	23.8					0	78	
26012005	14	19.8	21.9			20		52	22	
26012005	15	21.3	22.3					15	3	
26012005	16	16.2	20.7					24	19	
26012005	17	15.8	17.1			36		36	31	
26012005	18	17.7	18.6					34	57	2
26012005	19	17.7	18.6					28	44	
26012005	20	19.2	32.3					32	103	
26012005	21	20.0	20.1					24	81	2
26012005	22	18.6	19.8					44	44	
26012005	23	18.9	21.6					27	21	
26012005	24	21.0	22.9					33	31	2
26012005	25	19.2	19.5					40	17	3
26012005	26	21.0	22.3					19	36	4
26012005	27	17.1	20.4					28	23	1
26012005	28	17.4	17.7			9		33	3	2
26012005	29	18.9	21.0					30	7	7
26012005	30	20.1	21.0					28	6	5
26012005	31	20.1	21.0			2		2	21	
26012005	32	23.2	25.0			12		29	13	
26012005	33	18.3	19.2	19				19	53	2
27012005	34	18.6	18.9					13	12	
27012005	35	18.3	19.2					15	21	1
27012005	36	17.4	17.7					9	8	1
27012005	37	17.7	18.6					8	10	
27012005	38	18.3	20.1					6	37	
27012005	39	17.7	17.7						9	
27012005	40	22.9	23.5			17		17	60	
27012005	41	23.2	25.6			6	1	7	69	
27012005	42	22.9	23.8			6		6	158	
27012005	43	21.9	24.1				1	1	58	
27012005	44	23.2	23.2	3				3	12	
27012005	45	23.8	24.4			10		10	10	1
27012005	46	17.7	19.2					5	31	
27012005	47	20.1	20.7					9	74	

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
27012005	48	19.8	21.0					17	153	1
27012005	49	20.1	22.9						105	4
27012005	50	19.5	19.8			13		13	28	1
27012005	51	19.5	21.0			14		14	40	1
27012005	52	20.1	21.3			9		9	131	3
27012005	53	18.6	20.4					24	27	3
28012005	54	17.7	18.9					9	61	
28012005	55	19.8	22.6						0	
29012005	56	18.9	19.8						12	1
29012005	57	19.8	23.8					8	22	1
29012005	58	21.9	23.8					6	41	
29012005	59	17.1	21.9	29				29	33	
29012005	60	21.3	23.2					7	66	
29012005	61	15.2	25.6					19	43	
29012005	62	19.8	20.7					10	16	1
29012005	63	18.9	20.1					15	14	
29012005	64	22.9	23.5					6	21	1
29012005	65	19.8	21.9					7	42	
29012005	66	18.9	20.7					3	23	
29012005	67	19.8	19.8					12	74	
29012005	68	18.6	19.2					5	56	
29012005	69	19.2	20.7					8	57	1
29012005	70	18.9	20.7					6	47	4
29012005	71	20.7	20.7					11	15	2
29012005	72	18.3	20.1					10	5	1
29012005	73	20.1	20.7	11				11	16	1
29012005	74	20.1	21.6					3	117	
29012005	75	20.7	21.6					6	32	
29012005	76	19.8	20.4					9	17	1
29012005	77	18.3	19.8					2	92	2
29012005	78	17.4	19.8					2	60	2
29012005	79	19.8	20.7					2	44	
29012005	80	19.8	22.3					5	19	
29012005	81	18.3	19.8					4	5	1
30012005	82	19.8	21.9					7	30	1
30012005	83	19.5	20.1					3	7	
30012005	84	19.8	20.7					3	9	1

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
30012005	85	18.3	18.9					3	14	
30012005	86	16.8	17.7						2	2
30012005	87	19.8	20.7					4	13	4
30012005	88	20.7	21.6					7	51	1
30012005	89	19.5	24.1					34	5	2
30012005	90	17.7	20.4					12	8	1
30012005	91	20.4	24.1					1	20	3
30012005	92	17.4	22.3					4	4	2
30012005	93	18.3	20.7					17	9	2
30012005	94	16.5	20.4					5	2	
30012005	95	19.8	20.7					0	20	
30012005	96	19.8	20.4	1				1	50	1
30012005	97	19.2	20.4					8	11	
30012005	98	19.8	21.3					4	12	
30012005	99	16.2	18.3					3	10	
30012005	100	18.3	19.5					2	32	
30012005	101	19.8	21.0					8	10	
30012005	102	20.7	21.0					8	6	
30012005	103	20.4	20.7					4	4	1
30012005	104	20.7	21.3					3	5	
31012005	105	14.9	15.2					12	0	2
31012005	106	15.2	15.8						0	
31012005	107	13.1	13.1					7	0	
31012005	108	13.1	13.4					26	0	
31012005	109	15.8	15.5					7	0	
31012005	110	19.8	21.0					8	0	
31012005	111	21.0	21.3					7	1	
31012005	112	15.2	15.2						0	
1022005	113	18.9	21.9					34	14	
1022005	114	21.6	23.8					14	1	1
1022005	115	18.3	18.3					5	8	
1022005	116	18.9	25.0					4	8	
1022005	117	18.0	20.1					5	11	1
1022005	118	12.8	16.8					9	3	
1022005	119	15.8	19.8					4	5	
1022005	120	16.2	22.3					13	5	
1022005	121	16.2	22.9					5	1	1

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
1022005	122	16.5	21.9					7	6	
1022005	123	16.8	22.9					5	9	
2022005	124	17.1	21.9					1	17	
2022005	125	21.3	22.3					2	24	
2022005	126	20.7	22.3						26	
2022005	127	21.6	22.3					8	50	1
2022005	128	19.8	20.1						149	2
2022005	129	18.0	18.9						47	1
2022005	130	17.7	20.7						67	
2022005	131	17.7	20.7						28	
2022005	132	18.6	21.9					4	4	2
2022005	133	18.6	22.6					1	3	
2022005	134	18.9	21.9					1	1	
2022005	135	21.3	26.5					4	3	
2022005	136	19.2	22.3					2	2	
2022005	137	19.5	23.5					1	4	
2022005	138	19.5	19.8						24	
2022005	139	20.1	21.9					1	12	
2022005	140	18.6	19.2					2	39	
2022005	141	18.3	18.6						48	
2022005	142	16.8	18.3						129	
2022005	143	16.5	17.7					2	81	1
2022005	144	16.5	16.5						1	
2022005	145	17.7	18.3						117	
2022005	146	17.7	18.9					1	114	
2022005	147	18.3	19.5					2	37	
2022005	148	12.2	18.9						27	
2022005	149	12.8	19.2					1	1	
16012004	1	14.3	17.6					10	0	
16012004	2	13.8	17.0					8	0	1
17012004	3	14.9	18.0					8	0	1
17012004	4	18.4	19.3					18	0	3
17012004	5	19.5	20.0					5	0	4
17012004	6	17.1	19.8					6	3	2
17012004	7	18.3	19.7		6			7	0	4
17012004	8	20.3	21.5					13	1	7
17012004	9	22.8	23.1					26	0	4

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
17012004	10	17.0	18.8					4	1	5
17012004	11	14.9	21.6					6	0	
17012004	12	20.0	20.6					6	0	
17012004	13	20.3	21.0					29	0	
17012004	14	13.3	14.5					23	8	
17012004	15	16.9	18.8					22	4	
17012004	16	18.1	18.6					10	1	
17012004	17	17.4	18.0					14	0	
17012004	18	15.8	17.1					18	0	4
17012004	19	19.6	20.1					19	2	1
17012004	20	20.8	21.4					16	1	3
17012004	21	19.2	19.8					29	21	
17012004	22	20.1	20.1					16	14	2
17012004	23	19.6	20.1					4	3	3
17012004	24	20.0	21.7					43	5	5
17012004	25	18.7	20.8					49	5	
17012004	26	19.1	20.0				2	53	2	1
17012004	27	21.3	22.2					56	0	
17012004	28	21.1	22.8					40	8	7
17012004	29	21.9	22.6					60	4	3
17012004	30	17.2	20.9					24	0	2
17012004	31	19.2	19.5					20	8	5
17012004	32	19.1	19.6					17	10	1
17012004	33	19.1	19.9					13	5	
17012004	34	20.1	21.5					38	6	2
17012004	35	20.1	22.1					168	29	
17012004	36	22.1	22.1					62	19	4
17012004	37	18.8	20.0					38	107	2
18012004	38	23.3	23.9					36	15	2
18012004	39	22.6	23.3					28	39	
18012004	40	20.3	23.0					33	20	1
18012004	41	21.7	23.0		1			45	7	4
18012004	42	23.9	25.8					62	28	5
18012004	43	20.7	22.6					34	22	2
18012004	44	20.7	22.1					17	15	3
18012004	45	19.3	21.3					10	3	1
18012004	46	19.6	21.5					8	1	7

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
18012004	47	21.3	22.4					12	5	2
18012004	48	20.4	22.1					10	1	2
18012004	49	22.1	22.4					20	4	1
18012004	50	19.5	20.1					8	0	
18012004	51	19.5	20.8					19	3	
18012004	52	18.1	20.1					13	1	1
18012004	53	22.6	22.8					37	1	1
18012004	54	21.1	21.1					90	36	
18012004	55	18.7	20.8					68	49	
18012004	56	21.1	21.7			252	111	406	56	
18012004	57	19.6	24.0			72	51	166	51	
18012004	58	21.7	21.8					85	5	
18012004	59	21.1	22.1					27	3	
18012004	60	15.5	23.7			219	29	299	16	3
18012004	61	23.4	23.9			79	34	165	2	
18012004	62	21.9	22.5						0	
18012004	63	21.8	22.2		1			32	33	3
18012004	64	20.4	25.4					8	2	1
18012004	65	20.4	24.5					34	7	
18012004	66	23.0	23.3					26	11	
18012004	67	22.0	23.1					30	9	2
18012004	68	21.7	22.2					23	6	2
18012004	69	20.1	21.9					13	9	
18012004	70	16.0	21.6					7	7	2
18012004	71	21.6	21.7						3	1
18012004	72	22.7	24.1					5	11	3
18012004	73	19.7	20.4					12	15	2
18012004	74	15.3	20.0					14	1	2
18012004	75	11.6	14.3					2	0	1
18012004	76	11.8	22.8					4	3	
18012004	77	12.1	12.8					6	2	2
18012004	78	12.6	13.1					1	2	2
18012004	79	15.3	15.4					4	1	
19012004	80	16.1	17.1					4	0	4
19012004	81	16.3	18.1					3	13	
19012004	82	18.8	19.1		1			1	9	1
19012004	83	15.2	20.0					1	3	

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
19012004	84	14.8	20.1					5	14	
19012004	85	19.5	20.4					1	4	3
19012004	86	18.6	18.8					5	24	9
19012004	87	16.8	18.1					3	5	4
19012004	88	17.1	17.6						0	
19012004	89	15.3	16.9					21	0	1
19012004	90	13.0	15.1					24	7	
19012004	91	15.2	21.1					26	0	1
19012004	92	18.6	21.6					55	0	1
19012004	93	18.8	21.4					10	0	
19012004	94	15.9	19.5					18	1	
19012004	95	16.1	18.8		1			29	5	2
19012004	96	15.8	13.7	1				16	2	
19012004	97	16.2	17.9					7	1	2
19012004	98	19.6	20.1					24	9	
19012004	99	19.9	20.2					10	1	
19012004	100	15.4	22.3					3	0	
19012004	101	11.1	12.1					9	15	1
19012004	102	9.1	11.4					10	45	5
19012004	103	11.1	11.7					7	25	2
19012004	104	10.7	11.1					5	21	3
19012004	105	11.1	11.6					9	17	
19012004	106	9.8	11.1					7	8	1
19012004	107	9.8	10.1					1	4	
19012004	108	12.0	13.1						1	
19012004	109	12.9	13.2					4	47	2
19012004	110	12.7	14.1					3	24	1
20012004	111	14.9	16.7					1	12	5
20012004	112	19.1	16.6						4	
20012004	113	16.1	16.8						33	2
20012004	114	15.2	15.5					5	23	1
20012004	115	15.8	16.9					3	10	1
20012004	116	15.2	15.8					5	11	2
20012004	117	17.0	17.1						0	1
20012004	118	15.9	17.1					7	18	4
20012004	119	13.1	14.3					10	16	2

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
20012004	120	14.0	15.1				2	12	1	
20012004	121	16.2	17.1				15	17		
20012004	122	16.9	16.9				7	2		
20012004	123	15.0	16.0				6	22		
20012004	124	13.8	16.1				3	17	1	
20012004	125	14.6	14.8				23	81	2	
20012004	126	0.0	0.0				10	154		
20012004	127	11.6	13.7				1	91	1	
20012004	128	10.9	12.1					61	2	
20012004	129	11.1	12.1				3	9	2	
20012004	130	11.9	12.8				5	23	3	
20012004	131	13.6	14.1				10	50	1	
20012004	132	12.1	13.1				5	76		
20012004	133	13.7	15.9				10	17		
20012004	134	14.1	15.8					32	2	
20012004	135	14.1	15.9				4	38	3	
20012004	136	15.2	16.2				3	21	2	
20012004	137	13.0	14.1					88		
20012004	138	12.1	12.4				4	58		
20012004	139	15.4	15.8				6	5	3	
20012004	140	14.5	15.0				6	7	1	
20012004	141	12.6	15.1				3	2		
20012004	142	14.3	15.3					0		
20012004	143	16.9	17.8				9	0	7	
20012004	144	13.5	18.0				9	0	4	
21012004	145	16.4	19.2				11	1	4	
21012004	146	13.8	17.1				12	1	2	
21012004	147	12.8	15.7				4	5	6	
21012004	148	13.9	14.4				13	4	3	
21012004	149	13.1	14.3				3	4	3	
21012004	150	16.5	18.3				6	4	2	
21012004	151	15.0	17.2				8	4	2	
21012004	152	14.1	16.5				2	3	2	
21012004	153	13.2	15.0				1	2	1	
21012004	154	13.6	16.2				6	4	3	
21012004	155	14.9	22.5				6	9		
21012004	156	22.6	24.1				22	1	1	

21012004	157	22.6	23.5				11	0	1	
Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
21012004	158	19.8	21.5					18	218	
21012004	159	17.9	20.5					9	10	
21012004	160	20.2	20.7					4	11	1
21012004	161	20.8	20.8					11	3	1
21012004	162	19.1	21.0					10	15	
21012004	163	21.1	22.8					15	14	
21012004	164	20.6	21.3					6	0	2
21012004	165	19.8	21.3					8	4	3
21012004	166	18.9	19.2					8	11	
21012004	167	16.0	17.6					5	7	1
21012004	168	11.0	14.0					2	5	1
21012004	169	14.5	15.6					1	16	1
21012004	170	13.4	16.0					2	2	1
21012004	171	18.3	21.2	1				1	24	
21012004	172	12.6	21.5						0	
21012004	173	16.7	17.1					5	4	2
21012004	174	16.7	17.8					5	4	
21012004	175	14.5	17.9					21	0	3
21012004	176	15.5	15.8					9	3	
22012004	177	17.3	20.4					24	0	3
22012004	178	17.7	19.3					10	0	2
22012004	179	15.5	16.9					13	0	2
22012004	180	17.6	18.9					14	4	4
22012004	181	18.4	19.3					11	1	7
22012004	182	19.0	21.4					24	2	12
22012004	183	19.1	19.9					29	4	7
22012004	184	19.2	19.9					17	2	2
22012004	185	19.5	22.1					57	1	
22012004	186	22.9	23.0					46	3	3
22012004	187	22.3	22.6					11	1	
22012004	188	22.6	23.3					36	0	2
22012004	189	19.8	21.8						0	
22012004	190	14.3	15.1	8	1			9	3	
22012004	191	12.9	13.9					14	3	2
22012004	192	14.6	17.8					15	11	1
22012004	193	16.5	19.0					14	5	1
22012004	194	15.9	15.9					10	3	1

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
22012004	195	18.0	18.5	12	3			15	1	1
22012004	196	20.5	21.5	18	1			19	2	2
22012004	197	21.5	22.6	49	13			62	2	3
22012004	198	20.2	21.4	22	6			28	1	5
22012004	199	18.9	19.7	17	2			19	1	2
22012004	200	13.8	17.1	3				3	0	3
22012004	201	12.4	16.5	23	1			24	1	5
22012004	202	14.1	17.5	20	2			22	0	1
22012004	203	17.6	19.0					4	5	3
23012004	204	19.1	15.1	4	1			5	5	3
23012004	205	17.2	17.4	11	6			17	0	6
23012004	206	16.9	19.0	38	8			46	22	12
23012004	207	20.8	19.3	15	3			18	5	7
23012004	208	15.0	18.1	24	5			29	0	10
23012004	209	20.2	21.1	15	1			16	0	1
23012004	210	18.8	22.9	24	5			29	0	11
23012004	211	21.8	23.0						0	
23012004	212	21.1	21.9	36	8			44	0	2
23012004	213	16.1	20.6						10	
23012004	214	15.1	16.1	7	1			8	9	2
23012004	215	16.1	18.1		1			1	4	
23012004	216	18.1	20.5	11	4			15	16	
23012004	217	17.5	21.1	7	1			8	14	
23012004	218	16.7	17.4					5	3	
23012004	219	18.9	20.1	1				6	0	2
23012004	220	19.6	20.1					7	0	1
23012004	221	16.9	17.3					6	1	
23012004	222	17.3	18.7						1	2
23012004	223	14.6	17.8					13	3	
23012004	224	17.8	20.1					13	7	6
23012004	225	16.4	23.3					12	9	5
23012004	226	19.0	20.8					10	4	6
23012004	227	19.4	19.9					29	1	7
23012004	228	20.8	21.4					21	0	3
23012004	229	20.4	22.4					16	0	9
23012004	230	16.9	22.4					10	1	5
23012004	231	17.2	18.4					11	5	9

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
24012004	232	19.5	20.1	1				7	3	3
24012004	233	16.0	17.6					21	2	1
24012004	234	14.3	16.8					7	0	2
24012004	235	15.4	19.8					8	0	1
24012004	236	18.0	18.5					6	1	2
24012004	237	17.8	18.6						1	
24012004	238	16.8	19.1					6	0	1
24012004	239	16.8	18.1					3	3	1
24012004	240	15.9	19.2						0	
24012004	241	16.8	20.4					16	2	
24012004	242	20.1	20.6					13	2	1
24012004	243	19.7	19.9					34	1	1
24012004	244	20.1	21.3					42	1	2
24012004	245	20.8	21.0					45	7	2
24012004	246	20.2	22.4	18	8			28	2	1
24012004	247	17.4	21.1	35	12			47	4	
24012004	248	16.6	17.4	26	5	66	19	116	0	2
24012004	249	20.0	22.1					1	0	1
24012004	250	16.7	19.6	25	2	29	3	59	0	
24012004	251	15.7	18.1	23	5	31	5	64	0	
24012004	252	19.1	20.1	19	3	12	4	38	1	1
24012004	253	13.5	17.3	17	4			21	1	
24012004	254	15.7	15.9	23	5			28	5	1
24012004	255	14.6	16.0			46	3	49	31	
24012004	256	12.6	13.2			14	4	18	15	1
24012004	257	13.5	14.8	22	2			24	0	
24012004	258	12.7	16.2	23	7			30	0	2
14012003	1	17.4	17.4					0	0	
14012003	2	12.8	15.5					P	0	1
14012003	3	12.5	12.8					P	0	
14012003	4	14.0	14.9					0	0	3
14012003	5	15.2	15.5					0	0	1
14012003	6	14.0	14.3					0	0	2
14012003	7	13.4	13.4					0	0	1
14012003	8	12.5	13.1					0	0	1
14012003	9	13.4	13.4					0	0	1
14012003	10	0.0	0.0					0	0	

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
15012003	11	0.0	0.0					0	0	
15012003	12	0.0	0.0					0	0	
15012003	13	0.0	0.0					0	0	
15012003	14	0.0	0.0					0	0	
15012003	15	12.5	13.1					0	0	
15012003	16	12.5	12.5					0	0	
15012003	17	13.7	16.8					0	0	1
15012003	18	15.2	17.7					0	0	
15012003	19	0.0	0.0					0	0	
15012003	20	0.0	0.0					0	0	
15012003	21	0.0	0.0					0	0	
15012003	22	0.0	0.0					0	6	
15012003	23	0.0	0.0	27	2			29	19	
15012003	24	0.0	0.0	16	3			19	7	
15012003	25	0.0	0.0					0	3	
15012003	26	0.0	0.0					0	2	
15012003	27	13.7	15.5					0	0	1
15012003	28	14.3	15.8					0	0	1
15012003	29	12.8	17.1					0	2	
15012003	30	17.1	17.4					P	1	
15012003	31	21.3	21.6					P	0	
15012003	32	17.1	18.6					0	0	
15012003	33	16.2	16.2					0	2	
15012003	34	16.8	19.5					0	4	
15012003	35	20.7	21.0					0	1	
15012003	36	17.7	19.8					0	22	
16012003	37	15.2	15.2					0	12	
16012003	38	15.8	16.2					0	17	
16012003	39	16.5	16.8					0	17	
16012003	40	15.8	17.7					0	14	
16012003	41	18.3	18.9					0	4	
16012003	42	21.6	21.6					0	12	
16012003	43	20.4	21.6					0	26	
16012003	44	19.2	19.2					0	6	
16012003	45	19.2	19.5					0	1	
16012003	46	19.8	20.1					0	2	
16012003	47	17.7	19.2					0	1	

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
16012003	48	17.4	18.9					0	0	
16012003	49	20.1	20.1					0	2	
16012003	50	20.1	20.4					0	3	
16012003	51	18.3	19.5					0	6	
16012003	52	20.1	20.1					0	2	
16012003	53	18.3	18.9					0	1	
16012003	54	14.6	15.8					0	13	
16012003	55	15.5	15.8					0	7	
16012003	56	14.9	16.2					0	9	1
16012003	57	14.6	15.2					0	4	
16012003	58	15.2	15.8					0	2	
16012003	59	18.3	18.3					0	0	
16012003	60	13.7	17.7					0	2	
16012003	61	16.5	18.3					0	2	
16012003	62	16.5	16.5					0	0	
16012003	63	16.5	17.7	31	3			34	0	
16012003	64	16.8	18.3	14	5			19	1	
16012003	65	16.2	17.4	13	1			14	0	
16012003	66	14.9	15.8	8	2			10	0	
16012003	67	16.5	16.5	6	2			8	0	
16012003	68	16.5	17.4	4				4	0	
16012003	69	18.0	18.0	27	6			33	0	
16012003	70	17.4	18.6	8	3			11	0	
16012003	71	18.6	19.8	8	1			1	0	
17012003	72	18.3	19.8	1	4			6	0	
17012003	73	17.1	17.7	8	1			9	0	
17012003	74	16.8	16.8	28	3	25	8	64	40	
17012003	75	16.8	16.8	14	4	27	6	51	6	
17012003	76	18.6	18.9	11	5	14	4	34	4	
17012003	77	19.8	22.3	13	8	11	10	42	6	
17012003	78	17.1	19.2	7	6	75	38	126	9	
17012003	79	18.3	18.6	20	9			29	3	
17012003	80	18.6	18.9	10	3	22	6	41	13	
17012003	81	18.3	18.6	16	3	37	5	61	7	
17012003	82	15.8	18.6	17	1	186	19	223	5	
17012003	83	18.9	20.1	32	8	60	10	110	2	
17012003	84	19.5	19.8	21	6			27	3	

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
17012003	85	19.5	19.8	17	2	23	4	46	11	
17012003	86	19.8	21.9	19	2	1	1	23	40	
17012003	87	20.4	21.0	13	6			19	12	
17012003	88	20.7	20.7	11	2			13	49	
17012003	89	20.1	21.3	12	3			15	5	
17012003	90	20.7	20.7	2				2	26	
17012003	91	17.1	18.3	1	1			2	36	
17012003	92	17.1	17.1		2			2	5	
17012003	93	18.3	18.9	2				2	2	
17012003	94	20.1	20.7	2	1			3	2	
17012003	95	19.5	19.5	5	2			7	2	
17012003	96	22.3	24.7	4				4	0	
17012003	97	14.3	15.5	6	1			7	1	
17012003	98	22.3	25.0	5	2			7	0	1
17012003	99	19.8	21.0	7	2			9	1	
17012003	100	18.6	19.2	8	4			12	3	
17012003	101	18.3	18.6	16	7			23	11	1
17012003	102	19.2	19.5	4	1			5	1	
17012003	103	17.7	18.9	3	4			7	0	
17012003	104	18.3	20.7					P	0	
17012003	105	18.3	19.8	13	2			15	0	
18012003	106	21.3	21.3	3	1			4	0	
18012003	107	18.3	18.3	8	1			9	1	
18012003	108	16.8	16.8	9	1	25	3	38	7	
18012003	109	17.7	17.7	11	3			14	15	
18012003	110	20.7	22.6	9	3	53	9	74	9	
18012003	111	16.5	18.0	9	2	89	13	113	2	
18012003	112	11.6	15.8	6	4	23	6	39	40	
18012003	113	12.2	16.5	27	2			29	25	
18012003	114	16.5	19.5						0	
18012003	115	16.8	18.9	1				1	0	
18012003	116	20.7	21.3	4				4	0	
18012003	117	21.3	21.9	11		18	3	32	0	
18012003	118	21.3	21.9						0	
18012003	119	16.8	18.3	9	1			10	0	
18012003	120	16.2	17.1	10	1	4		15	15	
18012003	121	15.2	18.0	10	1	26	1	38	2	

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
18012003	122	16.5	16.8						32	
18012003	123	14.0	15.2	11				11	6	
18012003	124	13.1	13.4	17	4			21	0	
18012003	125	13.7	17.4	11	3			14	0	
18012003	126	17.1	18.3	15	4			19	5	
18012003	127	15.2	15.8	16	1			17	2	
18012003	128	13.7	17.1	34	1			35	0	
18012003	129	16.8	18.3	33	4			37	4	
18012003	130	12.8	14.9	12	4			16	1	
19012003	131	17.7	18.3	9		14	1	24	5	
19012003	132	15.2	16.8	7	2	9		18	0	
19012003	133	15.2	15.2	8	0	18	2	28	0	
19012003	134	16.8	18.3	11		63	9	83	0	
19012003	135	15.8	17.7	10		41	3	54	0	
19012003	136	14.0	16.5	10	1	24	1	36	19	
19012003	137	14.9	16.8	5	1	9		15	3	
19012003	138	16.8	18.6	6				6	1	
19012003	139	15.8	16.5	58	5			63	14	
19012003	140	14.3	15.8	6				6	0	
19012003	141	20.7	21.3	9				9	0	
19012003	142	18.3	18.3	13	1			14	0	
19012003	143	18.3	18.9	10				10	0	
19012003	144	15.2	15.2	5				5	1	
19012003	145	16.8	17.7	15	1			16	2	
19012003	146	15.2	16.8	5				5	1	
19012003	147	16.5	18.0	8				8	6	
19012003	148	18.6	18.9	13	3	127	10	153	97	
19012003	149	18.3	19.5	11	1	53	14	79	21	
19012003	150	17.4	21.6	21	5	17	8	51	15	
19012003	151	18.9	20.1	30	4			34	6	
19012003	152	14.6	17.7	17				17	37	
19012003	153	18.6	20.4	25	2			27	6	
19012003	154	18.6	19.5	29	7	19	1	56	21	
19012003	155	15.2	15.5	32	1			33	28	
19012003	156	15.8	17.4	37	3			40	15	
19012003	157	15.8	16.5	10		26	2	38	1	
20012003	158	15.8	15.8	14		13	4	31	1	

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
20012003	159	15.2	18.0	10	1	18	6	35	0	
20012003	160	18.3	18.3	11	1	59	7	78	4	
20012003	161	13.7	15.8	11	1	39	6	57	24	
20012003	162	14.9	15.8	7		21	2	30	14	
20012003	163	18.9	20.1	9	2	20	3	34	14	
20012003	164	14.0	17.1	9	3	20	2	34	21	
20012003	165	13.4	15.8	22	4	20	2	48	4	
20012003	166	14.6	17.4	49	12			61	21	
20012003	167	16.8	17.4	26	3	57	8	94	6	
20012003	168	14.9	16.8	57	7	20	4	88	25	
20012003	169	16.5	17.4	50	9			59	2	
20012003	170	14.0	16.5	7	1			8	0	
20012003	171	16.5	16.8	11	1	64	14	90	3	
20012003	172	17.1	17.1	12	1	63	13	89	0	
20012003	173	15.2	19.8	12	1	75	8	96	1	
20012003	174	14.6	16.8	12	0	19	9	40	0	
20012003	175	15.8	16.2	13	1	12		26	22	
20012003	176	16.5	16.8	11	3	129	8	151	2	
20012003	177	12.8	17.7	13	1	50	12	76	9	
20012003	178	13.4	15.8	14	1	197	19	231	5	
20012003	179	18.3	18.6	22	2	99	4	127	1	
20012003	180	17.7	18.0	21	1	82	7	111	5	
20012003	181	16.8	17.1	22		121	5	148	7	
20012003	182	16.8	17.1	14	1	18	2	35	2	
20012003	183	16.8	18.3	12		5	1	18	8	
20012003	184	16.5	17.1	8				8	4	
20012003	185	14.3	17.1	3	1			4	1	
20012003	186	14.3	17.4	12	3			15	0	
20012003	187	17.7	19.8	13		55	8	76	2	
20012003	188	16.8	17.7	7	1	18		26	2	
20012003	189	18.3	18.9	15		37	1	53	18	
20012003	190	17.7	18.9	12		31	3	46	23	
21012003	191	17.1	19.8	12		40	3	55	2	
21012003	192	20.7	22.6	9		33	3	45	10	
21012003	193	14.3	20.7	11	1	57	8	77	3	
21012003	194	12.5	18.3	7	1	36	2	46	113	
21012003	195	17.7	21.3	35	3	79	7	124	15	

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
21012003	196	13.7	14.0	17	1	1		19	74	
21012003	197	13.7	14.0	8	12			20	29	
21012003	198	13.4	13.7	9	2			11	30	
21012003	199	13.7	14.9	17	1			18	10	
21012003	200	15.5	21.0	14				14	10	
21012003	201	14.6	17.1	10				10	7	
21012003	202	16.8	16.8	3	3			6	6	
21012003	203	18.3	18.3	3				3	83	
21012003	204	17.1	17.1						173	
21012003	205	17.1	17.1						54	
21012003	206	19.8	21.3	20				20	37	
21012003	207	16.8	20.7	8				8	7	
21012003	208	18.6	18.9	1	2			3	9	
22012003	209	17.1	18.3						0	
22012003	210	15.2	15.2						0	
22012003	211	16.8	17.1	12	4	4	8	28	0	
22012003	212	13.7	14.6	11	3			14	1	
22012003	213	13.1	15.2	5	4			9	0	
22012003	214	13.4	14.9						0	
22012003	215	13.4	14.3	7	3			10	0	
22012003	216	14.0	14.3	4	4			9	0	
22012003	217	13.4	14.0						0	
22012003	218	15.2	15.2					1	0	
22012003	219	0.0	0.0	105	12	165	9	291	0	
22012003	220	19.8	19.8	43	5	34	7	89	0	
22012003	221	18.6	18.9	25	4	30	10	69	0	
22012003	222	16.8	17.1	5	3			8	0	
22012003	223	15.2	17.1	1				1	0	
22012003	224	13.4	14.3	1	1			2	0	
22012003	225	13.7	14.0	1	1			2	0	
22012003	226	14.0	14.0	3	1			4	0	
22012003	227	13.7	14.0	2	2			4	0	
14012002	1	15.8	17.1						0	
14012002	2	15.5	15.5						0	
14012002	3	15.2	15.5						0	
14012002	4	14.6	14.6						0	
14012002	5	14.3	14.9						1	

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
14012002	6	14.9	15.2						3	
14012002	7	14.0	14.0						0	
14012002	8	13.1	14.0						0	
14012002	9	13.4	14.3						0	
15012002	10	13.4	13.7						0	
15012002	11	18.3	18.3						0	
15012002	12	17.4	18.3	7.0				7	0	
15012002	13	15.2	15.2						0	
15012002	14	14.9	21.0	1.0				1	0	
15012002	15	14.9	20.4						0	
15012002	16	18.3	19.5						0	
15012002	17	17.1	17.1						0	
15012002	18	17.7	19.5						1	
15012002	19	21.0	21.3					P	0	
15012002	20	20.1	20.7						0	
15012002	21	16.2	16.5						0	
15012002	22	14.9	17.4						0	
15012002	23	12.2	14.9	44.0	3			47	3	
15012002	24	10.7	13.7	33.0	1			34	4	
15012002	25	15.2	16.2	7.0				7	1	
15012002	26	15.2	16.2	8.0	1			9	1	
15012002	27	16.2	16.2	47.0	2			49	0	
15012002	28	13.7	16.8	62.0	2			64	1	
15012002	29	16.8	18.9					81	1	
15012002	30	14.6	14.9						1	
15012002	31	18.6	21.6						2	
15012002	32	20.4	22.3					P	0	
15012002	33	18.9	21.0					P	1	
15012002	34	13.1	18.3						0	
15012002	35	13.4	14.3					P	0	
15012002	36	21.9	22.3					P	0	
15012002	37	22.3	22.6						0	
15012002	38	22.6	25.6						0	
15012002	39	23.2	25.3						0	
16012002	40	24.4	24.4					P	0	
16012002	41	18.3	21.3						0	
16012002	42	15.8	18.3						0	

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
16012002	43	14.9	18.3						0	
16012002	44	16.8	18.9						0	
16012002	45	21.3	21.9						0	
16012002	46	20.4	21.3						0	
16012002	47	21.6	22.3						0	
16012002	48	22.3	22.3						0	
16012002	49	20.1	20.7					P	0	
16012002	50	21.6	22.6					P	0	
16012002	51	15.5	16.5					P	6	
16012002	52	16.5	16.5						22	
16012002	53	18.0	18.3						2	
16012002	54	14.6	16.5						6	
16012002	55	13.4	14.3						5	
16012002	56	13.7	14.0						1	
16012002	57	12.8	13.4						0	
16012002	58	13.7	13.7						2	
16012002	59	14.0	15.2						4	
16012002	60	15.2	15.8						1	
16012002	61	15.5	15.8						3	
16012002	62	15.2	16.2						41	
16012002	63	15.8	18.6						5	
16012002	64	14.3	16.2						14	
16012002	65	14.9	15.5						5	
16012002	66	14.6	14.6						1	
16012002	67	16.8	18.3					P	1	
16012002	68	18.3	18.6						2	
16012002	69	15.5	16.5					P	0	
16012002	70	15.5	16.5					P	4	
16012002	71	17.4	17.7					P	1	
16012002	72	15.5	16.8					P	1	
16012002	73	15.5	15.5					P	0	
16012002	74	15.2	15.5					P	1	
16012002	75	16.8	22.3					P	2	
16012002	76	24.7	25.0					P	2	
16012002	77	22.3	24.7					P	0	
17012002	78	18.3	19.8						0	
17012002	79	17.7	18.3					P	0	

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
17012002	80	17.7	18.3						0	
17012002	81	15.2	18.3						0	
17012002	82	18.9	20.1						1	
17012002	83	19.8	20.7						0	
17012002	84	20.1	21.0					P	0	
17012002	85	18.3	19.5						0	
17012002	86	14.9	16.8					P	0	
17012002	87	15.5	17.7						0	
17012002	88	18.3	20.1						7	
17012002	89	18.3	19.8						7	
17012002	90	20.4	20.7						2	
17012002	91	20.1	21.9					P	2	
17012002	92	18.3	18.6						0	
17012002	93	13.7	14.6						8	
17012002	94	13.1	13.4						38	
17012002	95	13.1	13.4					P	1	
17012002	96	12.2	13.4						105	
17012002	97	13.7	14.0						3	
17012002	98	12.8	13.7						29	
17012002	99	13.1	13.1						13	
17012002	100	13.7	14.0						23	
17012002	101	12.2	13.7						10	
17012002	102	12.8	12.8						45	
17012002	103	12.2	12.2						21	
17012002	104	12.8	12.8						4	
17012002	105	11.9	12.8						2	
17012002	106	11.6	11.9						2	
17012002	107	11.6	12.5						4	
17012002	108	12.2	12.2					4	7	
17012002	109	11.9	11.9						28	
17012002	110	11.6	11.9						13	
17012002	111	11.6	13.4						69	
17012002	112	14.0	14.9						253	
17012002	113	14.3	14.9						168	
17012002	114	15.5	15.8						65	
17012002	115	13.7	14.3						328	
18012002	116	13.7	13.7						38	

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
18012002	117	13.4	13.7						68	
18012002	118	11.6	11.6						26	
18012002	119	11.9	12.5						12	
18012002	120	13.4	14.0						49	
18012002	121	13.7	14.0						54	
18012002	122	13.7	14.0						32	
18012002	123	12.2	12.8						108	
18012002	124	10.1	11.0						18	
18012002	125	11.6	12.8						70	
18012002	126	12.2	13.4						41	
18012002	127	11.3	12.2						30	
18012002	128	11.9	12.8						18	
18012002	129	11.9	12.8						12	
18012002	130	10.7	11.9						16	
18012002	131	11.6	10.4						26	
18012002	132	11.0	13.7						11	
18012002	133	12.5	13.7						8	
18012002	134	11.6	12.2					P	7	
18012002	135	11.9	11.9						2	
18012002	136	11.9	12.5	73.0	15			88	3	
18012002	137	13.7	14.0	21.0	5			26	8	
18012002	138	14.0	14.3	31.0	4			35	2	
18012002	139	12.2	13.1	4.0	2			6	2	
18012002	140	12.8	14.6						28	
18012002	141	11.6	12.2						8	
18012002	142	12.8	13.1						8	
18012002	143	11.9	11.9						1	
18012002	144	14.3	15.8						8	
18012002	145	12.8	13.1						7	
18012002	146	11.3	11.9						7	
18012002	147	12.2	12.5						5	
18012002	148	14.3	15.5						15	
18012002	149	15.2	16.2						18	
18012002	150	14.6	14.9	24.0	3			27	14	
18012002	151	12.8	14.6	41.0	7			48	7	
18012002	152	11.9	12.8	39.0	5			44	2	
18012002	153	12.5	14.0	39.0	6			45	0	

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
18012002	154	13.7	14.3	76.0	6			82	3	
18012002	155	12.8	13.4	60.0	8			68	1	
18012002	156	14.3	15.2	40.0	3			43	0	
18012002	157	16.8	19.5	33.0	0			33	3	
18012002	158	23.2	23.2					P	0	
19012002	159	16.8	19.2						11	
19012002	160	18.0	19.2						17	
19012002	161	18.3	20.7					P	2	
20012002	162	16.5	18.3						15	
20012002	163	18.6	20.7						33	
20012002	164	16.5	18.0						27	
20012002	165	17.4	18.3						27	
20012002	166	17.7	17.7						18	
20012002	167	15.5	16.2						34	
20012002	168	14.6	15.8						176	
20012002	169	17.7	18.3						22	
20012002	170	16.5	15.2						72	
20012002	171	13.1	13.7						35	
20012002	172	14.0	14.6						33	
20012002	173	14.0	14.3	18.0	2			20	35	
20012002	174	14.6	15.2						190	
20012002	175	14.6	16.2						139	
20012002	176	16.5	17.4						75	
20012002	177	14.6	16.2						381	
20012002	178	15.8	16.5						94	
20012002	179	14.3	14.6	3.0	2			5	23	
20012002	180	13.4	14.6						41	
20012002	181	13.4	13.7						183	
20012002	182	16.8	13.7						25	
20012002	183	16.2	17.7						4	
20012002	184	16.2	17.4						4	
20012002	185	16.5	16.8						21	
20012002	186	14.0	15.2						22	
20012002	187	15.8	16.8						9	
20012002	188	12.5	12.8						16	
20012002	189	14.9	16.2						4	
20012002	190	14.3	15.5	13.0	0			13	5	

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
20012002	191	14.0	15.5	44.0	5			49	28	
20012002	192	13.1	13.7	19.0	3			22	12	
20012002	193	11.9	12.5	50.0	5			55	21	
20012002	194	15.2	16.8	19.0	1			20	5	
20012002	195	14.3	15.8	35.0	2			37	17	
20012002	196	13.4	16.5	34.0	3			37	17	
20012002	197	16.2	16.5	40.0	4			44	5	
20012002	198	14.0	14.3	21.0	3			24	7	
20012002	199	14.3	14.6						5	
20012002	200	14.3	15.2	20.0	4			24	1	
20012002	201	16.8	17.4	31.0	12			43	0	
21012002	202	15.2	15.5						0	
21012002	203	14.6	16.8						1	
21012002	204	17.1	17.7						0	
21012002	205	17.4	18.0						0	
21012002	206	17.1	18.3						1	
21012002	207	17.4	18.6						1	
21012002	208	18.0	18.0						5	
21012002	209	20.1	20.1						5	
21012002	210	19.2	20.1						4	
21012002	211	19.5	12.8						1	
21012002	212	13.7	14.3						0	
21012002	213	14.3	19.5	18.0	1			19	3	
21012002	214	19.8	21.6						10	
21012002	215	20.1	20.4	7.0	0			7	5	
21012002	216	19.8	21.6						16	
21012002	217	15.2	20.1	5.0	2			7	2	
21012002	218	13.4	15.2						0	
21012002	219	14.9	15.2	4.0	1			5	1	
21012002	220	19.5	20.1	2.0	0			2	2	
21012002	221	22.3	22.3						2	
21012002	222	23.5	24.4						3	
21012002	223	17.7	20.1						1	
21012002	224	14.6	15.8						3	
21012002	225	18.6	22.3						0	
21012002	226	15.8	16.5						0	
14012001	1	14.9	16.8						0	

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
14012001	2	19.2	20.7						0	
14012001	3	16.8	18.3						0	
14012001	4	15.8	16.5						0	
15012001	5	14.6	15.2						0	
15012001	6	16.2	17.1						0	
15012001	7	17.4	18.3						0	
15012001	8	14.0	17.4						0	
15012001	9	14.0	14.6					P	0	
15012001	10	16.8	18.0						0	
15012001	11	16.2	17.1						0	1
15012001	12	14.6	16.8						0	1
15012001	13	16.2	18.9						0	1
15012001	14	13.4	13.4						0	1
15012001	15	17.4	19.8	1	1			2	0	1
15012001	16	16.5	17.7	1				1	0	
15012001	17	12.8	14.6						0	1
15012001	18	11.9	13.1						0	1
15012001	19	11.6	12.2						0	1
15012001	20	14.0	14.6						0	1
15012001	21	14.6	14.9						0	
15012001	22	14.6	16.8						0	
15012001	23	16.5	18.6						0	
15012001	24	16.8	18.3	1				1	2	
15012001	25	13.4	14.0	1				1	1	
15012001	26	13.4	13.4						2	
15012001	27	18.3	20.4						4	
15012001	28	21.3	21.3	4	1			5	5	1
16012001	29	19.5	19.8	1				1	2	
16012001	30	19.8	20.1						5	
16012001	31	19.2	20.1						3	
16012001	32	15.2	15.5	1				1	6	
16012001	33	15.2	15.5	2				2	3	
16012001	34	17.7	18.0	2				2	1	
16012001	35	17.7	18.0	3	1			4	14	
16012001	36	16.8	17.1	4				4	11	
16012001	37	16.8	19.8	1				1	4	
16012001	38	15.8	18.6	4				4	0	

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
16012001	39	16.8	17.4						0	1
16012001	40	17.7	18.6	1				1	1	
16012001	41	19.5	19.5	8	3			11	69	
16012001	42	20.1	20.7	2	1			3	7	
16012001	43	18.6	18.9	4				4	1	
16012001	44	18.9	21.0	2				2	53	
16012001	45	18.0	21.9	1				1	31	
16012001	46	20.4	22.3	1				1	3	
16012001	47	18.9	21.3	1				1	12	
16012001	48	20.4	21.3	10				10	19	
16012001	49	16.2	20.1	3				3	0	
16012001	50	13.1	17.1	7	1			8	14	
16012001	51	21.9	23.8	20	1			21	31	
16012001	52	19.2	19.2	8	6			14	3	
16012001	53	19.5	21.3	13	8			21	1	
16012001	54	16.8	20.4					15	2	
16012001	55	11.9	14.3						0	
16012001	56	13.4	20.1	11	2			13	0	
16012001	57	18.9	23.2	25	7			32	2	
16012001	58	19.8	22.9	13	3			16	13	
16012001	59	20.4	21.6	4	5			9	1	
16012001	60	20.1	20.7	23	4			27	2	
16012001	61	21.9	22.9	49	16			65	1	
16012001	62	22.3	22.9	42	8			59	0	
16012001	63	21.9	22.3	32	1			33	0	
16012001	64	21.9	21.6	20	7			27	0	
16012001	65	20.4	22.6					26	1	
16012001	66	14.6	18.3					P	111	
16012001	67	16.5	17.4						83	
16012001	68	17.1	18.0						142	
16012001	69	15.8	17.4						24	
17012001	70	15.8	16.5						138	
17012001	71	18.3	18.9						123	
17012001	72	19.2	19.8						49	
17012001	73	18.3	18.6						10	
17012001	74	17.7	18.3						6	
17012001	75	17.1	17.1						34	

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
17012001	76	17.7	18.6	8	5			13	14	
17012001	77	18.6	17.7	6	5			11	12	1
17012001	78	16.5	14.3	1	5			6	2	
17012001	79	17.7	19.5	4	5			9	3	
17012001	80	15.2	16.2	4	7			11	1	
17012001	81	18.9	19.8	15	8			23	1	
17012001	82	16.5	18.9	9	1			10	8	
17012001	83	17.4	17.7	1	1			12	28	
17012001	84	17.4	17.4						6	
17012001	85	17.4	18.0	1	3			4	25	
17012001	86	17.7	18.0	14	7			21	95	
17012001	87	18.6	19.2						58	
17012001	88	19.5	19.8						10	
17012001	89	18.0	18.9						45	
17012001	90	17.7	19.5						10	
17012001	91	20.1	20.4	20	6			26	0	
17012001	92	16.8	19.2					P	14	
17012001	93	18.3	18.9	24	9			33	12	
17012001	94	18.0	18.3	14	6			20	10	
17012001	95	17.4	18.0	13	3			16	18	
17012001	96	17.4	17.4	19	6			25	6	
17012001	97	15.8	16.8	11	6			17	56	
17012001	98	14.0	14.9	3	10			13	52	
17012001	99	12.8	15.8	6	2			8	29	
17012001	100	15.2	15.8						30	
17012001	101	13.7	15.2						42	
17012001	102	14.3	14.3					P	200	
17012001	103	16.2	16.5					P	119	
17012001	104	16.2	16.8					P	74	
17012001	105	16.8	17.1					P	26	
17012001	106	16.8	18.0					P	49	
17012001	107	14.3	16.8						17	
17012001	108	12.5	17.1					P	3	
18012001	109	16.5	17.4					5	0	
18012001	110	18.9	19.2					P	1	
18012001	111	19.5	20.4					P	2	
18012001	112	15.2	17.7					P	13	

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
18012001	113	15.2	18.3					P	0	
18012001	114	17.7	17.7						0	
18012001	115	18.0	18.6					P	4	
18012001	116	18.9	19.2		16	13		29	5	
18012001	117	16.8	18.3					P	34	
18012001	118	16.5	19.5					P	6	
18012001	119	21.6	21.9					P	1	
18012001	120	18.0	21.0					P	1	
18012001	121	14.6	15.5					P	0	
18012001	122	19.2	21.3						0	
18012001	123	17.4	21.3					P	0	
18012001	124	19.5	21.3					P	1	
18012001	125	15.2	16.8						74	
18012001	126	15.2	15.5						12	
18012001	127	16.5	16.5					P	5	
18012001	128	19.5	18.3					P	1	
18012001	129	17.7	18.3					P	1	
18012001	130	13.1	15.5						0	
18012001	131	15.2	15.8	12	3			15	0	
18012001	132	17.1	17.7	21	5			26	0	
18012001	133	18.0	18.9	16	6			22	0	
18012001	134	18.0	19.2	4	3			7	0	
18012001	135	16.8	17.1					7	0	
18012001	136	17.1	18.0	4	3			7	0	
18012001	137	17.4	15.8	2	3			9	1	
18012001	138	10.7	13.7					P	4	
18012001	139	19.5	22.6					P	7	
18012001	140	16.8	19.2						32	1
18012001	141	17.4	18.0					P	20	
18012001	142	19.5	22.3						7	
18012001	143	17.1	18.6					P	40	
18012001	144	16.8	17.1					P	39	
19012001	145	17.1	17.1					P	8	
19012001	146	17.7	18.9					P	4	
19012001	147	18.6	18.9					P	2	
19012001	148	19.5	20.1					P	1	
19012001	149	14.0	20.7					P	1	

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
19012001	150	12.5	15.8					P	9	
19012001	151	17.1	18.6					P	15	
19012001	152	13.1	14.0						0	
19012001	153	12.5	12.8						0	
19012001	154	13.1	13.4						0	
19012001	155	14.0	14.6						0	
19012001	156	14.6	15.8						0	
19012001	157	19.8	21.0						0	
19012001	158	21.6	22.3						0	
19012001	159	18.9	18.9						0	
19012001	160	16.5	17.4						0	
19012001	161	15.5	15.8					P	0	
19012001	162	13.4	13.7						0	
19012001	163	13.7	14.0						0	
29012000	1	11.3	12.2	7				7	1	
29012000	2	14.0	14.6					0	0	
29012000	3	13.7	14.6					0	0	
29012000	4	11.9	12.5					0	0	
29012000	5	13.1	13.7					0	2	
29012000	6	12.2	14.3	1				1	0	
29012000	7	13.4	14.0					0	0	
29012000	8	13.4	13.7					0	0	
29012000	9	13.7	13.7	2				2	1	
29012000	10	13.4	14.0	10				10	1	
30012000	11	17.1	17.1	7				12	2	
30012000	12	16.8	17.1	31	3			39	0	
30012000	13	17.1	17.4	60	4			64	0	
30012000	14	12.8	16.2					84	0	
30012000	15	16.2	16.5					15	0	
30012000	16	17.1	17.1					0	0	
30012000	17	14.6	16.8					2	0	
30012000	18	13.1	16.2					13	2	
30012000	19	15.8	15.8					0	1	
30012000	20	15.8	16.8					0	1	
30012000	21	16.2	17.1					0	0	
30012000	22	17.7	18.0					0	43	
30012000	23	14.0	14.9					0	0	

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
30012000	24	12.8	14.6					0	0	
30012000	25	12.2	12.5					1	0	
30012000	26	16.8	16.8					0	0	
30012000	27	13.7	16.8					0	0	
30012000	28	13.7	17.7					0	0	
30012000	29	19.5	20.4					0	3	
30012000	30	16.8	20.1					0	1	
30012000	31	18.0	19.2					0	1	
30012000	32	18.0	18.9					0	0	
30012000	33	19.2	20.1					0	0	
30012000	34	12.5	18.9					0	0	
30012000	35	14.9	16.5					0	0	
30012000	36	14.6	18.9					0	0	
30012000	37	15.8	20.1					0	0	
30012000	38	17.1	21.0					0	41	
31012000	39	18.3	21.6					0	125	
31012000	40	19.5	23.2					0	73	
31012000	41	20.1	21.9					0	30	
31012000	42	19.2	19.5					0	19	
31012000	43	17.4	19.5					0	21	
31012000	44	17.4	17.7					0	5	
31012000	45	18.3	19.5					0	26	
31012000	46	18.3	19.8					0	27	
31012000	47	18.0	18.3					0	55	
31012000	48	12.8	16.2					0	20	
31012000	49	16.8	20.1					0	188	
31012000	50	18.9	19.5					0	370	
31012000	51	16.5	18.3					0	88	
31012000	52	17.7	18.0					0	39	
31012000	53	18.3	19.5					0	388	
31012000	54	20.4	20.7					0	87	
31012000	55	18.6	19.5					0	98	
31012000	56	14.9	15.5					0	59	
31012000	57	13.1	18.0					0	36	
31012000	58	18.6	21.3					0	83	
31012000	59	20.1	20.7					0	204	
31012000	60	18.3	21.0					0	121	

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
31012000	61	19.8	19.8					0	493	
31012000	62	15.8	18.0					0	165	
31012000	63	15.2	16.5					0	156	
31012000	64	16.2	18.3					0	184	
1022000	65	17.1	19.8					0	132	
1022000	66	14.3	15.8	1				1	42	
1022000	67	14.9	17.1					0	49	
1022000	68	14.6	14.9					0	213	
1022000	69	14.6	15.5					0	65	
1022000	70	17.7	18.6					0	16	
1022000	71	17.7	19.8					0	5	
1022000	72	17.4	19.2					0	4	
1022000	73	17.7	20.7					0	9	
1022000	74	17.1	19.2					0	13	
1022000	75	21.6	22.9					0	26	
1022000	76	21.0	21.6					0	27	
1022000	77	21.6	22.3					0	46	
1022000	78	17.7	19.8					0	37	
1022000	79	18.3	19.5					0	5	
1022000	80	15.8	17.1					0	177	
1022000	81	17.7	18.0					0	608	
1022000	82	17.1	17.7					0	74	
1022000	83	13.1	15.5					0	50	
1022000	84	15.5	15.8					0	13	
1022000	85	11.9	12.5					0	106	
1022000	86	14.6	18.3					0	40	
1022000	87	18.9	20.1					0	12	
1022000	88	19.5	20.1					0	10	
1022000	89	18.0	18.9					0	19	
1022000	90	15.8	16.8					0	38	
1022000	91	14.6	14.9					0	21	
1022000	92	14.9	16.5					0	29	
2022000	93	15.5	16.2					0	30	
2022000	94	13.1	16.8					0	1	
2022000	95	14.9	18.6					0	0	
2022000	96	14.9	17.4					0	0	
2022000	97	15.8	18.6					0	0	

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
2022000	98	18.3	18.6					0	0	
2022000	99	20.7	21.9					0	0	
2022000	100	18.6	18.9					1	0	
2022000	101	18.3	18.6					0	0	
2022000	102	15.5	21.3					0	1	
2022000	103	15.2	19.8					0	0	
2022000	104	11.9	13.1					0	0	
2022000	105	12.2	12.5					0	0	
2022000	106	12.8	16.8					0	1	
2022000	107	16.5	20.1					0	34	
2022000	108	14.6	20.1					0	636	
2022000	109	14.6	21.0					0	50	
2022000	110	16.2	16.2					0	87	
2022000	111	15.5	16.5					0	50	
2022000	112	13.4	20.7					0	153	
2022000	113	12.8	14.3					0	46	
2022000	114	12.8	13.7					0	43	
2022000	115	12.8	17.1					0	80	
2022000	116	16.8	17.7					0	26	
2022000	117	14.6	16.8					0	12	
2022000	118	12.5	19.2					0	9	
2022000	119	18.3	22.6	1				1	24	
2022000	120	17.7	19.8					0	5	
2022000	121	18.6	21.6					0	0	
2022000	122	13.1	15.5					0	0	
3022000	123	11.6	15.5					1	1	
3022000	124	16.2	21.3					0	7	
3022000	125	16.8	18.3					0	0	
3022000	126	18.3	18.3	10				19	6	
3022000	127	17.7	21.0	88				88	15	
3022000	128	18.6	21.9					7	28	
3022000	129	16.2	17.1					4	0	
3022000	130	18.0	18.3					4	0	
3022000	131	22.6	23.5					5	0	
3022000	132	21.9	23.5					0	1	
3022000	133	16.5	18.0					0	0	
3022000	134	13.4	17.7					0	0	

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
3022000	135	15.8	16.2					0	0	
3022000	136	14.0	14.3					0	0	
4022000	137	12.5	14.9					0	0	
4022000	138	9.8	13.7	5				5	0	
4022000	139	13.4	15.5	6	1			7	0	
4022000	140	12.8	14.9	4				4	0	
4022000	141	20.4	20.7	4				4	0	
3021999	1	14.0	14.3						0	
3021999	2	14.6	15.8						0	
3021999	3	12.5	12.8						0	
3021999	4	14.6	14.9						0	
3021999	5	11.6	11.9						0	
3021999	6	13.1	13.4						0	
3021999	7	11.9	12.8						0	
3021999	8	12.5	12.5						1	
3021999	9	12.5	12.5						0	
3021999	10	14.6	15.2						0	
3021999	11	15.2	15.5						0	
3021999	12	15.2	15.2						0	
4021999	13	12.5	14.6						0	
4021999	14	11.6	12.2						0	
4021999	15	12.5	14.0						0	
4021999	16	17.4	18.9						1	
4021999	17	17.4	18.6						1	
4021999	18	16.8	19.2						1	
4021999	19	19.8	21.3						0	
4021999	20	19.5	20.4						0	
4021999	21	12.2	17.4						0	
4021999	22	16.5	17.1						0	
4021999	23	15.8	16.2						0	
4021999	24	10.7	12.8						1	
4021999	25	13.4	13.4						0	
4021999	26	15.5	16.5						0	
4021999	27	17.7	18.3						0	
4021999	28	19.2	20.7					7	0	
4021999	29	12.5	13.7						0	
4021999	30	12.5	13.1						0	

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
4021999	31	12.8	13.1						0	
4021999	32	11.3	11.9						0	
4021999	33	11.3	11.6						1	
4021999	34	10.7	14.0						0	
4021999	35	24.1	24.7						0	
4021999	36	13.7	22.6						0	
4021999	37	18.3	18.3						0	
4021999	38	17.4	17.4						0	
4021999	39	15.2	18.0						2	
4021999	40	10.7	11.3						0	
4021999	41	13.1	14.3						0	
4021999	42	19.5	21.6						0	
4021999	43	13.7	13.4						0	
4021999	44	14.9	15.5						0	
4021999	45	21.6	23.2						0	
4021999	46	14.6	21.0						0	
4021999	47	13.1	18.0						1	
4021999	48	15.8	18.0						0	
5021999	49	19.8	20.7						0	
5021999	50	14.0	18.0						0	
5021999	51	15.5	16.2						1	
5021999	52	15.5	17.4						2	
5021999	53	14.6	18.3						5	
5021999	54	16.8	17.4						0	
5021999	55	18.0	21.0						0	
5021999	56	17.4	17.4						1	
5021999	57	12.2	16.5			10		10	1	
5021999	58	15.2	17.4						1	
5021999	59	18.3	20.7						0	
5021999	60	19.8	20.4			25	2	27	5	
5021999	61	19.2	19.2			10	5	15	0	
5021999	62	20.1	21.6						0	
5021999	63	19.2	20.1						1	
5021999	64	18.0	18.3						3	
6021999	65	15.2	17.4						81	
6021999	66	14.0	16.5						10	
6021999	67	13.7	18.0						5	

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
6021999	68	18.6	19.5						1	
6021999	69	13.7	14.3						26	
6021999	70	17.7	18.9						8	
6021999	71	13.7	15.8						7	
6021999	72	13.7	17.4						0	
6021999	73	18.3	18.6						9	
6021999	74	17.1	17.7						17	
6021999	75	16.8	17.1						20	
6021999	76	13.4	14.9						7	
6021999	77	15.5	17.4						0	
6021999	78	13.7	17.4						6	
6021999	79	13.1	13.1						7	
6021999	80	13.7	14.0						6	
6021999	81	11.9	12.2			19		19	0	
6021999	82	11.9	13.1						0	
6021999	83	13.4	15.5			17	2	19	1	
6021999	84	14.3	15.5			16		16	1	
6021999	85	18.3	18.3			11		11	0	
6021999	86	17.1	18.3						6	
6021999	87	20.1	20.4						2	
7021999	88	19.8	21.0						0	
7021999	89	19.5	21.6			9	2	11	0	
7021999	90	18.3	18.9						6	
7021999	91	12.5	16.8						2	
7021999	92	13.7	17.1						3	
7021999	93	17.7	18.0						0	
7021999	94	14.6	15.2			5		5	1	
7021999	95	17.1	17.7			6	1	7	0	
7021999	96	15.5	15.8			2		2	0	
7021999	97	16.2	16.5			4		4	0	
7021999	98	18.0	18.1			9	2	11	0	
7021999	99	16.8	17.7			28	5	33	0	
7021999	100	14.3	18.9			65	11	76	0	
7021999	101	18.9	19.2			1	2	4	0	
7021999	102	16.8	19.2						0	
7021999	103	11.6	11.9						0	
7021999	104	17.4	18.0						0	

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
7021999	105	18.0	19.8						0	
7021999	106	19.5	20.1						0	
7021999	107	17.1	18.3						0	
7021999	108	15.5	16.5			11		11	0	
7021999	109	13.1	14.6						1	
7021999	110	15.5	17.4			4		4	0	
7021999	111	19.5	20.4			7		7	0	
7021999	112	12.2	18.3						0	
7021999	113	16.8	17.1			8		8	0	
7021999	114	23.5	27.4			26	2	28	0	
7021999	115	17.7	20.4						1	
7021999	116	16.8	17.1						0	
8021999	117	16.5	18.0						0	
8021999	118	17.7	18.3						0	
8021999	119	15.8	16.8						0	
8021999	120	17.4	20.7						0	
8021999	121	19.8	22.9						0	
8021999	122	18.3	19.2						0	
8021999	123	16.8	16.8						0	
8021999	124	13.1	15.5			3			1	
8021999	125	14.6	17.4						0	
8021999	126	17.4	18.6						0	
8021999	127	18.9	19.2						2	
8021999	128	20.1	21.3						2	
8021999	129	20.4	21.6						1	
8021999	130	19.8	20.1						0	
8021999	131	19.5	20.7						0	
8021999	132	20.7	22.3						3	
8021999	133	21.6	22.3						1	
8021999	134	21.6	21.9						0	
8021999	135	19.2	19.5						0	
8021999	136	18.3	18.9						4	
8021999	137	18.9	19.2						0	
8021999	138	17.7	18.3						0	
8021999	139	19.8	22.6						0	
8021999	140	17.7	19.2						0	
8021999	141	17.7	19.2						1	

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
8021999	142	13.7	15.2						0	
8021999	143	12.8	13.4						4	
8021999	144	16.2	17.1						1	
8021999	145	16.2	17.4					3	0	
8021999	146	18.3	19.5						0	
16011998	1	16	18							
17011998	2	18	18						1	
17011998	3	19	20							
17011998	4	18	19					1		
17011998	5	14	15							
17011998	6	17	19							
17011998	7	15	18							
17011998	8	18	18							
17011998	9	15	17							
17011998	10	20	20							
17011998	11	15	17					2		
18011998	12	15	15					3		
18011998	13	15	17					4	20	
18011998	14	22	23					3	1	
18011998	15	19	20							
18011998	16	18	22					1		
18011998	17	16	19					1	1	
18011998	18	15	16					14	12	
18011998	19	14	16					6	3	
18011998	20	16	19					5	5	
18011998	21	20	21					12	1	
18011998	22	18	20					34		
18011998	23	18	18					25	3	
18011998	24	16	18					27	1	
18011998	25	18	19					19	1	
19011998	26	16	17					14	9	
19011998	27	16	16					5	20	
19011998	28	14	16					1	26	
19011998	29	16	16					2	148	
19011998	30	16	16					1	50	
20011998	31	13	14						22	
20011998	32	15	17						86	

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
20011998	33	14	17					3		
20011998	34	18	18					2		
20011998	35	15	16					12	1	
21011998	36	23	24					155		
21011998	37	20	27					392	11	
21011998	38	15	15					2	4	
21011998	39	16	19					3	10	
21011998	40	20	21					7	1	
21011998	41	20	21							
21011998	42	21	22					15	10	
21011998	43	18	19					42	2	
21011998	44	16	18					51	4	
21011998	45	18	19					36	5	
21011998	46	19	21					16		
21011998	47	20	20					3	2	
21011998	48	19	19						5	
21011998	49	19	20					6		
22011998	50	16	18					3	2	
22011998	51	24	24					9		
22011998	52	22	23					2		
22011998	53	14	15							
22011998	54	15	16							
22011998	55	13	15							
22011998	56	13	15							
22011998	57	14	15							
22011998	58	15	15					2		
22011998	59	14	16							
22011998	60	15	17							
22011998	61	17	19							
22011998	62	18	20							
22011998	63	20	22					4		
22011998	64	21	22					4		
1021997	1	17	18					0		
2021997	2	18	20					3	1	
2021997	3	16	19					5	16	
2021997	4	17	17					2	1	
2021997	5	17	18					4	1	

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
2021997	6	18	19					1		
2021997	7	16	17					6	1	
2021997	8	18	19					2	1	
2021997	9	17	18					1		
2021997	10	17	18			5	1	6		
2021997	11	14	15					2		
2021997	12	16	26					0		
2021997	13	15	26					0		
2021997	14	25	26					0		
2021997	15	16	16					2	1	
2021997	16	15	16					47	2	
2021997	17	16	17					64	22	
2021997	18	11	12					35	36	
2021997	19	15	15					4	30	
2021997	20	13	16					21	28	
2021997	21	15	18					40	12	
2021997	22	13	18					46	16	
2021997	23	15	18					36	21	
2021997	24	13	16					23	3	
2021997	25	15	16					27	6	
2021997	26	10	14					37	9	
2021997	27	14	14					18	4	
2021997	28	14	16					25	3	
3021997	29	16	16					30	6	
3021997	30	15	15					13	4	
3021997	31	13	14					0		
3021997	32	15	17					0	1	
3021997	33	16	17					0	7	
3021997	34	16	16					0	3	
3021997	35	16	16					0	6	
3021997	36	16	20					0	5	
3021997	37	19	20					0	42	
3021997	38	15	18					0	29	
3021997	39	16	18					0		
3021997	40	16	17					1	10	
3021997	41	9	13					0	14	
3021997	42	11	13					0	2	

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
3021997	43	13	13					0	2	
3021997	44	15	18					0	6	
3021997	45	12	16					0	3	
3021997	46	15	18					0	1	
3021997	47	18	22					0	1	
3021997	48	22	23					0		
3021997	49	24	24					0	1	
3021997	50	19	24					0	4	
3021997	51	16	20					0	7	
3021997	52	15	21					0	4	
3021997	53	16	19					0	7	
3021997	54	14	18					0	20	
4021997	55	16	18					0	2	
4021997	56	16	18					0	2	
4021997	57	16	18					0	1	
4021997	58	16	18					0	1	
4021997	59	18	20					0	2	
4021997	60	22	24					0	11	
4021997	61	24	24					0	4	
4021997	62	22	24					0	174	
4021997	63	16	18					0	36	
4021997	64	18	20					0	6	
4021997	65	20	22					0	1	
4021997	66	22	22					2	10	
4021997	67	18	27					0	6	
4021997	68	18	22					0	2	
4021997	69	16	20					0	29	
4021997	70	16	18					0	34	
4021997	71	19	19					0	18	
4021997	72	18	22					0	38	
4021997	73	16	22					0	103	
4021997	74	18	22					0	20	
4021997	75	19	19					0	4	
4021997	76	22	24	2				2	5	
4021997	77	20	22					0	4	
4021997	78	18	20					0	3	
4021997	79	15	24					1	4	

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
5021997	80	16	18					0	2	
5021997	81	15	18					0	2	
5021997	82	17	23					0		
5021997	83	16	18					0		
5021997	84	18	20					0	1	
5021997	85	18	20					0		
5021997	86	13	17					0		
5021997	87	22	24					0	2	
5021997	88	22	22					0	2	
5021997	89	17	18					0	6	
5021997	90	16	18					0	4	
5021997	91	15	16					1	3	
5021997	92	15	16					0	4	
5021997	93	15	20					0		
5021997	94	12	16					0	3	
5021997	95	20	23					0	1	
5021997	96	15	24					0	1	
5021997	97	20	22					2		
5021997	98	15	16					0	9	
5021997	99	16	20	1				1	7	
5021997	100	16	22	2				2	3	
5021997	101	18	18					0	6	
5021997	102	14	18					0	5	
5021997	103	20	20					0	10	
5021997	104	20	22					0	4	
5021997	105	11	15					1	12	
6021997	106	11	16	4				4	11	
6021997	107	15	17	1				1	20	
6021997	108	13	13	7				7	33	
6021997	109	13	16	1				1	49	
6021997	110	15	16	2				2	28	
6021997	111	13	16	2				2	5	
6021997	112	14	16					8	14	
6021997	113	13	16					2	28	
6021997	114	13	16					0	29	
6021997	115	13	16					0	9	
6021997	116	18	18					0	41	

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
6021997	117	15	16					0	42	
6021997	118	15	16					0	6	
6021997	119	13	16					0		
6021997	120	15	16	2				2	60	
6021997	121	15	16					0	8	
6021997	122	18	20	8				8	1	
6021997	123	13	13					0		
6021997	124	15	18					0		
6021997	125	15	16	1				1		
6021997	126	16	19					0		
6021997	127	16	16					0		
6021997	128	16	16	1	2			3	1	
6021997	129	15	16		1			1		
6021997	130	16	18					0		
6021997	131	16	17					0		
23011996	1	11	11						0	
23011996	2	16	17						0	
23011996	3	17	19						0	
23011996	4	12	13						0	
24011996	5	13	16						0	
24011996	6	15	15						0	
24011996	7	18	19						0	
24011996	8	26	27	37	4			41	2	
24011996	9	20	21	83	17			188	0	
24011996	10	19	20	98	2			228	1	
24011996	11	19	19					0	15	
24011996	12	19	19					19	4	
24011996	13	21	21					60	16	
24011996	14	21	21						2	
24011996	15	21	21						0	
24011996	16	14	17						2	
24011996	17	20	20						1	
24011996	18	12	12						1	
24011996	19	12	12						2	
24011996	20	12	13						2	
24011996	21	14	14						1	
24011996	22	14	18						1	

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
24011996	23	17	19						0	
24011996	24	17	18						1	
24011996	25	13	14						0	
24011996	26	12	13						0	
24011996	27	17	23						0	
24011996	28	12	18						2	
24011996	29	17	19	1				1	0	
24011996	30	16	18	3				3	0	
24011996	31	25	26		1			2	2	
25011996	32	20	20						0	1
25011996	33	20	20						0	
25011996	34	14	16						0	1
25011996	35	12	17						0	1
25011996	36	19	19						0	
25011996	37	15	18						6	
25011996	38	13	14						44	
25011996	39	11	12						0	
25011996	40	15	15						2	
25011996	41	12	12						4	
25011996	42	13	13						0	1
25011996	43	11	12						3	
7021996	44	18	20	1				1	1	
7021996	45	16	17						0	2
7021996	46	15	18						0	
7021996	47	14	14						0	
7021996	48	15	15						0	
7021996	49	20	20						2	
7021996	50	20	20						3	
7021996	51	22	22						0	
7021996	52	20	20						8	
7021996	53	19	19						1	
7021996	54	22	22						1	
7021996	55	21	22					42	1	
7021996	56	15	15					3	1	1
7021996	57	16	22					20	5	1
7021996	58	24	25					53	18	
7021996	59	30	31						20	

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
7021996	60	20	25					P	0	
7021996	61	21	25					P	5	
7021996	62	23	27					P	1	
7021996	63	21	25					P	6	
7021996	64	22	23					P	2	
8021996	65	26	26						6	
8021996	66	23	23						2	
8021996	67	20	28						2	
8021996	68	17	17						2	
8021996	69	21	22					8	4	
8021996	70	12	14						2	
8021996	71	20	20					2	1	
8021996	72	19	19						6	
8021996	73	19	20						1	
8021996	74	20	21					2	2	
8021996	75	22	23						1	
8021996	76	17	23						3	
8021996	77	21	23						4	
8021996	78	21	22						40	
8021996	79	20	21						26	
8021996	80	20	23						26	
8021996	81	22	24						10	
8021996	82	21	21						22	
8021996	83	19	23						7	
8021996	84	20	20						11	
8021996	85	20	23						4	
8021996	86	19	20						5	
8021996	87	20	20						9	
8021996	88	21	23					31	2	
8021996	89	26	27					P	0	
8021996	90	19	23						1	
8021996	91	19	19						1	
9021996	92	19	19						1	
9021996	93	20	21					2	0	
9021996	94	20	21					P	3	
9021996	95	20	20						2	
9021996	96	16	19						1	

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
9021996	97	20	20						1	
9021996	98	11	13						2	
9021996	99	11	14						1	
9021996	100	13	16					P	0	
9021996	101	19	22						6	
9021996	102	12	15						5	
9021996	103	14	15						4	
9021996	104	14	16						1	
9021996	105	12	15						2	
9021996	106	14	15						5	
9021996	107	12	15						7	
9021996	108	13	14						2	
9021996	109	13	14						2	
9021996	110	13	14						8	
9021996	111	13	14				1	1	0	
9021996	112	20	20						2	
9021996	113	15	21						1	
9021996	114	22	26						1	
9021996	115	19	23	1				1	0	
9021996	116	23	25					P	1	
9021996	117	27	27					P	0	
10021996	118	20	23						1	
10021996	119	19	20		1			1	0	
10021996	120	21	28						0	
10021996	121	17	21						0	
10021996	122	20	20						0	
10021996	123	13	16						0	
10021996	124	12	16					P	0	
10021996	125	14	15						0	
10021996	126	12	12						0	
10021996	127	12	13						3	
10021996	128	14	17	1				1	2	
10021996	129	14	14						2	
10021996	130	13	13					P	7	
10021996	131	12	15					4	5	
10021996	132	14	14					P	5	
10021996	133	11	14					6	3	

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
10021996	134	14	16					18	2	
10021996	135	16	16					7	0	
10021996	136	16	17					2	0	
10021996	137	11	15						1	
10021996	138	21	22					P	0	
10021996	139	24	28					P	0	
10021996	140	29	33					P	0	
11021996	141	19	25					7	0	
11021996	142	18	18						0	
11021996	143	28	36						0	
11021996	144	22	28						0	
11021996	145	24	24						0	
11021996	146	18	20						0	
11021996	147	17	22					286	0	1
11021996	148	20	20					P	0	
11021996	149	21	23					P	0	
11021996	150	20	20			119	5	124	2	
11021996	151	18	19						4	
11021996	152	20	20						10	
11021996	153	19	21						2	
11021996	154	17	21						2	
11021996	155	18	20						14	
11021996	156	18	19					P	1	
11021996	157	16	18					P	3	
11021996	158	16	18						1	
11021996	159	19	20						0	
11021996	160	19	20						3	
11021996	161	17	18						5	
11021996	162	19	20						7	
11021996	163	19	19						8	
11021996	164	19	19						9	
11021996	165	21	21					P	11	
11021996	166	14	15						12	
11021996	167	14	15						19	
11021996	168	15	15						3	
11021996	169	15	16					P	0	
11021996	170	18	20					P	0	

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
11021996	171	19	20					P	0	
11021996	172	18	18						1	
11021996	173	19	20					P	0	
11021996	174	13	13					P	0	
11021996	175	12	15						1	
11021996	176	12	12						3	
12021996	177	12	12						1	
12021996	178	11	12						1	
12021996	179	11	11					11	0	
12021996	180	12	14					6	2	
12021996	181	10	15					2	0	
12021996	182	20	20					7	2	
12021996	183	20	20					26	1	
12021996	184	18	19					P	0	
12021996	185	17	17						3	
12021996	186	17	17						4	
12021996	187	20	20					7	2	
12021996	188	14	14					6	1	
12021996	189	11	13						23	
12021996	190	16	16						13	
12021996	191	14	15						3	
12021996	192	16	17		1			1	18	
12021996	193	12	16						14	
12021996	194	13	15						15	
12021996	195	15	16						8	
12021996	196	12	15						9	
12021996	197	13	16						4	
12021996	198	16	17						5	
12021996	199	14	14						6	
12021996	200	14	16						6	
12021996	201	14	14						4	
12021996	202	12	14						1	
12021996	203	16	19	1				1	0	
12021996	204	20	20						0	
24011995	1	16.5	21.0						1	
25011995	2	10.1	14.9						9	
25011995	3	9.1	16.8						36	

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
25011995	4	12.5	13.1						7	
25011995	5	11.3	11.9						3	
25011995	6	11.0	14.3						4	
25011995	7	12.5	14.9						5	
25011995	8	15.5	19.2						14	
25011995	9	20.7	22.3						0	
25011995	10	10.1	17.7						3	
25011995	11	10.1	13.1						1	
25011995	12	9.8	12.5						2	
25011995	13	9.4	10.7						2	
25011995	14	10.1	9.8						0	
25011995	15	15.5	21.9						0	
26011995	16	9.1	9.4						4	
26011995	17	10.1	11.3						26	
26011995	18	11.3	11.3						40	
26011995	19	11.3	14.3						4	
26011995	20	11.6	15.8						56	
26011995	21	10.4	11.3						24	
26011995	22	13.7	15.8						36	
26011995	23	13.1	14.9						30	
26011995	24	10.1	10.4						1	
26011995	25	11.9	14.0						2	
26011995	26	10.7	11.0						14	
26011995	27	9.4	10.1						9	
26011995	28	10.4	10.7						15	
26011995	29	11.3	11.6						25	
26011995	30	12.5	14.0						13	
27011995	31	10.4	11.0						0	
27011995	32	8.8	13.1						33	
27011995	33	11.6	12.8						45	
27011995	34	11.6	17.4						10	
27011995	35	10.4	14.3						1	
27011995	36	12.5	15.2						5	
27011995	37	10.4	15.2						24	
27011995	38	10.1	11.0						0	
27011995	41	14.6	16.2						7	
27011995	42	11.9	11.9						8	

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
27011995	43	12.2	12.2						5	
27011995	44	12.5	13.4						5	
27011995	45	10.4	11.6						0	
27011995	46	11.3	12.2						0	
28011995	47	18.3	18.3						5	
28011995	48	13.4	15.8						10	
28011995	49	13.1	16.8						2	
28011995	50	10.1	21.0						2	
28011995	51	14.9	15.8						2	
28011995	52	11.3	18.3						10	
28011995	53	13.1	14.6						13	
28011995	54	12.2	16.8						326	
28011995	55	16.8	18.0						0	
28011995	56	15.5	16.5						3	
28011995	57	12.5	14.9						0	
28011995	58	11.9	12.8						4	
28011995	59	8.5	11.6						5	
22011994	1	12.5	13.4					P	2	
22011994	2	12.8	16.8						0	
22011994	3	14.6	17.4						2	
22011994	4	17.4	19.2						1	
22011994	5	13.1	18.6						0	
22011994	6	14.6	14.9						2	P
22011994	7	19.8	19.8						0	P
22011994	8	13.1	13.4						1	
22011994	9	13.1	16.5						1	
22011994	10	15.2	18.3						3	
22011994	11	18.3	20.7						3	
22011994	12	15.2	17.1						16	
22011994	13	20.1	20.7						22	
22011994	14	19.2	20.1						28	
22011994	15	11.6	18.0						38	
22011994	16	10.7	11.3						42	
22011994	17	10.7	14.6						7	
22011994	18	11.3	14.6						269	
22011994	19	12.2	13.4						161	
22011994	20	15.2	15.5						43	

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
22011994	21	14.3	14.6						86	
22011994	22	12.2	16.5						261	
22011994	23	11.6	11.9						126	
22011994	24	12.2	12.2						210	
23011994	25	11.3	12.2						84	
23011994	26	11.9	12.2						260	
23011994	27	10.1	12.5						20	
23011994	28	10.7	10.7						19	
23011994	29	14.6	15.8					P	9	
23011994	30	16.2	16.8						38	
23011994	31	13.1	15.8						150	
23011994	32	12.8	14.0						79	
23011994	33	13.4	14.3						252	
23011994	34	14.3	14.9						569	
23011994	35	14.3	14.6						144	
23011994	36	14.0	14.3						249	
23011994	37	14.3	15.2						9	
23011994	38	15.8	16.2						21	
23011994	39	15.8	16.2						22	
23011994	40	16.5	16.8						124	
23011994	41	15.8	16.8						19	
23011994	42	11.6	13.1						10	
23011994	43	12.2	14.9						40	
23011994	44	11.6	12.5						78	
23011994	45	12.2	12.5						28	
23011994	46	11.6	11.9						76	
23011994	47	12.5	15.5						42	
23011994	48	10.7	15.8						77	
23011994	49	11.3	11.3						70	
24011994	50	11.0	11.9						7	
24011994	51	13.4	13.4						48	
24011994	52	10.4	14.6						37	
24011994	53	13.4	16.2						70	
24011994	54	18.9	19.2						32	
24011994	55	17.4	18.6						16	
24011994	56	10.1	17.4						35	
24011994	57	15.2	15.8						75	

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
24011994	58	13.4	14.9						108	
24011994	59	13.7	16.8						98	
24011994	60	16.2	16.8						235	
24011994	61	15.2	15.8						35	
24011994	62	14.3	14.9						183	
24011994	63	13.4	18.0						6	
24011994	64	12.5	12.8						60	
24011994	65	11.6	12.2						4	
24011994	66	11.3	11.6						0	
24011994	67	10.7	13.1						0	
24011994	68	11.6	16.2						9	
24011994	69	16.2	16.8						1	
24011994	70	9.8	13.4						126	
24011994	71	9.1	11.3						157	
24011994	72	14.6	15.2						7	
24011994	73	13.4	14.0						40	
25011994	74	15.2	15.2						15	
25011994	75	9.1	10.7						17	
25011994	76	11.0	11.3						3	
25011994	77	16.5	18.9						1	
25011994	78	17.1	20.4						26	
25011994	79	13.4	13.7						15	
25011994	80	14.9	19.2						8	
25011994	81	16.8	20.7						18	
25011994	82	22.6	23.8						2	
25011994	83	15.2	20.1						0	
25011994	84	21.9	22.9						1	
25011994	85	14.9	22.9						0	
25011994	86	12.8	14.9						1	
25011994	87	14.9	19.5						0	
25011994	88	12.2	14.6						2	
25011994	89	9.8	10.4						0	
25011994	90	10.1	15.2						0	
25011994	91	14.3	15.5						0	
25011994	92	15.2	16.2						0	
25011994	93	17.1	19.2						0	
25011994	94	16.5	18.9						0	

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
25011994	95	19.5	19.8						0	
25011994	96	20.7	27.4						0	
2021993	1	11.0	11.0						0	
3021993	2	14.6	14.6					P	0	
3021993	3	14.6	15.8					P	0	
3021993	4	9.1	11.0					P	0	
3021993	5	9.1	9.1					P	0	
3021993	6	9.1	11.0					P	0	
4021993	7	11.0	12.8						1	
4021993	8	9.1	11.0						1	
4021993	9	7.3	7.3						0	P
4021993	10	17.1	18.3					P	6	
4021993	11	17.1	17.1						5	
4021993	12	9.1	11.0						2	
4021993	13	9.1	9.1					P	2	
4021993	14	11.0	14.6					P	6	
4021993	15	9.1	9.1						1	
4021993	16	9.1	11.0						1	
5021993	17	11.0	12.8						1	
5021993	18	9.1	11.0						0	
5021993	19	12.8	14.6						9	
5021993	20	12.8	12.8						0	
5021993	21	7.3	11.0						0	
5021993	22	9.1	9.1						7	
5021993	23	11.0	12.8						2	
5021993	24	7.3	9.1						0	
5021993	25	23.8	23.8						0	
5021993	26	23.8	23.8						0	
5021993	27	12.8	14.6						11	
5021993	28	14.6	17.1						13	
5021993	29	14.6	14.6						14	
6021993	30	20.1	21.9						9	
6021993	31	20.1	20.1						1	
6021993	32	18.3	18.3						7	
6021993	33	18.3	21.9						5	
6021993	34	12.8	20.1						4	
6021993	35	11.0	12.8						23	

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
6021993	36	14.6	14.6						4	
6021993	37	7.3	7.3						35	
6021993	38	11.0	16.5						42	
6021993	39	16.5	18.3						3	
7021993	40	12.8	12.8						17	
7021993	41	14.6	14.6						10	
7021993	42	12.8	14.6						23	
7021993	43	11.0	12.8						29	
7021993	44	7.3	9.1							
7021993	45	7.3	9.1						32	
7021993	46	7.3	9.1						22	
7021993	47	7.3	7.3						9	
7021993	48	11.0	12.8						10	
7021993	49	11.0	11.0						3	
7021993	50	12.8	12.8						21	
7021993	51	12.8	12.8						36	
7021993	52	12.8	12.8						29	
8021993	53	12.8	14.6						55	
8021993	54	12.8	14.6						11	
8021993	55	14.6	14.6						42	
18011992	1	18.0	23.2					P	9	
18011993	2	11.0	14.3						0	
18011994	3	14.6	17.1					P	18	
18011995	4	12.2	16.8						0	P
18011996	5	12.5	17.1						18	
18011997	6	10.1	17.1					P	1	
18011998	7	12.2	12.2					P	0	
18011999	8	9.8	12.8					P	0	
18012000	9	18.6	18.6					P	1	
18012001	10	19.8	20.1						0	
18012002	11	16.2	19.2						0	
18012003	12	19.2	21.0						0	
18012004	13	15.8	19.8						0	
18012005	14	14.3	19.2						0	
18012006	15	0.0	0.0					P	0	P
18012007	16	17.7	23.2					P	2	
18012008	17	17.1	23.2					P	0	

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
18012009	18	26.5	28.3					P	0	
18012010	19	13.1	20.7					P	0	P
18012011	20	11.3	18.3					P	0	
18012012	21	12.8	15.5						0	
18012013	22	13.7	15.8						1	
18012014	23	15.2	15.5						0	
18012015	24	9.1	15.2						0	
18012016	25	11.0	13.1						0	
18012017	26	14.3	15.5						2	
18012018	27	17.1	17.1						16	
18012019	28	14.0	14.6						1	
18012020	29	9.1	12.2						2	
18012021	30	9.1	9.1						3	
18012022	31	6.1	10.4						2	
18012023	32	14.3	14.3						6	
18012024	33	19.5	21.0						6	
18012025	34	14.0	16.8						41	
18012026	35	14.6	15.5						21	
18012027	36	9.8	15.2						192	
18012028	37	11.6	13.1						162	
18012029	38	19.5	22.6						28	
18012030	39	11.9	11.9						82	
18012031	40	12.2	12.2						28	
18012032	41	13.1	14.9						17	
18012033	42	8.8	13.4						3	
18012034	43	10.7	14.3						3	
18012035	44	13.7	15.5						0	
18012036	45	17.4	19.8						0	
18012037	46	11.6	14.6						13	
18012038	47	13.4	15.8						0	
18012039	48	11.9	12.5						20	
18012040	49	14.6	14.9						21	
18012041	50	11.3	12.2						7	
18012042	51	14.0	15.2						1	
18012043	52	16.5	16.5						39	
18012044	53	12.2	13.4						296	
24011991	1	14.6	18.3					P	0	

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
24011991	2	18.3	21.6						0	
24011991	3	17.1	17.1					P	0	
24011991	4	18.3	19.8					P	0	
24011991	5	18.3	21.9					P	0	
24011991	6	12.8	18.3					P	0	
24011991	7	12.8	18.3					P	0	P
24011991	8	11.0	11.0					P	0	P
24011991	9	14.6	17.4					P	0	
24011991	10	18.3	20.1						1	
24011991	11	16.5	18.3						3	
24011991	12	14.6	14.6						0	
24011991	13	14.6	17.1						0	
24011991	14	14.6	16.5					P	0	
24011991	15	12.8	14.6					P	0	
24011991	16	11.0	12.8					P	0	
24011991	17	11.0	11.0					P	4	
24011991	18	11.0	11.0						2	
25011991	19	12.8	12.8					P	3	
25011991	20	11.0	11.9					P	6	
25011991	21	10.1	11.9					P	6	
25011991	22	11.9	11.9					P	1	
25011991	23	12.8	15.5						13	
25011991	24	18.3	21.9					P	0	P
25011991	25	16.5	21.9						1	
25011991	26	20.1	21.9					P	1	
25011991	27	20.1	22.3						0	
25011991	28	18.3	18.3						0	
25011991	29	16.5	18.3					P	0	P
25011991	30	18.3	20.1					P	0	P
25011991	31	16.5	16.5					P	0	P
25011991	32	14.6	16.5					P	0	P
26011991	33	17.4	21.9					P	10	P
26011991	34	12.8	12.8					P	15	
26011991	35	10.1	13.7					P	4	
26011991	36	12.8	16.5					P	4	
26011991	37	16.5	18.3						2	
26011991	38	14.6	16.5						2	

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
26011991	39	13.1	14.6						2	
26011991	40	11.9	13.1						27	
26011991	41	11.9	14.6						10	
26011991	42	16.5	20.1					P	0	P
26011991	43	16.5	20.1					P	1	P
26011991	44	10.1	20.1					P	0	
26011991	45	18.3	21.9					P	0	
26011991	46	13.7	16.5					P	2	
26011991	47	14.6	14.6					P	17	
26011991	48	12.5	14.9						12	
26011991	49	13.1	16.5						18	
26011991	50	12.5	13.1						5	
26011991	51	11.0	13.1						31	
26011991	52	11.0	11.0						14	
26011991	53	10.4	11.0						16	
26011991	54	9.8	10.1						67	
27011991	55	10.1	10.7						15	
27011991	56	10.1	14.6					P	59	
27011991	57	12.8	15.5						58	
27011991	58	10.7	11.3						3	
27011991	59	12.5	13.1						22	
27011991	60	12.2	13.7						66	
27011991	61	12.8	14.0						83	
27011991	62	10.4	12.8						121	
27011991	63	11.0	11.0						80	
27011991	64	11.3	12.8						123	
27011991	65	9.8	11.0					P	42	
27011991	66	9.1	9.4					P	5	
27011991	67	11.3	12.8					P	29	
27011991	68	9.8	13.1					P	61	
27011991	69	11.3	13.1						104	
27011991	70	12.5	12.8						20	
27011991	71	11.3	13.1						11	
27011991	72	11.0	14.6						25	
27011991	73	13.1	14.6						45	
27011991	74	10.1	11.0						19	
27011991	75	10.1	11.3						6	

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
28011991	76	11.0	11.3					P	2	
28011991	77	9.1	11.3					P	5	
28011991	78	9.4	12.2					P	6	
28011991	79	10.1	12.8					P	6	
28011991	80	10.1	13.1					P	3	
28011991	81	11.3	12.8						2	
28011991	82	12.5	13.7						4	
28011991	83	11.0	13.1						2	
28011991	84	12.8	16.5						7	
28011991	85	11.0	14.6						3	
28011991	86	16.5	18.3						3	
28011991	87	10.7	18.3						5	
28011991	88	11.0	16.5						18	
28011991	89	11.3	16.8					P	6	
28011991	90	9.4	12.2					P	2	
28011991	91	9.1	14.6					P	4	
28011991	92	11.3	17.1					P	1	
28011991	93	11.0	17.4					P	1	
28011991	94	15.5	20.4						1	
28011991	95	19.2	20.7						0	
28011991	96	18.6	21.9						0	
28011991	97	21.0	22.3						0	
28011991	98	17.4	19.5						1	
28011991	99	14.0	17.1						0	
28011991	100	14.9	20.1					P	0	
29011991	101	18.3	21.9					P	0	
29011991	102	21.9	21.9					P	0	
29011991	103	21.9	23.8					P	0	P
29011991	104	21.9	21.9					P	0	
29011991	105	15.5	21.9					P	0	
29011991	106	19.5	23.5						0	
29011991	107	20.4	22.6						0	
29011991	108	20.1	22.3						0	
29011991	109	19.8	24.1						0	
29011991	110	21.9	29.3						0	
29011991	111	21.3	27.7						0	
29011991	112	28.0	28.0						0	

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
29011991	113	25.6	25.6						0	
29011991	114	26.5	29.3						0	P
29011991	115	12.8	18.3						0	
29011991	116	20.1	25.3						0	
29011991	117	22.3	24.1						0	
29011991	118	24.4	27.1						0	
29011991	119	24.1	27.1						0	
29011991	120	21.9	24.1						0	
29011991	121	15.2	18.9						0	
29011991	122	15.8	17.4						0	
29011991	123	15.8	16.5						0	
30011991	124	12.8	14.6					P	0	
30011991	125	12.8	17.1						0	
30011991	126	11.3	12.8						0	
30011991	127	13.7	14.6						0	
30011991	128	12.8	14.3						0	
30011991	129	13.4	14.6						0	
30011991	130	14.3	14.9						0	
30011991	131	11.0	16.5						0	
30011991	132	17.4	21.9					P	0	
30011991	133	13.7	20.4					P	0	
30011991	134	18.3	21.0					P	0	P
30011991	135	14.6	16.5					P	6	P
30011991	136	10.1	14.6					P	11	
30011991	137	10.1	11.3					P	40	
30011991	138	9.8	11.3						20	
30011991	139	11.3	11.3						65	
30011991	140	11.3	11.6						12	
30011991	141	11.0	11.9						1	
30011991	142	11.3	12.8					P	3	P
30011991	143	12.2	12.8					P	0	
30011991	144	12.8	15.2					P	0	P
31011991	145	10.1	11.0						0	
31011991	146	11.0	11.9					P	6	
31011991	147	13.1	15.8					P	44	
31011991	148	13.1	16.8					P	11	P
31011991	149	12.5	13.1						3	

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
31011991	150	12.5	12.5						1	
31011991	151	15.2	16.5						3	
31011991	152	14.3	15.2						25	
31011991	153	13.4	14.6						38	
31011991	154	14.6	16.5						8	
31011991	155	12.8	12.8						6	
31011991	156	11.0	14.6						19	
31011991	157	11.0	12.8						11	
31011991	158	9.1	11.0						23	
31011991	159	11.0	11.9					P	4	P
31011991	160	11.0	14.9					P	1	
31011991	161	13.7	16.5					P	29	P
31011991	162	10.1	11.0					P	41	P
1021991	163	18.6	20.1						0	
1021991	164	20.1	20.1						0	
1021991	165	18.3	20.1						0	
1021991	166	16.2	20.1						0	
1021991	167	18.6	20.1						0	
1021991	168	18.3	20.1						0	
1021991	169	17.4	18.9						0	
1021991	170	18.3	18.3						0	
1021991	171									
1021991	172									
1021991	173									
1021991	174									
1021991	175									
1021991	176								0	
1021991	177								0	
1021991	178								0	
1021991	179								0	
1021991	180								0	
17011990	1	12.8	14.6					P	0	
17011990	2	25.6	25.6					P	0	
17011990	3	27.4	27.4					P	1	
17011990	4	18.3	21.9					P	0	P
17011990	5	29.3	29.3						0	
17011990	6	11.0	12.8					P	14	

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
18011990	7	9.1	12.8						7	
18011990	8	9.1	12.8						1	
18011990	9	9.1	12.8						1	
18011990	10	16.5	16.5						4	
18011990	11	14.6	16.5						61	
18011990	12	14.6	18.3						34	
18011990	13	19.2	20.1						6	
18011990	14	7.3	12.8						49	
18011990	15	9.1	11.0						7	
18011990	16	12.8	12.8						2	
18011990	17	11.0	11.0						6	
18011990	18	9.1	12.8						29	
19011990	19	11.0	11.0						15	
19011990	20	9.1	9.1						4	
19011990	21	9.1	9.1						0	
19011990	22	14.6	14.6						0	
19011990	23	16.5	16.5						0	
19011990	24	9.1	11.0						61	
19011990	25	7.3							51	
19011990	26	11.0							101	
19011990	27	11.0							135	
20011990	28	11.0	11.0						9	
20011990	29	9.1	11.0						45	
20011990	30	11.0	12.8						216	
20011990	31	11.0	11.0						60	
20011990	32	11.0	11.0						12	
20011990	33	9.1	11.0						13	
20011990	34	16.5	18.3						0	
20011990	35	18.3	20.1						0	
20011990	36	12.8	0.0						57	
20011990	37	11.0	0.0						99	
21011990	38	11.0	11.0						7	
21011990	39	11.0	11.0						74	
21011990	40	11.0	11.0						34	
21011990	41	11.0	12.8						2	
21011990	42	9.1	11.0						3	
21011990	43	9.1	0.0						7	

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
21011990	44	9.1	9.1						16	
21011990	45	11.0	12.8						14	
21011990	46	9.1	12.8						10	
21011990	47	9.1	9.1						32	
21011990	48	9.1	9.1						10	
21011990	49	11.0	12.8						24	
21011990	50	11.0	11.0						26	
21011990	51	9.1	11.0						10	
22011990	52	9.1	9.1						4	
22011990	53	9.1	9.1						1	
22011990	54	12.8	16.5						692	
22011990	55	16.5	18.3						2	
22011990	56	14.6	14.6						1	
22011990	57	11.0	14.6						6	
22011990	58	16.5	16.5						0	
22011990	59	14.6	0.0						0	
22011990	60	9.1	11.0						3	
22011990	61	11.0	12.8						12	
23011990	62	11.0	12.8						1	
23011990	63	14.6	14.6						5	
23011990	64	16.5	20.1						802	
23011990	65	14.6	14.6						2	
23011990	66	14.6	16.5						89	
23011990	67	12.8	16.5						0	
23011990	68	12.8	16.5						5	
24011990	69	14.6	14.6						3	
24011990	70	11.0	11.0						1	
24011990	71	18.3	18.3						8	
24011990	72	12.8	14.6						0	
24011990	73	12.8	20.1						2	
24011990	74	18.3	20.1						0	
24011990	75	11.0	12.8						0	
24011990	76	9.1	11.0						0	
24011990	77	12.8	12.8						0	
16011989	1	16.5	16.5						0	
16011989	2	14.6	14.6						0	
16011989	3	13.7	16.5					P	0	P

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
16011989	4	14.6	14.6						0	
16011989	5	18.3	18.3						0	
16011989	6	12.8	12.8					P	0	
16011989	7	11.0	11.0					P	0	
16011989	8	12.8	12.8						0	
16011989	9	11.0	12.8						0	
16011989	10	14.6	14.6						0	
16011989	11	18.3	18.3						0	
16011989	12	20.1	20.1					P	0	
16011989	13	10.1	10.1					P	0	
16011989	14	10.1	10.1					P	0	
16011989	15	12.8	12.8					P	0	
16011989	16	16.5	16.5					P	2	
17011989	17	10.1	10.1					P	0	
17011989	18	12.8	14.6					P	0	
17011989	19	14.6	18.3						0	
17011989	20	9.1	11.0						0	
17011989	21	11.0	12.8					P	0	
17011989	22	11.0	12.8					P	0	
17011989	23	11.0	12.8					P	0	
17011989	24	9.1	11.0					P	0	
17011989	25	11.0	12.8						0	
17011989	26	9.1	9.1						0	
17011989	27	9.1	11.0					P	0	
17011989	28	11.0	11.0					P	0	
17011989	29	14.6	16.5					P	0	
17011989	30	11.0	11.0						1	
17011989	31	12.2	13.1					P	3	
17011989	32	16.8	17.4					P	28	
17011989	33	15.8	18.3					P	8	
17011989	34	14.0	17.4					P	4	
17011989	35	16.2	20.1					P	6	
17011989	36	16.5	20.7					P	5	
17011989	37	16.5	16.5					P	1	
18011989	38	14.6	16.5						1	
18011989	39	16.5	16.5						0	
18011989	40	16.5	16.5						1	

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
18011989	41	16.5	17.4						0	
18011989	42	18.3	18.3						1	
18011989	43	15.8	18.3						1	
18011989	44	16.5	16.5						0	
18011989	45	14.6	16.5					P	4	
18011989	46	16.5	18.3					P	0	
18011989	47	13.7	15.5					P	0	
18011989	48	11.9	12.8					P	0	
18011989	49	18.0	18.9					P	0	
18011989	50	17.1	18.3					P	3	
18011989	51	13.7	16.5					P	0	
18011989	52	11.9	14.0						0	
18011989	53	11.9	14.0						0	
18011989	54	12.8	15.8						1	
18011989	55	14.6	16.5						1	
18011989	56	14.6	14.6						0	
18011989	57	14.6	16.5						0	
18011989	58	14.6	16.5						0	
18011989	59	14.6	14.6						0	
18011989	60	12.8	12.8						1	
18011989	61	14.6	14.6						1	
18011989	62	17.4	17.4						0	
18011989	63	11.9	11.9						0	
18011989	64	11.0	12.8					P	0	
18011989	65	11.0	14.6					P	0	
18011989	66	16.5	18.3					P	0	
18011989	67	18.3	20.1					P	0	
19011989	68	20.4	20.4						5	
19011989	69	20.1	20.1						0	
19011989	70	18.3	18.3						0	
19011989	71	14.6	14.6						0	
19011989	72	14.6	14.6						4	
19011989	73	18.3	18.3					P	3	
19011989	74	21.9	25.6						2	
19011989	75	20.1	21.9						0	
19011989	76	25.6	29.3						0	
19011989	77	29.3	30.2					P	0	

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
19011989	78	20.1	21.0					P	0	
19011989	79	20.4	21.3					P	0	
19011989	80	16.8	18.3					P	0	
19011989	81	16.8	18.0					P	0	
19011989	82	18.6	21.9					P	0	
19011989	83	21.9	21.9						0	
19011989	84	18.3	18.3						27	
19011989	85	18.3	18.3						25	
19011989	86	18.3	18.3						20	
19011989	87	18.3	18.3						0	
19011989	88	18.3	18.3					P	42	
19011989	89	18.3	18.3						1	
19011989	90	18.3	18.3						0	
19011989	91	18.3	18.3						131	
19011989	92	19.2	19.2						322	
19011989	93	18.6	18.6						49	
19011989	94	18.6	18.6						86	
19011989	95	18.3	18.3						106	
20011989	96	18.3	18.3						15	
20011989	97	18.3	18.3							
20011989	99	18.3	18.3						0	
20011989	100	18.3	18.3						1	
20011989	101	18.3	18.3						0	
20011989	102	19.2	19.2						25	
20011989	103	18.3	18.3						14	
20011989	104	18.3	18.3						2	
20011989	105	18.3	18.3						1	
20011989	106	20.1	20.1						1	
20011989	107	19.2	19.2					P	2	
20011989	108	18.9	18.9						41	
20011989	109	18.9	18.9					P	6	
20011989	110	18.3	18.3						7	
20011989	111	22.6	22.6					P	2	
20011989	112	18.3	18.3						1	
20011989	113	18.3	18.3						9	
20011989	114	14.6	14.6						7	
20011989	115	18.3	18.3						3	

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
20011989	116	18.3	18.3						44	
20011989	117	18.3	18.3						29	
20011989	118	18.3	18.3						1	
20011989	119	18.3	18.3						1	
20011989	120	16.5	16.5						3	
20011989	121	20.1	20.1						0	
20011989	122	19.2	19.2						0	
20011989	123	16.5	16.5						14	
20011989	124	16.5	16.5						23	
20011989	125	21.9	21.9					P	4	
20011989	126	19.2	19.2					P	0	
20011989	127	19.2	19.2					P	1	
20011989	128	19.2	19.2						1	
20011989	129	19.2	19.2						0	
21011989	130	18.3	18.3						0	
21011989	131	16.5	16.5						0	
21011989	132	14.6	16.5						2	
21011989	133	14.6	14.6						0	
21011989	134	12.8	12.8						1	
21011989	135	14.6	16.5						1	
21011989	136	18.3	18.3						0	
21011989	137	17.4	17.4						0	
21011989	138	12.8	12.8						0	
21011989	139	19.2	19.2						0	
21011989	140	20.1	20.1						0	
21011989	141	20.1	20.1						0	
21011989	142	20.1	20.1						0	
21011989	143	16.5	16.5						0	
21011989	144	21.0	21.0						0	
21011989	145	19.2	19.2						0	
21011989	146	18.3	18.3						2	
21011989	147	20.1	20.1						0	
21011989	148	20.1	20.1						0	
21011989	149	20.1	20.1						1	
21011989	150	20.1	20.1						0	
21011989	151	15.8	15.8					P	0	
21011989	152	18.6	18.6					P	0	

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
22011989	153	13.1	13.1						0	
22011989	154	14.6	16.5						0	
22011989	155	12.8	16.5						0	
22011989	156	12.8	16.5						0	
22011989	157	12.8	16.5						0	
22011989	158	20.1	20.1					P	0	
22011989	159	20.1	20.1					P	0	
22011989	160	12.8	12.8					P	2	
22011989	161	18.3	18.3						0	
22011989	162	17.4	17.4						0	
22011989	163	15.5	15.5						1	
22011989	164	21.9	21.9						3	
22011989	165	20.1	20.1						1	
22011989	166	12.8	16.5						0	
22011989	167	11.0	14.6						1	
22011989	168	11.0	14.6						0	
22011989	169	11.0	12.8						0	
22011989	170	14.6	14.6						0	
22011989	171	16.5	16.5						0	
22011989	172	14.6	14.6						0	
22011989	173	14.6	19.2						0	
22011989	174	18.3	18.3						0	
22011989	175	16.5	16.5						0	
22011989	176	16.5	16.5						0	
15011988	1	12.8	12.8					P	0	
15011988	2	18.3	18.3					P	0	
15011988	3	12.8	12.8						400	
15011988	4	14.6	14.6						0	
15011988	5	19.5	19.5						3	
15011988	6	12.8	12.8						4	
15011988	7	12.8	12.8					P	1	
15011988	8	12.8	12.8						0	
15011988	9	12.8	12.8					P	0	
15011988	10	18.3	18.3					P	0	
15011988	11	14.6	14.6					P	0	
15011988	12	14.6	16.5					P	0	
15011988	13	16.5	18.3					P	0	

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
15011988	14	18.3	20.1					P	0	
16011988	15	12.8	12.8					P	0	
16011988	16	12.8	12.8					P	0	
16011988	17	18.3	20.1					P	0	
16011988	18	12.8	14.6						0	
16011988	19	12.8	14.6						0	
16011988	20	11.0	12.8						4	
16011988	21	11.0	12.8					P	7	
16011988	22	11.0	12.8						4	
16011988	23	11.0	12.8					P	4	
16011988	24	11.0	12.8					P	3	
16011988	25	11.0	12.8						15	
16011988	26	12.8	14.6					P	7	
16011988	27	12.8	14.6					P	18	
16011988	28	14.6	14.6					P	3	
16011988	29	14.6	14.6					P	6	
16011988	30	12.8	14.6						5	
16011988	31	12.8	14.6						13	
16011988	32	12.8	14.6						8	
17011988	33	12.8	14.6						2	
17011988	34	12.8	14.6						1	
17011988	35	11.0	12.8						7	
17011988	36	12.8	12.8						9	
17011988	37	12.8	12.8						4	
17011988	38	12.8	12.8						5	
17011988	39	12.8	12.8					P	3	
17011988	40	12.8	12.8						5	
17011988	41	12.8	12.8						20	
17011988	42	12.8	12.8						5	
17011988	43	12.8	12.8						5	
17011988	44	12.8	12.8						7	
17011988	45	12.8	12.8						17	
17011988	46	12.8	12.8						1	
17011988	47	11.0	12.8						4	
17011988	48	11.0	12.8						12	
17011988	49	11.0	12.8						16	
17011988	50	11.0	12.8						5	

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
17011988	51	12.8	12.8						6	
17011988	52	12.8	12.8						2	
17011988	53	12.8	12.8						1	
17011988	54	12.8	12.8						13	
17011988	55	12.8	12.8						2	
17011988	56	12.8	12.8						2	
17011988	57	12.8	12.8						0	
17011988	58	12.8	12.8						0	
17011988	59	12.8	12.8						0	
17011988	60	12.8	12.8						1	
17011988	61	12.8	12.8						7	
18011988	62	12.8	12.8						9	
18011988	63	12.8	12.8						30	
18011988	64	11.0	12.8						20	
18011988	65	12.8	12.8						17	
18011988	66	12.8	12.8						22	
18011988	67	12.8	12.8						9	
18011988	68	12.8	12.8						9	
18011988	69	12.8	12.8						5	
18011988	70	12.8	12.8						5	
18011988	71	12.8	12.8						2	
18011988	72	14.6	14.6						7	
18011988	73	14.6	14.6						12	
18011988	74	14.6	14.6						4	
18011988	75	14.6	14.6						13	
18011988	76	14.6	14.6						2	
18011988	77	12.8	15.2						3	
18011988	78	12.8	12.8						3	
18011988	79	12.8	12.8						2	
18011988	80	11.0	12.8						5	
18011988	81	11.0	12.8						5	
18011988	82	11.0	12.8						5	
18011988	83	11.0	12.8						9	
18011988	84	11.0	12.8						24	
18011988	85	11.0	12.8						5	
18011988	86	11.0	12.8						4	
18011988	87	12.8	14.6						6	

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
18011988	88	12.8	14.6						7	
18011988	89	12.8	14.6						9	
18011988	90	12.8	14.6						9	
18011988	91	12.8	14.6						2	
19011988	92	12.8	12.8						7	
19011988	93	12.8	12.8						2	
19011988	94	12.8	14.6							
19011988	95	11.0	12.8						7	
19011988	96	11.0	12.8						6	
19011988	97	11.0	12.8						6	
19011988	98	11.0	12.8						11	
19011988	99	11.0	12.8						6	
19011988	100	11.0	12.8						8	
19011988	101	11.0	12.8						7	
19011988	102	11.0	12.8						3	
19011988	103	11.0	12.8						5	
19011988	104	12.8	12.8						3	
19011988	105	11.0	12.8						4	
19011988	106	12.8	14.9						6	
19011988	107	11.0	12.8						11	
19011988	108	12.8	12.8						5	
19011988	109	12.8	12.8						2	
19011988	110	14.9	17.1						6	
19011988	111	14.9	17.1						10	
19011988	112	12.8	14.6						0	
19011988	113	11.0	12.8						1	
19011988	114	12.8	14.9						3	
19011988	115	11.0	14.3						5	
19011988	116	12.8	14.6						4	
19011988	117	11.0	12.8						15	
19011988	118	12.8	14.6						5	
19011988	119	12.8	14.6						9	
19011988	120	12.8	14.6						5	
20011988	121	11.0	11.0						4	
20011988	122	11.0	11.0							
20011988	123	11.0	12.8						4	
20011988	124	12.8	12.8						2	

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
20011988	125	12.8	12.8						3	
20011988	126	12.8	12.8						25	
20011988	127	12.8	14.6						9	
20011988	128	11.0	12.8						2	
20011988	129	11.0	12.8						1	
20011988	130	11.0	12.8						1	
20011988	131	12.8	14.6						23	
20011988	132	12.8	14.6						6	
20011988	133	11.0	12.8						1	
20011988	134	11.0	12.8						3	
20011988	135	11.0	12.8						2	
20011988	136	11.0	12.8						2	
20011988	137	11.0	12.8						3	
20011988	138	11.0	12.8						3	
20011988	139	14.6	14.6							
20011988	140	12.8	12.8							
20011988	141	11.0	12.8						6	
20011988	142	11.0	12.8						2	
20011988	143	11.0	12.8							
20011988	144	11.0	12.8							
20011988	145	11.0	12.8						1	
20011988	146	11.0	12.8						1	
20011988	147	11.0	12.8						359	
20011988	148	11.0	12.8						22	
20011988	149	11.0	12.8						6	
21011988	150	11.0	12.8						0	
21011988	151	11.0	11.0							
21011988	152	11.0	11.0							
21011988	153	11.0	12.8							
21011988	154	11.0	12.8							
21011988	155	12.8	12.8						2	
21011988	156	12.8	12.8						7	
21011988	157	11.0	12.8						3	
21011988	158	12.8	14.6						3	
21011988	159	12.8	14.6						6	
21011988	160	12.8	14.6						0	
21011988	161	12.8	14.6						1	

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
21011988	162	11.0	12.8						0	
21011988	163	11.0	12.8							
22011988	164	11.0	12.8						1	
22011988	165	11.0	12.8						3	
22011988	166	11.0	12.8						2	
22011988	167	11.0	12.8						1	
22011988	168	11.0	12.8						2	
22011988	169	12.8	14.6						0	
22011988	170	11.0	12.8							P
22011988	171	18.3	18.3							
22011988	172	21.9	21.9							
22011988	173	25.6	25.6							
22011988	174	18.3	18.3							P
22011988	175	12.8	14.6							
22011988	176	12.8	14.6							
22011988	177	18.3	20.1							
23011988	178	21.9	21.9							
23011988	179	21.9	23.8							
23011988	180	23.8	23.8							
23011988	181	25.6	27.4							
23011988	182	27.4	27.4							
23011988	183	27.4	27.4							
23011988	184	14.6	14.6							
23011988	185	18.3	20.1							
23011988	186	18.3	20.1							
23011988	187	16.5	16.5							
23011988	188	16.5	16.5							
23011988	189	14.6	14.6							
23011988	190	14.6	14.6							
23011988	191	14.6	14.6							
23011988	192	11.0	12.8							
23011988	193	11.0	12.8							
23011988	194	16.5	16.5							
23011988	195	18.3	20.1							
23011988	196	18.3	20.1							
23011988	197	18.3	20.1							
23011988	198	18.3	20.1							

Date	Tow	Mindepth	Maxdepth	Dogs-F	Dogs-M	Dogs-Fover	Dogs-Mover	Total dogs	S.bass	SkatesAll
23011988	199	18.3	20.1							
23011988	200	18.3	20.1							

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
8012013	1	4	2	0	0	0	0	0
8012013	2	1	1	0	0	0	0	1
8012013	3	1	0	0	0	0	0	1
8012013	4	1	1	0	0	0	0	0
8012013	5	1	0	1	0	0	0	0
8012013	6	0	0	0	0	1	0	0
8012013	7	1	1	2	1	1	1	75
8012013	8	1	0	1	0	0	0	49
8012013	9	4	1	1	0	2	0	17
8012013	10	4	0	3	3	0	0	0
8012013	11	1	0	0	0	0	0	0
8012013	12	1	1	2	1	0	0	0
8012013	13	1	0	2	0	0	0	0
8012013	14	0	0	1	1	1	0	3
8012013	15	1	2	1	1	0	0	2
8012013	16	1	0	3	0	1	0	489
8012013	17	0	0	0	0	0	0	18
9012013	18	2	1	0	2	0	1	75
9012013	19	1	0	1	0	0	0	753
9012013	20	2	2	1	0	4	0	27
9012013	21	0	1	0	2	0	1	1
9012013	22	1	0	0	0	1	0	1
9012013	23	1	2	1	0	0	1	0
9012013	24	0	1	1	2	1	0	0
9012013	25	2	1	1	1	2	0	0
9012013	26	0	0	0	0	1	0	0
9012013	27	0	1	0	0	0	0	0
9012013	28	0	1	0	0	0	0	0
9012013	29	0	0	0	0	0	0	0
9012013	30	0	0	0	0	0	0	0
9012013	31	0	0	0	1	0	0	1
9012013	32	0	0	0	0	0	0	0
9012013	33	0	1	0	0	0	0	0
9012013	34	1	1	1	0	0	0	0
9012013	35	1	0	1	0	0	0	0
9012013	36	0	0	4	1	0	0	0
9012013	37	0	0	0	0	0	0	0

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
9012013	38	1	0	2	1	0	0	0
9012013	39	1	0	0	0	0	0	0
9012013	40	0	0	0	0	0	0	0
9012013	41	0	0	2	0	1	0	0
9012013	42	0	0	0	0	1	0	10
9012013	43	0	0	2	1	1	1	0
9012013	44	1	0	1	0	0	1	0
9012013	45	1	2	1	0	0	0	4
9012013	46	2	1	2	0	1	0	4
9012013	47	1	1	0	0	0	1	4
9012013	48	1	0	0	0	0	0	2
9012013	49	1	0	0	0	0	2	1
9012013	50	0	0	0	0	0	0	0
9012013	51	1	1	1	0	1	0	0
10012013	53	9	4	2	1	0	1	0
10012013	54	3	1	2	0	3	0	0
10012013	55	0	0	3	0	1	0	0
10012013	56	0	1	1	1	0	0	0
10012013	57	1	0	1	0	0	0	0
10012013	58	1	0	0	0	0	0	0
10012013	59	0	0	0	1	0	0	0
10012013	60	1	0	1	1	0	0	0
10012013	61	1	0	0	0	0	0	0
10012013	62	0	0	0	0	0	0	0
10012013	63	0	0	0	0	0	0	0
10012013	64	0	1	1	0	0	0	0
10012013	65	1	1	2	0	1	0	0
10012013	66	0	0	0	0	0	1	0
10012013	67	1	0	0	0	0	0	0
10012013	68	0	0	1	0	0	0	0
10012013	69	0	0	0	0	0	0	0
10012013	70	0	0	0	0	1	0	0
10012013	71	0	1	0	1	0	0	0
10012013	72	0	0	0	0	0	0	0
10012013	73	0	1	3	0	0	0	0
10012013	74	0	0	2	0	1	0	7
10012013	75	2	0	0	1	1	0	2

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
10012013	76	2	0	0	1	1	0	2
10012013	77	0	2	0	2	1	0	2
10012013	78	0	0	0	0	1	0	1
11012013	79	5	0	1	0	0	0	0
11012013	80	0	0	1	1	0	0	12
11012013	81	0	0	0	0	0	0	11
11012013	82	0	0	0	0	0	0	20
11012013	83	0	0	1	0	0	0	42
11012013	84	1	1	1	0	0	0	5
11012013	85	3	2	0	0	0	0	0
11012013	86	1	0	0	1	0	0	14
11012013	87	0	1	0	2	1	0	2
11012013	88	0	0	0	0	0	0	0
11012013	89	0	1	1	0	0	0	0
11012013	90	0	0	0	0	0	0	0
11012013	91	1	1	0	0	0	0	0
11012013	92	1	0	0	0	0	0	0
11012013	93	2	0	0	1	0	0	0
11012013	94	0	0	0	0	0	0	0
11012013	95	0	0	0	1	0	0	0
11012013	96	2	2	0	0	0	0	0
11012013	97	0	0	0	0	0	0	0
11012013	98	0	0	0	0	0	0	0
11012013	99	1	1	0	0	0	0	0
11012013	100	0	0	0	0	0	0	0
11012013	101	1	0	0	1	0	0	0
11012013	102	2	0	0	1	0	0	0
11012013	103	3	0	0	0	0	0	2
11012013	104	1	0	0	0	0	0	0
11012013	105	0	1	0	0	0	0	17
11012013	106	0	0	1	0	0	0	2
11012013	107	0	0	1	0	0	0	19
11012013	108	0	0	1	2	0	0	3
11012013	109	1	0	1	0	0	0	5
11012013	110	0	0	0	0	0	0	11
11012013	111	2	0	1	1	0	0	12
11012013	112	0	2	0	0	0	0	9

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
11012013	113	1	1	1	0	0	0	13
11012013	114	2	1	1	0	0	0	14
12012013	115	2	1	3	2	0	0	4
12012013	116	0	0	0	0	0	0	2
12012013	117	0	2	0	2	0	0	1
12012013	118	1	0	0	0	0	0	3
12012013	119	3	0	1	0	0	0	6
12012013	120	2	0	0	0	1	0	1
12012013	121	0	1	0	0	0	1	3
12012013	122	0	0	0	1	0	0	3
12012013	123	0	0	0	0	0	0	1
12012013	124	1	0	0	0	0	0	1
12012013	125	0	0	0	0	0	0	0
12012013	126	2	1	0	0	0	0	6
12012013	127	0	0	0	0	0	0	10
12012013	128	0	0	1	0	0	0	0
12012013	129	2	0	0	0	0	0	0
12012013	130	1	0	0	1	0	0	0
12012013	131	0	0	0	1	0	0	0
12012013	132	2	1	1	0	0	0	0
12012013	133	1	1	0	0	0	0	0
12012013	134	0	1	0	0	0	0	0
12012013	135	0	0	0	0	0	0	0
12012013	136	0	0	0	0	2	0	0
12012013	137	3	1	0	0	0	0	0
12012013	138	0	1	0	0	1	1	0
12012013	139	2	0	0	0	0	0	0
12012013	140	0	0	0	0	0	0	93
12012013	141	0	1	0	2	0	0	2
12012013	142	1	0	2	0	0	0	0
12012013	143	1	1	1	0	0	0	1
12012013	144	0	1	0	0	0	0	1
12012013	145	1	2	1	2	0	1	0
13012013	146	0	0	0	0	0	0	0
13012013	147	0	0	0	0	0	0	1
13012013	148	0	0	0	0	0	0	0
13012013	149	0	0	0	0	0	1	1

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
13012013	150	1	0	0	0	0	0	1
13012013	151	1	0	0	0	2	0	3
13012013	152	3	2	2	0	0	0	0
13012013	153	1	2	2	1	0	0	7
13012013	154	0	0	0	0	0	0	2
13012013	155	0	0	0	0	0	0	0
13012013	156	1	1	0	0	0	0	0
13012013	157	0	0	1	0	0	0	0
13012013	158	0	0	0	1	0	0	0
13012013	159	0	0	0	0	0	0	11
13012013	160	2	0	1	1	0	0	5
13012013	161	0	1	0	0	0	1	0
13012013	162	0	0	0	0	0	0	0
13012013	163	1	0	0	2	0	0	27
13012013	164	0	0	0	0	0	0	1
13012013	165	0	0	0	0	0	0	1
13012013	166	0	0	0	0	0	0	0
13012013	167	0	0	1	0	0	0	1
13012013	168	0	1	1	2	0	0	1
13012013	169	0	1	1	0	0	0	0
13012013	170	1	1	0	0	0	0	2
13012013	171	1	0	2	1	1	0	1
13012013	172	1	0	0	1	0	0	5
13012013	173	0	0	0	0	0	0	2
13012013	174	0	1	2	0	0	0	0
13012013	175	0	2	0	0	0	0	0
13012013	176	0	1	2	2	1	0	0
14012013	177	1	0	2	0	0	1	0
14012013	178	2	0	0	1	0	0	1
14012013	179	1	0	2	0	0	2	0
14012013	180	0	1	0	1	0	0	3
14012013	181	0	0	2	7	0	1	13
14012013	182	3	1	4	3	0	0	49
14012013	183	3	0	1	3	0	0	8
14012013	184	0	0	1	1	0	0	0
14012013	185	1	0	0	1	0	0	6
14012013	186	0	0	0	0	0	0	0

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
14012013	187	0	1	0	0	0	0	0
14012013	188	1	2	0	1	0	0	1
14012013	189	1	1	0	0	0	0	0
14012013	190	0	2	0	0	0	0	0
14012013	191	3	0	0	0	0	0	0
14012013	192	0	0	1	0	0	0	0
14012013	193	0	1	1	0	0	0	0
14012013	194	1	0	0	1	0	0	0
14012013	195	0	0	0	0	0	0	1
14012013	196	0	0	0	0	0	0	0
14012013	197	0	0	0	0	0	0	0
14012013	198	0	0	0	0	0	0	0
14012013	199	0	0	3	0	0	0	1
14012013	200	1	0	2	0	0	0	3
14012013	201	0	0	2	0	0	0	9
14012013	202	2	3	2	4	1	0	10
14012013	203	1	0	7	1	2	0	4
14012013	204	0	2	1	2	0	0	0
14012013	205	2	2	3	3	1	0	1
14012013	206	2	0	1	2	0	0	0
14012013	207	0	0	0	0	0	0	0
14012013	208	0	1	0	1	0	0	0
15012013	209	0	5	2	1	1	1	0
15012013	210	1	0	2	1	0	1	0
15012013	211	2	1	1	0	0	0	1
15012013	212	1	0	0	0	0	0	25
15012013	213	0	0	0	1	0	0	2
15012013	214	0	0	0	2	1	0	5
15012013	215	0	0	0	1	0	0	3
15012013	216	1	2	78	54	6	1	1
15012013	217	2	0	1	4	1	0	5
15012013	218	1	0	1	1	1	0	2
15012013	219	0	0	0	0	0	0	0
15012013	220	1	1	1	0	0	0	2
15012013	221	0	1	2	1	0	0	0
15012013	222	2	0	0	0	1	0	0
15012013	223	0	0	0	0	0	0	0

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
15012013	224	0	1	0	2	0	0	0
15012013	225	0	0	1	0	0	0	0
15012013	226	0	2	0	0	0	0	0
16012013	227	0	0	3	0	0	0	0
16012013	228	0	0	0	1	0	0	1
16012013	229	2	0	2	1	0	0	0
16012013	230	1	0	0	3	0	0	0
16012013	231	2	3	1	1	0	0	0
16012013	232	0	0	1	3	0	0	0
16012013	233	1	0	0	1	0	0	0
16012013	234	2	1	0	1	0	0	0
16012013	235	0	0	0	0	0	0	1
16012013	236	1	0	1	2	0	0	1
16012013	237	0	0	0	1	0	0	0
16012013	238	1	1	0	0	0	0	2
16012013	239	0	0	2	1	0	0	2
16012013	240	0	0	1	0	0	0	1
16012013	241	2	0	0	0	0	0	0
16012013	242	1	1	0	0	0	0	0
16012013	243	0	2	0	0	0	0	0
16012013	244	3	0	0	0	0	0	1
16012013	245	1	0	1	0	0	0	0
18022010	1							12
18022010	2				1			23
18022010	3							33
18022010	4							1
18022010	5							1
19022010	6							0
19022010	7							14
19022010	8							11
19022010	9				1			67
19022010	10							30
19022010	11	0	0	0	0	0	0	0
19022010	12							5
19022010	13		1	1				1
19022010	14							2
19022010	15							3

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
19022010	16							0
19022010	17			1				1
19022010	18							0
19022010	19							0
19022010	20							0
19022010	21							11
19022010	22							2
19022010	23							1
19022010	24							2
19022010	25							0
19022010	26							0
19022010	27							7
19022010	28							8
19022010	29							0
19022010	30							9
19022010	31							0
19022010	32							0
19022010	33							0
19022010	34							25
19022010	35							150
19022010	36							1
19022010	37							1240
19022010	38							504
19022010	39							1
19022010	40							68
19022010	41							0
19022010	42							0
19022010	43							109
19022010	44							2
19022010	45							155
19022010	46							20
19022010	47							0
20022010	48							0
20022010	49							0
20022010	50		1					0
20022010	51							0
20022010	52							0

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
20022010	53							0
20022010	54							0
20022010	55				1			0
20022010	56							0
20022010	57							0
20022010	58							0
20022010	59							0
20022010	60							5
20022010	61							3
20022010	62							16
20022010	63							3
20022010	64							54
20022010	65							0
20022010	66							0
20022010	67							1
20022010	68							20
20022010	69							11
20022010	70							43
20022010	71							14
20022010	72							2
20022010	73							2
20022010	74							2
20022010	75							2
20022010	76							6
20022010	77							0
20022010	78							3
21022010	79							4
21022010	80							1
21022010	81							3
21022010	82							1
21022010	83							1
21022010	84							10
21022010	85							90
21022010	86							18
21022010	87							1
21022010	88							1
21022010	89							0

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
21022010	90							1
21022010	91							1
21022010	92							5
21022010	93							12
21022010	94							2
21022010	95							3
21022010	96							10
21022010	97		3					0
21022010	98							0
21022010	99	1						0
21022010	100	2						0
21022010	101		1					0
21022010	102		1					0
21022010	103	1	1					0
21022010	104		1					0
21022010	105	2	1					0
21022010	106							0
21022010	107	1						0
21022010	108				1			0
22022010	109							0
22022010	110							0
22022010	111							0
22022010	112							0
22022010	113		1					0
22022010	114							0
22022010	115							0
22022010	116							0
22022010	117		1		1			0
22022010	118							0
22022010	119		1	1				0
22022010	120		1					0
22022010	121		2					0
22022010	122							0
22022010	123							0
22022010	124							0
22022010	125							0
22022010	126							0

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
22022010	127							31
22022010	128							0
22022010	129							8
22022010	130							60
22022010	131							7
22022010	132							1
22022010	133							3
22022010	134							10
22022010	135							31
22022010	136							6
22022010	137							2
22022010	138							1
22022010	139							2
22022010	140							6
22022010	141							6
22022010	142							6
22022010	143							2
22022010	144							2
22022010	145							12
23022010	146							8
23022010	147							11
23022010	148							31
23022010	149							17
23022010	150							4
23022010	151				1			4
23022010	152		1					10
23022010	153							1
23022010	154	1						0
23022010	155							0
23022010	156							0
23022010	157		1	1				0
23022010	158	1	1					0
23022010	159							0
23022010	160							1
23022010	161							1
23022010	162							0
23022010	163				1			0

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
23022010	164							0
23022010	165							0
23022010	166							0
23022010	167							0
23022010	168		1	1				1
23022010	169		1					2
23022010	170							0
23022010	171							0
23022010	172							5
23022010	173							3
23022010	174							6
23022010	175							3
23022010	176							4
23022010	177	1						5
23022010	178				1			2
24022010	179							36
24022010	180							0
24022010	181							14
24022010	182				1			12
24022010	183		1					53
24022010	184							16
24022010	185							2
24022010	186							0
24022010	187							1
24022010	188	1						13
24022010	189							2
24022010	190		1					5
24022010	191							34
24022010	192							10
24022010	193							1
24022010	194							12
24022010	195		1					3
24022010	196							0
24022010	197							1
24022010	198							13
24022010	199							6
24022010	200							90

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
29012009	1	1	0	0	0			2
29012009	2	0	0	0	0			0
29012009	3	0	0	0	0			0
29012009	4	3	0	2	1			0
30012009	5	0	0	0	1			1
30012009	6	0	0	0	0			7
30012009	7	0	1	0	0			21
30012009	8	0	0	0	0			1
30012009	9	0	0	0	0			71
30012009	10	0	0	0	1			100
30012009	11	1	2	0	0			25
30012009	12	1	0	0	0			0
30012009	13	0	0	0	0			11
30012009	14	0	0	0	0			4
30012009	15	0	0	0	0			14
30012009	16	0	0	0	0			5
30012009	17	0	0	0	0			4
30012009	18	0	0	0	0			3
30012009	19	0	0	0	0			0
30012009	20	0	2	0	0			16
30012009	21	0	0	0	0			12
30012009	22	0	0	1	0			19
30012009	23	0	0	0	0			14
30012009	24	0	0	0	0			29
30012009	25	0	0	0	0			1
30012009	26	0	0	0	0			7
30012009	27	0	0	0	0			6
30012009	28	0	0	0	0			37
31012009	29	0	0	0	0			12
31012009	30	0	0	0	0			5
31012009	31	0	1	1	0			10
31012009	32	0	0	0	0			84
31012009	33	0	0	0	0			35
31012009	34	0	1	0	0			25
31012009	35	0	0	0	0			6
31012009	36	0	0	0	0			29
31012009	37	0	0	0	0			29

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
31012009	38	0	0	0	0			37
31012009	39	0	0	0	0			9
31012009	40	0	0	0	0	0	0	2
31012009	41	0	0	0	0	0	0	27
31012009	42	0	0	0	0	0	0	2
31012009	43	0	1	0	0	0	0	12
31012009	44	1	0	0	0	0	0	49
31012009	45	1	0	0	0	0	0	16
31012009	46	0	0	0	0	0	0	12
31012009	47	0	0	0	0	0	0	4
31012009	48	0	0	0	0	0	0	10
31012009	49	0	0	0	0	0	0	2
31012009	50	0	0	0	0	0	0	11
31012009	51	0	0	0	0	0	0	5
31012009	52	0	0	0	0	0	0	10
31012009	53	0	0	0	0	0	0	23
31012009	54	0	0	0	0	0	0	26
31012009	55	0	0	0	0	0	0	47
31012009	56	0	0	0	0	0	0	1
31012009	57	0	0	1	1	0	0	37
31012009	58	0	1	0	0	0	0	15
31012009	59	0	0	0	0	0	0	6
1022009	60	0	1	0	0	0	0	0
1022009	61	0	1	0	0	0	0	0
1022009	62	0	0	1	1	0	0	0
1022009	63	0	1	0	0	0	0	0
1022009	64	0	0	0	0	0	0	52
1022009	65	0	0	1	0	0	0	2
1022009	66	0	0	0	0	0	0	8
1022009	67	0	0	0	0	0	0	0
1022009	68	0	0	0	0	0	0	0
1022009	69							0
1022009	70							0
1022009	71	0	0	0	0	0	0	3
1022009	72	0	0	0	0	0	0	2
1022009	73	0	0	0	0	1	0	0
1022009	74	0	0	0	0	0	0	0

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
2022009	75	0	0	0	0	0	1	3
2022009	76	0	0	1	1	0	0	2
2022009	77	0	0	3	1	1	0	0
2022009	78	0	0	0	0	0	2	1
2022009	79	0	0	0	0	1	0	1
2022009	80	0	0	0	2	0	1	0
2022009	81	0	0	0	0	1	0	2
2022009	82	0	0	0	1	1	1	0
2022009	83	0	0	0	1	0	0	0
2022009	84	0	0	0	0	0	0	2
2022009	85	3	1	0	0	0	0	1
2022009	86	0	0	0	1	0	0	10
2022009	87	1	3	0	1	0	0	46
2022009	88	0	0	0	0	0	0	185
2022009	89	1	0	0	0	0	0	6
2022009	90	0	0	0	1	0	0	5
2022009	91	0	0	2	0	0	0	8
2022009	92	0	0	0	0	0	0	6
2022009	93	2	0	1	0	0	0	9
2022009	94	2	1	0	0	0	0	18
2022009	95	1	0	0	0	0	0	5
3022009	96	3	2	0	0	0	0	18
3022009	97	2	1	4	3	0	0	0
3022009	98	1	5	2	0	1	0	0
3022009	99	3	2	1	2	0	0	0
3022009	100	3	3	2	2	0	0	0
3022009	101	1	4	1	1	0	0	0
3022009	102	3	0	0	0	0	0	0
3022009	103	0	0	0	0	0	0	9
3022009	104	0	0	1	0	0	0	0
3022009	105	0	0	0	0	0	0	45
3022009	106	0	0	0	0	0	0	1
3022009	107	0	0	0	0	0	0	140
3022009	108	0	0	0	0	0	0	152
3022009	109	0	0	0	0	0	0	0
3022009	110	0	0	0	0	0	0	1
3022009	111	0	0	0	0	0	0	1

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
3022009	112	1	1	0	1	0	0	79
3022009	113	1	1	1	0	0	0	17
3022009	114	2	1	0	1	0	0	5
3022009	115	1	0	0	0	0	0	140
3022009	116	1	0	0	1	0	0	7
3022009	117	1	0	0	0	0	0	19
3022009	118	1	0	0	0	0	0	1
3022009	119	0	0	0	0	0	0	2
4022009	120	0	1	0	0	0	0	13
4022009	121	0	0	0	0	0	0	4
4022009	122	0	0	0	0	0	0	2
4022009	123	0	1	0	0	0	0	2
4022009	124	0	0	1	0	0	0	2
4022009	125	0	0	0	0	0	0	5
4022009	126	1	0	0	0	0	0	0
4022009	127	0	0	0	0	0	0	0
4022009	128	1	0	0	0	0	0	153
4022009	129	0	0	0	0	0	0	0
4022009	130	0	0	0	0	0	0	7
4022009	131	0	0	0	1	0	0	0
4022009	132	0	0	0	0	0	0	1
4022009	133	0	0	0	0	0	0	1
4022009	134	0	0	0	0	0	0	1
4022009	135	0	0	0	0	0	0	93
4022009	136	0	1	0	0	0	0	16
4022009	137	0	1	1	0	0	0	13
4022009	138	0	0	0	0	0	0	114
4022009	139	1	0	0	0	0	0	4
4022009	140	0	0	0	0	0	0	41
4022009	141	0	0	1	1	0	0	1
4022009	142	3	1	1	0	0	0	1
4022009	143	1	0	0	0	0	0	0
4022009	144	0	0	0	0	0	0	3
4022009	145	0	0	0	0	0	0	0
4022009	146	0	0	0	0	0	0	0
4022009	147	0	0	0	0	0	0	4
5022009	148	0	0	0	0	0	0	85

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
5022009	149	0	0	0	0	0	0	13
5022009	150	1	1	0	0	0	0	0
5022009	151	0	3	0	0	0	0	1
5022009	152	0	1	0	0	0	0	14
5022009	153	0	1	0	0	0	0	13
5022009	154	0	0	0	0	0	0	21
5022009	155	0	0	0	0	0	0	11
5022009	156	0	0	0	0	0	0	5
5022009	157	0	0	0	0	0	0	0
5022009	158	0	0	0	0	0	0	0
5022009	159	0	0	0	0	0	0	0
5022009	160	0	0	0	0	0	0	17
5022009	161	0	0	0	0	0	0	9
5022009	162	0	0	0	0	0	0	0
5022009	163	0	0	0	0	0	0	1
5022009	164	0	1	1	0	0	0	42
5022009	165	0	0	0	0	0	0	193
5022009	166	1	0	0	1	0	0	4
5022009	167	0	2	0	0	0	0	0
5022009	168	1	1	0	0	0	0	0
5022009	169	2	1	0	0	0	0	0
5022009	170	8	0	1	1	0	0	0
5022009	171	7	0	0	0	0	0	0
5022009	172	5	1	0	0	0	0	0
5022009	173	0	0	1	0	0	0	0
5022009	174	1	1	0	0	0	0	0
5022009	175	5	1	0	1	0	0	0
6022009	176	2	0	0	0	0	0	3
6022009	177	3	1	0	0	0	0	0
6022009	178	0	1	2	0	0	0	0
6022009	179	0	3	1	0	0	0	1
6022009	180	3	3	0	0	0	0	1
6022009	181	3	2	2	0	0	0	0
6022009	182	0	1	2	0	0	0	0
6022009	183	3	1	0	1	1	0	0
6022009	184	0	2	2	0	0	0	0
6022009	185	1	1	1	0	0	0	0

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
6022009	186	2	0	1	0	0	0	0
6022009	187	4	4	0	0	0	0	0
6022009	188	0	0	0	0	0	0	0
6022009	189	0	0	0	0	0	0	0
6022009	190	0	4	0	0	0	0	0
6022009	191	1	0	0	0	0	0	0
6022009	192	1	0	0	1	0	0	0
6022009	193	5	3	0	0	0	0	0
6022009	194	0	2	0	0	0	0	0
6022009	195	1	2	0	0	0	0	0
6022009	196	2	2	0	0	0	0	0
6022009	197	0	2	0	0	0	0	0
6022009	198	1	2	0	0	0	0	0
6022009	199	2	1	5	0	1	0	0
6022009	200	0	0	0	2	0	0	0
6022009	201	1	0	1	0	0	0	0
6022009	202	1	2	1	0	0	0	0
6022009	203	1	1	1	0	0	0	0
6022009	204	1	1	0	0	0	0	0
6022009	205	0	1	0	0	1	0	0
7022009	206	0	2	0	2	0	0	0
7022009	207	1	1	0	0	0	0	0
7022009	208	1	1	0	0	0	0	0
7022009	209	1	1	1	0	0	0	0
7022009	210	0	2	0	0	0	0	0
15012008	1							0
15012008	2	5	1					0
15012008	3	2	1					0
15012008	4	5	4					0
15012008	5	10	3	1				0
15012008	6	6	2					0
15012008	7	2	2					0
15012008	8		3					0
15012008	9	3	1		1			0
15012008	10	3	2	1				0
15012008	11	6	1					0
15012008	12	6	3	1	1			0

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
15012008	13	10			1			0
15012008	14	7	3	2	2			0
15012008	15	5	4	2				0
15012008	16	6		5	1			0
15012008	17	15	3	3	2			0
15012008	18	13	7		1			0
15012008	19	3	5					0
15012008	20	5	1	1				0
15012008	21	1	3	2				0
15012008	22	2		1	1			1
15012008	23	14	3					1
15012008	24	1	2					0
15012008	25	6	4	1	2			2
15012008	26	9	4		1			0
16012008	27	9	1					0
16012008	28	7	2	1				0
16012008	29	11	1	2				0
16012008	30	6	3					0
16012008	31	4	2		1			0
16012008	32	4	2		2			0
16012008	33	1	2		1			0
16012008	34	1	1	2				0
16012008	35	8		2	2			0
16012008	36	4	1	2				0
16012008	37	1	1					0
16012008	38		3					0
16012008	39	3	1		1			0
16012008	40	4			2			0
16012008	41	3	1		1			0
16012008	42	1	2	1				0
16012008	43							0
16012008	44	2	2	3				0
16012008	45	4	2			1	1	0
16012008	46	1	2				1	0
16012008	47	10	3	2				1
16012008	48	16	2	3	2			0
16012008	49	17	1	1				0

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
16012008	50	3	6		1			0
16012008	51	5	5	1				0
16012008	52	4	2	1	2	2		0
16012008	53	7	4	3		1		0
16012008	54	2	2	1				0
16012008	55	1						0
16012008	56	4		1				0
16012008	57	3	3					0
16012008	58	3	2		1	1		4
16012008	59	2	2					1
16012008	60		2	3				0
16012008	61	5	1		1			0
17012008	62	13	7	1				0
17012008	63	11	3	1	2			0
17012008	64	8	5		1			0
17012008	65	3	1	1	1			0
17012008	66	2	1	2	3	2		0
17012008	67	12	5	4	5	1		0
17012008	68	9	2	5	5			0
17012008	69	15	2	3	3			0
17012008	70	6	1	2	2			0
17012008	71	6	2	1				0
17012008	72	1	2	2	2			0
17012008	73	5	3					0
17012008	74	9	1	2	4	3		0
17012008	75	14	2	5	2			0
17012008	76	8	5					0
17012008	77	8	1	1		1		0
17012008	78	11		1	1			0
17012008	79	11	3		2	1		0
17012008	80	5	1		2			0
17012008	81	5	6	1		1		0
17012008	82	5	2	1	2	1		0
17012008	83	2						0
17012008	84	9	2	1	1	1		0
17012008	85	4	2				1	1
17012008	86	3	1		1			0

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
17012008	87	10	3	4			1	0
17012008	88	7	2	3	2			0
17012008	89	1			1			0
17012008	90	1	1					0
17012008	91	13	3	4	1			0
17012008	92	6	3	1	1			0
17012008	93	11	2	4				0
17012008	94	15	1	1	3			0
17012008	95	3		2	1			0
17012008	96	6	4	2	2			0
17012008	97	7				1		0
18012008	98	4	1	1				0
18012008	99	4	1	5	2			1
18012008	100	2	2				1	0
18012008	101	8		3		1		0
18012008	102	3	1	2	1			0
18012008	103	9						0
18012008	104	5	1		1			0
18012008	105	4	2	1				0
18012008	106	7	2					0
18012008	107	2	4		1			0
18012008	108	4	3	1	1			0
18012008	109	13	4		1			0
18012008	110	5	1		1			20
18012008	111	9	2	1	1			2
18012008	112	1						0
18012008	113	1	2			1		0
18012008	114			2	1			0
18012008	115			2	1	1		0
18012008	116	4	2	2	2			0
18012008	117		1	1	2	1		0
18012008	118	2				5		4
18012008	119		1		2	2	1	2
18012008	120				1			3
18012008	121	2	2		2	1		0
18012008	122		3		1			8
18012008	123		3	1		2		6

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
18012008	124	3	1		1	2		11
19012008	125		2	1		6		8
19012008	126			2	1	2		6
19012008	127		1	4	1	2		2
19012008	128		4	6	5	1	1	7
19012008	129			3	4	3		1
19012008	130				3	1		2
19012008	131		1	1	1			3
19012008	132	1	1	1	1	4	1	1
19012008	133	1	1			4		0
19012008	134		1	2	1	2		0
19012008	135	1	1	1				0
19012008	136	1		1				0
19012008	137		1			1		0
19012008	138	1	1		1	2		2
19012008	139		2		2		1	2
19012008	140	1	1		2			0
19012008	141			1		1		0
19012008	142		1	3	2			0
19012008	143							0
19012008	144	2	1		1		2	0
19012008	145					2		2
19012008	146				1			3
19012008	147		1	1		1		0
19012008	148			2	2			0
19012008	149	1				3		5
19012008	150							4
19012008	151	1		1	2	1		0
19012008	152	1				1		0
19012008	153	1	1		2	1	1	0
19012008	154		1	3	2			0
19012008	155		2	1	1			4
19012008	156	2	3	1	2	2	2	0
19012008	157		1	2		3		10
19012008	158					1		2
19012008	159	2	2	6	3	1		10
19012008	160		1			3		8

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
19012008	161	1			1		1	3
19012008	162		1	1	2	3		9
19012008	163				2			2
20012008	164					1		1
20012008	165							0
20012008	166	1	1		1	1		0
20012008	167							0
20012008	168		1		2			1
20012008	169		1	1		2	3	0
20012008	170		2			1		1
20012008	171	2	2	1				2
20012008	172	1	1		1	2		2
20012008	173		1			4		1
20012008	174		3		2			0
20012008	175		1		1	1		0
20012008	176	1	1	1	1			4
20012008	177	3			3	1		1
20012008	178	4	1		1			0
20012008	179	3	3	2	1	1		0
20012008	180	2	3	1	1			0
20012008	181	1			1			0
20012008	182	1	4			1		0
20012008	183	3		1				0
20012008	184	4		2	3			0
20012008	185	2	1		1			0
20012008	186	1	1	1			1	0
20012008	187	1	3	2				0
20012008	188	2	1	1				0
20012008	189	2	1	3	2			0
20012008	190							0
20012008	191	4	3	2				0
20012008	192	1	1	1				0
20012008	193	12	1	1	3			0
21012008	194	1		3				0
21012008	195	3	2	2	2			0
21012008	196	1	2	2	1			0
21012008	197	1	4	1				2

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
21012008	198	8			2			0
21012008	199				3			0
21012008	200		1	1		1		0
21012008	201	5		1				0
21012008	202	6	3	1	1			0
21012008	203	1						0
21012008	204	6	1	1				0
21012008	205	1	1		1			0
21012008	206	4	1	2	1			0
21012008	207							1
21012008	208	5		1				0
21012008	209	3	1		1			0
21012008	210	5		1				0
21012008	211							0
21012008	212	2	1	1				0
21012008	213	5	3					0
21012008	214			1	1			0
21012008	215							0
21012008	216							0
21012008	217	1	1	4				0
21012008	218	1						0
21012008	219	4		5	1			0
21012008	220	2	1	2	1			0
21012008	221	5	1	4		1		0
21012008	222	1	1	1	1			0
21012008	223	3		1	1			1
21012008	224	2	1	3	1			0
21012008	225	5	2		1			0
21012008	226	4	3		3			1
21012008	227	2	1		1	1		0
21012008	228	1		2				0
21012008	229	2	1	2	2			0
21012008	230	5						0
21012008	231	1	2	2	1			0
21012008	232							0
21012008	233	4	1	4		1		0
22012008	234	1	1		2			0

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
22012008	235	3	1	4	3			0
22012008	236	5		1	3			0
22012008	237	2						0
22012008	238	3	1	1				1
22012008	239	4		2				0
22012008	240	2	1					0
22012008	241							0
22012008	242							0
22012008	243	1			1			1
22012008	244	2	1	1	1		2	0
22012008	245	1	3					0
22012008	246	1	1	1				0
22012008	247		2		1			0
22012008	248	4						0
22012008	249				1			2
22012008	250	2	1	1				0
22012008	251							0
22012008	252							0
22012008	253	1						0
22012008	254							0
22012008	255		2					1
22012008	256		3		1		1	0
22012008	257	2	3		2			0
22012008	258	4	1	1				0
22012008	259	2	1	1				0
22012008	260		3	1				0
22012008	261	2	3	1	1			0
22012008	262	2						0
22012008	263	4	1	1				0
22012008	264	3						0
22012008	265	4						0
22012008	266	4	1	1	1			0
22012008	267	2		1				0
23012008	268	2	1					0
23012008	269	2	2	2	2			0
23012008	270	1		1				0
23012008	271	4	2					0

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
23012008	272	3	1	3	2			0
23012008	273	2	1	2				0
23012008	274	3		1	1			0
23012008	275					1		0
23012008	276	2	1		2			0
23012008	277	3	1	3	3			0
23012008	278	5	2	2	1			0
23012008	279	1						0
23012008	280	1			1			0
23012008	281	1	1					0
23012008	282	3	4					0
23012008	283		1	2	2			0
23012008	284	2	2	2	1			0
23012008	285		1	3	1			0
23012008	286	2		1				0
23012008	287	3						0
23012008	288			2				0
23012008	289	1						0
23012008	290	2		2	2			0
23012008	291		2	1				0
23012008	292	1		1				0
23012008	293	3		2				0
23012008	294			1				0
23012008	295		1					0
23012008	296	1						0
23012008	297							0
23012008	298	3	1	1				0
23012008	299		1					0
23012008	300			1				0
23012008	301	2	1					0
23012008	302		1					3
23012008	303		2					2
24012008	304							0
24012008	305							0
24012008	306	1						5
24012008	307	2		1				1
24012008	308							0

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
24012008	309							0
24012008	310	4						1
24012008	311	2						0
24012008	312							1
24012008	313		1					2
24012008	314	1		1				0
24012008	315	1	1					0
24012008	316			1				1
24012008	317	3	2		1			0
24012008	318	2	2		3			0
24012008	319	2	1	1				0
24012008	320		1		1			0
24012008	321	2	2					0
24012008	322							2
24012008	323	1	1					55
24012008	324							0
24012008	325	1	1					0
24012008	326	1	1		2			0
24012008	327			2				0
24012008	328	2	4	1	1			0
24012008	329	2		1				0
18012007	1	5	5					0
18012007	2	5	8					0
18012007	3		3					0
18012007	4		1					0
18012007	5							0
18012007	6	2	1					0
18012007	7		1					0
18012007	8							0
18012007	9		1					0
18012007	10	4	0	0	1			0
18012007	11	6	0	0	1	0	0	0
18012007	12	11	2	0	4			0
18012007	13	1	4	0	1	0	0	0
18012007	14	11	3	1	0	0	0	0
18012007	15	15	7	0	0	0	0	0
18012007	16	7	8					0

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
18012007	17	5	0					0
18012007	18	4	3	0	0	0	0	0
18012007	19	12	4	2	4	0	0	0
19012007	20	8	4	0	2			0
19012007	21	2	1					0
19012007	22	1	6	1	0	0	0	0
19012007	23	6	3					0
19012007	24	6	6	0	1	0	0	0
19012007	25	1	2	1	1	0	0	0
19012007	26	2	3	1	0	0	0	0
19012007	27	5	1	0	0	0	0	0
19012007	28	7	1	0	0	1	0	0
19012007	29	7	1	0	0	0	0	0
19012007	30	11	5	0	0	0	0	0
19012007	31	7	3	0	2	0	0	0
19012007	32	3	4	3	3	0	0	0
19012007	33	10	2	1	1	1	0	0
19012007	34	6	2	1	0	0	0	0
19012007	35	5	1	0	1	0	0	0
19012007	36	8	2	0	0	0	0	3
19012007	37	11	4	0	0	0	0	0
19012007	38	6	3	0	3	0	0	0
19012007	39	6	2					0
19012007	40	11	3	1	5	0	1	0
19012007	41	3	1	0	1	0	0	0
19012007	42							0
20012007	43	1	2	1	0			0
20012007	44	5	0	5	3	1		0
20012007	45	10	2	3	1	0	0	0
20012007	46	2	1	0	1	0	0	0
20012007	47	14	3	0	4	0	0	0
20012007	48	4	4	3	2	0	0	0
20012007	49	3	2	1	1	1	0	0
20012007	50	2	5	0	0	0	0	0
20012007	51	3	3	0	0	1	0	0
20012007	52	14	12	0	2	0	0	0
20012007	53	5	2	1	0	0	0	0

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
20012007	54	3	1	1	0	0	0	0
20012007	55	5	4	1	1	3	2	0
20012007	56							0
20012007	57	1	2	5	1	0	0	0
20012007	58	25	16	4	0	0	0	0
20012007	59	4	9	6	3	1	0	0
20012007	60	6	4	3	6	0	0	0
20012007	61	0	1	5	3	0	0	0
21012007	62	1	1	1	4	3	1	0
21012007	63	2	0	2	1	10	0	0
21012007	64	0	3	4	1	8	0	0
21012007	65	5	1	5	0	12	0	0
21012007	66	0	5	3	1	11	3	0
21012007	67	5	3	2	4	10	0	0
21012007	68	7	1	3	5	1	0	0
21012007	69	6	3	7	2	11	0	0
21012007	70	2	3	3	0	0	0	0
21012007	71	1	3	0	1	0	0	0
21012007	72	1	0	0	0	1	0	24
21012007	73							0
21012007	74							0
21012007	75	0	0	3	0	0	1	0
21012007	76	0	1	2	0	0	0	2
21012007	77	2	0					15
21012007	78	3	1	0	3	0	0	0
21012007	79	1	0	1	0	1	0	0
21012007	80	0	0	1	1	1	0	0
21012007	81	0	1					0
21012007	82	0	1	0	0	2	0	0
21012007	83	1	2					0
21012007	84	2	1	1	1	2	0	7
21012007	85	1	1					1
21012007	86							1
21012007	87	3	1	0	1			0
21012007	88	4	1	1	3			1
21012007	89							1
21012007	90							1

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
21012007	91	2	1	1	1	0	0	0
21012007	92	2	2	2	4	0	0	0
21012007	93	5	3	2	2	0	0	0
22012007	94	5	0	3	0	5	0	0
22012007	95	1	1	0	0	3	0	0
22012007	96	2	2	1	0	2	0	0
22012007	97	3	4	2	1	0	0	0
22012007	98	2	2	4	3	5	1	0
22012007	99	4	1	0	0	2	0	0
22012007	100	2	0	3	0	2	0	0
22012007	101	0	0	4	0	0	0	0
22012007	102	2	2	2	2	0	0	0
22012007	103	6	0	4	1	0	0	0
22012007	104	5	1	3	2	0	0	0
22012007	105	3	6	1	0	0	0	0
22012007	106	3	4	5	2	0	0	0
22012007	107	8	8	0	2	0	0	0
22012007	108	7	6	1	2	0	0	0
22012007	109	2	2	2	1	1	0	0
22012007	110	2	3	1	0	0	0	0
22012007	111	1	2	0	1	0	0	0
22012007	112	1	0	0	0	0	0	0
22012007	113	3	0	0	0	0	0	0
22012007	114	1	1	0	0	3	0	0
22012007	115	1	2	0	0	5	0	0
22012007	116	3	2	0	0	5	0	0
22012007	117	2	1	0	0	0	0	0
22012007	118	2	1	1	0	0	1	0
22012007	119	2	4	0	0	0	0	0
22012007	120	1	6	0	0	0	0	1
22012007	121	3	1	0	1	0	0	0
22012007	122	2	0	2	2	0	0	1
22012007	123	7	0	5	2	0	0	0
22012007	124	4	1	1	0	0	0	0
22012007	125	2	1	0	0	0	0	0
23012007	126	2	1	0	1	1	1	0
23012007	127	2	4	0	0	0	0	0

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
23012007	128	2	3	1	0	2	0	0
23012007	129	1	3	1	0	0	0	0
23012007	130	0	2	0	1	2	0	0
23012007	131	4	2	2	0	0	0	1
23012007	132	1	0	3	0	1	1	0
23012007	133	0	0	1	1	0	0	0
23012007	134	1	0	2	1	4	0	0
23012007	135	3	4	3	1	0	0	0
23012007	136	4	0	2	1	0	0	0
23012007	137	1	4	2	1	0	0	0
23012007	138	3	5	3	1	0	0	0
23012007	139	8	8	1	1	0	0	0
23012007	140	1	3	0	2	0	0	0
23012007	141	0	2	1	0	0	0	0
23012007	142	0	0	2	1	1	0	0
23012007	143	3	4	0	2	0	0	0
23012007	144	0	1	0	0	0	0	0
23012007	145							0
23012007	146	1	0	0	0	0	0	0
23012007	147	1	0	0	0	0	0	0
23012007	148							0
23012007	149	1	0					0
23012007	150	2	1					0
23012007	151	1	0					0
23012007	152	1	0					0
23012007	153	1	0					0
23012007	154	1	0					1
23012007	155	1	0					0
23012007	156	0	1					0
23012007	157	3	1					0
24012007	158	3	0					0
24012007	159	0	2					0
24012007	160							0
24012007	161	2	1	1	1	0	0	0
24012007	162	1	0					0
24012007	163	5	0					0
24012007	164							0

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
24012007	165	5	2					0
24012007	166	6	1					0
24012007	167	10	3					0
24012007	168	4	3	0	1			0
24012007	169	4	5	3	0	0	0	0
24012007	170	1	1	0	2	0	0	0
24012007	171	2	2					0
24012007	172	2	3					0
24012007	173	2	2	0	0	0	0	0
24012007	174	1	0					0
24012007	175	5	0	0	2			0
24012007	176	1	2					0
24012007	177	6	1	1	0			0
24012007	178	1	2	1	0			0
24012007	179	1	2					0
24012007	180	2	3	2	0			0
24012007	181	2	2	1	2			0
24012007	182	5	2	1	1			0
24012007	183	1	1					0
24012007	184	12	3					0
24012007	185	3	2					0
19012006	1							
19012006	2							
19012006	3							
20012006	4							
20012006	5	13	9		2			
20012006	6	5	4					
20012006	7	5	8	2				
20012006	8	5	2	3		1		
20012006	9	5	1	1	1			1
20012006	10	0	1					
20012006	11							
20012006	12	0	4					1
20012006	13							
20012006	14					2		
20012006	15	0	1	0	2	1	0	
20012006	16							

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
20012006	17			0	2			
20012006	18							
20012006	19							
20012006	20	0	1					
20012006	21	0	1					
20012006	22	1	0					
20012006	23	1	1	1	0	2	0	
20012006	24	2	4					
20012006	25	5	0	1	1	3	0	
20012006	26	0	1					
20012006	27	1	2	1	0			
20012006	28							
20012006	29	2	1	0	1	1	0	
20012006	30	3	0					
20012006	31	1	0					
20012006	32	0	1					
20012006	33							
20012006	34	2						
20012006	35	1	1					
20012006	36	1	1					
20012006	37							
20012006	38							
20012006	39							
20012006	40	1	0					
20012006	41							
21012006	42							
21012006	43	0	3	1	2			
21012006	44	3	0	2	6	2	0	
21012006	45	3	1	0	3	1	0	
21012006	46	1	1					
21012006	47	0	0	0	0	2	0	
21012006	48	0	1	1	0	1	0	
21012006	49	1	1	1	1	0	0	
21012006	50							
21012006	51							
21012006	52							
21012006	53	0	2					

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
21012006	54							
21012006	55							
21012006	56							
21012006	57							
21012006	58							
21012006	59	2	1					
21012006	60	1	1					
21012006	61	0	3	1	0			
21012006	62	1	1					
21012006	63	1	0	1	0			
21012006	64	0	0	0	0	1	0	
21012006	65	1	1	0	1			
21012006	66	0	1	0	1	0	2	
21012006	67	2	3	0	0	1	0	
21012006	68	2	2	0	0	1	0	
21012006	69	0	1	1	2	0	0	
21012006	70	0	1	0	0	0	0	
21012006	71							
21012006	72							
21012006	73							
21012006	74							
21012006	75							
21012006	76							1
21012006	77							6
21012006	78							
21012006	79							
22012006	80	1	1	1	1	0	0	
22012006	81	2	0	0	1	1	1	
22012006	82	0	0	0	0	0	0	
22012006	83	4	0	0	2	1	0	1
22012006	84	0	1	0	2	0	0	1
22012006	85	2	1	0	0	1	0	1
22012006	86	1	0	0	0	0	0	
22012006	87					1	0	
22012006	88							
22012006	89							
22012006	90							

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
22012006	91							1
22012006	92							
22012006	93							
22012006	94					1	0	
22012006	95	3	0	3	1	0	0	
22012006	96					1	0	
22012006	97							
22012006	98	1	1	1	1	0	0	
22012006	99	0	1	1	0	0	0	
22012006	100	2	2	0	3	0	0	
22012006	101	3	1	0	2	0	0	
22012006	102	3	3	1	3	0	0	
22012006	103	0	0	1	2	0	0	
22012006	104	2	0	1	0	2	0	
22012006	105							
22012006	106							
22012006	107							
22012006	108							
22012006	109							1
22012006	110							
22012006	111							
22012006	112							
22012006	113							
23012006	114	1	0	0	1	1	0	1
23012006	115	2	0	0	0	1	0	
23012006	116	4	1	3	1	0	0	
23012006	117	5	1	3	2	0	0	
23012006	118	4	1	1	0	5	0	
23012006	119	2	0	2	1	2	0	
23012006	120	2	2	1	0	0	0	
23012006	121	0	0	1	0	0	1	
23012006	122	0	0	0	0	0	0	
23012006	123	0	0	0	0	0	0	
23012006	124	0	0	0	0	0	0	
23012006	125	0	0	0	0	0	0	
23012006	126	0	0	0	0	0	0	
23012006	127	1	0	0	0	0	0	1

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
23012006	128	0	0	0	0	0	0	1
23012006	129	0	0	0	0	0	0	1
23012006	130	0	0	0	0	0	0	
23012006	131	0	0	0	0	0	0	
23012006	132	1	1	1	1	0	0	
23012006	133	0	0	2	1	0	0	
23012006	134	0	1	0	0	0	0	
23012006	135	0	0	3	1	2	0	4
23012006	136	1	1	0	1	0	0	
23012006	137	2	0	0	2	1	0	
23012006	138	0	1	2	2	0	0	
23012006	139	2	0	1	0	2	0	
23012006	140	2	1	1	4	0	0	
23012006	141							
23012006	142	3	0	0	2	1	1	
23012006	143							
23012006	144							
23012006	145							1
23012006	146							1
23012006	147							
24012006	148	1	3	1	1	1	0	
24012006	149	1	3	2	1	0	0	
24012006	150	2	1	0	0	0	0	
24012006	151	2	0	1	0	0	0	
24012006	152	0	0	0	0	0	0	
24012006	153							
24012006	154							
24012006	155							
24012006	156							
24012006	157	0	0	1	0	0	0	
24012006	158							
24012006	159							
24012006	160							
24012006	161	5	1	0	2	1	0	
24012006	162	2	1	1	1	1	0	
24012006	163	2	2	5	1	2	0	
24012006	164	6	4	2	1	0	0	

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
24012006	165	3	2	1	0	1	0	
24012006	166	2	3	3	2	2	1	
24012006	167	2	0	1	2	1	0	
24012006	168	2	1	1	1	4	0	
24012006	169	7	2	6	0	1	0	
24012006	170	1	1	2	0	0	0	
24012006	171	1	1	0	1	0	1	
24012006	172							
24012006	173							
24012006	174							
24012006	175							
24012006	176							1
24012006	177							1
24012006	178							
24012006	179							
24012006	180							
25012006	181	10	4	1	3	1	1	
25012006	182	3	1	4	4	0	1	
25012006	183	10	3	5	2	0	1	
25012006	184	3	2	5	4	1	0	
25012006	185	5	2	1	0	0	0	
25012006	186	4	1	3	2	1	0	
25012006	187	6	5	3	3	2	0	
25012006	188	2	0	3	1	1	0	
25012006	189							
25012006	190							
25012006	191	1	0	0	0	0	0	
25012006	192	2	0	0	0	1	0	
25012006	193							
25012006	194							
25012006	195							
25012006	196							
25012006	197							
25012006	198							
25012006	199							
25012006	200							
25012006	201	1	1	1	1	0	0	

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
25012006	202							
25012006	203	3	0	0	0	1	0	
25012006	204							
25012006	205	4	0	1	0	0	0	
25012006	206	7	1	0	2	2	0	
25012006	207	0	1	0	0	0	0	
25012006	208							
25012006	209	1	0					
25012006	210							
25012006	211							
25012006	212							
25012006	213							
25012006	214							
25012006	215							
26012006	216	3	2	1	0	1	0	
26012006	217	3	1	2	1	2	0	
26012006	218	1	2	0	0	0	0	
26012006	219	2	1	0	0	2	0	
26012006	220	3	0	0	0	0	0	
26012006	221	3	2	2	0	0	0	
26012006	222	2	3	0	0	1	0	
26012006	223	3	2	1	0	0	0	
26012006	224							
26012006	225							
26012006	226							
26012006	227							
26012006	228							
26012006	229							
26012006	230	0	0	0	1	3	0	
26012006	231	0	1	0	1	0	0	
26012006	232	6	1	0	0	2	0	
26012006	233	7	5	1	2	1	0	
26012006	234							
26012006	235	3	0	1	1	0	0	
26012006	236	0	0	0	0	0	0	
26012006	237							
26012006	238							

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
26012006	239							
26012006	240							
27012006	241	2	0	1	2	0	0	
27012006	242	2	1	0	1	0	0	
27012006	243	4	4	2	1	1	0	
27012006	244	1	0	1	0	0	0	
27012006	245	0	1	1	4	0	0	
27012006	246	5	3	5	5	0	0	
27012006	247	4	1	2	1	0	0	
27012006	248							
27012006	249							1
27012006	250	1	1	0	0	1	0	
27012006	251							
27012006	252							
27012006	253							
27012006	254							
27012006	255	4	1	0	0	1	0	
27012006	256	3	2	0	1	0	0	
27012006	257	2	0	2	1	0	0	
27012006	258	13	3	1	1	0	0	
27012006	259	4	3	2	0	2	0	
27012006	260	1	2	0	1	0	0	
27012006	261	4	2	2	0	1	0	
27012006	262	5	4	0	0	3	0	
27012006	263	5	3	1	1	0	0	
27012006	264	4	1	1	0	0	1	
27012006	265							
27012006	266							
27012006	267							1
27012006	268							1
27012006	269							
27012006	270							1
27012006	271							1
27012006	272	1	2	0	0	0	1	
27012006	273							
27012006	274							1
28012006	275	1	0	4	2	0	0	

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
28012006	276	2	0	0	0	0	0	
28012006	277	0	0	0	0	0	0	
28012006	278							
28012006	279	3	1	2	0	0	0	1
28012006	280	0	1	0	1	0	0	
28012006	281							
28012006	282							
28012006	283							
28012006	284	1	0	1	1	1	0	
28012006	285	2	0	0	0	0	0	
28012006	286	1	2	4	1	0	0	
28012006	287	4	1	0	0	1	0	
28012006	288	3	0	3	0	0	0	
28012006	289	3	0	1	0	0	0	
28012006	290	6	1	0	0	0	0	1
28012006	291	3	1	0	0	0	0	
28012006	292	1	2	1	0	0	0	1
28012006	293	2	0	0	0	0	0	
28012006	294	0	0	0	0	0	0	
28012006	295	0	0	0	0	0	0	
28012006	296	1	0	0	1	0	0	
28012006	297	1	1	1	1	0	0	
28012006	298	1	0	0	0	0	0	
28012006	299							
28012006	300	3	0	0	0	0	0	
28012006	301							
28012006	302	4	0	0	0	0	0	
25012005	1	1	2					
25012005	2							1
25012005	3		1					1
25012005	4							
26012005	5					1	5	2
26012005	6						3	1
26012005	7				1			2
26012005	8						2	7
26012005	9						1	19
26012005	10							29

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
26012005	11							4
26012005	12							2
26012005	13							
26012005	14							2
26012005	15							4
26012005	16							
26012005	17							
26012005	18				2			
26012005	19							
26012005	20							
26012005	21							1
26012005	22							
26012005	23							
26012005	24			1	1			
26012005	25			1	2			
26012005	26	1	2		1			3
26012005	27			1				1
26012005	28	1	1					1
26012005	29	5	2					1
26012005	30	3	1	1				2
26012005	31							1
26012005	32							
26012005	33		1					1
27012005	34							1
27012005	35							
27012005	36						1	
27012005	37							
27012005	38							
27012005	39							
27012005	40							
27012005	41							2
27012005	42							9
27012005	43							2
27012005	44							1
27012005	45							1
27012005	46							
27012005	47							

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
27012005	48			1				
27012005	49							
27012005	50							3
27012005	51							1
27012005	52							
27012005	53							1
28012005	54							
28012005	55							
29012005	56							3
29012005	57							4
29012005	58							1
29012005	59							3
29012005	60							
29012005	61							3
29012005	62							
29012005	63							
29012005	64			1				
29012005	65							
29012005	66							
29012005	67							
29012005	68							
29012005	69				1			
29012005	70			2	2			
29012005	71			1			1	
29012005	72							
29012005	73							2
29012005	74							2
29012005	75							2
29012005	76						1	2
29012005	77							2
29012005	78						1	1
29012005	79							2
29012005	80							3
29012005	81							2
30012005	82						1	
30012005	83							
30012005	84				1			

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
30012005	85							
30012005	86					1	1	
30012005	87			3	1			
30012005	88				1			
30012005	89							
30012005	90							
30012005	91			1	2			
30012005	92						1	1
30012005	93	1	1					1
30012005	94							2
30012005	95							2
30012005	96							4
30012005	97							4
30012005	98							3
30012005	99							
30012005	100							
30012005	101							
30012005	102							
30012005	103				1			
30012005	104							
31012005	105		1			1		3
31012005	106							
31012005	107							
31012005	108							2
31012005	109							3
31012005	110							1
31012005	111							
31012005	112							1
1022005	113							
1022005	114				1			2
1022005	115							
1022005	116							
1022005	117				1			
1022005	118							2
1022005	119							3
1022005	120							
1022005	121							

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
1022005	122							2
1022005	123							3
2022005	124							
2022005	125							
2022005	126							
2022005	127			1				
2022005	128			1	1			
2022005	129					1		
2022005	130							2
2022005	131							2
2022005	132							2
2022005	133							3
2022005	134							
2022005	135							3
2022005	136							
2022005	137							
2022005	138							3
2022005	139							
2022005	140							
2022005	141							
2022005	142							
2022005	143						1	
2022005	144							
2022005	145							
2022005	146							
2022005	147							2
2022005	148							2
2022005	149							
16012004	1							
16012004	2							
17012004	3		1					
17012004	4	1						
17012004	5	1						
17012004	6	2						1
17012004	7		3					2
17012004	8	3	3					
17012004	9	1	3					

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
17012004	10	2						
17012004	11							
17012004	12							
17012004	13							
17012004	14							
17012004	15							
17012004	16							
17012004	17							
17012004	18	2						
17012004	19	1						2
17012004	20		2					1
17012004	21							
17012004	22							
17012004	23		1					1
17012004	24	1	3					
17012004	25							1
17012004	26							
17012004	27							
17012004	28	2	4					
17012004	29	3						
17012004	30	2						
17012004	31							
17012004	32							
17012004	33							
17012004	34	2						
17012004	35							
17012004	36	3			1			
17012004	37							
18012004	38				2			
18012004	39							
18012004	40							
18012004	41	1	2	1				
18012004	42	2	3					
18012004	43	1	1					
18012004	44	2	1					
18012004	45	1						2
18012004	46	2	4					

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
18012004	47	1		1				
18012004	48	1		1				
18012004	49							
18012004	50							
18012004	51							
18012004	52							
18012004	53		1					
18012004	54							
18012004	55							
18012004	56							
18012004	57							
18012004	58							
18012004	59							
18012004	60	1	1		1			
18012004	61							
18012004	62							
18012004	63	3						
18012004	64		1					
18012004	65							
18012004	66							
18012004	67	1	1					
18012004	68	2						
18012004	69							
18012004	70	2						
18012004	71	1						
18012004	72	3						
18012004	73	1	1					
18012004	74	1	1					
18012004	75		1					
18012004	76							
18012004	77	1	1					
18012004	78	1	1					
18012004	79							
19012004	80	2	2					1
19012004	81							
19012004	82		1					
19012004	83							3

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
19012004	84							1
19012004	85	1	2					
19012004	86	6	1	2				
19012004	87	2	2					
19012004	88							
19012004	89							
19012004	90							
19012004	91	1						
19012004	92	1						
19012004	93							1
19012004	94							2
19012004	95		1					
19012004	96							6
19012004	97		2					1
19012004	98							8
19012004	99							1
19012004	100							3
19012004	101	1						
19012004	102		1	2	2			
19012004	103							
19012004	104	1	1		1			
19012004	105							
19012004	106				1			
19012004	107							
19012004	108							
19012004	109	1						
19012004	110		1					
20012004	111	3	1		1			
20012004	112							
20012004	113	1	1					
20012004	114		1					
20012004	115		1					
20012004	116		1					
20012004	117							
20012004	118	1	3					
20012004	119	2						

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
20012004	120	1						
20012004	121							
20012004	122							
20012004	123							
20012004	124			1				
20012004	125			1				
20012004	126							
20012004	127		1					
20012004	128		1	1				
20012004	129		1		1			
20012004	130	1	1		1			1
20012004	131				F			
20012004	132							
20012004	133							
20012004	134	1		1				1
20012004	135				3			
20012004	136	1	1					
20012004	137							
20012004	138							
20012004	139	1						
20012004	140	1						
20012004	141							
20012004	142							
20012004	143	7						
20012004	144	1		1	2			
21012004	145		2	1	1			1
21012004	146				2			4
21012004	147	1	1	3	1			3
21012004	148	1	1		1			1
21012004	149	1	1		1			
21012004	150	1			1			1
21012004	151			1	1			1
21012004	152		1		1			1
21012004	153			1				
21012004	154	1	1		1			
21012004	155							
21012004	156							22
21012004	157							

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
21012004	158							
21012004	159							
21012004	160		1					
21012004	161	1						2
21012004	162							3
21012004	163							2
21012004	164	1	1					3
21012004	165	2			1			5
21012004	166							4
21012004	167		1					19
21012004	168		1					
21012004	169				1			
21012004	170		1					
21012004	171							
21012004	172							
21012004	173		1					
21012004	174							
21012004	175	2	1					
21012004	176							
22012004	177	1	1		1			4
22012004	178	1	1					4
22012004	179		1		1			4
22012004	180	2	2					
22012004	181	2	1	1	3			
22012004	182	7	2	2	1			
22012004	183	2	3	1	1			2
22012004	184	2						
22012004	185							
22012004	186	1	1					
22012004	187							
22012004	188	1	1					
22012004	189							
22012004	190							2
22012004	191		1		1			
22012004	192		1					2
22012004	193		1					3
22012004	194		1					1

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
22012004	195		1					
22012004	196		2					
22012004	197	2		1				
22012004	198	3	1		1			
22012004	199		2					
22012004	200	1	1		1			
22012004	201	1	1	1	2			
22012004	202		1					
22012004	203	1	1		1			
23012004	204	1	2					3
23012004	205	3	2					1
23012004	206	3	6		3			
23012004	207	5			2			
23012004	208	7	3					
23012004	209	1						
23012004	210	6	3	1	1			
23012004	211							
23012004	212	1	1					
23012004	213							
23012004	214		2					
23012004	215							
23012004	216							
23012004	217							5
23012004	218							5
23012004	219	2						
23012004	220	1						3
23012004	221							
23012004	222	1			1			
23012004	223							
23012004	224	5		1				
23012004	225	2	2	1				
23012004	226	5			1			
23012004	227	4	3					
23012004	228	2		1				
23012004	229	6		1	2			
23012004	230	4	1					
23012004	231	5	2	2				

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
24012004	232	1	1		1			
24012004	233		1					
24012004	234	1	1					
24012004	235	1						2
24012004	236		1		1			2
24012004	237							
24012004	238			1				1
24012004	239	1						2
24012004	240							
24012004	241							
24012004	242	1						
24012004	243	1						1
24012004	244	1	1					
24012004	245		1		1			
24012004	246	1						
24012004	247							
24012004	248		2					
24012004	249							
24012004	250							
24012004	251							1
24012004	252		1					
24012004	253							
24012004	254				1			2
24012004	255							
24012004	256							
24012004	257							1
24012004	258	2						
14012003	1							
14012003	2							
14012003	3							
14012003	4							
14012003	5							
14012003	6							
14012003	7							
14012003	8							
14012003	9							
14012003	10							

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
15012003	11							
15012003	12							
15012003	13							
15012003	14							
15012003	15							
15012003	16							
15012003	17							
15012003	18							
15012003	19							
15012003	20							
15012003	21							
15012003	22							
15012003	23							
15012003	24							
15012003	25							
15012003	26							
15012003	27							1
15012003	28							1
15012003	29							
15012003	30							
15012003	31							
15012003	32							
15012003	33							
15012003	34							
15012003	35							
15012003	36							
16012003	37							
16012003	38							
16012003	39							
16012003	40							
16012003	41							
16012003	42							
16012003	43							
16012003	44							
16012003	45							
16012003	46							
16012003	47							

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
16012003	48							
16012003	49							
16012003	50							
16012003	51							
16012003	52							
16012003	53							
16012003	54							
16012003	55							
16012003	56							
16012003	57							
16012003	58							
16012003	59							
16012003	60							
16012003	61							
16012003	62							
16012003	63							
16012003	64							
16012003	65							
16012003	66							
16012003	67							1
16012003	68							
16012003	69							
16012003	70							
16012003	71							
17012003	72							
17012003	73							
17012003	74							
17012003	75							
17012003	76							
17012003	77							
17012003	78							
17012003	79							
17012003	80							
17012003	81							
17012003	82							
17012003	83							
17012003	84							

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
17012003	85							
17012003	86							
17012003	87							1
17012003	88							
17012003	89							
17012003	90							
17012003	91							
17012003	92							
17012003	93							
17012003	94							
17012003	95							
17012003	96							
17012003	97							
17012003	98							
17012003	99							
17012003	100							
17012003	101							1
17012003	102							
17012003	103							
17012003	104							
17012003	105							
18012003	106							
18012003	107							
18012003	108							
18012003	109							
18012003	110							
18012003	111							
18012003	112							
18012003	113							
18012003	114							
18012003	115							
18012003	116							
18012003	117							
18012003	118							
18012003	119							
18012003	120							
18012003	121							

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll	
18012003	122								
18012003	123								
18012003	124								
18012003	125								
18012003	126								
18012003	127								
18012003	128								
18012003	129								
18012003	130								
19012003	131								
19012003	132								
19012003	133								
19012003	134								
19012003	135								
19012003	136								
19012003	137								
19012003	138								
19012003	139								
19012003	140								471
19012003	141							1	
19012003	142								
19012003	143								
19012003	144								
19012003	145								
19012003	146								
19012003	147								
19012003	148								
19012003	149								
19012003	150							2	
19012003	151								
19012003	152								
19012003	153								
19012003	154								
19012003	155								
19012003	156								
19012003	157								
20012003	158								

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
20012003	159							
20012003	160							
20012003	161							
20012003	162							
20012003	163							
20012003	164							
20012003	165							1
20012003	166							1
20012003	167							
20012003	168							
20012003	169							
20012003	170							
20012003	171							
20012003	172							
20012003	173							
20012003	174							
20012003	175							
20012003	176							
20012003	177							
20012003	178							
20012003	179							
20012003	180							
20012003	181							
20012003	182							
20012003	183							
20012003	184							
20012003	185							
20012003	186							
20012003	187							
20012003	188							
20012003	189							
20012003	190							
21012003	191							
21012003	192							
21012003	193							
21012003	194							
21012003	195							

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
21012003	196							
21012003	197							
21012003	198							
21012003	199							
21012003	200							
21012003	201							
21012003	202							
21012003	203							
21012003	204							
21012003	205							
21012003	206							
21012003	207							
21012003	208							
22012003	209							
22012003	210							
22012003	211							
22012003	212							
22012003	213							
22012003	214							
22012003	215							
22012003	216							
22012003	217							
22012003	218							
22012003	219							
22012003	220							
22012003	221							
22012003	222							
22012003	223							
22012003	224							
22012003	225							
22012003	226							
22012003	227							
14012002	1							
14012002	2							
14012002	3							
14012002	4							
14012002	5							

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
14012002	6							
14012002	7							
14012002	8							
14012002	9							
15012002	10							
15012002	11							
15012002	12							
15012002	13							
15012002	14							
15012002	15							
15012002	16							
15012002	17							
15012002	18							
15012002	19							
15012002	20							
15012002	21							
15012002	22							
15012002	23							
15012002	24							
15012002	25							
15012002	26							
15012002	27							
15012002	28							
15012002	29							
15012002	30							
15012002	31							
15012002	32							
15012002	33							
15012002	34							
15012002	35							
15012002	36							
15012002	37							
15012002	38							
15012002	39							
16012002	40							
16012002	41							
16012002	42							

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
16012002	43							
16012002	44							
16012002	45							
16012002	46							
16012002	47							
16012002	48							
16012002	49							
16012002	50							
16012002	51							
16012002	52							
16012002	53							
16012002	54							
16012002	55							
16012002	56							
16012002	57							
16012002	58							
16012002	59							
16012002	60							
16012002	61							
16012002	62							
16012002	63							
16012002	64							
16012002	65							
16012002	66							
16012002	67							
16012002	68							
16012002	69							
16012002	70							
16012002	71							
16012002	72							
16012002	73							
16012002	74							
16012002	75							
16012002	76							
16012002	77							
17012002	78							
17012002	79							

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
17012002	80							
17012002	81							
17012002	82							
17012002	83							
17012002	84							
17012002	85							
17012002	86							
17012002	87							
17012002	88							
17012002	89							
17012002	90							
17012002	91							
17012002	92							
17012002	93							
17012002	94							
17012002	95							
17012002	96							
17012002	97							
17012002	98							
17012002	99							
17012002	100							
17012002	101							
17012002	102							
17012002	103							
17012002	104							
17012002	105							
17012002	106							
17012002	107							
17012002	108							
17012002	109							
17012002	110							
17012002	111							
17012002	112							
17012002	113							
17012002	114							
17012002	115							
18012002	116							

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
18012002	117							
18012002	118							
18012002	119							
18012002	120							
18012002	121							
18012002	122							
18012002	123							
18012002	124							
18012002	125							
18012002	126							
18012002	127							
18012002	128							
18012002	129							
18012002	130							
18012002	131							
18012002	132							
18012002	133							
18012002	134							
18012002	135							
18012002	136							
18012002	137							
18012002	138							
18012002	139							
18012002	140							
18012002	141							
18012002	142							
18012002	143							
18012002	144							
18012002	145							
18012002	146							
18012002	147							
18012002	148							
18012002	149							
18012002	150							
18012002	151							
18012002	152							
18012002	153							

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
18012002	154							
18012002	155							
18012002	156							
18012002	157							
18012002	158							
19012002	159							
19012002	160							
19012002	161							
20012002	162							
20012002	163							
20012002	164							
20012002	165							
20012002	166							
20012002	167							
20012002	168							
20012002	169							
20012002	170							
20012002	171							
20012002	172							
20012002	173							
20012002	174							
20012002	175							
20012002	176							1
20012002	177							
20012002	178							
20012002	179							
20012002	180							
20012002	181							
20012002	182							
20012002	183							
20012002	184							
20012002	185							
20012002	186							
20012002	187							
20012002	188							
20012002	189							
20012002	190							

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
20012002	191							
20012002	192							
20012002	193							
20012002	194							
20012002	195							
20012002	196							
20012002	197							
20012002	198							
20012002	199							
20012002	200							
20012002	201							
21012002	202							
21012002	203							
21012002	204							
21012002	205							
21012002	206							
21012002	207							
21012002	208							
21012002	209							
21012002	210							
21012002	211							
21012002	212							
21012002	213							
21012002	214							
21012002	215							
21012002	216							
21012002	217							
21012002	218							
21012002	219							
21012002	220							
21012002	221							
21012002	222							
21012002	223							
21012002	224							
21012002	225							
21012002	226							
14012001	1							1

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
14012001	2							1
14012001	3							1
14012001	4							1
15012001	5							1
15012001	6							1
15012001	7							1
15012001	8							
15012001	9							
15012001	10							1
15012001	11							2
15012001	12							2
15012001	13							1
15012001	14							
15012001	15							
15012001	16							1
15012001	17							2
15012001	18							2
15012001	19							3
15012001	20							2
15012001	21							3
15012001	22							3
15012001	23							5
15012001	24							2
15012001	25							3
15012001	26							4
15012001	27							3
15012001	28							3
16012001	29							2
16012001	30							1
16012001	31							2
16012001	32							1
16012001	33							
16012001	34							2
16012001	35							
16012001	36							
16012001	37							
16012001	38							

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
16012001	39							1
16012001	40							2
16012001	41							4
16012001	42							
16012001	43							
16012001	44							
16012001	45							
16012001	46							
16012001	47							
16012001	48							
16012001	49							
16012001	50							
16012001	51							
16012001	52							
16012001	53							
16012001	54							
16012001	55							2
16012001	56							2
16012001	57							
16012001	58							
16012001	59							
16012001	60							3
16012001	61							1
16012001	62							
16012001	63							
16012001	64							
16012001	65							
16012001	66							
16012001	67							
16012001	68							
16012001	69							
17012001	70							
17012001	71							
17012001	72							
17012001	73							
17012001	74							
17012001	75							

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
17012001	76							
17012001	77							1
17012001	78							2
17012001	79							2
17012001	80							
17012001	81							1
17012001	82							
17012001	83							2
17012001	84							1
17012001	85							
17012001	86							
17012001	87							
17012001	88							
17012001	89							
17012001	90							
17012001	91							
17012001	92							
17012001	93							
17012001	94							2
17012001	95							1
17012001	96							2
17012001	97							
17012001	98							
17012001	99							
17012001	100							
17012001	101							
17012001	102							
17012001	103							
17012001	104							
17012001	105							
17012001	106							
17012001	107							
17012001	108							
18012001	109							
18012001	110							1
18012001	111							1
18012001	112							1

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
18012001	113							
18012001	114							1
18012001	115							3
18012001	116							
18012001	117							
18012001	118							
18012001	119							
18012001	120							
18012001	121							
18012001	122							
18012001	123							
18012001	124							
18012001	125							
18012001	126							
18012001	127							
18012001	128							
18012001	129							
18012001	130							
18012001	131							1
18012001	132							
18012001	133							
18012001	134							
18012001	135							3
18012001	136							3
18012001	137							2
18012001	138							
18012001	139							1
18012001	140							2
18012001	141							1
18012001	142							2
18012001	143							1
18012001	144							
19012001	145							1
19012001	146							1
19012001	147							1
19012001	148							2
19012001	149							1

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
19012001	150							1
19012001	151							1
19012001	152							
19012001	153							
19012001	154							
19012001	155							1
19012001	156							1
19012001	157							1
19012001	158							1
19012001	159							
19012001	160							
19012001	161							1
19012001	162							
19012001	163							
29012000	1							0
29012000	2							0
29012000	3							0
29012000	4							0
29012000	5							0
29012000	6							0
29012000	7							0
29012000	8							0
29012000	9							0
29012000	10							0
30012000	11							0
30012000	12							0
30012000	13							0
30012000	14							0
30012000	15							0
30012000	16							0
30012000	17							0
30012000	18							0
30012000	19							1
30012000	20							0
30012000	21							0
30012000	22							0
30012000	23							0

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
30012000	24							4
30012000	25							1
30012000	26							7
30012000	27							0
30012000	28							0
30012000	29							0
30012000	30							0
30012000	31							0
30012000	32							0
30012000	33							0
30012000	34							0
30012000	35							0
30012000	36							0
30012000	37							0
30012000	38							0
31012000	39							0
31012000	40							0
31012000	41							0
31012000	42							0
31012000	43							0
31012000	44							0
31012000	45							0
31012000	46							0
31012000	47							0
31012000	48							0
31012000	49							0
31012000	50							0
31012000	51							0
31012000	52							0
31012000	53							0
31012000	54							0
31012000	55							0
31012000	56							0
31012000	57							0
31012000	58							0
31012000	59							0
31012000	60							0

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
31012000	61							0
31012000	62							0
31012000	63							0
31012000	64							0
1022000	65							0
1022000	66							0
1022000	67							0
1022000	68							0
1022000	69							0
1022000	70							0
1022000	71							0
1022000	72							0
1022000	73							0
1022000	74							0
1022000	75							0
1022000	76							0
1022000	77							0
1022000	78							0
1022000	79							0
1022000	80							0
1022000	81							0
1022000	82							0
1022000	83							0
1022000	84							0
1022000	85							0
1022000	86							0
1022000	87							0
1022000	88							0
1022000	89							0
1022000	90							0
1022000	91							0
1022000	92							0
2022000	93							0
2022000	94							0
2022000	95							0
2022000	96							0
2022000	97							0

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
2022000	98							0
2022000	99							0
2022000	100							0
2022000	101							0
2022000	102							0
2022000	103							0
2022000	104							0
2022000	105							0
2022000	106							0
2022000	107							0
2022000	108							0
2022000	109							1
2022000	110							0
2022000	111							0
2022000	112							0
2022000	113							0
2022000	114							0
2022000	115							0
2022000	116							0
2022000	117							0
2022000	118							0
2022000	119							0
2022000	120							0
2022000	121							0
2022000	122							0
3022000	123							0
3022000	124							0
3022000	125							0
3022000	126							0
3022000	127							0
3022000	128							0
3022000	129							0
3022000	130							0
3022000	131							0
3022000	132							0
3022000	133							0
3022000	134							0

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
3022000	135							0
3022000	136							0
4022000	137							0
4022000	138							0
4022000	139							0
4022000	140							0
4022000	141							0
3021999	1							
3021999	2							
3021999	3							
3021999	4							
3021999	5							
3021999	6							
3021999	7							
3021999	8							
3021999	9							
3021999	10							
3021999	11							
3021999	12							
4021999	13							
4021999	14							
4021999	15							
4021999	16							
4021999	17							
4021999	18							
4021999	19							
4021999	20							
4021999	21							
4021999	22							
4021999	23							
4021999	24							
4021999	25							
4021999	26							
4021999	27							
4021999	28							
4021999	29							
4021999	30							

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
4021999	31							
4021999	32							
4021999	33							
4021999	34							
4021999	35							
4021999	36							
4021999	37							
4021999	38							
4021999	39							
4021999	40							
4021999	41							
4021999	42							
4021999	43							
4021999	44							
4021999	45							
4021999	46							
4021999	47							
4021999	48							
5021999	49							
5021999	50							
5021999	51							
5021999	52							
5021999	53							
5021999	54							
5021999	55							
5021999	56							
5021999	57							
5021999	58							
5021999	59							
5021999	60							
5021999	61							
5021999	62							
5021999	63							
5021999	64							
6021999	65							
6021999	66							
6021999	67							

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
6021999	68							
6021999	69							
6021999	70							
6021999	71							
6021999	72							
6021999	73							
6021999	74							
6021999	75							
6021999	76							
6021999	77							
6021999	78							
6021999	79							
6021999	80							
6021999	81							
6021999	82							
6021999	83							
6021999	84							
6021999	85							
6021999	86							
6021999	87							
7021999	88							
7021999	89							
7021999	90							
7021999	91							
7021999	92							
7021999	93							
7021999	94							
7021999	95							
7021999	96							
7021999	97							1
7021999	98							
7021999	99							
7021999	100							
7021999	101							
7021999	102							
7021999	103							
7021999	104							

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Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
7021999	105							
7021999	106							
7021999	107							
7021999	108							
7021999	109							
7021999	110							
7021999	111							
7021999	112							
7021999	113							
7021999	114							
7021999	115							
7021999	116							
8021999	117							
8021999	118							
8021999	119							
8021999	120							
8021999	121							
8021999	122							
8021999	123							
8021999	124							
8021999	125							
8021999	126							
8021999	127							
8021999	128							
8021999	129							
8021999	130							
8021999	131							
8021999	132							
8021999	133							
8021999	134							
8021999	135							
8021999	136							
8021999	137							
8021999	138							
8021999	139							
8021999	140							
8021999	141							

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
8021999	142							
8021999	143							
8021999	144							
8021999	145							
8021999	146							
16011998	1							
17011998	2							
17011998	3							
17011998	4							1
17011998	5							
17011998	6							
17011998	7							
17011998	8							
17011998	9							
17011998	10							
17011998	11							
18011998	12							1
18011998	13							
18011998	14							
18011998	15							
18011998	16							1
18011998	17							
18011998	18							
18011998	19							
18011998	20							
18011998	21							
18011998	22							
18011998	23							
18011998	24							
18011998	25							
19011998	26							
19011998	27							
19011998	28							
19011998	29							
19011998	30							
20011998	31							
20011998	32							

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
20011998	33							
20011998	34							
20011998	35							
21011998	36							
21011998	37							
21011998	38							
21011998	39							
21011998	40							
21011998	41							
21011998	42							
21011998	43							
21011998	44							
21011998	45							
21011998	46							
21011998	47							
21011998	48							
21011998	49							
22011998	50							
22011998	51							
22011998	52							
22011998	53							
22011998	54							
22011998	55							
22011998	56							
22011998	57							
22011998	58							
22011998	59							
22011998	60							
22011998	61							
22011998	62							
22011998	63							
22011998	64							
1021997	1							
2021997	2							
2021997	3							
2021997	4							
2021997	5							

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
2021997	6							
2021997	7							
2021997	8							
2021997	9							
2021997	10							
2021997	11							
2021997	12							
2021997	13							
2021997	14							
2021997	15							
2021997	16							
2021997	17							
2021997	18							
2021997	19							
2021997	20							
2021997	21							
2021997	22							
2021997	23							
2021997	24							
2021997	25							
2021997	26							
2021997	27							
2021997	28							
3021997	29							
3021997	30							
3021997	31							
3021997	32							
3021997	33							
3021997	34							
3021997	35							
3021997	36							
3021997	37							
3021997	38							
3021997	39							
3021997	40							
3021997	41							
3021997	42							

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
3021997	43							
3021997	44							
3021997	45							
3021997	46							
3021997	47							
3021997	48							1
3021997	49							
3021997	50							
3021997	51							
3021997	52							
3021997	53							
3021997	54							
4021997	55							
4021997	56							
4021997	57							
4021997	58							
4021997	59							
4021997	60							
4021997	61							
4021997	62							
4021997	63							
4021997	64							
4021997	65							
4021997	66							
4021997	67							
4021997	68							
4021997	69							
4021997	70							
4021997	71							
4021997	72							
4021997	73							
4021997	74							
4021997	75							
4021997	76							
4021997	77							
4021997	78							
4021997	79							

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
5021997	80							
5021997	81							
5021997	82							
5021997	83							
5021997	84							
5021997	85							
5021997	86							
5021997	87							
5021997	88							
5021997	89							
5021997	90							
5021997	91							
5021997	92							
5021997	93							
5021997	94							
5021997	95							
5021997	96							
5021997	97							
5021997	98							
5021997	99							
5021997	100							
5021997	101							
5021997	102							
5021997	103							
5021997	104							
5021997	105							
6021997	106							
6021997	107							
6021997	108							
6021997	109							
6021997	110							
6021997	111							
6021997	112							
6021997	113							
6021997	114							
6021997	115							
6021997	116							

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll	
6021997	117								
6021997	118								
6021997	119								
6021997	120								
6021997	121								
6021997	122								
6021997	123								
6021997	124								
6021997	125								
6021997	126								
6021997	127								
6021997	128								
6021997	129								
6021997	130								
6021997	131								
23011996	1								
23011996	2								
23011996	3							1	
23011996	4							1	497
24011996	5								
24011996	6								
24011996	7							1	
24011996	8								
24011996	9								
24011996	10								
24011996	11								
24011996	12								
24011996	13								
24011996	14								
24011996	15								
24011996	16								
24011996	17								
24011996	18								
24011996	19								
24011996	20								
24011996	21								
24011996	22								

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
24011996	23							
24011996	24							
24011996	25							
24011996	26							
24011996	27							
24011996	28							
24011996	29							
24011996	30							
24011996	31							
25011996	32							1
25011996	33							
25011996	34							2
25011996	35							1
25011996	36							
25011996	37							
25011996	38							
25011996	39							
25011996	40							
25011996	41							
25011996	42							1
25011996	43							
7021996	44							4
7021996	45	1	1					4
7021996	46							2
7021996	47							
7021996	48							
7021996	49							
7021996	50							
7021996	51							
7021996	52							
7021996	53							
7021996	54							
7021996	55							1
7021996	56							1
7021996	57							1
7021996	58							
7021996	59							

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
7021996	60							
7021996	61							
7021996	62							
7021996	63							
7021996	64							
8021996	65							
8021996	66							
8021996	67							
8021996	68							
8021996	69							1
8021996	70							
8021996	71							
8021996	72							
8021996	73							
8021996	74							
8021996	75							
8021996	76							
8021996	77							
8021996	78							
8021996	79							
8021996	80							
8021996	81							
8021996	82							
8021996	83							
8021996	84							
8021996	85							
8021996	86							
8021996	87							
8021996	88							
8021996	89							
8021996	90							
8021996	91							
9021996	92							
9021996	93							2
9021996	94							1
9021996	95							
9021996	96							

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
9021996	97							
9021996	98							
9021996	99							
9021996	100							1
9021996	101							
9021996	102							
9021996	103							
9021996	104							
9021996	105							
9021996	106							
9021996	107							
9021996	108							
9021996	109							
9021996	110							
9021996	111							
9021996	112							1
9021996	113							1
9021996	114							1
9021996	115							
9021996	116							
9021996	117							1
10021996	118							
10021996	119							
10021996	120							1
10021996	121							
10021996	122							
10021996	123							
10021996	124							
10021996	125							1
10021996	126							1
10021996	127							
10021996	128							
10021996	129							
10021996	130							
10021996	131							
10021996	132							
10021996	133							

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
10021996	134							
10021996	135							
10021996	136							
10021996	137							
10021996	138							1
10021996	139							
10021996	140							
11021996	141							
11021996	142							
11021996	143							
11021996	144							
11021996	145							
11021996	146							
11021996	147							
11021996	148							
11021996	149							
11021996	150							
11021996	151							
11021996	152							
11021996	153							
11021996	154							
11021996	155							
11021996	156							
11021996	157							
11021996	158							
11021996	159							
11021996	160							1
11021996	161							1
11021996	162							
11021996	163							
11021996	164							
11021996	165							
11021996	166							
11021996	167							
11021996	168							
11021996	169							
11021996	170							

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
11021996	171							
11021996	172							
11021996	173							
11021996	174							1
11021996	175							
11021996	176							
12021996	177							
12021996	178							
12021996	179							
12021996	180							
12021996	181							
12021996	182							
12021996	183							1
12021996	184							
12021996	185							
12021996	186							
12021996	187							
12021996	188							
12021996	189							1
12021996	190							1
12021996	191							
12021996	192							
12021996	193							
12021996	194							
12021996	195							
12021996	196							
12021996	197							
12021996	198							
12021996	199							
12021996	200							
12021996	201							
12021996	202							
12021996	203							
12021996	204							
24011995	1							
25011995	2							
25011995	3							

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
25011995	4							
25011995	5							
25011995	6							
25011995	7							
25011995	8							
25011995	9							
25011995	10							
25011995	11							
25011995	12							
25011995	13							
25011995	14							
25011995	15							
26011995	16							
26011995	17							
26011995	18							
26011995	19							
26011995	20							
26011995	21							
26011995	22							
26011995	23							
26011995	24							
26011995	25							
26011995	26							
26011995	27							
26011995	28							
26011995	29							
26011995	30							
27011995	31							
27011995	32							
27011995	33							
27011995	34							
27011995	35							
27011995	36							
27011995	37							
27011995	38							
27011995	41							
27011995	42							

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
27011995	43							
27011995	44							
27011995	45							
27011995	46							
28011995	47							
28011995	48							
28011995	49							
28011995	50							
28011995	51							
28011995	52							
28011995	53							
28011995	54							
28011995	55							
28011995	56							
28011995	57							
28011995	58							
28011995	59							
22011994	1							1
22011994	2							
22011994	3							
22011994	4							
22011994	5							1
22011994	6							1
22011994	7							1
22011994	8							
22011994	9							
22011994	10							
22011994	11							
22011994	12							
22011994	13							
22011994	14							
22011994	15							
22011994	16							
22011994	17							1
22011994	18							
22011994	19							
22011994	20							

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
22011994	21							
22011994	22							
22011994	23							
22011994	24							
23011994	25							
23011994	26							
23011994	27							
23011994	28							
23011994	29							
23011994	30							
23011994	31							
23011994	32							
23011994	33							
23011994	34							
23011994	35							
23011994	36							
23011994	37							
23011994	38							
23011994	39							
23011994	40							
23011994	41							
23011994	42							
23011994	43							
23011994	44							
23011994	45							
23011994	46							
23011994	47							
23011994	48							
23011994	49							
24011994	50							
24011994	51							
24011994	52							
24011994	53							
24011994	54							
24011994	55							
24011994	56							
24011994	57							

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
24011994	58							
24011994	59							
24011994	60							
24011994	61							
24011994	62							
24011994	63							
24011994	64							
24011994	65							
24011994	66							1
24011994	67							
24011994	68							1
24011994	69							
24011994	70							
24011994	71							
24011994	72							
24011994	73							
25011994	74							
25011994	75							
25011994	76							
25011994	77							
25011994	78							
25011994	79							
25011994	80							
25011994	81							
25011994	82							
25011994	83							
25011994	84							
25011994	85							
25011994	86							
25011994	87							
25011994	88							
25011994	89							
25011994	90							2
25011994	91							
25011994	92							
25011994	93							
25011994	94							

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
25011994	95							
25011994	96							
2021993	1							
3021993	2							
3021993	3							1
3021993	4							
3021993	5							
3021993	6							
4021993	7							
4021993	8							
4021993	9							
4021993	10							
4021993	11							
4021993	12							
4021993	13							
4021993	14							
4021993	15							
4021993	16							
5021993	17							
5021993	18							
5021993	19							
5021993	20							
5021993	21							
5021993	22							
5021993	23							
5021993	24							
5021993	25							
5021993	26							
5021993	27							
5021993	28							
5021993	29							
6021993	30							
6021993	31							
6021993	32							
6021993	33							
6021993	34							
6021993	35							

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
6021993	36							
6021993	37							
6021993	38							
6021993	39							
7021993	40							
7021993	41							
7021993	42							
7021993	43							
7021993	44							
7021993	45							
7021993	46							
7021993	47							
7021993	48							
7021993	49							
7021993	50							
7021993	51							
7021993	52							
8021993	53							
8021993	54							
8021993	55							
18011992	1							
18011993	2							
18011994	3							2
18011995	4							
18011996	5							
18011997	6							
18011998	7							
18011999	8							
18012000	9							
18012001	10							
18012002	11							
18012003	12							
18012004	13							
18012005	14							
18012006	15							1
18012007	16							
18012008	17							

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
18012009	18							
18012010	19							1
18012011	20							
18012012	21							
18012013	22							
18012014	23							
18012015	24							
18012016	25							
18012017	26							
18012018	27							
18012019	28							
18012020	29							
18012021	30							
18012022	31							
18012023	32							
18012024	33							
18012025	34							
18012026	35							
18012027	36							
18012028	37							
18012029	38							
18012030	39							
18012031	40							
18012032	41							
18012033	42							
18012034	43							
18012035	44							
18012036	45							
18012037	46							
18012038	47							
18012039	48							
18012040	49							
18012041	50							
18012042	51							
18012043	52							
18012044	53							
24011991	1							

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
24011991	2							
24011991	3							
24011991	4							
24011991	5							
24011991	6							
24011991	7							
24011991	8							
24011991	9							
24011991	10							
24011991	11							
24011991	12							
24011991	13							
24011991	14							1
24011991	15							1
24011991	16							
24011991	17							
24011991	18							
25011991	19							2
25011991	20							2
25011991	21							1
25011991	22							1
25011991	23							
25011991	24							1
25011991	25							
25011991	26							
25011991	27							
25011991	28							
25011991	29							
25011991	30							
25011991	31							
25011991	32							
26011991	33							1
26011991	34							1
26011991	35							1
26011991	36							1
26011991	37							
26011991	38							

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
26011991	39							
26011991	40							
26011991	41							
26011991	42							2
26011991	43							2
26011991	44							2
26011991	45							1
26011991	46							2
26011991	47							2
26011991	48							
26011991	49							
26011991	50							
26011991	51							
26011991	52							
26011991	53							
26011991	54							
27011991	55							
27011991	56							1
27011991	57							
27011991	58							
27011991	59							
27011991	60							
27011991	61							
27011991	62							
27011991	63							
27011991	64							
27011991	65							1
27011991	66							1
27011991	67							1
27011991	68							1
27011991	69							
27011991	70							
27011991	71							
27011991	72							
27011991	73							
27011991	74							
27011991	75							

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
28011991	76							2
28011991	77							1
28011991	78							1
28011991	79							1
28011991	80							1
28011991	81							
28011991	82							
28011991	83							
28011991	84							
28011991	85							
28011991	86							
28011991	87							
28011991	88							
28011991	89							2
28011991	90							2
28011991	91							2
28011991	92							2
28011991	93							1
28011991	94							
28011991	95							
28011991	96							
28011991	97							
28011991	98							
28011991	99							
28011991	100							1
29011991	101							1
29011991	102							
29011991	103							1
29011991	104							1
29011991	105							1
29011991	106							
29011991	107							
29011991	108							
29011991	109							
29011991	110							
29011991	111							
29011991	112							

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
29011991	113							
29011991	114							
29011991	115							
29011991	116							
29011991	117							
29011991	118							
29011991	119							
29011991	120							
29011991	121							
29011991	122							
29011991	123							
30011991	124							
30011991	125							
30011991	126							
30011991	127							
30011991	128							
30011991	129							
30011991	130							
30011991	131							
30011991	132							
30011991	133							
30011991	134							
30011991	135							1
30011991	136							2
30011991	137							2
30011991	138							
30011991	139							
30011991	140							
30011991	141							
30011991	142							
30011991	143							
30011991	144							
31011991	145							
31011991	146							1
31011991	147							2
31011991	148							1
31011991	149							

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
31011991	150							
31011991	151							
31011991	152							
31011991	153							
31011991	154							
31011991	155							
31011991	156							
31011991	157							
31011991	158							
31011991	159							1
31011991	160							1
31011991	161							2
31011991	162							2
1021991	163							
1021991	164							
1021991	165							
1021991	166							
1021991	167							
1021991	168							
1021991	169							
1021991	170							
1021991	171							
1021991	172							
1021991	173							
1021991	174							
1021991	175							
1021991	176							
1021991	177							
1021991	178							
1021991	179							
1021991	180							
17011990	1							101
17011990	2							
17011990	3							
17011990	4							1
17011990	5							
17011990	6							2

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
18011990	7							1
18011990	8							1
18011990	9							
18011990	10							1
18011990	11							
18011990	12							
18011990	13							
18011990	14							
18011990	15							
18011990	16							
18011990	17							
18011990	18							
19011990	19							
19011990	20							
19011990	21							1
19011990	22							
19011990	23							
19011990	24							
19011990	25							
19011990	26							
19011990	27							
20011990	28							
20011990	29							
20011990	30							
20011990	31							
20011990	32							
20011990	33							
20011990	34							
20011990	35							1
20011990	36							
20011990	37							
21011990	38							
21011990	39							
21011990	40							
21011990	41							
21011990	42							
21011990	43							

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
21011990	44							
21011990	45							
21011990	46							
21011990	47							
21011990	48							
21011990	49							
21011990	50							
21011990	51							
22011990	52							
22011990	53							
22011990	54							
22011990	55							
22011990	56							
22011990	57							
22011990	58							
22011990	59							
22011990	60							
22011990	61							
23011990	62							
23011990	63							
23011990	64							
23011990	65							
23011990	66							
23011990	67							1
23011990	68							
24011990	69							
24011990	70							
24011990	71							
24011990	72							
24011990	73							
24011990	74							1
24011990	75							
24011990	76							
24011990	77							
16011989	1							
16011989	2							
16011989	3							1

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
16011989	4							2
16011989	5							
16011989	6							1
16011989	7							1
16011989	8							
16011989	9							
16011989	10							
16011989	11							
16011989	12							1
16011989	13							1
16011989	14							2
16011989	15							
16011989	16							
17011989	17							1
17011989	18							1
17011989	19							
17011989	20							
17011989	21							1
17011989	22							
17011989	23							
17011989	24							
17011989	25							
17011989	26							
17011989	27							1
17011989	28							1
17011989	29							1
17011989	30							
17011989	31							1
17011989	32							1
17011989	33							1
17011989	34							1
17011989	35							1
17011989	36							2
17011989	37							1
18011989	38							
18011989	39							
18011989	40							

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
18011989	41							
18011989	42							
18011989	43							
18011989	44							
18011989	45							
18011989	46							1
18011989	47							
18011989	48							
18011989	49							
18011989	50							
18011989	51							
18011989	52							
18011989	53							
18011989	54							
18011989	55							
18011989	56							
18011989	57							
18011989	58							
18011989	59							
18011989	60							
18011989	61							
18011989	62							
18011989	63							
18011989	64							1
18011989	65							1
18011989	66							1
18011989	67							
19011989	68							
19011989	69							
19011989	70							
19011989	71							
19011989	72							
19011989	73							
19011989	74							
19011989	75							
19011989	76							
19011989	77							

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
19011989	78							
19011989	79							
19011989	80							
19011989	81							
19011989	82							
19011989	83							
19011989	84							
19011989	85							
19011989	86							
19011989	87							
19011989	88							
19011989	89							
19011989	90							
19011989	91							
19011989	92							
19011989	93							
19011989	94							
19011989	95							
20011989	96							
20011989	97							
20011989	99							
20011989	100							
20011989	101							
20011989	102							
20011989	103							
20011989	104							
20011989	105							
20011989	106							
20011989	107							
20011989	108							
20011989	109							
20011989	110							
20011989	111							
20011989	112							
20011989	113							
20011989	114							
20011989	115							

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
20011989	116							
20011989	117							
20011989	118							
20011989	119							
20011989	120							
20011989	121							
20011989	122							
20011989	123							
20011989	124							
20011989	125							
20011989	126							
20011989	127							
20011989	128							
20011989	129							
21011989	130							
21011989	131							
21011989	132							
21011989	133							
21011989	134							
21011989	135							
21011989	136							
21011989	137							
21011989	138							
21011989	139							
21011989	140							
21011989	141							
21011989	142							
21011989	143							
21011989	144							
21011989	145							
21011989	146							
21011989	147							
21011989	148							
21011989	149							
21011989	150							
21011989	151							
21011989	152							

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
22011989	153							
22011989	154							
22011989	155							
22011989	156							
22011989	157							
22011989	158							
22011989	159							
22011989	160							1
22011989	161							
22011989	162							
22011989	163							
22011989	164							
22011989	165							
22011989	166							
22011989	167							
22011989	168							
22011989	169							
22011989	170							
22011989	171							
22011989	172							
22011989	173							
22011989	174							
22011989	175							
22011989	176							
15011988	1							2
15011988	2							1
15011988	3							
15011988	4							
15011988	5							
15011988	6							
15011988	7							
15011988	8							
15011988	9							
15011988	10							
15011988	11							2
15011988	12							2
15011988	13							2

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
15011988	14							1
16011988	15							1
16011988	16							
16011988	17							
16011988	18							
16011988	19							
16011988	20							
16011988	21							
16011988	22							
16011988	23							
16011988	24							
16011988	25							
16011988	26							1
16011988	27							
16011988	28							2
16011988	29							
16011988	30							
16011988	31							
16011988	32							
17011988	33							
17011988	34							
17011988	35							
17011988	36							
17011988	37							
17011988	38							
17011988	39							
17011988	40							1
17011988	41							
17011988	42							
17011988	43							
17011988	44							
17011988	45							
17011988	46							
17011988	47							
17011988	48							
17011988	49							
17011988	50							

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
17011988	51							
17011988	52							
17011988	53							
17011988	54							
17011988	55							1
17011988	56							
17011988	57							
17011988	58							
17011988	59							
17011988	60							
17011988	61							
18011988	62							
18011988	63							
18011988	64							
18011988	65							
18011988	66							
18011988	67							
18011988	68							
18011988	69							
18011988	70							
18011988	71							
18011988	72							
18011988	73							
18011988	74							
18011988	75							
18011988	76							
18011988	77							
18011988	78							
18011988	79							
18011988	80							
18011988	81							
18011988	82							
18011988	83							
18011988	84							
18011988	85							
18011988	86							
18011988	87							

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
18011988	88							
18011988	89							
18011988	90							
18011988	91							
19011988	92							
19011988	93							
19011988	94							
19011988	95							
19011988	96							
19011988	97							
19011988	98							
19011988	99							
19011988	100							
19011988	101							
19011988	102							
19011988	103							
19011988	104							
19011988	105							
19011988	106							
19011988	107							
19011988	108							
19011988	109							
19011988	110							
19011988	111							
19011988	112							
19011988	113							
19011988	114							
19011988	115							
19011988	116							
19011988	117							
19011988	118							
19011988	119							
19011988	120							
20011988	121							
20011988	122							
20011988	123							
20011988	124							

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
20011988	125							
20011988	126							
20011988	127							
20011988	128							
20011988	129							
20011988	130							
20011988	131							
20011988	132							
20011988	133							
20011988	134							
20011988	135							
20011988	136							
20011988	137							
20011988	138							
20011988	139							
20011988	140							
20011988	141							
20011988	142							
20011988	143							
20011988	144							
20011988	145							
20011988	146							
20011988	147							
20011988	148							
20011988	149							
21011988	150							
21011988	151							
21011988	152							
21011988	153							
21011988	154							
21011988	155							
21011988	156							
21011988	157							
21011988	158							
21011988	159							
21011988	160							
21011988	161							

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
21011988	162							
21011988	163							
22011988	164							
22011988	165							
22011988	166							
22011988	167							
22011988	168							
22011988	169							
22011988	170							
22011988	171							
22011988	172							
22011988	173							
22011988	174							
22011988	175							
22011988	176							
22011988	177							
23011988	178							
23011988	179							
23011988	180							
23011988	181							
23011988	182							
23011988	183							
23011988	184							
23011988	185							
23011988	186							
23011988	187							
23011988	188							
23011988	189							
23011988	190							
23011988	191							
23011988	192							
23011988	193							
23011988	194							
23011988	195							
23011988	196							
23011988	197							
23011988	198							

Date	Tow	Clearnose-M	clearnose-F	Winterskate-M	Winterskate-F	Littleskate-M	Littleskate-F	ClupiedsAll
23011988	199							
23011988	200							

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
8012013	1	0	0	0	0	0	0	0	0	0	0
8012013	2	0	0	0	0	0	0	0	0	0	0
8012013	3	0	0	0	0	0	0	0	0	0	0
8012013	4	0	0	0	0	0	0	0	0	0	0
8012013	5	0	0	0	0	0	0	0	0	0	0
8012013	6	0	0	0	0	0	0	0	0	0	0
8012013	7	0	0	0	0	0	0	0	0	0	0
8012013	8	0	0	0	0	0	0	0	0	0	0
8012013	9	1	1	0	0	0	0	0	0	0	0
8012013	10	1	1	0	0	0	0	0	0	0	0
8012013	11	2	2	0	0	0	0	0	0	0	0
8012013	12	3	3	0	0	0	0	0	0	0	0
8012013	13	1	1	0	0	0	0	0	0	0	0
8012013	14	0	0	0	0	0	0	0	0	0	0
8012013	15	1	1	0	0	0	0	0	0	0	0
8012013	16	0	0	0	0	0	0	0	0	0	0
8012013	17	0	0	0	0	0	0	0	0	0	0
9012013	18	0	0	0	0	0	0	0	0	0	0
9012013	19	1	1	0	0	0	0	0	0	0	0
9012013	20	0	0	0	0	0	2	0	0	0	0
9012013	21	0	0	0	0	0	0	0	0	0	0
9012013	22	0	0	0	0	0	0	0	0	0	0
9012013	23	0	0	0	0	0	0	0	0	0	0
9012013	24	0	0	0	0	0	0	0	0	0	0
9012013	25	1	1	0	0	0	0	0	0	0	0
9012013	26	0	0	0	0	0	0	0	0	0	0
9012013	27	0	0	0	0	0	0	0	0	0	0
9012013	28	0	0	0	0	0	0	0	0	0	0
9012013	29	0	0	0	0	0	0	0	0	0	0
9012013	30	0	0	0	0	0	0	0	0	0	0
9012013	31	0	0	0	0	0	0	0	0	0	0
9012013	32	0	0	0	0	0	0	0	0	0	0
9012013	33	0	0	0	0	0	0	0	0	0	0
9012013	34	0	0	0	0	0	0	0	0	0	0
9012013	35	0	0	0	0	0	0	0	0	0	0
9012013	36	0	0	0	0	0	0	0	0	0	0
9012013	37	0	0	0	0	0	0	0	0	0	0

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
9012013	38	0	0	0	0	0	0	0	0	0	0
9012013	39	0	0	0	0	0	0	0	0	0	0
9012013	40	0	0	0	0	0	0	0	0	0	0
9012013	41	0	0	0	0	0	0	0	0	0	0
9012013	42	0	0	0	0	0	0	0	0	0	0
9012013	43	0	0	0	0	0	0	0	0	0	0
9012013	44	0	0	0	0	0	0	0	0	0	0
9012013	45	0	0	0	0	0	0	0	0	0	0
9012013	46	0	0	0	0	0	0	0	0	0	0
9012013	47	0	0	0	0	0	0	0	0	0	0
9012013	48	1	1	0	0	0	0	0	0	0	0
9012013	49	1	1	0	0	0	0	0	0	0	0
9012013	50	0	0	0	0	0	0	0	0	0	0
9012013	51	0	0	0	0	0	0	0	0	0	0
10012013	53	0	0	0	0	0	0	0	0	0	0
10012013	54	0	0	0	0	0	0	0	0	0	0
10012013	55	0	0	0	0	0	0	0	0	0	0
10012013	56	0	0	0	0	0	0	0	0	0	0
10012013	57	0	0	0	0	0	0	0	0	0	0
10012013	58	0	0	0	0	0	0	0	0	0	0
10012013	59	0	0	0	0	0	0	0	0	0	0
10012013	60	0	0	0	0	0	0	0	0	0	0
10012013	61	0	0	0	0	0	0	0	0	0	0
10012013	62	0	0	0	0	0	0	0	0	0	0
10012013	63	0	0	0	0	0	0	0	0	0	0
10012013	64	0	0	0	0	0	0	0	0	0	0
10012013	65	0	0	0	0	0	0	0	0	0	0
10012013	66	0	0	0	0	0	0	0	0	0	0
10012013	67	0	0	0	0	0	0	0	0	0	0
10012013	68	0	0	0	0	0	0	0	0	0	0
10012013	69	0	0	0	0	0	0	0	0	0	0
10012013	70	0	0	0	0	0	0	0	0	0	0
10012013	71	0	0	0	0	0	0	0	0	0	0
10012013	72	0	0	0	0	0	0	0	0	0	
10012013	73	0	0	0	0	0	0	0	0	0	0
10012013	74	0	0	0	0	0	6	0	0	0	0
10012013	75	0	0	0	0	0	1	0	0	0	0

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
10012013	76	0	0	0	0	0	0	0	0	0	0
10012013	77	2	2	0	0	0	0	0	0	0	0
10012013	78	0	0	0	0	0	1	0	0	0	0
11012013	79	0	0	0	0	0	0	0	0	0	0
11012013	80	0	0	0	0	0	0	0	0	0	0
11012013	81	0	0	0	0	0	0	0	0	0	0
11012013	82	1	1	0	0	0	4	0	0	0	0
11012013	83	0	0	0	0	0	0	0	0	0	0
11012013	84	0	0	0	0	0	0	0	0	0	0
11012013	85	1	1	0	0	0	0	0	0	0	0
11012013	86	0	0	0	0	0	0	0	0	0	0
11012013	87	0	0	0	0	0	0	0	0	0	0
11012013	88	0	0	0	0	0	0	0	0	0	0
11012013	89	0	0	0	0	0	0	0	0	0	0
11012013	90	0	0	0	0	0	0	0	0	0	0
11012013	91	0	0	0	0	0	0	0	0	0	0
11012013	92	0	0	0	0	0	0	0	0	0	0
11012013	93	0	0	0	0	0	0	0	0	0	0
11012013	94	0	0	0	0	0	0	0	0	0	0
11012013	95	0	0	0	0	0	0	0	0	0	0
11012013	96	0	0	0	0	0	0	0	0	0	0
11012013	97	0	0	0	0	0	0	0	0	0	0
11012013	98	0	0	0	0	0	0	0	0	0	0
11012013	99	0	0	0	0	0	0	0	0	0	0
11012013	100	0	0	0	0	0	0	0	0	0	0
11012013	101	0	0	0	0	0	0	0	0	0	0
11012013	102	0	0	0	0	0	0	0	0	0	0
11012013	103	0	0	0	0	0	0	0	0	0	0
11012013	104	0	0	0	0	0	0	0	0	0	0
11012013	105	0	0	0	0	0	0	0	2	0	0
11012013	106	0	0	0	0	0	0	0	0	0	0
11012013	107	3	3	0	0	0	0	0	0	0	0
11012013	108	1	1	0	0	0	1	0	0	0	0
11012013	109	4	4	0	0	0	0	0	0	0	0
11012013	110	0	0	0	0	0	0	0	0	0	0
11012013	111	0	0	0	0	0	0	0	0	0	0
11012013	112	1	1	0	0	0	0	0	0	0	0

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
11012013	113	1	1	0	0	0	0	0	0	0	0
11012013	114	4	4	0	0	0	3	0	0	0	0
12012013	115	2	2	0	0	0	0	0	0	0	0
12012013	116	0	0	0	0	0	0	0	0	0	0
12012013	117	0	0	0	0	0	0	0	0	0	0
12012013	118	0	0	0	0	0	2	0	0	0	0
12012013	119	0	0	0	0	0	0	0	0	0	0
12012013	120	1	1	0	0	0	0	0	0	0	0
12012013	121	0	0	0	0	0	0	0	0	0	0
12012013	122	0	0	0	0	0	1	0	0	0	0
12012013	123	0	0	0	0	0	0	0	0	0	0
12012013	124	0	0	0	0	0	0	0	0	0	0
12012013	125	0	0	0	0	0	0	0	0	0	0
12012013	126	0	0	0	0	0	0	0	0	0	0
12012013	127	0	0	0	0	0	0	0	0	0	0
12012013	128	0	0	0	0	0	0	0	0	0	0
12012013	129	0	0	0	0	0	0	0	0	0	0
12012013	130	0	0	0	0	0	0	0	0	0	0
12012013	131	0	0	0	0	0	0	0	0	0	0
12012013	132	0	0	0	0	0	0	0	0	0	0
12012013	133	0	0	0	0	0	0	0	0	0	0
12012013	134	0	0	0	0	0	0	0	0	0	0
12012013	135	0	0	0	0	0	0	0	0	0	0
12012013	136	0	0	0	0	0	0	0	0	0	0
12012013	137	0	0	0	0	0	0	0	0	0	0
12012013	138	0	0	0	0	0	0	0	0	0	0
12012013	139	0	0	0	0	0	0	0	0	0	0
12012013	140	0	0	0	0	0	0	0	0	0	0
12012013	141	0	0	0	0	0	2	0	0	0	0
12012013	142	1	1	0	0	0	0	0	0	0	0
12012013	143	0	0	0	0	0	1	0	0	0	0
12012013	144	0	0	0	0	0	0	0	0	0	0
12012013	145	1	1	0	0	0	0	0	0	0	0
13012013	146	0	0	0	0	0	0	0	0	0	0
13012013	147	0	0	0	0	0	0	0	0	0	0
13012013	148	0	0	0	0	0	0	0	0	0	0
13012013	149	0	0	0	0	0	1	0	0	0	0

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
13012013	150	4	4	0	0	0	0	0	0	0	0
13012013	151	4	4	0	0	0	3	0	0	0	0
13012013	152	2	2	0	0	0	0	0	0	0	0
13012013	153	7	7	0	0	0	2	0	0	0	0
13012013	154	12	12	0	0	0	2	0	0	0	0
13012013	155	0	0	0	0	0	0	0	0	0	0
13012013	156	0	0	0	0	0	0	0	0	0	0
13012013	157	0	0	0	0	0	0	0	0	0	0
13012013	158	0	0	0	0	0	0	0	0	0	0
13012013	159	0	0	0	0	0	2	0	0	0	0
13012013	160	1	1	0	0	0	0	0	0	0	0
13012013	161	0	0	0	0	0	0	0	0	0	0
13012013	162	0	0	0	0	0	0	0	0	0	0
13012013	163	0	0	0	0	0	27	0	0	0	0
13012013	164	0	0	0	0	0	1	0	0	0	0
13012013	165	0	0	0	0	0	1	0	0	0	0
13012013	166	0	0	0	0	0	0	0	0	0	0
13012013	167	0	0	0	0	0	0	0	0	0	0
13012013	168	0	0	0	0	0	0	0	0	0	0
13012013	169	2	2	0	0	0	0	0	0	0	0
13012013	170	5	5	0	0	0	2	0	0	0	0
13012013	171	4	4	0	0	0	1	0	0	0	0
13012013	172	3	3	0	0	0	2	0	0	0	0
13012013	173	1	1	0	0	0	2	0	0	0	0
13012013	174	0	0	0	0	0	0	0	0	0	0
13012013	175	1	1	0	0	0	0	0	0	0	0
13012013	176	0	0	0	0	0	0	0	0	0	0
14012013	177	0	0	0	0	0	0	0	0	0	0
14012013	178	0	0	0	0	0	1	0	0	0	0
14012013	179	0	0	0	0	0	0	0	0	0	0
14012013	180	1	1	0	0	0	0	0	0	0	0
14012013	181	5	5	0	0	0	0	0	0	0	0
14012013	182	8	8	0	0	0	0	0	0	0	0
14012013	183	0	0	0	0	0	0	0	0	0	0
14012013	184	2	2	0	0	0	0	0	0	0	0
14012013	185	0	0	0	0	0	0	0	0	0	0
14012013	186	0	0	0	0	0	0	0	0	0	0

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
14012013	187	0	0	0	0	0	0	0	0	0	0
14012013	188	0	0	0	0	0	0	0	0	0	0
14012013	189	0	0	0	0	0	0	0	0	0	0
14012013	190	0	0	0	0	0	0	0	0	0	0
14012013	191	0	0	0	0	0	0	0	0	0	0
14012013	192	2	2	0	0	0	0	0	0	0	0
14012013	193	0	0	0	0	0	0	0	0	0	0
14012013	194	2	2	0	0	0	0	0	0	0	0
14012013	195	0	0	0	0	0	1	0	0	0	0
14012013	196	1	1	0	0	0	0	0	0	0	0
14012013	197	0	0	0	0	0	0	0	0	0	0
14012013	198	0	0	0	0	0	0	0	0	0	0
14012013	199	0	0	0	0	0	0	0	0	0	0
14012013	200	0	0	0	0	0	1	0	0	0	0
14012013	201	0	0	0	0	0	0	0	1	0	0
14012013	202	2	2	0	0	0	0	0	0	0	0
14012013	203	0	0	0	0	0	1	0	0	0	0
14012013	204	3	3	0	0	0	0	0	0	0	0
14012013	205	2	2	0	0	0	1	0	0	0	0
14012013	206	1	1	0	0	0	0	0	0	0	0
14012013	207	0	0	0	0	0	0	0	0	0	0
14012013	208	0	0	0	0	0	0	0	0	0	0
15012013	209	0	0	0	0	0	0	0	0	0	0
15012013	210	0	0	0	0	0	0	0	0	0	0
15012013	211	0	0	0	0	0	1	0	0	0	0
15012013	212	0	0	0	0	0	0	0	0	0	0
15012013	213	1	1	0	0	0	0	0	0	0	0
15012013	214	1	1	0	0	0	0	0	0	0	0
15012013	215	0	0	0	0	0	0	0	0	0	0
15012013	216	2	2	0	0	0	0	0	0	0	0
15012013	217	1	0	0	0	0	0	0	0	0	0
15012013	218	7	6	0	1	0	0	0	0	0	0
15012013	219	2	2	0	0	0	0	0	0	0	0
15012013	220	1	1	0	0	0	0	0	0	0	0
15012013	221	1	1	1	0	0	0	0	0	0	0
15012013	222	1	0	0	0	0	0	0	0	0	0
15012013	223	0	0	0	0	0	0	0	0	0	0

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
15012013	224	0	0	0	0	0	0	0	0	0	0
15012013	225	1	0	0	0	0	0	0	0	0	0
15012013	226	0	0	0	0	0	0	0	0	0	0
16012013	227	0	0	0	0	0	0	0	0	0	0
16012013	228	1	1	0	0	0	0	0	0	0	0
16012013	229	1	1	0	0	0	0	0	0	0	0
16012013	230	0	0	0	0	0	0	0	0	0	0
16012013	231	0	0	0	0	0	0	0	0	0	0
16012013	232	0	0	0	0	0	0	0	0	0	0
16012013	233	0	0	0	0	0	0	0	0	0	0
16012013	234	1	1	0	0	0	0	0	0	0	0
16012013	235	0	0	0	0	0	0	0	0	0	0
16012013	236	1	1	0	0	0	0	0	0	0	0
16012013	237	3	3	0	0	0	0	0	0	0	0
16012013	238	1	1	0	0	0	1	0	0	0	0
16012013	239	131	2	0	0	0	0	0	0	0	0
16012013	240	2	2	0	0	0	0	0	0	0	0
16012013	241	0	0	0	0	0	0	0	0	0	0
16012013	242	0	0	0	0	0	0	0	0	0	0
16012013	243	0	0	0	0	0	0	0	0	0	0
16012013	244	0	0	0	1	0	1	0	0	0	0
16012013	245	0	0	0	0	0	0	0	0	0	0
18022010	1	0				P	P				
18022010	2	0				1					
18022010	3	0									
18022010	4	0									
18022010	5	0									
19022010	6	0									
19022010	7	0				1					
19022010	8	0									
19022010	9	0				3					
19022010	10	0				19	3				
19022010	11	0	0	0	0	0	0	0	0	0	0
19022010	12	0				1					
19022010	13	0				1					
19022010	14	0				2					
19022010	15	0				3					

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
19022010	16	0									
19022010	17	0									
19022010	18	0									
19022010	19	0									
19022010	20	0									
19022010	21	0				3	6				
19022010	22	0				P	P				
19022010	23	0					1				
19022010	24	0					P				
19022010	25	0									
19022010	26	0									
19022010	27	0									
19022010	28	0									
19022010	29	0									
19022010	30	0						3			
19022010	31	0									
19022010	32	0									
19022010	33	0									
19022010	34	0									
19022010	35	0									
19022010	36	0									
19022010	37	0									
19022010	38	0									
19022010	39	0									
19022010	40	0									
19022010	41	0									
19022010	42	0									
19022010	43	0									
19022010	44	0									
19022010	45	0									
19022010	46	0									
19022010	47	0									
20022010	48	0									
20022010	49	0									
20022010	50	0									
20022010	51	0									
20022010	52	0									

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
20022010	53	0									
20022010	54	0									
20022010	55	0									
20022010	56	0									
20022010	57	0									
20022010	58	0									
20022010	59	0									
20022010	60	0				4	1				
20022010	61	0				2					
20022010	62	0				4	9	1			
20022010	63	0				2	1				
20022010	64	0									
20022010	65	0									
20022010	66	0									
20022010	67	0				1					
20022010	68	0				16					
20022010	69	0				11					
20022010	70	0				37	1				
20022010	71	0				12	1				
20022010	72	0				P					
20022010	73	0				1					
20022010	74	0				P					
20022010	75	0				P					
20022010	76	0				2	1	1			
20022010	77	0									
20022010	78	0				1	P				
21022010	79	0				1	2				
21022010	80	0				1					
21022010	81	0				1		1			
21022010	82	0									
21022010	83	0					1				
21022010	84	1				3					
21022010	85	0				89					
21022010	86	0				P	15				
21022010	87	0						1			
21022010	88	0									
21022010	89	0									

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
21022010	90	0									
21022010	91	0									
21022010	92	0									
21022010	93	0				2					
21022010	94	0				1					
21022010	95	0				2					
21022010	96	0				7					
21022010	97	0									
21022010	98	0									
21022010	99	0									
21022010	100	0									
21022010	101	0									
21022010	102	0									
21022010	103	0									
21022010	104	0									
21022010	105	0									
21022010	106	0									
21022010	107	0									
21022010	108	0									
22022010	109	0									
22022010	110	0									
22022010	111	0									
22022010	112	0									
22022010	113	0									
22022010	114	0									
22022010	115	0									
22022010	116	0									
22022010	117	0									
22022010	118	0									
22022010	119	0									
22022010	120	0									
22022010	121	0									
22022010	122	0									
22022010	123	0									
22022010	124	0									
22022010	125	0									
22022010	126	0									

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish	
22022010	127	0										
22022010	128	0										
22022010	129	0				5						
22022010	130	0				3						
22022010	131	0										
22022010	132	0										
22022010	133	0										
22022010	134	0										
22022010	135	0										
22022010	136	0				1						
22022010	137	0										
22022010	138	0										
22022010	139	0					P					
22022010	140	0					4	1				
22022010	141	0				4						
22022010	142	0				P	1	1				
22022010	143	0					P					
22022010	144	1					P					
22022010	145	0										538
23022010	146	0				1	4					
23022010	147	0				2	5	1				
23022010	148	0				7	1					
23022010	149	0				6	4					
23022010	150	0				P	P	1				
23022010	151	0										
23022010	152	0				2	1					
23022010	153	0										
23022010	154	0									1	
23022010	155	0										
23022010	156	0										
23022010	157	0										
23022010	158	0										
23022010	159	0										
23022010	160	0										
23022010	161	0										
23022010	162	0										
23022010	163	0										

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
23022010	164	0									
23022010	165	0									
23022010	166	0									
23022010	167	0									
23022010	168	0									
23022010	169	0				1					
23022010	170	0									
23022010	171	0									
23022010	172	0									
23022010	173	0				1					
23022010	174	0					2				
23022010	175	0				P					
23022010	176	0				P	P				
23022010	177	0				P	2				
23022010	178	0				P					
24022010	179	0				1					
24022010	180	0									
24022010	181	0									
24022010	182	0									
24022010	183	0									
24022010	184	0									
24022010	185	0						2			
24022010	186	0									
24022010	187	0									
24022010	188	0				4					
24022010	189	0									
24022010	190	0				P	P	1			
24022010	191	0				8	2				
24022010	192	0							1		
24022010	193	0					1				
24022010	194	0				10					
24022010	195	0				1					
24022010	196	0									
24022010	197	0				1					
24022010	198	0									
24022010	199	0					2				
24022010	200	0				69	1				

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
29012009	1	156	156	2	7	2	0	0	0	0	0
29012009	2	0	0	0	3	0	0	0	0	0	0
29012009	3	0	0	0	0	0	0	0	0	0	0
29012009	4	3	2	2	0	0	0	0	0	1	0
30012009	5	0	0	0	0	1	0	0	0	0	1
30012009	6	0	0	0	0	5	1	0	0	0	0
30012009	7	0	0	0	0	17	0	0	0	0	0
30012009	8	0	0	0	0	1	0	0	0	0	0
30012009	9	0	0	0	0	0	0	0	0	0	0
30012009	10	0	0	0	0	0	0	0	0	0	0
30012009	11	0	0	0	0	0	0	0	0	0	0
30012009	12	0	0	0	0	0	0	0	0	0	0
30012009	13	0	0	0	0	0	2	0	0	0	0
30012009	14	0	0	0	0	0	0	0	0	0	0
30012009	15	0	0	0	0	13	0	0	0	0	0
30012009	16	1	1	0	0	1	0	0	0	0	0
30012009	17	0	0	0	0	0	0	0	0	0	0
30012009	18	0	0	0	0	0	1	2	0	0	0
30012009	19	0	0	0	0	0	0	0	0	0	0
30012009	20	0	0	0	0	0	8	1	0	0	0
30012009	21	1	1	0	0	4	6	1	0	0	0
30012009	22	0	0	0	0	6	1	0	0	0	0
30012009	23	0	0	1	0	8	1	0	0	0	0
30012009	24	0	0	0	0	27	0	0	0	0	0
30012009	25	0	0	0	0	1	0	0	0	0	0
30012009	26	0	0	0	0	3	3	0	0	0	0
30012009	27	0	0	0	0	1	0	0	0	0	0
30012009	28	0	0	0	0	35	2	0	0	0	0
31012009	29	0	0	0	0	0	5	0	0	0	0
31012009	30	0	0	2	0	1	0	0	0	0	0
31012009	31	1	1	0	0	1	1	0	0	0	0
31012009	32	0	0	0	0	5	7	0	0	0	0
31012009	33	0	0	0	0	4	23	0	0	0	0
31012009	34	0	0	0	0	6	2	0	0	0	0
31012009	35	0	0	0	0	0	2	0	0	0	0
31012009	36	0	0	0	0	0	6	0	2	0	0
31012009	37	0	0	0	0	0	13	0	0	0	0

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
31012009	38	0	0	0	0	5	15	0	0	0	0
31012009	39	0	0	0	0	1	0	0	0	0	0
31012009	40	0	0	0	0	0	0	0	0	0	0
31012009	41	0	0	0	0	9	10	1	0	0	0
31012009	42	0	0	0	0	0	1	1	0	0	0
31012009	43	2	2	0	0	5	7	0	0	0	0
31012009	44	0	0	0	0	34	0	2	0	0	0
31012009	45	2	0	0	0	2	0	4	0	0	0
31012009	46	0	0	0	0	1	2	1	0	0	0
31012009	47	3	0	0	0	0	1	1	0	0	0
31012009	48	0	0	0	0	2	2	0	0	0	0
31012009	49	0	0	0	0	2	0	0	0	0	0
31012009	50	0	0	0	0	0	1	0	0	0	0
31012009	51	0	0	0	0	3	1	0	0	0	0
31012009	52	0	0	0	0	8	1	0	0	0	0
31012009	53	0	0	0	0	21	1	0	0	0	0
31012009	54	0	0	0	0	21	4	0	0	0	0
31012009	55	0	0	0	0	45	1	0	0	0	0
31012009	56	0	0	0	0	1	0	0	0	0	0
31012009	57	0	0	0	0	9	3	1	0	0	0
31012009	58	0	0	0	0	12	1	0	0	0	0
31012009	59	0	0	0	0	1	4	0	0	0	0
1022009	60	0	0	0	0	0	0	0	0	0	0
1022009	61	0	0	0	0	0	0	0	0	0	0
1022009	62	0	0	0	0	0	0	0	0	0	0
1022009	63	0	0	0	0	0	0	0	0	0	0
1022009	64	0	0	0	0	50	1	0	0	0	0
1022009	65	0	0	0	0	1	0	0	0	0	0
1022009	66	0	0	0	0	0	0	0	0	0	0
1022009	67	0	0	0	0	0	0	0	0	0	0
1022009	68	0	0	0	0	0	0	0	0	0	0
1022009	69	0									
1022009	70	0									
1022009	71	0	0	0	0	1	1	1	0	0	0
1022009	72	0	0	0	0	0	0	1	0	0	0
1022009	73	0	0	0	0	0	0	0	0	0	0
1022009	74	0	0	0	0	0	0	0	0	0	0

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
2022009	75	0	0	0	0	1	0	0	0	0	0
2022009	76	0	0	0	0	0	2	0	0	0	0
2022009	77	0	0	0	0	0	0	0	0	0	0
2022009	78	0	0	0	0	1	0	0	0	0	0
2022009	79	0	0	0	0	0	0	0	0	0	0
2022009	80	0	0	0	0	0	0	0	0	0	0
2022009	81	0	0	0	0	1	0	0	0	0	0
2022009	82	0	0	0	0	0	0	0	0	0	0
2022009	83	0	0	0	0	0	0	0	0	0	0
2022009	84	0	0	0	0	1	0	0	0	0	0
2022009	85	0	0	0	0	0	0	0	0	0	0
2022009	86	0	0	0	0	6	0	0	0	0	0
2022009	87	0	0	0	0	0	2	1	0	0	0
2022009	88	0	0	0	0	0	3	1	0	0	0
2022009	89	0	0	0	0	6	0	0	0	0	0
2022009	90	0	0	0	0	5	0	0	0	0	0
2022009	91	0	0	0	0	8	0	0	0	0	0
2022009	92	0	0	0	0	5	0	0	0	0	0
2022009	93	0	0	0	0	9	0	0	0	0	1
2022009	94	0	0	0	0	17	1	0	0	0	0
2022009	95	0	0	0	0	5	0	0	0	0	0
3022009	96	0	0	0	0	1	1	0	0	0	0
3022009	97	0	0	0	0	0	0	0	0	0	0
3022009	98	0	0	0	0	0	0	0	0	0	0
3022009	99	0	0	0	0	0	0	0	0	0	0
3022009	100	0	0	0	0	0	0	0	0	0	0
3022009	101	0	0	0	0	0	0	0	0	0	0
3022009	102	0	0	0	0	0	0	0	0	0	0
3022009	103	0	0	0	0	6	2	0	0	0	0
3022009	104	0	0	0	0	0	0	0	0	0	0
3022009	105	0	0	0	0	43	0	0	0	0	0
3022009	106	0	0	0	0	1	0	0	0	0	0
3022009	107	0	0	0	0	40	0	0	0	0	0
3022009	108	1	1	0	0	1	0	0	0	0	0
3022009	109	0	0	0	0	0	0	0	0	0	0
3022009	110	0	0	0	0	0	0	0	0	0	0
3022009	111	0	0	0	0	0	0	0	0	0	0

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
3022009	112	0	0	0	0	3	0	0	0	0	0
3022009	113	0	0	0	0	6	0	0	0	0	0
3022009	114	0	0	0	0	0	0	0	0	0	0
3022009	115	0	0	0	0	2	0	0	0	0	0
3022009	116	0	0	1	0	5	0	0	0	0	0
3022009	117	0	0	0	0	6	3	0	0	0	0
3022009	118	0	0	0	0	0	1	0	0	0	0
3022009	119	0	0	0	0	2	0	0	0	0	0
4022009	120	0	0	0	0	3	2	1	0	0	0
4022009	121	0	0	0	0	3	0	0	0	0	0
4022009	122	0	0	0	0	0	1	1	0	0	0
4022009	123	0	0	0	0	0	0	0	0	0	0
4022009	124	1	0	1	0	0	0	1	0	0	0
4022009	125	0	0	0	0	2	0	0	0	0	0
4022009	126	1	0	0	0	0	0	0	0	0	0
4022009	127	0	0	0	0	0	0	0	0	0	0
4022009	128	1	0	0	0	0	1	1	1	0	1
4022009	129	0	0	0	0	0	0	0	0	0	0
4022009	130	0	0	0	0	2	2	3	0	0	0
4022009	131	0	0	0	0	0	0	0	0	0	0
4022009	132	0	0	0	0	0	0	1	0	0	0
4022009	133	0	0	0	0	0	0	0	1	0	0
4022009	134	0	0	0	0	0	1	0	0	0	0
4022009	135	0	0	0	0	13	0	0	0	0	0
4022009	136	0	0	0	0	2	0	0	0	0	0
4022009	137	0	0	0	0	0	0	0	0	0	0
4022009	138	0	0	0	0	0	0	0	0	0	0
4022009	139	0	0	0	0	0	0	0	0	0	0
4022009	140	0	0	0	0	0	1	0	0	0	0
4022009	141	0	0	0	0	0	0	0	0	0	0
4022009	142	0	0	0	0	0	0	0	0	0	0
4022009	143	0	0	0	0	0	0	0	0	0	0
4022009	144	1	0	0	0	0	2	0	0	0	0
4022009	145	0	0	0	0	0	0	0	0	0	0
4022009	146	0	0	0	0	0	0	0	0	0	0
4022009	147	0	0	0	0	1	2	0	0	0	0
5022009	148	0	0	0	0	0	0	0	0	0	0

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
5022009	149	0	0	0	0	1	0	0	0	0	0
5022009	150	0	0	0	0	0	0	0	0	0	0
5022009	151	0	0	0	0	0	0	0	0	0	0
5022009	152	0	0	0	0	0	2	0	0	0	0
5022009	153	0	0	0	0	10	2	0	1	0	1
5022009	154	0	0	0	0	11	1	0	0	0	1
5022009	155	0	0	0	0	8	3	0	0	0	0
5022009	156	0	0	0	0	0	4	0	1	0	0
5022009	157	0	0	0	0	0	0	0	0	0	0
5022009	158	0	0	0	0	0	0	0	0	0	0
5022009	159	0	0	0	0	0	0	0	0	0	0
5022009	160	0	0	0	0	16	0	0	0	0	0
5022009	161	0	0	0	0	0	0	9	0	0	0
5022009	162	0	0	0	0	0	0	0	0	0	0
5022009	163	0	0	0	0	0	1	0	0	0	0
5022009	164	1	1	0	0	12	30	0	0	0	0
5022009	165	0	0	0	0	44	63	4	1	0	0
5022009	166	0	0	0	0	1	0	0	0	0	0
5022009	167	0	0	0	0	0	0	0	0	0	0
5022009	168	0	0	0	0	0	0	0	0	0	0
5022009	169	0	0	0	0	0	0	0	0	0	0
5022009	170	0	0	0	0	0	0	0	0	0	0
5022009	171	0	0	0	0	0	0	0	0	0	0
5022009	172	0	0	0	0	0	0	0	0	0	0
5022009	173	0	0	0	0	0	0	0	0	0	0
5022009	174	0	0	0	0	0	0	0	0	0	0
5022009	175	0	0	0	0	0	0	0	0	0	0
6022009	176	0	0	0	0	0	0	0	0	0	0
6022009	177	0	0	0	0	0	0	0	0	0	0
6022009	178	0	0	0	0	0	0	0	0	0	0
6022009	179	0	0	0	0	0	0	0	0	0	0
6022009	180	0	0	0	0	0	0	0	0	0	0
6022009	181	0	0	0	0	0	0	0	0	0	0
6022009	182	0	0	0	0	0	0	0	0	0	0
6022009	183	0	0	0	0	0	0	0	0	0	0
6022009	184	0	0	0	0	0	0	0	0	0	0
6022009	185	0	0	0	0	0	0	0	0	0	0

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
6022009	186	0	0	0	0	0	0	0	0	0	0
6022009	187	0	0	0	0	0	0	0	0	0	0
6022009	188	0	0	0	0	0	0	0	0	0	0
6022009	189	0	0	0	0	0	0	0	0	0	0
6022009	190	0	0	0	0	0	0	0	0	0	0
6022009	191	0	0	0	0	0	0	0	0	0	0
6022009	192	0	0	0	0	0	0	0	0	0	0
6022009	193	0	0	0	0	0	0	0	0	0	0
6022009	194	0	0	0	0	0	0	0	0	0	0
6022009	195	0	0	0	0	0	0	0	0	0	0
6022009	196	0	0	0	0	0	0	0	0	0	0
6022009	197	0	0	0	0	0	0	0	0	0	0
6022009	198	0	0	0	0	0	0	0	0	0	0
6022009	199	0	0	0	0	0	0	0	0	0	0
6022009	200	0	0	0	0	0	0	0	0	0	0
6022009	201	0	0	0	0	0	0	0	0	0	0
6022009	202	0	0	0	0	0	0	0	0	0	0
6022009	203	0	0	0	0	0	0	0	0	0	0
6022009	204	0	0	0	0	0	0	0	0	0	0
6022009	205	0	0	0	0	0	0	0	0	0	0
7022009	206	0	0	0	0	0	0	0	0	0	0
7022009	207	0	0	0	0	0	0	0	0	0	0
7022009	208	0	0	0	0	0	0	0	0	0	0
7022009	209	0	0	0	0	0	0	0	0	0	0
7022009	210	0	0	0	0	0	0	0	0	0	0
15012008	1	0	0	0	0	0	0	0	0	0	0
15012008	2	0	0	0	0	0	0	0	0	0	0
15012008	3	0	0	0	0	0	0	0	0	0	0
15012008	4	0	0	0	2	0	0	0	0	0	0
15012008	5	0	0	0	5	0	0	0	0	0	0
15012008	6	6	6	0	12	0	0	0	0	0	0
15012008	7	1	0	0	0	0	0	0	0	0	0
15012008	8	2	2	0	2	0	0	0	0	0	0
15012008	9	3	3	0	5	0	0	0	0	0	0
15012008	10	3	0	0	1	0	0	0	0	0	0
15012008	11	6	6	0	0	0	0	0	0	0	0
15012008	12	2	0	0	0	0	0	0	0	0	0

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
15012008	13	3	2	0	0	0	0	0	0	0	0
15012008	14	2	2	0	0	0	0	0	0	0	0
15012008	15	1	1	0	6	0	0	0	0	0	0
15012008	16	0	0	0	0	0	0	0	0	0	0
15012008	17	8	8	0	8	0	0	0	0	0	0
15012008	18	6	0	0	2	0	0	0	0	0	0
15012008	19	13	8	0	38	0	0	0	0	0	0
15012008	20	54	4	0	4	0	0	0	0	0	0
15012008	21	2	1	0	0	0	0	0	0	0	0
15012008	22	0	0	0	0	1	0	0	0	0	0
15012008	23	2	0	0	0	1	0	0	0	1	0
15012008	24	0	0	0	0	0	0	0	0	0	0
15012008	25	1	1	0	0	2	0	0	0	0	0
15012008	26	0	0	0	0	0	0	0	0	0	0
16012008	27	28	3	0	0	0	0	0	0	0	0
16012008	28	0	0	0	0	0	0	0	0	0	0
16012008	29	0	0	0	0	0	0	0	0	0	0
16012008	30	0	0	0	0	0	0	0	0	0	0
16012008	31	0	0	0	0	0	0	0	0	0	0
16012008	32	1	0	0	0	0	0	0	0	0	0
16012008	33	0	0	0	0	0	0	0	0	0	0
16012008	34	0	0	0	0	0	0	0	0	0	0
16012008	35	0	0	0	0	0	0	0	0	0	0
16012008	36	0	0	0	0	0	0	0	0	0	0
16012008	37	1	0	0	0	0	0	0	0	0	0
16012008	38	0	0	0	0	0	0	0	0	0	0
16012008	39	6	6	0	0	0	0	0	0	0	0
16012008	40	0	0	0	0	0	0	0	0	0	0
16012008	41	0	0	0	0	0	0	0	0	0	0
16012008	42	0	0	0	0	0	0	0	0	0	0
16012008	43	0	0	0	0	0	0	0	0	0	0
16012008	44	0	0	0	0	0	0	0	0	0	0
16012008	45	1	1	0	0	0	0	0	0	0	0
16012008	46	1	0	0	0	0	0	0	0	0	0
16012008	47	5	5	0	0	1	0	0	0	0	0
16012008	48	0	0	0	0	0	0	0	0	0	0
16012008	49	0	0	0	0	0	0	0	0	0	0

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
16012008	50	0	0	0	0	0	0	0	0	0	0
16012008	51	0	0	0	0	0	0	0	0	0	0
16012008	52	0	0	0	0	0	0	0	0	0	0
16012008	53	0	0	0	0	0	0	0	0	0	0
16012008	54	0	0	0	0	0	0	0	0	0	0
16012008	55	0	0	0	0	0	0	0	0	0	0
16012008	56	1	0	0	0	0	0	0	0	0	0
16012008	57	0	0	0	0	0	0	0	0	0	0
16012008	58	0	0	0	0	4	0	0	0	0	0
16012008	59	0	0	0	0	0	1	0	0	0	0
16012008	60	0	0	0	0	0	0	0	0	0	0
16012008	61	0	0	0	0	0	0	0	0	0	0
17012008	62	0	0	0	0	0	0	0	0	0	0
17012008	63	0	0	0	0	0	0	0	0	0	0
17012008	64	0	0	0	0	0	0	0	0	0	0
17012008	65	0	0	0	0	0	0	0	0	0	0
17012008	66	0	0	0	0	0	0	0	0	0	0
17012008	67	0	0	0	0	0	0	0	0	0	0
17012008	68	0	0	0	0	0	0	0	0	0	0
17012008	69	0	0	0	0	0	0	0	0	0	0
17012008	70	0	0	0	0	0	0	0	0	0	0
17012008	71	0	0	0	0	0	0	0	0	0	0
17012008	72	0	0	0	0	0	0	0	0	0	0
17012008	73	1	1	0	0	0	0	0	0	0	0
17012008	74	1	1	0	0	0	0	0	0	0	0
17012008	75	0	0	0	0	0	0	0	0	0	0
17012008	76	0	0	0	0	0	0	0	0	0	0
17012008	77	0	0	0	0	0	0	0	0	0	0
17012008	78	0	0	0	0	0	0	0	0	0	0
17012008	79	0	0	0	0	0	0	0	0	0	0
17012008	80	0	0	0	0	0	0	0	0	0	0
17012008	81	0	0	0	0	0	0	0	0	0	0
17012008	82	0	0	0	0	0	0	0	0	0	0
17012008	83	0	0	0	1	0	0	0	0	0	0
17012008	84	0	0	0	0	0	0	0	0	0	0
17012008	85	0	0	0	0	1	0	0	0	0	0
17012008	86	0	0	0	0	0	0	0	0	0	0

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
17012008	87	0	0	0	0	0	0	0	0	0	0
17012008	88	0	0	0	0	0	0	0	0	0	0
17012008	89	0	0	0	0	0	0	0	0	0	0
17012008	90	0	0	0	0	0	0	0	0	0	0
17012008	91	0	0	0	0	0	0	0	0	0	0
17012008	92	0	0	0	0	0	0	0	0	0	0
17012008	93	0	0	0	0	0	0	0	0	0	0
17012008	94	0	0	0	0	0	0	0	0	0	0
17012008	95	0	0	0	0	0	0	0	0	0	0
17012008	96	0	0	0	0	0	0	0	0	0	0
17012008	97	0	0	0	0	0	0	0	0	0	1
18012008	98	0	0	0	0	0	0	0	0	0	0
18012008	99	0	0	0	0	1	0	0	0	0	0
18012008	100	0	0	0	0	0	0	0	0	0	0
18012008	101	0	0	0	0	0	0	0	0	0	0
18012008	102	0	0	0	0	0	0	0	0	0	0
18012008	103	0	0	0	0	0	0	0	0	0	0
18012008	104	0	0	0	0	0	0	0	0	0	0
18012008	105	0	0	0	0	0	0	0	0	0	0
18012008	106	0	0	0	0	0	0	0	0	0	0
18012008	107	0	0	0	0	0	0	0	0	0	0
18012008	108	0	0	0	0	0	0	0	0	0	0
18012008	109	0	0	0	0	0	0	0	0	0	0
18012008	110	0	0	0	0	0	20	0	0	0	0
18012008	111	0	0	0	0	2	0	0	0	0	0
18012008	112	0	0	0	0	0	0	0	0	0	0
18012008	113	0	0	0	0	0	0	0	0	0	0
18012008	114	0	0	0	0	0	0	0	0	0	0
18012008	115	0	0	0	0	0	0	0	0	0	0
18012008	116	0	0	0	0	0	0	0	0	0	0
18012008	117	0	0	0	0	0	0	0	0	0	0
18012008	118	0	0	0	0	2	2	0	0	0	0
18012008	119	0	0	0	0	2	0	0	0	0	0
18012008	120	0	0	0	0	2	1	0	0	0	0
18012008	121	0	0	0	0	0	0	0	0	0	1
18012008	122	0	0	0	0	4	4	0	0	0	0
18012008	123	0	0	0	0	2	4	0	0	0	0

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
18012008	124	0	0	0	0	11	0	0	0	0	0
19012008	125	0	0	0	0	7	0	0	1	0	1
19012008	126	0	0	0	0	6	0	0	0	0	0
19012008	127	1	1	0	0	2	0	0	0	0	1
19012008	128	2	2	0	0	1	6	0	0	0	0
19012008	129	0	0	0	0	0	1	0	0	0	0
19012008	130	0	0	0	0	0	2	0	0	0	0
19012008	131	0	0	0	0	0	3	0	0	0	0
19012008	132	0	0	0	0	1	0	0	0	0	0
19012008	133	0	0	0	0	0	0	0	0	0	0
19012008	134	0	0	0	0	0	0	0	0	0	0
19012008	135	0	0	0	0	0	0	0	0	0	0
19012008	136	1	0	0	0	0	0	0	0	0	0
19012008	137	0	0	0	0	0	0	0	0	0	0
19012008	138	0	0	0	0	1	0	1	0	0	0
19012008	139	0	0	0	0	2	0	0	0	0	0
19012008	140	0	0	0	0	0	0	0	0	0	0
19012008	141	0	0	0	0	0	0	0	0	0	0
19012008	142	0	0	0	0	0	0	0	0	0	0
19012008	143	0	0	0	0	0	0	0	0	0	0
19012008	144	0	0	0	0	0	0	0	0	0	0
19012008	145	0	0	0	0	1	1	0	0	0	0
19012008	146	0	0	0	0	3	0	0	0	0	0
19012008	147	0	0	0	0	0	0	0	0	0	0
19012008	148	0	0	0	0	0	0	0	0	0	0
19012008	149	0	0	0	0	4	1	0	0	0	0
19012008	150	0	0	0	0	1	3	0	0	0	0
19012008	151	0	0	0	0	0	0	0	0	0	0
19012008	152	0	0	0	0	0	0	0	0	0	0
19012008	153	0	0	0	0	0	0	0	0	0	0
19012008	154	0	0	0	0	0	0	0	0	0	0
19012008	155	0	0	0	0	2	2	0	0	0	0
19012008	156	0	0	0	0	0	0	0	0	0	0
19012008	157	0	0	0	0	8	2	0	0	0	0
19012008	158	0	0	0	0	0	2	0	0	0	0
19012008	159	0	0	0	0	4	6	0	0	0	0
19012008	160	0	0	0	0	6	2	0	0	0	0

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
19012008	161	0	0	0	0	1	2	0	0	0	0
19012008	162	0	0	0	0	6	3	0	0	0	0
19012008	163	0	0	0	0	2	0	0	0	0	0
20012008	164	0	0	0	0	0	1	0	0	0	0
20012008	165	0	0	0	0	0	0	0	0	0	0
20012008	166	0	0	0	0	0	0	0	0	0	0
20012008	167	0	0	0	0	0	0	0	0	0	0
20012008	168	0	0	0	0	1	0	0	0	0	0
20012008	169	0	0	0	0	0	0	0	0	0	0
20012008	170	0	0	0	0	0	1	0	0	0	0
20012008	171	0	0	0	0	0	2	0	0	0	0
20012008	172	0	0	0	0	2	0	0	0	0	0
20012008	173	0	0	0	0	0	1	0	0	0	0
20012008	174	0	0	0	0	0	0	0	0	0	0
20012008	175	0	0	0	0	0	0	0	0	0	0
20012008	176	0	0	0	0	2	2	0	0	0	0
20012008	177	0	0	0	0	0	1	0	0	0	0
20012008	178	0	0	0	0	0	0	0	0	0	0
20012008	179	0	0	0	0	0	0	0	0	0	0
20012008	180	0	0	0	0	0	0	0	0	0	0
20012008	181	0	0	0	0	0	0	0	0	0	0
20012008	182	0	0	0	0	0	0	0	0	0	0
20012008	183	0	0	0	0	0	0	0	0	0	0
20012008	184	0	0	0	0	0	0	0	0	0	0
20012008	185	0	0	0	0	0	0	0	0	0	0
20012008	186	0	0	0	0	0	0	0	0	0	0
20012008	187	0	0	0	0	0	0	0	0	0	0
20012008	188	0	0	0	0	0	0	0	0	0	0
20012008	189	0	0	0	0	0	0	0	0	0	0
20012008	190	0	0	0	0	0	0	0	0	0	0
20012008	191	0	0	0	0	0	0	0	0	0	0
20012008	192	0	0	0	0	0	0	0	0	0	0
20012008	193	0	0	0	0	0	0	0	0	0	0
21012008	194	0	0	0	0	0	0	0	0	0	0
21012008	195	0	0	0	0	0	0	0	0	0	0
21012008	196	0	0	0	0	0	0	0	0	0	0
21012008	197	0	0	0	0	0	2	0	0	0	0

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
21012008	198	0	0	0	0	0	0	0	0	0	0
21012008	199	0	0	0	0	0	0	0	0	0	0
21012008	200	0	0	0	0	0	0	0	0	0	0
21012008	201	0	0	0	0	0	0	0	0	0	0
21012008	202	0	0	0	0	0	0	0	0	0	1
21012008	203	0	0	0	0	0	0	0	0	0	0
21012008	204	0	0	0	0	0	0	0	0	0	0
21012008	205	0	0	0	0	0	0	0	0	0	0
21012008	206	0	0	0	0	0	0	0	0	0	0
21012008	207	0	0	0	0	0	0	0	1	0	0
21012008	208	0	0	0	0	0	0	0	0	0	0
21012008	209	0	0	0	0	0	0	0	0	0	0
21012008	210	0	0	0	0	0	0	0	0	0	0
21012008	211	0	0	0	0	0	0	0	0	0	0
21012008	212	0	0	0	0	0	0	0	0	0	0
21012008	213	0	0	0	0	0	0	0	0	0	0
21012008	214	0	0	0	0	0	0	0	0	0	0
21012008	215	0	0	0	0	0	0	0	0	0	0
21012008	216	0	0	0	0	0	0	0	0	0	0
21012008	217	0	0	0	0	0	0	0	0	0	0
21012008	218	0	0	0	0	0	0	0	0	0	0
21012008	219	0	0	0	0	0	0	0	0	0	0
21012008	220	0	0	0	0	0	0	0	0	0	0
21012008	221	0	0	0	0	0	0	0	0	0	0
21012008	222	0	0	0	0	0	0	0	0	0	0
21012008	223	0	0	0	0	0	1	0	0	0	0
21012008	224	0	0	0	0	0	0	0	0	0	0
21012008	225	0	0	0	0	0	0	0	0	0	0
21012008	226	0	0	0	0	1	0	0	0	0	0
21012008	227	1	0	0	0	0	0	0	0	0	0
21012008	228	1	0	0	0	0	0	0	0	0	0
21012008	229	0	0	0	0	0	0	0	0	0	0
21012008	230	0	0	0	0	0	0	0	0	0	0
21012008	231	0	0	0	0	0	0	0	0	0	0
21012008	232	0	0	0	0	0	0	0	0	0	0
21012008	233	0	0	0	0	0	0	0	0	0	0
22012008	234	0	0	0	0	0	0	0	0	0	0

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
22012008	235	0	0	0	0	0	0	0	0	0	0
22012008	236	1	1	0	0	0	0	0	0	0	0
22012008	237	1	1	0	0	0	0	0	0	0	0
22012008	238	0	0	0	0	0	1	0	0	0	0
22012008	239	0	0	0	0	0	0	0	0	0	0
22012008	240	0	0	0	0	0	0	0	0	0	0
22012008	241	0	0	0	0	0	0	0	0	0	0
22012008	242	0	0	0	0	0	0	0	0	0	0
22012008	243	50	0	0	0	1	0	0	0	0	0
22012008	244	2	0	0	0	0	0	0	0	2	0
22012008	245	0	0	0	0	0	0	0	0	0	0
22012008	246	0	0	0	0	0	0	0	0	0	0
22012008	247	0	0	0	0	0	0	0	0	0	0
22012008	248	0	0	1	0	0	0	0	0	0	0
22012008	249	53	1	0	0	1	0	0	1	1	0
22012008	250	1	1	0	0	0	0	0	0	0	0
22012008	251	100	0	0	0	0	0	0	0	0	0
22012008	252	0	0	0	0	0	0	0	0	0	0
22012008	253	0	0	0	0	0	0	0	0	0	0
22012008	254	0	0	0	0	0	0	0	0	0	0
22012008	255	0	0	0	0	1	0	0	0	0	0
22012008	256	0	0	0	0	0	0	0	0	0	0
22012008	257	0	0	0	0	0	0	0	0	0	0
22012008	258	0	0	0	0	0	0	0	0	0	0
22012008	259	0	0	0	0	0	0	0	0	0	0
22012008	260	0	0	0	0	0	0	0	0	0	0
22012008	261	0	0	0	0	0	0	0	0	0	0
22012008	262	0	0	0	0	0	0	0	0	0	0
22012008	263	0	0	0	0	0	0	0	0	0	0
22012008	264	0	0	0	0	0	0	0	0	0	0
22012008	265	0	0	0	0	0	0	0	0	0	0
22012008	266	0	0	0	0	0	0	0	0	0	0
22012008	267	0	0	0	0	0	0	0	0	0	0
23012008	268	0	0	0	0	0	0	0	0	0	0
23012008	269	0	0	0	0	0	0	0	0	0	0
23012008	270	0	0	0	0	0	0	0	0	0	0
23012008	271	0	0	0	0	0	0	0	0	0	0

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
23012008	272	0	0	0	0	0	0	0	0	0	0
23012008	273	0	0	0	0	0	0	0	0	0	0
23012008	274	0	0	0	0	0	0	0	0	0	0
23012008	275	0	0	0	0	0	0	0	0	0	0
23012008	276	0	0	0	0	0	0	0	0	0	0
23012008	277	0	0	0	0	0	0	0	0	0	0
23012008	278	0	0	0	0	0	0	0	0	0	0
23012008	279	0	0	0	0	0	0	0	0	0	0
23012008	280	0	0	0	0	0	0	0	0	0	0
23012008	281	0	0	0	0	0	0	0	0	0	0
23012008	282	0	0	0	0	0	0	0	0	0	0
23012008	283	0	0	0	0	0	0	0	0	0	0
23012008	284	0	0	0	0	0	0	0	0	0	0
23012008	285	0	0	0	0	0	0	0	0	0	0
23012008	286	0	0	0	0	0	0	0	0	0	0
23012008	287	0	0	0	0	0	0	0	0	0	0
23012008	288	0	0	0	0	0	0	0	0	0	0
23012008	289	0	0	0	0	0	0	0	0	0	1
23012008	290	0	0	0	0	0	0	0	0	0	0
23012008	291	0	0	0	0	0	0	0	0	0	0
23012008	292	0	0	0	0	0	0	0	0	0	0
23012008	293	0	0	0	0	0	0	0	0	0	0
23012008	294	0	0	0	0	0	0	0	0	0	0
23012008	295	0	0	0	0	0	0	0	0	0	0
23012008	296	0	0	0	0	0	0	0	0	0	0
23012008	297	0	0	0	0	0	0	0	0	0	0
23012008	298	0	0	0	0	0	0	0	0	0	0
23012008	299	0	0	0	0	0	0	0	0	0	0
23012008	300	0	0	0	0	0	0	0	0	0	0
23012008	301	0	0	0	0	0	0	0	0	0	0
23012008	302	0	0	0	0	2	1	0	0	0	0
23012008	303	0	0	0	0	1	1	0	0	0	0
24012008	304	10	5	1	0	0	0	0	0	0	0
24012008	305	0	0	0	0	0	0	0	0	0	0
24012008	306	0	0	0	0	2	3	0	0	0	0
24012008	307	0	0	0	0	0	1	0	0	0	0
24012008	308	0	0	0	0	0	0	0	0	0	0

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
24012008	309	0	0	0	0	0	0	0	0	0	0
24012008	310	0	0	0	0	0	1	0	0	0	0
24012008	311	0	0	0	0	0	0	0	0	0	0
24012008	312	0	0	0	0	1	0	0	0	0	0
24012008	313	0	0	0	0	2	0	0	0	0	0
24012008	314	0	0	0	0	0	0	0	0	0	0
24012008	315	18	15	0	0	0	0	0	0	0	0
24012008	316	0	0	0	0	0	1	0	0	0	0
24012008	317	0	0	0	0	0	0	0	0	0	0
24012008	318	0	0	0	0	0	0	0	0	0	0
24012008	319	0	0	0	0	0	0	0	0	0	0
24012008	320	0	0	0	0	0	0	0	0	0	0
24012008	321	0	0	0	0	0	0	0	0	0	0
24012008	322	0	0	0	0	2	0	0	0	0	0
24012008	323	0	0	0	0	55	0	0	0	0	0
24012008	324	0	0	0	0	0	0	0	0	0	0
24012008	325	0	0	0	0	0	0	0	0	0	0
24012008	326	0	0	0	0	0	0	0	0	0	0
24012008	327	0	0	0	0	0	0	0	0	0	0
24012008	328	0	0	0	0	0	0	0	0	0	0
24012008	329	0	0	0	0	0	0	0	0	0	0
18012007	1	19	19		10						
18012007	2	6	6								1
18012007	3	0									
18012007	4	0									
18012007	5	0									
18012007	6	0									
18012007	7	0									
18012007	8	8	4								
18012007	9	4	2								
18012007	10	10	3		1						
18012007	11	7	2		5						
18012007	12	0									
18012007	13	1								1	
18012007	14	1								1	
18012007	15	0									
18012007	16	0									

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
18012007	17	0									
18012007	18	0									1
18012007	19	6								6	
19012007	20	0									
19012007	21	0									
19012007	22	5	3								
19012007	23	1								1	1
19012007	24	0									
19012007	25	0									
19012007	26	0			7						
19012007	27	0									
19012007	28	0									
19012007	29	0									
19012007	30	0									
19012007	31	0									
19012007	32	3			1						
19012007	33	0									
19012007	34	0									
19012007	35	0									
19012007	36	0									
19012007	37	0									
19012007	38	0									
19012007	39	0									
19012007	40	0									
19012007	41	0									
19012007	42	0									
20012007	43	3									
20012007	44	0									
20012007	45	0									
20012007	46	0									
20012007	47	0									
20012007	48	0									
20012007	49	0									
20012007	50	0									
20012007	51	0									1
20012007	52	0									
20012007	53	0									

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Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
20012007	54	0									
20012007	55	0									
20012007	56	0									
20012007	57	0									
20012007	58	0									
20012007	59	0									
20012007	60	0									
20012007	61	0									
21012007	62	0									
21012007	63	0									
21012007	64	0									
21012007	65	0									
21012007	66	0									
21012007	67	0									
21012007	68	0									
21012007	69	0									
21012007	70	0									
21012007	71	0									
21012007	72	0									
21012007	73	0									
21012007	74	0									
21012007	75	0									
21012007	76	0				1	1				
21012007	77	1	1			15					
21012007	78	0									
21012007	79	0									
21012007	80	0									
21012007	81	0									
21012007	82	0									
21012007	83	0									
21012007	84	0				7					
21012007	85	0				1					
21012007	86	0									
21012007	87	0									
21012007	88	0				1					
21012007	89	0				1					
21012007	90	0				1					

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
21012007	91	0									
21012007	92	0									
21012007	93	0									
22012007	94	0									
22012007	95	0									
22012007	96	0									
22012007	97	0									
22012007	98	0									
22012007	99	0									
22012007	100	0									
22012007	101	0									2
22012007	102	0									
22012007	103	0									
22012007	104	0									
22012007	105	0									
22012007	106	0									
22012007	107	0									
22012007	108	0									
22012007	109	0									
22012007	110	0									
22012007	111	0									
22012007	112	0									
22012007	113	0									
22012007	114	0									
22012007	115	0									
22012007	116	0									
22012007	117	0									
22012007	118	0									
22012007	119	0									
22012007	120	0				1					
22012007	121	0									
22012007	122	0						1			
22012007	123	0									
22012007	124	3	3								
22012007	125	0									
23012007	126	0									
23012007	127	0									

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Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
23012007	128	0									
23012007	129	0									
23012007	130	0									
23012007	131	0									
23012007	132	0									
23012007	133	0									
23012007	134	1			1					1	
23012007	135	0									
23012007	136	0									
23012007	137	0									
23012007	138	0									
23012007	139	0									
23012007	140	0									
23012007	141	0									
23012007	142	0									
23012007	143	0									
23012007	144	0									
23012007	145	0									
23012007	146	0									
23012007	147	0									
23012007	148	0			1						
23012007	149	0									
23012007	150	0									
23012007	151	0									
23012007	152	0									
23012007	153	0			1						
23012007	154	0		1							
23012007	155	2								2	
23012007	156	0			14						
23012007	157	0									
24012007	158	0									
24012007	159	0									
24012007	160	0									
24012007	161	0									
24012007	162	0									
24012007	163	0									
24012007	164	0									

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish	
24012007	165	2	1									
24012007	166	0										
24012007	167	0										
24012007	168	0										
24012007	169	0										
24012007	170	0										
24012007	171	0										
24012007	172	0										
24012007	173	0										
24012007	174	0										
24012007	175	0										
24012007	176	0										
24012007	177	0										
24012007	178	0										
24012007	179	1										
24012007	180	0										
24012007	181	0										
24012007	182	0										
24012007	183	0										559
24012007	184	0										
24012007	185	0										
19012006	1	2	P									
19012006	2	1										
19012006	3	1										
20012006	4	1										
20012006	5											
20012006	6	1										
20012006	7										1	
20012006	8											
20012006	9						1					
20012006	10											
20012006	11											
20012006	12											
20012006	13										1	
20012006	14											
20012006	15											
20012006	16											

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish	
20012006	17											
20012006	18											
20012006	19											
20012006	20											
20012006	21											
20012006	22											
20012006	23											
20012006	24											
20012006	25											
20012006	26											
20012006	27											
20012006	28	1	1									
20012006	29											
20012006	30											
20012006	31	1	1									
20012006	32	1			1							
20012006	33	1										
20012006	34											
20012006	35	1	1									560
20012006	36	1										
20012006	37	1										
20012006	38	1	1									
20012006	39	1	1									
20012006	40											
20012006	41											
21012006	42											
21012006	43											
21012006	44											
21012006	45											
21012006	46											
21012006	47										1	
21012006	48											
21012006	49											
21012006	50											
21012006	51											
21012006	52											
21012006	53											

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
21012006	54										
21012006	55										
21012006	56										
21012006	57										
21012006	58										
21012006	59										
21012006	60										
21012006	61										
21012006	62										
21012006	63										
21012006	64										
21012006	65										
21012006	66										
21012006	67										
21012006	68										
21012006	69										
21012006	70										
21012006	71										
21012006	72	3	3								
21012006	73	1	1								
21012006	74	1	1								
21012006	75	2	2								
21012006	76	1	1			1					
21012006	77				1						
21012006	78	1	1								
21012006	79										
22012006	80										
22012006	81										
22012006	82										
22012006	83					1					
22012006	84					1					
22012006	85					1					
22012006	86										
22012006	87										
22012006	88										
22012006	89										
22012006	90	1	1								

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish	
22012006	91	1	1									
22012006	92											
22012006	93											
22012006	94											
22012006	95											
22012006	96											
22012006	97											
22012006	98											
22012006	99											
22012006	100											
22012006	101											
22012006	102											
22012006	103											
22012006	104											
22012006	105											
22012006	106											
22012006	107	1	1									
22012006	108											
22012006	109	2	2						1			562
22012006	110											
22012006	111	1	1									
22012006	112											
22012006	113											
23012006	114	1										
23012006	115											
23012006	116											
23012006	117											
23012006	118											
23012006	119											
23012006	120											
23012006	121											
23012006	122											
23012006	123											
23012006	124	2	2									
23012006	125											
23012006	126	1	1									
23012006	127	2	2						1			

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish	
23012006	128	3	3			1						
23012006	129	2	2				1					
23012006	130											
23012006	131											
23012006	132											
23012006	133	1										
23012006	134											
23012006	135								4			
23012006	136											
23012006	137											
23012006	138											
23012006	139											
23012006	140											
23012006	141											
23012006	142											
23012006	143											
23012006	144											
23012006	145								1			
23012006	146								1			563
23012006	147											
24012006	148											
24012006	149											
24012006	150											
24012006	151											
24012006	152											
24012006	153											
24012006	154											
24012006	155											
24012006	156										1	
24012006	157											
24012006	158											
24012006	159											
24012006	160											
24012006	161											
24012006	162											
24012006	163											
24012006	164											

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
24012006	165										
24012006	166										
24012006	167										
24012006	168										
24012006	169										
24012006	170										
24012006	171										
24012006	172	1									
24012006	173	1									
24012006	174	1	1								
24012006	175										
24012006	176								1		
24012006	177								1		
24012006	178	1	1								
24012006	179										
24012006	180										
25012006	181										
25012006	182										
25012006	183										
25012006	184										
25012006	185										1
25012006	186										
25012006	187										
25012006	188										
25012006	189										
25012006	190										
25012006	191										
25012006	192										
25012006	193										
25012006	194										
25012006	195										
25012006	196										
25012006	197										
25012006	198										
25012006	199										
25012006	200										
25012006	201										

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
25012006	202										
25012006	203										
25012006	204										
25012006	205										
25012006	206										
25012006	207										
25012006	208										
25012006	209										
25012006	210										
25012006	211										
25012006	212										
25012006	213										
25012006	214										
25012006	215										
26012006	216	1	1								
26012006	217										
26012006	218										
26012006	219										
26012006	220										
26012006	221										
26012006	222										
26012006	223										
26012006	224										
26012006	225	1	1								
26012006	226										
26012006	227										
26012006	228										
26012006	229										
26012006	230										
26012006	231										
26012006	232										
26012006	233										
26012006	234										
26012006	235										
26012006	236										
26012006	237	1									
26012006	238	1									

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
26012006	239										
26012006	240										
27012006	241										
27012006	242										
27012006	243										
27012006	244										
27012006	245										
27012006	246										
27012006	247										
27012006	248										
27012006	249						1		1		
27012006	250										
27012006	251										
27012006	252	1	1								
27012006	253	5	5								
27012006	254										
27012006	255										
27012006	256										
27012006	257										
27012006	258										
27012006	259										
27012006	260										
27012006	261										
27012006	262										
27012006	263										
27012006	264										
27012006	265	3	3								1
27012006	266	2	2								
27012006	267								1		
27012006	268								1		
27012006	269	1									
27012006	270								1		
27012006	271								1		
27012006	272										1
27012006	273	1	1								
27012006	274								1		
28012006	275										

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
28012006	276										
28012006	277										
28012006	278										
28012006	279	2	P			P					
28012006	280										
28012006	281										
28012006	282										
28012006	283										
28012006	284										
28012006	285										1
28012006	286										
28012006	287										
28012006	288										
28012006	289										1
28012006	290										
28012006	291										
28012006	292										
28012006	293										
28012006	294	1									
28012006	295										
28012006	296										
28012006	297										
28012006	298										
28012006	299										
28012006	300										
28012006	301										
28012006	302										
25012005	1		1								
25012005	2	P									
25012005	3	P	P								
25012005	4	P	P								
26012005	5	P									
26012005	6										
26012005	7	P									
26012005	8					4	1	2			
26012005	9	P				11	4	1	1		
26012005	10					4	2	19	3		

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
26012005	11						2				
26012005	12						P				
26012005	13										
26012005	14	P				P					
26012005	15		P			2	P				
26012005	16	P	P								
26012005	17										
26012005	18										
26012005	19										
26012005	20										
26012005	21								1		
26012005	22										
26012005	23										
26012005	24										
26012005	25										
26012005	26					P	P				
26012005	27		3							P	
26012005	28		2			P					
26012005	29		1			P					
26012005	30								1		
26012005	31		P			P			1		
26012005	32										
26012005	33	P							1		
27012005	34								1		
27012005	35										
27012005	36										
27012005	37										
27012005	38										
27012005	39										
27012005	40										
27012005	41							1			
27012005	42								9		
27012005	43						P				
27012005	44										
27012005	45										
27012005	46										
27012005	47										

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
27012005	48										
27012005	49										
27012005	50								1		
27012005	51										
27012005	52										
27012005	53										
28012005	54										
28012005	55										
29012005	56					P	P				
29012005	57					P	P		1		
29012005	58								1		
29012005	59						P		P		
29012005	60										
29012005	61						P				
29012005	62										
29012005	63										
29012005	64										
29012005	65										
29012005	66										
29012005	67										
29012005	68										
29012005	69										
29012005	70										
29012005	71										
29012005	72	P									
29012005	73					P	P				
29012005	74						P				
29012005	75						P				
29012005	76						P				
29012005	77						P				
29012005	78										
29012005	79						P				
29012005	80	P					P		P		
29012005	81						P				
30012005	82										
30012005	83										
30012005	84										

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
30012005	85										
30012005	86										
30012005	87										
30012005	88										
30012005	89										
30012005	90										
30012005	91										
30012005	92	P							1		
30012005	93								P		
30012005	94								1		
30012005	95						P				
30012005	96						P		1		
30012005	97					P	P				
30012005	98					P	P				
30012005	99										
30012005	100										
30012005	101										
30012005	102										
30012005	103										
30012005	104										
31012005	105	P	P				P				
31012005	106	P									
31012005	107	P									
31012005	108	P	P								
31012005	109	P							2		
31012005	110	P									
31012005	111	P	P								
31012005	112	P	P								
1022005	113										
1022005	114								2		
1022005	115										
1022005	116										
1022005	117										
1022005	118						P				
1022005	119					P	P				
1022005	120										
1022005	121										

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
1022005	122						P				
1022005	123						P				
2022005	124										
2022005	125										
2022005	126										
2022005	127										
2022005	128										
2022005	129										
2022005	130						P				
2022005	131						P				
2022005	132						P				
2022005	133					P	P				
2022005	134										
2022005	135					P	P				
2022005	136										
2022005	137										
2022005	138								3		
2022005	139										
2022005	140										
2022005	141										
2022005	142										
2022005	143										
2022005	144										
2022005	145										
2022005	146										
2022005	147						P				
2022005	148						P				
2022005	149										
16012004	1	2	P								
16012004	2	1									
17012004	3	1									
17012004	4	1									
17012004	5	1	1								
17012004	6				P		P				
17012004	7	1						P		P	
17012004	8										
17012004	9										

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
17012004	10										
17012004	11										
17012004	12										
17012004	13										
17012004	14										
17012004	15										
17012004	16										
17012004	17										
17012004	18										
17012004	19								2		
17012004	20	3	3						1		
17012004	21										
17012004	22	1	1								
17012004	23	2	2						1		
17012004	24	1	1								
17012004	25								1		
17012004	26										
17012004	27										
17012004	28										
17012004	29										
17012004	30										
17012004	31	2	2								
17012004	32										
17012004	33										
17012004	34										
17012004	35										
17012004	36										
17012004	37										
18012004	38										
18012004	39										
18012004	40										
18012004	41										
18012004	42										
18012004	43										
18012004	44										
18012004	45						1				
18012004	46										

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Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
18012004	47										
18012004	48										
18012004	49										
18012004	50										
18012004	51										
18012004	52										
18012004	53										
18012004	54										
18012004	55										
18012004	56										
18012004	57										
18012004	58										
18012004	59										
18012004	60										
18012004	61										
18012004	62										
18012004	63										
18012004	64										
18012004	65										
18012004	66										
18012004	67										
18012004	68										
18012004	69										
18012004	70										
18012004	71										
18012004	72										
18012004	73										
18012004	74										
18012004	75	1									
18012004	76	1	1								
18012004	77										
18012004	78	1									
18012004	79										
19012004	80	2	2						1		
19012004	81										
19012004	82										
19012004	83						P		2		

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
19012004	84							P			
19012004	85										
19012004	86										
19012004	87										
19012004	88										
19012004	89										
19012004	90										
19012004	91										1
19012004	92										
19012004	93								1		
19012004	94							P			
19012004	95										
19012004	96	3						P	2	3	
19012004	97						P				
19012004	98								8		
19012004	99								P		
19012004	100	1						P	P		
19012004	101										
19012004	102										
19012004	103										1
19012004	104										1
19012004	105										
19012004	106										
19012004	107										
19012004	108										
19012004	109										
19012004	110										
20012004	111										
20012004	112										
20012004	113										
20012004	114										
20012004	115										
20012004	116										
20012004	117										
20012004	118										
20012004	119										

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish	
20012004	120	1										
20012004	121											
20012004	122											
20012004	123											
20012004	124											
20012004	125											
20012004	126											
20012004	127											
20012004	128											
20012004	129											
20012004	130	1					P					
20012004	131											
20012004	132											
20012004	133	2								2		
20012004	134								P			
20012004	135											
20012004	136											
20012004	137											
20012004	138										1	575
20012004	139											
20012004	140											
20012004	141											
20012004	142											
20012004	143											
20012004	144											
21012004	145	1				P						
21012004	146					P	P	P	P			
21012004	147	1					2					
21012004	148							P				
21012004	149										1	
21012004	150	1					P			P		
21012004	151								P			
21012004	152								P			
21012004	153											
21012004	154											
21012004	155											
21012004	156								22			
21012004	157											

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
21012004	158										
21012004	159										
21012004	160										
21012004	161								2		
21012004	162							P	P		
21012004	163								P		
21012004	164				P			P			
21012004	165							2	P		
21012004	166	1				P			P		
21012004	167					1	6	9	P		
21012004	168										
21012004	169										
21012004	170										
21012004	171										
21012004	172										
21012004	173										
21012004	174										
21012004	175										
21012004	176										
22012004	177	1				P	P	P	P	1	
22012004	178	2	P			P		P	P		
22012004	179	4	P		P	P	P	P	P	1	
22012004	180										
22012004	181										
22012004	182										
22012004	183						2				
22012004	184		1								
22012004	185										
22012004	186										
22012004	187										
22012004	188										
22012004	189										
22012004	190					P			P		
22012004	191										
22012004	192					P					
22012004	193						P	P			
22012004	194							1			

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
22012004	195										
22012004	196										
22012004	197										
22012004	198										
22012004	199										
22012004	200										
22012004	201										
22012004	202										
22012004	203										
23012004	204	1	P			P	P				
23012004	205										
23012004	206										
23012004	207										1
23012004	208										
23012004	209										
23012004	210										
23012004	211										
23012004	212										
23012004	213										
23012004	214										
23012004	215										
23012004	216										
23012004	217					P	P	P	P		
23012004	218	1				P	P	P			
23012004	219										
23012004	220					P			P		
23012004	221	1	1								
23012004	222									1	
23012004	223	1	P								
23012004	224	1	P								
23012004	225	1	P								
23012004	226										
23012004	227										
23012004	228	1	P								
23012004	229										
23012004	230										
23012004	231										

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
24012004	232										
24012004	233										
24012004	234										
24012004	235	2	P								
24012004	236	2	P								
24012004	237										
24012004	238	2	P								
24012004	239	1	P								
24012004	240										
24012004	241										
24012004	242										
24012004	243	1	P				P				
24012004	244										
24012004	245										
24012004	246										
24012004	247										
24012004	248										
24012004	249										
24012004	250										
24012004	251										
24012004	252										
24012004	253										
24012004	254										
24012004	255										
24012004	256										
24012004	257							1			
24012004	258										
14012003	1										
14012003	2				P						
14012003	3				P						
14012003	4				P						
14012003	5				p						
14012003	6		P		P						
14012003	7		P		P						
14012003	8				5						
14012003	9	P			P					1	
14012003	10										

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish	
15012003	11											
15012003	12											
15012003	13											
15012003	14	P										
15012003	15											
15012003	16											
15012003	17	P										
15012003	18											
15012003	19											
15012003	20											
15012003	21											
15012003	22											
15012003	23											
15012003	24											
15012003	25											
15012003	26	P										
15012003	27	P										
15012003	28	P	P		P							
15012003	29	P										579
15012003	30											
15012003	31										1	
15012003	32	P										
15012003	33											
15012003	34											
15012003	35											
15012003	36											
16012003	37											
16012003	38		9									
16012003	39											
16012003	40											
16012003	41											
16012003	42											
16012003	43											
16012003	44											
16012003	45											
16012003	46											
16012003	47											

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
16012003	48										
16012003	49	P									
16012003	50										
16012003	51										
16012003	52										
16012003	53										
16012003	54										
16012003	55										
16012003	56		P								1
16012003	57										
16012003	58										
16012003	59										
16012003	60		1								
16012003	61										
16012003	62										
16012003	63										
16012003	64										1
16012003	65										
16012003	66										1
16012003	67	P						1			
16012003	68										
16012003	69										
16012003	70										
16012003	71										
17012003	72										
17012003	73										
17012003	74										
17012003	75										
17012003	76										
17012003	77										
17012003	78										
17012003	79										
17012003	80										
17012003	81										
17012003	82										
17012003	83										
17012003	84										

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
17012003	85										
17012003	86										
17012003	87						1				
17012003	88										
17012003	89										
17012003	90		1								
17012003	91										
17012003	92		1								
17012003	93										
17012003	94		1								
17012003	95										
17012003	96										1
17012003	97										
17012003	98	P									1
17012003	99										
17012003	100									1	
17012003	101										
17012003	102										
17012003	103	P								1	
17012003	104										
17012003	105										
18012003	106										
18012003	107										
18012003	108										
18012003	109										
18012003	110										
18012003	111										
18012003	112										
18012003	113										
18012003	114										
18012003	115										
18012003	116										1
18012003	117										
18012003	118										
18012003	119										1
18012003	120										
18012003	121										

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish	
18012003	122											
18012003	123	P										
18012003	124											
18012003	125											
18012003	126											
18012003	127											
18012003	128											
18012003	129											
18012003	130											
19012003	131											
19012003	132											
19012003	133		2							2		
19012003	134		1									
19012003	135		1									
19012003	136											
19012003	137											
19012003	138											
19012003	139											
19012003	140											582
19012003	141					P						
19012003	142											
19012003	143											
19012003	144											
19012003	145										1	
19012003	146											
19012003	147											
19012003	148											
19012003	149											
19012003	150					P			P			
19012003	151											
19012003	152											
19012003	153											
19012003	154											
19012003	155											
19012003	156											
19012003	157											
20012003	158											

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
20012003	159										
20012003	160										
20012003	161										
20012003	162										
20012003	163										
20012003	164										
20012003	165							P			
20012003	166							1			
20012003	167										
20012003	168										
20012003	169										
20012003	170										
20012003	171		1								
20012003	172										
20012003	173										1
20012003	174										1
20012003	175										
20012003	176										1
20012003	177										
20012003	178										
20012003	179										
20012003	180										
20012003	181										1
20012003	182										1
20012003	183										
20012003	184										
20012003	185										
20012003	186										
20012003	187										
20012003	188										
20012003	189										
20012003	190										1
21012003	191										
21012003	192										
21012003	193		1								1
21012003	194										
21012003	195										

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
21012003	196										
21012003	197										
21012003	198										
21012003	199										
21012003	200										
21012003	201										
21012003	202										
21012003	203										
21012003	204										
21012003	205										
21012003	206										1
21012003	207										
21012003	208										
22012003	209	P	P		P						
22012003	210	P	P								
22012003	211										
22012003	212										
22012003	213										
22012003	214										
22012003	215										
22012003	216										
22012003	217	P	P		P						
22012003	218	P								P	
22012003	219										
22012003	220										
22012003	221										
22012003	222										
22012003	223			P							
22012003	224										
22012003	225										
22012003	226										
22012003	227										
14012002	1										
14012002	2	2	P								
14012002	3	1									
14012002	4										
14012002	5	1									

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
14012002	6										
14012002	7										
14012002	8										
14012002	9										
15012002	10										
15012002	11	3	P								
15012002	12										
15012002	13										
15012002	14										
15012002	15	2	P								
15012002	16										
15012002	17										
15012002	18										
15012002	19										
15012002	20	1									
15012002	21										
15012002	22	2	1								
15012002	23										
15012002	24	1									
15012002	25										
15012002	26										
15012002	27										
15012002	28	1	1								
15012002	29										
15012002	30										
15012002	31										
15012002	32										
15012002	33										
15012002	34										
15012002	35										
15012002	36										
15012002	37										1
15012002	38										
15012002	39	2	2								
16012002	40										1
16012002	41										
16012002	42										

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
16012002	43										
16012002	44										
16012002	45										
16012002	46										
16012002	47										
16012002	48										
16012002	49										
16012002	50										1
16012002	51										
16012002	52										
16012002	53										
16012002	54										
16012002	55										
16012002	56										
16012002	57										
16012002	58										
16012002	59										
16012002	60										
16012002	61										
16012002	62	1	1								
16012002	63										P
16012002	64										
16012002	65										
16012002	66										
16012002	67										
16012002	68										
16012002	69										
16012002	70										
16012002	71										
16012002	72										
16012002	73										
16012002	74										
16012002	75										1
16012002	76	1	1								1
16012002	77										1
17012002	78										1
17012002	79										

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
17012002	80										
17012002	81										
17012002	82										
17012002	83										
17012002	84										
17012002	85										
17012002	86										2
17012002	87										
17012002	88										
17012002	89										
17012002	90										
17012002	91										
17012002	92										1
17012002	93										
17012002	94	2	2								
17012002	95										
17012002	96										
17012002	97										
17012002	98										
17012002	99										
17012002	100										
17012002	101										
17012002	102										
17012002	103										
17012002	104										
17012002	105										
17012002	106										
17012002	107										
17012002	108	1									
17012002	109										
17012002	110										
17012002	111										
17012002	112										
17012002	113										
17012002	114										
17012002	115										
18012002	116										

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
18012002	117										
18012002	118										
18012002	119										
18012002	120										
18012002	121										
18012002	122										
18012002	123										
18012002	124										
18012002	125										
18012002	126										
18012002	127	1	1								
18012002	128										
18012002	129										
18012002	130										
18012002	131										
18012002	132										
18012002	133	1	P								
18012002	134										
18012002	135										
18012002	136										
18012002	137	1	1								
18012002	138										
18012002	139										
18012002	140										
18012002	141										
18012002	142										
18012002	143										
18012002	144										
18012002	145										
18012002	146										
18012002	147										
18012002	148										
18012002	149										
18012002	150										
18012002	151										
18012002	152										
18012002	153										

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
18012002	154										
18012002	155										
18012002	156										
18012002	157										
18012002	158										
19012002	159										
19012002	160										
19012002	161										
20012002	162										
20012002	163										
20012002	164										
20012002	165										
20012002	166										1
20012002	167										1
20012002	168										1
20012002	169										
20012002	170										
20012002	171										
20012002	172										
20012002	173										1
20012002	174										
20012002	175										
20012002	176										
20012002	177										
20012002	178										
20012002	179										
20012002	180	2								2	
20012002	181										
20012002	182										
20012002	183										
20012002	184										
20012002	185										
20012002	186										
20012002	187	1								P	
20012002	188										
20012002	189										
20012002	190										

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
20012002	191										
20012002	192										1
20012002	193										
20012002	194										
20012002	195										
20012002	196										
20012002	197										
20012002	198										
20012002	199										
20012002	200										
20012002	201										
21012002	202										
21012002	203										2
21012002	204										
21012002	205										
21012002	206										
21012002	207										
21012002	208										2
21012002	209										
21012002	210										
21012002	211										
21012002	212										
21012002	213										
21012002	214										
21012002	215										
21012002	216										1
21012002	217										
21012002	218										
21012002	219										
21012002	220										
21012002	221										
21012002	222										
21012002	223										
21012002	224										1
21012002	225										
21012002	226										
14012001	1	2	P		P						

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
14012001	2	1			P						
14012001	3	3	1		P						
14012001	4	3	P		P						1
15012001	5	2	P								
15012001	6										
15012001	7	1	P								
15012001	8	1	P								
15012001	9	1	P								
15012001	10	1	P		P	P					
15012001	11	3	P		P	P					
15012001	12	3	1		P	P					
15012001	13										
15012001	14	1	P								
15012001	15	3	P		P						
15012001	16	1									
15012001	17	2	P			P	P				
15012001	18	2	P				P				
15012001	19	3	P			P	P		P		
15012001	20	2	P			P	P				
15012001	21					P			P		
15012001	22					P			P		
15012001	23	1				P		P	P		
15012001	24										
15012001	25								P		
15012001	26					P			P		
15012001	27					P					1
15012001	28					P					1
16012001	29										
16012001	30										
16012001	31										
16012001	32										
16012001	33										
16012001	34					P					
16012001	35										
16012001	36										
16012001	37										
16012001	38										

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
16012001	39										
16012001	40								P		
16012001	41	1						P	P	P	
16012001	42										
16012001	43										
16012001	44										
16012001	45										
16012001	46										
16012001	47										
16012001	48										
16012001	49										
16012001	50										
16012001	51	7	7								
16012001	52										
16012001	53										
16012001	54										
16012001	55						P				
16012001	56					P					
16012001	57										
16012001	58										
16012001	59										
16012001	60	2	1							1	2
16012001	61								P		
16012001	62										
16012001	63										
16012001	64	1	1								
16012001	65										
16012001	66										
16012001	67										
16012001	68										
16012001	69										
17012001	70										
17012001	71										
17012001	72										
17012001	73										
17012001	74										
17012001	75										

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
17012001	76										
17012001	77								P		
17012001	78							P	P		
17012001	79					P			P		
17012001	80										
17012001	81								P		
17012001	82										
17012001	83					P					
17012001	84	1								1	
17012001	85										
17012001	86										
17012001	87										
17012001	88										
17012001	89										
17012001	90										
17012001	91										
17012001	92										
17012001	93	1	1								
17012001	94								P		
17012001	95								P		
17012001	96	1							P	1	
17012001	97										
17012001	98										
17012001	99										
17012001	100										
17012001	101										
17012001	102										
17012001	103										
17012001	104										
17012001	105										
17012001	106										
17012001	107										
17012001	108										
18012001	109	1	P								
18012001	110	1								1	
18012001	111	1	P								1
18012001	112	1								1	

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
18012001	113										
18012001	114	1								1	
18012001	115	1						P		1	
18012001	116										
18012001	117										
18012001	118										
18012001	119										
18012001	120										
18012001	121										
18012001	122										
18012001	123										
18012001	124										
18012001	125										
18012001	126										
18012001	127										
18012001	128										
18012001	129										
18012001	130										
18012001	131								P		
18012001	132										
18012001	133										
18012001	134										
18012001	135										2
18012001	136							1	P		
18012001	137								P		
18012001	138										
18012001	139										
18012001	140						P				
18012001	141										
18012001	142					P					
18012001	143										
18012001	144										
19012001	145										
19012001	146										
19012001	147										
19012001	148										
19012001	149										

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
19012001	150										
19012001	151										
19012001	152	2	P								
19012001	153										
19012001	154										
19012001	155										
19012001	156	1	P								
19012001	157										
19012001	158										
19012001	159										
19012001	160										
19012001	161	2	P								
19012001	162	3	P		P						
19012001	163										
29012000	1										0
29012000	2	1									0
29012000	3				1						0
29012000	4										1
29012000	5										2
29012000	6	1									0
29012000	7										0
29012000	8										0
29012000	9										0
29012000	10										0
30012000	11	2								1	0
30012000	12										0
30012000	13										0
30012000	14										0
30012000	15										0
30012000	16	19	8								0
30012000	17	12									0
30012000	18										0
30012000	19					1					0
30012000	20										0
30012000	21										0
30012000	22	1								1	0
30012000	23										0

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
30012000	24						3	1			0
30012000	25							1			0
30012000	26					1	3		3		0
30012000	27										0
30012000	28										0
30012000	29										0
30012000	30										0
30012000	31										0
30012000	32										0
30012000	33										0
30012000	34										0
30012000	35										0
30012000	36										0
30012000	37										0
30012000	38										0
31012000	39										0
31012000	40										0
31012000	41										0
31012000	42										0
31012000	43										0
31012000	44										0
31012000	45										0
31012000	46										0
31012000	47										0
31012000	48										0
31012000	49										0
31012000	50										0
31012000	51										0
31012000	52										0
31012000	53										0
31012000	54										0
31012000	55										0
31012000	56										0
31012000	57										0
31012000	58										0
31012000	59										0
31012000	60										0

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
31012000	61										0
31012000	62										0
31012000	63										0
31012000	64										0
1022000	65										0
1022000	66										0
1022000	67										0
1022000	68										0
1022000	69										0
1022000	70										0
1022000	71										0
1022000	72										0
1022000	73										0
1022000	74										0
1022000	75										0
1022000	76										0
1022000	77										1
1022000	78										0
1022000	79										0
1022000	80										0
1022000	81										0
1022000	82										0
1022000	83										0
1022000	84										0
1022000	85										0
1022000	86										0
1022000	87										0
1022000	88										0
1022000	89										0
1022000	90										0
1022000	91										0
1022000	92										0
2022000	93										0
2022000	94										0
2022000	95										0
2022000	96										1
2022000	97										0

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
2022000	98										0
2022000	99										0
2022000	100										0
2022000	101										0
2022000	102										0
2022000	103										0
2022000	104										0
2022000	105										0
2022000	106										0
2022000	107										0
2022000	108										0
2022000	109							1			0
2022000	110										0
2022000	111										0
2022000	112										0
2022000	113										0
2022000	114										0
2022000	115										0
2022000	116										0
2022000	117										0
2022000	118										0
2022000	119										0
2022000	120										0
2022000	121										0
2022000	122										0
3022000	123										0
3022000	124										0
3022000	125										0
3022000	126										0
3022000	127	12									1
3022000	128	18									1
3022000	129										0
3022000	130	3	P								0
3022000	131										0
3022000	132	2	1								0
3022000	133										0
3022000	134										0

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
3022000	135										0
3022000	136										0
4022000	137										0
4022000	138										0
4022000	139										0
4022000	140										0
4022000	141										0
3021999	1										
3021999	2										
3021999	3										
3021999	4										
3021999	5										
3021999	6										
3021999	7										
3021999	8										
3021999	9										
3021999	10										
3021999	11										
3021999	12										
4021999	13										
4021999	14										
4021999	15										1
4021999	16										
4021999	17										
4021999	18										
4021999	19										
4021999	20										
4021999	21										
4021999	22										
4021999	23										
4021999	24										
4021999	25										
4021999	26										
4021999	27										
4021999	28										
4021999	29										
4021999	30										

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
4021999	31										
4021999	32										
4021999	33										
4021999	34										
4021999	35										
4021999	36										
4021999	37										
4021999	38										
4021999	39										
4021999	40										
4021999	41										
4021999	42										
4021999	43										
4021999	44										
4021999	45										1
4021999	46										
4021999	47										
4021999	48										
5021999	49										
5021999	50										
5021999	51										
5021999	52										
5021999	53										
5021999	54										
5021999	55										
5021999	56										
5021999	57										
5021999	58										
5021999	59										
5021999	60										
5021999	61										
5021999	62										
5021999	63										
5021999	64										
6021999	65										
6021999	66										
6021999	67										

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
6021999	68										
6021999	69										
6021999	70										
6021999	71										
6021999	72										
6021999	73										
6021999	74										
6021999	75										
6021999	76										
6021999	77										
6021999	78										
6021999	79										
6021999	80										
6021999	81										
6021999	82										
6021999	83										
6021999	84										
6021999	85										
6021999	86										
6021999	87										
7021999	88										
7021999	89										
7021999	90										
7021999	91										
7021999	92										
7021999	93										
7021999	94										
7021999	95										
7021999	96										
7021999	97							1			
7021999	98										
7021999	99										
7021999	100										
7021999	101										
7021999	102										
7021999	103										
7021999	104										

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish	
7021999	105											
7021999	106											
7021999	107											
7021999	108											
7021999	109											
7021999	110											
7021999	111											
7021999	112											
7021999	113											
7021999	114										1	
7021999	115											
7021999	116											
8021999	117											
8021999	118											
8021999	119											
8021999	120											
8021999	121											
8021999	122											
8021999	123											602
8021999	124											
8021999	125	2								P		
8021999	126	2								P		
8021999	127											
8021999	128											
8021999	129											
8021999	130											
8021999	131											
8021999	132											
8021999	133											
8021999	134											
8021999	135											
8021999	136										1	
8021999	137											
8021999	138											
8021999	139											
8021999	140											
8021999	141											

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
8021999	142										
8021999	143										
8021999	144										
8021999	145										
8021999	146										
16011998	1	3	P								
17011998	2	2	P								
17011998	3										
17011998	4	1	P								
17011998	5	3	P								
17011998	6	2	P								
17011998	7										
17011998	8										
17011998	9										
17011998	10	1	P								
17011998	11	1	P								
18011998	12								1		
18011998	13										
18011998	14										
18011998	15										
18011998	16								1		
18011998	17										
18011998	18										
18011998	19										
18011998	20										
18011998	21										
18011998	22										
18011998	23										
18011998	24										
18011998	25										
19011998	26										
19011998	27										
19011998	28										
19011998	29										
19011998	30										
20011998	31										
20011998	32										

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
20011998	33										
20011998	34										
20011998	35										
21011998	36										
21011998	37										
21011998	38										
21011998	39										
21011998	40	1	P								
21011998	41										
21011998	42	1	P								
21011998	43										
21011998	44	3	3								
21011998	45	1	P								
21011998	46	1	P								
21011998	47										
21011998	48	23	23								
21011998	49										
22011998	50	1	P								
22011998	51	2	P								
22011998	52										
22011998	53	1	P								
22011998	54	3	P								
22011998	55	2	P								
22011998	56	2	P								
22011998	57										
22011998	58										
22011998	59	1	P								
22011998	60										
22011998	61										
22011998	62										
22011998	63										
22011998	64										
1021997	1										
2021997	2										
2021997	3										
2021997	4										
2021997	5										

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
2021997	6										
2021997	7										
2021997	8										
2021997	9										
2021997	10										
2021997	11										
2021997	12										
2021997	13										
2021997	14										
2021997	15										
2021997	16										
2021997	17										
2021997	18										
2021997	19										
2021997	20										
2021997	21										
2021997	22										
2021997	23										
2021997	24										
2021997	25										
2021997	26										
2021997	27										
2021997	28										
3021997	29										
3021997	30										
3021997	31										
3021997	32										
3021997	33										
3021997	34										
3021997	35										
3021997	36										
3021997	37										
3021997	38										
3021997	39										
3021997	40										
3021997	41										
3021997	42										

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
3021997	43										
3021997	44										
3021997	45										
3021997	46										
3021997	47										
3021997	48								1		
3021997	49										
3021997	50										
3021997	51										
3021997	52										
3021997	53										
3021997	54										
4021997	55										
4021997	56	1									
4021997	57										
4021997	58										
4021997	59	1									
4021997	60										
4021997	61										
4021997	62										
4021997	63										
4021997	64										
4021997	65										
4021997	66										
4021997	67										
4021997	68										
4021997	69										
4021997	70										
4021997	71										
4021997	72										
4021997	73										
4021997	74										
4021997	75										
4021997	76										
4021997	77										
4021997	78										
4021997	79										

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
5021997	80										
5021997	81										
5021997	82										
5021997	83										
5021997	84										
5021997	85										
5021997	86										
5021997	87										
5021997	88										
5021997	89										
5021997	90										
5021997	91										
5021997	92										
5021997	93										
5021997	94										
5021997	95										
5021997	96										
5021997	97										
5021997	98										
5021997	99										
5021997	100										
5021997	101										
5021997	102										
5021997	103										
5021997	104										
5021997	105										
6021997	106										
6021997	107										
6021997	108										
6021997	109										
6021997	110										
6021997	111										
6021997	112										
6021997	113										
6021997	114										
6021997	115										
6021997	116										

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
6021997	117										
6021997	118										
6021997	119										
6021997	120										
6021997	121										
6021997	122										
6021997	123										
6021997	124										
6021997	125										
6021997	126	3	P		P						
6021997	127	3	P		P						
6021997	128										
6021997	129										
6021997	130										
6021997	131										
23011996	1	2	P								
23011996	2	2	P								
23011996	3	1	P								
23011996	4										
24011996	5	3	P								
24011996	6	3	P								
24011996	7	2									
24011996	8										
24011996	9										
24011996	10										
24011996	11										
24011996	12										
24011996	13	1									
24011996	14										
24011996	15										
24011996	16										
24011996	17										
24011996	18										
24011996	19										
24011996	20										
24011996	21										
24011996	22										

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
24011996	23										
24011996	24										
24011996	25										
24011996	26										
24011996	27										
24011996	28										
24011996	29										
24011996	30										
24011996	31										
25011996	32										
25011996	33										
25011996	34										
25011996	35										
25011996	36										
25011996	37										
25011996	38										
25011996	39										
25011996	40										
25011996	41										
25011996	42										
25011996	43										
7021996	44					P	P	P			
7021996	45	2				P	P				
7021996	46	2									
7021996	47										
7021996	48										
7021996	49		1								
7021996	50	2									
7021996	51	1									
7021996	52	1									
7021996	53										
7021996	54										
7021996	55	1				P					
7021996	56	1				P					
7021996	57	1				P					
7021996	58										
7021996	59										

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish	
7021996	60										1	
7021996	61											
7021996	62											
7021996	63											
7021996	64											
8021996	65											
8021996	66											
8021996	67											
8021996	68											
8021996	69					P						
8021996	70											
8021996	71											
8021996	72											
8021996	73											
8021996	74											
8021996	75											
8021996	76											
8021996	77											
8021996	78	1	P									610
8021996	79											
8021996	80											
8021996	81											
8021996	82											
8021996	83											
8021996	84											
8021996	85											
8021996	86											
8021996	87											
8021996	88											
8021996	89											
8021996	90											
8021996	91											
9021996	92											
9021996	93					P						
9021996	94										1	
9021996	95											
9021996	96											

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish	
9021996	97											
9021996	98											
9021996	99											
9021996	100											
9021996	101											
9021996	102											
9021996	103											
9021996	104											
9021996	105											
9021996	106											
9021996	107											
9021996	108											
9021996	109											
9021996	110											
9021996	111											
9021996	112							1				
9021996	113							1				
9021996	114							1				
9021996	115	1	1									611
9021996	116											
9021996	117											
10021996	118											
10021996	119											
10021996	120							1				
10021996	121											
10021996	122											
10021996	123											
10021996	124											
10021996	125							1				
10021996	126							1				
10021996	127											
10021996	128											
10021996	129											
10021996	130											
10021996	131											
10021996	132											
10021996	133											

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish	
10021996	134											
10021996	135											
10021996	136											
10021996	137											
10021996	138	4	P									
10021996	139										P	
10021996	140	1	P									
11021996	141											
11021996	142											
11021996	143											
11021996	144											
11021996	145											
11021996	146											
11021996	147											
11021996	148											
11021996	149											
11021996	150											
11021996	151											
11021996	152											612
11021996	153											
11021996	154											
11021996	155											
11021996	156											
11021996	157											
11021996	158	1										
11021996	159	1								1		
11021996	160	1										
11021996	161							1				
11021996	162											
11021996	163											
11021996	164											
11021996	165											
11021996	166											
11021996	167											
11021996	168											
11021996	169											
11021996	170											

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
11021996	171										
11021996	172										
11021996	173										
11021996	174	2									P
11021996	175										
11021996	176	3	1							1	
12021996	177										
12021996	178										
12021996	179										
12021996	180										
12021996	181										
12021996	182										
12021996	183							1			
12021996	184	1									
12021996	185										
12021996	186										
12021996	187	1	1								
12021996	188	1	1								
12021996	189							1			
12021996	190	2								P	
12021996	191	1									
12021996	192	1									
12021996	193	1									
12021996	194	1	1								
12021996	195										
12021996	196										
12021996	197										
12021996	198										
12021996	199										
12021996	200										
12021996	201										
12021996	202										
12021996	203										
12021996	204										
24011995	1										
25011995	2										
25011995	3										

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
25011995	4										
25011995	5										
25011995	6										
25011995	7										
25011995	8										
25011995	9										
25011995	10										
25011995	11										
25011995	12										
25011995	13										
25011995	14										
25011995	15										
26011995	16										
26011995	17										
26011995	18										
26011995	19										
26011995	20										
26011995	21										
26011995	22										
26011995	23										
26011995	24										
26011995	25										
26011995	26										
26011995	27										
26011995	28										
26011995	29										
26011995	30										
27011995	31										
27011995	32										
27011995	33										
27011995	34										
27011995	35										
27011995	36										
27011995	37										
27011995	38										
27011995	41										
27011995	42										

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
27011995	43										
27011995	44										
27011995	45										
27011995	46										
28011995	47										
28011995	48										
28011995	49										
28011995	50										
28011995	51										
28011995	52										
28011995	53										
28011995	54										
28011995	55										
28011995	56										
28011995	57										
28011995	58										
28011995	59										
22011994	1										
22011994	2										
22011994	3										
22011994	4										
22011994	5										
22011994	6	1									
22011994	7					P					
22011994	8										
22011994	9										
22011994	10										
22011994	11										
22011994	12										
22011994	13										
22011994	14										
22011994	15										
22011994	16										
22011994	17										
22011994	18										
22011994	19										
22011994	20										

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
22011994	21										
22011994	22										
22011994	23										
22011994	24										
23011994	25										
23011994	26										
23011994	27										
23011994	28										
23011994	29										
23011994	30										
23011994	31										
23011994	32										
23011994	33										
23011994	34										
23011994	35										
23011994	36										
23011994	37										
23011994	38										
23011994	39										
23011994	40										
23011994	41										
23011994	42										
23011994	43										
23011994	44										
23011994	45										
23011994	46										
23011994	47										
23011994	48										
23011994	49										
24011994	50										
24011994	51										
24011994	52										
24011994	53										
24011994	54										
24011994	55										
24011994	56										
24011994	57										

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
24011994	58										
24011994	59										
24011994	60										
24011994	61										
24011994	62										
24011994	63										
24011994	64										
24011994	65										
24011994	66										
24011994	67										
24011994	68										
24011994	69										
24011994	70										
24011994	71										
24011994	72										
24011994	73										
25011994	74										
25011994	75										
25011994	76										
25011994	77										
25011994	78										
25011994	79										
25011994	80										
25011994	81										
25011994	82										
25011994	83										
25011994	84										
25011994	85										
25011994	86										
25011994	87										
25011994	88										
25011994	89										
25011994	90								P		
25011994	91	3	P							P	
25011994	92	2	P							P	
25011994	93	2	P							P	
25011994	94	3	P							P	

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
25011994	95	3	P							P	
25011994	96										
2021993	1	1	P								
3021993	2										
3021993	3										
3021993	4										
3021993	5										
3021993	6										
4021993	7										
4021993	8										
4021993	9										
4021993	10										
4021993	11										
4021993	12										
4021993	13										
4021993	14										
4021993	15										
4021993	16										
5021993	17										
5021993	18										
5021993	19										
5021993	20										
5021993	21										
5021993	22										
5021993	23										
5021993	24										
5021993	25										
5021993	26										
5021993	27										
5021993	28										
5021993	29										
6021993	30										
6021993	31										
6021993	32										
6021993	33										
6021993	34										
6021993	35										

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
6021993	36										
6021993	37										
6021993	38										
6021993	39										
7021993	40										
7021993	41										
7021993	42										
7021993	43										
7021993	44										
7021993	45										
7021993	46										
7021993	47										
7021993	48										
7021993	49										
7021993	50										
7021993	51										
7021993	52										
8021993	53										
8021993	54										
8021993	55										
18011992	1										
18011993	2										
18011994	3										
18011995	4	1	P								
18011996	5										
18011997	6										
18011998	7										
18011999	8										
18012000	9										
18012001	10										
18012002	11										
18012003	12										
18012004	13										
18012005	14										
18012006	15										
18012007	16										
18012008	17										

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
18012009	18	1	P								
18012010	19	1								P	
18012011	20										P
18012012	21										
18012013	22										
18012014	23										
18012015	24										
18012016	25										
18012017	26										
18012018	27										
18012019	28										
18012020	29										
18012021	30										
18012022	31										
18012023	32										
18012024	33										
18012025	34										
18012026	35										
18012027	36										
18012028	37										
18012029	38										
18012030	39										
18012031	40										
18012032	41										
18012033	42										
18012034	43										
18012035	44										
18012036	45										
18012037	46										
18012038	47										
18012039	48										
18012040	49										
18012041	50										
18012042	51										
18012043	52										
18012044	53										
24011991	1										

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
24011991	2	2								P	
24011991	3	1	P								
24011991	4	1									
24011991	5	1									
24011991	6	1								P	
24011991	7										
24011991	8	1								P	
24011991	9	1	P								
24011991	10										
24011991	11	1	P								
24011991	12										
24011991	13										
24011991	14										
24011991	15	1								P	
24011991	16	1									
24011991	17	1									
24011991	18										
25011991	19	1									
25011991	20										
25011991	21	1									
25011991	22										
25011991	23										
25011991	24										
25011991	25										
25011991	26										
25011991	27										
25011991	28										
25011991	29										
25011991	30										
25011991	31										
25011991	32										
26011991	33	1	P								
26011991	34	2								P	
26011991	35	1								P	
26011991	36	1									
26011991	37										
26011991	38										

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
26011991	39										
26011991	40										
26011991	41										
26011991	42										
26011991	43							P			
26011991	44										
26011991	45										
26011991	46										
26011991	47										
26011991	48										
26011991	49										
26011991	50										
26011991	51										
26011991	52										
26011991	53										
26011991	54										
27011991	55										
27011991	56										
27011991	57										
27011991	58										
27011991	59										
27011991	60										
27011991	61										
27011991	62										
27011991	63										
27011991	64										
27011991	65										
27011991	66										
27011991	67										
27011991	68										
27011991	69										
27011991	70										
27011991	71										
27011991	72										
27011991	73										
27011991	74										
27011991	75										

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
28011991	76					P					
28011991	77	1									
28011991	78	1									
28011991	79	1									
28011991	80	1									
28011991	81										
28011991	82										
28011991	83										
28011991	84										
28011991	85										
28011991	86										
28011991	87										
28011991	88										
28011991	89						P				
28011991	90										
28011991	91										
28011991	92					P					
28011991	93										
28011991	94										
28011991	95										
28011991	96										
28011991	97										
28011991	98										
28011991	99										
28011991	100	1	P								
29011991	101	1	P								
29011991	102	2	P								
29011991	103	1	P								
29011991	104	1	P								
29011991	105	1	P								
29011991	106										
29011991	107										
29011991	108										
29011991	109										
29011991	110										
29011991	111										
29011991	112										

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
29011991	113										
29011991	114	1	P								
29011991	115	2	P								
29011991	116										
29011991	117										
29011991	118										
29011991	119										
29011991	120										
29011991	121										
29011991	122										
29011991	123										
30011991	124										
30011991	125										
30011991	126										
30011991	127										
30011991	128										
30011991	129										
30011991	130										
30011991	131										
30011991	132										
30011991	133										
30011991	134										
30011991	135										
30011991	136						P				
30011991	137						P				
30011991	138										
30011991	139										
30011991	140										
30011991	141										
30011991	142										
30011991	143										
30011991	144	1								P	
31011991	145										
31011991	146					P					
31011991	147										
31011991	148	1									
31011991	149										

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
31011991	150										
31011991	151										
31011991	152										
31011991	153										
31011991	154										
31011991	155										
31011991	156										
31011991	157										
31011991	158										
31011991	159	1	P								
31011991	160										
31011991	161										
31011991	162										
1021991	163										
1021991	164										
1021991	165										
1021991	166										
1021991	167										
1021991	168										
1021991	169										
1021991	170										
1021991	171										
1021991	172										
1021991	173										
1021991	174										
1021991	175										
1021991	176										
1021991	177										
1021991	178										
1021991	179										
1021991	180										
17011990	1	1	1								
17011990	2	1	1								
17011990	3										
17011990	4										
17011990	5										
17011990	6										

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
18011990	7										
18011990	8										
18011990	9										
18011990	10										
18011990	11										
18011990	12										
18011990	13										
18011990	14										
18011990	15										
18011990	16										
18011990	17										
18011990	18										
19011990	19										
19011990	20										
19011990	21										
19011990	22										
19011990	23										
19011990	24										
19011990	25										
19011990	26										
19011990	27										
20011990	28										
20011990	29										
20011990	30										
20011990	31										
20011990	32										
20011990	33										
20011990	34										
20011990	35										
20011990	36										
20011990	37										
21011990	38										
21011990	39										
21011990	40										
21011990	41										
21011990	42										
21011990	43										

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
21011990	44										
21011990	45										
21011990	46										
21011990	47										
21011990	48										
21011990	49										
21011990	50										
21011990	51										
22011990	52										
22011990	53									1	
22011990	54										
22011990	55										
22011990	56										
22011990	57										
22011990	58										
22011990	59										
22011990	60										
22011990	61										
23011990	62										
23011990	63										
23011990	64										
23011990	65										
23011990	66										
23011990	67										
23011990	68										
24011990	69										
24011990	70										
24011990	71										
24011990	72										
24011990	73										
24011990	74										
24011990	75										
24011990	76										
24011990	77										
16011989	1	3	P								
16011989	2										
16011989	3	2	P								

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
16011989	4							P			
16011989	5	2	P							P	
16011989	6										
16011989	7										
16011989	8										
16011989	9										
16011989	10										
16011989	11										
16011989	12										
16011989	13										
16011989	14										
16011989	15										
16011989	16										
17011989	17										
17011989	18										
17011989	19										
17011989	20										
17011989	21										
17011989	22										
17011989	23	1									
17011989	24	1									
17011989	25										
17011989	26										
17011989	27										
17011989	28										
17011989	29										
17011989	30										
17011989	31										
17011989	32										
17011989	33										
17011989	34										
17011989	35										
17011989	36							P			
17011989	37										
18011989	38										
18011989	39										
18011989	40										

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
18011989	41										
18011989	42										
18011989	43										
18011989	44										
18011989	45										P
18011989	46										
18011989	47										
18011989	48										
18011989	49										
18011989	50										
18011989	51										
18011989	52										
18011989	53										
18011989	54										
18011989	55										
18011989	56										
18011989	57										
18011989	58										
18011989	59										
18011989	60										
18011989	61										
18011989	62										
18011989	63										
18011989	64										
18011989	65	1									
18011989	66										
18011989	67										
19011989	68										
19011989	69										
19011989	70										
19011989	71										
19011989	72										
19011989	73										
19011989	74										
19011989	75										
19011989	76										
19011989	77	1	P								

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
19011989	78										
19011989	79										
19011989	80										
19011989	81										
19011989	82										
19011989	83										
19011989	84										
19011989	85										
19011989	86										
19011989	87										
19011989	88										
19011989	89										
19011989	90										
19011989	91										
19011989	92										
19011989	93										
19011989	94										
19011989	95										
20011989	96										
20011989	97										
20011989	99										
20011989	100										
20011989	101										
20011989	102										
20011989	103										
20011989	104										
20011989	105										
20011989	106										
20011989	107										
20011989	108										
20011989	109										
20011989	110										
20011989	111										
20011989	112										
20011989	113										
20011989	114										
20011989	115										

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
20011989	116										
20011989	117										
20011989	118										
20011989	119										
20011989	120										
20011989	121										
20011989	122										
20011989	123										
20011989	124										
20011989	125										
20011989	126										
20011989	127										P
20011989	128										
20011989	129										
21011989	130										
21011989	131										
21011989	132										
21011989	133										
21011989	134										
21011989	135										
21011989	136										
21011989	137										
21011989	138										
21011989	139										
21011989	140										
21011989	141										
21011989	142										
21011989	143										
21011989	144										
21011989	145										
21011989	146										
21011989	147										
21011989	148										
21011989	149										
21011989	150										
21011989	151	1								P	
21011989	152	2								P	

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
22011989	153										
22011989	154										
22011989	155										
22011989	156										
22011989	157										
22011989	158	1								P	
22011989	159										
22011989	160										
22011989	161										
22011989	162										
22011989	163										
22011989	164										
22011989	165										
22011989	166										
22011989	167										
22011989	168										
22011989	169										
22011989	170										
22011989	171										
22011989	172										
22011989	173										
22011989	174										
22011989	175										
22011989	176										
15011988	1	3					P				
15011988	2	4					P		P		
15011988	3										
15011988	4										
15011988	5	2									
15011988	6										
15011988	7	2									
15011988	8										
15011988	9	3									
15011988	10	4					P				
15011988	11	2					P				
15011988	12	4				P	P				
15011988	13	4				P	P				

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
15011988	14	2					P				
16011988	15	3				P					
16011988	16	3				P					
16011988	17	3				P					
16011988	18	2					P				
16011988	19	2					P				
16011988	20	1									
16011988	21	2					P				
16011988	22	3				P	P				
16011988	23	3				P	P				
16011988	24	2				P					
16011988	25										
16011988	26	3				P				P	
16011988	27	2				P					
16011988	28	3				P					
16011988	29	3				P					
16011988	30										
16011988	31										
16011988	32										
17011988	33										
17011988	34										
17011988	35										
17011988	36										
17011988	37										
17011988	38										
17011988	39	4				P	P				
17011988	40	2					P				
17011988	41	4				P	P				
17011988	42										
17011988	43										
17011988	44										
17011988	45										
17011988	46										
17011988	47										
17011988	48										
17011988	49										
17011988	50										

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
17011988	51										
17011988	52										
17011988	53										
17011988	54										
17011988	55										
17011988	56	1						P			
17011988	57										
17011988	58	1									
17011988	59										
17011988	60										
17011988	61										
18011988	62										
18011988	63										
18011988	64										
18011988	65										
18011988	66										
18011988	67										
18011988	68										
18011988	69										
18011988	70										
18011988	71										
18011988	72										
18011988	73										
18011988	74										
18011988	75										
18011988	76										
18011988	77										
18011988	78										
18011988	79										
18011988	80										
18011988	81										
18011988	82										
18011988	83										
18011988	84										
18011988	85										
18011988	86										
18011988	87										

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
18011988	88										
18011988	89										
18011988	90										
18011988	91										
19011988	92										
19011988	93										
19011988	94										
19011988	95										
19011988	96										
19011988	97										
19011988	98										
19011988	99										
19011988	100										
19011988	101										
19011988	102										
19011988	103										
19011988	104										
19011988	105										
19011988	106										
19011988	107										
19011988	108										
19011988	109										
19011988	110										
19011988	111										
19011988	112										
19011988	113										
19011988	114										
19011988	115										
19011988	116										
19011988	117										
19011988	118										
19011988	119										
19011988	120										
20011988	121										
20011988	122										
20011988	123										
20011988	124										

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
20011988	125										
20011988	126										
20011988	127										
20011988	128										
20011988	129										
20011988	130										
20011988	131										
20011988	132										
20011988	133										
20011988	134										
20011988	135										
20011988	136										
20011988	137										
20011988	138										
20011988	139										
20011988	140										
20011988	141										
20011988	142										
20011988	143										
20011988	144										
20011988	145										
20011988	146										
20011988	147										
20011988	148										
20011988	149										
21011988	150										
21011988	151										
21011988	152										
21011988	153										
21011988	154										
21011988	155										
21011988	156										
21011988	157										
21011988	158										
21011988	159										
21011988	160										
21011988	161										

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
21011988	162										
21011988	163										
22011988	164										
22011988	165										
22011988	166										
22011988	167										
22011988	168										
22011988	169										
22011988	170	1						P			
22011988	171										
22011988	172										
22011988	173										
22011988	174										
22011988	175										
22011988	176										
22011988	177										
23011988	178										
23011988	179										
23011988	180										
23011988	181										
23011988	182										
23011988	183										
23011988	184										
23011988	185										
23011988	186										
23011988	187										
23011988	188										
23011988	189										
23011988	190										
23011988	191										
23011988	192										
23011988	193										
23011988	194										
23011988	195										
23011988	196										
23011988	197										
23011988	198										

Date	Tow	ScianidsAll	Weakfish	W.Shrimp	Kingfishy	Bluebacks	Alewife	Amer.shad	HickShad	Sp.trout	Monkfish
23011988	199										
23011988	200										

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish
8012013	1	0	1	0	0	0	0	0	0	0	0
8012013	2	0	0	0	1	0	0	0	0	1	0
8012013	3	0	0	0	1	0	0	0	0	1	0
8012013	4	0	0	0	0	0	0	0	0	3	0
8012013	5	0	0	0	0	0	0	0	0	0	0
8012013	6	0	0	0	0	0	2	0	0	0	0
8012013	7	75	0	0	0	0	2	0	0	0	0
8012013	8	49	0	0	0	1	0	0	0	0	0
8012013	9	17	0	0	0	1	0	0	0	1	0
8012013	10	0	0	0	0	0	3	0	0	2	0
8012013	11	0	0	0	0	0	3	0	0	2	0
8012013	12	0	0	0	0	0	3	0	0	0	0
8012013	13	0	0	0	0	0	4	0	0	0	0
8012013	14	3	0	0	0	0	0	0	0	1	0
8012013	15	1	0	0	1	1	1	0	0	22	0
8012013	16	1	0	0	488	0	1	0	0	2	0
8012013	17	1	0	0	17	0	1	1	0	15	0
9012013	18	0	0	0	75	0	1	1	0	6	0
9012013	19	0	0	0	753	0	0	0	0	4	0
9012013	20	4	0	0	21	0	0	0	0	28	0
9012013	21	0	0	0	1	1	3	1	0	2	0
9012013	22	1	0	0	0	0	0	0	0	1	0
9012013	23	0	0	0	0	0	0	0	0	6	0
9012013	24	0	1	0	0	0	3	0	0	6	0
9012013	25	0	0	0	0	0	5	0	0	5	0
9012013	26	0	0	0	0	0	1	0	0	3	0
9012013	27	0	0	0	0	0	0	0	0	0	0
9012013	28	0	0	0	0	1	0	0	0	3	0
9012013	29	0	0	0	0	0	1	0	0	2	0
9012013	30	0	8	0	0	1	2	0	0	0	0
9012013	31	1	1	0	0	0	3	0	0	2	0
9012013	32	0	0	0	0	0	1	0	0	0	0
9012013	33	0	0	0	0	0	1	0	0	1	0
9012013	34	0	0	0	0	0	0	0	0	0	0
9012013	35	0	0	0	0	0	2	0	0	0	0
9012013	36	0	0	0	0	0	1	0	0	1	0
9012013	37	0	0	0	0	0	1	0	0	0	0

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish
9012013	38	0	0	0	0	0	3	0	0	2	0
9012013	39	0	0	0	0	0	1	0	0	0	0
9012013	40	0	0	0	0	0	2	0	0	0	0
9012013	41	0	0	0	0	0	0	0	0	1	0
9012013	42	10	0	0	0	0	4	0	0	6	0
9012013	43	0	0	0	0	0	0	0	0	7	0
9012013	44	0	0	0	0	0	0	0	0	8	0
9012013	45	4	0	0	0	0	2	0	1	1	0
9012013	46	4	0	0	0	0	4	0	0	4	0
9012013	47	4	0	0	0	0	0	0	0	3	0
9012013	48	2	0	0	0	1	1	0	0	0	0
9012013	49	1	2	0	0	0	1	0	0	4	0
9012013	50	0	0	0	0	0	0	0	0	4	0
9012013	51	0	1	0	0	0	1	0	0	0	0
10012013	53	0	1	0	0	0	0	0	0	1	0
10012013	54	0	12	0	0	0	1	0	0	5	0
10012013	55	0	4	0	0	0	4	0	0	6	0
10012013	56	0	2	0	0	0	0	0	0	0	0
10012013	57	0	0	0	0	0	2	0	0	4	0
10012013	58	0	0	0	0	0	1	0	0	1	0
10012013	59	0	0	0	0	0	2	0	0	0	0
10012013	60	0	0	0	0	0	0	0	0	0	0
10012013	61	0	0	0	0	0	2	0	0	0	0
10012013	62	0	0	0	0	0	0	0	0	0	0
10012013	63	0	0	0	0	0	2	0	0	0	0
10012013	64	0	0	0	0	0	0	0	0	0	0
10012013	65	0	0	0	0	0	0	0	0	0	0
10012013	66	0	0	0	0	0	0	0	0	0	0
10012013	67	0	0	0	0	0	0	0	0	0	0
10012013	68	0	0	0	0	0	3	0	0	0	0
10012013	69	0	0	0	0	0	0	0	0	0	0
10012013	70	0	0	0	0	0	0	0	0	0	0
10012013	71	0	1	0	0	0	0	1	0	2	0
10012013	72	0	0	0	0	0	0	0	0	3	0
10012013	73	0	0	0	0	0	0	0	0	1	0
10012013	74	1	0	0	0	0	1	0	0	2	0
10012013	75	1	0	0	0	0	1	0	0	3	0

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish
10012013	76	2	0	0	0	0	2	0	0	10	0
10012013	77	2	0	0	0	0	0	0	0	1	0
10012013	78	0	0	0	0	0	2	0	0	0	0
11012013	79	0	0	0	0	0	0	0	0	2	0
11012013	80	12	0	0	0	0	2	0	0	1	0
11012013	81	11	0	0	0	1	3	0	0	5	0
11012013	82	16	0	0	0	0	1	0	0	1	0
11012013	83	41	0	0	1	0	0	0	0	3	0
11012013	84	5	0	0	0	0	1	0	0	26	0
11012013	85	0	0	0	0	0	2	0	0	23	0
11012013	86	14	0	0	0	4	0	0	0	2	0
11012013	87	2	0	0	0	0	2	0	0	2	0
11012013	88	0	0	0	0	0	2	0	0	0	0
11012013	89	0	0	0	0	0	1	0	0	0	0
11012013	90	0	0	0	0	0	0	0	0	1	0
11012013	91	0	0	0	0	0	0	0	0	0	0
11012013	92	0	0	0	0	0	0	0	0	0	0
11012013	93	0	0	0	0	0	0	0	0	0	0
11012013	94	0	0	0	0	0	0	0	0	0	0
11012013	95	0	0	0	0	0	0	0	0	0	0
11012013	96	0	0	0	0	0	0	0	0	0	0
11012013	97	0	0	0	0	0	0	0	0	0	0
11012013	98	0	0	0	0	0	1	1	0	0	0
11012013	99	0	0	0	0	0	1	0	0	0	0
11012013	100	0	0	0	0	0	1	0	0	0	0
11012013	101	0	0	0	0	0	1	0	0	0	0
11012013	102	0	0	0	0	0	1	0	0	0	0
11012013	103	2	0	0	0	0	1	0	0	1	0
11012013	104	0	0	0	0	0	3	0	0	0	0
11012013	105	15	0	0	0	3	1	0	0	1	0
11012013	106	2	0	0	0	1	1	0	0	0	0
11012013	107	2	0	0	17	0	0	0	0	5	0
11012013	108	1	0	0	1	0	2	0	0	0	0
11012013	109	4	0	0	1	1	0	0	0	3	0
11012013	110	6	0	0	5	1	1	0	0	5	0
11012013	111	6	0	0	6	2	0	0	0	10	0
11012013	112	4	0	0	5	2	1	0	0	0	0

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish
11012013	113	6	0	0	7	0	0	0	0	7	0
11012013	114	11	0	0	0	0	3	0	0	3	0
12012013	115	4	0	0	0	0	1	0	0	3	0
12012013	116	2	0	0	0	0	0	0	0	0	0
12012013	117	1	0	0	0	0	0	0	0	0	0
12012013	118	1	0	0	0	0	4	0	0	1	0
12012013	119	6	0	0	0	0	2	0	0	0	0
12012013	120	1	0	0	0	3	1	0	0	3	0
12012013	121	3	0	0	0	1	0	0	1	2	0
12012013	122	2	0	0	0	0	1	0	0	1	0
12012013	123	1	0	0	0	0	2	0	0	1	0
12012013	124	1	0	0	0	0	2	0	0	1	0
12012013	125	0	0	0	0	0	0	0	0	0	0
12012013	126	6	0	0	0	4	1	0	0	0	0
12012013	127	10	0	0	0	1	1	0	0	0	0
12012013	128	0	3	0	0	8	0	0	0	0	0
12012013	129	0	0	0	0	6	0	0	0	0	0
12012013	130	0	0	0	0	0	0	0	0	0	0
12012013	131	0	0	0	0	0	0	0	0	1	0
12012013	132	0	0	0	0	0	1	0	0	0	0
12012013	133	0	0	0	0	0	1	0	0	0	0
12012013	134	0	0	0	0	0	2	0	0	0	0
12012013	135	0	0	0	0	0	0	0	0	0	0
12012013	136	0	0	0	0	0	2	0	0	0	0
12012013	137	0	0	0	0	0	1	0	0	0	0
12012013	138	0	0	0	0	0	2	0	0	0	0
12012013	139	0	0	0	0	0	3	0	0	0	0
12012013	140	93	0	0	0	1	1	0	0	0	0
12012013	141	0	0	0	0	0	1	0	0	2	0
12012013	142	0	0	0	0	1	0	0	0	1	0
12012013	143	0	0	0	0	0	0	0	0	0	0
12012013	144	1	13	0	0	0	0	0	0	0	0
12012013	145	0	3	0	0	0	0	0	1	1	0
13012013	146	0	0	0	0	0	0	0	0	1	0
13012013	147	1	1	0	0	0	0	0	0	0	0
13012013	148	0	0	0	0	0	3	0	0	0	0
13012013	149	0	0	0	0	0	0	0	0	0	0

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish
13012013	150	1	2	0	0	0	0	0	0	1	0
13012013	151	0	1	0	0	1	1	0	0	0	0
13012013	152	0	1	0	0	0	2	0	0	1	0
13012013	153	0	4	0	5	0	1	0	0	1	0
13012013	154	0	5	0	0	2	3	0	0	1	0
13012013	155	0	21	0	0	0	2	0	0	0	0
13012013	156	0	34	0	0	0	0	0	0	1	0
13012013	157	0	4	0	0	0	0	0	0	0	0
13012013	158	0	0	0	0	0	0	0	0	0	0
13012013	159	9	2	0	0	0	0	0	0	0	0
13012013	160	5	1	0	0	0	0	0	0	0	0
13012013	161	0	0	0	0	1	0	0	0	0	0
13012013	162	0	0	0	0	1	0	0	0	0	0
13012013	163	0	0	0	0	2	0	0	0	0	0
13012013	164	0	0	0	0	0	0	0	0	0	0
13012013	165	0	21	0	0	0	0	0	0	0	0
13012013	166	0	0	0	0	0	1	0	0	0	0
13012013	167	1	21	0	0	0	0	0	0	0	0
13012013	168	1	1	0	0	0	2	0	0	0	0
13012013	169	0	0	0	0	0	0	0	0	0	0
13012013	170	0	0	0	0	0	1	0	0	0	0
13012013	171	0	1	0	0	0	1	0	0	1	0
13012013	172	3	5	0	0	0	0	0	0	0	0
13012013	173	0	0	0	0	0	2	0	0	0	0
13012013	174	0	1	0	0	0	1	0	0	0	0
13012013	175	0	0	0	0	0	1	0	0	0	0
13012013	176	0	0	0	0	0	2	0	0	1	0
14012013	177	0	2	0	0	0	1	0	0	0	0
14012013	178	0	2	0	0	0	2	0	0	2	0
14012013	179	0	0	0	0	0	0	0	0	1	0
14012013	180	0	1	0	3	0	0	0	0	0	0
14012013	181	11	0	0	2	0	2	0	0	2	0
14012013	182	49	0	0	0	0	0	0	0	2	0
14012013	183	8	0	0	0	0	1	0	0	1	0
14012013	184	0	1	0	0	0	1	0	0	0	0
14012013	185	6	0	0	0	0	1	0	0	1	0
14012013	186	0	0	0	0	0	0	0	0	0	0

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish
14012013	187	0	0	0	0	0	0	0	0	0	0
14012013	188	1	0	0	0	0	0	0	0	0	0
14012013	189	0	1	0	0	0	0	0	0	0	0
14012013	190	0	0	0	0	0	0	0	0	0	0
14012013	191	0	3	0	0	0	0	0	0	0	0
14012013	192	0	0	0	0	0	1	0	0	0	0
14012013	193	0	0	0	0	0	1	0	0	0	0
14012013	194	0	0	0	0	0	1	0	0	0	0
14012013	195	0	0	0	0	0	0	0	0	0	0
14012013	196	0	0	0	0	0	0	0	0	0	0
14012013	197	0	0	0	0	0	1	0	0	0	0
14012013	198	0	0	0	0	0	0	0	0	0	0
14012013	199	1	2	0	0	0	0	0	1	0	0
14012013	200	2	0	0	0	0	1	0	0	0	0
14012013	201	8	0	0	0	0	5	0	0	0	0
14012013	202	10	0	0	0	0	5	0	0	0	0
14012013	203	3	1	0	0	0	5	0	0	3	0
14012013	204	0	0	0	0	0	2	0	0	1	0
14012013	205	0	1	0	0	0	5	0	0	1	0
14012013	206	0	0	0	0	0	1	0	0	2	0
14012013	207	0	0	0	0	0	0	0	0	0	0
14012013	208	0	0	0	0	0	1	0	0	1	0
15012013	209	0	0	0	0	0	4	0	0	4	0
15012013	210	0	0	0	0	0	2	0	0	4	0
15012013	211	0	0	0	0	0	2	0	0	1	0
15012013	212	25	0	0	0	0	0	0	0	1	0
15012013	213	2	0	0	0	0	1	0	0	6	0
15012013	214	5	1	0	0	0	1	0	0	1	0
15012013	215	3	0	0	0	2	0	0	0	1	0
15012013	216	0	0	0	1	0	3	0	0	3	0
15012013	217	0	0	0	5	0	0	0	0	7	0
15012013	218	1	0	0	1	0	1	0	0	1	0
15012013	219	0	1	0	0	0	0	0	0	1	0
15012013	220	2	0	0	0	0	0	0	0	0	0
15012013	221	0	0	0	0	0	0	0	0	0	0
15012013	222	0	0	0	0	0	3	0	0	0	0
15012013	223	0	0	0	0	0	0	0	0	0	0

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish
15012013	224	0	0	0	0	0	0	0	0	1	0
15012013	225	0	0	0	0	0	1	0	0	1	0
15012013	226	0	0	0	0	0	0	0	0	1	0
16012013	227	0	0	0	0	0	0	0	0	1	0
16012013	228	0	0	0	1	0	0	0	0	0	0
16012013	229	0	1	0	0	0	0	0	0	1	0
16012013	230	0	0	0	0	0	0	0	0	1	0
16012013	231	0	0	0	0	0	0	0	0	0	0
16012013	232	0	0	0	0	0	2	0	0	0	0
16012013	233	0	0	0	0	0	1	0	0	0	0
16012013	234	0	0	0	0	0	0	0	0	0	0
16012013	235	0	0	0	1	0	1	0	0	1	0
16012013	236	0	0	0	1	0	1	0	0	1	0
16012013	237	0	0	0	0	0	0	0	0	0	0
16012013	238	0	3	0	1	0	1	0	0	1	0
16012013	239	1	0	0	1	0	0	0	0	0	0
16012013	240	1	5	0	0	0	1	0	0	0	0
16012013	241	0	0	0	0	0	0	0	0	0	0
16012013	242	0	0	0	0	0	0	0	0	0	0
16012013	243	0	2	0	0	0	0	0	0	0	0
16012013	244	0	0	0	0	0	1	0	0	0	0
16012013	245	0	0	1	0	0	0	0	0	0	1
18022010	1				10	1			0		
18022010	2				22				0		
18022010	3				33				0		
18022010	4				1				0		
18022010	5		6		1				0	3	
19022010	6		1						0	4	
19022010	7				13	4	2		0	4	
19022010	8				11	1	1		0	3	
19022010	9				64	6			0	1	
19022010	10				8	13			0		
19022010	11	0	0	0	0	0	0	0	0	0	0
19022010	12				4	2			0		
19022010	13								0	1	
19022010	14				P				0	1	
19022010	15				P				0		

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish
19022010	16				P				0		
19022010	17				1				0		
19022010	18								0	1	
19022010	19								0		
19022010	20								0	1	
19022010	21				2				0		
19022010	22						1		0	2	
19022010	23								0		
19022010	24				1				0		
19022010	25								0		
19022010	26								0		
19022010	27	7							0		
19022010	28	8							0		
19022010	29								0		
19022010	30	1			5	14			0		
19022010	31					5			0	1	
19022010	32								0		
19022010	33								0		
19022010	34				25				0		
19022010	35				150				0	P	
19022010	36				P				0	1	
19022010	37				1240				0		
19022010	38				504				0		
19022010	39				P				0		
19022010	40				68				0		
19022010	41								0	P	
19022010	42								0		
19022010	43				109				0		
19022010	44				2				0		
19022010	45				155				0		
19022010	46				20				0		
19022010	47								0	1	
20022010	48								0		
20022010	49								0		
20022010	50						1		0	3	
20022010	51								0	7	
20022010	52								0		

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish
20022010	53								0		
20022010	54								0	12	
20022010	55		1				1		0		
20022010	56		P						0	P	
20022010	57		3						0		
20022010	58								0		
20022010	59								0		
20022010	60								0		
20022010	61				P				0		
20022010	62	P			P				0		
20022010	63					2			0		
20022010	64				54	2			0		
20022010	65								0		
20022010	66								0		
20022010	67								0		
20022010	68				4				0		
20022010	69								0		
20022010	70				5	2			0		
20022010	71	1				2			0		
20022010	72				P				0	P	
20022010	73				P				0		
20022010	74				P				0		
20022010	75				P				0		
20022010	76	2							0		
20022010	77								0		
20022010	78	P					1		0		
21022010	79	1					1		0	5	
21022010	80								0	3	
21022010	81	1							0		
21022010	82	1							0		
21022010	83					56			0	5	
21022010	84	6			1				0	4	
21022010	85	1							0	1	
21022010	86	1			P				0		
21022010	87								0		
21022010	88				P				0		
21022010	89								0		

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish
21022010	90				P				0		
21022010	91				P				0		
21022010	92				5				0		
21022010	93				10				0		
21022010	94				1		1		0	1	
21022010	95				1				0		
21022010	96				3				0		
21022010	97								0		
21022010	98								0		
21022010	99								0		
21022010	100								0		
21022010	101								0		
21022010	102								0	1	
21022010	103								0		
21022010	104								0	1	
21022010	105								0		
21022010	106								0		
21022010	107						1		0		
21022010	108								0		
22022010	109					2	1		0	1	
22022010	110					1	3		0	3	
22022010	111		3						0	2	
22022010	112								1	7	
22022010	113								0	4	
22022010	114								0	6	
22022010	115						1		0	2	
22022010	116								0	6	
22022010	117								0		
22022010	118								0		
22022010	119								0		
22022010	120								0		
22022010	121								0		
22022010	122								0		
22022010	123								0		
22022010	124								0		
22022010	125								0		
22022010	126								0		

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish
22022010	127	1			30				0		
22022010	128								0		
22022010	129	3							0		
22022010	130	56			1	6			0		
22022010	131	P			6				0		
22022010	132	P							0		
22022010	133	P			2				0		
22022010	134	9			1				0		
22022010	135	29			2		1		0		
22022010	136	2			3				0		
22022010	137	P			P		1		0		
22022010	138	P							0		
22022010	139	P							0		
22022010	140	P							0		
22022010	141	2							0		
22022010	142	P			2				0	3	
22022010	143	P					2		0	2	
22022010	144	P							0	P	
22022010	145	12							0	3	
23022010	146	P			2				0		
23022010	147	2			1		2		0	1	
23022010	148	23					1		0	3	
23022010	149	4			3		1		0	1	
23022010	150	P				1	2		0		
23022010	151	2			P	5			0		
23022010	152				7	5	1		0	1	
23022010	153				1		1		0		
23022010	154								0		
23022010	155								0		
23022010	156								0		
23022010	157								0		
23022010	158								0		
23022010	159								0		
23022010	160				P				0		
23022010	161				P				0		
23022010	162								0		
23022010	163								0		

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish
23022010	164								0		
23022010	165								0	1	
23022010	166								0		
23022010	167								0		
23022010	168				1				0		
23022010	169				P				0		
23022010	170								0		
23022010	171								0		
23022010	172	4			1		1		0	2	
23022010	173	2					2		0	2	
23022010	174	4							0	1	
23022010	175	2							0		
23022010	176	P			1				0		
23022010	177	P			1		2		0		
23022010	178	1							0	3	
24022010	179				35				0		
24022010	180								0		
24022010	181	13			P				0		
24022010	182	5			7		1		0		
24022010	183	26			27				0		
24022010	184	5			11	1			0		
24022010	185								0		
24022010	186								0		
24022010	187				1		1		0		
24022010	188	3			6		1		0		
24022010	189	P			P				0		
24022010	190	P			P				0		
24022010	191	23			1				0	1	
24022010	192	9				2			0		
24022010	193								0		
24022010	194	1			P				0		
24022010	195	1			1				0		
24022010	196								0	1	
24022010	197								0		
24022010	198	13							0	1	
24022010	199	4							0	1	
24022010	200	17			3				0	3	

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish
29012009	1	0	0	0	0	0	0	0	0	0	0
29012009	2	0	0	0	0	0	0	0	0	0	0
29012009	3	0	0	0	0	0	0	0	0	0	0
29012009	4	0	0	0	0	0	0	0	0	0	0
30012009	5	0	0	0	0	0	0	0	0	0	0
30012009	6	1	2	0	0	0	0	0	0	0	0
30012009	7	4	0	1	0	0	0	0	0	0	0
30012009	8	0	0	0	0	0	0	0	0	0	0
30012009	9	70	0	0	1	0	0	0	0	0	0
30012009	10	100	0	0	0	0	0	0	0	0	0
30012009	11	25	0	0	0	0	0	0	0	0	0
30012009	12	0	0	0	0	0	0	0	0	0	0
30012009	13	8	0	0	0	1	0	0	0	0	0
30012009	14	3	0	0	0	1	0	0	0	0	0
30012009	15	0	0	0	1	0	1	0	0	0	0
30012009	16	0	0	0	1	3	0	0	0	0	0
30012009	17	0	0	0	3	1	0	0	0	0	0
30012009	18	0	0	0	0	0	0	0	0	0	0
30012009	19	0	0	0	0	0	0	0	1	0	0
30012009	20	6	0	0	1	0	0	0	0	0	0
30012009	21	1	0	0	0	0	0	0	0	0	0
30012009	22	10	1	0	2	0	0	0	0	2	1
30012009	23	5	1	0	0	0	0	0	0	0	0
30012009	24	0	0	0	2	0	0	0	0	1	0
30012009	25	0	0	0	0	0	0	0	0	0	0
30012009	26	1	0	0	0	0	0	0	0	2	0
30012009	27	5	2	0	0	0	0	0	0	1	0
30012009	28	0	0	0	0	0	0	0	2	1	0
31012009	29	5	0	0	2	0	0	0	2	0	0
31012009	30	4	0	0	0	0	0	0	0	2	0
31012009	31	8	0	0	0	0	0	0	0	2	0
31012009	32	72	0	0	0	0	0	0	0	0	0
31012009	33	0	0	0	0	8	0	0	3	0	0
31012009	34	17	0	0	0	0	0	0	1	0	0
31012009	35	4	0	0	0	0	0	0	4	5	0
31012009	36	20	0	0	1	0	0	0	0	0	0
31012009	37	15	0	0	1	0	0	0	0	0	0

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish
31012009	38	15	0	0	2	0	0	0	0	0	0
31012009	39	6	0	0	2	0	0	0	0	0	0
31012009	40	1	0	0	1	0	0	0	0	0	0
31012009	41	5	0	0	2	0	0	0	0	0	0
31012009	42	0	0	0	0	0	0	0	0	0	0
31012009	43	0	0	0	0	0	0	0	0	0	0
31012009	44	13	0	0	0	0	0	0	0	0	0
31012009	45	0	0	0	10	0	0	0	1	0	0
31012009	46	0	0	0	8	0	0	0	0	1	0
31012009	47	1	0	0	1	0	0	0	0	6	0
31012009	48	2	0	0	4	0	0	0	0	1	0
31012009	49	0	0	0	0	0	0	0	0	0	0
31012009	50	5	0	0	5	0	0	0	0	0	0
31012009	51	1	0	0	0	0	2	0	0	0	0
31012009	52	1	0	0	0	0	0	0	0	1	0
31012009	53	1	0	0	0	0	0	0	0	0	0
31012009	54	1	0	0	0	0	0	0	0	0	0
31012009	55	1	0	0	0	0	0	1	0	0	0
31012009	56	0	0	0	0	0	0	1	0	0	0
31012009	57	24	0	0	0	0	0	1	0	0	0
31012009	58	2	0	0	0	0	0	2	0	0	0
31012009	59	1	0	0	0	0	0	1	0	0	0
1022009	60	0	0	0	0	0	0	0	0	0	0
1022009	61	0	0	0	0	0	0	0	0	0	0
1022009	62	0	0	0	0	0	0	0	0	0	0
1022009	63	0	0	0	0	0	0	1	0	0	0
1022009	64	1	0	0	0	0	0	0	0	0	0
1022009	65	1	0	0	0	0	0	0	0	0	0
1022009	66	0	0	0	8	0	0	0	0	0	0
1022009	67	0	0	0	0	0	0	0	0	0	0
1022009	68	0	0	0	0	0	0	0	0	0	0
1022009	69										
1022009	70										
1022009	71	0	0	0	0	0	0	0	1	0	0
1022009	72	0	0	0	1	0	0	0	0	1	0
1022009	73	0	0	0	0	0	0	0	0	0	0
1022009	74	0	0	0	0	0	0	2	1	1	0

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish
2022009	75	0	0	0	2	0	0	1	0	1	0
2022009	76	0	0	0	0	0	1	0	0	0	0
2022009	77	0	0	0	0	0	0	1	0	0	0
2022009	78	0	0	0	0	0	1	0	0	1	0
2022009	79	0	0	0	1	0	0	0	0	0	0
2022009	80	0	0	0	0	0	1	0	0	0	0
2022009	81	0	0	0	1	0	1	0	0	0	0
2022009	82	0	0	0	0	0	0	0	0	0	0
2022009	83	0	0	0	0	0	0	0	0	0	0
2022009	84	0	0	0	1	0	0	0	0	0	0
2022009	85	1	1	0	0	0	0	1	0	0	0
2022009	86	4	0	0	0	0	0	0	0	0	0
2022009	87	41	0	0	0	2	0	0	0	0	0
2022009	88	181	0	0	0	0	0	0	0	0	0
2022009	89	0	1	0	0	0	0	1	0	0	0
2022009	90	0	0	0	0	0	0	1	0	0	0
2022009	91	0	1	0	0	0	0	0	0	0	0
2022009	92	1	0	0	0	0	0	0	0	0	0
2022009	93	0	1	0	0	0	0	1	0	0	0
2022009	94	0	0	0	0	0	0	0	0	0	0
2022009	95	0	0	0	0	0	0	0	0	1	0
3022009	96	16	0	0	0	0	0	0	0	9	0
3022009	97	0	0	0	0	0	0	0	0	0	0
3022009	98	0	1	0	0	0	0	0	0	2	0
3022009	99	0	0	0	0	0	0	2	0	0	0
3022009	100	0	0	0	0	0	1	0	0	0	0
3022009	101	0	0	0	0	0	0	0	0	2	0
3022009	102	0	0	0	0	0	0	0	0	1	0
3022009	103	0	0	0	1	0	0	0	1	0	0
3022009	104	0	0	0	0	0	0	0	1	0	0
3022009	105	0	0	0	1	1	0	0	0	0	0
3022009	106	0	0	0	0	0	0	0	1	0	0
3022009	107	0	0	0	100	0	0	0	1	0	0
3022009	108	0	0	0	150	1	0	0	0	0	0
3022009	109	0	0	0	0	0	0	0	0	0	0
3022009	110	1	0	0	0	0	0	0	0	0	0
3022009	111	1	0	0	0	0	0	0	1	0	0

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish
3022009	112	0	0	0	76	0	0	0	0	0	0
3022009	113	11	0	0	0	0	0	0	0	0	0
3022009	114	5	0	0	0	0	0	0	0	1	0
3022009	115	138	0	0	0	0	1	0	0	0	0
3022009	116	1	0	0	0	1	0	1	0	0	0
3022009	117	5	0	0	5	0	0	1	0	0	0
3022009	118	0	0	0	0	0	0	0	0	0	0
3022009	119	0	0	0	0	0	0	0	2	0	0
4022009	120	4	0	0	3	0	0	0	2	0	0
4022009	121	1	0	0	0	0	0	0	0	0	0
4022009	122	0	0	0	0	0	0	0	1	0	0
4022009	123	0	0	0	1	1	0	0	0	0	0
4022009	124	1	0	0	0	0	0	0	0	0	0
4022009	125	0	0	0	3	0	1	0	0	0	0
4022009	126	0	0	0	0	0	0	0	0	0	0
4022009	127	0	0	0	0	0	0	0	0	0	0
4022009	128	0	0	0	150	0	0	1	0	0	0
4022009	129	0	0	0	0	0	0	0	0	0	0
4022009	130	0	0	0	0	0	0	0	0	0	0
4022009	131	0	0	0	0	0	0	0	0	0	0
4022009	132	0	0	0	0	0	0	0	0	0	0
4022009	133	0	0	0	0	0	0	0	0	0	0
4022009	134	0	0	0	0	0	0	0	0	0	0
4022009	135	0	0	0	0	80	0	0	0	0	0
4022009	136	14	0	0	0	0	0	0	0	1	0
4022009	137	13	0	0	0	0	0	0	0	0	0
4022009	138	114	0	0	0	0	0	0	0	0	0
4022009	139	4	0	0	0	0	0	0	0	0	0
4022009	140	40	0	0	0	0	0	0	0	0	0
4022009	141	1	0	0	0	0	0	0	0	0	0
4022009	142	1	0	0	0	0	0	0	0	0	0
4022009	143	0	0	0	0	0	0	0	0	0	0
4022009	144	0	0	0	1	0	0	0	0	1	0
4022009	145	0	0	0	0	0	0	0	0	0	0
4022009	146	0	0	0	0	0	0	1	0	0	0
4022009	147	1	0	0	0	0	0	0	0	0	0
5022009	148	85	0	0	0	0	0	0	0	0	0

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish
5022009	149	12	0	0	0	0	0	0	0	0	0
5022009	150	0	0	0	0	0	0	0	0	1	0
5022009	151	1	0	0	0	0	0	0	0	1	0
5022009	152	12	0	0	0	0	0	0	0	0	0
5022009	153	0	0	0	0	0	0	0	1	0	0
5022009	154	9	0	0	0	0	1	0	0	0	0
5022009	155	0	0	0	0	0	0	0	2	0	0
5022009	156	0	0	0	0	0	0	0	0	0	0
5022009	157	0	0	0	0	0	0	0	0	0	0
5022009	158	0	0	0	0	0	0	0	0	0	0
5022009	159	0	0	0	0	0	0	0	0	0	0
5022009	160	1	0	0	0	0	0	0	0	0	0
5022009	161	0	0	0	0	0	0	0	0	0	0
5022009	162	0	0	0	0	0	0	0	0	0	0
5022009	163	0	0	0	0	0	0	0	0	0	0
5022009	164	0	0	0	0	0	0	0	0	0	0
5022009	165	81	0	0	0	0	0	0	0	0	0
5022009	166	3	0	0	0	0	0	0	0	0	0
5022009	167	0	0	0	0	0	0	0	0	0	0
5022009	168	0	0	0	0	0	0	0	0	0	0
5022009	169	0	0	0	0	0	0	1	0	0	0
5022009	170	0	0	0	0	0	0	0	1	0	0
5022009	171	0	0	0	0	0	0	4	0	0	0
5022009	172	0	0	0	0	0	0	1	0	0	0
5022009	173	0	0	0	0	0	0	2	0	0	0
5022009	174	0	0	0	0	0	0	0	0	0	0
5022009	175	0	0	0	0	0	0	0	1	0	0
6022009	176	3	0	0	0	0	2	0	0	0	0
6022009	177	0	0	0	0	0	3	0	0	0	0
6022009	178	0	0	0	0	0	0	0	0	0	0
6022009	179	0	0	0	1	0	0	0	0	0	0
6022009	180	1	0	0	0	0	2	0	0	1	0
6022009	181	0	1	0	0	0	2	0	0	0	0
6022009	182	0	0	0	0	0	0	0	0	0	0
6022009	183	0	0	0	0	0	2	0	0	0	0
6022009	184	0	0	0	0	0	0	0	0	0	0
6022009	185	0	0	0	0	0	0	0	0	0	0

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish
6022009	186	0	0	0	0	0	0	0	0	0	0
6022009	187	0	0	0	0	0	0	0	0	0	0
6022009	188	0	0	0	0	0	0	0	0	0	0
6022009	189	0	0	0	0	0	0	0	0	0	0
6022009	190	0	0	0	0	0	0	1	0	0	0
6022009	191	0	0	0	0	0	0	0	0	0	0
6022009	192	0	0	0	0	0	0	0	0	0	0
6022009	193	0	0	0	0	0	2	0	0	0	0
6022009	194	0	0	0	0	0	0	1	0	0	0
6022009	195	0	0	0	0	0	0	0	0	0	0
6022009	196	0	0	0	0	0	0	0	0	0	0
6022009	197	0	0	0	0	0	0	0	0	0	0
6022009	198	0	0	0	0	0	2	0	0	0	0
6022009	199	0	0	0	0	0	0	2	0	0	0
6022009	200	0	0	0	0	0	0	2	0	0	0
6022009	201	0	0	0	0	0	0	1	0	0	0
6022009	202	0	0	0	0	0	0	1	0	0	0
6022009	203	0	0	0	0	0	0	7	0	0	0
6022009	204	0	0	0	0	0	0	2	0	0	0
6022009	205	0	0	0	0	0	0	1	0	0	0
7022009	206	0	0	0	0	0	0	0	0	0	0
7022009	207	0	0	0	0	0	0	0	0	0	0
7022009	208	0	0	0	0	0	0	1	0	0	0
7022009	209	0	0	0	0	0	1	0	0	0	0
7022009	210	0	0	0	0	0	0	0	0	0	0
15012008	1	0	0		0	0	8	0	0	0	0
15012008	2	0	0		0	0	17	0	0	2	0
15012008	3	1	1		0	0	9	0	0	1	0
15012008	4	1	1		1	0	7	0	0	0	0
15012008	5	0	0		0	0	0	0	0	2	0
15012008	6	0	0		0	0	13	0	0	0	0
15012008	7	2	0		0	0	0	0	0	0	0
15012008	8	0	0		0	0	1	0	0	0	0
15012008	9	0	0		0	0	5	0	0	0	0
15012008	10	0	0		0	0	5	0	0	0	0
15012008	11	0	0		0	0	22	0	0	0	0
15012008	12	0	0		0	0	6	0	0	0	0

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish
15012008	13	0	0		0	0	23	0	0	0	0
15012008	14	0	0		0	0	7	0	0	0	0
15012008	15	0	0		0	0	17	0	0	1	0
15012008	16	0	0		0	0	3	0	0	0	0
15012008	17	0	0		0	0	3	0	0	0	0
15012008	18	0	0		0	0	2	0	0	0	0
15012008	19	0	0		0	0	2	0	0	1	0
15012008	20	0	0		0	0	3	0	0	0	0
15012008	21	0	0		1	0	0	0	0	1	0
15012008	22	0	0		1	0	0	0	0	0	0
15012008	23	0	0		0	0	0	0	0	0	0
15012008	24	0	0		1	0	1	0	0	0	0
15012008	25	0	0		1	0	8	0	0	0	0
15012008	26	0	0		0	0	4	0	0	0	0
16012008	27	0	0		0	0	3	0	0	0	0
16012008	28	0	0		0	0	42	0	0	0	0
16012008	29	0	0		0	0	8	0	11	0	0
16012008	30	0	0		0	0	8	0	3	0	0
16012008	31	0	0		0	0	8	0	9	0	0
16012008	32	0	0		0	0	20	0	2	0	0
16012008	33	0	0		0	0	0	0	5	0	0
16012008	34	0	0		1	0	7	0	0	0	0
16012008	35	0	0		0	0	5	0	0	0	0
16012008	36	0	0		3	0	7	0	0	7	0
16012008	37	0	0		4	0	0	0	0	0	0
16012008	38	0	0		0	0	2	0	0	0	0
16012008	39	0	0		0	0	2	0	0	0	0
16012008	40	12	0		0	0	1	0	0	0	0
16012008	41	5	0		0	0	3	0	1	0	0
16012008	42	0	0		50	0	2	0	1	0	0
16012008	43	0	0		0	0	12	0	1	0	0
16012008	44	0	0		0	0	4	0	0	0	0
16012008	45	0	0		0	0	1	0	0	0	0
16012008	46	0	0		0	0	33	0	0	0	0
16012008	47	0	0		0	0	5	0	0	0	0
16012008	48	0	0		0	0	0	0	1	0	0
16012008	49	0	0		0	0	9	0	0	0	0

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish
16012008	50	0	0		0	0	6	0	0	0	0
16012008	51	0	0		0	0	2	0	0	0	0
16012008	52	0	0		0	0	9	0	0	0	0
16012008	53	0	0		7	0	1	0	0	3	0
16012008	54	0	0		0	0	0	0	1	0	0
16012008	55	0	0		0	0	1	0	0	0	0
16012008	56	0	0		0	0	1	0	0	0	0
16012008	57	0	0		0	0	5	0	0	0	0
16012008	58	1	0		0	0	8	0	1	0	0
16012008	59	0	0		0	0	1	0	1	0	0
16012008	60	0	0		0	0	8	0	0	0	0
16012008	61	0	0		0	0	3	0	0	0	0
17012008	62	0	0		0	0	33	0	0	0	0
17012008	63	0	0		0	0	0	0	0	0	0
17012008	64	0	0		0	0	0	0	0	0	0
17012008	65	0	0		0	0	8	0	0	0	0
17012008	66	0	0		0	0	5	0	0	0	0
17012008	67	0	0		0	0	2	0	0	0	0
17012008	68	0	0		0	0	1	0	0	0	0
17012008	69	0	0		0	0	0	0	0	0	0
17012008	70	0	0		0	0	0	0	0	0	0
17012008	71	0	0		0	0	14	0	0	0	0
17012008	72	2	0		0	0	3	0	0	0	0
17012008	73	0	0		0	0	1	0	0	0	0
17012008	74	0	0		0	0	4	0	0	0	0
17012008	75	0	0		0	0	4	0	0	0	0
17012008	76	0	0		0	0	12	0	0	0	1
17012008	77	0	0		0	0	0	0	0	0	0
17012008	78	0	0		0	0	0	0	0	0	0
17012008	79	0	0		0	0	0	0	0	0	0
17012008	80	0	0		0	0	0	0	0	0	0
17012008	81	0	0		0	0	2	0	0	0	0
17012008	82	0	0		0	0	0	0	0	0	0
17012008	83	0	0		0	0	2	0	0	0	0
17012008	84	0	0		0	0	5	0	0	0	0
17012008	85	0	0		0	0	10	0	0	0	0
17012008	86	0	0		0	0	1	0	0	0	0

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish
17012008	87	0	0		0	0	1	0	0	0	0
17012008	88	0	0		0	0	10	0	0	0	0
17012008	89	0	0		0	0	4	0	2	0	0
17012008	90	1	0		0	0	1	0	0	0	0
17012008	91	0	0		0	0	0	0	0	0	0
17012008	92	0	0		0	0	0	0	0	0	0
17012008	93	0	0		0	0	0	0	0	0	0
17012008	94	0	0		0	0	0	0	0	0	0
17012008	95	0	0		0	0	0	0	0	0	0
17012008	96	0	0		0	0	0	0	0	0	0
17012008	97	0	0		0	0	0	0	0	0	0
18012008	98	0	0		0	0	1	0	0	0	0
18012008	99	0	0		0	0	10	0	0	0	0
18012008	100	0	0		0	0	4	0	0	0	0
18012008	101	0	0		0	0	3	0	0	0	0
18012008	102	0	0		0	0	3	0	0	0	0
18012008	103	0	0		0	0	3	0	0	0	0
18012008	104	0	0		0	0	0	0	0	0	0
18012008	105	0	0		0	0	4	0	0	0	0
18012008	106	0	0		0	0	8	0	0	0	0
18012008	107	0	0		0	0	2	0	0	0	0
18012008	108	0	0		0	0	1	0	0	0	0
18012008	109	0	0		0	0	8	0	0	0	0
18012008	110	0	0		0	0	1	0	0	0	0
18012008	111	0	0		0	0	13	0	0	0	0
18012008	112	0	0		0	0	0	0	3	0	0
18012008	113	5	0		0	0	5	0	0	0	0
18012008	114	0	0		0	0	0	0	0	0	0
18012008	115	1	0		0	0	0	0	0	0	0
18012008	116	0	0		0	0	0	0	0	0	0
18012008	117	0	0		0	0	0	0	0	0	0
18012008	118	0	0		0	0	0	0	0	0	0
18012008	119	0	0		0	0	0	0	0	0	0
18012008	120	0	0		0	0	1	0	0	0	0
18012008	121	0	0		0	0	0	0	0	0	0
18012008	122	0	0		0	0	0	0	0	0	0
18012008	123	0	0		0	0	0	0	0	0	0

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish
18012008	124	0	0		0	0	4	0	0	0	0
19012008	125	0	0		0	0	0	0	0	0	0
19012008	126	4	0		0	0	1	0	1	0	0
19012008	127	0	0		0	0	0	0	0	0	0
19012008	128	0	0		0	0	0	0	0	0	0
19012008	129	0	0		0	0	0	0	0	0	0
19012008	130	0	0		0	0	0	0	0	0	0
19012008	131	0	0		0	0	0	0	0	0	0
19012008	132	0	0		0	0	0	0	0	0	0
19012008	133	0	0		0	0	0	0	0	0	0
19012008	134	0	0		0	0	0	0	0	0	0
19012008	135	0	0		0	0	4	0	0	0	0
19012008	136	0	0		0	0	0	0	0	0	0
19012008	137	0	0		0	0	1	0	0	0	0
19012008	138	0	0		0	0	1	0	0	0	0
19012008	139	0	0		0	0	0	0	0	0	0
19012008	140	0	0		0	0	1	0	0	0	0
19012008	141	0	0		0	0	0	0	0	0	0
19012008	142	0	0		0	0	0	0	0	0	0
19012008	143	0	0		0	0	0	0	0	0	0
19012008	144	0	0		0	0	0	0	0	0	0
19012008	145	0	0		0	0	0	0	0	0	0
19012008	146	0	0		0	0	0	0	0	0	0
19012008	147	0	0		0	0	0	0	0	0	0
19012008	148	0	0		0	0	0	0	0	0	0
19012008	149	0	0		0	0	0	0	0	0	0
19012008	150	0	0		0	0	0	0	0	0	0
19012008	151	0	0		0	0	0	0	0	0	0
19012008	152	0	0		0	0	0	0	0	0	0
19012008	153	0	0		0	0	1	0	0	0	0
19012008	154	0	0		0	0	0	0	0	0	0
19012008	155	0	0		0	0	0	0	0	0	0
19012008	156	0	0		0	0	0	0	0	0	0
19012008	157	0	0		0	0	0	0	1	0	0
19012008	158	0	0		0	0	0	0	0	0	0
19012008	159	0	0		0	0	0	0	0	0	0
19012008	160	0	0		0	0	5	0	0	0	0

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish
19012008	161	0	0		0	0	3	0	0	0	0
19012008	162	0	0		0	0	1	0	0	0	0
19012008	163	0	0		0	0	1	0	0	0	0
20012008	164	0	0		0	0	0	0	0	0	0
20012008	165	0	0		0	0	0	0	0	0	0
20012008	166	0	0		0	0	2	0	0	0	0
20012008	167	0	0		0	0	0	0	0	0	0
20012008	168	0	0		0	0	0	0	0	0	0
20012008	169	0	0		0	0	5	0	0	0	0
20012008	170	0	0		0	0	2	0	0	0	0
20012008	171	0	0		0	0	1	0	0	0	0
20012008	172	0	0		0	0	3	0	0	0	0
20012008	173	0	0		0	0	2	0	0	0	0
20012008	174	0	0		25	0	1	0	0	0	0
20012008	175	0	0		0	0	0	0	0	0	0
20012008	176	0	0		0	0	0	0	0	0	0
20012008	177	0	0		0	0	0	0	0	0	0
20012008	178	0	0		0	0	0	0	0	0	0
20012008	179	0	0		0	0	1	0	0	0	0
20012008	180	0	0		0	0	1	0	0	0	0
20012008	181	0	0		0	0	5	0	0	0	0
20012008	182	0	0		0	0	0	0	0	0	0
20012008	183	0	0		0	0	0	0	0	0	0
20012008	184	0	0		0	0	2	0	0	0	0
20012008	185	0	0		0	0	1	0	0	0	0
20012008	186	1	0		0	0	0	0	1	0	0
20012008	187	0	0		0	0	0	0	0	0	0
20012008	188	0	0		0	0	0	0	0	0	0
20012008	189	0	0		0	0	0	0	0	0	0
20012008	190	0	0		0	0	0	0	0	0	0
20012008	191	0	0		0	0	0	0	0	0	0
20012008	192	0	0		0	0	0	0	0	0	0
20012008	193	0	0		0	0	0	0	0	0	0
21012008	194	0	0		0	0	1	0	0	0	0
21012008	195	0	0		0	0	0	0	0	0	0
21012008	196	0	0		0	0	0	0	0	0	0
21012008	197	0	0		0	0	2	0	0	0	0

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish
21012008	198	0	0		0	0	2	0	0	0	0
21012008	199	0	0		0	0	0	0	0	0	0
21012008	200	0	0		0	0	1	0	0	0	0
21012008	201	0	0		0	0	0	0	0	0	0
21012008	202	0	0		0	0	0	0	0	0	0
21012008	203	0	0		0	0	0	0	0	0	0
21012008	204	0	0		2	0	2	0	0	0	0
21012008	205	0	0		0	0	0	0	0	0	0
21012008	206	0	0		0	0	0	0	0	0	0
21012008	207	0	0		0	0	0	0	0	0	0
21012008	208	0	0		0	0	0	0	0	0	0
21012008	209	0	0		0	0	0	0	0	0	0
21012008	210	0	0		0	0	0	0	0	0	0
21012008	211	0	0		0	0	0	0	0	0	0
21012008	212	0	0		0	0	0	0	0	0	0
21012008	213	0	0		0	0	1	0	0	0	0
21012008	214	0	0		0	0	0	0	0	0	0
21012008	215	0	0		0	0	0	0	0	0	0
21012008	216	0	0		0	0	1	0	0	0	0
21012008	217	0	0		0	0	2	0	0	0	0
21012008	218	0	0		0	0	0	0	0	0	0
21012008	219	0	0		0	0	0	0	0	0	0
21012008	220	0	0		0	0	0	0	0	0	0
21012008	221	0	0		0	0	0	0	0	0	0
21012008	222	0	0		0	0	0	0	0	0	0
21012008	223	0	0		0	0	0	0	0	0	0
21012008	224	0	0		0	0	0	0	0	0	0
21012008	225	3	0		0	0	0	0	0	0	0
21012008	226	0	0		0	0	0	0	0	0	0
21012008	227	0	0		0	0	0	0	0	0	0
21012008	228	0	0		0	0	0	0	0	0	0
21012008	229	0	0		0	0	0	0	0	0	0
21012008	230	0	0		0	0	3	0	0	0	0
21012008	231	0	0		0	0	0	0	0	0	0
21012008	232	0	0		0	0	0	0	0	0	0
21012008	233	0	0		0	0	0	0	0	0	0
22012008	234	0	0		0	0	0	0	0	0	0

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish
22012008	235	0	0		0	0	0	0	0	0	0
22012008	236	0	0		0	0	2	0	0	0	0
22012008	237	0	0		0	0	0	0	0	0	0
22012008	238	0	0		0	0	1	0	0	0	0
22012008	239	0	0		0	0	0	0	0	0	0
22012008	240	0	0		0	0	0	0	0	0	0
22012008	241	0	0		0	0	8	0	0	0	0
22012008	242	0	0		0	0	1	0	1	0	0
22012008	243	0	0		0	0	7	0	0	0	0
22012008	244	0	0		0	0	7	0	0	0	0
22012008	245	0	0		0	0	0	0	0	0	0
22012008	246	0	0		0	0	2	0	0	0	0
22012008	247	0	0		0	0	1	0	0	0	0
22012008	248	0	0		0	0	0	0	0	0	0
22012008	249	0	0		0	0	3	0	0	0	0
22012008	250	0	0		0	0	2	0	1	0	0
22012008	251	15	0		30	0	5	0	0	0	0
22012008	252	0	0		0	0	0	0	0	0	0
22012008	253	0	0		0	0	0	0	0	0	0
22012008	254	0	0		0	0	2	0	0	0	0
22012008	255	0	1		0	1	0	0	0	0	0
22012008	256	0	0		0	0	0	0	0	0	0
22012008	257	0	0		0	0	0	0	0	0	0
22012008	258	0	0		0	0	0	0	0	0	0
22012008	259	0	0		0	0	4	0	0	0	0
22012008	260	0	0		0	0	0	0	0	0	0
22012008	261	0	0		0	0	0	0	0	0	0
22012008	262	0	0		0	0	0	0	0	0	0
22012008	263	0	0		0	0	0	0	0	0	0
22012008	264	0	0		0	0	0	0	0	0	0
22012008	265	0	0		0	0	0	0	0	0	0
22012008	266	0	0		0	0	0	0	0	0	0
22012008	267	0	0		0	0	0	0	0	0	0
23012008	268	0	0		0	0	0	0	0	0	0
23012008	269	0	0		0	0	3	0	0	0	0
23012008	270	0	0		0	0	0	0	0	0	0
23012008	271	0	0		0	0	0	0	0	0	0

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish
23012008	272	0	0		0	0	0	0	0	0	0
23012008	273	0	0		0	0	0	0	0	0	0
23012008	274	0	0		0	0	0	0	0	0	0
23012008	275	0	0		0	0	0	0	0	0	0
23012008	276	0	0		0	0	0	0	0	0	0
23012008	277	0	0		0	0	0	0	0	0	0
23012008	278	0	0		0	0	0	0	0	0	0
23012008	279	0	0		0	0	0	0	0	0	0
23012008	280	0	0		0	0	0	0	0	0	0
23012008	281	0	0		0	0	0	0	0	0	0
23012008	282	0	0		0	0	1	0	0	0	0
23012008	283	0	0		0	0	0	0	0	0	0
23012008	284	0	0		0	0	0	0	0	0	0
23012008	285	0	0		0	0	1	0	0	0	0
23012008	286	0	0		0	0	2	0	0	0	0
23012008	287	0	0		0	0	0	0	0	0	0
23012008	288	0	0		0	0	0	0	0	0	0
23012008	289	0	0		0	0	0	0	0	0	0
23012008	290	0	0		0	0	0	0	0	0	0
23012008	291	0	0		0	0	0	0	0	0	0
23012008	292	0	0		0	3	0	0	0	0	0
23012008	293	1	0		0	0	0	0	0	0	0
23012008	294	0	0		0	0	2	0	0	0	0
23012008	295	0	0		0	0	0	0	4	0	0
23012008	296	0	0		0	0	0	0	1	0	0
23012008	297	0	0		0	0	2	0	1	0	0
23012008	298	0	0		0	0	0	0	0	0	0
23012008	299	0	0		0	0	0	0	3	0	0
23012008	300	0	0		0	0	0	0	2	0	0
23012008	301	0	0		0	0	0	0	0	0	0
23012008	302	0	0		0	0	6	0	0	0	0
23012008	303	0	0		0	0	12	0	0	0	0
24012008	304	5	0		0	0	5	0	2	5	0
24012008	305	0	0		0	0	0	0	1	0	0
24012008	306	0	0		0	0	2	0	0	0	0
24012008	307	0	0		0	0	0	0	1	0	0
24012008	308	0	0		0	0	4	0	3	0	0

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish
24012008	309	0	0		0	0	6	0	2	0	0
24012008	310	0	0		0	0	6	0	1	0	0
24012008	311	0	0		0	0	6	0	0	0	0
24012008	312	0	0		0	0	2	0	0	0	0
24012008	313	0	0		0	0	0	0	2	0	0
24012008	314	0	0		0	0	8	0	0	0	0
24012008	315	5	0		0	0	8	0	0	0	0
24012008	316	0	0		0	0	8	0	2	0	0
24012008	317	0	50		0	0	1	0	0	0	0
24012008	318	0	0		0	0	0	0	0	0	0
24012008	319	0	0		0	0	0	0	0	0	0
24012008	320	0	0		0	0	0	0	0	0	0
24012008	321	0	0		0	0	0	0	0	0	0
24012008	322	4	0		0	0	3	0	0	0	0
24012008	323	0	0		0	0	0	0	0	0	0
24012008	324	0	0		0	0	0	0	0	0	0
24012008	325	0	0		0	0	0	0	0	0	0
24012008	326	0	0		0	0	0	0	0	0	0
24012008	327	0	0		0	0	0	0	0	0	0
24012008	328	0	0		0	0	0	0	0	0	0
24012008	329	0	0		0	0	0	0	0	0	0
18012007	1						1		0		
18012007	2						11		0		
18012007	3								0		
18012007	4						14		0		
18012007	5						8		0		
18012007	6						1		0		
18012007	7						10		0		
18012007	8						4		0		
18012007	9		1				16		0		
18012007	10						2		0		
18012007	11						10		0		
18012007	12						1		0		
18012007	13						12		0		
18012007	14						1		0		
18012007	15						0		0		
18012007	16						0		0		

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish
18012007	17						1		0		
18012007	18						1		0		
18012007	19						5		0		
19012007	20						1		0		
19012007	21						0		0		
19012007	22						4		0		
19012007	23						15		0		
19012007	24						2		1		
19012007	25						1		0		
19012007	26						5		0		
19012007	27						7		0		
19012007	28						9		0		
19012007	29						21		0		
19012007	30						14		0		
19012007	31						13		0		
19012007	32						5		0		
19012007	33		1	1			10		0		
19012007	34						12		0		
19012007	35						12		0		
19012007	36	3					42		0		
19012007	37						34		0		
19012007	38						24		0		
19012007	39						32		0		
19012007	40						60		0		
19012007	41						12		0		
19012007	42						2		0		
20012007	43						11		0		
20012007	44						8		0		
20012007	45						17		0		
20012007	46						2		0		
20012007	47						2		0		
20012007	48						2		0		
20012007	49						3		0		
20012007	50						6		0		
20012007	51						1		0		
20012007	52						1		0		
20012007	53						2		1		

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish	
20012007	54						0		0			
20012007	55						3		0			
20012007	56						8		1			
20012007	57						4		0			
20012007	58						2		0			
20012007	59						0		0			
20012007	60						0		0			
20012007	61						3		0			
21012007	62						3		0			
21012007	63						5		0			
21012007	64						1		0			
21012007	65						1		1			
21012007	66						2		2			
21012007	67						3		0			
21012007	68						7		0			
21012007	69						4		0			
21012007	70						3		0			
21012007	71						1		0			
21012007	72	24					1		0			
21012007	73						0		0			
21012007	74						0		0			
21012007	75						5		0	1		
21012007	76						0		0			
21012007	77						0		1			
21012007	78						0		0			
21012007	79						1		0			
21012007	80						0		0			
21012007	81						1		0			
21012007	82						1		0			
21012007	83						0		0			
21012007	84						2		0			
21012007	85						4		0			
21012007	86	1					5		0			
21012007	87						0		0			
21012007	88						1		0			
21012007	89						4		0			
21012007	90						1		0			

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish
21012007	91						0		0		
21012007	92						5		0		
21012007	93						2		0		
22012007	94						0		0		
22012007	95						3		0		
22012007	96						2		0		
22012007	97						3		0		
22012007	98						7		0		
22012007	99						2		0		
22012007	100						1		0		
22012007	101						3		0		
22012007	102						3		0		
22012007	103						0		0		
22012007	104						0		0		
22012007	105						2		0		
22012007	106						0		0		
22012007	107						0		0		
22012007	108						1		0		
22012007	109						0		0		
22012007	110						0		0		
22012007	111						2		0		
22012007	112						0		0		
22012007	113						2		0		
22012007	114						1		0		
22012007	115						0		0		
22012007	116						0		0		
22012007	117						0		0		
22012007	118						0		0		
22012007	119						0		0		
22012007	120						3		0		
22012007	121						0		0		
22012007	122						1		0		
22012007	123						3		0		
22012007	124						0		0		
22012007	125						0		0		
23012007	126						8		0		
23012007	127						1		0		

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish
23012007	128						2		0		
23012007	129						1		0		
23012007	130						0		0		
23012007	131	1					9		0		
23012007	132						6		0		
23012007	133						7		1		
23012007	134						2		1		
23012007	135						1		0		
23012007	136						0		0		
23012007	137						1		0		
23012007	138						0		0		
23012007	139						0		0		
23012007	140						1		0		
23012007	141						1		0		
23012007	142						0		0		
23012007	143						0		0		
23012007	144						2		0		
23012007	145						3		0		
23012007	146						11		0		
23012007	147						11		0		
23012007	148					2	7		0		
23012007	149						1		0		
23012007	150						0		0		
23012007	151						2		0		
23012007	152						1		0		
23012007	153						22		0		
23012007	154				1		3		0		
23012007	155						3		0		
23012007	156						1		0		
23012007	157						21		0		
24012007	158						0		0		
24012007	159						5		0		
24012007	160						2		0		
24012007	161						1		0		
24012007	162						9		3		
24012007	163						15		0		
24012007	164						9		0		

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish
24012007	165						56		0		
24012007	166						2		0		
24012007	167						2		0		
24012007	168						2		0		
24012007	169						0		0		
24012007	170						3		0		
24012007	171						2		0		
24012007	172						15		0		
24012007	173						9		0		
24012007	174						4		0		
24012007	175						8		0		
24012007	176						0		0		
24012007	177						0		0		
24012007	178						0		0		
24012007	179						1		0		
24012007	180						3		0		
24012007	181						1		1		
24012007	182						9		0		
24012007	183						4		0		
24012007	184						8		0		
24012007	185						10		0		
19012006	1						0		0		
19012006	2						0		0		
19012006	3						0		0		
20012006	4						6		1		
20012006	5						7		1		
20012006	6						12		0		
20012006	7						19		0		
20012006	8						22		0		
20012006	9						16		0		
20012006	10						0		0		
20012006	11						0		0		
20012006	12						2		0		
20012006	13						0		0		
20012006	14						1		0		
20012006	15						0		0		
20012006	16						0		0		

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish
20012006	17		1				0		0	1	
20012006	18						0		0		
20012006	19						0		0		
20012006	20						3		0		
20012006	21						4		0		
20012006	22						1		0		
20012006	23						3		0		
20012006	24						3		0		
20012006	25						11		0		
20012006	26						0		0		
20012006	27						3		0		
20012006	28						1		0		
20012006	29						0		0		
20012006	30						1		0		
20012006	31						2		0	1	
20012006	32						7		0		
20012006	33						1		0		
20012006	34		1				2		0	1	
20012006	35		3				2		0		
20012006	36						4		0		
20012006	37					7	1		0		
20012006	38						21		0	1	
20012006	39						9		0		
20012006	40						4		1		
20012006	41						1		2		
21012006	42						1		0		
21012006	43						1		0		
21012006	44						1		0		
21012006	45						2		0		
21012006	46						0		0		
21012006	47						3		0		
21012006	48						0		0		
21012006	49						2		0		
21012006	50						3		0		
21012006	51						0		0		
21012006	52						0		0		
21012006	53						0		0		

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish
21012006	54						0		0		
21012006	55						0		0		
21012006	56						0		0		
21012006	57						0		0		
21012006	58						0		0		
21012006	59						1		0		
21012006	60						1		0		
21012006	61						1		0		
21012006	62						1		0		
21012006	63						1		0		
21012006	64						4		0		
21012006	65						0		0		
21012006	66						0		0		
21012006	67						0		0		
21012006	68						1		0		
21012006	69						2		0		
21012006	70						2		0		
21012006	71						1		0		
21012006	72						3		0		
21012006	73						0		0		
21012006	74						2		0		
21012006	75						6		0		
21012006	76						22		0		
21012006	77	6					2		0		
21012006	78						1		0		
21012006	79						3		0		
22012006	80						13		0		
22012006	81						4		0		
22012006	82						4		2		
22012006	83						1		0		
22012006	84						6		0		
22012006	85						3		1		
22012006	86						2		1		
22012006	87						0		0		
22012006	88						0		1		
22012006	89						4		0		
22012006	90						1		0		

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish
22012006	91	1					2		0		
22012006	92						0		0		
22012006	93						1		0		
22012006	94						0		0		
22012006	95						3		0		
22012006	96						1		0		
22012006	97						0		0		
22012006	98						0		0		
22012006	99						1		0		
22012006	100						3		0		
22012006	101						1		0		
22012006	102						1		0		
22012006	103						4		0		
22012006	104						1		0		
22012006	105						0		3		
22012006	106						0		2		
22012006	107						4		0		
22012006	108						0		0		
22012006	109						8		0		
22012006	110						3		0		
22012006	111						8		6		
22012006	112						5		0		
22012006	113						0		0		
23012006	114	P					15		0	1	
23012006	115						6		0		
23012006	116						5		0		
23012006	117						8		0		
23012006	118						5		0		
23012006	119						2		0		
23012006	120						6		0		
23012006	121						17		0		
23012006	122						5		0		
23012006	123						7		0		
23012006	124						1		0		
23012006	125						3		0		
23012006	126						1		1		
23012006	127						2		0		

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish
23012006	128						2		0		
23012006	129						1		0		
23012006	130						2		0		
23012006	131						0		0		
23012006	132						2		1		
23012006	133						2		0		
23012006	134						1		0		
23012006	135						3		0		
23012006	136						0		0		
23012006	137						1		0		
23012006	138						4		0		
23012006	139						3		0		
23012006	140						16		0		
23012006	141										
23012006	142						8		0		
23012006	143						1		2		
23012006	144						1		1		
23012006	145						2		0		
23012006	146						13		0		
23012006	147						6		0		
24012006	148						11		0		
24012006	149						1		0		
24012006	150						2		0		
24012006	151						2		0		
24012006	152						2		1		
24012006	153						0		0		
24012006	154						2		0		
24012006	155						0		0		
24012006	156						0		0		
24012006	157		1				1		0		
24012006	158						0		0		
24012006	159						2		0		
24012006	160						0		0		
24012006	161						1		0		
24012006	162						4		0		
24012006	163						0		0		
24012006	164						2		0		

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish
24012006	165						1		0		
24012006	166						11		0		
24012006	167						20		0		
24012006	168						18		0		
24012006	169						2		0		
24012006	170						1		1		
24012006	171						10		0		
24012006	172						0		0		
24012006	173						0		0		
24012006	174						6		0		
24012006	175						9		0		
24012006	176						2		0		
24012006	177						2		0		
24012006	178						0		0	1	
24012006	179						0		0		
24012006	180						2		0		
25012006	181						3		0		
25012006	182						1		0		
25012006	183						4		0		
25012006	184						0		0		
25012006	185						0		0		
25012006	186						0		0		
25012006	187						0		0		
25012006	188						2		0		
25012006	189						0		0		
25012006	190						0		0		
25012006	191						0		0		
25012006	192						0		0		
25012006	193						0		0		
25012006	194						1		0		
25012006	195						0		0		
25012006	196										
25012006	197										
25012006	198										
25012006	199										
25012006	200										
25012006	201										

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish
25012006	202										
25012006	203										
25012006	204										
25012006	205										
25012006	206										
25012006	207						1		0		
25012006	208						1		0		
25012006	209						0		0		
25012006	210						0		0		
25012006	211						0		0		
25012006	212						0		0		
25012006	213						2		0		
25012006	214						1		0		
25012006	215						3		0		
26012006	216						1		0		
26012006	217						2		0		
26012006	218						3		0		
26012006	219						3		0		
26012006	220						4		0		
26012006	221						4		0		
26012006	222						2		0		
26012006	223						2		0		
26012006	224						0		0		
26012006	225						0		0		
26012006	226						1		0		
26012006	227						1		0		
26012006	228						1		0		
26012006	229						0		0		
26012006	230						0		0		
26012006	231						0		0		
26012006	232						1		0		
26012006	233						1		0		
26012006	234						0		0		
26012006	235						1		0		
26012006	236						0		0		
26012006	237						0		0		
26012006	238						0		0		

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish
26012006	239						0		0		
26012006	240						0		0		
27012006	241						2		0		
27012006	242						2		0		
27012006	243						1		0		
27012006	244						0		0		
27012006	245						0		0		
27012006	246						0		0		
27012006	247						2		0		
27012006	248						2		0		
27012006	249						3		0		
27012006	250						3		0		
27012006	251						1		0		
27012006	252		4				3		0		
27012006	253						0		0		
27012006	254						0		0		
27012006	255						0		0		
27012006	256						0		0		
27012006	257						1		0		
27012006	258						0		0		
27012006	259						1		0		
27012006	260						0		0		
27012006	261						0		0		
27012006	262						0		0		
27012006	263						0		0		
27012006	264						1		0		
27012006	265						3		0		
27012006	266						4		0		
27012006	267						3		0		
27012006	268						2		0		
27012006	269						0		0		
27012006	270						5		0		
27012006	271						0		0		
27012006	272						1		0		
27012006	273						0		0		
27012006	274						1		0		
28012006	275						1		0		

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish
28012006	276						1		0	4	
28012006	277						6		0		
28012006	278						2		0		
28012006	279		P				0		0	P	
28012006	280		1				1		0	3	
28012006	281										
28012006	282										
28012006	283						2		0		
28012006	284						1		0		
28012006	285						4		0		
28012006	286						3		0		
28012006	287						0		0		
28012006	288						0		0		
28012006	289						2		0		
28012006	290	P					1		0		
28012006	291						0		0		
28012006	292	P					3		0		
28012006	293						73		0		
28012006	294						5		0		
28012006	295						2		0		
28012006	296						0		0		
28012006	297						0		0		
28012006	298						3		0		
28012006	299						0		0		
28012006	300						0		0		
28012006	301						1		0		
28012006	302						1		0		
25012005	1										
25012005	2				P					P	
25012005	3				P					P	
25012005	4										
26012005	5	P			P						
26012005	6				P					P	
26012005	7	P			P	1	1				
26012005	8										
26012005	9	P			P		3			P	
26012005	10				P	P					

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish
26012005	11	P			P						
26012005	12	P									
26012005	13										
26012005	14				P						
26012005	15	P				P				P	
26012005	16										
26012005	17		P								
26012005	18										
26012005	19										
26012005	20										
26012005	21										
26012005	22						1			P	
26012005	23										
26012005	24										
26012005	25										
26012005	26	P								P	
26012005	27	P								P	
26012005	28										
26012005	29									P	
26012005	30	1								P	
26012005	31									P	
26012005	32									P	
26012005	33										
27012005	34						3			3	
27012005	35										
27012005	36						2				
27012005	37						7				
27012005	38						3				
27012005	39										
27012005	40										
27012005	41				P						
27012005	42										
27012005	43				P						
27012005	44				P						
27012005	45				P						
27012005	46										
27012005	47										

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish
27012005	48										
27012005	49										
27012005	50	P			P						
27012005	51	P								P	
27012005	52										
27012005	53	P									
28012005	54										
28012005	55										
29012005	56	P									
29012005	57	P									
29012005	58										
29012005	59				P						
29012005	60										
29012005	61	P			P						
29012005	62										
29012005	63										
29012005	64										
29012005	65										
29012005	66										
29012005	67										
29012005	68						1				
29012005	69										
29012005	70						2				
29012005	71										
29012005	72										
29012005	73										
29012005	74	P									
29012005	75	P									
29012005	76	P									
29012005	77	P									
29012005	78	P									
29012005	79	P								P	
29012005	80	P									
29012005	81	P									
30012005	82						2				
30012005	83										
30012005	84										

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish
30012005	85										
30012005	86										
30012005	87						1				
30012005	88										
30012005	89						1				
30012005	90										
30012005	91						2				
30012005	92										
30012005	93										
30012005	94	P									
30012005	95	P									
30012005	96	P			P		1			P	
30012005	97	P			P					P	
30012005	98	P									
30012005	99										
30012005	100										
30012005	101										
30012005	102										
30012005	103						2				
30012005	104						1				
31012005	105	P			P					P	
31012005	106										
31012005	107										
31012005	108	P			P						
31012005	109	P									
31012005	110	P									P
31012005	111										
31012005	112	P									
1022005	113										
1022005	114										
1022005	115										
1022005	116										
1022005	117										
1022005	118	P								P	
1022005	119	P									
1022005	120										
1022005	121										

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish	
1022005	122	P										
1022005	123	P			P							
2022005	124											
2022005	125						1					
2022005	126											
2022005	127						5					
2022005	128											
2022005	129											
2022005	130	P										
2022005	131	P										
2022005	132	P										
2022005	133	P										
2022005	134											
2022005	135	P										
2022005	136											
2022005	137											
2022005	138											
2022005	139						1					
2022005	140											682
2022005	141											
2022005	142								1			
2022005	143											
2022005	144											
2022005	145											
2022005	146											
2022005	147	P										
2022005	148	P										
2022005	149											
16012004	1											
16012004	2							1				
17012004	3											
17012004	4											
17012004	5						2					
17012004	6						1					
17012004	7						1					
17012004	8						4					
17012004	9						3					

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish
17012004	10						2				
17012004	11						1				
17012004	12						4				
17012004	13						2				
17012004	14										
17012004	15						1				
17012004	16										
17012004	17						1				
17012004	18						2				
17012004	19										
17012004	20						2	1			
17012004	21										
17012004	22						1				
17012004	23										
17012004	24										
17012004	25						1				
17012004	26										
17012004	27										
17012004	28						1				
17012004	29						2				
17012004	30						1				
17012004	31										
17012004	32										
17012004	33										
17012004	34										
17012004	35										
17012004	36						1				
17012004	37										
18012004	38						1				
18012004	39										
18012004	40										
18012004	41						1				
18012004	42						1				
18012004	43										
18012004	44						1				
18012004	45										
18012004	46						3				

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish
18012004	47						1				
18012004	48						2				
18012004	49						1				
18012004	50						1				
18012004	51										
18012004	52										
18012004	53										
18012004	54										
18012004	55						1				
18012004	56										
18012004	57										
18012004	58						1				
18012004	59										
18012004	60										
18012004	61										
18012004	62										
18012004	63						1				
18012004	64										
18012004	65										
18012004	66										
18012004	67										
18012004	68										
18012004	69										
18012004	70										
18012004	71										
18012004	72						1				
18012004	73										
18012004	74										
18012004	75						1				
18012004	76						6				
18012004	77						9				
18012004	78						8				
18012004	79						3				
19012004	80						1				
19012004	81						1				
19012004	82						2				
19012004	83						2				

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish
19012004	84						1				
19012004	85						3				
19012004	86						8				
19012004	87						3				
19012004	88										
19012004	89										
19012004	90						1				
19012004	91						1				
19012004	92										
19012004	93					P					
19012004	94				P						
19012004	95						3				
19012004	96						4				
19012004	97										
19012004	98										
19012004	99										
19012004	100				P						
19012004	101						9				
19012004	102						23				
19012004	103						18				
19012004	104						17				
19012004	105						68				
19012004	106						30				
19012004	107						24				
19012004	108						2				
19012004	109						15				
19012004	110						15				
20012004	111						20				
20012004	112						12				
20012004	113						6				
20012004	114						3				
20012004	115						4				
20012004	116						18				
20012004	117										
20012004	118						9				
20012004	119						2				

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish
20012004	120					8					
20012004	121					3					
20012004	122										
20012004	123					1					
20012004	124					1					
20012004	125					14					
20012004	126					7					
20012004	127					7					
20012004	128					5					
20012004	129					5					
20012004	130					22					
20012004	131					10					
20012004	132					2					
20012004	133					5					
20012004	134					3					
20012004	135					10					
20012004	136					4					
20012004	137										
20012004	138										
20012004	139										
20012004	140										
20012004	141										
20012004	142										
20012004	143					4					
20012004	144										
21012004	145										
21012004	146										
21012004	147				P	9				P	
21012004	148					17					
21012004	149										
21012004	150					14					
21012004	151					8					
21012004	152					6					
21012004	153					2					
21012004	154					4					

21012004 155
21012004 156
21012004 157

1

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Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish	
21012004	158											
21012004	159											
21012004	160											
21012004	161											
21012004	162	P				P						
21012004	163	P										
21012004	164	P			P	P						
21012004	165	P			P							
21012004	166	P			P							
21012004	167	P			P					P		
21012004	168						34					
21012004	169						6					
21012004	170											
21012004	171											
21012004	172											
21012004	173						2					
21012004	174						3					
21012004	175						6					
21012004	176						4					688
22012004	177											
22012004	178	P					2			P		
22012004	179						15	1		P		
22012004	180						5	2				
22012004	181							1				
22012004	182						2					
22012004	183						2					
22012004	184											
22012004	185											
22012004	186											
22012004	187											
22012004	188											
22012004	189											
22012004	190											
22012004	191											
22012004	192	P	1				1					
22012004	193	P										
22012004	194											

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish
22012004	195										
22012004	196										
22012004	197						1				
22012004	198						2				
22012004	199						3				
22012004	200						2				
22012004	201						4				
22012004	202						2				
22012004	203						1				
23012004	204	P					2	2		P	
23012004	205	P				P	1	2		P	
23012004	206						1				
23012004	207						1	1			
23012004	208						3				
23012004	209		P							P	
23012004	210										
23012004	211										
23012004	212										
23012004	213										
23012004	214										
23012004	215										
23012004	216										
23012004	217	P				1					
23012004	218	P			P						
23012004	219										
23012004	220	P	P								
23012004	221										
23012004	222						1				
23012004	223						9				
23012004	224										
23012004	225										
23012004	226						3				
23012004	227										
23012004	228						1				
23012004	229						1				
23012004	230						3				
23012004	231						1				

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish
24012004	232						6	1			
24012004	233						12	1			
24012004	234						5	1			
24012004	235	P			P		3	1			
24012004	236	P	P		P		5			P	
24012004	237										
24012004	238				P		5				
24012004	239	P			P		15				
24012004	240										
24012004	241										
24012004	242										
24012004	243					P					
24012004	244						1				
24012004	245						1				
24012004	246						2				
24012004	247										
24012004	248										
24012004	249		P			P					
24012004	250										
24012004	251	P	P				1				
24012004	252						1				
24012004	253						1				
24012004	254	P			P	P					
24012004	255										
24012004	256										
24012004	257										
24012004	258								1		
14012003	1						0		0		
14012003	2						0		0		
14012003	3						1		0		
14012003	4		P				0		0		
14012003	5		P				2		0		
14012003	6		P	P			2		0		P
14012003	7		P				2		0		
14012003	8		P				2		0		
14012003	9		P				4		0	P	
14012003	10						3		0		

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish
15012003	11						1		1		
15012003	12						3		0		
15012003	13						2		0		
15012003	14						0		0		
15012003	15						0		0		
15012003	16						1		0		
15012003	17		P				0		0		
15012003	18						1		0		
15012003	19						2		0		
15012003	20						4		0		
15012003	21						2		0		
15012003	22						1		0		
15012003	23						1		0		
15012003	24						0		0		
15012003	25						3		0		
15012003	26						4		0		
15012003	27				P		1		0		
15012003	28				P		3		0	P	
15012003	29						1		0		
15012003	30						1		0		
15012003	31						32		0		
15012003	32						5		0		
15012003	33						3		0		
15012003	34						2		0		
15012003	35						5		0		
15012003	36						0		0		
16012003	37						2		0		
16012003	38						0		0		
16012003	39						0		0		
16012003	40						4		0		
16012003	41						3		0		
16012003	42						2		0		
16012003	43						5		0		
16012003	44						1		0		
16012003	45						1		0		
16012003	46						2		0		
16012003	47						0		0		

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish
16012003	48						2		0		
16012003	49						0		0		
16012003	50						3		0		
16012003	51						1		0		
16012003	52						1		0		
16012003	53						3		0		
16012003	54						0		1		
16012003	55						0		0		
16012003	56						0		0		
16012003	57						0		1		
16012003	58						0		0		
16012003	59						0		0		
16012003	60						0		0		
16012003	61						1		0		
16012003	62						1		0		
16012003	63						0		0		
16012003	64						1		0		
16012003	65						0		0		
16012003	66						1		0		
16012003	67						5		0		
16012003	68						1		0		
16012003	69						7		0		
16012003	70						4		0		
16012003	71						14		0		
17012003	72						3		0		
17012003	73						11		0		
17012003	74						1		0		
17012003	75						3		0		
17012003	76						4		0		
17012003	77						15		0		
17012003	78						18		0		
17012003	79						12		0		
17012003	80						6		1		
17012003	81						8		0		
17012003	82						2		0		
17012003	83						2		0		
17012003	84						7		0		

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish	
17012003	85						6		0			
17012003	86						1		0			
17012003	87						8		0			
17012003	88						5		0			
17012003	89						5		0			
17012003	90						1		0			
17012003	91						3		0			
17012003	92						4		0			
17012003	93						8		0			
17012003	94						2		0			
17012003	95						5		0			
17012003	96						23		0			
17012003	97						0		0			
17012003	98						21		1			
17012003	99						30		0			
17012003	100						32		0			
17012003	101	P					8	1	0	P		
17012003	102						29		0			
17012003	103						3		0			693
17012003	104						0		0			
17012003	105						5		0			
18012003	106						9		0			
18012003	107						0		0			
18012003	108						0		0			
18012003	109						0		0			
18012003	110						3		0			
18012003	111						1		0			
18012003	112						1		0			
18012003	113						1		0			
18012003	114						1		0			
18012003	115						2		0			
18012003	116						21		0			
18012003	117						19		0			
18012003	118						0		0			
18012003	119						0		0			
18012003	120						1		0			
18012003	121						0		0			

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish
18012003	122						0		1		
18012003	123						5		0		
18012003	124						0		0		
18012003	125						1		0		
18012003	126						0		0		
18012003	127						0		0		
18012003	128						1		0		
18012003	129						1		0		
18012003	130						2		0		
19012003	131						1		0		
19012003	132						0		0		
19012003	133						2		0		
19012003	134						1		0		
19012003	135						0		0		
19012003	136						1		0		
19012003	137						0		0		
19012003	138						1		0		
19012003	139						2		0		
19012003	140						0		0		
19012003	141						7		0		
19012003	142						0		0		
19012003	143						0		0		
19012003	144						0		0		
19012003	145						1		0		
19012003	146						0		0		
19012003	147						1		0		
19012003	148						0		0		
19012003	149						1		0		
19012003	150						1		0		
19012003	151						3		0		
19012003	152						0		1		
19012003	153						1		0		
19012003	154						1		0		
19012003	155						1		0		
19012003	156						0		0		
19012003	157						1		0		
20012003	158						1		0		

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish
20012003	159						0		0		
20012003	160						1		0		
20012003	161						2		0		
20012003	162						3		0		
20012003	163						0		0		
20012003	164						1		0		
20012003	165					P	1		0		
20012003	166						0		0		
20012003	167						0		0		
20012003	168						0		0		
20012003	169						0		0		
20012003	170						0		0		
20012003	171						0		0		
20012003	172						0		0		
20012003	173						1		0		
20012003	174						1		0		
20012003	175						2		0		
20012003	176						0		0		
20012003	177						0		0		
20012003	178						0		0		
20012003	179						0		0		
20012003	180						1		0		
20012003	181						2		0		
20012003	182						5		0		
20012003	183						5		0		
20012003	184						6		0		
20012003	185						3		1		
20012003	186						11		0		
20012003	187						2		0		
20012003	188						1		0		
20012003	189						0		0		
20012003	190						2		0		
21012003	191						3		0		
21012003	192						0		0		
21012003	193						3		0		
21012003	194						0		0		
21012003	195						4		0		

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish
21012003	196						0		0		
21012003	197						0		0		
21012003	198						0		0		
21012003	199						0		0		
21012003	200						0		0		
21012003	201						2		0		
21012003	202						1		0		
21012003	203						0		0		
21012003	204						0		0		
21012003	205						0		0		
21012003	206						0		0		
21012003	207						1		0		
21012003	208						1		0		
22012003	209						0		0		
22012003	210						0		0		
22012003	211						0		0		
22012003	212						0		0		
22012003	213						0		0		
22012003	214						0		0		
22012003	215						1		0		
22012003	216						0		0		
22012003	217						0		0		
22012003	218		P				0		0		
22012003	219						2		0		
22012003	220						0		0		
22012003	221						2		0		
22012003	222						1		0		
22012003	223						1		0	P	
22012003	224						0		0		
22012003	225						0		0		
22012003	226						0		0		
22012003	227						0		0		
14012002	1								0		
14012002	2								0		
14012002	3								0		
14012002	4								0		
14012002	5								0		

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish
14012002	6								0		
14012002	7								0		
14012002	8								0		
14012002	9								0		
15012002	10								0		
15012002	11								0		
15012002	12								0		
15012002	13								0		
15012002	14						3		0		
15012002	15								0		
15012002	16						3		0		
15012002	17						2		0		
15012002	18						1		0		
15012002	19						1		0		
15012002	20								0		
15012002	21						1		0		
15012002	22		P						0		
15012002	23						1		0		
15012002	24						1		0		
15012002	25						2		0		
15012002	26						2		0		
15012002	27								0		
15012002	28								0		
15012002	29								0		
15012002	30						5		0		
15012002	31								1		
15012002	32								0	P	
15012002	33								0		
15012002	34								0		
15012002	35								0		
15012002	36								0		
15012002	37								0		
15012002	38								0		
15012002	39						13		0		
16012002	40						P		0		
16012002	41								0		
16012002	42						8		0		

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish
16012002	43						4		0		
16012002	44						5		0		
16012002	45						4		0		
16012002	46						3		0		
16012002	47						5		0		
16012002	48						4		0		
16012002	49								0		
16012002	50								0		
16012002	51								0		
16012002	52								0		
16012002	53								1		
16012002	54								0		
16012002	55								0		
16012002	56						7		0		
16012002	57						7		0		
16012002	58						4		0		
16012002	59						3		0		
16012002	60						2		2		
16012002	61						4		0		
16012002	62						10		0		
16012002	63						1		0		
16012002	64						2		1		
16012002	65								0		
16012002	66								0		
16012002	67								0		
16012002	68								0		
16012002	69						P		0		
16012002	70						P		0		
16012002	71						P		0		
16012002	72						P		2		
16012002	73						P		0		
16012002	74						P		0		
16012002	75						P		0		
16012002	76						P		0		
16012002	77						P		0		
17012002	78								0		
17012002	79						1		0		

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish
17012002	80								0		
17012002	81						7		1		
17012002	82								0		
17012002	83								0		
17012002	84						P		0		
17012002	85								0		
17012002	86						P		0		
17012002	87								0		
17012002	88								0		
17012002	89								0		
17012002	90								0		
17012002	91								0		
17012002	92								0		
17012002	93								0		
17012002	94								0		
17012002	95								0		
17012002	96								0		
17012002	97								0		
17012002	98								0		
17012002	99								0		
17012002	100								0		
17012002	101								0		
17012002	102								0		
17012002	103								1		
17012002	104								1		
17012002	105								0		
17012002	106								0		
17012002	107								0		
17012002	108								0		
17012002	109								0		
17012002	110								0		
17012002	111								0		
17012002	112								0		
17012002	113								0		
17012002	114								0		
17012002	115								0		
18012002	116								0		

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish
18012002	117								0		
18012002	118								0		
18012002	119								0		
18012002	120								0		
18012002	121								0		
18012002	122								0		
18012002	123								0		
18012002	124								0		
18012002	125								0		
18012002	126								0		
18012002	127								0		
18012002	128								0		
18012002	129								0		
18012002	130								0		
18012002	131								0		
18012002	132								2		
18012002	133								0		
18012002	134						4		0		
18012002	135								0		
18012002	136						4		0		
18012002	137								0		
18012002	138						4		0		
18012002	139						3		0		
18012002	140						1		0		
18012002	141						3		0		
18012002	142						4		0		
18012002	143						3		0		
18012002	144								0		
18012002	145						3		0		
18012002	146								0		
18012002	147						1		0		
18012002	148								0		
18012002	149								1		
18012002	150						2		0		
18012002	151						11		1		
18012002	152						13		0		
18012002	153						7		0		

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish
18012002	154						12		0		
18012002	155						12		0		
18012002	156						7		0		
18012002	157						8		1		
18012002	158						1		1		
19012002	159								0		
19012002	160								0		
19012002	161						P		0		
20012002	162						2		0		
20012002	163						2		0		
20012002	164								0		
20012002	165						12		0		
20012002	166						14		0		
20012002	167						7		0		
20012002	168								0		
20012002	169								0		
20012002	170						2		0		
20012002	171						1		0		
20012002	172						5		0		
20012002	173						10		0		
20012002	174								0		
20012002	175						23		0		
20012002	176						2		0		
20012002	177						3		0		
20012002	178						2		0		
20012002	179						3		0		
20012002	180						3		0		
20012002	181								0		
20012002	182						1		0		
20012002	183						1		0		
20012002	184								0		
20012002	185								0		
20012002	186								0		
20012002	187								0		
20012002	188						3		0		
20012002	189								0		
20012002	190						6		0		

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish
20012002	191						10		0		
20012002	192						12		0		
20012002	193						4		0		
20012002	194						2		0		
20012002	195						5		0		
20012002	196						5		0		
20012002	197						7		0		
20012002	198						11		0		
20012002	199						4		3		
20012002	200						2		1		
20012002	201						16		0		
21012002	202								0		
21012002	203								0		
21012002	204								0		
21012002	205								0		
21012002	206								0		
21012002	207								0		
21012002	208						1		0		
21012002	209						2		0		
21012002	210						3		0		
21012002	211						1		0		
21012002	212								0		
21012002	213								1		
21012002	214						8		0		
21012002	215						12		0		
21012002	216						5		1		
21012002	217						7		0		
21012002	218								0		
21012002	219						7		0		
21012002	220								0		
21012002	221						4		0		
21012002	222						2		0		
21012002	223						3		0		
21012002	224						3		0		
21012002	225								0		
21012002	226								0		
14012001	1		P		P		2		0	P	

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish
14012001	2		P		P		7		0	P	
14012001	3		P		P		3		0		
14012001	4				P		2		0		
15012001	5				P		2		0		
15012001	6		P		P		4		0		
15012001	7		1		P		12		0		
15012001	8						10		0	P	
15012001	9						0		0		
15012001	10		P				1	1	0	P	
15012001	11		P		P		1		1		
15012001	12		P		P		1		0		
15012001	13				P		4		0		
15012001	14		P				0		0	P	
15012001	15		1		P		7		0	P	
15012001	16						1		0		
15012001	17						2		0	P	
15012001	18				P		0		0	P	
15012001	19						0		0	P	
15012001	20						0		0		
15012001	21				P		0		0		
15012001	22				P		0		0		
15012001	23	P			P		0		0		
15012001	24	P			P		0		0		
15012001	25	P			P		0		0		
15012001	26	P			P		1		0		
15012001	27				P		0		0		
15012001	28				P		0		0		
16012001	29	P			P		2		0		
16012001	30				P		0		0		
16012001	31	P			P		1		0	P	
16012001	32				P		0		1		
16012001	33						0		0		
16012001	34				P	P	0		0		
16012001	35						0		0		
16012001	36						0		0		
16012001	37						0		0	P	
16012001	38						0		0	P	

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish
16012001	39	P					1		0	P	
16012001	40	P					0		0	P	
16012001	41	P					1		0		
16012001	42						0		0		
16012001	43						0		0		
16012001	44						2		0		
16012001	45						0		0		
16012001	46						1		0		
16012001	47						0		0		
16012001	48						0		0		
16012001	49						0		0		
16012001	50						1		0		
16012001	51						1		0		
16012001	52						1		0		
16012001	53						0		0		
16012001	54					P	1		0		
16012001	55	P					0		0		
16012001	56	P				P	0		0		
16012001	57						0		0		
16012001	58					P	2		0		
16012001	59						0		0		
16012001	60						0		0		
16012001	61		1				3		0		
16012001	62						2		0		
16012001	63						2		0	P	
16012001	64						0		0		
16012001	65					P	1		0	P	
16012001	66						0		0		
16012001	67						0		0		
16012001	68						P		0		
16012001	69						0		0		
17012001	70						0		0		
17012001	71						0		0		
17012001	72						0		0		
17012001	73						1		0		
17012001	74						1		0		
17012001	75						1		0		

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish
17012001	76						3		0		
17012001	77						1		0	P	
17012001	78						1		0		
17012001	79						2		0	P	
17012001	80						0		0	P	
17012001	81						0		0	P	
17012001	82						0		0		
17012001	83	P					0		0		
17012001	84						0		0		
17012001	85						0		0		
17012001	86						0		0		
17012001	87						0		0		
17012001	88						0		1		
17012001	89						0		0		
17012001	90					P	1		1		
17012001	91					P	0		0		
17012001	92						1		0		
17012001	93						0		0		
17012001	94	P	P				0		0		
17012001	95						0		0		
17012001	96						0		0		
17012001	97						0		0		
17012001	98						0		0		
17012001	99						0		0		
17012001	100						0		0		
17012001	101						0		0		
17012001	102						0		0		
17012001	103						0		0		
17012001	104						0		0		
17012001	105						0		0		
17012001	106						0		0		
17012001	107						0		0		
17012001	108						0		0		
18012001	109					P	1		0		
18012001	110					P	0		0		
18012001	111					P	1		0		
18012001	112					P	0		0		

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish
18012001	113					P	1		0		
18012001	114						0		0		
18012001	115					P	1		0		
18012001	116						0		0		
18012001	117						2		0		
18012001	118						0		0		
18012001	119						0		0		
18012001	120						0		0		
18012001	121						0		0		
18012001	122						3		0		
18012001	123						1		0		
18012001	124						1		0		
18012001	125						1		0		
18012001	126						0		0		
18012001	127						0		0		
18012001	128						0		0		
18012001	129						0		0		
18012001	130						0		0		
18012001	131						1		0		
18012001	132						0		0		
18012001	133						1		0		
18012001	134						1		0	P	
18012001	135	P					0		0		
18012001	136	P					0		0	P	
18012001	137	P					0		0	P	
18012001	138		1				0		0		
18012001	139				P		4		0	P	
18012001	140				P		0		0		
18012001	141				P		0		0	P	
18012001	142	P					4		0	P	
18012001	143				P		0		0		
18012001	144						0		0		
19012001	145				P		0		0		
19012001	146				P		0		0		
19012001	147				P		1		0		
19012001	148				P		0		0		
19012001	149				P		0		0		

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish
19012001	150				P		0		0	P	
19012001	151				P	P	0		0		
19012001	152						0		0		
19012001	153						0		0		
19012001	154						0		0		
19012001	155				P		0		0		
19012001	156				P		4		0		
19012001	157				P		2		0		
19012001	158				P		8		0		
19012001	159						8		0		
19012001	160						9		0		
19012001	161				P		4		0		
19012001	162		P				4		0		
19012001	163						0		0		
29012000	1						0		0		
29012000	2						0		0		
29012000	3						4		0		
29012000	4						0		0		
29012000	5						0		1		
29012000	6						0		0		
29012000	7						0		0		
29012000	8						0		0		
29012000	9						0		0		
29012000	10						0		0		
30012000	11						1		0		
30012000	12						6		0		
30012000	13						0		0		
30012000	14						0		0		
30012000	15						0		0		
30012000	16						1		0		
30012000	17						0		0		
30012000	18						0		0		
30012000	19						0		0		
30012000	20						0		0		
30012000	21						0		0		
30012000	22						0		0		
30012000	23						0		0		

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish
30012000	24						0		0		
30012000	25						0		0		
30012000	26						0		0		
30012000	27						0		0		
30012000	28						0		0		
30012000	29						0		0		
30012000	30						0		0		
30012000	31						0		0		
30012000	32						0		0		
30012000	33						0		0		
30012000	34						0		0		
30012000	35						0		0		
30012000	36						0		0		
30012000	37						0		0		
30012000	38						0		0		
31012000	39						0		0		
31012000	40						0		0		
31012000	41						0		0		
31012000	42						0		0		
31012000	43						0		0		
31012000	44						0		0		
31012000	45						0		0		
31012000	46						0		0		
31012000	47						0		0		
31012000	48						0		0		
31012000	49						0		0		
31012000	50						0		0		
31012000	51						0		0		
31012000	52						0		0		
31012000	53						0		0		
31012000	54						0		0		
31012000	55						0		0		
31012000	56						0		0		
31012000	57						0		0		
31012000	58						0		0		
31012000	59						0		0		
31012000	60						0		0		

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish
31012000	61						0		0		
31012000	62						0		0		
31012000	63						0		0		
31012000	64						0		0		
1022000	65						2		0		
1022000	66						1		0		
1022000	67						0		0		
1022000	68						0		0		
1022000	69						0		0		
1022000	70						1		0		
1022000	71						1		0		
1022000	72						5		0		
1022000	73						4		0		
1022000	74						0		0		
1022000	75						0		0		
1022000	76						0		0		
1022000	77						1		0		
1022000	78						0		0		
1022000	79						0		0		
1022000	80						0		0		
1022000	81						2		0		
1022000	82						1		0		
1022000	83						0		0		
1022000	84						1		0		
1022000	85						1		0		
1022000	86						1		0		
1022000	87						6		0		
1022000	88						0		0		
1022000	89						0		0		
1022000	90						0		0		
1022000	91						0		0		
1022000	92						0		2		
2022000	93						7		0		
2022000	94						5		2		
2022000	95						2		1		
2022000	96						1		0		
2022000	97						0		0		

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish
2022000	98						3		1		
2022000	99						2		0		
2022000	100						2		0		
2022000	101						1		0		
2022000	102						1		0		
2022000	103						1		0		
2022000	104						0		0		
2022000	105						0		0		
2022000	106						0		0		
2022000	107						0		1		
2022000	108						0		0		
2022000	109						0		0		
2022000	110						0		0		
2022000	111						0		0		
2022000	112						0		0		
2022000	113						0		0		
2022000	114						0		0		
2022000	115						0		0		
2022000	116						0		0		
2022000	117						2		0		
2022000	118						0		0		
2022000	119						4		0		
2022000	120						0		0		
2022000	121						0		0		
2022000	122						0		0		
3022000	123						3		0		
3022000	124					P	0		0		
3022000	125						1		0		
3022000	126						1		0		
3022000	127						1		0		
3022000	128						5		0		
3022000	129						0		0		
3022000	130						0		0		
3022000	131						4		0		
3022000	132						0		0		
3022000	133						6		0		
3022000	134						2		0		

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish
3022000	135						0		0		
3022000	136						0		0		
4022000	137						0		0		
4022000	138						0	1	0		
4022000	139						2		0		
4022000	140						2		0		
4022000	141						7		0		
3021999	1						0				
3021999	2						2				
3021999	3						0				
3021999	4						1				
3021999	5						0				
3021999	6						1				
3021999	7						0				
3021999	8						0				
3021999	9						3				
3021999	10						0				
3021999	11						0				
3021999	12						0				
4021999	13						0				
4021999	14						0				
4021999	15						0				
4021999	16						0				
4021999	17						0				
4021999	18						0				
4021999	19						0				
4021999	20						0				
4021999	21						2				
4021999	22						0				
4021999	23						3				
4021999	24						0				
4021999	25						0				
4021999	26						0				
4021999	27						0				
4021999	28						0				
4021999	29						0				
4021999	30						0				

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish	
4021999	31						0					
4021999	32						0					
4021999	33						0					
4021999	34						0					
4021999	35						0					
4021999	36						0					
4021999	37						0					
4021999	38						5					
4021999	39						0					
4021999	40						0					
4021999	41						0					
4021999	42						59					
4021999	43						2					
4021999	44						0		1			
4021999	45						0					
4021999	46						0					
4021999	47						0					
4021999	48						0					
5021999	49						0					712
5021999	50						0					
5021999	51						0					
5021999	52						0					
5021999	53						0					
5021999	54						0					
5021999	55						0					
5021999	56						0					
5021999	57						0					
5021999	58						0					
5021999	59						0					
5021999	60						2					
5021999	61						0					
5021999	62						0					
5021999	63						0					
5021999	64						0					
6021999	65						0					
6021999	66						0					
6021999	67						0					

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish	
6021999	68						0					
6021999	69						0					
6021999	70						0					
6021999	71						0					
6021999	72						21					
6021999	73						1					
6021999	74						1					
6021999	75						11					
6021999	76						1					
6021999	77						3					
6021999	78						12					
6021999	79						0					
6021999	80						15					
6021999	81						0					
6021999	82						6					
6021999	83						0					
6021999	84						0					
6021999	85						0					
6021999	86						0					713
6021999	87						0					
7021999	88						1					
7021999	89						3					
7021999	90						5					
7021999	91						49					
7021999	92						27					
7021999	93						11					
7021999	94						0					
7021999	95						0					
7021999	96						0					
7021999	97						0					
7021999	98						0		1			
7021999	99						0					
7021999	100						0					
7021999	101						2					
7021999	102						1					
7021999	103						0					
7021999	104						0					

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish
7021999	105						0				
7021999	106						0				
7021999	107						33				
7021999	108						2				
7021999	109						0				
7021999	110						0				
7021999	111						0				
7021999	112						3				
7021999	113						4				
7021999	114						55				
7021999	115						0				
7021999	116						0				
8021999	117						7				
8021999	118						9				
8021999	119						6				
8021999	120						3				
8021999	121						15				
8021999	122						14				
8021999	123						10				
8021999	124						0				
8021999	125						0				
8021999	126						0				
8021999	127						0				
8021999	128						0				
8021999	129						0				
8021999	130						0				
8021999	131						0				
8021999	132						0				
8021999	133						0				
8021999	134						0				
8021999	135						0				
8021999	136						0				
8021999	137						0				
8021999	138						2				
8021999	139						2				
8021999	140						0				
8021999	141						0				

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish
8021999	142						0				
8021999	143						0				
8021999	144						0				
8021999	145						0				
8021999	146						0				
16011998	1										
17011998	2										
17011998	3										
17011998	4	1	P								
17011998	5										
17011998	6										
17011998	7		2								
17011998	8										
17011998	9										
17011998	10						P				
17011998	11										
18011998	12						P				
18011998	13										
18011998	14										
18011998	15						P				
18011998	16										
18011998	17										
18011998	18										
18011998	19										
18011998	20										
18011998	21										
18011998	22										
18011998	23										
18011998	24						5				
18011998	25						P				
19011998	26						P				
19011998	27						P				
19011998	28										
19011998	29						P		1		
19011998	30						1				
20011998	31										
20011998	32						P				

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish
20011998	33						P				
20011998	34										
20011998	35										
21011998	36										
21011998	37						1				
21011998	38										
21011998	39										
21011998	40										
21011998	41										
21011998	42										
21011998	43										
21011998	44						1				
21011998	45										
21011998	46						P				
21011998	47										
21011998	48										
21011998	49										
22011998	50										
22011998	51										
22011998	52										
22011998	53										
22011998	54										
22011998	55										
22011998	56										
22011998	57										
22011998	58										
22011998	59										
22011998	60						2				
22011998	61										
22011998	62						2				
22011998	63										
22011998	64										
1021997	1										
2021997	2						13				
2021997	3						10				
2021997	4										
2021997	5						12				

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish	
2021997	6						51					
2021997	7						46					
2021997	8						10					
2021997	9						3					
2021997	10						1					
2021997	11											
2021997	12						3					
2021997	13											
2021997	14											
2021997	15						1					
2021997	16						8					
2021997	17											
2021997	18											
2021997	19											
2021997	20											
2021997	21											
2021997	22											
2021997	23											
2021997	24											717
2021997	25											
2021997	26											
2021997	27											
2021997	28											
3021997	29						1					
3021997	30											
3021997	31								1			
3021997	32											
3021997	33											
3021997	34											
3021997	35											
3021997	36											
3021997	37											
3021997	38											
3021997	39											
3021997	40						1					
3021997	41											
3021997	42											

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish	
3021997	43											
3021997	44						1					
3021997	45											
3021997	46						1					
3021997	47						5					
3021997	48						23					
3021997	49											
3021997	50						8					
3021997	51											
3021997	52											
3021997	53						2					
3021997	54											
4021997	55											
4021997	56											
4021997	57						6					
4021997	58						3					
4021997	59						2					
4021997	60								1			
4021997	61						1					718
4021997	62											
4021997	63											
4021997	64											
4021997	65											
4021997	66						1					
4021997	67											
4021997	68						1					
4021997	69											
4021997	70											
4021997	71											
4021997	72						1					
4021997	73											
4021997	74											
4021997	75											
4021997	76											
4021997	77											
4021997	78											
4021997	79											

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish
5021997	80										
5021997	81						4				
5021997	82										
5021997	83										
5021997	84										
5021997	85										
5021997	86										
5021997	87										
5021997	88						6				
5021997	89						19				
5021997	90						3				
5021997	91						1				
5021997	92						1				
5021997	93										
5021997	94										
5021997	95						5				
5021997	96										
5021997	97										
5021997	98						3				
5021997	99						6				
5021997	100						18				
5021997	101						3				
5021997	102										
5021997	103										
5021997	104										
5021997	105										
6021997	106						1				
6021997	107						2				
6021997	108						1				
6021997	109								1		
6021997	110						2				
6021997	111						6				
6021997	112								1		
6021997	113						4				
6021997	114						2				
6021997	115										
6021997	116						1				

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish
6021997	117										
6021997	118										
6021997	119						1				
6021997	120						2				
6021997	121						2				
6021997	122						7				
6021997	123										
6021997	124										
6021997	125						1		1		
6021997	126		P								
6021997	127		P								
6021997	128										
6021997	129										
6021997	130										
6021997	131										
23011996	1								0		
23011996	2								0		
23011996	3				P				0		
23011996	4				P				0		
24011996	5								0		
24011996	6								0		
24011996	7				P				0		
24011996	8								0		
24011996	9								0		
24011996	10								0		
24011996	11								0		
24011996	12								0		
24011996	13								0		
24011996	14								0		
24011996	15								0		
24011996	16								0		
24011996	17								1		
24011996	18								1		
24011996	19								0		
24011996	20								1		
24011996	21								0		
24011996	22								0		

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish	
24011996	23								1			
24011996	24								0			
24011996	25								0			
24011996	26								0			
24011996	27								1			
24011996	28								0			
24011996	29								0			
24011996	30								0			
24011996	31								0			
25011996	32	P							0			
25011996	33								0			
25011996	34	P							0			
25011996	35	P					P		0			
25011996	36								0			
25011996	37								1			
25011996	38								2			
25011996	39								1			
25011996	40								0			
25011996	41								2			721
25011996	42	P							0			
25011996	43								0			
7021996	44	P							0			
7021996	45	P			P		P		0		P	
7021996	46	P			P		P	P	0			
7021996	47								0			
7021996	48						P		0			
7021996	49								0			
7021996	50								0			
7021996	51								0			
7021996	52								0			
7021996	53								0			
7021996	54								0			
7021996	55								0			
7021996	56								0			
7021996	57								0			
7021996	58								0			
7021996	59								0			

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish	
7021996	60								0			
7021996	61								0			
7021996	62								0			
7021996	63								0			
7021996	64								0			
8021996	65								0			
8021996	66								0			
8021996	67								0			
8021996	68								0			
8021996	69		P						0			
8021996	70								0			
8021996	71								0			
8021996	72								0			
8021996	73								0			
8021996	74								0			
8021996	75								0			
8021996	76								0			
8021996	77								0			
8021996	78								0			722
8021996	79								0			
8021996	80								0			
8021996	81								0			
8021996	82								0			
8021996	83								0			
8021996	84								0			
8021996	85								0			
8021996	86								0			
8021996	87								0			
8021996	88								0			
8021996	89								0			
8021996	90								0			
8021996	91								0			
9021996	92								0			
9021996	93	P					P		0			
9021996	94	P							0	P		
9021996	95								0			
9021996	96								0			

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish
9021996	97								0		
9021996	98								0		
9021996	99								0		
9021996	100	P							0		
9021996	101								0		
9021996	102								0		
9021996	103								0		
9021996	104								0		
9021996	105								1		
9021996	106								0		
9021996	107								0		
9021996	108								0		
9021996	109								1		
9021996	110								1		
9021996	111								0		
9021996	112								0		
9021996	113								0		
9021996	114								0		
9021996	115								0		
9021996	116								0		
9021996	117	P				P			0		
10021996	118								0		
10021996	119								0		
10021996	120								0		
10021996	121								0		
10021996	122								0		
10021996	123								0		
10021996	124								0		
10021996	125								0		
10021996	126								0		
10021996	127								1		
10021996	128								0		
10021996	129								0		
10021996	130								0		
10021996	131								0		
10021996	132								0		
10021996	133								0		

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish
10021996	134								0		
10021996	135								0		
10021996	136								0		
10021996	137								0		
10021996	138	P							0		
10021996	139		P						0		
10021996	140		P						0		
11021996	141								0		
11021996	142								0		
11021996	143								0		
11021996	144								0		
11021996	145								0		
11021996	146						P		0		
11021996	147								0		
11021996	148								0		
11021996	149								0		
11021996	150								0		
11021996	151								0		
11021996	152								0		
11021996	153								0		
11021996	154								0		
11021996	155								0		
11021996	156								0		
11021996	157								0		
11021996	158								0		
11021996	159								0		
11021996	160								0		
11021996	161								0		
11021996	162								0		
11021996	163								0		
11021996	164								0		
11021996	165								0		
11021996	166								0		
11021996	167								0		
11021996	168								0		
11021996	169								0		
11021996	170								0		

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish
11021996	171								0		
11021996	172								0		
11021996	173								0		
11021996	174								0		
11021996	175								0		
11021996	176								0		
12021996	177								0		
12021996	178								0		
12021996	179								0		
12021996	180								0		
12021996	181								0		
12021996	182								0		
12021996	183								0		
12021996	184								0		
12021996	185								0		
12021996	186								0		
12021996	187								0		
12021996	188								0		
12021996	189								0		
12021996	190				P				0		
12021996	191								0		
12021996	192								0		
12021996	193								0		
12021996	194								0		
12021996	195								0		
12021996	196								0		
12021996	197								0		
12021996	198								0		
12021996	199								0		
12021996	200								0		
12021996	201								0		
12021996	202								0		
12021996	203								0		
12021996	204								0		
24011995	1										
25011995	2						1				
25011995	3						2				

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish
25011995	4										
25011995	5										
25011995	6						1				
25011995	7						2				
25011995	8										
25011995	9										
25011995	10						1				
25011995	11										
25011995	12						2				
25011995	13										
25011995	14										
25011995	15										
26011995	16										
26011995	17										
26011995	18						1				
26011995	19						3				
26011995	20										
26011995	21										
26011995	22										
26011995	23										
26011995	24										
26011995	25						2				
26011995	26						1				
26011995	27						1				
26011995	28						1				
26011995	29						3				
26011995	30										
27011995	31										
27011995	32										
27011995	33										
27011995	34										
27011995	35										
27011995	36										
27011995	37										
27011995	38										
27011995	41						7				
27011995	42						2				

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish	
27011995	43						1					
27011995	44						5					
27011995	45						1					
27011995	46						1					
28011995	47											
28011995	48						1					
28011995	49											
28011995	50						1					
28011995	51						1					
28011995	52						2					
28011995	53						7					
28011995	54						1					
28011995	55						7					
28011995	56											
28011995	57											
28011995	58											
28011995	59											
22011994	1				P					P		
22011994	2											727
22011994	3											
22011994	4											
22011994	5											
22011994	6	P					1					
22011994	7								1			
22011994	8											
22011994	9											
22011994	10											
22011994	11											
22011994	12											
22011994	13						1					
22011994	14											
22011994	15											
22011994	16								1			
22011994	17	P							1			
22011994	18											
22011994	19											
22011994	20											

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish	
22011994	21											
22011994	22											
22011994	23											
22011994	24											
23011994	25											
23011994	26											
23011994	27											
23011994	28											
23011994	29						1					
23011994	30											
23011994	31											
23011994	32											
23011994	33											
23011994	34											
23011994	35											
23011994	36											
23011994	37											
23011994	38											
23011994	39											728
23011994	40											
23011994	41											
23011994	42											
23011994	43											
23011994	44								1			
23011994	45											
23011994	46								1			
23011994	47											
23011994	48											
23011994	49											
24011994	50											
24011994	51						1					
24011994	52						1					
24011994	53											
24011994	54											
24011994	55						12					
24011994	56						1					
24011994	57											

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish	
24011994	58											
24011994	59											
24011994	60											
24011994	61											
24011994	62											
24011994	63											
24011994	64											
24011994	65											
24011994	66	P										
24011994	67											
24011994	68	P										
24011994	69						1					
24011994	70											
24011994	71											
24011994	72											
24011994	73											
25011994	74											
25011994	75								1			
25011994	76											729
25011994	77											
25011994	78											
25011994	79											
25011994	80						1					
25011994	81											
25011994	82						1					
25011994	83											
25011994	84											
25011994	85											
25011994	86											
25011994	87											
25011994	88											
25011994	89											
25011994	90		P									
25011994	91											
25011994	92											
25011994	93											
25011994	94		P									

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish
25011994	95		P				3				
25011994	96						29				
2021993	1										
3021993	2										
3021993	3	P					1				
3021993	4										
3021993	5										
3021993	6										
4021993	7										
4021993	8										
4021993	9										
4021993	10										
4021993	11										
4021993	12										
4021993	13										
4021993	14										
4021993	15										
4021993	16										
5021993	17										
5021993	18										
5021993	19										
5021993	20										
5021993	21										
5021993	22										
5021993	23										
5021993	24										
5021993	25										
5021993	26										
5021993	27										
5021993	28										
5021993	29										
6021993	30										
6021993	31										
6021993	32										
6021993	33										
6021993	34										
6021993	35										

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish
6021993	36										
6021993	37										
6021993	38										
6021993	39										
7021993	40										
7021993	41										
7021993	42										
7021993	43										
7021993	44										
7021993	45										
7021993	46										
7021993	47										
7021993	48										
7021993	49										
7021993	50										
7021993	51										
7021993	52										
8021993	53										
8021993	54										
8021993	55										
18011992	1								0		
18011992	2								0		
18011992	3	P			P				0	P	
18011992	4						5		0	P	
18011992	5								0		
18011992	6								0		
18011992	7								0		
18011992	8								0		
18011992	9								0		
18011992	10								0		
18011992	11								0		
18011992	12								0		
18011992	13								0		
18011992	14								0		
18011992	15				P				0		
18011992	16								0		
18011992	17								0		

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish
18011992	18						P		0		
18011992	19								0		
18011992	20								0		
18011992	21								0		
18011992	22								0		
18011992	23								0		
18011992	24								0		
18011992	25								0		
18011992	26								0		
18011992	27								0		
18011992	28								0		
18011992	29								0		
18011992	30								0		
18011992	31								0		
18011992	32								0		
18011992	33								0		
18011992	34								0		
18011992	35								0		
18011992	36								0		
18011992	37								0		
18011992	38								3		
18011992	39								0		
18011992	40								0		
18011992	41								0		
18011992	42								0		
18011992	43								0		
18011992	44								0		
18011992	45								1		
18011992	46								0		
18011992	47								0		
18011992	48								2		
18011992	49								0		
18011992	50								0		
18011992	51								0		
18011992	52								0		
18011992	53								0		
24011991	1						8		0		

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish
24011991	2						35		0	P	
24011991	3						13		0		
24011991	4								0		
24011991	5						P		0		
24011991	6						P		0		
24011991	7								0	P	
24011991	8						3		0		
24011991	9								0		
24011991	10								0		
24011991	11								0		
24011991	12						7		0		
24011991	13						9		0		
24011991	14	P							0		
24011991	15	P							1		
24011991	16								0		
24011991	17								0		
24011991	18						2		0		
25011991	19	P			P				0	P	
25011991	20	P			P				0		
25011991	21				P		2		0		
25011991	22	P					P		0		
25011991	23								0		
25011991	24	P	P						0		
25011991	25								0		
25011991	26		P						0		
25011991	27						3		0		
25011991	28						2		0		
25011991	29		P				1		0		
25011991	30		P				2		0		
25011991	31		P						0		
25011991	32		P						0		
26011991	33	P					2		0		
26011991	34	P					10		0		
26011991	35	P					8		0		
26011991	36	P					2		0		
26011991	37						2		0		
26011991	38						4		0		

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish
26011991	39						13		0		
26011991	40								0		
26011991	41								0		
26011991	42	P			P				0		
26011991	43	P					2		0		
26011991	44	P			P				0		
26011991	45				P				0		
26011991	46	P			P		1		0		
26011991	47	P			P				0		
26011991	48								0		
26011991	49								0		
26011991	50								0		
26011991	51								0		
26011991	52								0		
26011991	53								0		
26011991	54								0		
27011991	55								0		
27011991	56						2		0		
27011991	57								0		
27011991	58								0		
27011991	59								0		
27011991	60								0		
27011991	61								0		
27011991	62								0		
27011991	63								0		
27011991	64								0		
27011991	65	P					1		0		
27011991	66	P							0		
27011991	67	P					2		0		
27011991	68	P							0		
27011991	69								0		
27011991	70								0		
27011991	71								0		
27011991	72								0		
27011991	73								0		
27011991	74						1		0		
27011991	75						5		0		

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish
28011991	76	P					P		0		
28011991	77	P					2		0		
28011991	78	P							0		
28011991	79	P					P		0		
28011991	80	P					P		0		
28011991	81								0		
28011991	82								0		
28011991	83								0		
28011991	84						2		0		
28011991	85						1		0		
28011991	86								0		
28011991	87								0		
28011991	88								0		
28011991	89	P							0		
28011991	90	P			P				0		
28011991	91	P			P				0		
28011991	92	P					1		0		
28011991	93	P					P		0		
28011991	94								0		
28011991	95						17		0		
28011991	96						12		0		
28011991	97						14		0		
28011991	98						12		0		
28011991	99						11		1		
28011991	100				P		2		0		
29011991	101				P		6		0		
29011991	102		P				28		0		
29011991	103				P		12		0		
29011991	104		P		P		44		0		
29011991	105				P		10		0		
29011991	106								0		
29011991	107								0		
29011991	108								0		
29011991	109								0		
29011991	110						23		0		
29011991	111						42		0		
29011991	112						84		0		

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish
29011991	113						47		0		
29011991	114		P				70		0		
29011991	115		P				60		0		
29011991	116						73		0		
29011991	117								0		
29011991	118								0		
29011991	119								0		
29011991	120								0		
29011991	121						81		0		
29011991	122								0		
29011991	123								0		
30011991	124								0		
30011991	125						5		0		
30011991	126						2		0		
30011991	127								0		
30011991	128								0		
30011991	129								0		
30011991	130								0		
30011991	131								0		
30011991	132								0		
30011991	133								0		
30011991	134								0		
30011991	135	P							0		
30011991	136		P		P				0		
30011991	137				P		5		0		
30011991	138								0		
30011991	139								0		
30011991	140						3		0		
30011991	141								0		
30011991	142						2		0		
30011991	143								0		
30011991	144								0		
31011991	145						1		0		
31011991	146								0	P	
31011991	147	P			P				0		
31011991	148								0		
31011991	149						1		0		

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish
31011991	150						1		0		
31011991	151						1		0		
31011991	152								0		
31011991	153								0		
31011991	154								1		
31011991	155								0		
31011991	156								0		
31011991	157								0		
31011991	158								0		
31011991	159					P	5		0		
31011991	160	P							0		
31011991	161	P			P				0		
31011991	162				P				0		
1021991	163						1		0		
1021991	164						5		0		
1021991	165								0		
1021991	166								0		
1021991	167						0		0		
1021991	168						6		0		
1021991	169						8		0		
1021991	170						4		0		
1021991	171								0		
1021991	172								0		
1021991	173								0		
1021991	174								0		
1021991	175								0		
1021991	176								0		
1021991	177								0		
1021991	178								0		
1021991	179								0		
1021991	180								0		
17011990	1	100			P				0		
17011990	2								0	P	
17011990	3		60						0	P	
17011990	4	P							0		
17011990	5								0		
17011990	6				P				0		

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish
18011990	7	P							0		
18011990	8								0		
18011990	9								0		
18011990	10								0		
18011990	11								0		
18011990	12								0		
18011990	13								0		
18011990	14								0		
18011990	15								0		
18011990	16								0		
18011990	17								0		
18011990	18								0		
19011990	19								0		
19011990	20								0		
19011990	21				P				0		
19011990	22								0		
19011990	23								0		
19011990	24								1		
19011990	25								2		
19011990	26								2		
19011990	27								0		
20011990	28								0		
20011990	29								1		
20011990	30								0		
20011990	31								0		
20011990	32								0		
20011990	33								0		
20011990	34								0		
20011990	35	P							0		
20011990	36								0		
20011990	37								0		
21011990	38								0		
21011990	39								0		
21011990	40								0		
21011990	41								1		
21011990	42								1		
21011990	43								1		

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish
21011990	44								1		
21011990	45								0		
21011990	46								0		
21011990	47								0		
21011990	48								0		
21011990	49								0		
21011990	50								0		
21011990	51								0		
22011990	52								0		
22011990	53								0		
22011990	54								0		
22011990	55								0		
22011990	56								0		
22011990	57								0		
22011990	58								0		
22011990	59								0		
22011990	60								0		
22011990	61								0		
23011990	62								0		
23011990	63								0		
23011990	64								0		
23011990	65								0		
23011990	66								0		
23011990	67				P				0		
23011990	68								0		
24011990	69								0		
24011990	70								0		
24011990	71								0		
24011990	72								0		
24011990	73								0		
24011990	74				P				0		
24011990	75								0		
24011990	76								0		
24011990	77								0		
16011989	1										
16011989	2										
16011989	3		P		P		P			P	

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Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish
16011989	4	P								P	
16011989	5										
16011989	6	P	P			P				P	
16011989	7						4				
16011989	8										
16011989	9										
16011989	10										
16011989	11										
16011989	12									P	
16011989	13									P	
16011989	14										
16011989	15										
16011989	16										
17011989	17	P									
17011989	18	P									
17011989	19										
17011989	20										
17011989	21									P	
17011989	22										
17011989	23										
17011989	24										
17011989	25										
17011989	26										
17011989	27										
17011989	28										
17011989	29										
17011989	30										
17011989	31					P					
17011989	32										
17011989	33										
17011989	34										
17011989	35										
17011989	36										
17011989	37										
18011989	38										
18011989	39										
18011989	40										

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish
18011989	41										
18011989	42										
18011989	43										
18011989	44										
18011989	45										
18011989	46					P					
18011989	47										
18011989	48										
18011989	49										
18011989	50										
18011989	51										
18011989	52										
18011989	53										
18011989	54										
18011989	55										
18011989	56										
18011989	57										
18011989	58										
18011989	59										
18011989	60										
18011989	61										
18011989	62										
18011989	63										
18011989	64										
18011989	65										
18011989	66					P					
18011989	67										
19011989	68										
19011989	69										
19011989	70										
19011989	71										
19011989	72										
19011989	73								1		
19011989	74										
19011989	75										
19011989	76										
19011989	77										

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Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish
19011989	78										
19011989	79										
19011989	80										
19011989	81										
19011989	82										
19011989	83										
19011989	84										
19011989	85										
19011989	86										
19011989	87										
19011989	88										
19011989	89										
19011989	90										
19011989	91										
19011989	92										
19011989	93										
19011989	94										
19011989	95										
20011989	96										
20011989	97										
20011989	99										
20011989	100										
20011989	101										
20011989	102										
20011989	103										
20011989	104										
20011989	105										
20011989	106										
20011989	107										
20011989	108										
20011989	109										
20011989	110										
20011989	111										
20011989	112										
20011989	113										
20011989	114										
20011989	115										

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish
20011989	116										
20011989	117										
20011989	118										
20011989	119										
20011989	120										
20011989	121										
20011989	122								1		
20011989	123										
20011989	124										
20011989	125		P								
20011989	126		P								
20011989	127		P								
20011989	128										
20011989	129										
21011989	130										
21011989	131										
21011989	132										
21011989	133										
21011989	134										
21011989	135										
21011989	136										
21011989	137										
21011989	138										
21011989	139										
21011989	140										
21011989	141						P				
21011989	142										
21011989	143										
21011989	144										
21011989	145										
21011989	146										
21011989	147										
21011989	148										
21011989	149										
21011989	150										
21011989	151										
21011989	152									P	

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish
22011989	153										
22011989	154										
22011989	155										
22011989	156										
22011989	157										
22011989	158										
22011989	159										
22011989	160										
22011989	161										
22011989	162										
22011989	163										
22011989	164										
22011989	165										
22011989	166										
22011989	167										
22011989	168										
22011989	169										
22011989	170										
22011989	171										
22011989	172										
22011989	173						P				
22011989	174						P				
22011989	175										
22011989	176										
15011988	1	P			P				1	P	
15011988	2	P			P						
15011988	3										
15011988	4										
15011988	5	P			P					P	
15011988	6										
15011988	7	P			P						
15011988	8										
15011988	9	P			P						
15011988	10	P			P						
15011988	11	P								P	
15011988	12	P			P		P		1	P	
15011988	13	P			P		P			P	

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish
15011988	14	P									
16011988	15	P			P						
16011988	16	P			P						
16011988	17	P			P						
16011988	18				P					P	
16011988	19				P						
16011988	20				P						
16011988	21				P					P	
16011988	22				P					P	
16011988	23				P					P	
16011988	24				P					P	
16011988	25										
16011988	26	P			P		P				
16011988	27				P					P	
16011988	28	P			P						
16011988	29	P			P					P	
16011988	30										
16011988	31										
16011988	32										
17011988	33										
17011988	34										
17011988	35										
17011988	36										
17011988	37										
17011988	38										
17011988	39	P			P					P	
17011988	40	P								P	
17011988	41	P			P		P			P	
17011988	42										
17011988	43										
17011988	44										
17011988	45										
17011988	46										
17011988	47								1		
17011988	48										
17011988	49										
17011988	50										

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish
17011988	51										
17011988	52										
17011988	53										
17011988	54									P	
17011988	55									P	
17011988	56										
17011988	57										
17011988	58										
17011988	59										
17011988	60										
17011988	61										
18011988	62										
18011988	63										
18011988	64										
18011988	65										
18011988	66										
18011988	67										
18011988	68								1		
18011988	69										
18011988	70										
18011988	71										
18011988	72										
18011988	73										
18011988	74										
18011988	75										
18011988	76										
18011988	77										
18011988	78								1		
18011988	79								1		
18011988	80										
18011988	81										
18011988	82										
18011988	83										
18011988	84										
18011988	85										
18011988	86										
18011988	87										

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish
18011988	88										
18011988	89								1		
18011988	90										
18011988	91										
19011988	92										
19011988	93										
19011988	94										
19011988	95										
19011988	96										
19011988	97								1		
19011988	98										
19011988	99										
19011988	100										
19011988	101										
19011988	102										
19011988	103										
19011988	104										
19011988	105										
19011988	106										
19011988	107										
19011988	108								1		
19011988	109										
19011988	110										
19011988	111										
19011988	112										
19011988	113										
19011988	114										
19011988	115										
19011988	116										
19011988	117										
19011988	118								1		
19011988	119										
19011988	120										
20011988	121										
20011988	122										
20011988	123										
20011988	124										

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish
20011988	125										
20011988	126										
20011988	127										
20011988	128										
20011988	129										
20011988	130										
20011988	131								1		
20011988	132										
20011988	133										
20011988	134										
20011988	135								1		
20011988	136								1		
20011988	137										
20011988	138										
20011988	139										
20011988	140										
20011988	141										
20011988	142										
20011988	143										
20011988	144										
20011988	145										
20011988	146										
20011988	147										
20011988	148										
20011988	149										
21011988	150								1		
21011988	151										
21011988	152										
21011988	153										
21011988	154										
21011988	155										
21011988	156										
21011988	157										
21011988	158										
21011988	159										
21011988	160										
21011988	161										

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish
21011988	162										
21011988	163								1		
22011988	164										
22011988	165										
22011988	166										
22011988	167										
22011988	168										
22011988	169		P								
22011988	170		P								
22011988	171										
22011988	172										
22011988	173										
22011988	174										
22011988	175										
22011988	176										
22011988	177										
23011988	178						P				
23011988	179						P				
23011988	180										
23011988	181										
23011988	182										
23011988	183									P	
23011988	184										
23011988	185										
23011988	186										
23011988	187										
23011988	188						P				
23011988	189						P				
23011988	190						P				
23011988	191						P				
23011988	192										
23011988	193										
23011988	194										
23011988	195										
23011988	196										
23011988	197										
23011988	198										

Date	Tow	Atl.Herring	Butterfish	Pigfish	Menhaden	Atl.Mackerel	Summerfl	Southernfl	Atl.sturgeon	Hake sp.	Pinfish
23011988	199										
23011988	200										

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
8012013	1	0	0	0	0	0	0
8012013	2	0	0	0	3	0	0
8012013	3	0	0	0	0	0	0
8012013	4	0	0	0	0	0	0
8012013	5	0	0	1	0	0	0
8012013	6	0	0	0	0	0	0
8012013	7	0	0	1	0	0	0
8012013	8	0	0	2	0	0	0
8012013	9	0	0	1	0	0	0
8012013	10	0	0	1	0	0	0
8012013	11	0	0	0	0	0	0
8012013	12	0	0	1	0	0	0
8012013	13	0	0	0	0	0	0
8012013	14	0	0	1	0	0	0
8012013	15	0	0	0	0	0	0
8012013	16	0	0	0	0	0	0
8012013	17	0	0	0	0	0	0
9012013	18	0	0	0	0	0	0
9012013	19	0	0	2	0	0	0
9012013	20	0	0	1	0	0	0
9012013	21	0	0	1	0	0	0
9012013	22	0	0	2	0	0	0
9012013	23	0	0	0	0	0	0
9012013	24	0	0	0	0	0	0
9012013	25	0	0	3	0	0	0
9012013	26	0	0	1	0	0	0
9012013	27	0	0	0	0	0	0
9012013	28	0	0	0	0	0	0
9012013	29	0	0	0	0	0	0
9012013	30	0	0	0	0	0	0
9012013	31	0	0	0	0	0	0
9012013	32	0	0	0	0	0	0
9012013	33	0	0	0	0	0	0
9012013	34	0	0	0	0	0	0
9012013	35	0	0	0	0	0	0
9012013	36	0	0	2	0	0	0
9012013	37	0	0	0	0	0	0

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
9012013	38	0	0	0	0	0	0
9012013	39	0	0	0	0	0	0
9012013	40	0	0	1	0	0	0
9012013	41	0	0	1	0	0	0
9012013	42	0	0	0	0	0	0
9012013	43	0	0	0	0	0	0
9012013	44	0	0	0	0	0	0
9012013	45	0	0	2	0	0	0
9012013	46	0	0	1	0	0	0
9012013	47	0	0	3	0	0	0
9012013	48	0	0	0	0	0	0
9012013	49	0	0	0	0	0	0
9012013	50	0	0	0	0	0	0
9012013	51	0	0	0	0	0	0
10012013	53	0	0	1	0	0	0
10012013	54	0	0	0	0	1	0
10012013	55	0	0	0	0	0	0
10012013	56	0	0	0	0	0	0
10012013	57	0	0	0	0	0	0
10012013	58	0	0	1	0	0	0
10012013	59	0	0	0	0	0	0
10012013	60	0	0	0	0	0	0
10012013	61	0	0	0	0	0	0
10012013	62	0	0	1	0	0	0
10012013	63	0	0	1	0	0	0
10012013	64	0	0	0	0	0	0
10012013	65	0	0	0	0	0	0
10012013	66	0	0	1	0	0	0
10012013	67	0	0	0	0	0	0
10012013	68	0	0	0	0	0	0
10012013	69	0	0	0	0	0	0
10012013	70	0	0	0	0	0	0
10012013	71	0	0	0	0	0	0
10012013	72	0	0	0	0	0	0
10012013	73	0	0	1	0	0	0
10012013	74	0	0	1	0	0	0
10012013	75	0	0	1	0	0	0

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
10012013	76	0	0	1	0	0	0
10012013	77	0	0	0	0	0	0
10012013	78	0	0	0	0	0	0
11012013	79	0	0	0	0	0	0
11012013	80	0	0	2	0	0	0
11012013	81	0	0	1	0	0	0
11012013	82	0	0	0	0	0	0
11012013	83	0	0	0	0	0	0
11012013	84	0	0	0	0	0	0
11012013	85	0	0	3	0	0	0
11012013	86	0	0	0	0	0	0
11012013	87	0	0	3	0	0	0
11012013	88	0	0	1	0	0	0
11012013	89	0	0	1	0	0	0
11012013	90	0	0	1	0	0	0
11012013	91	0	0	1	0	0	0
11012013	92	0	0	0	0	0	0
11012013	93	0	0	0	0	0	0
11012013	94	0	0	0	0	0	0
11012013	95	0	0	1	0	0	0
11012013	96	0	0	2	0	0	0
11012013	97	0	0	0	0	0	0
11012013	98	0	0	0	0	0	0
11012013	99	0	0	0	0	0	0
11012013	100	0	0	0	0	0	0
11012013	101	0	0	0	0	0	0
11012013	102	0	0	1	0	0	0
11012013	103	0	0	0	0	0	0
11012013	104	0	0	1	0	0	0
11012013	105	0	0	0	0	0	0
11012013	106	0	0	0	0	0	0
11012013	107	0	0	0	0	0	0
11012013	108	0	0	0	0	0	0
11012013	109	0	0	0	0	0	0
11012013	110	0	0	0	0	0	0
11012013	111	0	0	0	0	0	0
11012013	112	0	0	0	0	0	0

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
11012013	113	0	0	0	0	0	0
11012013	114	0	0	0	0	0	0
12012013	115	0	0	1	0	0	0
12012013	116	0	0	0	0	0	0
12012013	117	0	0	0	0	0	0
12012013	118	0	0	0	0	0	0
12012013	119	0	0	0	0	0	0
12012013	120	0	0	2	0	0	0
12012013	121	0	0	0	0	0	0
12012013	122	0	0	0	0	0	0
12012013	123	0	0	0	0	0	0
12012013	124	0	0	0	0	0	0
12012013	125	0	0	0	0	0	0
12012013	126	0	0	0	0	0	0
12012013	127	0	0	0	0	0	0
12012013	128	0	0	1	0	0	0
12012013	129	0	0	0	0	0	0
12012013	130	0	0	0	0	0	0
12012013	131	0	0	0	0	0	0
12012013	132	0	0	0	0	0	0
12012013	133	0	0	1	0	0	0
12012013	134	0	0	0	0	0	0
12012013	135	0	0	0	0	0	0
12012013	136	0	0	0	0	0	0
12012013	137	0	0	2	0	0	0
12012013	138	0	0	0	0	0	0
12012013	139	0	0	0	0	0	0
12012013	140	0	0	0	0	0	0
12012013	141	0	0	0	0	0	0
12012013	142	0	0	0	0	0	0
12012013	143	0	0	0	0	0	0
12012013	144	0	0	0	0	0	0
12012013	145	0	0	0	0	0	0
13012013	146	0	0	0	0	0	0
13012013	147	0	0	0	0	0	0
13012013	148	0	0	1	0	0	0
13012013	149	0	0	0	0	0	0

ate	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
13012013	150	0	0	0	0	0	0
13012013	151	0	0	0	0	0	1
13012013	152	0	0	0	0	0	0
13012013	153	0	0	0	0	0	0
13012013	154	0	0	0	0	0	0
13012013	155	0	0	0	0	0	0
13012013	156	0	0	0	0	0	0
13012013	157	0	0	0	0	0	0
13012013	158	0	0	1	0	0	0
13012013	159	0	0	0	0	0	0
13012013	160	0	0	2	0	0	0
13012013	161	0	0	0	0	0	0
13012013	162	0	0	0	0	0	0
13012013	163	0	0	1	0	0	0
13012013	164	0	0	0	0	0	0
13012013	165	0	0	0	0	0	0
13012013	166	0	0	0	0	0	0
13012013	167	0	0	1	0	0	0
13012013	168	0	0	1	0	0	0
13012013	169	0	0	1	0	0	0
13012013	170	0	0	0	0	0	0
13012013	171	0	0	0	0	0	0
13012013	172	0	0	1	0	0	0
13012013	173	0	0	0	0	0	0
13012013	174	0	0	3	0	0	0
13012013	175	0	0	2	0	0	0
13012013	176	0	0	3	0	0	0
14012013	177	0	0	1	0	0	0
14012013	178	0	0	1	0	0	0
14012013	179	0	0	0	0	0	0
14012013	180	0	0	0	0	0	0
14012013	181	0	0	6	0	0	0
14012013	182	0	0	3	0	0	0
14012013	183	0	0	0	0	0	0
14012013	184	0	0	0	0	0	0
14012013	185	0	0	1	0	0	0
14012013	186	0	0	0	0	0	0

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
14012013	187	0	0	1	0	0	0
14012013	188	0	0	0	0	0	0
14012013	189	0	0	2	0	0	0
14012013	190	0	0	0	0	0	0
14012013	191	0	0	0	0	0	0
14012013	192	0	0	0	0	0	0
14012013	193	0	0	1	0	0	0
14012013	194	0	0	0	0	0	0
14012013	195	0	0	1	0	0	0
14012013	196	0	0	0	0	0	0
14012013	197	0	0	1	0	0	0
14012013	198	0	0	2	0	0	0
14012013	199	0	0	1	0	0	0
14012013	200	0	0	1	0	0	0
14012013	201	0	0	2	0	0	0
14012013	202	0	0	4	0	0	0
14012013	203	0	0	2	0	0	0
14012013	204	0	0	1	0	0	0
14012013	205	0	0	1	0	0	0
14012013	206	0	0	0	0	0	0
14012013	207	0	0	0	0	0	0
14012013	208	0	0	0	0	0	0
15012013	209	0	0	0	0	0	0
15012013	210	0	0	1	0	0	0
15012013	211	0	0	1	0	0	0
15012013	212	0	0	0	0	0	0
15012013	213	0	0	1	0	0	0
15012013	214	0	0	1	0	0	0
15012013	215	0	0	0	0	0	0
15012013	216	0	0	1	0	0	0
15012013	217	1	0	1	0	0	0
15012013	218	1	0	3	0	0	0
15012013	219	0	0	0	0	0	0
15012013	220	0	0	1	0	0	0
15012013	221	0	0	0	0	0	0
15012013	222	1	0	0	0	0	0
15012013	223	0	0	0	0	0	0

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
15012013	224	0	0	0	0	0	0
15012013	225	1	0	0	0	0	0
15012013	226	0	0	0	0	0	0
16012013	227	0	0	0	0	0	0
16012013	228	0	0	1	0	0	0
16012013	229	0	0	0	0	0	0
16012013	230	0	0	0	0	0	0
16012013	231	0	0	0	0	0	0
16012013	232	0	0	0	0	0	0
16012013	233	0	0	0	0	0	0
16012013	234	0	0	0	0	0	0
16012013	235	0	0	0	0	0	0
16012013	236	0	0	0	0	0	0
16012013	237	0	0	0	0	0	0
16012013	238	0	0	0	0	0	0
16012013	239	0	0	1	0	0	0
16012013	240	0	0	0	0	0	0
16012013	241	0	0	0	0	0	0
16012013	242	0	0	0	0	0	0
16012013	243	0	0	0	0	0	0
16012013	244	0	0	0	0	0	0
16012013	245	0	0	0	0	1	0
18022010	1						
18022010	2						
18022010	3						
18022010	4						
18022010	5						
19022010	6						
19022010	7						
19022010	8						
19022010	9						
19022010	10						
19022010	11	0		0	0	0	0
19022010	12						
19022010	13						
19022010	14						
19022010	15						

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
19022010	16						
19022010	17						
19022010	18						
19022010	19						
19022010	20						
19022010	21						
19022010	22						
19022010	23						
19022010	24						
19022010	25						
19022010	26						
19022010	27						
19022010	28						
19022010	29						
19022010	30						
19022010	31						
19022010	32						
19022010	33						
19022010	34						
19022010	35						
19022010	36						
19022010	37						
19022010	38						
19022010	39						
19022010	40						
19022010	41						
19022010	42						
19022010	43						
19022010	44						
19022010	45						
19022010	46						
19022010	47						
20022010	48						
20022010	49						
20022010	50						
20022010	51						
20022010	52						

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
20022010	53						
20022010	54						
20022010	55						
20022010	56						
20022010	57						
20022010	58						
20022010	59						
20022010	60						
20022010	61						
20022010	62						
20022010	63						
20022010	64						
20022010	65						
20022010	66						
20022010	67						
20022010	68						
20022010	69						
20022010	70						
20022010	71						
20022010	72						
20022010	73						
20022010	74						
20022010	75						
20022010	76						
20022010	77						
20022010	78						
21022010	79						
21022010	80						
21022010	81						
21022010	82						
21022010	83						
21022010	84						
21022010	85						
21022010	86						
21022010	87						
21022010	88						
21022010	89						

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
21022010	90						
21022010	91						
21022010	92						
21022010	93						
21022010	94						
21022010	95						
21022010	96						
21022010	97						
21022010	98						
21022010	99						
21022010	100						
21022010	101						
21022010	102						
21022010	103			2			
21022010	104						
21022010	105						
21022010	106						
21022010	107						
21022010	108			1			
22022010	109						
22022010	110						
22022010	111						
22022010	112			1			
22022010	113						
22022010	114						
22022010	115						
22022010	116						
22022010	117						
22022010	118						
22022010	119						
22022010	120						
22022010	121						
22022010	122			1			
22022010	123						
22022010	124						
22022010	125						
22022010	126			1			

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
22022010	127						
22022010	128						
22022010	129						
22022010	130						
22022010	131						
22022010	132						
22022010	133						
22022010	134						
22022010	135						
22022010	136						
22022010	137						
22022010	138						
22022010	139						
22022010	140						
22022010	141						
22022010	142						
22022010	143						
22022010	144	1					
22022010	145						
23022010	146						
23022010	147						
23022010	148						
23022010	149						
23022010	150						
23022010	151						
23022010	152						
23022010	153			1			
23022010	154						
23022010	155						
23022010	156						
23022010	157						
23022010	158						
23022010	159						
23022010	160						
23022010	161						
23022010	162						
23022010	163						

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
23022010	164						
23022010	165						
23022010	166						
23022010	167						
23022010	168						
23022010	169						
23022010	170						
23022010	171						
23022010	172						
23022010	173						
23022010	174						
23022010	175						
23022010	176						
23022010	177						
23022010	178			1			
24022010	179						
24022010	180						
24022010	181						
24022010	182						
24022010	183						
24022010	184						
24022010	185						
24022010	186						
24022010	187						
24022010	188						
24022010	189						
24022010	190						
24022010	191						
24022010	192						
24022010	193						
24022010	194						
24022010	195						
24022010	196						
24022010	197						
24022010	198						
24022010	199						
24022010	200						

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
29012009	1						
29012009	2						
29012009	3						
29012009	4						
30012009	5						
30012009	6						
30012009	7						
30012009	8						
30012009	9						
30012009	10						
30012009	11						
30012009	12						
30012009	13						
30012009	14						
30012009	15						
30012009	16						
30012009	17						
30012009	18						
30012009	19						
30012009	20						
30012009	21						
30012009	22						
30012009	23						
30012009	24						
30012009	25						
30012009	26						
30012009	27						
30012009	28						
31012009	29						
31012009	30						
31012009	31						
31012009	32						
31012009	33						
31012009	34						
31012009	35						
31012009	36						
31012009	37						

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
31012009	38						
31012009	39						
31012009	40						
31012009	41						
31012009	42						
31012009	43						
31012009	44						
31012009	45	2	1				
31012009	46	0	0				
31012009	47	3	0				
31012009	48	0	0				
31012009	49	0	0	1			
31012009	50	0	0	0			
31012009	51	0	0	0			
31012009	52	0	0	0			
31012009	53	0	0	0			
31012009	54	0	0	0			
31012009	55	0	0	0			
31012009	56	0	0	0			
31012009	57	0	0	0			
31012009	58	0	2	0			
31012009	59	0	3	0			
1022009	60	0	0	0			
1022009	61	0	0	1			
1022009	62	0	0	0			
1022009	63	0	0	0			
1022009	64	0	0	0			
1022009	65	0	0	0			
1022009	66	0	0	0			
1022009	67	0	0	0			
1022009	68	0	0	0			
1022009	69						
1022009	70						
1022009	71	0	0	1			
1022009	72	0	0	1			
1022009	73	0	0	0			
1022009	74	0	0	0			

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
2022009	75	0	0	0			
2022009	76	0	1	0			
2022009	77	0	0	1			
2022009	78	0	0	0			
2022009	79	0	0	0			
2022009	80	0	0	0			
2022009	81	0	0	0			
2022009	82	0	0	0			
2022009	83	0	0	0			
2022009	84	0	0	0			
2022009	85	0	0	0			
2022009	86	0	0	0			
2022009	87	0	0	0			
2022009	88	0	0	0			
2022009	89	0	0	0			
2022009	90	0	0	0			
2022009	91	0	0	0			
2022009	92	0	0	0			
2022009	93	0	0	0			
2022009	94	0	1	0			
2022009	95	0	0	0			
3022009	96	0	0	0			
3022009	97	0	0	0			
3022009	98	0	0	0			
3022009	99	0	0	1			
3022009	100	0	0	0			
3022009	101	0	0	0			
3022009	102	0	0	0			
3022009	103	0	0	0			
3022009	104	0	0	0			
3022009	105	0	0	0			
3022009	106	0	0	0			
3022009	107	0	0	0			
3022009	108	0	0	0			
3022009	109	0	0	0			
3022009	110	0	0	0			
3022009	111	0	0	0			

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
3022009	112	0	0	0			
3022009	113	0	0	0			
3022009	114	0	0	0			
3022009	115	0	0	0			
3022009	116	0	1	0			
3022009	117	0	0	0			
3022009	118	0	0	0			
3022009	119	0	0	0			
4022009	120	0	0	0			
4022009	121	0	0	0	1		
4022009	122	0	0	0			
4022009	123	0	0	1			
4022009	124	1	0	1			
4022009	125	0	0	0			
4022009	126	1	0	0			
4022009	127	0	0	0			
4022009	128	1	0	0			
4022009	129	0	0	0			
4022009	130	0	0	0			
4022009	131	0	0	0			
4022009	132	0	0	0			
4022009	133	0	0	0			
4022009	134	0	0	0			
4022009	135	0	0	0			
4022009	136	0	0	0			
4022009	137	0	0	0			
4022009	138	0	0	0			
4022009	139	0	0	0			
4022009	140	0	0	0			
4022009	141	0	0	1			
4022009	142	0	0	0			
4022009	143	0	0	0			
4022009	144	1	0	0			
4022009	145	0	0	0			
4022009	146	0	0	0			
4022009	147	0	0	0			
5022009	148	0	1	0			

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
5022009	149	0	0	0			
5022009	150	0	0	0			
5022009	151	0	0	0			
5022009	152	0	0	0			
5022009	153	0	0	0			
5022009	154	0	4	0			
5022009	155	0	0	0			
5022009	156	0	0	0			
5022009	157	0	0	0			
5022009	158	0	0	0			
5022009	159	0	0	0			
5022009	160	0	0	0			
5022009	161	0	0	0			
5022009	162	0	0	0			
5022009	163	0	0	0			
5022009	164	0	1	0			
5022009	165	0	0	0			
5022009	166	0	0	0			
5022009	167	0	0	0			
5022009	168	0	0	0			
5022009	169	0	0	0			
5022009	170	0	0	1			
5022009	171	0	0	0			
5022009	172	0	0	0			
5022009	173	0	0	0			
5022009	174	0	0	0			
5022009	175	0	0	0			
6022009	176	0	0	0			
6022009	177	0	0	1			
6022009	178	0	0	1			
6022009	179	0	0	0			
6022009	180	0	0	0			
6022009	181	0	0	0			
6022009	182	0	0	0			
6022009	183	0	0	0	0	0	
6022009	184	0	0	0			
6022009	185	0	0	0			

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
6022009	186	0	0	0			
6022009	187	0	0	0			
6022009	188	0	0	0			
6022009	189	0	0	0			
6022009	190	0	0	0			
6022009	191	0	0	0			
6022009	192	0	0	0			
6022009	193	0	0	0		1	1
6022009	194	0	0	0			
6022009	195	0	0	0			
6022009	196	0	0	0			
6022009	197	0	0	0			
6022009	198	0	0	1			
6022009	199	0	0	0			
6022009	200	0	0	1		15	
6022009	201	0	0	0			
6022009	202	0	0	0	0	0	0
6022009	203	0	0	0	0	0	0
6022009	204	0	0	0	0	0	0
6022009	205	0	0	0	0	0	0
7022009	206	0	0	0	0	0	0
7022009	207	0	0	0	0	0	0
7022009	208	0	0	1	0	0	1
7022009	209	0	0	0	0	0	0
7022009	210	0	0	0	0	0	0
15012008	1	0		0	0	0	0
15012008	2	0		1	0	0	0
15012008	3	0		1	0	0	0
15012008	4	0		0	0	0	0
15012008	5	0		0	0	0	0
15012008	6	0		0	0	0	0
15012008	7	0		0	0	0	0
15012008	8	0		0	0	0	0
15012008	9	0		0	0	0	0
15012008	10	0		0	0	0	0
15012008	11	0		0	0	0	0
15012008	12	0		0	0	1	0

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
15012008	13	1		0	0	0	0
15012008	14	0		0	0	0	0
15012008	15	0		0	0	0	0
15012008	16	0		0	0	0	0
15012008	17	0		0	1	0	0
15012008	18	6		0	0	0	0
15012008	19	3		0	0	0	0
15012008	20	50		0	1	0	0
15012008	21	0		0	0	0	0
15012008	22	0		0	3	0	0
15012008	23	1		0	0	0	0
15012008	24	0		0	0	0	0
15012008	25	0		0	0	0	0
15012008	26	0		0	0	0	0
16012008	27	25		1	0	0	0
16012008	28	0		0	0	0	0
16012008	29	0		3	0	0	0
16012008	30	0		0	0	0	0
16012008	31	0		0	0	0	0
16012008	32	0		0	0	0	0
16012008	33	0		0	0	0	0
16012008	34	0		1	0	0	0
16012008	35	0		2	0	0	0
16012008	36	0		4	0	0	0
16012008	37	0		0	0	0	0
16012008	38	0		2	0	0	0
16012008	39	0		0	0	0	0
16012008	40	0		0	0	0	0
16012008	41	0		0	0	0	0
16012008	42	0		1	0	0	0
16012008	43	0		0	0	0	0
16012008	44	0		0	0	0	0
16012008	45	0		0	0	0	0
16012008	46	0		0	0	0	0
16012008	47	0		0	0	0	0
16012008	48	0		0	0	0	0
16012008	49	0		0	0	0	0

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
16012008	50	0		0	0	0	0
16012008	51	0		0	0	0	0
16012008	52	0		0	0	0	0
16012008	53	0		0	0	0	0
16012008	54	0		0	0	0	0
16012008	55	0		0	0	0	0
16012008	56	0		1	0	0	0
16012008	57	0		6	0	0	0
16012008	58	0		0	0	0	0
16012008	59	0		0	0	0	0
16012008	60	0		1	0	0	0
16012008	61	0		1	0	0	0
17012008	62	0		0	0	0	0
17012008	63	0		0	0	0	0
17012008	64	0		0	0	0	0
17012008	65	0		0	0	0	0
17012008	66	0		0	0	0	0
17012008	67	0		0	0	0	0
17012008	68	0		0	0	0	0
17012008	69	0		0	0	0	0
17012008	70	0		0	0	0	0
17012008	71	0		0	0	0	0
17012008	72	0		0	0	0	0
17012008	73	0		2	0	0	0
17012008	74	0		0	0	0	0
17012008	75	0		0	0	0	0
17012008	76	0		0	0	0	0
17012008	77	0		0	0	0	0
17012008	78	0		0	0	0	0
17012008	79	0		0	0	0	0
17012008	80	0		0	0	0	0
17012008	81	0		0	0	0	0
17012008	82	0		0	0	0	0
17012008	83	0		0	0	0	0
17012008	84	0		0	0	0	0
17012008	85	0		0	0	0	0
17012008	86	0		0	0	0	0

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
17012008	87	0		0	0	0	1
17012008	88	0		0	0	0	0
17012008	89	0		0	0	0	0
17012008	90	0		0	0	0	0
17012008	91	0		7	0	0	0
17012008	92	0		0	0	0	0
17012008	93	0		0	0	0	0
17012008	94	0		0	0	0	0
17012008	95	0		1	0	0	0
17012008	96	0		1	0	0	0
17012008	97	0		1	0	0	0
18012008	98	0		0	0	0	0
18012008	99	0		0	0	0	0
18012008	100	0		0	0	0	0
18012008	101	0		0	0	0	0
18012008	102	0		0	0	0	0
18012008	103	0		0	0	0	0
18012008	104	0		0	0	0	0
18012008	105	0		0	0	0	0
18012008	106	0		0	0	0	0
18012008	107	0		0	0	0	0
18012008	108	0		1	0	0	0
18012008	109	0		1	0	1	0
18012008	110	0		3	0	0	0
18012008	111	0		3	0	0	0
18012008	112	0		0	0	0	0
18012008	113	0		3	0	0	0
18012008	114	0		0	0	0	0
18012008	115	0		0	0	0	1
18012008	116	0		0	0	0	0
18012008	117	0		0	0	0	0
18012008	118	0		1	0	0	0
18012008	119	0		0	0	0	0
18012008	120	0		1	0	0	0
18012008	121	0		0	0	0	0
18012008	122	0		0	0	0	0
18012008	123	0		0	0	0	0

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
18012008	124	0		1	0	0	0
19012008	125	0		0	0	0	0
19012008	126	0		0	0	0	0
19012008	127	0		0	0	0	0
19012008	128	0		3	0	0	0
19012008	129	0		0	0	0	0
19012008	130	0		0	0	0	0
19012008	131	0		2	0	0	0
19012008	132	0		0	0	0	0
19012008	133	0		0	0	0	0
19012008	134	0		0	0	0	0
19012008	135	0		5	0	0	0
19012008	136	0		0	0	0	0
19012008	137	0		5	0	0	0
19012008	138	0		5	0	0	0
19012008	139	0		0	0	0	0
19012008	140	0		1	0	0	0
19012008	141	0		0	0	0	0
19012008	142	0		3	0	0	0
19012008	143	0		0	0	0	0
19012008	144	0		0	0	0	0
19012008	145	0		0	0	0	0
19012008	146	0		0	0	0	0
19012008	147	0		0	0	0	0
19012008	148	0		0	0	0	0
19012008	149	0		0	0	0	0
19012008	150	0		0	0	0	0
19012008	151	0		0	0	0	0
19012008	152	0		0	0	0	0
19012008	153	0		0	0	0	0
19012008	154	0		0	0	0	0
19012008	155	0		0	0	0	0
19012008	156	0		0	0	0	0
19012008	157	0		0	0	0	0
19012008	158	0		0	0	0	0
19012008	159	0		0	0	0	0
19012008	160	0		2	0	0	0

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
19012008	161	0		2	0	0	0
19012008	162	0		0	0	0	0
19012008	163	0		3	0	0	0
20012008	164	0		0	0	0	0
20012008	165	0		0	0	0	0
20012008	166	0		0	0	0	0
20012008	167	0		0	0	0	0
20012008	168	0		0	0	0	0
20012008	169	0		0	0	0	0
20012008	170	0		0	0	0	0
20012008	171	0		0	0	0	0
20012008	172	0		0	0	0	0
20012008	173	0		0	0	0	0
20012008	174	0		3	0	0	0
20012008	175	0		0	0	0	0
20012008	176	0		0	0	1	0
20012008	177	0		0	0	0	0
20012008	178	0		0	0	0	0
20012008	179	0		0	0	0	0
20012008	180	0		0	0	0	0
20012008	181	0		0	0	0	0
20012008	182	0		0	0	0	0
20012008	183	0		1	0	0	0
20012008	184	0		1	0	0	0
20012008	185	0		0	0	0	0
20012008	186	0		0	0	0	0
20012008	187	0		1	0	0	0
20012008	188	0		0	0	0	0
20012008	189	0		0	0	0	0
20012008	190	0		0	0	0	0
20012008	191	0		0	0	0	0
20012008	192	0		0	0	0	0
20012008	193	0		0	0	0	0
21012008	194	0		0	0	0	0
21012008	195	0		0	0	0	0
21012008	196	0		0	0	0	0
21012008	197	0		0	0	0	0

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
21012008	198	0		0	0	0	0
21012008	199	0		0	0	0	0
21012008	200	0		0	0	0	0
21012008	201	0		0	0	0	0
21012008	202	0		0	0	0	0
21012008	203	0		0	0	0	0
21012008	204	0		0	0	0	0
21012008	205	0		0	0	0	0
21012008	206	0		0	0	0	0
21012008	207	0		1	0	0	0
21012008	208	0		2	0	0	0
21012008	209	0		0	0	0	0
21012008	210	0		0	0	0	0
21012008	211	0		0	0	0	0
21012008	212	0		0	0	0	0
21012008	213	0		0	0	0	0
21012008	214	0		0	0	0	0
21012008	215	0		0	0	0	0
21012008	216	0		0	0	0	0
21012008	217	0		0	0	0	0
21012008	218	0		0	0	0	0
21012008	219	0		0	0	0	0
21012008	220	0		0	0	0	0
21012008	221	0		0	0	0	0
21012008	222	0		0	0	0	0
21012008	223	0		0	0	0	0
21012008	224	0		0	0	0	0
21012008	225	0		0	0	0	0
21012008	226	0		0	0	0	0
21012008	227	0		0	0	0	0
21012008	228	1		0	0	0	0
21012008	229	0		0	0	0	0
21012008	230	0		2	0	0	0
21012008	231	0		0	0	0	0
21012008	232	0		0	0	0	0
21012008	233	0		0	0	0	0
22012008	234	0		0	0	0	0

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
22012008	235	0		0	0	0	0
22012008	236	0		0	0	0	0
22012008	237	0		0	0	0	0
22012008	238	0		0	0	0	0
22012008	239	0		0	0	0	0
22012008	240	0		0	0	0	0
22012008	241	0		0	0	0	0
22012008	242	0		0	0	0	0
22012008	243	50		0	0	0	0
22012008	244	0		0	0	0	0
22012008	245	0		0	0	0	0
22012008	246	0		2	0	0	0
22012008	247	0		0	0	0	0
22012008	248	0		0	0	0	0
22012008	249	50		0	0	0	0
22012008	250	0		0	0	0	0
22012008	251	100		0	0	0	0
22012008	252	0		0	0	0	0
22012008	253	0		0	0	0	0
22012008	254	0		0	0	0	0
22012008	255	0		0	0	0	0
22012008	256	0		0	0	0	0
22012008	257	0		0	0	0	0
22012008	258	0		0	0	0	0
22012008	259	0		0	0	0	0
22012008	260	0		0	0	0	0
22012008	261	0		0	0	0	0
22012008	262	0		0	0	0	0
22012008	263	0		0	0	0	0
22012008	264	0		0	0	0	0
22012008	265	0		0	0	0	0
22012008	266	0		0	0	0	0
22012008	267	0		0	0	0	0
23012008	268	0		0	0	0	0
23012008	269	0		0	0	0	0
23012008	270	0		0	0	0	0
23012008	271	0		0	0	0	0

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
23012008	272	0		0	0	0	0
23012008	273	0		0	0	0	0
23012008	274	0		0	0	0	0
23012008	275	0		0	0	0	0
23012008	276	0		0	0	0	0
23012008	277	0		0	0	0	0
23012008	278	0		0	0	0	0
23012008	279	0		0	0	0	0
23012008	280	0		0	0	0	0
23012008	281	0		0	0	0	0
23012008	282	0		0	0	0	0
23012008	283	0		0	0	0	0
23012008	284	0		0	0	0	0
23012008	285	0		0	0	0	0
23012008	286	0		0	0	0	0
23012008	287	0		0	0	0	0
23012008	288	0		1	0	0	0
23012008	289	0		0	0	0	0
23012008	290	0		0	0	0	0
23012008	291	0		0	0	0	0
23012008	292	0		3	0	0	0
23012008	293	0		0	0	0	0
23012008	294	0		0	0	0	0
23012008	295	0		0	0	0	0
23012008	296	0		0	0	0	0
23012008	297	0		0	0	0	0
23012008	298	0		0	0	0	0
23012008	299	0		0	0	0	0
23012008	300	0		0	0	0	0
23012008	301	0		0	0	0	0
23012008	302	0		0	0	0	0
23012008	303	0		0	0	0	0
24012008	304	5		0	0	0	0
24012008	305	0		0	0	0	0
24012008	306	0		2	0	0	0
24012008	307	0		0	0	0	0
24012008	308	0		0	0	0	0

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
24012008	309	0		0	0	0	0
24012008	310	0		0	0	0	0
24012008	311	0		0	0	0	0
24012008	312	0		0	0	0	0
24012008	313	0		0	0	0	0
24012008	314	0		0	0	0	0
24012008	315	3		0	0	0	0
24012008	316	0		0	0	0	0
24012008	317	0		0	0	1	0
24012008	318	0		0	0	0	0
24012008	319	0		1	0	0	0
24012008	320	0		0	0	0	0
24012008	321	0		0	0	0	0
24012008	322	0		0	0	0	0
24012008	323	0		0	0	0	0
24012008	324	0		0	0	0	0
24012008	325	0		0	0	0	0
24012008	326	0		0	0	0	0
24012008	327	0		0	0	0	0
24012008	328	0		0	0	0	0
24012008	329	0		0	0	0	0
18012007	1						
18012007	2						
18012007	3						
18012007	4						
18012007	5						
18012007	6			1			
18012007	7			1			
18012007	8	4					
18012007	9	2					
18012007	10	4					
18012007	11	2					
18012007	12						
18012007	13						
18012007	14						
18012007	15						
18012007	16						

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
18012007	17						
18012007	18						
18012007	19						
19012007	20						
19012007	21						
19012007	22	2					
19012007	23						
19012007	24						
19012007	25						
19012007	26						
19012007	27						
19012007	28						
19012007	29						
19012007	30			1			
19012007	31			7			
19012007	32	3					
19012007	33						
19012007	34						
19012007	35						
19012007	36						
19012007	37						
19012007	38			3			
19012007	39			4			
19012007	40						
19012007	41						
19012007	42						
20012007	43	3					
20012007	44						
20012007	45						
20012007	46						
20012007	47						
20012007	48						
20012007	49					2	
20012007	50						
20012007	51						
20012007	52						
20012007	53						

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
20012007	54						
20012007	55						
20012007	56						5
20012007	57						
20012007	58						
20012007	59						
20012007	60						
20012007	61						
21012007	62						
21012007	63						
21012007	64						
21012007	65						
21012007	66						
21012007	67						
21012007	68						
21012007	69						
21012007	70						
21012007	71						
21012007	72						
21012007	73						
21012007	74						
21012007	75						
21012007	76						
21012007	77						
21012007	78						
21012007	79						
21012007	80						
21012007	81						
21012007	82						
21012007	83						
21012007	84						
21012007	85						
21012007	86						
21012007	87						
21012007	88						
21012007	89						
21012007	90						

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
21012007	91						
21012007	92						
21012007	93						
22012007	94						
22012007	95						
22012007	96						
22012007	97						
22012007	98						
22012007	99						
22012007	100						
22012007	101						
22012007	102						
22012007	103						
22012007	104						
22012007	105						
22012007	106						
22012007	107						
22012007	108						
22012007	109						
22012007	110						
22012007	111						
22012007	112						
22012007	113						
22012007	114						
22012007	115						
22012007	116						
22012007	117						
22012007	118						
22012007	119						
22012007	120						
22012007	121						
22012007	122						
22012007	123						
22012007	124						
22012007	125						
23012007	126						
23012007	127						

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
23012007	128						
23012007	129						
23012007	130						
23012007	131			1			
23012007	132						
23012007	133						
23012007	134						
23012007	135						
23012007	136						
23012007	137						
23012007	138						
23012007	139						
23012007	140						
23012007	141						
23012007	142						
23012007	143						
23012007	144						
23012007	145						
23012007	146						
23012007	147						
23012007	148						
23012007	149						
23012007	150						
23012007	151						
23012007	152						
23012007	153						
23012007	154						
23012007	155						
23012007	156						
23012007	157						
24012007	158						
24012007	159						
24012007	160						
24012007	161						
24012007	162						
24012007	163						
24012007	164						

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
24012007	165	1					
24012007	166						
24012007	167						
24012007	168						
24012007	169						
24012007	170						
24012007	171						
24012007	172						
24012007	173						
24012007	174						
24012007	175						
24012007	176						
24012007	177						
24012007	178						
24012007	179	1					
24012007	180						
24012007	181						
24012007	182						
24012007	183						
24012007	184						
24012007	185						
19012006	1	P					
19012006	2	P					
19012006	3	P					
20012006	4	1					
20012006	5						
20012006	6	1					
20012006	7						
20012006	8						
20012006	9						
20012006	10						
20012006	11						
20012006	12						
20012006	13						
20012006	14						
20012006	15			1			
20012006	16						

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
20012006	17						
20012006	18						
20012006	19						
20012006	20						
20012006	21						
20012006	22						
20012006	23						
20012006	24						
20012006	25						
20012006	26						
20012006	27						
20012006	28						
20012006	29						
20012006	30						
20012006	31						
20012006	32	1					
20012006	33	1					
20012006	34						
20012006	35						
20012006	36	1					
20012006	37	1					
20012006	38			1			
20012006	39						
20012006	40						
20012006	41						
21012006	42						
21012006	43						
21012006	44						
21012006	45						
21012006	46						
21012006	47						
21012006	48						
21012006	49						
21012006	50						
21012006	51						
21012006	52						
21012006	53						

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
21012006	54						
21012006	55						
21012006	56						
21012006	57						
21012006	58						
21012006	59						
21012006	60						
21012006	61						
21012006	62						
21012006	63						
21012006	64						
21012006	65						
21012006	66						
21012006	67						
21012006	68						
21012006	69						
21012006	70						
21012006	71			1			
21012006	72						
21012006	73					1	
21012006	74						
21012006	75						
21012006	76						
21012006	77						
21012006	78						
21012006	79						
22012006	80						
22012006	81						
22012006	82						
22012006	83						
22012006	84						
22012006	85						
22012006	86						
22012006	87						
22012006	88						
22012006	89						
22012006	90						

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
22012006	91						
22012006	92						
22012006	93						
22012006	94			1			
22012006	95						
22012006	96						
22012006	97						
22012006	98						
22012006	99						
22012006	100						
22012006	101						
22012006	102						
22012006	103						
22012006	104						
22012006	105						
22012006	106						
22012006	107						
22012006	108						
22012006	109						
22012006	110						
22012006	111						
22012006	112						
22012006	113						
23012006	114	P		P			
23012006	115						
23012006	116						
23012006	117						
23012006	118						
23012006	119						
23012006	120						
23012006	121						
23012006	122						
23012006	123						
23012006	124						
23012006	125						
23012006	126						
23012006	127						

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
23012006	128						
23012006	129						
23012006	130						
23012006	131						
23012006	132						
23012006	133	1					
23012006	134						
23012006	135						
23012006	136						
23012006	137						
23012006	138						
23012006	139						
23012006	140						
23012006	141						
23012006	142						
23012006	143						
23012006	144						
23012006	145						
23012006	146						
23012006	147						
24012006	148						
24012006	149						
24012006	150						
24012006	151						
24012006	152						
24012006	153			1			
24012006	154						
24012006	155						
24012006	156			1			
24012006	157						
24012006	158						
24012006	159						
24012006	160						
24012006	161						
24012006	162						
24012006	163						
24012006	164						

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
24012006	165						
24012006	166						
24012006	167						
24012006	168						
24012006	169						
24012006	170						
24012006	171						
24012006	172	P					
24012006	173	P					
24012006	174						
24012006	175						
24012006	176						
24012006	177						
24012006	178						
24012006	179						
24012006	180						
25012006	181						
25012006	182						
25012006	183						
25012006	184						
25012006	185						
25012006	186						
25012006	187						
25012006	188						
25012006	189						
25012006	190						
25012006	191			1			
25012006	192						
25012006	193						
25012006	194						
25012006	195						
25012006	196						
25012006	197						
25012006	198						
25012006	199						
25012006	200						
25012006	201						

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
25012006	202						
25012006	203						
25012006	204						
25012006	205						
25012006	206						
25012006	207						
25012006	208						
25012006	209						
25012006	210						
25012006	211						
25012006	212						
25012006	213						
25012006	214						
25012006	215						
26012006	216						
26012006	217						
26012006	218						
26012006	219						
26012006	220						
26012006	221						
26012006	222						
26012006	223						1
26012006	224						
26012006	225						
26012006	226						
26012006	227						
26012006	228						
26012006	229						
26012006	230						
26012006	231						
26012006	232						
26012006	233						
26012006	234						
26012006	235						
26012006	236						
26012006	237	P					
26012006	238	P					

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
26012006	239						
26012006	240						
27012006	241						
27012006	242						
27012006	243						
27012006	244						
27012006	245						
27012006	246						
27012006	247						
27012006	248						
27012006	249						
27012006	250						
27012006	251						
27012006	252						
27012006	253						
27012006	254						
27012006	255						
27012006	256						
27012006	257						
27012006	258						
27012006	259						
27012006	260						
27012006	261						
27012006	262						
27012006	263						
27012006	264						
27012006	265						
27012006	266						
27012006	267						
27012006	268						
27012006	269	P					
27012006	270						
27012006	271						
27012006	272						
27012006	273						
27012006	274						
28012006	275						

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
28012006	276						
28012006	277			2			
28012006	278						
28012006	279			P			
28012006	280						
28012006	281						
28012006	282						
28012006	283						
28012006	284						
28012006	285						
28012006	286						
28012006	287						
28012006	288						
28012006	289						
28012006	290						
28012006	291						
28012006	292						
28012006	293						
28012006	294	P					
28012006	295						
28012006	296			P			
28012006	297						
28012006	298						
28012006	299						
28012006	300					3	
28012006	301						
28012006	302						
25012005	1						
25012005	2	P					
25012005	3	P					
25012005	4	P					
26012005	5	P					
26012005	6						
26012005	7	P					
26012005	8						
26012005	9	P					
26012005	10						

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
26012005	11						
26012005	12						
26012005	13						
26012005	14						
26012005	15						
26012005	16	P					
26012005	17			P			
26012005	18						
26012005	19						
26012005	20						
26012005	21						
26012005	22			1			
26012005	23						
26012005	24						
26012005	25						
26012005	26			P			
26012005	27						
26012005	28			P			
26012005	29						
26012005	30						
26012005	31			P			
26012005	32						
26012005	33						
27012005	34						
27012005	35						
27012005	36						
27012005	37						
27012005	38						
27012005	39						
27012005	40			p			
27012005	41						
27012005	42						
27012005	43			P			
27012005	44			P			
27012005	45			P			
27012005	46						
27012005	47						

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
27012005	48						
27012005	49						
27012005	50			P			
27012005	51						
27012005	52						
27012005	53						
28012005	54						
28012005	55						
29012005	56						
29012005	57			P			
29012005	58						
29012005	59						
29012005	60						
29012005	61						
29012005	62						
29012005	63						
29012005	64						
29012005	65						
29012005	66						
29012005	67						
29012005	68						
29012005	69						
29012005	70						
29012005	71						
29012005	72						
29012005	73						
29012005	74						
29012005	75						
29012005	76						
29012005	77			P			
29012005	78						
29012005	79						
29012005	80	P					
29012005	81						
30012005	82						
30012005	83						
30012005	84						

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
30012005	85						
30012005	86						
30012005	87						
30012005	88						
30012005	89						
30012005	90						
30012005	91						
30012005	92	P					
30012005	93						
30012005	94						
30012005	95						
30012005	96						
30012005	97						
30012005	98						
30012005	99						
30012005	100						
30012005	101						
30012005	102						
30012005	103						
30012005	104						
31012005	105	P					
31012005	106	P					
31012005	107	P					
31012005	108	P					
31012005	109	P					
31012005	110	P					
31012005	111	P					
31012005	112	P					
1022005	113						
1022005	114						
1022005	115						
1022005	116						
1022005	117						
1022005	118						
1022005	119						
1022005	120						
1022005	121						

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
1022005	122						
1022005	123			P			
2022005	124						
2022005	125						
2022005	126						
2022005	127						
2022005	128						
2022005	129						
2022005	130						
2022005	131						
2022005	132						
2022005	133						
2022005	134						
2022005	135						
2022005	136						
2022005	137						
2022005	138						
2022005	139						
2022005	140						
2022005	141						
2022005	142						
2022005	143						
2022005	144						
2022005	145						
2022005	146						
2022005	147						
2022005	148						
2022005	149						
16012004	1	P					
16012004	2	P					
17012004	3	P					
17012004	4	P					
17012004	5						
17012004	6						
17012004	7						
17012004	8						
17012004	9						

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
17012004	10						
17012004	11						
17012004	12						
17012004	13						
17012004	14						
17012004	15						
17012004	16						
17012004	17						
17012004	18						
17012004	19						
17012004	20						
17012004	21						
17012004	22						
17012004	23						
17012004	24						
17012004	25						
17012004	26						
17012004	27						
17012004	28						
17012004	29						
17012004	30						
17012004	31						
17012004	32						
17012004	33						
17012004	34						
17012004	35						
17012004	36						
17012004	37						
18012004	38						
18012004	39						
18012004	40						
18012004	41						
18012004	42						
18012004	43						
18012004	44						
18012004	45						
18012004	46						

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
18012004	47						
18012004	48						
18012004	49						
18012004	50						
18012004	51						
18012004	52						
18012004	53						
18012004	54						
18012004	55						
18012004	56						
18012004	57						
18012004	58						
18012004	59						
18012004	60						
18012004	61						
18012004	62						
18012004	63						
18012004	64						
18012004	65						
18012004	66						
18012004	67						
18012004	68						
18012004	69						
18012004	70						
18012004	71						
18012004	72						
18012004	73						
18012004	74						
18012004	75	1					
18012004	76						
18012004	77						
18012004	78	1					
18012004	79						
19012004	80						
19012004	81						
19012004	82						
19012004	83						

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
19012004	84						
19012004	85						
19012004	86						
19012004	87						
19012004	88						
19012004	89						
19012004	90						
19012004	91						
19012004	92						
19012004	93						
19012004	94						
19012004	95						
19012004	96						
19012004	97						
19012004	98						
19012004	99						
19012004	100	P					
19012004	101						
19012004	102						
19012004	103						
19012004	104						
19012004	105						
19012004	106						
19012004	107						
19012004	108						
19012004	109						
19012004	110						
20012004	111						
20012004	112						
20012004	113						
20012004	114						
20012004	115						
20012004	116						
20012004	117						
20012004	118						
20012004	119						

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
20012004	120		P				
20012004	121						
20012004	122						
20012004	123						
20012004	124						
20012004	125						
20012004	126						
20012004	127						
20012004	128						
20012004	129						
20012004	130						
20012004	131						
20012004	132						
20012004	133						
20012004	134						
20012004	135						
20012004	136						
20012004	137						
20012004	138						
20012004	139						
20012004	140						
20012004	141						
20012004	142						
20012004	143						
20012004	144						
21012004	145		P				
21012004	146						
21012004	147		P				
21012004	148						
21012004	149						
21012004	150						
21012004	151						
21012004	152						
21012004	153						
21012004	154						
21012004	155						
21012004	156						
21012004	157						

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
21012004	158						
21012004	159						
21012004	160						
21012004	161						
21012004	162						
21012004	163						
21012004	164						
21012004	165						
21012004	166	1					
21012004	167						
21012004	168						
21012004	169						
21012004	170						
21012004	171						
21012004	172						
21012004	173						
21012004	174						
21012004	175						
21012004	176						
22012004	177						
22012004	178	P					
22012004	179	P					
22012004	180						
22012004	181						
22012004	182						
22012004	183						
22012004	184						
22012004	185						
22012004	186						
22012004	187						
22012004	188						
22012004	189					1	
22012004	190						
22012004	191						
22012004	192						
22012004	193						
22012004	194						

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
22012004	195						
22012004	196						
22012004	197						
22012004	198						
22012004	199						
22012004	200						
22012004	201						
22012004	202						
22012004	203						
23012004	204						
23012004	205						
23012004	206						
23012004	207						
23012004	208						
23012004	209			P			
23012004	210						
23012004	211						
23012004	212						
23012004	213						
23012004	214						
23012004	215						
23012004	216						
23012004	217						
23012004	218	P					
23012004	219						
23012004	220						
23012004	221						
23012004	222						
23012004	223						
23012004	224						
23012004	225						
23012004	226						
23012004	227						
23012004	228						
23012004	229						
23012004	230						
23012004	231						

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
24012004	232						
24012004	233						
24012004	234						
24012004	235	P		P			
24012004	236	P		P			
24012004	237						
24012004	238	P		P			
24012004	239						
24012004	240						
24012004	241						
24012004	242						
24012004	243						
24012004	244						
24012004	245						
24012004	246						
24012004	247						
24012004	248						
24012004	249						
24012004	250						
24012004	251						
24012004	252						
24012004	253						
24012004	254						
24012004	255						
24012004	256						
24012004	257						
24012004	258						
14012003	1						
14012003	2						
14012003	3						
14012003	4						
14012003	5						
14012003	6			P			
14012003	7						
14012003	8				P		
14012003	9				P		
14012003	10						

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
15012003	11						
15012003	12						
15012003	13						
15012003	14	P					
15012003	15						
15012003	16						
15012003	17						
15012003	18						
15012003	19						
15012003	20						
15012003	21						
15012003	22						
15012003	23						
15012003	24						
15012003	25						
15012003	26	1					
15012003	27	1			P		
15012003	28	P			P		
15012003	29	1					
15012003	30						
15012003	31						
15012003	32	P					
15012003	33						
15012003	34						
15012003	35						
15012003	36						
16012003	37						
16012003	38						
16012003	39						
16012003	40						
16012003	41						
16012003	42						
16012003	43						
16012003	44						
16012003	45						
16012003	46						
16012003	47						

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
16012003	48						
16012003	49	1					
16012003	50						
16012003	51						
16012003	52						
16012003	53						
16012003	54						
16012003	55						
16012003	56						
16012003	57						
16012003	58						
16012003	59						
16012003	60						
16012003	61						
16012003	62						
16012003	63						
16012003	64						
16012003	65						
16012003	66						
16012003	67	1					
16012003	68						
16012003	69						
16012003	70						
16012003	71						
17012003	72						
17012003	73						
17012003	74						
17012003	75						
17012003	76						
17012003	77						
17012003	78						
17012003	79						
17012003	80						
17012003	81						
17012003	82						
17012003	83						
17012003	84						

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
17012003	85						
17012003	86						
17012003	87						
17012003	88						
17012003	89						
17012003	90						
17012003	91						
17012003	92						
17012003	93						
17012003	94						
17012003	95						
17012003	96						
17012003	97						
17012003	98				P		
17012003	99						
17012003	100				P		
17012003	101						
17012003	102						
17012003	103	2					
17012003	104						
17012003	105						
18012003	106						
18012003	107						
18012003	108						
18012003	109						
18012003	110						
18012003	111						
18012003	112						
18012003	113						
18012003	114						
18012003	115						
18012003	116						
18012003	117						
18012003	118						
18012003	119						
18012003	120						
18012003	121						

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
18012003	122						
18012003	123	1					
18012003	124						
18012003	125						
18012003	126						
18012003	127						
18012003	128						
18012003	129						
18012003	130						
19012003	131						
19012003	132						
19012003	133						
19012003	134						
19012003	135						
19012003	136						
19012003	137						
19012003	138						
19012003	139						
19012003	140						
19012003	141						
19012003	142						
19012003	143						
19012003	144						
19012003	145						
19012003	146						
19012003	147						
19012003	148						
19012003	149						
19012003	150						
19012003	151						
19012003	152						
19012003	153						
19012003	154						
19012003	155						
19012003	156						
19012003	157						
20012003	158						

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
20012003	159						
20012003	160						
20012003	161						
20012003	162						
20012003	163						
20012003	164						
20012003	165						
20012003	166						
20012003	167						
20012003	168						
20012003	169						
20012003	170						
20012003	171						
20012003	172						
20012003	173						
20012003	174						
20012003	175						
20012003	176						
20012003	177						
20012003	178						
20012003	179						
20012003	180						
20012003	181						
20012003	182						
20012003	183						
20012003	184						
20012003	185						
20012003	186						
20012003	187						
20012003	188						
20012003	189						
20012003	190						
21012003	191						
21012003	192						
21012003	193						
21012003	194						
21012003	195						

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
21012003	196						
21012003	197						
21012003	198						
21012003	199						
21012003	200						
21012003	201						
21012003	202						
21012003	203						
21012003	204						
21012003	205						
21012003	206						
21012003	207						
21012003	208						
22012003	209	P					
22012003	210	P					
22012003	211						
22012003	212						
22012003	213						
22012003	214						
22012003	215						
22012003	216						
22012003	217	P					
22012003	218	P					
22012003	219						
22012003	220						
22012003	221						
22012003	222						
22012003	223						
22012003	224						
22012003	225						
22012003	226						
22012003	227						
14012002	1						
14012002	2	P					
14012002	3	P					
14012002	4						
14012002	5	P					

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
14012002	6						
14012002	7						
14012002	8						
14012002	9						
15012002	10						
15012002	11	P					
15012002	12						
15012002	13						
15012002	14						
15012002	15	P					
15012002	16						
15012002	17						
15012002	18						
15012002	19						
15012002	20	P					
15012002	21						
15012002	22	1					
15012002	23						
15012002	24	1					
15012002	25						
15012002	26						
15012002	27						
15012002	28						
15012002	29						
15012002	30						
15012002	31						
15012002	32						
15012002	33						
15012002	34						
15012002	35						
15012002	36						
15012002	37						
15012002	38						
15012002	39						
16012002	40						
16012002	41						
16012002	42						

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
16012002	43						
16012002	44						
16012002	45						
16012002	46						
16012002	47						
16012002	48						
16012002	49						
16012002	50						
16012002	51						
16012002	52						
16012002	53						
16012002	54						
16012002	55						
16012002	56						
16012002	57						
16012002	58						
16012002	59						
16012002	60						
16012002	61						
16012002	62						
16012002	63						
16012002	64						
16012002	65						
16012002	66						
16012002	67						
16012002	68						
16012002	69						
16012002	70						
16012002	71						
16012002	72						
16012002	73						
16012002	74						
16012002	75						
16012002	76						
16012002	77						
17012002	78						
17012002	79						

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
17012002	80						
17012002	81						
17012002	82						
17012002	83						
17012002	84						
17012002	85						
17012002	86						
17012002	87						
17012002	88						
17012002	89						
17012002	90						
17012002	91						
17012002	92						
17012002	93						
17012002	94						
17012002	95						
17012002	96						
17012002	97						
17012002	98						
17012002	99						
17012002	100						
17012002	101						
17012002	102						
17012002	103						
17012002	104						
17012002	105						
17012002	106						
17012002	107						
17012002	108						
17012002	109						
17012002	110						
17012002	111						
17012002	112						
17012002	113						
17012002	114						
17012002	115						
18012002	116						

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
18012002	117						
18012002	118						
18012002	119						
18012002	120						
18012002	121						
18012002	122						
18012002	123						
18012002	124						
18012002	125						
18012002	126						
18012002	127						
18012002	128						
18012002	129						
18012002	130						
18012002	131						
18012002	132						
18012002	133						
18012002	134						
18012002	135						
18012002	136						
18012002	137						
18012002	138						
18012002	139						
18012002	140						
18012002	141						
18012002	142						
18012002	143						
18012002	144						
18012002	145						
18012002	146						
18012002	147						
18012002	148						
18012002	149						
18012002	150						
18012002	151						
18012002	152						
18012002	153						

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
18012002	154						
18012002	155						
18012002	156						
18012002	157						
18012002	158						
19012002	159						
19012002	160						
19012002	161						
20012002	162						
20012002	163						
20012002	164						
20012002	165						
20012002	166						
20012002	167						
20012002	168						
20012002	169						
20012002	170						
20012002	171						
20012002	172						
20012002	173						
20012002	174						
20012002	175						
20012002	176						
20012002	177						
20012002	178						
20012002	179						
20012002	180						
20012002	181						
20012002	182						
20012002	183						
20012002	184						
20012002	185						
20012002	186						
20012002	187						
20012002	188						
20012002	189						
20012002	190						

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
20012002	191						
20012002	192						
20012002	193						
20012002	194						
20012002	195						
20012002	196						
20012002	197						
20012002	198						
20012002	199						
20012002	200						
20012002	201						
21012002	202						
21012002	203						
21012002	204						
21012002	205						
21012002	206						
21012002	207						
21012002	208						
21012002	209						
21012002	210						
21012002	211						
21012002	212						
21012002	213						
21012002	214						
21012002	215						
21012002	216						
21012002	217						
21012002	218						
21012002	219						
21012002	220						
21012002	221						
21012002	222						
21012002	223						
21012002	224						
21012002	225						
21012002	226						
14012001	1	P					

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
14012001	2	P			P		
14012001	3	P			P		
14012001	4	1					
15012001	5	1					
15012001	6				P		
15012001	7				P		
15012001	8				P		
15012001	9						
15012001	10				P		
15012001	11	P			P		
15012001	12	P					
15012001	13				P		
15012001	14						
15012001	15	P					
15012001	16	P					
15012001	17	P					
15012001	18	P					
15012001	19	P					
15012001	20	P					
15012001	21						
15012001	22						
15012001	23					P	
15012001	24						
15012001	25			P			
15012001	26						
15012001	27						
15012001	28			1			
16012001	29			P			
16012001	30						
16012001	31			P			
16012001	32			P			
16012001	33						
16012001	34			P			
16012001	35						
16012001	36						
16012001	37						
16012001	38			2			

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
16012001	39			P			
16012001	40			P			
16012001	41			P			
16012001	42						
16012001	43			P	P		
16012001	44						
16012001	45						
16012001	46						
16012001	47						
16012001	48						
16012001	49						
16012001	50						
16012001	51						
16012001	52						
16012001	53						
16012001	54						
16012001	55						
16012001	56						
16012001	57						
16012001	58						
16012001	59			P	P		
16012001	60						
16012001	61						
16012001	62						
16012001	63					P	
16012001	64						
16012001	65						
16012001	66						
16012001	67						
16012001	68						
16012001	69						
17012001	70						
17012001	71						
17012001	72						
17012001	73						
17012001	74						
17012001	75						

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
17012001	76						
17012001	77						
17012001	78			P			
17012001	79			P			
17012001	80						
17012001	81			P			
17012001	82						
17012001	83						
17012001	84						
17012001	85						
17012001	86						
17012001	87						
17012001	88						
17012001	89						
17012001	90						
17012001	91						
17012001	92						
17012001	93						
17012001	94						
17012001	95			P			
17012001	96						
17012001	97						
17012001	98						
17012001	99						
17012001	100						
17012001	101						
17012001	102						
17012001	103						
17012001	104						
17012001	105						
17012001	106						
17012001	107						
17012001	108						
18012001	109						
18012001	110						
18012001	111						
18012001	112			P			

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
18012001	113			P			
18012001	114						
18012001	115			P			
18012001	116						
18012001	117						
18012001	118						
18012001	119						
18012001	120						
18012001	121						
18012001	122						
18012001	123						
18012001	124						
18012001	125						
18012001	126						
18012001	127						
18012001	128						
18012001	129						
18012001	130						
18012001	131			P			
18012001	132						
18012001	133						
18012001	134			P			
18012001	135			P			
18012001	136			P			
18012001	137			P			
18012001	138						
18012001	139				P		
18012001	140			P			
18012001	141			P			
18012001	142						
18012001	143						
18012001	144						
19012001	145						
19012001	146						
19012001	147			P			
19012001	148			P			
19012001	149			P			

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
19012001	150			P			
19012001	151			P			
19012001	152	P					
19012001	153						
19012001	154						
19012001	155						
19012001	156				P		
19012001	157						
19012001	158						
19012001	159						
19012001	160				P		
19012001	161	P					
19012001	162	P					
19012001	163						
29012000	1						
29012000	2	1					
29012000	3						
29012000	4						
29012000	5						
29012000	6	1					
29012000	7						
29012000	8						
29012000	9						
29012000	10						
30012000	11	1					
30012000	12						
30012000	13						
30012000	14						
30012000	15						
30012000	16	11					
30012000	17	12					
30012000	18						
30012000	19						
30012000	20						
30012000	21						
30012000	22						
30012000	23						

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
30012000	24						
30012000	25						
30012000	26						
30012000	27						
30012000	28						
30012000	29						
30012000	30						
30012000	31						
30012000	32						
30012000	33						
30012000	34						
30012000	35						
30012000	36						
30012000	37						
30012000	38						
31012000	39						
31012000	40						
31012000	41						
31012000	42						
31012000	43						
31012000	44						
31012000	45						
31012000	46						
31012000	47						
31012000	48						
31012000	49						
31012000	50						
31012000	51						
31012000	52						
31012000	53						
31012000	54						
31012000	55						
31012000	56						
31012000	57						
31012000	58						
31012000	59						
31012000	60						

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
31012000	61						
31012000	62						
31012000	63						
31012000	64						
1022000	65						
1022000	66						
1022000	67						
1022000	68						
1022000	69						
1022000	70						
1022000	71						
1022000	72						
1022000	73						
1022000	74						
1022000	75						
1022000	76						
1022000	77						
1022000	78						
1022000	79						
1022000	80						
1022000	81						
1022000	82						
1022000	83						
1022000	84						
1022000	85						
1022000	86						
1022000	87						
1022000	88						
1022000	89						
1022000	90						
1022000	91						
1022000	92						
2022000	93						
2022000	94						
2022000	95						
2022000	96						
2022000	97						

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
2022000	98						
2022000	99						
2022000	100						
2022000	101						
2022000	102						
2022000	103						
2022000	104						
2022000	105						
2022000	106						
2022000	107						
2022000	108						
2022000	109						
2022000	110						
2022000	111						
2022000	112						
2022000	113						
2022000	114						
2022000	115						
2022000	116						
2022000	117						
2022000	118						
2022000	119						
2022000	120						
2022000	121						
2022000	122						
3022000	123						
3022000	124						
3022000	125						
3022000	126						
3022000	127	12					
3022000	128	18					
3022000	129						
3022000	130	P					
3022000	131						
3022000	132	P					
3022000	133						
3022000	134						

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
3022000	135						
3022000	136						
4022000	137						
4022000	138						
4022000	139						
4022000	140						
4022000	141						
3021999	1						
3021999	2						
3021999	3						
3021999	4						
3021999	5						
3021999	6						
3021999	7						
3021999	8						
3021999	9						
3021999	10						
3021999	11						
3021999	12						
4021999	13						
4021999	14						
4021999	15						
4021999	16						
4021999	17						
4021999	18						
4021999	19						
4021999	20						
4021999	21						
4021999	22						
4021999	23						
4021999	24						
4021999	25						
4021999	26						
4021999	27						
4021999	28						
4021999	29						
4021999	30						

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
4021999	31						
4021999	32						
4021999	33						
4021999	34						
4021999	35						
4021999	36						
4021999	37						
4021999	38						
4021999	39						
4021999	40						
4021999	41						
4021999	42						
4021999	43						
4021999	44						
4021999	45						
4021999	46						
4021999	47						
4021999	48						
5021999	49						
5021999	50						
5021999	51						
5021999	52						
5021999	53						
5021999	54						
5021999	55						
5021999	56						
5021999	57						
5021999	58						
5021999	59						
5021999	60						
5021999	61						
5021999	62						
5021999	63						
5021999	64						
6021999	65						
6021999	66						
6021999	67						

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
6021999	68						
6021999	69						
6021999	70						
6021999	71						
6021999	72						
6021999	73						
6021999	74						
6021999	75						
6021999	76						
6021999	77						
6021999	78						
6021999	79						
6021999	80						
6021999	81						
6021999	82						
6021999	83						
6021999	84						
6021999	85						
6021999	86						
6021999	87						
7021999	88						
7021999	89						
7021999	90						
7021999	91						
7021999	92						
7021999	93						
7021999	94						
7021999	95						
7021999	96						
7021999	97						
7021999	98						
7021999	99						
7021999	100						
7021999	101						
7021999	102						
7021999	103						
7021999	104						

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
7021999	105						
7021999	106						
7021999	107						
7021999	108						
7021999	109						
7021999	110						
7021999	111						
7021999	112						
7021999	113						
7021999	114						
7021999	115						
7021999	116						
8021999	117						
8021999	118						
8021999	119						
8021999	120						
8021999	121						
8021999	122						
8021999	123						
8021999	124						
8021999	125	P					
8021999	126	P					
8021999	127						
8021999	128						
8021999	129						
8021999	130						
8021999	131						
8021999	132						
8021999	133						
8021999	134						
8021999	135						
8021999	136						
8021999	137						
8021999	138						
8021999	139						
8021999	140						
8021999	141						

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
8021999	142						
8021999	143						
8021999	144						
8021999	145						
8021999	146						
16011998	1	P					
17011998	2						
17011998	3						
17011998	4				2		
17011998	5	P					
17011998	6	P					
17011998	7						
17011998	8						
17011998	9						
17011998	10						
17011998	11						
18011998	12						
18011998	13						
18011998	14						
18011998	15						
18011998	16						
18011998	17						
18011998	18						
18011998	19						
18011998	20						
18011998	21						
18011998	22						
18011998	23						
18011998	24						
18011998	25						
19011998	26						
19011998	27						
19011998	28						
19011998	29						
19011998	30						
20011998	31						
20011998	32						

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
20011998	33						
20011998	34						
20011998	35						
21011998	36						
21011998	37						
21011998	38						
21011998	39						
21011998	40						
21011998	41						
21011998	42						
21011998	43						
21011998	44						
21011998	45						
21011998	46						
21011998	47						
21011998	48						
21011998	49						
22011998	50						
22011998	51	P					
22011998	52						
22011998	53						
22011998	54	P					
22011998	55						
22011998	56						
22011998	57						
22011998	58						
22011998	59						
22011998	60						
22011998	61				P		
22011998	62				P		
22011998	63				P		
22011998	64				P		
1021997	1						
2021997	2						
2021997	3						
2021997	4						
2021997	5						

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
2021997	6						
2021997	7						
2021997	8						
2021997	9						
2021997	10						
2021997	11						
2021997	12						
2021997	13						
2021997	14						
2021997	15						
2021997	16						
2021997	17						
2021997	18						
2021997	19						
2021997	20						
2021997	21						
2021997	22						
2021997	23						
2021997	24						
2021997	25						
2021997	26						
2021997	27						
2021997	28						
3021997	29						
3021997	30						
3021997	31						
3021997	32						
3021997	33						
3021997	34						
3021997	35						
3021997	36						
3021997	37						
3021997	38						
3021997	39						
3021997	40						
3021997	41						
3021997	42						

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
3021997	43						
3021997	44						
3021997	45						
3021997	46						
3021997	47						
3021997	48						
3021997	49						
3021997	50						
3021997	51						
3021997	52						
3021997	53						
3021997	54						
4021997	55						
4021997	56						
4021997	57						
4021997	58						
4021997	59						
4021997	60						
4021997	61						
4021997	62						
4021997	63						
4021997	64						
4021997	65						
4021997	66						
4021997	67						
4021997	68						
4021997	69						
4021997	70						
4021997	71						
4021997	72						
4021997	73						
4021997	74						
4021997	75						
4021997	76						
4021997	77						
4021997	78						
4021997	79						

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
5021997	80						
5021997	81						
5021997	82						
5021997	83						
5021997	84						
5021997	85						
5021997	86						
5021997	87						
5021997	88						
5021997	89						
5021997	90						
5021997	91						
5021997	92						
5021997	93						
5021997	94						
5021997	95						
5021997	96						
5021997	97						
5021997	98						
5021997	99						
5021997	100						
5021997	101						
5021997	102						
5021997	103						
5021997	104						
5021997	105						
6021997	106						
6021997	107						
6021997	108						
6021997	109						
6021997	110						
6021997	111						
6021997	112						
6021997	113						
6021997	114						
6021997	115						
6021997	116						

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
6021997	117						
6021997	118						
6021997	119						
6021997	120						
6021997	121						
6021997	122						
6021997	123						
6021997	124						
6021997	125						
6021997	126	P					
6021997	127	P					
6021997	128						
6021997	129						
6021997	130						
6021997	131						
23011996	1						
23011996	2						
23011996	3						
23011996	4						
24011996	5	P					
24011996	6	P					
24011996	7	P					
24011996	8						
24011996	9						
24011996	10						
24011996	11						
24011996	12						
24011996	13						
24011996	14						
24011996	15						
24011996	16						
24011996	17						
24011996	18						
24011996	19						
24011996	20						
24011996	21						
24011996	22						

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
24011996	23						
24011996	24						
24011996	25						
24011996	26						
24011996	27						
24011996	28						
24011996	29						
24011996	30						
24011996	31						
25011996	32						
25011996	33						
25011996	34						
25011996	35						
25011996	36						
25011996	37						
25011996	38						
25011996	39						
25011996	40						
25011996	41						
25011996	42						
25011996	43						
7021996	44						
7021996	45	P					
7021996	46	P			P		
7021996	47						
7021996	48						
7021996	49						
7021996	50	1					
7021996	51	P					
7021996	52	P					
7021996	53						
7021996	54						
7021996	55	P					
7021996	56	P					
7021996	57	P					
7021996	58						
7021996	59						

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
7021996	60						
7021996	61						
7021996	62						
7021996	63						
7021996	64						
8021996	65						
8021996	66						
8021996	67						
8021996	68						
8021996	69						
8021996	70						
8021996	71						
8021996	72						
8021996	73						
8021996	74						
8021996	75						
8021996	76						
8021996	77						
8021996	78						
8021996	79						
8021996	80						
8021996	81						
8021996	82						
8021996	83						
8021996	84						
8021996	85						
8021996	86						
8021996	87						
8021996	88						
8021996	89						
8021996	90						
8021996	91						
9021996	92						
9021996	93						
9021996	94						
9021996	95						
9021996	96						

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
9021996	97						
9021996	98						
9021996	99						
9021996	100						
9021996	101						
9021996	102						
9021996	103						
9021996	104						
9021996	105						
9021996	106						
9021996	107						
9021996	108						
9021996	109						
9021996	110						
9021996	111						
9021996	112						
9021996	113						
9021996	114						
9021996	115						
9021996	116						
9021996	117						
10021996	118						
10021996	119						
10021996	120						
10021996	121						
10021996	122						
10021996	123						
10021996	124						
10021996	125						
10021996	126						
10021996	127						
10021996	128						
10021996	129						
10021996	130						
10021996	131						
10021996	132						
10021996	133						

ate	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
10021996	134						
10021996	135						
10021996	136						
10021996	137						
10021996	138				P		
10021996	139						
10021996	140				P		
11021996	141						
11021996	142						
11021996	143						
11021996	144						
11021996	145						
11021996	146						
11021996	147						
11021996	148						
11021996	149						
11021996	150						
11021996	151						
11021996	152						
11021996	153						
11021996	154						
11021996	155						
11021996	156						
11021996	157						
11021996	158	1					
11021996	159						
11021996	160						
11021996	161						
11021996	162						
11021996	163						
11021996	164						
11021996	165						
11021996	166						
11021996	167						
11021996	168						
11021996	169						
11021996	170						

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
11021996	171						
11021996	172						
11021996	173						
11021996	174	P					
11021996	175						
11021996	176	1					
12021996	177						
12021996	178						
12021996	179						
12021996	180						
12021996	181						
12021996	182						
12021996	183						
12021996	184	P					
12021996	185						
12021996	186						
12021996	187						
12021996	188						
12021996	189						
12021996	190	P					
12021996	191	1					
12021996	192	1					
12021996	193	1					
12021996	194						
12021996	195						
12021996	196						
12021996	197						
12021996	198						
12021996	199						
12021996	200						
12021996	201						
12021996	202						
12021996	203						
12021996	204						
24011995	1						
25011995	2						
25011995	3						

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
25011995	4						
25011995	5						
25011995	6						
25011995	7						
25011995	8						
25011995	9						
25011995	10						
25011995	11						
25011995	12						
25011995	13						
25011995	14						
25011995	15						
26011995	16						
26011995	17						
26011995	18						
26011995	19						
26011995	20						
26011995	21						
26011995	22						
26011995	23						
26011995	24						
26011995	25						
26011995	26						
26011995	27						
26011995	28						
26011995	29						
26011995	30						
27011995	31						
27011995	32						
27011995	33						
27011995	34						
27011995	35						
27011995	36						
27011995	37						
27011995	38						
27011995	41						
27011995	42						

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
27011995	43						
27011995	44						
27011995	45						
27011995	46						
28011995	47						
28011995	48						
28011995	49						
28011995	50						
28011995	51						
28011995	52						
28011995	53						
28011995	54						
28011995	55						
28011995	56						
28011995	57						
28011995	58						
28011995	59						
22011994	1						
22011994	2						
22011994	3						
22011994	4						
22011994	5			P			
22011994	6						
22011994	7						
22011994	8						
22011994	9						
22011994	10						
22011994	11						
22011994	12						
22011994	13						
22011994	14						
22011994	15						
22011994	16						
22011994	17						
22011994	18						
22011994	19						
22011994	20						

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
22011994	21						
22011994	22						
22011994	23						
22011994	24						
23011994	25						
23011994	26						
23011994	27						
23011994	28						
23011994	29						
23011994	30						
23011994	31						
23011994	32						
23011994	33						
23011994	34						
23011994	35						
23011994	36						
23011994	37						
23011994	38						
23011994	39						
23011994	40						
23011994	41						
23011994	42						
23011994	43						
23011994	44						
23011994	45						
23011994	46						
23011994	47						
23011994	48						
23011994	49						
24011994	50						
24011994	51						
24011994	52						
24011994	53						
24011994	54						
24011994	55						
24011994	56						
24011994	57						

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
24011994	58						
24011994	59						
24011994	60						
24011994	61						
24011994	62						
24011994	63						
24011994	64						
24011994	65						
24011994	66						
24011994	67						
24011994	68						
24011994	69						
24011994	70						
24011994	71						
24011994	72						
24011994	73						
25011994	74						
25011994	75						
25011994	76						
25011994	77						
25011994	78						
25011994	79						
25011994	80						
25011994	81						
25011994	82						
25011994	83						
25011994	84						
25011994	85						
25011994	86						
25011994	87						
25011994	88						
25011994	89						
25011994	90						
25011994	91						
25011994	92						
25011994	93						
25011994	94						

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
25011994	95	P			P		
25011994	96						
2021993	1						
3021993	2						
3021993	3						
3021993	4						
3021993	5						
3021993	6						
4021993	7						
4021993	8						
4021993	9						
4021993	10						
4021993	11						
4021993	12						
4021993	13						
4021993	14						
4021993	15						
4021993	16						
5021993	17						
5021993	18						
5021993	19						
5021993	20						
5021993	21						
5021993	22						
5021993	23						
5021993	24						
5021993	25						
5021993	26						
5021993	27						
5021993	28						
5021993	29						
6021993	30						
6021993	31						
6021993	32						
6021993	33						
6021993	34						
6021993	35						

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
6021993	36						
6021993	37						
6021993	38						
6021993	39						
7021993	40						
7021993	41						
7021993	42						
7021993	43						
7021993	44						
7021993	45						
7021993	46						
7021993	47						
7021993	48						
7021993	49						
7021993	50						
7021993	51						
7021993	52						
8021993	53						
8021993	54						
8021993	55						
18011992	1						
18011993	2						
18011994	3						
18011995	4						
18011996	5						
18011997	6						
18011998	7						
18011999	8						
18012000	9						
18012001	10						
18012002	11						
18012003	12						
18012004	13						
18012005	14						
18012006	15						
18012007	16						
18012008	17					P	

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
18012009	18						
18012010	19						
18012011	20						
18012012	21						
18012013	22						
18012014	23						
18012015	24						
18012016	25						
18012017	26						
18012018	27						
18012019	28						
18012020	29						
18012021	30						
18012022	31						
18012023	32						
18012024	33						
18012025	34						
18012026	35						
18012027	36						
18012028	37						
18012029	38						
18012030	39						
18012031	40						
18012032	41						
18012033	42						
18012034	43						
18012035	44						
18012036	45						
18012037	46						
18012038	47						
18012039	48						
18012040	49						
18012041	50						
18012042	51						
18012043	52						
18012044	53						
24011991	1						

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
24011991	2						
24011991	3						
24011991	4						
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26011991	36						
26011991	37						
26011991	38						

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
26011991	39						
26011991	40						
26011991	41						
26011991	42						
26011991	43						
26011991	44						
26011991	45			P			
26011991	46						
26011991	47						
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26011991	49						
26011991	50						
26011991	51						
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26011991	53						
26011991	54						
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27011991	64						
27011991	65						
27011991	66						
27011991	67						
27011991	68			P			
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27011991	70						
27011991	71						
27011991	72						
27011991	73						
27011991	74						
27011991	75						

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
28011991	76						
28011991	77						
28011991	78			P			
28011991	79						
28011991	80						
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28011991	100						
29011991	101						
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29011991	104						
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29011991	108						
29011991	109						
29011991	110						
29011991	111						
29011991	112						

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
29011991	113						
29011991	114				P		
29011991	115						
29011991	116						
29011991	117						
29011991	118						
29011991	119						
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30011991	141						
30011991	142						
30011991	143						
30011991	144						
31011991	145						
31011991	146						
31011991	147						
31011991	148						
31011991	149						

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
31011991	150						
31011991	151						
31011991	152						
31011991	153						
31011991	154						
31011991	155						
31011991	156						
31011991	157						
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1021991	164						
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1021991	176						
1021991	177						
1021991	178						
1021991	179						
1021991	180						
17011990	1						
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17011990	3						
17011990	4						
17011990	5						
17011990	6						

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
18011990	7						
18011990	8						
18011990	9						
18011990	10						
18011990	11						
18011990	12						
18011990	13						
18011990	14						
18011990	15						
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19011990	27						
20011990	28						
20011990	29						
20011990	30						
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20011990	32						
20011990	33						
20011990	34						
20011990	35						
20011990	36						
20011990	37						
21011990	38						
21011990	39						
21011990	40						
21011990	41						
21011990	42						
21011990	43						

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
21011990	44						
21011990	45						
21011990	46						
21011990	47						
21011990	48						
21011990	49						
21011990	50						
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22011990	52						
22011990	53						
22011990	54						
22011990	55						
22011990	56						
22011990	57						
22011990	58						
22011990	59						
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24011990	72						
24011990	73						
24011990	74						
24011990	75						
24011990	76						
24011990	77						
16011989	1	P					
16011989	2						
16011989	3			P			

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
16011989	4						
16011989	5						
16011989	6			P			
16011989	7						
16011989	8						
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16011989	10						
16011989	11						
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17011989	29						
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17011989	31						
17011989	32						
17011989	33						
17011989	34						
17011989	35						
17011989	36						
17011989	37						
18011989	38						
18011989	39						
18011989	40						

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
18011989	41						
18011989	42						
18011989	43						
18011989	44						
18011989	45						
18011989	46						
18011989	47						
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18011989	49						
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19011989	68						
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19011989	73						
19011989	74						
19011989	75						
19011989	76						
19011989	77						

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
19011989	78						
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20011989	96						
20011989	97						
20011989	99						
20011989	100						
20011989	101						
20011989	102						
20011989	103						
20011989	104						
20011989	105						
20011989	106						
20011989	107						
20011989	108						
20011989	109						
20011989	110						
20011989	111						
20011989	112						
20011989	113						
20011989	114						
20011989	115						

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
20011989	116						
20011989	117						
20011989	118						
20011989	119						
20011989	120						
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20011989	122						
20011989	123						
20011989	124						
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21011989	141						
21011989	142						
21011989	143						
21011989	144						
21011989	145						
21011989	146						
21011989	147						
21011989	148						
21011989	149						
21011989	150						
21011989	151						
21011989	152						

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
22011989	153						
22011989	154						
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22011989	156						
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22011989	176						
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15011988	9						
15011988	10						
15011988	11	P					
15011988	12	P					
15011988	13	P		P			

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
15011988	14	P		P			
16011988	15	P		P			
16011988	16						
16011988	17						
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16011988	27			P			
16011988	28	P		P			
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17011988	34						
17011988	35						
17011988	36						
17011988	37						
17011988	38						
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17011988	42						
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17011988	45						
17011988	46						
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17011988	48						
17011988	49						
17011988	50						

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
17011988	51						
17011988	52						
17011988	53						
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18011988	87						

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
18011988	88						
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19011988	112						
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19011988	114						
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20011988	121						
20011988	122						
20011988	123						
20011988	124						

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
20011988	125						
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21011988	153						
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21011988	156						
21011988	157						
21011988	158						
21011988	159						
21011988	160						
21011988	161						

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
21011988	162						
21011988	163						
22011988	164						
22011988	165						
22011988	166						
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22011988	169						
22011988	170				P		
22011988	171						
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22011988	175						
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23011988	183				P		
23011988	184						
23011988	185						
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23011988	193						
23011988	194						
23011988	195						
23011988	196						
23011988	197						
23011988	198						

Date	Tow	Croaker	Whiff	Windopane	Sea Robin	Black Sea Bass	Lobster
23011988	199						
23011988	200						

Date	Tow	Other Species	Squid	Shrimp	Anchovy
8012013	1	BAN	13	3	
8012013	2	BAN, baby's ear, SF	10	0	
8012013	3	BAN	19	0	
8012013	4	SF	30	0	
8012013	5	BAN	16	0	
8012013	6	SF	0	0	
8012013	7	BAN, SF, Surf Clam	2	0	
8012013	8	BAN	0	0	
8012013	9	BAN, Blue Crab	1	0	
8012013	10	BAN, portunis crab sp., SF, roughneck? shrimp	1	1	
8012013	11	BAN, Horseshoe crab, SF	0	0	
8012013	12	BAN, Horseshoe Crab, SF, fringe flounder	3	0	
8012013	13	Horseshoe Crab	17	0	
8012013	14	SF	5	0	
8012013	15	Lady crab, spot, blue crab, fringe flounder	0	0	
8012013	16	Horseshoe crab, fringe flounder	0	0	
8012013	17	Horseshoe crab, SF	0	0	
9012013	18	SF	0	0	
9012013	19	Horseshoe crab	0	0	
9012013	20	BAN, Jonas Crab, Portunas crab, fringe flounder, grey trout, horseshoe crab	3	0	
9012013	21	BAN, Horseshoe crab	15	0	
9012013	22	BAN, horseshoe crab, fringe flounder	32	0	
9012013	23	BAN, octopus, jellies	10	0	
9012013	24	Horseshoe crab	2	0	
9012013	25	Horseshoe crab, fringe flounder	13	0	
9012013	26	Horseshoe crab	9	0	
9012013	27	BAN	8	0	
9012013	28	Horseshoe crab	21	0	
9012013	29	Horseshoe crab, spot	0	0	
9012013	30	SF	14	0	
9012013	31	Horseshoe crab	0	0	
9012013	32	SF	10	0	
9012013	33	SF	11	0	
9012013	34		0	0	
9012013	35	SF	6	0	
9012013	36	SF, Jellies	11	0	
9012013	37	SF, BAN	12	0	

Date	Tow	Other Species	Squid	Shrimp	Anchovy
9012013	38	blue crab	9	0	
9012013	39	blue crab	23	0	
9012013	40	Hermit crab, BAN	11	0	
9012013	41	SF	21	0	
9012013	42	SF, Horseshoe crab, Jellies	15	0	
9012013	43	Horseshoe crab, SF, Fringe Flounder	13	0	
9012013	44	Horseshoe crab, fringe flounder, SF	9	0	
9012013	45	Horseshoe crab, spider crab, octopus, SF	26	0	
9012013	46	SF, Jonas crab	6	0	
9012013	47	Horseshoe crab	6	0	
9012013	48		13	0	
9012013	49	BAN, channel whelk, fringe flounder, portunis sp. Crab	26	0	
9012013	50	Horseshoe crab, SF, Fringe Flounder, Hermit crab	20	0	
9012013	51		6	0	
10012013	53	Horseshoe crab	47	0	
10012013	54	Horseshoe crab, hermit crab, BAN, Jonas crab, Fringe Flounder	25	0	
10012013	55	Cutless fish, horseshoe crab	21	2	
10012013	56	Clam, Horseshoe crab	14	0	
10012013	57	Horseshoe crab, portunis sp. Crab	56	0	
10012013	58		16	0	
10012013	59		0	0	
10012013	60		0	0	
10012013	61		0	0	
10012013	62		6	0	
10012013	63		0	0	
10012013	64		0	0	
10012013	65	Horseshoe crab, SF	4	0	
10012013	66	SF	0	0	
10012013	67	SF, BAN	14	0	
10012013	68		0	0	
10012013	69	BAN, SF, Blue crab, Horseshoe crab	13	0	
10012013	70	Channel whelk, SF	14	0	
10012013	71	Horseshoe crab, SF, knobbed whelk	16	0	
10012013	72	Hermit crab, SF, knobbed whelk	25	0	
10012013	73	Knobbed whelk	14	0	
10012013	74	Horseshoe crab	11	0	
10012013	75	Horseshoe crab, blue crab	1	0	

Date	Tow	Other Species	Squid	Shrimp	Anchovy
10012013	76	Fringe flounder, Horseshoe crab	0	0	
10012013	77	Horseshoe crab	7	0	
10012013	78	Horseshoe crab	2	0	
11012013	79		0	0	
11012013	80	Horseshoe crab	0	0	
11012013	81		0	0	
11012013	82	Horseshoe crab, octopus	2	0	
11012013	83	Horseshoe crab, BAN	52	0	
11012013	84	Horseshoe crab, BAN, Jellies	56	0	
11012013	85	Horseshoe crab, Jonas crab	0	0	
11012013	86	Horseshoe crab, SF	36	0	
11012013	87	Horseshoe crab	0	0	
11012013	88	Horseshoe crab, American eel, SF	1	0	
11012013	89		0	0	
11012013	90	SF	0	0	
11012013	91		0	0	
11012013	92		0	0	
11012013	93	SF	0	0	
11012013	94	BAN, SF	2	0	
11012013	95	SF	0	0	
11012013	96		0	0	
11012013	97	BAN	0	0	
11012013	98	BAN	0	0	
11012013	99	SF	3	0	
11012013	100	Horseshoe crab, spider crab, SF	5	0	
11012013	101	SF	5	0	
11012013	102	SF	5	0	
11012013	103	Fringe Flounder	64	0	
11012013	104	SF	11	0	
11012013	105	BAN, SF, Horseshoe crab	0	0	
11012013	106	Horseshoe crab, SF	0	0	
11012013	107	Horseshoe crab	10	0	
11012013	108		1	0	
11012013	109	Horseshoe crab	4	0	
11012013	110	Horseshoe crab	1	0	
11012013	111	Horseshoe crab	1	0	
11012013	112	Horseshoe crab	4	0	

Date	Tow	Other Species	Squid	Shrimp	Anchovy
11012013	113	Horseshoe crab, Fringe Flounder	2	0	
11012013	114	Horseshoe crab, spider crab	0	0	
12012013	115	BAN, Horseshoe crab	1	0	
12012013	116		0	0	
12012013	117	Jellies, Horseshoe crab	1	0	
12012013	118		1	0	
12012013	119	Horseshoe crab	1	0	
12012013	120	Horseshoe crab, BAN	1	0	
12012013	121	Horseshoe crab, BAN, Jellies, Hermit crab	2	0	
12012013	122	Horseshoe crab, Jellies	0	0	
12012013	123	Horseshoe crab, Fringe Flounder	1	0	
12012013	124	Horseshoe crab, Jonas crab	0	0	
12012013	125		0	0	
12012013	126	SF	0	0	
12012013	127		0	0	
12012013	128	Sand dollar	0	0	
12012013	129	SF	2	0	
12012013	130	SF, Jellies	0	0	
12012013	131	SF	0	0	
12012013	132	SF	0	0	
12012013	133	Horseshoe crab	0	0	
12012013	134	Spider crab, BAN	0	0	
12012013	135	Horseshoe crab, SF, Jellies	0	0	
12012013	136	Jellies, SF	0	0	
12012013	137	Jellies, BAN	0	0	
12012013	138	BAN, Jellies, Horseshoe crab	2	0	
12012013	139	Jellies, SF	0	0	
12012013	140	BAN, SF	3	0	
12012013	141	Horseshoe crab, Fringe Flounder	8	0	
12012013	142	Horseshoe crab	7	0	
12012013	143	Horseshoe crab, 1 large jelly	5	0	
12012013	144	Horseshoe crab, Fringe Flounder	2	0	
12012013	145	Horseshoe crab, Hermit crab	6	0	
13012013	146	Fringe Flounder, Horseshoe crab, Jellies, SF, Channel Whelk	7	0	
13012013	147	Horseshoe crab, Jellies	19	0	
13012013	148	Horseshoe crab, Jellies, Moon snail	0	0	
13012013	149	Horseshoe crab, Jellies	0	0	

Date	Tow	Other Species	Squid	Shrimp	Anchovy
13012013	150	SF, Jellies	0	0	
13012013	151	Horseshoe crab, Jellies	3	0	
13012013	152	BAN, Jonas Crab, Jellies	1	0	
13012013	153	Jellies	0	0	
13012013	154		4	0	
13012013	155	Horseshoe crab	15	0	
13012013	156		7	0	
13012013	157		5	0	
13012013	158		0	0	
13012013	159		3	0	
13012013	160	SF, Jellies	21	0	
13012013	161		9	0	
13012013	162	Jellies	0	0	
13012013	163	SF, Jellies, Horseshoe crab	7	0	
13012013	164	SF	0	0	
13012013	165	SF, Jellies	0	0	
13012013	166		0	0	
13012013	167	SF	4	0	
13012013	168		0	0	
13012013	169		0	0	
13012013	170	Horseshoe Crab	0	0	
13012013	171		3	0	
13012013	172	Fringe Flounder	0	0	
13012013	173	Horseshoe crab, Jonas crab	0	0	
13012013	174		0	0	
13012013	175		2	0	
13012013	176	Horseshoe crab	2	0	
14012013	177	Jellies	0	0	
14012013	178	Jellies, BAN, thorny skate	0	0	
14012013	179	Jellies, BAN, Horseshoe crab, Jonas Crab	9	0	
14012013	180	BAN, Jellies, Horseshoe crab	3	0	
14012013	181		0	0	
14012013	182	BAN, Jellies, Horseshoe crab, Jonas crab	3	0	
14012013	183	BAN, Jellies, Horseshoe crab	2	0	
14012013	184		4	0	
14012013	185	Horseshoe crab	11	0	
14012013	186		0	0	

Date	Tow	Other Species	Squid	Shrimp	Anchovy
14012013	187	BAN	33	0	
14012013	188		14	0	
14012013	189		2	0	
14012013	190		8	0	
14012013	191	Horseshoe crab	8	0	
14012013	192	SF	3	0	
14012013	193		2	0	
14012013	194		0	0	
14012013	195	BAN	0	0	
14012013	196	BAN	5	0	
14012013	197	BAN, Horseshoe crab	26	0	
14012013	198		27	0	
14012013	199		0	0	
14012013	200	Jellies, SF	11	0	
14012013	201	BAN, Jellies, Horseshoe crab	0	0	
14012013	202	Horseshoe crab, Jonas crab, Blue crab, octopus	2	0	
14012013	203		0	0	
14012013	204	Horseshoe crab	0	0	
14012013	205	Horseshoe crab, SF	3	0	
14012013	206		18	0	
14012013	207		0	0	
14012013	208	SF, Horseshoe crab	2	0	
15012013	209	SF	8	0	
15012013	210	Horseshoe crab, SF, BAN, Blue crab, jellies	11	0	
15012013	211	Horseshoe crab, Jellies, Blue crab	0	0	
15012013	212	BAN, Horseshoe crab	5	0	
15012013	213	Horseshoe crab	16	0	
15012013	214		31	0	
15012013	215		1	0	
15012013	216	Horseshoe crab, BAN, Jellies, Silver Perch, Spot, Blue Crab	0	0	
15012013	217	BAN, Jellies, Horseshoe crab, Spot, Silver Perch	0	0	
15012013	218	BAN, Spot, Silver Perch	6	0	
15012013	219	Jellies, Spot, Horseshoe crab, Arrow crab	19	0	
15012013	220	BAN, Spider crab	7	0	
15012013	221	Spot, Horseshoe crab, Blue Crab, Lesser Blue Crab	0	0	
15012013	222	Horseshoe crab	0	0	
15012013	223		0	0	

Date	Tow	Other Species	Squid	Shrimp	Anchovy
15012013	224	Horseshoe crab, spot	1	0	
15012013	225		0	0	
15012013	226	Horseshoe crab	3	0	
16012013	227	BAN	1	0	
16012013	228	Jellies	7	0	
16012013	229	BAN, Jellies	16	0	
16012013	230	BAN, Jellies	2	0	
16012013	231	BAN, Jellies	5	0	
16012013	232	BAN, Horseshoe crab	7	0	
16012013	233	Horseshoe crab	7	0	
16012013	234	BAN, Jellies, Horseshoe crab	2	0	
16012013	235	BAN, Jellies	4	0	
16012013	236	SF, BAN, Jellies	5	0	
16012013	237	Spot	4	0	
16012013	238	Spot	11	0	
16012013	239	Spot (129)	7	0	
16012013	240	spot	14	0	
16012013	241	spot	0	0	
16012013	242		14	0	
16012013	243		17	0	
16012013	244	SF, Jellies	0	0	
16012013	245		0	0	
18022010	1				P
18022010	2				P
18022010	3				
18022010	4				
18022010	5				
19022010	6				
19022010	7				
19022010	8				
19022010	9				
19022010	10				
19022010	11	0	0	0	0
19022010	12				
19022010	13				
19022010	14	Boston Mackerel (1); Horseshoe crab			
19022010	15				

Date	Tow	Other Species	Squid	Shrimp	Anchovy
19022010	16				
19022010	17				
19022010	18				
19022010	19				
19022010	20				
19022010	21				
19022010	22	Boston Mackerel (1)			
19022010	23	Boston Mackerel (1)			
19022010	24				
19022010	25				
19022010	26				
19022010	27				
19022010	28				
19022010	29				
19022010	30	Atlantic Silverside (1)			P
19022010	31				
19022010	32				
19022010	33				
19022010	34				
19022010	35	Boston Mackerel (8)			
19022010	36	Boston Mackerel (1)			
19022010	37	Boston Mackerel (1)			
19022010	38				
19022010	39	Boston Mackerel (1)			
19022010	40				
19022010	41				
19022010	42				
19022010	43				
19022010	44	Unknown Crab (1)			
19022010	45				
19022010	46				
19022010	47				
20022010	48				
20022010	49				
20022010	50				
20022010	51				
20022010	52				

Date	Tow	Other Species	Squid	Shrimp	Anchovy
20022010	53				
20022010	54		P		
20022010	55				
20022010	56	Boston Mackerel (33)			
20022010	57				
20022010	58	Boston Mackerel (1)			
20022010	59				
20022010	60	Boston Mackerel (total weight 16kg)			
20022010	61	Boston Mackerel (total weight 3.5kg)			
20022010	62	Boston Mackerel (1kg)			
20022010	63				
20022010	64				
20022010	65				
20022010	66				
20022010	67				
20022010	68				
20022010	69				
20022010	70				
20022010	71				
20022010	72				
20022010	73				
20022010	74				
20022010	75				
20022010	76				
20022010	77				
20022010	78	Boston Mackerel (1)			
21022010	79				
21022010	80				
21022010	81				
21022010	82				
21022010	83				
21022010	84	Seahorse (1)			
21022010	85	Boston Mackerel (2)			
21022010	86	Boston Mackerel (.25kg)			
21022010	87	Boston Mackerel (1)			
21022010	88				
21022010	89				

Date	Tow	Other Species	Squid	Shrimp	Anchovy
21022010	90				
21022010	91				
21022010	92				
21022010	93				
21022010	94				
21022010	95				
21022010	96				
21022010	97		13		
21022010	98				
21022010	99				
21022010	100				
21022010	101				
21022010	102				
21022010	103	Ling-Cod (9)	1		
21022010	104	Ling-Cod (2)	5		
21022010	105	Ling-Cod (3); Clam (1)			
21022010	106	Ling-Cod (3)			
21022010	107	Ling-Cod (1)			
21022010	108				
22022010	109				
22022010	110				
22022010	111				
22022010	112				
22022010	113				
22022010	114	Black-cheeked tonguefish (1)			
22022010	115				
22022010	116				
22022010	117				
22022010	118				
22022010	119				
22022010	120				
22022010	121				
22022010	122				
22022010	123	Ling-Cod (1)			
22022010	124				
22022010	125				
22022010	126				

Date	Tow	Other Species	Squid	Shrimp	Anchovy
22022010	127				
22022010	128				
22022010	129				P
22022010	130	Atl. Herring 8.96kg; Mackerel 1.26kg; Bluebacks .44kg; Menhaden .26kg			
22022010	131	Atl. Herring 90.8kg; Menhaden .88kg			
22022010	132	Atl. Herring 38kg			
22022010	133	Atl. Herring 45kg			
22022010	134	Atlantic Cod (1); Silverside (1)			P
22022010	135				
22022010	136				
22022010	137				
22022010	138				
22022010	139				
22022010	140				
22022010	141				
22022010	142	Boston Mackerel (1); Spider crabs		P	
22022010	143				
22022010	144	Horseshoe Crab			
22022010	145				
23022010	146				
23022010	147				
23022010	148	Sea cucumber (1)		P	
23022010	149				
23022010	150				
23022010	151				
23022010	152	Whelk (1)			
23022010	153	Boston Mackerel (2)			
23022010	154	Ling-Cod (1)			
23022010	155				
23022010	156				
23022010	157				
23022010	158				
23022010	159	ASS? (1)			
23022010	160				
23022010	161				
23022010	162	Black-cheeked tonguefish (1)			
23022010	163				

Date	Tow	Other Species	Squid	Shrimp	Anchovy
23022010	164				
23022010	165				
23022010	166				
23022010	167				
23022010	168	Boston Mackerel (1)			
23022010	169				P
23022010	170				
23022010	171				
23022010	172				
23022010	173	Boston Mackerel (1)			
23022010	174				
23022010	175				
23022010	176	Boston Mackerel			
23022010	177	Boston Mackerel (2)			
23022010	178			1	
24022010	179				
24022010	180				
24022010	181				
24022010	182				
24022010	183				
24022010	184				
24022010	185				
24022010	186				
24022010	187	ASS?(1); Black-cheeked tonguefish (1)			
24022010	188	ASS? (2); Boston Mackerel (3)			
24022010	189	Boston Mackerel (3)			
24022010	190	Boston Mackerel			
24022010	191				
24022010	192				
24022010	193				
24022010	194				
24022010	195				
24022010	196				
24022010	197				
24022010	198				
24022010	199				
24022010	200				

Date	Tow	Other Species	Squid	Shrimp	Anchovy
29012009	1				
29012009	2				
29012009	3				
29012009	4				
30012009	5				
30012009	6				
30012009	7				
30012009	8				
30012009	9				
30012009	10				
30012009	11				
30012009	12				
30012009	13				
30012009	14				
30012009	15				
30012009	16				
30012009	17				
30012009	18				
30012009	19				
30012009	20				
30012009	21				
30012009	22				
30012009	23				
30012009	24				
30012009	25				
30012009	26				
30012009	27				
30012009	28				
31012009	29				
31012009	30				
31012009	31				
31012009	32				
31012009	33				
31012009	34				
31012009	35				
31012009	36				
31012009	37				

Date	Tow	Other Species	Squid	Shrimp	Anchovy
31012009	38				
31012009	39				
31012009	40				
31012009	41				
31012009	42				
31012009	43				
31012009	44				
31012009	45				
31012009	46				
31012009	47				
31012009	48				
31012009	49				
31012009	50				
31012009	51				
31012009	52				
31012009	53				
31012009	54				
31012009	55				
31012009	56				
31012009	57				
31012009	58				
31012009	59				
1022009	60				
1022009	61				
1022009	62				
1022009	63				
1022009	64				
1022009	65				
1022009	66				
1022009	67				
1022009	68				
1022009	69				
1022009	70				
1022009	71				
1022009	72				
1022009	73				
1022009	74				

Date	Tow	Other Species	Squid	Shrimp	Anchovy
2022009	75				
2022009	76				
2022009	77				
2022009	78				
2022009	79				
2022009	80				
2022009	81				
2022009	82				
2022009	83				
2022009	84				
2022009	85				
2022009	86				
2022009	87				
2022009	88				
2022009	89				
2022009	90				
2022009	91				
2022009	92				
2022009	93				
2022009	94				
2022009	95				
3022009	96				
3022009	97				
3022009	98				
3022009	99				
3022009	100				
3022009	101				
3022009	102				
3022009	103				
3022009	104				
3022009	105				
3022009	106				
3022009	107				
3022009	108				
3022009	109				
3022009	110				
3022009	111				

Date	Tow	Other Species	Squid	Shrimp	Anchovy
3022009	112				
3022009	113				
3022009	114				
3022009	115				
3022009	116				
3022009	117				
3022009	118				
3022009	119				
4022009	120				
4022009	121				
4022009	122				
4022009	123				
4022009	124				
4022009	125				
4022009	126				
4022009	127				
4022009	128				
4022009	129				
4022009	130				
4022009	131				
4022009	132				
4022009	133				
4022009	134				
4022009	135				
4022009	136				
4022009	137				
4022009	138				
4022009	139				
4022009	140				
4022009	141				
4022009	142				
4022009	143				
4022009	144				
4022009	145				
4022009	146				
4022009	147				
5022009	148				

Date	Tow	Other Species	Squid	Shrimp	Anchovy
5022009	149				
5022009	150				
5022009	151				
5022009	152				
5022009	153				
5022009	154				
5022009	155				
5022009	156				
5022009	157				
5022009	158				
5022009	159				
5022009	160				
5022009	161				
5022009	162				
5022009	163				
5022009	164				
5022009	165				
5022009	166				
5022009	167				
5022009	168				
5022009	169				
5022009	170				
5022009	171				
5022009	172				
5022009	173				
5022009	174				
5022009	175				
6022009	176				
6022009	177				
6022009	178				
6022009	179				
6022009	180				
6022009	181				
6022009	182				
6022009	183				
6022009	184				
6022009	185				

Date	Tow	Other Species	Squid	Shrimp	Anchovy
6022009	186				
6022009	187				
6022009	188				
6022009	189				
6022009	190				
6022009	191				
6022009	192				
6022009	193				
6022009	194				
6022009	195				
6022009	196				
6022009	197				
6022009	198				
6022009	199				
6022009	200				
6022009	201				
6022009	202				
6022009	203				
6022009	204				
6022009	205				
7022009	206				
7022009	207				
7022009	208				
7022009	209				
7022009	210				
15012008	1				
15012008	2				
15012008	3	Thresher Shark			
15012008	4				
15012008	5				
15012008	6	Hermit crab			
15012008	7				
15012008	8				
15012008	9				
15012008	10				
15012008	11				
15012008	12				

Date	Tow	Other Species	Squid	Shrimp	Anchovy
15012008	13				
15012008	14				
15012008	15				
15012008	16				
15012008	17				
15012008	18				
15012008	19				
15012008	20				
15012008	21				
15012008	22				
15012008	23				
15012008	24				
15012008	25				
15012008	26				
16012008	27				
16012008	28				
16012008	29				
16012008	30				
16012008	31				
16012008	32				
16012008	33				
16012008	34				
16012008	35				
16012008	36				
16012008	37				
16012008	38				
16012008	39				
16012008	40				
16012008	41				
16012008	42				
16012008	43				
16012008	44				
16012008	45				
16012008	46				
16012008	47				
16012008	48				
16012008	49				

Date	Tow	Other Species	Squid	Shrimp	Anchovy
16012008	50				
16012008	51				
16012008	52				
16012008	53				
16012008	54				
16012008	55				
16012008	56				
16012008	57				
16012008	58				
16012008	59				
16012008	60				
16012008	61				
17012008	62				
17012008	63				
17012008	64				
17012008	65				
17012008	66				
17012008	67				
17012008	68				
17012008	69				
17012008	70				
17012008	71				
17012008	72				
17012008	73				
17012008	74				
17012008	75				
17012008	76				
17012008	77				
17012008	78				
17012008	79				
17012008	80				
17012008	81				
17012008	82				
17012008	83				
17012008	84				
17012008	85				
17012008	86				

Date	Tow	Other Species	Squid	Shrimp	Anchovy
17012008	87				
17012008	88				
17012008	89				
17012008	90				
17012008	91				
17012008	92				
17012008	93				
17012008	94				
17012008	95				
17012008	96				
17012008	97				
18012008	98				
18012008	99				
18012008	100				
18012008	101				
18012008	102				
18012008	103				
18012008	104				
18012008	105				
18012008	106				
18012008	107				
18012008	108				
18012008	109				
18012008	110				
18012008	111				
18012008	112				
18012008	113				
18012008	114				
18012008	115				
18012008	116				
18012008	117				
18012008	118				
18012008	119				
18012008	120				
18012008	121				
18012008	122				
18012008	123				

Date	Tow	Other Species	Squid	Shrimp	Anchovy
18012008	124				
19012008	125				
19012008	126				
19012008	127				
19012008	128				
19012008	129				
19012008	130				
19012008	131				
19012008	132				
19012008	133				
19012008	134				
19012008	135				
19012008	136				
19012008	137				
19012008	138				
19012008	139				
19012008	140				
19012008	141				
19012008	142				
19012008	143				
19012008	144				
19012008	145				
19012008	146				
19012008	147				
19012008	148				
19012008	149				
19012008	150				
19012008	151				
19012008	152				
19012008	153				
19012008	154				
19012008	155				
19012008	156				
19012008	157				
19012008	158				
19012008	159				
19012008	160				

Date	Tow	Other Species	Squid	Shrimp	Anchovy
19012008	161				
19012008	162				
19012008	163				
20012008	164				
20012008	165				
20012008	166				
20012008	167				
20012008	168				
20012008	169				
20012008	170				
20012008	171				
20012008	172				
20012008	173				
20012008	174				
20012008	175				
20012008	176				
20012008	177				
20012008	178				
20012008	179				
20012008	180				
20012008	181				
20012008	182				
20012008	183				
20012008	184				
20012008	185				
20012008	186				
20012008	187				
20012008	188				
20012008	189				
20012008	190				
20012008	191				
20012008	192				
20012008	193				
21012008	194				
21012008	195				
21012008	196				
21012008	197				

Date	Tow	Other Species	Squid	Shrimp	Anchovy
21012008	198				
21012008	199				
21012008	200				
21012008	201				
21012008	202				
21012008	203				
21012008	204				
21012008	205				
21012008	206				
21012008	207				
21012008	208				
21012008	209				
21012008	210				
21012008	211				
21012008	212				
21012008	213				
21012008	214				
21012008	215				
21012008	216				
21012008	217				
21012008	218				
21012008	219				
21012008	220				
21012008	221				
21012008	222				
21012008	223				
21012008	224				
21012008	225				
21012008	226				
21012008	227				
21012008	228				
21012008	229				
21012008	230				
21012008	231				
21012008	232				
21012008	233				
22012008	234				

Date	Tow	Other Species	Squid	Shrimp	Anchovy
22012008	235				
22012008	236				
22012008	237				
22012008	238				
22012008	239				
22012008	240				
22012008	241				
22012008	242				
22012008	243				
22012008	244				
22012008	245				
22012008	246				
22012008	247				
22012008	248				
22012008	249				
22012008	250				
22012008	251				
22012008	252				
22012008	253				
22012008	254				
22012008	255				
22012008	256				
22012008	257				
22012008	258				
22012008	259				
22012008	260				
22012008	261				
22012008	262				
22012008	263				
22012008	264				
22012008	265				
22012008	266				
22012008	267				
23012008	268				
23012008	269				
23012008	270				
23012008	271				

Date	Tow	Other Species	Squid	Shrimp	Anchovy
23012008	272				
23012008	273				
23012008	274				
23012008	275				
23012008	276				
23012008	277				
23012008	278				
23012008	279				
23012008	280				
23012008	281				
23012008	282				
23012008	283				
23012008	284				
23012008	285				
23012008	286				
23012008	287				
23012008	288				
23012008	289				
23012008	290				
23012008	291				
23012008	292				
23012008	293				
23012008	294				
23012008	295				
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23012008	297				
23012008	298				
23012008	299				
23012008	300				
23012008	301				
23012008	302				
23012008	303				
24012008	304				
24012008	305				
24012008	306				
24012008	307				
24012008	308				

Date	Tow	Other Species	Squid	Shrimp	Anchovy
24012008	309				
24012008	310				
24012008	311				
24012008	312				
24012008	313				
24012008	314				
24012008	315				
24012008	316				
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24012008	327				
24012008	328				
24012008	329				
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18012007	7				
18012007	8				
18012007	9				
18012007	10				
18012007	11				
18012007	12				
18012007	13				
18012007	14				
18012007	15				
18012007	16				

Date	Tow	Other Species	Squid	Shrimp	Anchovy
18012007	17				
18012007	18				
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19012007	20				
19012007	21				
19012007	22				
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19012007	25				
19012007	26				
19012007	27				
19012007	28				
19012007	29				
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19012007	32				
19012007	33				
19012007	34				
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19012007	36				
19012007	37				
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19012007	42				
20012007	43				
20012007	44				
20012007	45				
20012007	46				
20012007	47				
20012007	48				
20012007	49				
20012007	50				
20012007	51				
20012007	52				
20012007	53				

Date	Tow	Other Species	Squid	Shrimp	Anchovy
20012007	54				
20012007	55				
20012007	56				
20012007	57				
20012007	58				
20012007	59				
20012007	60				
20012007	61				
21012007	62				
21012007	63				
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21012007	72				
21012007	73				
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21012007	79				
21012007	80				
21012007	81				
21012007	82				
21012007	83				
21012007	84				
21012007	85				
21012007	86				
21012007	87				
21012007	88				
21012007	89				
21012007	90				

Date	Tow	Other Species	Squid	Shrimp	Anchovy
21012007	91				
21012007	92				
21012007	93				
22012007	94				
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22012007	97				
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22012007	99				
22012007	100				
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22012007	117				
22012007	118				
22012007	119				
22012007	120				
22012007	121				
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22012007	123				
22012007	124				
22012007	125				
23012007	126				
23012007	127				

Date	Tow	Other Species	Squid	Shrimp	Anchovy
23012007	128				
23012007	129				
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23012007	131				
23012007	132				
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23012007	134				
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23012007	137				
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23012007	141				
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23012007	144				
23012007	145				
23012007	146				
23012007	147				
23012007	148				
23012007	149				
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23012007	154				
23012007	155				
23012007	156				
23012007	157				
24012007	158				
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24012007	160				
24012007	161				
24012007	162				
24012007	163				
24012007	164				

Date	Tow	Other Species	Squid	Shrimp	Anchovy
24012007	165				
24012007	166				
24012007	167				
24012007	168				
24012007	169				
24012007	170				
24012007	171				
24012007	172				
24012007	173				
24012007	174				
24012007	175				
24012007	176				
24012007	177				
24012007	178				
24012007	179				
24012007	180				
24012007	181				
24012007	182				
24012007	183				
24012007	184				
24012007	185				
19012006	1	Tonguefish			
19012006	2				
19012006	3				
20012006	4				
20012006	5				
20012006	6				
20012006	7				
20012006	8				
20012006	9				
20012006	10				
20012006	11				
20012006	12	Herringgen = Round herring			
20012006	13				
20012006	14				
20012006	15	Whelk; Starfish			
20012006	16				

Date	Tow	Other Species	Squid	Shrimp	Anchovy
20012006	17				
20012006	18				
20012006	19				
20012006	20				
20012006	21				
20012006	22				
20012006	23				
20012006	24				
20012006	25				
20012006	26				
20012006	27				
20012006	28				
20012006	29				
20012006	30				
20012006	31	Boston Mackerel			
20012006	32				
20012006	33				
20012006	34				
20012006	35				
20012006	36				
20012006	37				
20012006	38				
20012006	39				
20012006	40				
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21012006	43				
21012006	44				
21012006	45				
21012006	46				
21012006	47				
21012006	48				
21012006	49				
21012006	50				
21012006	51				
21012006	52				
21012006	53				

Date	Tow	Other Species	Squid	Shrimp	Anchovy
21012006	54				
21012006	55				
21012006	56				
21012006	57				
21012006	58				
21012006	59				
21012006	60				
21012006	61				
21012006	62				
21012006	63				
21012006	64				
21012006	65				
21012006	66				
21012006	67				
21012006	68				
21012006	69				
21012006	70				
21012006	71				
21012006	72				
21012006	73				
21012006	74				
21012006	75				
21012006	76				
21012006	77				
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21012006	79				
22012006	80				
22012006	81				
22012006	82				
22012006	83				
22012006	84				
22012006	85				
22012006	86				
22012006	87				
22012006	88				
22012006	89				
22012006	90				

Date	Tow	Other Species	Squid	Shrimp	Anchovy
22012006	91				
22012006	92				
22012006	93				
22012006	94				
22012006	95				
22012006	96				
22012006	97				
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22012006	100				
22012006	101				
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22012006	103				
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22012006	111				
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22012006	113				
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23012006	118				
23012006	119				
23012006	120				
23012006	121				
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23012006	123				
23012006	124				
23012006	125				
23012006	126				
23012006	127				

Date	Tow	Other Species	Squid	Shrimp	Anchovy
23012006	128				
23012006	129				
23012006	130				
23012006	131				
23012006	132				
23012006	133				
23012006	134				
23012006	135				
23012006	136				
23012006	137				
23012006	138				
23012006	139				
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23012006	146				
23012006	147				
24012006	148				
24012006	149				
24012006	150				
24012006	151				
24012006	152				
24012006	153				
24012006	154				
24012006	155				
24012006	156				
24012006	157				
24012006	158				
24012006	159				
24012006	160				
24012006	161				
24012006	162				
24012006	163				
24012006	164				

Date	Tow	Other Species	Squid	Shrimp	Anchovy
24012006	165				
24012006	166				
24012006	167				
24012006	168				
24012006	169				
24012006	170				
24012006	171				
24012006	172				
24012006	173				
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25012006	190				
25012006	191				
25012006	192				
25012006	193				
25012006	194				
25012006	195				
25012006	196				
25012006	197				
25012006	198				
25012006	199				
25012006	200				
25012006	201				

Date	Tow	Other Species	Squid	Shrimp	Anchovy
25012006	202				
25012006	203				
25012006	204				
25012006	205				
25012006	206				
25012006	207				
25012006	208				
25012006	209				
25012006	210				
25012006	211				
25012006	212				
25012006	213				
25012006	214				
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26012006	217				
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26012006	219				
26012006	220				
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26012006	223				
26012006	224				
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26012006	226				
26012006	227				
26012006	228				
26012006	229				
26012006	230				
26012006	231				
26012006	232				
26012006	233				
26012006	234				
26012006	235				
26012006	236				
26012006	237				
26012006	238				

Date	Tow	Other Species	Squid	Shrimp	Anchovy
26012006	239				
26012006	240				
27012006	241				
27012006	242				
27012006	243				
27012006	244				
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27012006	246				
27012006	247				
27012006	248				
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27012006	253				
27012006	254				
27012006	255				
27012006	256				
27012006	257				
27012006	258				
27012006	259				
27012006	260				
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27012006	262				
27012006	263				
27012006	264				
27012006	265				
27012006	266				
27012006	267				
27012006	268				
27012006	269				
27012006	270				
27012006	271				
27012006	272				
27012006	273				
27012006	274				
28012006	275				

Date	Tow	Other Species	Squid	Shrimp	Anchovy
28012006	276				
28012006	277				
28012006	278	Smallmouth Flounder, 2			5
28012006	279				
28012006	280	Smallmouth Flounder, 1			
28012006	281				
28012006	282				
28012006	283				
28012006	284				
28012006	285				
28012006	286				
28012006	287				
28012006	288				
28012006	289				
28012006	290				P
28012006	291				
28012006	292	Haddock, 1 Juvenile			P
28012006	293				
28012006	294				
28012006	295				
28012006	296				
28012006	297				
28012006	298				
28012006	299				
28012006	300				
28012006	301				
28012006	302				
25012005	1	Butterfly ray; Pufferfish; Triggerfish; Cownose ray			
25012005	2				
25012005	3				
25012005	4				P
26012005	5				P
26012005	6				P
26012005	7				P
26012005	8				
26012005	9				
26012005	10				P

Date	Tow	Other Species	Squid	Shrimp	Anchovy
26012005	11				P
26012005	12				P
26012005	13				
26012005	14				P
26012005	15				P
26012005	16				P
26012005	17				P
26012005	18				
26012005	19				
26012005	20				
26012005	21				
26012005	22				
26012005	23				
26012005	24				
26012005	25				
26012005	26	Loligo			P
26012005	27				P
26012005	28				
26012005	29				P
26012005	30				
26012005	31				P
26012005	32	Tonguefish			P
26012005	33				
27012005	34				
27012005	35				
27012005	36				
27012005	37				
27012005	38				
27012005	39				
27012005	40				
27012005	41				
27012005	42				
27012005	43				
27012005	44				
27012005	45				
27012005	46				
27012005	47				

Date	Tow	Other Species	Squid	Shrimp	Anchovy
27012005	48				
27012005	49				
27012005	50				
27012005	51				
27012005	52				
27012005	53				
28012005	54				
28012005	55				
29012005	56				
29012005	57				
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29012005	62				
29012005	63				
29012005	64				
29012005	65				
29012005	66				
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29012005	68				
29012005	69				
29012005	70				
29012005	71				
29012005	72				
29012005	73				
29012005	74				
29012005	75	Tonguefish			P
29012005	76				
29012005	77				
29012005	78				P
29012005	79				
29012005	80				
29012005	81				P
30012005	82				
30012005	83				
30012005	84				

Date	Tow	Other Species	Squid	Shrimp	Anchovy
30012005	85				
30012005	86				
30012005	87				
30012005	88				
30012005	89				
30012005	90				
30012005	91				
30012005	92				
30012005	93				
30012005	94				P
30012005	95				P
30012005	96				
30012005	97				
30012005	98				
30012005	99				
30012005	100				
30012005	101				
30012005	102				
30012005	103				
30012005	104				
31012005	105				P
31012005	106				
31012005	107	Big bag of Croaker			P
31012005	108				P
31012005	109				P
31012005	110				P
31012005	111				P
31012005	112				
1022005	113				
1022005	114				
1022005	115				
1022005	116				
1022005	117				
1022005	118				
1022005	119				
1022005	120				
1022005	121				

Date	Tow	Other Species	Squid	Shrimp	Anchovy
1022005	122				
1022005	123				
2022005	124				
2022005	125				
2022005	126				
2022005	127				
2022005	128				
2022005	129				
2022005	130				
2022005	131				
2022005	132				
2022005	133				
2022005	134				
2022005	135				
2022005	136				
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2022005	138				
2022005	139				
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2022005	141				
2022005	142				
2022005	143				
2022005	144				
2022005	145				
2022005	146				
2022005	147				
2022005	148				
2022005	149				
16012004	1				
16012004	2				
17012004	3				
17012004	4				
17012004	5				
17012004	6				
17012004	7				
17012004	8				
17012004	9				

Date	Tow	Other Species	Squid	Shrimp	Anchovy
17012004	10				
17012004	11				
17012004	12				
17012004	13				
17012004	14				
17012004	15				
17012004	16				
17012004	17				
17012004	18				
17012004	19				
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17012004	27				
17012004	28				
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17012004	36				
17012004	37				
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18012004	39				
18012004	40				
18012004	41				
18012004	42				
18012004	43				
18012004	44				
18012004	45				
18012004	46				

Date	Tow	Other Species	Squid	Shrimp	Anchovy
18012004	47				
18012004	48				
18012004	49				
18012004	50				
18012004	51				
18012004	52				
18012004	53				
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18012004	55				
18012004	56				
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18012004	78				
18012004	79				
19012004	80				
19012004	81				
19012004	82				
19012004	83				

Date	Tow	Other Species	Squid	Shrimp	Anchovy
19012004	84	Pipefish			
19012004	85				
19012004	86				
19012004	87				
19012004	88				
19012004	89				
19012004	90				
19012004	91				
19012004	92				
19012004	93				
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19012004	95				
19012004	96				
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19012004	98				
19012004	99				
19012004	100				
19012004	101				
19012004	102				
19012004	103				
19012004	104				
19012004	105				
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19012004	107				
19012004	108				
19012004	109				
19012004	110				
20012004	111				
20012004	112				
20012004	113				
20012004	114	Pollock			
20012004	115				
20012004	116				
20012004	117				
20012004	118				
20012004	119				

Date	Tow	Other Species	Squid	Shrimp	Anchovy
20012004	120				
20012004	121				
20012004	122				
20012004	123				
20012004	124				
20012004	125				
20012004	126				
20012004	127				
20012004	128				
20012004	129				
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20012004	141				
20012004	142				
20012004	143				
20012004	144				
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21012004	146				
21012004	147				
21012004	148				
21012004	149				
21012004	150				
21012004	151				
21012004	152				
21012004	153				
21012004	154				
21012004	155				
21012004	156				
21012004	157				

Date	Tow	Other Species	Squid	Shrimp	Anchovy
21012004	158				
21012004	159				
21012004	160				
21012004	161				
21012004	162				
21012004	163				P
21012004	164				
21012004	165				
21012004	166				
21012004	167				P
21012004	168				
21012004	169				
21012004	170				
21012004	171				
21012004	172				
21012004	173				
21012004	174				
21012004	175				
21012004	176				
22012004	177				
22012004	178				
22012004	179				
22012004	180	T. Constrictus			
22012004	181				
22012004	182				
22012004	183				
22012004	184				
22012004	185				
22012004	186				
22012004	187				
22012004	188				
22012004	189	Rock Sea Bass; Silversides; Very fuzzy xanthid crab			P
22012004	190				
22012004	191				
22012004	192				
22012004	193				P
22012004	194				

Date	Tow	Other Species	Squid	Shrimp	Anchovy
22012004	195				
22012004	196				
22012004	197				
22012004	198				
22012004	199				
22012004	200				
22012004	201				
22012004	202	Boston Mackerel			
22012004	203				
23012004	204				P
23012004	205	Starfish			P
23012004	206				
23012004	207				
23012004	208				
23012004	209	Moon Snail			
23012004	210				
23012004	211				
23012004	212				
23012004	213				
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23012004	216				
23012004	217				
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23012004	223				
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23012004	225				
23012004	226				
23012004	227				
23012004	228				
23012004	229				
23012004	230				
23012004	231				

Date	Tow	Other Species	Squid	Shrimp	Anchovy
24012004	232				
24012004	233				
24012004	234				
24012004	235				
24012004	236				
24012004	237				
24012004	238				
24012004	239				
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24012004	242				
24012004	243				
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24012004	245				
24012004	246				
24012004	247				
24012004	248				
24012004	249	alosids			
24012004	250				
24012004	251				
24012004	252				
24012004	253				
24012004	254				
24012004	255				
24012004	256				
24012004	257				
24012004	258				
14012003	1				
14012003	2		P		
14012003	3	Stargazer (1)	P		
14012003	4	Starfish (1)	P		
14012003	5	N. Pufferfish	P		
14012003	6	Swimming Crab; Bat Ray; Blackjaw? (1); N. Pufferfish	P		
14012003	7	N. Pufferfish; Blackcheeked Tonguefish; Whifts	P		
14012003	8	Bat Ray (2 juveniles); N. Pufferfish	P		
14012003	9	SeaStar; Blackcheeked Tonguefish; Pipefish; N. Pufferfish	P		
14012003	10				

Date	Tow	Other Species	Squid	Shrimp	Anchovy
15012003	11				
15012003	12				
15012003	13				
15012003	14				
15012003	15	Cutlassfish			P
15012003	16	Cutlassfish	P		
15012003	17		P		P
15012003	18				
15012003	19		P		
15012003	20				
15012003	21				
15012003	22				
15012003	23				
15012003	24				
15012003	25				
15012003	26				
15012003	27		P		P
15012003	28		P		P
15012003	29				
15012003	30	Rock Sea Bass'			
15012003	31				
15012003	32				
15012003	33				
15012003	34				
15012003	35				
15012003	36				
16012003	37				
16012003	38				
16012003	39				
16012003	40				
16012003	41				
16012003	42				
16012003	43				
16012003	44				
16012003	45				
16012003	46				
16012003	47				

Date	Tow	Other Species	Squid	Shrimp	Anchovy
16012003	48				
16012003	49				
16012003	50				
16012003	51				
16012003	52				
16012003	53				
16012003	54				
16012003	55				
16012003	56				
16012003	57				
16012003	58				
16012003	59				
16012003	60				
16012003	61				
16012003	62				
16012003	63				
16012003	64				
16012003	65				
16012003	66				
16012003	67				
16012003	68				
16012003	69				
16012003	70				
16012003	71				
17012003	72				
17012003	73				
17012003	74				
17012003	75				
17012003	76				
17012003	77				
17012003	78				
17012003	79				
17012003	80				
17012003	81				
17012003	82				
17012003	83				
17012003	84				

Date	Tow	Other Species	Squid	Shrimp	Anchovy
17012003	85				
17012003	86				
17012003	87				
17012003	88				
17012003	89				
17012003	90				
17012003	91				
17012003	92				
17012003	93				
17012003	94				
17012003	95				
17012003	96				
17012003	97				
17012003	98	Sea Urchins; Thorny Skate			
17012003	99	Thorny Skate			
17012003	100	Thorny Skate			P
17012003	101				
17012003	102	Thorny skate			
17012003	103				
17012003	104				
17012003	105				
18012003	106				
18012003	107				
18012003	108				
18012003	109				
18012003	110				
18012003	111				
18012003	112				
18012003	113				
18012003	114				
18012003	115				
18012003	116				
18012003	117				
18012003	118				
18012003	119				
18012003	120				
18012003	121				

Date	Tow	Other Species	Squid	Shrimp	Anchovy
18012003	122				
18012003	123				
18012003	124				
18012003	125				
18012003	126				
18012003	127				
18012003	128				
18012003	129				
18012003	130				
19012003	131				
19012003	132				
19012003	133				
19012003	134				
19012003	135				
19012003	136				
19012003	137				
19012003	138				
19012003	139				
19012003	140				
19012003	141				
19012003	142				
19012003	143				
19012003	144				
19012003	145				
19012003	146				
19012003	147				
19012003	148				
19012003	149				
19012003	150				
19012003	151				
19012003	152	Pollock			
19012003	153				
19012003	154				
19012003	155				
19012003	156				
19012003	157				
20012003	158				

Date	Tow	Other Species	Squid	Shrimp	Anchovy
20012003	159				
20012003	160				
20012003	161				
20012003	162				
20012003	163				
20012003	164				
20012003	165				
20012003	166				
20012003	167				
20012003	168				
20012003	169				
20012003	170				
20012003	171				
20012003	172				
20012003	173				
20012003	174				
20012003	175				
20012003	176				
20012003	177				
20012003	178				
20012003	179				
20012003	180				
20012003	181				
20012003	182				
20012003	183				
20012003	184				
20012003	185				
20012003	186				
20012003	187				
20012003	188				
20012003	189				
20012003	190				
21012003	191				
21012003	192				
21012003	193				
21012003	194				
21012003	195				

Date	Tow	Other Species	Squid	Shrimp	Anchovy
21012003	196				
21012003	197				
21012003	198				
21012003	199				
21012003	200				
21012003	201				
21012003	202				
21012003	203				
21012003	204				
21012003	205				
21012003	206				
21012003	207				
21012003	208				
22012003	209				
22012003	210				
22012003	211				
22012003	212				
22012003	213				
22012003	214				
22012003	215				
22012003	216				
22012003	217				
22012003	218	Banded drum	P		
22012003	219				
22012003	220	Smooth Dog (1 Female)			
22012003	221				
22012003	222				
22012003	223				
22012003	224				
22012003	225				
22012003	226				
22012003	227				
14012002	1				
14012002	2				
14012002	3				
14012002	4				
14012002	5				

Date	Tow	Other Species	Squid	Shrimp	Anchovy
14012002	6				
14012002	7				
14012002	8				
14012002	9				
15012002	10				
15012002	11	Dogfish, Smooth (4 Females); Cutlassfish			
15012002	12	Dogfish, Smooth (15 Males, 8 Females)			
15012002	13	Dogfish, Smooth (7 Females, 8 Males)			
15012002	14	Dogfish, Smooth (8 Males, 4 Females)			
15012002	15				
15012002	16				
15012002	17				
15012002	18				
15012002	19	Dogfish, Smooth			
15012002	20				
15012002	21				
15012002	22				
15012002	23	Dogfish, Smooth (7 Males, 7 Females)			
15012002	24	Dogfish, Smooth (4 Males, 5 Females)			
15012002	25	Dogfish, Smooth (12 Males, 14 Females)			
15012002	26	Dogfish, Smooth (12 Males, 13 Females)			
15012002	27	Dogfish, Smooth (2 Males, 4 Females)			
15012002	28	Dogfish, Smooth (1 Male, 1 Female)			
15012002	29	Dogfish, Smooth (1 Male, 2 Females)			
15012002	30				
15012002	31				
15012002	32	Conch			
15012002	33				
15012002	34				
15012002	35				
15012002	36				
15012002	37	Little wend fish			
15012002	38				
15012002	39				
16012002	40	Dogfish, Smooth			
16012002	41				
16012002	42				

Date	Tow	Other Species	Squid	Shrimp	Anchovy
16012002	43				
16012002	44				
16012002	45				
16012002	46				
16012002	47				
16012002	48				
16012002	49				
16012002	50				
16012002	51				
16012002	52				
16012002	53				
16012002	54				
16012002	55				
16012002	56				
16012002	57				
16012002	58				
16012002	59	Thresher shark			
16012002	60				
16012002	61				
16012002	62				
16012002	63				
16012002	64				
16012002	65				
16012002	66				
16012002	67	Northern Puffer			
16012002	68				
16012002	69				
16012002	70				
16012002	71				
16012002	72				
16012002	73				
16012002	74				
16012002	75				
16012002	76				
16012002	77				
17012002	78				
17012002	79				

Date	Tow	Other Species	Squid	Shrimp	Anchovy
17012002	80				
17012002	81				
17012002	82				
17012002	83				
17012002	84				
17012002	85				
17012002	86				
17012002	87				
17012002	88				
17012002	89				
17012002	90				
17012002	91	Octopus (little one); Tautog (1)			
17012002	92				
17012002	93				
17012002	94				
17012002	95				
17012002	96				
17012002	97				
17012002	98				
17012002	99				
17012002	100				
17012002	101				
17012002	102				
17012002	103				
17012002	104				
17012002	105				
17012002	106				
17012002	107				
17012002	108				
17012002	109				
17012002	110				
17012002	111				
17012002	112				
17012002	113				
17012002	114				
17012002	115				
18012002	116				

Date	Tow	Other Species	Squid	Shrimp	Anchovy
18012002	117				
18012002	118				
18012002	119				
18012002	120				
18012002	121				
18012002	122				
18012002	123				
18012002	124				
18012002	125				
18012002	126				
18012002	127				
18012002	128				
18012002	129				
18012002	130				
18012002	131				
18012002	132				
18012002	133				
18012002	134				
18012002	135				
18012002	136				
18012002	137				
18012002	138				
18012002	139				
18012002	140				
18012002	141				
18012002	142				
18012002	143				
18012002	144				
18012002	145				
18012002	146				
18012002	147				
18012002	148				
18012002	149				
18012002	150				
18012002	151				
18012002	152				
18012002	153				

Date	Tow	Other Species	Squid	Shrimp	Anchovy
18012002	154				
18012002	155				
18012002	156				
18012002	157				
18012002	158				
19012002	159				
19012002	160				
19012002	161				
20012002	162				
20012002	163				
20012002	164				
20012002	165				
20012002	166				
20012002	167				
20012002	168				
20012002	169				
20012002	170				
20012002	171				
20012002	172				
20012002	173				
20012002	174				
20012002	175				
20012002	176				
20012002	177				
20012002	178				
20012002	179				
20012002	180				
20012002	181				
20012002	182				
20012002	183				
20012002	184				
20012002	185				
20012002	186				
20012002	187				
20012002	188				
20012002	189				
20012002	190				

Date	Tow	Other Species	Squid	Shrimp	Anchovy
20012002	191				
20012002	192				
20012002	193				
20012002	194				
20012002	195				
20012002	196				
20012002	197				
20012002	198				
20012002	199				
20012002	200				
20012002	201				
21012002	202				
21012002	203				
21012002	204				
21012002	205				
21012002	206				
21012002	207				
21012002	208				
21012002	209				
21012002	210				
21012002	211				
21012002	212				
21012002	213				
21012002	214				
21012002	215				
21012002	216				
21012002	217				
21012002	218				
21012002	219				
21012002	220				
21012002	221				
21012002	222				
21012002	223				
21012002	224				
21012002	225				
21012002	226				
14012001	1		P		

Date	Tow	Other Species	Squid	Shrimp	Anchovy
14012001	2		P		
14012001	3				
14012001	4		P		
15012001	5				
15012001	6	Loggerhead Turtle	P		
15012001	7	Puffer	P		
15012001	8		P		
15012001	9				
15012001	10	Ribbonfish			
15012001	11	Ribbonfish			P
15012001	12	Dogfish, Smooth; Bat Ray	P		
15012001	13	Dogfish, Smooth (many small)	P		
15012001	14	Dogfish, Smooth; Surf clam (1); Hermit Crab (1)	P		
15012001	15	Spider crab; Ribbonfish			
15012001	16		P		
15012001	17		P		
15012001	18				P
15012001	19		P		P
15012001	20				
15012001	21		P		P
15012001	22				P
15012001	23	Oyster toadfish	P		
15012001	24				P
15012001	25	Black-cheeked tongue fish; small-mouthed flounder			P
15012001	26				P
15012001	27	Tonguefish			P
15012001	28				
16012001	29				P
16012001	30				P
16012001	31				P
16012001	32				P
16012001	33				
16012001	34				P
16012001	35				
16012001	36				
16012001	37	False Albacore			
16012001	38	Boston Mackerel			

Date	Tow	Other Species	Squid	Shrimp	Anchovy
16012001	39		P		P
16012001	40	Tonguefish			P
16012001	41	Starfish			P
16012001	42				
16012001	43				P
16012001	44				
16012001	45				
16012001	46				
16012001	47				
16012001	48				
16012001	49				
16012001	50				
16012001	51				
16012001	52				
16012001	53				
16012001	54				P
16012001	55				
16012001	56	Starfish			
16012001	57	Tonguefish; Boston Mackerel	P		
16012001	58	Channel whelk			
16012001	59	Boston Mackerel; Lady Crab; Tonguefish	P		
16012001	60				
16012001	61	Lady Crabs; Boston Mackerel; Smallmouth flounder			
16012001	62	Boston Mackerel	P		
16012001	63	Boston Mackerel	P		
16012001	64				
16012001	65	Starfish (several species); Smallmouth flounders			
16012001	66				
16012001	67				
16012001	68				
16012001	69				
17012001	70				
17012001	71				
17012001	72				
17012001	73				
17012001	74				
17012001	75				

Date	Tow	Other Species	Squid	Shrimp	Anchovy
17012001	76				
17012001	77	Starfish; Boston Mackerel; Lady Crab	P		
17012001	78	Boston Mackerel			
17012001	79	Rockcrab; starfish			
17012001	80	Boston Mackerel; Lady Crab	P		
17012001	81	Boston Mackerel; Clam	P		
17012001	82				
17012001	83	Striped starfish			
17012001	84				
17012001	85				
17012001	86				
17012001	87				
17012001	88	Mackerel; Starfish			
17012001	89				
17012001	90				
17012001	91		P		
17012001	92				
17012001	93				
17012001	94	Rock Crab; Boston Mackerel	P		
17012001	95	Boston Mackerel			
17012001	96	Boston Mackerel	P		
17012001	97				
17012001	98				
17012001	99				
17012001	100				
17012001	101				
17012001	102				
17012001	103				
17012001	104				
17012001	105				
17012001	106				
17012001	107				
17012001	108				
18012001	109				
18012001	110				P
18012001	111				P
18012001	112		P		P

Date	Tow	Other Species	Squid	Shrimp	Anchovy
18012001	113				P
18012001	114				
18012001	115				P
18012001	116				
18012001	117				
18012001	118				
18012001	119				
18012001	120				
18012001	121	Calico scallops; Surf Clam; Tun Shell			P
18012001	122				
18012001	123				P
18012001	124				
18012001	125				
18012001	126				
18012001	127				
18012001	128				
18012001	129				
18012001	130				
18012001	131				P
18012001	132	Mud crab			P
18012001	133	Heart urchin			
18012001	134	Starfish; Sea Urchins; Moon Snails	P		
18012001	135	Starfish	P		
18012001	136	Starfish; Clams; Moon Snails	P		P
18012001	137				P
18012001	138				
18012001	139				
18012001	140				P
18012001	141				P
18012001	142		P		P
18012001	143				P
18012001	144				
19012001	145				P
19012001	146		P		P
19012001	147		P		P
19012001	148		P		P
19012001	149		P		P

Date	Tow	Other Species	Squid	Shrimp	Anchovy
19012001	150				P
19012001	151				P
19012001	152	Dogfish, Smooth			P
19012001	153				
19012001	154				
19012001	155				
19012001	156	Dogfish, Smooth	P		
19012001	157	Dogfish, Smooth	P		
19012001	158	Starfish	P		
19012001	159	Jellyfish	P		
19012001	160	Bat Ray			
19012001	161	Jellyfish; Starfish	P		
19012001	162	Cutlassfish; Starfish	P		
19012001	163				
29012000	1	Stingray (1)			
29012000	2				
29012000	3				
29012000	4				
29012000	5				
29012000	6	Dogfish, Smooth (1)			
29012000	7	Dogfish, Smooth (3-Female; 1-Male)			
29012000	8				
29012000	9	Dogfish, Smooth (1-Male)			
29012000	10				
30012000	11	Dogfish, Smooth (2-Female)			
30012000	12	Dogfish, Smooth (6-Female; 5-Male)			
30012000	13				
30012000	14				
30012000	15				
30012000	16				
30012000	17				
30012000	18				
30012000	19				
30012000	20				
30012000	21				
30012000	22				
30012000	23				

Date	Tow	Other Species	Squid	Shrimp	Anchovy
30012000	24				
30012000	25				
30012000	26				
30012000	27				
30012000	28				
30012000	29				
30012000	30				
30012000	31				
30012000	32				
30012000	33				
30012000	34				
30012000	35				
30012000	36				
30012000	37				
30012000	38				
31012000	39				
31012000	40				
31012000	41				
31012000	42				
31012000	43				
31012000	44				
31012000	45				
31012000	46				
31012000	47				
31012000	48				
31012000	49				
31012000	50				
31012000	51				
31012000	52				
31012000	53				
31012000	54				
31012000	55				
31012000	56				
31012000	57				
31012000	58				
31012000	59				
31012000	60				

Date	Tow	Other Species	Squid	Shrimp	Anchovy
31012000	61				
31012000	62				
31012000	63				
31012000	64				
1022000	65				
1022000	66	Sargassum type seahorse (1)			
1022000	67				
1022000	68				
1022000	69				
1022000	70				
1022000	71				
1022000	72				
1022000	73				
1022000	74				
1022000	75				
1022000	76				
1022000	77				
1022000	78				
1022000	79		1		
1022000	80				
1022000	81				
1022000	82				
1022000	83				
1022000	84				
1022000	85				
1022000	86				
1022000	87				
1022000	88	Tautog (1)			
1022000	89				
1022000	90				
1022000	91				
1022000	92				
2022000	93				
2022000	94	Mantis Shrimp (1)			
2022000	95				
2022000	96				
2022000	97				

Date	Tow	Other Species	Squid	Shrimp	Anchovy
2022000	98				
2022000	99				
2022000	100				
2022000	101				
2022000	102				
2022000	103				
2022000	104				
2022000	105				
2022000	106				
2022000	107				
2022000	108				
2022000	109				
2022000	110				
2022000	111				
2022000	112				
2022000	113				
2022000	114				
2022000	115				
2022000	116				
2022000	117				
2022000	118				
2022000	119				
2022000	120				
2022000	121				
2022000	122				
3022000	123				
3022000	124				
3022000	125				
3022000	126				
3022000	127				
3022000	128				
3022000	129				
3022000	130	Dogfish, Smooth (2); Cutlassfish	P		
3022000	131				
3022000	132				
3022000	133				
3022000	134				

Date	Tow	Other Species	Squid	Shrimp	Anchovy
3022000	135				
3022000	136				
4022000	137				
4022000	138				
4022000	139				
4022000	140				
4022000	141				
3021999	1				
3021999	2				
3021999	3				
3021999	4				
3021999	5				
3021999	6				
3021999	7				
3021999	8				
3021999	9	Red Drum			
3021999	10				
3021999	11				
3021999	12	Red Drum			
4021999	13	Red Drum			
4021999	14				
4021999	15	Blackfin Goosefish			
4021999	16				
4021999	17				
4021999	18				
4021999	19				
4021999	20				
4021999	21				
4021999	22				
4021999	23				
4021999	24				
4021999	25				
4021999	26				
4021999	27				
4021999	28				
4021999	29				
4021999	30				

Date	Tow	Other Species	Squid	Shrimp	Anchovy
4021999	31				
4021999	32				
4021999	33				
4021999	34				
4021999	35				
4021999	36				
4021999	37				
4021999	38				
4021999	39				
4021999	40				
4021999	41				
4021999	42				
4021999	43				
4021999	44				
4021999	45				
4021999	46				
4021999	47				
4021999	48				
5021999	49				
5021999	50				
5021999	51				
5021999	52				
5021999	53				
5021999	54				
5021999	55				
5021999	56				
5021999	57				
5021999	58				
5021999	59				
5021999	60				
5021999	61				
5021999	62				
5021999	63				
5021999	64				
6021999	65				
6021999	66				
6021999	67				

Date	Tow	Other Species	Squid	Shrimp	Anchovy
6021999	68				
6021999	69				
6021999	70				
6021999	71				
6021999	72				
6021999	73				
6021999	74				
6021999	75				
6021999	76				
6021999	77				
6021999	78				
6021999	79				
6021999	80				
6021999	81				
6021999	82				
6021999	83				
6021999	84				
6021999	85				
6021999	86				
6021999	87				
7021999	88				
7021999	89				
7021999	90				
7021999	91				
7021999	92				
7021999	93				
7021999	94				
7021999	95				
7021999	96				
7021999	97				
7021999	98				
7021999	99				
7021999	100				
7021999	101				
7021999	102				
7021999	103				
7021999	104				

Date	Tow	Other Species	Squid	Shrimp	Anchovy
7021999	105				
7021999	106				
7021999	107				
7021999	108				
7021999	109				
7021999	110				
7021999	111				
7021999	112				
7021999	113				
7021999	114				
7021999	115				
7021999	116				
8021999	117				
8021999	118				
8021999	119				
8021999	120				
8021999	121				
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8021999	123				
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8021999	131				
8021999	132				
8021999	133				
8021999	134				
8021999	135				
8021999	136				
8021999	137				
8021999	138				
8021999	139				
8021999	140				
8021999	141				

Date	Tow	Other Species	Squid	Shrimp	Anchovy
8021999	142				
8021999	143				
8021999	144				
8021999	145				
8021999	146				
16011998	1				
17011998	2				
17011998	3				
17011998	4				
17011998	5				
17011998	6				
17011998	7				
17011998	8				
17011998	9				
17011998	10				
17011998	11				
18011998	12				
18011998	13				
18011998	14				
18011998	15				
18011998	16				
18011998	17				
18011998	18				
18011998	19				
18011998	20				
18011998	21				
18011998	22				
18011998	23				
18011998	24				
18011998	25				
19011998	26				
19011998	27				
19011998	28				
19011998	29				
19011998	30				
20011998	31				
20011998	32				

Date	Tow	Other Species	Squid	Shrimp	Anchovy
20011998	33				
20011998	34				
20011998	35				
21011998	36				
21011998	37				
21011998	38				
21011998	39				
21011998	40				
21011998	41				
21011998	42				
21011998	43				
21011998	44				
21011998	45				
21011998	46				
21011998	47				
21011998	48				
21011998	49				
22011998	50				
22011998	51				
22011998	52				
22011998	53				
22011998	54				
22011998	55				
22011998	56				
22011998	57				
22011998	58				
22011998	59				
22011998	60				
22011998	61				
22011998	62				
22011998	63				
22011998	64				
1021997	1				
2021997	2				
2021997	3				
2021997	4				
2021997	5				

Date	Tow	Other Species	Squid	Shrimp	Anchovy
2021997	6				
2021997	7				
2021997	8	DogfishSmooth (1)			
2021997	9	DogfishSmooth (1)			
2021997	10				
2021997	11				
2021997	12	DogfishSmooth (1); Bluefish			
2021997	13				
2021997	14				
2021997	15	DogfishSmooth (1)			
2021997	16				
2021997	17				
2021997	18				
2021997	19				
2021997	20				
2021997	21				
2021997	22				
2021997	23				
2021997	24				
2021997	25				
2021997	26				
2021997	27				
2021997	28				
3021997	29				
3021997	30				
3021997	31				
3021997	32				
3021997	33				
3021997	34				
3021997	35				
3021997	36				
3021997	37				
3021997	38				
3021997	39				
3021997	40				
3021997	41				
3021997	42				

Date	Tow	Other Species	Squid	Shrimp	Anchovy
3021997	43				
3021997	44				
3021997	45				
3021997	46				
3021997	47				
3021997	48				
3021997	49				
3021997	50				
3021997	51				
3021997	52				
3021997	53				
3021997	54				
4021997	55				
4021997	56				
4021997	57				
4021997	58				
4021997	59				
4021997	60				
4021997	61				
4021997	62				
4021997	63				
4021997	64				
4021997	65				
4021997	66				
4021997	67				
4021997	68				
4021997	69				
4021997	70				
4021997	71				
4021997	72				
4021997	73				
4021997	74				
4021997	75				
4021997	76				
4021997	77				
4021997	78				
4021997	79				

Date	Tow	Other Species	Squid	Shrimp	Anchovy
5021997	80				
5021997	81				
5021997	82				
5021997	83				
5021997	84				
5021997	85				
5021997	86				
5021997	87				
5021997	88				
5021997	89				
5021997	90				
5021997	91				
5021997	92				
5021997	93				
5021997	94				
5021997	95				
5021997	96				
5021997	97				
5021997	98				
5021997	99				
5021997	100				
5021997	101				
5021997	102				
5021997	103				
5021997	104				
5021997	105				
6021997	106				
6021997	107				
6021997	108				
6021997	109				
6021997	110				
6021997	111				
6021997	112				
6021997	113				
6021997	114				
6021997	115				
6021997	116				

Date	Tow	Other Species	Squid	Shrimp	Anchovy
6021997	117				
6021997	118				
6021997	119	Conch (1)			
6021997	120				
6021997	121				
6021997	122	Dogfish, Smooth (2 male, 1 female)			
6021997	123	Dogfish, Smooth (measured: 8 female, 45 male)			
6021997	124	Dogfish, Smooth			
6021997	125	Dogfish, Smooth (1 male, 5 female)			
6021997	126				
6021997	127				
6021997	128				
6021997	129				
6021997	130				
6021997	131				
23011996	1	Scianids			
23011996	2	Scianids			
23011996	3				
23011996	4				
24011996	5				
24011996	6				
24011996	7				
24011996	8	Unknown (unreadable record) species: 4 females			
24011996	9				
24011996	10	Unknown (unreadable record)			
24011996	11				
24011996	12				
24011996	13				
24011996	14				
24011996	15				
24011996	16				
24011996	17				
24011996	18				
24011996	19				
24011996	20				
24011996	21				
24011996	22				

Date	Tow	Other Species	Squid	Shrimp	Anchovy
24011996	23				
24011996	24				
24011996	25				
24011996	26				
24011996	27				
24011996	28				
24011996	29				
24011996	30				
24011996	31				
25011996	32				P
25011996	33				
25011996	34				P
25011996	35				P
25011996	36				
25011996	37				
25011996	38				
25011996	39				
25011996	40				
25011996	41				
25011996	42				
25011996	43				
7021996	44				P
7021996	45				P
7021996	46				P
7021996	47				
7021996	48				
7021996	49				
7021996	50				
7021996	51				
7021996	52				
7021996	53				
7021996	54				
7021996	55				
7021996	56				P
7021996	57				
7021996	58				
7021996	59				

Date	Tow	Other Species	Squid	Shrimp	Anchovy
7021996	60				
7021996	61				
7021996	62				
7021996	63				
7021996	64				
8021996	65				
8021996	66				
8021996	67				
8021996	68				
8021996	69				
8021996	70				
8021996	71				
8021996	72				
8021996	73				
8021996	74				
8021996	75				
8021996	76				
8021996	77				
8021996	78				
8021996	79				
8021996	80				
8021996	81				
8021996	82				
8021996	83				
8021996	84				
8021996	85				
8021996	86				
8021996	87				
8021996	88				
8021996	89				
8021996	90				
8021996	91				
9021996	92				
9021996	93				
9021996	94				
9021996	95				
9021996	96				

Date	Tow	Other Species	Squid	Shrimp	Anchovy
9021996	97				
9021996	98				
9021996	99				
9021996	100				
9021996	101				
9021996	102				
9021996	103				
9021996	104				
9021996	105				
9021996	106				
9021996	107				
9021996	108				
9021996	109				
9021996	110				
9021996	111				
9021996	112				
9021996	113				
9021996	114				
9021996	115				
9021996	116				
9021996	117				
10021996	118				
10021996	119				
10021996	120				
10021996	121				
10021996	122				
10021996	123				
10021996	124				
10021996	125				
10021996	126				
10021996	127				
10021996	128				
10021996	129				
10021996	130				
10021996	131				
10021996	132				
10021996	133				

Date	Tow	Other Species	Squid	Shrimp	Anchovy
10021996	134				
10021996	135				
10021996	136				
10021996	137				
10021996	138		P		
10021996	139				
10021996	140		P		
11021996	141				
11021996	142	DogfishSmooth			
11021996	143				
11021996	144				
11021996	145				
11021996	146		P		
11021996	147				
11021996	148				
11021996	149		P		
11021996	150				
11021996	151				
11021996	152				
11021996	153				
11021996	154				
11021996	155				
11021996	156				
11021996	157				
11021996	158				
11021996	159				
11021996	160				
11021996	161				
11021996	162				
11021996	163				
11021996	164				
11021996	165				
11021996	166				
11021996	167				
11021996	168				
11021996	169				
11021996	170				

Date	Tow	Other Species	Squid	Shrimp	Anchovy
11021996	171				
11021996	172				
11021996	173				
11021996	174				
11021996	175				
11021996	176				
12021996	177				
12021996	178				
12021996	179				
12021996	180				
12021996	181				
12021996	182				
12021996	183				
12021996	184				
12021996	185				
12021996	186				
12021996	187				
12021996	188				
12021996	189				
12021996	190				
12021996	191				
12021996	192				
12021996	193				
12021996	194				
12021996	195				
12021996	196				
12021996	197				
12021996	198				
12021996	199				
12021996	200				
12021996	201				
12021996	202				
12021996	203				
12021996	204				
24011995	1				
25011995	2				
25011995	3				

Date	Tow	Other Species	Squid	Shrimp	Anchovy
25011995	4				
25011995	5				
25011995	6				
25011995	7				
25011995	8				
25011995	9				
25011995	10				
25011995	11				
25011995	12				
25011995	13				
25011995	14				
25011995	15				
26011995	16				
26011995	17				
26011995	18				
26011995	19				
26011995	20				
26011995	21				
26011995	22				
26011995	23				
26011995	24				
26011995	25				
26011995	26				
26011995	27				
26011995	28				
26011995	29				
26011995	30				
27011995	31				
27011995	32				
27011995	33				
27011995	34				
27011995	35				
27011995	36				
27011995	37				
27011995	38				
27011995	41				
27011995	42				

Date	Tow	Other Species	Squid	Shrimp	Anchovy
27011995	43				
27011995	44				
27011995	45				
27011995	46				
28011995	47				
28011995	48				
28011995	49				
28011995	50				
28011995	51				
28011995	52				
28011995	53				
28011995	54				
28011995	55				
28011995	56				
28011995	57				
28011995	58				
28011995	59				
22011994	1				
22011994	2				P
22011994	3				
22011994	4				
22011994	5				P
22011994	6	U. REGIA			
22011994	7	U. REGIA			
22011994	8				
22011994	9				
22011994	10				
22011994	11				
22011994	12				
22011994	13				
22011994	14				
22011994	15				
22011994	16				
22011994	17				
22011994	18				
22011994	19				
22011994	20				

Date	Tow	Other Species	Squid	Shrimp	Anchovy
22011994	21				
22011994	22				
22011994	23				
22011994	24				
23011994	25				
23011994	26				
23011994	27				
23011994	28				
23011994	29	Urophypia			
23011994	30				
23011994	31				
23011994	32				
23011994	33				
23011994	34				
23011994	35				
23011994	36				
23011994	37				
23011994	38				
23011994	39				
23011994	40				
23011994	41				
23011994	42				
23011994	43				
23011994	44				
23011994	45				
23011994	46				
23011994	47				
23011994	48				
23011994	49				
24011994	50				
24011994	51				
24011994	52				
24011994	53				
24011994	54				
24011994	55				
24011994	56				
24011994	57				

Date	Tow	Other Species	Squid	Shrimp	Anchovy
24011994	58				
24011994	59				
24011994	60				
24011994	61				
24011994	62				
24011994	63				
24011994	64				
24011994	65				
24011994	66				
24011994	67				
24011994	68	u. REGIA			
24011994	69				
24011994	70				
24011994	71				
24011994	72				
24011994	73				
25011994	74				
25011994	75				
25011994	76				
25011994	77				
25011994	78				
25011994	79				
25011994	80				
25011994	81				
25011994	82				
25011994	83				
25011994	84				
25011994	85				
25011994	86				
25011994	87				
25011994	88				
25011994	89				
25011994	90		P		
25011994	91				
25011994	92				
25011994	93				
25011994	94				

Date	Tow	Other Species	Squid	Shrimp	Anchovy
25011994	95				
25011994	96				
2021993	1				
3021993	2				
3021993	3				P
3021993	4				
3021993	5				
3021993	6				
4021993	7				
4021993	8				
4021993	9				
4021993	10				
4021993	11				
4021993	12				
4021993	13				
4021993	14				
4021993	15				
4021993	16				
5021993	17				
5021993	18				
5021993	19	Red Drum			
5021993	20				
5021993	21				
5021993	22	Red Drum			
5021993	23				
5021993	24	Red Drum			
5021993	25				
5021993	26				
5021993	27				
5021993	28				
5021993	29				
6021993	30				
6021993	31				
6021993	32				
6021993	33				
6021993	34				
6021993	35				

Date	Tow	Other Species	Squid	Shrimp	Anchovy
6021993	36				
6021993	37				
6021993	38				
6021993	39				
7021993	40				
7021993	41				
7021993	42				
7021993	43				
7021993	44				
7021993	45				
7021993	46				
7021993	47				
7021993	48				
7021993	49				
7021993	50				
7021993	51				
7021993	52				
8021993	53				
8021993	54				
8021993	55				
18011992	1				
18011993	2				
18011994	3		P		
18011995	4				P
18011996	5				
18011997	6				
18011998	7				
18011999	8				
18012000	9				
18012001	10				
18012002	11				
18012003	12				
18012004	13				
18012005	14				
18012006	15				
18012007	16				
18012008	17				

Date	Tow	Other Species	Squid	Shrimp	Anchovy
18012009	18				
18012010	19				
18012011	20				
18012012	21				
18012013	22				
18012014	23				
18012015	24				
18012016	25				
18012017	26				
18012018	27				
18012019	28				
18012020	29				
18012021	30				
18012022	31				
18012023	32				
18012024	33				
18012025	34				
18012026	35				
18012027	36				
18012028	37				
18012029	38				
18012030	39				
18012031	40				
18012032	41				
18012033	42				
18012034	43				
18012035	44				
18012036	45				
18012037	46				
18012038	47				
18012039	48				
18012040	49				
18012041	50				
18012042	51				
18012043	52				
18012044	53				
24011991	1				

Date	Tow	Other Species	Squid	Shrimp	Anchovy
24011991	2				
24011991	3		P		
24011991	4				
24011991	5				
24011991	6				
24011991	7				
24011991	8				
24011991	9				
24011991	10				
24011991	11				
24011991	12				
24011991	13				
24011991	14				
24011991	15				
24011991	16				
24011991	17				
24011991	18				
25011991	19				
25011991	20				
25011991	21				
25011991	22				
25011991	23				
25011991	24				
25011991	25				
25011991	26		P		
25011991	27				
25011991	28				
25011991	29		P		
25011991	30		P		
25011991	31		P		
25011991	32		P		
26011991	33				
26011991	34				
26011991	35				
26011991	36				
26011991	37				
26011991	38				

Date	Tow	Other Species	Squid	Shrimp	Anchovy
26011991	39				
26011991	40				
26011991	41				
26011991	42				
26011991	43				
26011991	44		P		
26011991	45				
26011991	46				
26011991	47				
26011991	48				
26011991	49				
26011991	50				
26011991	51				
26011991	52				
26011991	53				
26011991	54				
27011991	55				
27011991	56				
27011991	57				
27011991	58				
27011991	59				
27011991	60				
27011991	61				
27011991	62				
27011991	63				
27011991	64				
27011991	65				
27011991	66				
27011991	67				
27011991	68				
27011991	69				
27011991	70				
27011991	71				
27011991	72				
27011991	73				
27011991	74				
27011991	75				

Date	Tow	Other Species	Squid	Shrimp	Anchovy
28011991	76				
28011991	77				
28011991	78				
28011991	79				
28011991	80				
28011991	81				
28011991	82				
28011991	83				
28011991	84				
28011991	85				
28011991	86				
28011991	87				
28011991	88				
28011991	89				
28011991	90				
28011991	91				
28011991	92				
28011991	93				
28011991	94				
28011991	95				
28011991	96				
28011991	97				
28011991	98				
28011991	99				
28011991	100				
29011991	101		P		
29011991	102				
29011991	103				
29011991	104		P		
29011991	105				
29011991	106				
29011991	107				
29011991	108				
29011991	109				
29011991	110				
29011991	111				
29011991	112				

Date	Tow	Other Species	Squid	Shrimp	Anchovy
29011991	113				
29011991	114				
29011991	115				
29011991	116				
29011991	117				
29011991	118				
29011991	119				
29011991	120				
29011991	121				
29011991	122				
29011991	123				
30011991	124				
30011991	125				
30011991	126				
30011991	127				
30011991	128				
30011991	129				
30011991	130				
30011991	131				
30011991	132		P		
30011991	133	Tautog	P		
30011991	134		P		
30011991	135				
30011991	136		P		
30011991	137				
30011991	138				
30011991	139				
30011991	140				
30011991	141				
30011991	142				
30011991	143				
30011991	144				
31011991	145				
31011991	146		P		
31011991	147				
31011991	148				
31011991	149				

Date	Tow	Other Species	Squid	Shrimp	Anchovy
31011991	150				
31011991	151				
31011991	152				
31011991	153				
31011991	154				
31011991	155				
31011991	156				
31011991	157				
31011991	158				
31011991	159				
31011991	160		P		
31011991	161				
31011991	162				
1021991	163				
1021991	164				
1021991	165				
1021991	166				
1021991	167	Lizardfish, wrasses	P		
1021991	168				
1021991	169				
1021991	170				
1021991	171				
1021991	172				
1021991	173				
1021991	174				
1021991	175				
1021991	176				
1021991	177				
1021991	178				
1021991	179				
1021991	180				
17011990	1				
17011990	2				
17011990	3				
17011990	4				
17011990	5				
17011990	6				

Date	Tow	Other Species	Squid	Shrimp	Anchovy
18011990	7				
18011990	8				
18011990	9				
18011990	10				
18011990	11				
18011990	12				
18011990	13				
18011990	14				
18011990	15				
18011990	16				
18011990	17				
18011990	18				
19011990	19				
19011990	20				
19011990	21				
19011990	22				
19011990	23				
19011990	24				
19011990	25				
19011990	26				
19011990	27				
20011990	28				
20011990	29				
20011990	30				
20011990	31				
20011990	32				
20011990	33				
20011990	34				
20011990	35				
20011990	36				
20011990	37				
21011990	38				
21011990	39				
21011990	40				
21011990	41				
21011990	42				
21011990	43				

Date	Tow	Other Species	Squid	Shrimp	Anchovy
21011990	44				
21011990	45				
21011990	46				
21011990	47				
21011990	48				
21011990	49				
21011990	50				
21011990	51				
22011990	52				
22011990	53				
22011990	54				
22011990	55				
22011990	56				
22011990	57				
22011990	58				
22011990	59				
22011990	60				
22011990	61				
23011990	62				
23011990	63				
23011990	64				
23011990	65				
23011990	66	Longnnose sturgeon (1)			
23011990	67				
23011990	68				
24011990	69				
24011990	70				
24011990	71				
24011990	72				
24011990	73				
24011990	74				
24011990	75				
24011990	76				
24011990	77				
16011989	1				
16011989	2				
16011989	3				

Date	Tow	Other Species	Squid	Shrimp	Anchovy
16011989	4	Blackcheeked Tonguefish			
16011989	5				
16011989	6	Loligo; tonguefish	P		P
16011989	7		P		
16011989	8				
16011989	9				
16011989	10				
16011989	11				
16011989	12				
16011989	13				
16011989	14				
16011989	15				
16011989	16				
17011989	17				
17011989	18				
17011989	19				
17011989	20				
17011989	21				
17011989	22				
17011989	23				
17011989	24				
17011989	25				
17011989	26				
17011989	27				
17011989	28				
17011989	29				
17011989	30				
17011989	31		P		
17011989	32				
17011989	33				
17011989	34				
17011989	35				
17011989	36				
17011989	37				
18011989	38				
18011989	39				
18011989	40				

Date	Tow	Other Species	Squid	Shrimp	Anchovy
18011989	41				
18011989	42				
18011989	43				
18011989	44				
18011989	45				
18011989	46				
18011989	47				
18011989	48				
18011989	49				
18011989	50				
18011989	51				
18011989	52				
18011989	53				
18011989	54				
18011989	55				
18011989	56				
18011989	57				
18011989	58				
18011989	59				
18011989	60				
18011989	61				
18011989	62				
18011989	63				
18011989	64				
18011989	65				
18011989	66				
18011989	67				
19011989	68				
19011989	69				
19011989	70				
19011989	71				
19011989	72				
19011989	73	Pogr???			
19011989	74				
19011989	75				
19011989	76				
19011989	77				

Date	Tow	Other Species	Squid	Shrimp	Anchovy
19011989	78				
19011989	79				
19011989	80				
19011989	81				
19011989	82				
19011989	83				
19011989	84				
19011989	85				
19011989	86				
19011989	87				
19011989	88				
19011989	89				
19011989	90				
19011989	91				
19011989	92				
19011989	93				
19011989	94				
19011989	95				
20011989	96				
20011989	97				
20011989	99				
20011989	100				
20011989	101				
20011989	102				
20011989	103				
20011989	104				
20011989	105				
20011989	106				
20011989	107				
20011989	108				
20011989	109				
20011989	110				
20011989	111	Seahorse	P		
20011989	112				
20011989	113				
20011989	114				
20011989	115				

Date	Tow	Other Species	Squid	Shrimp	Anchovy
20011989	116				
20011989	117				
20011989	118				
20011989	119				
20011989	120				
20011989	121				
20011989	122				
20011989	123				
20011989	124				
20011989	125				
20011989	126				
20011989	127				
20011989	128				
20011989	129				
21011989	130				
21011989	131				
21011989	132				
21011989	133				
21011989	134				
21011989	135				
21011989	136				
21011989	137				
21011989	138				
21011989	139				
21011989	140				
21011989	141				
21011989	142				
21011989	143				
21011989	144				
21011989	145				
21011989	146				
21011989	147				
21011989	148				
21011989	149				
21011989	150				
21011989	151				
21011989	152				

Date	Tow	Other Species	Squid	Shrimp	Anchovy
22011989	153				
22011989	154				
22011989	155				
22011989	156				
22011989	157				
22011989	158	Alosids			
22011989	159				
22011989	160		P		
22011989	161				
22011989	162				
22011989	163				
22011989	164				
22011989	165				
22011989	166				
22011989	167				
22011989	168				
22011989	169				
22011989	170				
22011989	171				
22011989	172				
22011989	173				
22011989	174				
22011989	175				
22011989	176				
15011988	1				P
15011988	2				P
15011988	3				
15011988	4				
15011988	5				P
15011988	6				
15011988	7	Starfish			P
15011988	8				
15011988	9				
15011988	10	White Shad			
15011988	11	Tonguefish			P
15011988	12				P
15011988	13				P

Date	Tow	Other Species	Squid	Shrimp	Anchovy
15011988	14				P
16011988	15				P
16011988	16	Spanish Sardine			P
16011988	17				
16011988	18	Starfish; Spanish Sardine			P
16011988	19				P
16011988	20				P
16011988	21				P
16011988	22				P
16011988	23				P
16011988	24				P
16011988	25				
16011988	26				P
16011988	27	Striped Mullet			P
16011988	28	Striped Mullet			P
16011988	29				P
16011988	30				
16011988	31				
16011988	32				
17011988	33				
17011988	34				
17011988	35				
17011988	36				
17011988	37				
17011988	38				
17011988	39				P
17011988	40				P
17011988	41	Tonguefish			P
17011988	42				
17011988	43				
17011988	44				
17011988	45				
17011988	46				
17011988	47	Boston Mackerel			
17011988	48				
17011988	49	Boston Mackerel			
17011988	50				

Date	Tow	Other Species	Squid	Shrimp	Anchovy
17011988	51				
17011988	52				
17011988	53				
17011988	54	Boston Mackerel; Others recorded			
17011988	55				
17011988	56				
17011988	57	Other miscellaneous species			
17011988	58	6 bushels herring			
17011988	59	Red Drum			
17011988	60				
17011988	61				
18011988	62				
18011988	63				
18011988	64				
18011988	65				
18011988	66				
18011988	67	Tautog (1)			
18011988	68				
18011988	69				
18011988	70				
18011988	71				
18011988	72				
18011988	73				
18011988	74				
18011988	75				
18011988	76				
18011988	77				
18011988	78				
18011988	79				
18011988	80				
18011988	81				
18011988	82				
18011988	83				
18011988	84				
18011988	85				
18011988	86				
18011988	87				

Date	Tow	Other Species	Squid	Shrimp	Anchovy
18011988	88				
18011988	89				
18011988	90				
18011988	91				
19011988	92				
19011988	93				
19011988	94				
19011988	95				
19011988	96				
19011988	97				
19011988	98				
19011988	99				
19011988	100				
19011988	101				
19011988	102				
19011988	103				
19011988	104				
19011988	105				
19011988	106				
19011988	107				
19011988	108				
19011988	109				
19011988	110				
19011988	111				
19011988	112				
19011988	113	Longnose Sturgeon (1)			
19011988	114				
19011988	115				
19011988	116				
19011988	117				
19011988	118				
19011988	119				
19011988	120				
20011988	121				
20011988	122				
20011988	123				
20011988	124				

Date	Tow	Other Species	Squid	Shrimp	Anchovy
20011988	125				
20011988	126				
20011988	127				
20011988	128				
20011988	129				
20011988	130				
20011988	131				
20011988	132				
20011988	133				
20011988	134				
20011988	135				
20011988	136				
20011988	137				
20011988	138				
20011988	139				
20011988	140				
20011988	141				
20011988	142				
20011988	143				
20011988	144	Longnose sturgeon			
20011988	145				
20011988	146				
20011988	147	Longnose sturgeon			
20011988	148				
20011988	149				
21011988	150				
21011988	151				
21011988	152				
21011988	153				
21011988	154				
21011988	155				
21011988	156				
21011988	157				
21011988	158				
21011988	159				
21011988	160				
21011988	161				

Date	Tow	Other Species	Squid	Shrimp	Anchovy
21011988	162				
21011988	163				
22011988	164				
22011988	165				
22011988	166				
22011988	167				
22011988	168				
22011988	169		P		
22011988	170				
22011988	171	Rays: butterfly, bluntnose, cownosed			
22011988	172	Round Herring; Blue octopus; Bluntnosed rays; Angel shark			
22011988	173	Loggerhead Turtles (3)			
22011988	174	N. Puffer, Spadefish, Sharks			
22011988	175				
22011988	176				
22011988	177				
23011988	178	N. Puffer; Horned whiff			
23011988	179	Inshore Lizardfish; Puffers			
23011988	180	Dusky Flounder			
23011988	181	Sand Perch			
23011988	182				
23011988	183	Round Scad; Snakefish; Cuskeel; Least Puffer; Spotted Whiff			
23011988	184	Stargazer			
23011988	185				
23011988	186	Amberjack			
23011988	187	Amberjack			
23011988	188				
23011988	189				
23011988	190				
23011988	191	Ribbonfish; coconut			
23011988	192				
23011988	193				
23011988	194				
23011988	195				
23011988	196				
23011988	197				
23011988	198				

Date	Tow	Other Species	Squid	Shrimp	Anchovy
23011988	199				
23011988	200				

APPENDIX B

CRUISE TOW LAYER METADATA

FIELD	DESCRIPTION OF FIELD
WATCH	SHIFT HOURS, WHERE DESIGNATED BY LETTERS OR HOURS WORKED ON DECK
YEAR	YEAR OF TRAWLING EFFORT
MONTH	MONTH OF TRAWLING EFFORT
DAY	DAY OF TRAWLING EFFORT
DATE	DATE OF TOW, IN MONTH/DAY/YEAR FORMAT
TOW	TOW IDENTIFICATION NUMBER
STARTTIME	TIME OF DAY THAT TRAWL WAS FULLY DEPLOYED IN WATER - FISHING STARTED.
STOPTIME	TIME OF DAY TRAWL WAS RETRIEVED - FISHING STOPPED.
DURATION	LENGTH OF TIME, IN PORTION OF HOUR, THAT TRAWLING WAS CONDUCTED FOR THAT INDIVIDUAL TOW.
NONETS	NUMBER OF NETS DEPLOYED DURING TOW.
SLAT	LATITUDE OF VESSEL AT STARTTIME, CONVERTED TO DECIMAL DEGREE FORMAT
SLONG	LONGITUDE OF VESSEL AT STARTTIME, CONVERTED TO DECIMAL DEGREE FORMAT
SLATO	LATITUDE OF VESSEL AT STARTTIME
SLONGO	LONGITUDE OF VESSEL AT STARTTIME
STOPLAT	LATITUDE OF VESSEL AT STOPTIME
STOPLONG	LONGITUDE OF VESSEL AT STOPTIME
TOWSPEED	MINIMUM RECORDED SPEED OF VESSEL DURING TOW, IN KNOTS

TOWSPEED2	MAXIMUM RECORDED SPEED OF VESSEL DURING TOW, IN KNOTS
TSPEEDAVG	THE AVERAGE VESSEL SPEED, IN KNOTS, RECORDED DURING TOW
WTEMP	WATER TEMPERATURE (SURFACE <10M), IN DEGREES CELCIUS.
AIRTEMP	AIR TEMPERATURE, IN DEGREES CELCIUS
SALINITY	SURFACE (<10M) SALINITY IN PPT
MINDEPTH	MINIMUM RECORDED DEPTH OF TRAWL DURING TOW, IN METERS
MAXDEPTH	MAXIMUM RECORDED DEPTH OF TRAWL DURING TOW, IN METERS
MINDEPTH	MINIMUM RECORDED DEPTH OF TRAWL DURING TOW, IN FEET
MAXDEPTH	MAXIMUM RECORDED DEPTH OF TRAWL DURING TOW, IN FEET
DOGSF	NUMBER OF FEMALE SPINY DOGFISH CAPTURED, MEASURED, AND/OR TAGGED
DOGSM	NUMBER OF MALE SPINY DOGFISH CAPTURED, MEASURED, AND/OR TAGGED
DOGSFOVER	ADDITIONAL NUMBER OF FEMALE SPINY DOGFISH CAPTURED
DOGSMOVER	ADDITIONAL NUMBER OF MALE SPINY DOGFISH CAPTURED
ALLDOGSOVER	SUM TOTAL OF ADDITION DOGFISH (DOGSFOVER, DOGSMOVER, AND UNSEXED SPINY DOGFISH NOT MEASURED OR TAGGED)
DOGST	SUM TOTAL OF ALL DOGFISH CAPTURED
SBASS	TOTAL STRIPED BASS CAPTURED
SPECIES COLUMNS:	SPECIES/TAXA WILL BE IDENTIFIED NEXT TO COLUMN NAME, IF A NUMBER IS PRESENT IN CORRESPONDING CELL

	(=NUMBER CAPTURED), IF LETTER "P" (=PRESENT, NOT ENUMERATED), IF BLANK (=NOT RECORDED/NO DATA).
SKATESGEN	ALL SKATE SPECIES
CLEARNOSET	CLEARNOSE SKATE TOTAL
CLEARNOSEM	CLEARNOSE SKATE MALE
CLEARNOSEF	CLEARNOSE SKATE FEMALE
WINTERT	WINTER SKATE TOTAL
WINTERM	WINTER SKATE MALE
WINTERF	WINTER SKATE FEMALE
LITTLET	LITTLE SKATE TOTAL
LITTLEM	LITTLE SKATE MALE
LITTLEF	LITTLE SKATE FEMALE
EELAM	AMERICAN EEL
WEAKFISH	WEAKFISH, GREY TROUT
WSHRIMP	WHITE SHRIMP
KINGFISH	KINGFISH, SOUTHERN KINGFISH
HERRINGRIVER	BLUEBACK HERRING, ALEWIFE, OR RIVER HERRING
BLUEBACK	BLUEBACK HERRING
ALEWIFE	ALEWIFE
SHADGEN	SHAD
AMSHAD	AMERICAN SHAD
HICKSHAD	HICKORY SHAD
SPTROUT	SPECKLED SEA TROUT
MONKFISH	MONKFISH, GOOSEFISH

CLUPEIDSUMS	ALL CLUPEIDS RECORDED
ATLHERRING	ATLANTIC HERRING
BUTTERFISH	BUTTERFISH
PIGFISH	PIGFISH
MENHADEN	ATLANTIC MENHADEN
ATLMACKEREL	ATLANTIC MACKEREL
KINGMACKEREL	KING MACKEREL
FLOUNDERGEN	UNIDENTIFIED FLOUNDER SPECIES
SUMMERFL	SUMMER FLOUNDER
SOUTHERNFL	SOUTHERN FLOUNDER
ATLSTURGEON	ATLANTIC STURGEON
HAKESP	UNIDENTIFIED HAKE SPECIES
PINFISH	PINFISH
CROAKER	ATLANTIC CROAKER
SPOT	SPOT
DRUMRED	RED DRUM, PUPPY DRUM
DRUMBLACK	BLACK DRUM
DRUMSTAR	STAR DRUM
SCIANIDS	UNIDENTIFIED SCIAENIDS
WINDOWPANEFL	WINDOWPANE FLOUNDER
SEAROBIN	SEAROBIN, NORTHERN SEAROBIN
BSEABASS	BLACK SEA BASS
LOBSTER	AMERICAN LOBSTER

ANCHOVY	BAY ANCHOVY, SILVERSIDE
SHEEPSHEAD	SHEEPSHEAD
PERCHSILVER	SILVER PERCH
LAMPREY	LAMPREY
WHITING	WHITING
BLUEFISH	BLUEFISH
TUNABLUEFIN	BLUEFIN TUNA
ANGLERFISH	ANGLERFISH
SEAMULLET	SEA MULLET
OTHERSPECIES	ANY ADDITIONAL SPECIES/TAXA THAT WERE CAPTURED DURING THE TOW
SQUID	ALL SPECIES SQUID
SHRIMP	ALL SPECIES SHRIMP, EXCEPT WHITE SHRIMP
HORSESHOECRAB	HORSESHOE CRAB TOTAL: MALES, FEMALES, IMMATURES, UNIDENTIFIED
COMMENTS	NOTES ON TRAWL MALFUNCTIONS, WEATHER, CATCH ODDITIES, ETC.

APPENDIX C

USGS ALT_EXT SHAPEFILE METADATA

```
Identification_Information:
  Citation:
    Citation_Information:
      Originator: U.S. Geological Survey
      Originator: University of Colorado
      Publication_Date: 2005
      Title: ATL_EXT: usSEABED EXTracted data for the entire U.S. Atlantic
Coast
      Edition: 1.0
      Geospatial_Data_Presentation_Form: vector digital data
      Online_Linkage: http://pubs.usgs.gov/ds/2005/118/data/atl_ext.zip
      Online_Linkage: http://pubs.usgs.gov/ds/2005/118/htmldocs/data_cata.htm
      Larger_Work_Citation:
        Citation_Information:
          Originator: J.M. Reid
          Originator: J.A. Reid
          Originator: C.J. Jenkins
          Originator: M.E. Hastings
          Originator: S.J. Williams
          Originator: L.J. Poppe
          Publication_Date: 2005
          Title: usSEABED: Atlantic Coast Offshore Surficial Sediment Data
Release
          Series_Information:
            Series_Name: Data Series
            Issue_Identification: 118
          Publication_Information:
            Publication_Place: Woods Hole Science Center, Woods Hole, MA
            Publisher: U.S. Geological Survey, Coastal and Marine Geology
Program
          Online_Linkage: http://pubs.usgs.gov/ds/2005/118/
  Description:
    Abstract: This data layer is a point coverage of known sediment
samplings, inspections and probings from the usSEABED data collection and
integrated using the software system dbSEABED. This data layer represents the
extracted (EXT) output of the dbSEABED mining software. It contains data
items which were simply extracted from the data resources through data
mining. The EXT data is usually based on instrumental analyses (probe or
laboratory) but may apply to just a subsample of the sediment (eg. no large
shells).
    Purpose: To build a digital mapping of the character of the seabed on
regional, national and global scales. These data are intended for science
researchers, students, policy makers, and the general public. The data can be
used with geographic information systems (GIS) software to display geologic
and oceanographic information.
  Time_Period_of_Content:
    Time_Period_Information:
      Single_Date/Time:
        Calendar_Date: 2005
    Currentness_Reference: publication date
  Status:
```

```
    Progress: The usSEABED database is a work-in-progress.
    Maintenance_and_Update_Frequency: As additional information becomes
available, and/or significant changes to the data mining software.
  Spatial_Domain:
    Bounding_Coordinates:
      West_Bounding_Coordinate: -81.927000
      East_Bounding_Coordinate: -65.000000
      North_Bounding_Coordinate: 44.906000
      South_Bounding_Coordinate: 23.020000
  Keywords:
    Theme:
      Theme_Keyword_Thesaurus: General
      Theme_Keyword: analyses
      Theme_Keyword: CMGP
      Theme_Keyword: Coastal and Marine Geology Program
      Theme_Keyword: dbSEABED
      Theme_Keyword: descriptions
      Theme_Keyword: geology
      Theme_Keyword: grain size
      Theme_Keyword: Marine Aggregates Resources and Processes
      Theme_Keyword: seabed
      Theme_Keyword: seafloor
      Theme_Keyword: sediment data
      Theme_Keyword: texture
      Theme_Keyword: U.S. Geological Survey
      Theme_Keyword: USGS
      Theme_Keyword: usSEABED
      Theme_Keyword: Woods Hole Science Center
      Theme_Keyword: University of Colorado
      Theme_Keyword: Institute of Arctic and Alpine Research
      Theme_Keyword: Benthic Habitats (Pacific) Project
      Theme_Keyword: Pacific Science Center
      Theme_Keyword: USGS
      Theme_Keyword: CMGP
      Theme_Keyword: WHSC
      Theme_Keyword: PSC
      Theme_Keyword: INSTAAR
    Theme:
      Theme_Keyword_Thesaurus: ISO 19115 Topic Category
      Theme_Keyword: oceans and estuaries
      Theme_Keyword: location
      Theme_Keyword: geoscientificInformation
    Place:
      Place_Keyword_Thesaurus: General
      Place_Keyword: Atlantic coast
      Place_Keyword: East Coast
      Place_Keyword: United States
      Place_Keyword: Atlantic Ocean
  Access_Constraints: None
  Use_Constraints: Public domain data from the U.S. Government are freely
redistributable with proper metadata and source attribution. Please recognize
the U.S. Geological Survey (USGS) as the source of this information.
  Point_of_Contact:
    Contact_Information:
      Contact_Person_Primary:
        Contact_Person: Jamey Reid
```

```
        Contact_Organization: U.S. Geological Survey
      Contact_Position: IT Specialist (Data Management)
      Contact_Address:
        Address_Type: mailing and physical address
        Address: 384 Woods Hole Road
        City: Woods Hole
        State_or_Province: MA
        Postal_Code: 02543-1598
        Country: USA
      Contact_Voice_Telephone: (508) 548-8700 x2204
      Contact_Facsimile_Telephone: (508) 457-2310
      Contact_Electronic_Mail_Address: jreid@usgs.gov
  Browse_Graphic:
    Browse_Graphic_File_Name:
http://pubs.usgs.gov/ds/2005/118/data/atl_ext.jpg
    Browse_Graphic_File_Description: Image map showing extent of data layer
coverage
    Browse_Graphic_File_Type: JPEG
  Data_Set_Credit: We thank the following interns for their assistance in
data entry, coding, and data testing: Viness Ubert, Emma Mitchell, Emily
Denham and Shea Quinn.
  Native_Data_Set_Environment: Microsoft Windows 2000 Version 5.1 (Build
2600) Service Pack 2; ESRI ArcCatalog 8.3.0.800
Data_Quality_Information:
  Attribute_Accuracy:
    Attribute_Accuracy_Report: Accuracy of each attribute is dependent on the
accuracy of the lineage data.
  Logical_Consistency_Report: Data in usSEABED are based on the observations
and analyses of others, filtered through a unifying and mining software. Each
source report varies in type of information/data recorded and format. Only
those observations that are recorded can be filtered and mined; only presence
(not absence) or information can be noted.
  Completeness_Report: Additional useable data may exist in this area; the
authors appreciate any information and leads.
  Positional_Accuracy:
    Horizontal_Positional_Accuracy:
      Horizontal_Positional_Accuracy_Report: Locational accuracy is dependent
on the accuracy of the navigational technique from the individual data
sources and may vary widely (e.g., from 0.005km (differential GPS) in more
recent surveys to greater than 2 km based on radar, Loran, or dead reckoning
in older surveys.) Users of the data should use their own criteria for
assessing the accuracy of the locations.
    Vertical_Positional_Accuracy:
      Vertical_Positional_Accuracy_Report: Locational accuracy is dependent
on the accuracy of the navigational technique from the individual data
sources. Users of the data should use their own criteria for assessing the
accuracy of the locations.
  Lineage:
    Source_Information:
      Source_Scale_Denominator: See separate listing within this publication
for specific sources and associated metadata
      Type_of_Source_Media: various hard copy documents and digital files
      Source_Contribution: point locations, descriptions and analytical data
on many different types of sediment and rock materials and benthos
Spatial_Data_Organization_Information:
  Direct_Spatial_Reference_Method: Vector
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  Point_and_Vector_Object_Information:
    SDTS_Terms_Description:
      SDTS_Point_and_Vector_Object_Type: Entity point
      Point_and_Vector_Object_Count: 49257
Spatial_Reference_Information:
  Horizontal_Coordinate_System_Definition:
    Geographic:
      Latitude_Resolution: 0.000000
      Longitude_Resolution: 0.000000
      Geographic_Coordinate_Units: Decimal degrees
    Geodetic_Model:
      Horizontal_Datum_Name: North American Datum of 1983
      Ellipsoid_Name: Geodetic Reference System 80
      Semi-major_Axis: 6378137.000000
      Denominator_of_Flattening_Ratio: 298.257222
Entity_and_Attribute_Information:
  Detailed_Description:
    Entity_Type:
      Entity_Type_Label: atl_ext
    Attribute:
      Attribute_Label: FID
      Attribute_Definition: Internal feature number.
      Attribute_Definition_Source: ESRI
      Attribute_Domain_Values:
        Unrepresentable_Domain: Sequential unique whole numbers that are
automatically generated.
    Attribute:
      Attribute_Label: Shape
      Attribute_Definition: Feature geometry.
      Attribute_Definition_Source: ESRI
      Attribute_Domain_Values:
        Unrepresentable_Domain: Coordinates defining the features.
    Attribute:
      Attribute_Label: LATITUDE
      Attribute_Definition: Latitude coordinate of sample location
      Attribute_Definition_Source: source data
      Attribute_Domain_Values:
        Range_Domain:
          Attribute_Units_of_Measure: decimal degrees
    Attribute:
      Attribute_Label: LONGITUDE
      Attribute_Definition: Longitude coordinate of sample location
      Attribute_Definition_Source: source data
      Attribute_Domain_Values:
        Range_Domain:
          Attribute_Units_of_Measure: decimal degrees
    Attribute:
      Attribute_Label: WATERDEPTH
      Attribute_Definition: measured water depth for site (usually
uncorrected)
      Attribute_Definition_Source: source data
      Attribute_Domain_Values:
        Range_Domain:
          Attribute_Units_of_Measure: meters
    Attribute:
      Attribute_Label: SAMPLETOP
```

```
      Attribute_Definition: measured subbottom depth information for each
point sample
      Attribute_Domain_Values:
        Range_Domain:
          Attribute_Units_of_Measure: meters
    Attribute:
      Attribute_Label: SAMPLEBASE
      Attribute_Definition: measured subbottom depth information for each
point sample
      Attribute_Domain_Values:
        Range_Domain:
          Attribute_Units_of_Measure: meters
    Attribute:
      Attribute_Label: SITENAME
      Attribute_Definition: Survey or laboratory code for site (non-unique)
    Attribute:
      Attribute_Label: DATASETKEY
      Attribute_Definition: Unique sequential numeric key to SRC file
      Attribute_Definition_Source: dbSEABED processing software
    Attribute:
      Attribute_Label: SITEKEY
      Attribute_Definition: Unique sequential numeric key to SRC file
      Attribute_Definition_Source: dbSEABED processing software
    Attribute:
      Attribute_Label: SAMPLEKEY
      Attribute_Definition: Unique sequential numeric key to SRC file
      Attribute_Definition_Source: dbSEABED processing software
    Attribute:
      Attribute_Label: SAMPLER
      Attribute_Definition: Equipment used to collect samples
      Attribute_Definition_Source: Original data source
    Attribute:
      Attribute_Label: DATATYPES
      Attribute_Definition: Type of data that were used to derive values held
in characterization
      Attribute_Domain_Values:
        Enumerated_Domain:
          Enumerated_Domain_Value: ACU
          Enumerated_Domain_Value_Definition: Acoustic Properties
          Enumerated_Domain_Value_Definition_Source: dbSEABED Data Entry
Template
        Enumerated_Domain:
          Enumerated_Domain_Value: CMP
          Enumerated_Domain_Value_Definition: Sediment Composition
          Enumerated_Domain_Value_Definition_Source: dbSEABED Data Entry
Template
        Enumerated_Domain:
          Enumerated_Domain_Value: COL
          Enumerated_Domain_Value_Definition: Color
          Enumerated_Domain_Value_Definition_Source: dbSEABED Data Entry
Template
        Enumerated_Domain:
          Enumerated_Domain_Value: GTC
          Enumerated_Domain_Value_Definition: Geotechnical Properties
          Enumerated_Domain_Value_Definition_Source: dbSEABED Data Entry
Template
```

```
        Enumerated_Domain:
          Enumerated_Domain_Value: GRZ
          Enumerated_Domain_Value_Definition: Grain Size
          Enumerated_Domain_Value_Definition_Source: dbSEABED Data Entry
Template
        Enumerated_Domain:
          Enumerated_Domain_Value: TXR
          Enumerated_Domain_Value_Definition: Texture
          Enumerated_Domain_Value_Definition_Source: dbSEABED Data Entry
Template
        Enumerated_Domain:
          Enumerated_Domain_Value: TXG
          Enumerated_Domain_Value_Definition: Texture (Graphic)
          Enumerated_Domain_Value_Definition_Source: dbSEABED Data Entry
Template
        Enumerated_Domain:
          Enumerated_Domain_Value: LTH
          Enumerated_Domain_Value_Definition: Lithology
          Enumerated_Domain_Value_Definition_Source: dbSEABED Data Entry
Template
    Attribute:
      Attribute_Label: GRAVEL
      Attribute_Definition: Gravel grainsize fraction
      Attribute_Definition_Source: Original data source
      Attribute_Domain_Values:
        Range_Domain:
          Range_Domain_Minimum: 0
          Range_Domain_Maximum: 100
          Attribute_Units_of_Measure: percent
          Attribute_Measurement_Resolution: 1
    Attribute:
      Attribute_Label: SAND
      Attribute_Definition: Sand grainsize fraction
      Attribute_Definition_Source: Original data source
      Attribute_Domain_Values:
        Range_Domain:
          Range_Domain_Minimum: 0
          Range_Domain_Maximum: 100
          Attribute_Units_of_Measure: percent
          Attribute_Measurement_Resolution: 1
    Attribute:
      Attribute_Label: MUD
      Attribute_Definition: Mud grainsize fraction
      Attribute_Definition_Source: Original data source
      Attribute_Domain_Values:
        Range_Domain:
          Range_Domain_Minimum: 0
          Range_Domain_Maximum: 100
          Attribute_Units_of_Measure: percent
          Attribute_Measurement_Resolution: 1
    Attribute:
      Attribute_Label: CLAY
      Attribute_Definition: Clay grainsize fraction
      Attribute_Definition_Source: Original data source
      Attribute_Domain_Values:
        Range_Domain:
```

```
          Range_Domain_Minimum: 0
          Range_Domain_Maximum: 100
          Attribute_Units_of_Measure: percent
          Attribute_Measurement_Resolution: 1
    Attribute:
      Attribute_Label: GRAINSIZE
      Attribute_Definition: Phi characteristic grainsize
      Attribute_Domain_Values:
        Range_Domain:
          Range_Domain_Minimum: -7.3
          Range_Domain_Maximum: 12
          Attribute_Units_of_Measure: phi
          Attribute_Measurement_Resolution: 0.1
    Attribute:
      Attribute_Label: SORTING
      Attribute_Definition: Phi grainsize dispersion; standard deviation
sorting only
      Attribute_Domain_Values:
        Range_Domain:
          Range_Domain_Minimum: 0
          Range_Domain_Maximum: 6
          Attribute_Units_of_Measure: phi
          Attribute_Measurement_Resolution: 0.1
    Attribute:
      Attribute_Label: SEABEDCLS
      Attribute_Definition: Seabed class; (Facies) with the maximum Fuzzy
Membership value > 30%
      Attribute_Definition_Source: dbSEABED processing software
    Attribute:
      Attribute_Label: CLSMSHP
      Attribute_Definition: Class membership; fuzzy membership (%) of above
Class (Facies)
      Attribute_Definition_Source: dbSEABED processing software
    Attribute:
      Attribute_Label: FOLKCODE
      Attribute_Definition: Grainsize classification
      Attribute_Definition_Source: Folk, Andrews, and Lewis, 1970
      Attribute_Domain_Values:
        Enumerated_Domain:
          Enumerated_Domain_Value: (g)M
          Enumerated_Domain_Value_Definition: slightly gravelly mud
          Enumerated_Domain_Value_Definition_Source: dbSEABED software,
version MNEt
        Enumerated_Domain:
          Enumerated_Domain_Value: (g)mS
          Enumerated_Domain_Value_Definition: slightly gravelly muddy sand
          Enumerated_Domain_Value_Definition_Source: dbSEABED software,
version MNEt
        Enumerated_Domain:
          Enumerated_Domain_Value: (g)sM
          Enumerated_Domain_Value_Definition: slightly gravelly sandy mud
          Enumerated_Domain_Value_Definition_Source: dbSEABED software,
version MNEt
        Enumerated_Domain:
          Enumerated_Domain_Value: (g)S
          Enumerated_Domain_Value_Definition: slightly gravelly sand
```

```
          Enumerated_Domain_Value_Definition_Source: dbSEABED software,
version MNEt
        Enumerated_Domain:
          Enumerated_Domain_Value: G
          Enumerated_Domain_Value_Definition: gravel
          Enumerated_Domain_Value_Definition_Source: dbSEABED software,
version MNEt
        Enumerated_Domain:
          Enumerated_Domain_Value: gM
          Enumerated_Domain_Value_Definition: gravelly mud
          Enumerated_Domain_Value_Definition_Source: dbSEABED software,
version MNEt
        Enumerated_Domain:
          Enumerated_Domain_Value: gmS
          Enumerated_Domain_Value_Definition: gravelly muddy sand
          Enumerated_Domain_Value_Definition_Source: dbSEABED software,
version MNEt
        Enumerated_Domain:
          Enumerated_Domain_Value: gS
          Enumerated_Domain_Value_Definition: gravelly sand
          Enumerated_Domain_Value_Definition_Source: dbSEABED software,
version MNEt
        Enumerated_Domain:
          Enumerated_Domain_Value: M
          Enumerated_Domain_Value_Definition: Mud
          Enumerated_Domain_Value_Definition_Source: dbSEABED software,
version MNEt
        Enumerated_Domain:
          Enumerated_Domain_Value: mG
          Enumerated_Domain_Value_Definition: muddy gravel
          Enumerated_Domain_Value_Definition_Source: dbSEABED software,
version MNEt
        Enumerated_Domain:
          Enumerated_Domain_Value: mS
          Enumerated_Domain_Value_Definition: muddy sand
          Enumerated_Domain_Value_Definition_Source: dbSEABED software,
version MNEt
        Enumerated_Domain:
          Enumerated_Domain_Value: msG
          Enumerated_Domain_Value_Definition: muddy sandy gravel
          Enumerated_Domain_Value_Definition_Source: dbSEABED software,
version MNEt
        Enumerated_Domain:
          Enumerated_Domain_Value: S
          Enumerated_Domain_Value_Definition: sand
          Enumerated_Domain_Value_Definition_Source: dbSEABED software,
version MNEt
        Enumerated_Domain:
          Enumerated_Domain_Value: sG
          Enumerated_Domain_Value_Definition: sandy gravel
          Enumerated_Domain_Value_Definition_Source: dbSEABED software,
version MNEt
        Enumerated_Domain:
          Enumerated_Domain_Value: sM
          Enumerated_Domain_Value_Definition: sandy mud
```

```
          Enumerated_Domain_Value_Definition_Source: dbSEABED software,
version MNEt
    Attribute:
      Attribute_Label: SHEPARDCOD
      Attribute_Definition: Shepard code; grain size classification
      Attribute_Domain_Values:
        Enumerated_Domain:
          Enumerated_Domain_Value: CLAYEY SILT
        Enumerated_Domain:
          Enumerated_Domain_Value: SANDY SILT
        Enumerated_Domain:
          Enumerated_Domain_Value: SAND SILT CLAY
        Enumerated_Domain:
          Enumerated_Domain_Value: SILTY CLAY
        Enumerated_Domain:
          Enumerated_Domain_Value: SAND
        Enumerated_Domain:
          Enumerated_Domain_Value: SILTY SAND
        Enumerated_Domain:
          Enumerated_Domain_Value: SEDIMENT
        Enumerated_Domain:
          Enumerated_Domain_Value: CLAYEY SAND
        Enumerated_Domain:
          Enumerated_Domain_Value: CLAY
        Enumerated_Domain:
          Enumerated_Domain_Value: SANDY CLAY
        Enumerated_Domain:
          Enumerated_Domain_Value: SILT
        Enumerated_Domain:
          Enumerated_Domain_Value: GRAVELLY SEDIMENT
        Enumerated_Domain:
          Enumerated_Domain_Value: GRAVEL
    Attribute:
      Attribute_Label: ROCKMSHP
      Attribute_Definition: Rock membership; fuzzy membership (%) reflecting
percent exposure of rock
      Attribute_Definition_Source: dbSEABED processing software
      Attribute_Domain_Values:
        Enumerated_Domain:
          Enumerated_Domain_Value: -99
          Enumerated_Domain_Value_Definition: no data
    Attribute:
      Attribute_Label: WEEDMSHP
      Attribute_Definition: Weed membership; fuzzy membership (%) reflecting
percent abundance of seaweed and seagrass
      Attribute_Definition_Source: dbSEABED processing software
      Attribute_Domain_Values:
        Enumerated_Domain:
          Enumerated_Domain_Value: -99
          Enumerated_Domain_Value_Definition: no data
    Attribute:
      Attribute_Label: CARBONATE
      Attribute_Definition: Carbonate, including finest to coarsest sampled
fractions
    Attribute:
      Attribute_Label: MUNSLCODE
```

```
      Attribute_Definition: Munsell color code
      Attribute_Definition_Source: GSA Rock-Color Chart, 1991
      Attribute_Domain_Values:
        Unrepresentable_Domain: non-unique code based on HVC (Hue, Value,
Chroma)
    Attribute:
      Attribute_Label: ORGCARBON
      Attribute_Definition: organic carbon in the sample
      Attribute_Domain_Values:
        Range_Domain:
          Range_Domain_Minimum: 0
          Range_Domain_Maximum: 100
          Attribute_Units_of_Measure: percent
    Attribute:
      Attribute_Label: LGSHEARSTR
      Attribute_Definition: Undrained compressive shear strength, Log10 of
KiloPascals
      Attribute_Definition_Source: dbSEABED processing software
      Attribute_Domain_Values:
        Enumerated_Domain:
          Enumerated_Domain_Value: -99
          Enumerated_Domain_Value_Definition: no data
          Enumerated_Domain_Value_Definition_Source: dbSEABED software,
version MNEt
    Attribute:
      Attribute_Label: POROSITY
      Attribute_Definition: Void volume
      Attribute_Definition_Source: dbSEABED processing software
      Attribute_Domain_Values:
        Range_Domain:
          Attribute_Units_of_Measure: percent
    Attribute:
      Attribute_Label: PWAVEVEL
      Attribute_Definition: Compressional wave velocity
      Attribute_Definition_Source: dbSEABED processing software
      Attribute_Domain_Values:
        Range_Domain:
          Attribute_Units_of_Measure: meters/second
    Attribute:
      Attribute_Label: ROUGHNESS
      Attribute_Definition: A coded output representing the V:H of the
roughness element with greatest aspect ratio
      Attribute_Definition_Source: dbSEABED processing software
      Attribute_Domain_Values:
        Range_Domain:
          Attribute_Units_of_Measure: values expressed as (rounded) integer
log2 of V and H in cm
    Attribute:
      Attribute_Label: LGCRSHST
      Attribute_Definition: Log Critical Shear Stress, Log10 of Tau in kPa,
being the Shear Stress required to initiate easily observable erosion and
transport, whether by traction or suspension
      Attribute_Domain_Values:
        Range_Domain:
          Attribute_Units_of_Measure: kPa
    Attribute:
```

```
      Attribute_Label: SAMPLEPHAS
      Attribute_Definition: Sample Phase; records whether the results are for
the whole, bulk sediment or just to some special part
      Attribute_Definition_Source: dbSEABED processing software
      Attribute_Domain_Values:
        Range_Domain:
          Attribute_Units_of_Measure: Output as a word-based description that
may involve numerics. This field will need to be selected against when GIS
mappings of the bulk sedient characters are being mapped. Only blank entries
should be included in such a mapping.
  Overview_Description:
    Entity_and_Attribute_Overview: Values of -99 for any field are
indications that there was no data available.
Distribution_Information:
  Distributor:
    Contact_Information:
      Contact_Person_Primary:
        Contact_Person: Jamey Reid
        Contact_Organization: U.S. Geological Survey
      Contact_Position: IT Specialist (Data Management)
      Contact_Address:
        Address_Type: mailing and physical address
        Address: 384 Woods Hole Rd.
        City: Woods Hole
        State_or_Province: MA
        Postal_Code: 02543-1598
      Contact_Voice_Telephone: (508) 548-8700x2204
      Contact_Facsimile_Telephone: (508) 457-2310
      Contact_Electronic_Mail_Address: jreid@usgs.gov
  Resource_Description: Downloadable Data
  Distribution_Liability: Although this data set has been used by the U.S.
Geological Survey (USGS), no warranty, expressed or implied, is made by the
USGS as to the accuracy of the data and/or related materials. The act of
distribution shall not constitute any such warranty, and no responsibility is
assumed by the USGS in the use of these data or related materials. Trade,
firm, or product names and other references to non-USGS products and services
are provided for information only and do not constitute endorsement or
warranty, express or implied, by the USGS, USDOI, or U.S. Government, as to
their suitability, content, usefulness, functioning, completeness, or
accuracy.
  Standard_Order_Process:
    Digital_Form:
      Digital_Transfer_Information:
        Format_Name: ASCII
        Format_Information_Content: Text file containing data input to
usSEABED. Fields are comma separated values. First record of file contains
field names.
        File_Decompression_Technique: no compression applied
        Transfer_Size: 6.61 MB
      Digital_Transfer_Option:
        Online_Option:
          Computer_Contact_Information:
            Network_Address:
              Network_Resource_Name:
http://pubs.usgs.gov/ds/2005/118/data/atl_ext.txt
```

```
              Network_Resource_Name:
http://pubs.usgs.gov/ds/2005/118/htmldocs/data_cata.htm
          Access_Instructions: Downloadable thru the WWW
    Digital_Form:
      Digital_Transfer_Information:
        Format_Name: SHP
        Format_Specification: ESRI Shapefile
        Format_Information_Content: The SHP file contains the geospatial
data. The SHX file contains the index of the geospatial data. The DBF file
contains the attribute data in dBASE format. The PRJ file contains the
coordinate system information (optional). The AVL file contains the legend
information (optional). The SBN and SBX files contain the spatial index of
the geospatial data (optional). The XML file contains the metadata describing
the data set <data set name>.shp.xml.  An ASCII version of the metadata file.
A browse graphic showing the data layer coverage and extent (optional).
        File_Decompression_Technique: winzip
      Digital_Transfer_Option:
        Online_Option:
          Computer_Contact_Information:
            Network_Address:
              Network_Resource_Name:
http://pubs.usgs.gov/ds/2005/118/data/atl_ext.zip
              Network_Resource_Name:
http://pubs.usgs.gov/ds/2005/118/htmldocs/data_cata.htm
          Access_Instructions: Downloadable thru the WWW
    Fees: None
  Technical_Prerequisites: These data are available in Environmental Systems
Research Institute (ESRI) shapefile format. The user must have ArcGIS® or
ArcView® 3.0 or greater software to read and process the data file. In lieu
of ArcView or ArcGIS, the user may utilize another GIS application package
capable of importing the data. A free data viewer, arcexplorer, capable of
displaying the data is available from ESRI at www.esri.com.
Metadata_Reference_Information:
  Metadata_Date: 20050518
  Metadata_Review_Date: 20050512
  Metadata_Contact:
    Contact_Information:
      Contact_Person_Primary:
        Contact_Person: Jamey Reid
        Contact_Organization: U.S. Geological Survey
      Contact_Position: IT Specialist (Data Management)
      Contact_Address:
        Address_Type: mailing and physical address
        Address: 384 Woods Hole Rd.
        City: Woods Hole
        State_or_Province: MA
        Postal_Code: 02543-1598
      Contact_Voice_Telephone: (508) 548-8700x2204
      Contact_Facsimile_Telephone: (508) 457-2310
      Contact_Electronic_Mail_Address: jreid@usgs.gov
  Metadata_Standard_Name: FGDC Content Standards for Digital Geospatial
Metadata
  Metadata_Standard_Version: FGDC-STD-001-1998
  Metadata_Time_Convention: local time
  Metadata_Access_Constraints: None
  Metadata_Use_Constraints: None
```

```
Metadata_Extensions:
  Online_Linkage: http://www.esri.com/metadata/esriprof80.html
  Profile_Name: ESRI Metadata Profile
```

APPENDIX D

SPATIAL INTERPOLATIONS' METHODS REPORTS

Depth

```
<?xml version="1.0"?>
- <model name="LPI">
  - <dataset dataset-type="DSA-XX" Label="Dataset">
      <field/>
      <field optional="true"/>
    </dataset>
    <value name="Power">1</value>
    <value name="Weight" auto="false">0.22802729732500282</value>
    <enum name="KernelType">Exponential</enum>
    <enum name="ResultType">Prediction</enum>
    <value name="SpatialConditionNumberThreshold" auto="false" enable="true">9.77687455149423</value>
    <value name="SimpleSettings" enable="true">60</value>
  - <model name="NeighbourSearch" auto="NONE">
      <enum name="Type">Standard</enum>
      <value name="NeighboursMax" auto="false">1000</value>
      <value name="NeighboursMin" auto="false">0</value>
      <enum name="SectorType">One</enum>
      <value name="MajorSemiaxis" auto="false">0.2850341216562535</value>
      <value name="MinorSemiaxis" auto="false">0.2850341216562535</value>
      <value name="Angle">0</value>
    </model>
</model>
```

Sediment Grain Size

```
<?xml version="1.0"?>
- <model name="LPI">
  - <dataset dataset-type="DSA-XX" Label="Dataset">
      <field/>
      <field optional="true"/>
    </dataset>
    <value name="Power">1</value>
    <value name="Weight" auto="false">0.616594346990816</value>
    <enum name="KernelType">Exponential</enum>
    <enum name="ResultType">Prediction</enum>
    <value name="SpatialConditionNumberThreshold" auto="false" enable="true">9.48587689343027</value>
    <value name="SimpleSettings" enable="true">41</value>
  - <model name="NeighbourSearch" auto="NONE">
      <enum name="Type">Standard</enum>
      <value name="NeighboursMax" auto="false">1000</value>
      <value name="NeighboursMin" auto="false">0</value>
      <enum name="SectorType">One</enum>
      <value name="MajorSemiaxis" auto="false">0.7707429337385199</value>
      <value name="MinorSemiaxis" auto="false">0.7707429337385199</value>
      <value name="Angle">0</value>
    </model>
</model>
```

Sediment Percent Organic Carbon Content

```
<?xml version="1.0"?>
- <model name="LPI">
  - <dataset dataset-type="DSA-XX" Label="Dataset">
      <field/>
      <field optional="true"/>
    </dataset>
    <value name="Power">1</value>
    <value name="Weight" auto="false">0.4632122991935691</value>
    <enum name="KernelType">Exponential</enum>
    <enum name="ResultType">Prediction</enum>
    <value name="SpatialConditionNumberThreshold" auto="false" enable="true">17.41260707540641</value>
    <value name="SimpleSettings" enable="true">73</value>
  - <model name="NeighbourSearch" auto="NONE">
      <enum name="Type">Standard</enum>
      <value name="NeighboursMax" auto="false">1000</value>
      <value name="NeighboursMin" auto="false">0</value>
      <enum name="SectorType">One</enum>
      <value name="MajorSemiaxis" auto="false">0.5790153739919614</value>
      <value name="MinorSemiaxis" auto="false">0.5790153739919614</value>
      <value name="Angle">0</value>
    </model>
</model>
```

APPENDIX E

T-TEST REPORTS

Water Depth Early

t-Test: Two-Sample Assuming Unequal Variances

Striped Bass x Spiny Dogfish

	Early	*Early*
Mean	1316	15.125
Variance	1831223.143	385.2678571
Observations	8	8
Hypothesized Mean Difference	0	
df	7	
t Stat	2.718718525	
P(T<=t) one-tail	0.014910388	
t Critical one-tail	1.414923928	
P(T<=t) two-tail	0.029820776	
t Critical two-tail	1.894578605	

Water Depth Late

t-Test: Two-Sample Assuming Unequal Variances

Striped Bass x Spiny Dogfish

	Late	*Late*
Mean	656.375	1083.625
Variance	875811.9821	2130798.554
Observations	8	8
Hypothesized Mean Difference	0	
df	12	
t Stat	-0.696928905	
P(T<=t) one-tail	0.24956321	
t Critical one-tail	1.356217334	
P(T<=t) two-tail	0.49912642	
t Critical two-tail	1.782287556	

t-Test: Two-Sample Assuming Unequal Variances

Striped Bass x Skates

	Early	Early
Mean	1316	1.375
Variance	1831223.143	2.839285714
Observations	8	8
Hypothesized Mean Difference	0	
df	7	
t Stat	2.747741731	
P(T<=t) one-tail	0.014298483	
t Critical one-tail	1.414923928	
P(T<=t) two-tail	0.028596966	
t Critical two-tail	1.894578605	

t-Test: Two-Sample Assuming Unequal Variances

Striped Bass x Skates

	Late	Late
Mean	656.375	97.875
Variance	875811.9821	25525.83929
Observations	8	8
Hypothesized Mean Difference	0	
df	7	
t Stat	1.663889087	
P(T<=t) one-tail	0.070041222	
t Critical one-tail	1.414923928	
P(T<=t) two-tail	0.140082445	
t Critical two-tail	1.894578605	

t-Test: Two-Sample Assuming Unequal Variances t-Test: Two-Sample Assuming Unequal Variances Striped Bass x Atlantic Sturgeon Striped Bass x Atlantic Sturgeon

	Early	Early	Late	Late
Mean	1316	4 Mean	656.375	9.625
Variance	1831223.143	18.57142857 Variance	875811.9821	198.2678571
Observations	8	8 Observations	8	8
Hypothesized Mean Difference	0	Hypothesized Mean Difference	0	
df	7	df	7	
t Stat	2.742243351	t Stat	1.954460227	
P(T<=t) one-tail	0.014412356	P(T<=t) one-tail	0.045781984	
t Critical one-tail	1.414923928	t Critical one-tail	1.414923928	
P(T<=t) two-tail	0.028824712	P(T<=t) two-tail	0.091563968	
t Critical two-tail	1.894578605	t Critical two-tail	1.894578605	

t-Test: Two-Sample Assuming Unequal Variances t-Test: Two-Sample Assuming Unequal Variances Striped Bass x Flounders Striped Bass x Flounders

	Early	Early		Late	Late
Mean	1316	25.625	Mean	656.375	130.75
Variance	1831223.143	1263.696429	Variance	875811.9821	22881.35714
Observations	8	8	Observations	8	8
Hypothesized Mean Difference	0		Hypothesized Mean Difference	0	
df	7		df	7	
t Stat	2.696127969		t Stat	1.568249816	
P(T<=t) one-tail	0.015405598		P(T<=t) one-tail	0.080405013	
t Critical one-tail	1.414923928		t Critical one-tail	1.414923928	
P(T<=t) two-tail	0.030811196		P(T<=t) two-tail	0.160810026	
t Critical two-tail	1.894578605		t Critical two-tail	1.894578605	

t-Test: Two-Sample Assuming Unequal Variances t-Test: Two-Sample Assuming Unequal Variances

	Early	Early	Late	Late
Mean	15.125	1.375 Mean	1083.625	97.875
Variance	385.2678571	2.839285714 Variance	2130798.554	25525.83929
Observations	8	8 Observations	8	8
Hypothesized Mean Difference	0	Hypothesized Mean Difference	0	
df	7	df	7	
t Stat	1.974112388	t Stat	1.898692922	
P(T<=t) one-tail	0.044475211	P(T<=t) one-tail	0.049698441	
t Critical one-tail	1.414923928	t Critical one-tail	1.414923928	
P(T<=t) two-tail	0.088950423	P(T<=t) two-tail	0.099396882	
t Critical two-tail	1.894578605	t Critical two-tail	1.894578605	

Spiny Dogfish x Skates Spiny Dogfish x Skates

t-Test: Two-Sample Assuming Unequal Variances

Spiny Dogfish x Atlantic Sturgeon		
	Early	Early
Mean	15.125	4
Variance	385.2678571	18.57142857
Observations	8	8
Hypothesized Mean Difference	0	
df	8	
t Stat	1.565816015	
P(T<=t) one-tail	0.078012203	
t Critical one-tail	1.39681531	
P(T<=t) two-tail	0.156024406	
t Critical two-tail	1.859548038	

t-Test: Two-Sample Assuming Unequal Variances

Spiny Dogfish x Atlantic Sturgeon		
	Late	Late
Mean	1083.625	9.625
Variance	2130798.554	198.2678571
Observations	8	8
Hypothesized Mean Difference	0	
df	7	
t Stat	2.080931929	
P(T<=t) one-tail	0.037990262	
t Critical one-tail	1.414923928	
P(T<=t) two-tail	0.075980524	
t Critical two-tail	1.894578605	

t-Test: Two-Sample Assuming Unequal Variances

Spiny Dogfish x Flounders		
	Early	Early
Mean	15.125	25.625
Variance	385.2678571	1263.696429
Observations	8	8
Hypothesized Mean Difference	0	
df	11	
t Stat	-0.731355729	
P(T<=t) one-tail	0.239926074	
t Critical one-tail	1.363430318	
P(T<=t) two-tail	0.479852149	
t Critical two-tail	1.795884819	

t-Test: Two-Sample Assuming Unequal Variances

Spiny Dogfish x Flounders		
	Late	Late
Mean	1083.625	130.75
Variance	2130798.554	22881.35714
Observations	8	8
Hypothesized Mean Difference	0	
df	7	
t Stat	1.836497527	
P(T<=t) one-tail	0.054451459	
t Critical one-tail	1.414923928	
P(T<=t) two-tail	0.108902919	
t Critical two-tail	1.894578605	

Skates x Atlantic Sturgeon		
	Early	Early
Mean	1.375	4
Variance	2.839285714	18.57142857
Observations	8	8
Hypothesized Mean Difference	0	
df	9	
t Stat	-1.604570203	
P(T<=t) one-tail	0.071525742	
t Critical one-tail	1.383028738	

Skates x Atlantic Sturgeon		
	Late	Late
Mean	97.875	9.625
Variance	25525.83929	198.2678571
Observations	8	8
Hypothesized Mean Difference	0	
df	7	
t Stat	1.556286509	
P(T<=t) one-tail	0.081797158	
t Critical one-tail	1.414923928	

P(T<=t) two-tail	0.143051485	P(T<=t) two-tail	0.163594317
t Critical two-tail	1.833112933	t Critical two-tail	1.894578605

t-Test: Two-Sample Assuming Unequal Variances

Skates x Flounders

	Early	Early
Mean	1.375	25.625
Variance	2.839285714	1263.696429
Observations	8	8
Hypothesized Mean Difference	0	
df	7	
t Stat	-1.927294207	
P(T<=t) one-tail	0.047650576	
t Critical one-tail	1.414923928	
P(T<=t) two-tail	0.095301152	
t Critical two-tail	1.894578605	

t-Test: Two-Sample Assuming Unequal Variances

Skates x Flounders

	Late	Late
Mean	97.875	130.75
Variance	25525.83929	22881.35714
Observations	8	8
Hypothesized Mean Difference	0	
df	14	
t Stat	-0.42262559	
P(T<=t) one-tail	0.339493825	
t Critical one-tail	1.345030374	
P(T<=t) two-tail	0.67898765	
t Critical two-tail	1.761310136	

t-Test: Two-Sample Assuming Unequal Variances

Atlantic Sturgeon x Flounders

	Early	Early
Mean	4	25.625
Variance	18.57142857	1263.696429
Observations	8	8
Hypothesized Mean Difference	0	
df	7	
t Stat	-1.708093861	
P(T<=t) one-tail	0.065686774	
t Critical one-tail	1.414923928	
P(T<=t) two-tail	0.131373549	
t Critical two-tail	1.894578605	

t-Test: Two-Sample Assuming Unequal Variances

Atlantic Sturgeon x Flounders

	Late	Late
Mean	9.625	130.75
Variance	198.2678571	22881.35714
Observations	8	8
Hypothesized Mean Difference	0	
df	7	
t Stat	-2.255092754	
P(T<=t) one-tail	0.029377547	
t Critical one-tail	1.414923928	
P(T<=t) two-tail	0.058755093	
t Critical two-tail	1.894578605	

Early G Size

Late G Size

t-Test: Two-Sample Assuming Unequal Variances

t-Test: Two-Sample Assuming Unequal Variances

Striped Bass x Spiny Dogfish

	Variable 1	Variable 2
Mean	2575	34.83333333
Variance	5166286.4	1458.566667
Observations	6	6
Hypothesized Mean Difference	0	
df	5	

Striped Bass x Spiny Dogfish

	Variable 1	Variable 2
Mean	5475	12011.83333
Variance	28932041.2	268391415.8
Observations	6	6
Hypothesized Mean Difference	0	
df	6	

t Stat	2.737078805	t Stat	-0.928599511
P(T<=t) one-tail	0.020467007	P(T<=t) one-tail	0.194463512
t Critical one-tail	1.475884049	t Critical one-tail	1.439755747
P(T<=t) two-tail	0.040934015	P(T<=t) two-tail	0.388927024
t Critical two-tail	2.015048373	t Critical two-tail	1.943180281

t-test: Two-Sample Assuming Unequal Variances

t-Test: Two-Sample Assuming Unequal Variances

Striped Bass x Skates

Striped Bass x Skates

	Variable 1	Variable 2	Variable 1	Variable 2
Mean	2575	5 Mean	5475	1048.166667
Variance	5166286.4	28 Variance	28932041.2	1863142.567
Observations	6	6 Observations	6	6
Hypothesized Mean Difference	0	Hypothesized Mean Difference	0	
df	5	df	6	
t Stat	2.769608176	t Stat	1.954012766	
P(T<=t) one-tail	0.019691798	P(T<=t) one-tail	0.049254708	
t Critical one-tail	1.475884049	t Critical one-tail	1.439755747	
P(T<=t) two-tail	0.039383595	P(T<=t) two-tail	0.098509415	
t Critical two-tail	2.015048373	t Critical two-tail	1.943180281	

t-Test: Two-Sample Assuming Unequal Variances

t-Test: Two-Sample Assuming Unequal Variances

Striped Bass x Atlantic Sturgeon

Striped Bass x Atlantic Sturgeon

	Variable 1	Variable 2	Variable 1	Variable 2
Mean	2575	7 Mean	5475	30
Variance	5166286.4	55.2 Variance	28932041.2	2641.666667
Observations	6	6 Observations	6	7
Hypothesized Mean Difference	0	Hypothesized Mean Difference	0	
df	5	df	5	
t Stat	2.767445553	t Stat	2.47951636	
P(T<=t) one-tail	0.019742314	P(T<=t) one-tail	0.027937103	
t Critical one-tail	1.475884049	t Critical one-tail	1.475884049	
P(T<=t) two-tail	0.039484629	P(T<=t) two-tail	0.055874205	
t Critical two-tail	2.015048373	t Critical two-tail	2.015048373	

t-Test: Two-Sample Assuming Unequal Variances

t-Test: Two-Sample Assuming Unequal Variances

Striped Bass x Flounders

Striped Bass x Flounders

	Variable 1	Variable 2	Variable 1	Variable 2
Mean	2575	165 Mean	5475	823.8571429
Variance	5166286.4	99158.8 Variance	28932041.2	1728286.143
Observations	6	6 Observations	6	7
Hypothesized Mean Difference	0	Hypothesized Mean Difference	0	
df	5	df	6	
t Stat	2.572616905	t Stat	2.065868186	

P(T<=t) one-tail	0.024938344	P(T<=t) one-tail	0.04218423
t Critical one-tail	1.475884049	t Critical one-tail	1.439755747
P(T<=t) two-tail	0.049876688	P(T<=t) two-tail	0.08436846
t Critical two-tail	2.015048373	t Critical two-tail	1.943180281

t-Test: Two-Sample Assuming Unequal Variances t-Test: Two-Sample Assuming Unequal Variances

Spiny Dogfish x Skates		Spiny Dogfish x Skates		
	Variable 1	Variable 2	Variable 1	Variable 2
Mean	34.83333333	5 Mean	12011.83333	1048.166667
Variance	1458.566667	28 Variance	268391415.8	1863142.567
Observations	6	6 Observations	6	6
Hypothesized Mean Difference	0	Hypothesized Mean Difference	0	
df	5	df	5	
t Stat	1.895331631	t Stat	1.633597027	
P(T<=t) one-tail	0.058279783	P(T<=t) one-tail	0.081635782	
t Critical one-tail	1.475884049	t Critical one-tail	1.475884049	
P(T<=t) two-tail	0.116559565	P(T<=t) two-tail	0.163271563	
t Critical two-tail	2.015048373	t Critical two-tail	2.015048373	

t-Test: Two-Sample Assuming Unequal Variances t-Test: Two-Sample Assuming Unequal Variances

Spiny Dogfish x Flounders		Spiny Dogfish x Flounders		
	Variable 1	Variable 2	Variable 1	Variable 2
Mean	34.83333333	165 Mean	12011.83333	961.1666667
Variance	1458.566667	99158.8 Variance	268391415.8	1159536.967
Observations	6	6 Observations	6	6
Hypothesized Mean Difference	0	Hypothesized Mean Difference	0	
df	5	df	5	
t Stat	-1.005168651	t Stat	1.648707709	
P(T<=t) one-tail	0.180476218	P(T<=t) one-tail	0.080061139	
t Critical one-tail	1.475884049	t Critical one-tail	1.475884049	
P(T<=t) two-tail	0.360952437	P(T<=t) two-tail	0.160122278	
t Critical two-tail	2.015048373	t Critical two-tail	2.015048373	

Spiny Dogfish x Atlantic Sturgeon		Spiny Dogfish x Atlantic Sturgeon		
	Variable 1	Variable 2	Variable 1	Variable 2
Mean	34.83333333	7 Mean	12011.83333	35
Variance	1458.566667	55.2 Variance	268391415.8	1255.2
Observations	6	6 Observations	6	6
Hypothesized Mean Difference	0	Hypothesized Mean Difference	0	
df	5	df	5	
t Stat	1.752311766	t Stat	1.790739054	

P(T<=t) one-tail	0.07005219	P(T<=t) one-tail	0.066669024
t Critical one-tail	1.475884049	t Critical one-tail	1.475884049
P(T<=t) two-tail	0.14010438	P(T<=t) two-tail	0.133338049
t Critical two-tail	2.015048373	t Critical two-tail	2.015048373

t-Test: Two-Sample Assuming Unequal Variances t-Test: Two-Sample Assuming Unequal Variances t-Test: Two-Sample Assuming Unequal Variances t-Test: Two-Sample Assuming Unequal Variances

Skates x Atlantic Sturgeon		Skates x Atlantic Sturgeon		
	Variable 1	Variable 2	Variable 1	Variable 2
Mean	5	7 Mean	1048.166667	35
Variance	28	55.2 Variance	1863142.567	1255.2
Observations	6	6 Observations	6	6
Hypothesized Mean Difference	0	Hypothesized Mean Difference	0	
df	9	df	5	
t Stat	-0.537086156	t Stat	1.817553617	
P(T<=t) one-tail	0.302115131	P(T<=t) one-tail	0.064407025	
t Critical one-tail	1.383028738	t Critical one-tail	1.475884049	
P(T<=t) two-tail	0.604230262	P(T<=t) two-tail	0.128814049	
t Critical two-tail	1.833112933	t Critical two-tail	2.015048373	

t-Test: Two-Sample Assuming Unequal Variances t-Test: Two-Sample Assuming Unequal Variances

Skates x Flounders		Skates x Flounders		
	Variable 1	Variable 2	Variable 1	Variable 2
Mean	5	165 Mean	1048.166667	961.1666667
Variance	28	99158.8 Variance	1863142.567	1159536.967
Observations	6	6 Observations	6	6
Hypothesized Mean Difference	0	Hypothesized Mean Difference	0	
df	5	df	9	
t Stat	-1.244424831	t Stat	0.122574132	
P(T<=t) one-tail	0.134247137	P(T<=t) one-tail	0.452568896	
t Critical one-tail	1.475884049	t Critical one-tail	1.383028738	
P(T<=t) two-tail	0.268494273	P(T<=t) two-tail	0.905137792	
t Critical two-tail	2.015048373	t Critical two-tail	1.833112933	

t-Test: Two-Sample Assuming Unequal Variances t-Test: Two-Sample Assuming Unequal Variances

Atlantic Sturgeon x Flounders		Atlantic Sturgeon x Flounders		
	Variable 1	Variable 2	Variable 1	Variable 2
Mean	7	165 Mean	35	961.1666667
Variance	55.2	99158.8 Variance	1255.2	1159536.967
Observations	6	6 Observations	6	6
Hypothesized Mean Difference	0	Hypothesized Mean Difference	0	
df	5	df	5	

t Stat	- 1.228701059	t Stat	- 2.105656558
P(T<=t) one-tail	0.136927827	P(T<=t) one-tail	0.044555715
t Critical one-tail	1.475884049	t Critical one-tail	1.475884049
P(T<=t) two-tail	0.273855654	P(T<=t) two-tail	0.08911143
t Critical two-tail	2.015048373	t Critical two-tail	2.015048373

Early % Org C Late % Org C

t-Test: Two-Sample Assuming Unequal Variances t-Test: Two-Sample Assuming Unequal Variances

Striped Bass x Spiny Dogfish		Striped Bass x Spiny Dogfish		
	Variable 1	Variable 2	Variable 1	Variable 2
Mean	2207.142857	29.85714286 Mean	4692.857143	10295.85714
Variance	11535756.48	1660.142857 Variance	53052924.48	204126296.8
Observations	7	7 Observations	7	7
Hypothesized Mean Difference	0	Hypothesized Mean Difference	0	
df	6	df	9	
t Stat	1.695938719	t Stat	- 0.924382477	
P(T<=t) one-tail	0.070413479	P(T<=t) one-tail	0.189702268	
t Critical one-tail	1.439755747	t Critical one-tail	1.383028738	
P(T<=t) two-tail	0.140826959	P(T<=t) two-tail	0.379404536	
t Critical two-tail	1.943180281	t Critical two-tail	1.833112933	

t-Test: Two-Sample Assuming Unequal Variances t-Test: Two-Sample Assuming Unequal Variances

Striped Bass x Skates		Striped Bass x Skates		
	Variable 1	Variable 2	Variable 1	Variable 2
Mean	2207.142857	4.285714286 Mean	4692.857143	898.4285714
Variance	11535756.48	30.9047619 Variance	53052924.48	1195658.952
Observations	7	7 Observations	7	7
Hypothesized Mean Difference	0	Hypothesized Mean Difference	0	
df	6	df	6	
t Stat	1.715978066	t Stat	1.363016775	
P(T<=t) one-tail	0.068491727	P(T<=t) one-tail	0.110904808	
t Critical one-tail	1.439755747	t Critical one-tail	1.439755747	
P(T<=t) two-tail	0.136983453	P(T<=t) two-tail	0.221809617	
t Critical two-tail	1.943180281	t Critical two-tail	1.943180281	

t-Test: Two-Sample Assuming Unequal Variances t-Test: Two-Sample Assuming Unequal Variances

Striped Bass x Atlantic Sturgeon		Striped Bass x Atlantic Sturgeon		
	Variable 1	Variable 2	Variable 1	Variable 2
Mean	2207.142857	6 Mean	4692.857143	30
Variance	11535756.48	108.6666667 Variance	53052924.48	2641.666667
Observations	7	7 Observations	7	7

Hypothesized Mean Difference	0	Hypothesized Mean Difference	0
df	6	df	6
t Stat	1.714636895	t Stat	1.693696747
P(T<=t) one-tail	0.068618737	P(T<=t) one-tail	0.070631707
t Critical one-tail	1.439755747	t Critical one-tail	1.439755747
P(T<=t) two-tail	0.137237474	P(T<=t) two-tail	0.141263415
t Critical two-tail	1.943180281	t Critical two-tail	1.943180281

t-Test: Two-Sample Assuming Unequal Variances t-Test: Two-Sample Assuming Unequal Variances

Striped Bass x Flounders		Striped Bass x Flounders		
	Variable 1	Variable 2	Variable 1	Variable 2
Mean	2207.142857	141.4285714 Mean	4692.857143	823.8571429
Variance	11535756.48	43568.95238 Variance	53052924.48	1728286.143
Observations	7	7 Observations	7	7
Hypothesized Mean Difference	0	Hypothesized Mean Difference	0	
df	6	df	6	
t Stat	1.606118717	t Stat	1.383031071	
P(T<=t) one-tail	0.079685514	P(T<=t) one-tail	0.107960866	
t Critical one-tail	1.439755747	t Critical one-tail	1.439755747	
P(T<=t) two-tail	0.159371029	P(T<=t) two-tail	0.215921732	
t Critical two-tail	1.943180281	t Critical two-tail	1.943180281	

t-Test: Two-Sample Assuming Unequal Variances t-Test: Two-Sample Assuming Unequal Variances

Spiny Dogfish x Flounders		Spiny Dogfish x Flounders		
	Variable 1	Variable 2	Variable 1	Variable 2
Mean	29.85714286	141.4285714 Mean	10295.85714	823.8571429
Variance	1660.142857	43568.95238 Variance	204126296.8	1728286.143
Observations	7	7 Observations	7	7
Hypothesized Mean Difference	0	Hypothesized Mean Difference	0	
df	6	df	6	
t Stat	-1.388011498	t Stat	1.746668304	
P(T<=t) one-tail	0.107239397	P(T<=t) one-tail	0.065647078	
t Critical one-tail	1.439755747	t Critical one-tail	1.439755747	
P(T<=t) two-tail	0.214478795	P(T<=t) two-tail	0.131294155	
t Critical two-tail	1.943180281	t Critical two-tail	1.943180281	

Spiny Dogfish x Skates		Spiny Dogfish x Skates		
	Variable 1	Variable 2	Variable 1	Variable 2
Mean	29.85714286	4.285714286 Mean	10295.85714	898.4285714
Variance	1660.142857	30.9047619 Variance	204126296.8	1195658.952
Observations	7	7 Observations	7	7
Hypothesized Mean Difference	0	Hypothesized Mean Difference	0	

df	6	df	6
t Stat	1.645228001	t Stat	1.735163315
P(T<=t) one-tail	0.075512488	P(T<=t) one-tail	0.066699706
t Critical one-tail	1.439755747	t Critical one-tail	1.439755747
P(T<=t) two-tail	0.151024977	P(T<=t) two-tail	0.133399413
t Critical two-tail	1.943180281	t Critical two-tail	1.943180281

t-Test: Two-Sample Assuming Unequal Variances t-Test: Two-Sample Assuming Unequal Variances

Spiny Dogfish x Atlantic Sturgeon			Spiny Dogfish x Atlantic Sturgeon		
	Variable 1	Variable 2		Variable 1	Variable 2
Mean	29.85714286	6	Mean	10295.85714	30
Variance	1660.142857	108.6666667	Variance	204126296.8	2641.666667
Observations	7	7	Observations	7	7
Hypothesized Mean Difference	0		Hypothesized Mean Difference	0	
df	7		df	6	
t Stat	1.500814155		t Stat	1.901043033	
P(T<=t) one-tail	0.0885465		P(T<=t) one-tail	0.053008199	
t Critical one-tail	1.414923928		t Critical one-tail	1.439755747	
P(T<=t) two-tail	0.177093		P(T<=t) two-tail	0.106016398	
t Critical two-tail	1.894578605		t Critical two-tail	1.943180281	

t-Test: Two-Sample Assuming Unequal Variances t-Test: Two-Sample Assuming Unequal Variances t-Test: Two-Sample Assuming Unequal Variances t-Test: Two-Sample Assuming Unequal Variances

Skates x Atlantic Sturgeon			Skates x Atlantic Sturgeon		
	Variable 1	Variable 2		Variable 1	Variable 2
Mean	4.285714286	6	Mean	898.4285714	30
Variance	30.9047619	108.6666667	Variance	1195658.952	2641.666667
Observations	7	7	Observations	7	7
Hypothesized Mean Difference	0		Hypothesized Mean Difference	0	
df	9		df	6	
t Stat	-0.383914013		t Stat	2.098941003	
P(T<=t) one-tail	0.354977399		P(T<=t) one-tail	0.040297805	
t Critical one-tail	1.383028738		t Critical one-tail	1.439755747	
P(T<=t) two-tail	0.709954797		P(T<=t) two-tail	0.08059561	
t Critical two-tail	1.833112933		t Critical two-tail	1.943180281	

T-Test: Two-Sample Assuming Unequal Variances t-Test: Two-Sample Assuming Unequal Variances

Skates x Flounders		Skates x Flounders		
	Variable 1	Variable 2	Variable 1	Variable 2
Mean	4.285714286	141.4285714 Mean	898.4285714	823.8571429
Variance	30.9047619	43568.95238 Variance	1195658.952	1728286.143
Observations	7	7 Observations	7	7
Hypothesized Mean Difference	0	Hypothesized Mean Difference	0	
df	6	df	12	
t Stat	-1.737719521	t Stat	0.115381685	
P(T<=t) one-tail	0.066464417	P(T<=t) one-tail	0.455025437	
t Critical one-tail	1.439755747	t Critical one-tail	1.356217334	
P(T<=t) two-tail	0.132928834	P(T<=t) two-tail	0.910050874	
t Critical two-tail	1.943180281	t Critical two-tail	1.782287556	

t-Test: Two-Sample Assuming Unequal Variances t-Test: Two-Sample Assuming Unequal Variances

Atlantic Sturgeon x Flounders		Atlantic Sturgeon x Flounders		
	Variable 1	Variable 2	Variable 1	Variable 2
Mean	6	141.4285714 Mean	30	823.8571429
Variance	108.6666667	43568.95238 Variance	2641.666667	1728286.143
Observations	7	7 Observations	7	7
Hypothesized Mean Difference	0	Hypothesized Mean Difference	0	
df	6	df	6	
t Stat	-1.714469799	t Stat	-1.59643742	
P(T<=t) one-tail	0.068634578	P(T<=t) one-tail	0.080752053	
t Critical one-tail	1.439755747	t Critical one-tail	1.439755747	
P(T<=t) two-tail	0.137269155	P(T<=t) two-tail	0.161504105	
t Critical two-tail	1.943180281	t Critical two-tail	1.943180281	

Early W Temp Late W Temp

t-Test: Two-Sample Assuming Unequal Variances t-Test: Two-Sample Assuming Unequal Variances

Striped Bass x Spiny Dogfish			Striped Bass x Spiny Dogfish		
	Variable 1	Variable 2		Variable 1	Variable 2
Mean	1931.25	26.125	Mean	4106.25	9008.875
Variance	6752753.643	2040.982143	Variance	23335927.07	161659964.4
Observations	8	8	Observations	8	8
Hypothesized Mean Difference	0		Hypothesized Mean Difference	0	
df	7		df	9	
t Stat	2.073301181		t Stat	-1.01951267	
P(T<=t) one-tail	0.038420674		P(T<=t) one-tail	0.167290806	
t Critical one-tail	1.414923928		t Critical one-tail	1.383028738	

P(T<=t) two-tail	0.076841347	P(T<=t) two-tail	0.334581613
t Critical two-tail	1.894578605	t Critical two-tail	1.833112933

t-Test: Two-Sample Assuming Unequal Variances — t-Test: Two-Sample Assuming Unequal Variances

Striped Bass x Skates — Striped Bass x Skates

	Variable 1	Variable 2	Variable 1	Variable 2
Mean	1931.25	3.75 Mean	4106.25	786.125
Variance	6752753.643	55.35714286 Variance	23335927.07	1818962.411
Observations	8	8 Observations	8	8
Hypothesized Mean Difference	0	Hypothesized Mean Difference	0	
df	7	df	8	
t Stat	2.097959727	t Stat	1.872355115	
P(T<=t) one-tail	0.037047038	P(T<=t) one-tail	0.0490257	
t Critical one-tail	1.414923928	t Critical one-tail	1.39681531	
P(T<=t) two-tail	0.074094076	P(T<=t) two-tail	0.0980514	
t Critical two-tail	1.894578605	t Critical two-tail	1.859548038	

t-Test: Two-Sample Assuming Unequal Variances — t-Test: Two-Sample Assuming Unequal Variances

Striped Bass x Atlantic Sturgeon — Striped Bass x Atlantic Sturgeon

	Variable 1	Variable 2	Variable 1	Variable 2
Mean	1931.25	5.25 Mean	4106.25	26.25
Variance	6752753.643	42.21428571 Variance	23335927.07	1651.071429
Observations	8	8 Observations	8	8
Hypothesized Mean Difference	0	Hypothesized Mean Difference	0	
df	7	df	7	
t Stat	2.096329114	t Stat	2.388786104	
P(T<=t) one-tail	0.037136344	P(T<=t) one-tail	0.024127412	
t Critical one-tail	1.414923928	t Critical one-tail	1.414923928	
P(T<=t) two-tail	0.074272687	P(T<=t) two-tail	0.048254824	
t Critical two-tail	1.894578605	t Critical two-tail	1.894578605	

t-Test: Two-Sample Assuming Unequal Variances — t-Test: Two-Sample Assuming Unequal Variances

Striped Bass x Flounders — Striped Bass x Flounders

	Variable 1	Variable 2	Variable 1	Variable 2
Mean	1931.25	123.75 Mean	4106.25	720.875
Variance	6752753.643	30486.78571 Variance	23335927.07	1026421.268
Observations	8	8 Observations	8	8
Hypothesized Mean Difference	0	Hypothesized Mean Difference	0	
df	7	df	8	
t Stat	1.962929465	t Stat	1.939957439	
P(T<=t) one-tail	0.045214261	P(T<=t) one-tail	0.044176053	
t Critical one-tail	1.414923928	t Critical one-tail	1.39681531	
P(T<=t) two-tail	0.090428523	P(T<=t) two-tail	0.088352106	

t Critical two-tail	1.894578605	t Critical two-tail	1.859548038

t-Test: Two-Sample Assuming Unequal Variances

Spiny Dogfish x Skates			
	Variable 1	Variable 2	
Mean	26.125	3.75	
Variance	2040.982143	55.35714286	
Observations	8	8	
Hypothesized Mean Difference	0		
df	7		
t Stat	1.382220249		
P(T<=t) one-tail	0.104698976		
t Critical one-tail	1.414923928		
P(T<=t) two-tail	0.209397952		
t Critical two-tail	1.894578605		

t-Test: Two-Sample Assuming Unequal Variances

Spiny Dogfish x Skates			
	Variable 1	Variable 2	
Mean	9008.875	786.125	
Variance	161659964.4	1818962.411	
Observations	8	8	
Hypothesized Mean Difference	0		
df	7		
t Stat	1.818993683		
P(T<=t) one-tail	0.055866582		
t Critical one-tail	1.414923928		
P(T<=t) two-tail	0.111733165		
t Critical two-tail	1.894578605		

t-Test: Two-Sample Assuming Unequal Variances

Spiny Dogfish x Flounders			
	Variable 1	Variable 2	
Mean	26.125	123.75	
Variance	2040.982143	30486.78571	
Observations	8	8	
Hypothesized Mean Difference	0		
df	8		
t Stat	-1.53101311		
P(T<=t) one-tail	0.082149588		
t Critical one-tail	1.39681531		
P(T<=t) two-tail	0.164299177		
t Critical two-tail	1.859548038		

t-Test: Two-Sample Assuming Unequal Variances

Spiny Dogfish x Flounders			
	Variable 1	Variable 2	
Mean	9008.875	720.875	
Variance	161659964.4	1026421.268	
Observations	8	8	
Hypothesized Mean Difference	0		
df	7		
t Stat	1.837888374		
P(T<=t) one-tail	0.05434051		
t Critical one-tail	1.414923928		
P(T<=t) two-tail	0.10868102		
t Critical two-tail	1.894578605		

Spiny Dogfish x Atlantic Sturgeon			
	Variable 1	Variable 2	
Mean	26.125	5.25	
Variance	2040.982143	42.21428571	
Observations	8	8	
Hypothesized Mean Difference	0		
df	7		
t Stat	1.293618943		
P(T<=t) one-tail	0.118422198		
t Critical one-tail	1.414923928		
P(T<=t) two-tail	0.236844395		
t Critical two-tail	1.894578605		

Spiny Dogfish x Atlantic Sturgeon		
	Variable 1	Variable 2
Mean	9008.875	26.25
Variance	161659964.4	1651.071429
Observations	8	8
Hypothesized Mean Difference	0	
df	7	
t Stat	1.998226921	
P(T<=t) one-tail	0.042921753	
t Critical one-tail	1.414923928	
P(T<=t) two-tail	0.085843505	
t Critical two-tail	1.894578605	

t-Test: Two-Sample Assuming Unequal Variances t-Test: Two-Sample Assuming Unequal Variances t-Test: Two-Sample Assuming Unequal Variances t-Test: Two-Sample Assuming Unequal Variances

Skates x Atlantic Sturgeon		Skates x Atlantic Sturgeon		
	Variable 1	Variable 2	Variable 1	Variable 2
Mean	3.75	5.25 Mean	786.125	26.25
Variance	55.35714286	42.21428571 Variance	1818962.411	1651.071429
Observations	8	8 Observations	8	8
Hypothesized Mean Difference	0	Hypothesized Mean Difference	0	
df	14	df	7	
t Stat	-0.429511623	t Stat	1.592862444	
P(T<=t) one-tail	0.337043826	P(T<=t) one-tail	0.077609518	
t Critical one-tail	1.345030374	t Critical one-tail	1.414923928	
P(T<=t) two-tail	0.674087652	P(T<=t) two-tail	0.155219036	
t Critical two-tail	1.761310136	t Critical two-tail	1.894578605	

t-Test: Two-Sample Assuming Unequal Variances t-Test: Two-Sample Assuming Unequal Variances

Skates x Flounders			Skates x Flounders		
	Variable 1	Variable 2		Variable 1	Variable 2
Mean	3.75	123.75	Mean	786.125	720.875
Variance	55.35714286	30486.78571	Variance	1818962.411	1026421.268
Observations	8	8	Observations	8	8
Hypothesized Mean Difference	0		Hypothesized Mean Difference	0	
df	7		df	13	
t Stat	-1.942121909		t Stat	0.109409515	
P(T<=t) one-tail	0.046621597		P(T<=t) one-tail	0.457274271	
t Critical one-tail	1.414923928		t Critical one-tail	1.350171289	
P(T<=t) two-tail	0.093243193		P(T<=t) two-tail	0.914548543	
t Critical two-tail	1.894578605		t Critical two-tail	1.770933396	

t-Test: Two-Sample Assuming Unequal Variances t-Test: Two-Sample Assuming Unequal Variances

Atlantic Sturgeon x Flounders			Atlantic Sturgeon x Flounders		
	Variable 1	Variable 2		Variable 1	Variable 2
Mean	5.25	123.75	Mean	26.25	720.875
Variance	42.21428571	30486.78571	Variance	1651.071429	1026421.268
Observations	8	8	Observations	8	8
Hypothesized Mean Difference	0		Hypothesized Mean Difference	0	
df	7		df	7	
t Stat	-1.91825816		t Stat	-1.937686735	
P(T<=t) one-tail	0.048288495		P(T<=t) one-tail	0.046927078	
t Critical one-tail	1.414923928		t Critical one-tail	1.414923928	
P(T<=t) two-tail	0.09657699		P(T<=t) two-tail	0.093854155	

t Critical two-tail	1.894578605	t Critical two-tail	1.894578605

Early A Temp Late A Temp

t-Test: Two-Sample Assuming Unequal Variances t-Test: Two-Sample Assuming Unequal Variances

Striped Bass x Spiny Dogfish Striped Bass x Spiny Dogfish

	Variable 1	Variable 2		Variable 1	Variable 2
Mean	3090	41.8	Mean	6570	14414.2
Variance	9702849.5	1254.7	Variance	45763574.5	230117095.7
Observations	5	5	Observations	5	5
Hypothesized Mean Difference	0		Hypothesized Mean Difference	0	
df	4		df	6	
t Stat	2.188017218		t Stat	-1.056022142	
P(T<=t) one-tail	0.046949855		P(T<=t) one-tail	0.165806065	
t Critical one-tail	1.533206274		t Critical one-tail	1.439755747	
P(T<=t) two-tail	0.093899711		P(T<=t) two-tail	0.33161213	
t Critical two-tail	2.131846786		t Critical two-tail	1.943180281	

t-Test: Two-Sample Assuming Unequal Variances t-Test: Two-Sample Assuming Unequal Variances

Striped Bass x Skates Striped Bass x Skates

	Variable 1	Variable 2		Variable 1	Variable 2
Mean	3090	6	Mean	6570	1257.8
Variance	9702849.5	19.5	Variance	45763574.5	1500711.7
Observations	5	5	Observations	5	5
Hypothesized Mean Difference	0		Hypothesized Mean Difference	0	
df	4		df	4	
t Stat	2.213855586		t Stat	1.727797606	
P(T<=t) one-tail	0.045616859		P(T<=t) one-tail	0.079545937	
t Critical one-tail	1.533206274		t Critical one-tail	1.533206274	
P(T<=t) two-tail	0.091233718		P(T<=t) two-tail	0.159091874	
t Critical two-tail	2.131846786		t Critical two-tail	2.131846786	

t-Test: Two-Sample Assuming Unequal Variances t-Test: Two-Sample Assuming Unequal Variances Striped Bass x Atlantic Sturgeon Striped Bass x Atlantic Sturgeon

	Variable 1	Variable 2		Variable 1	Variable 2
Mean	3090	8.4	Mean	6570	42
Variance	9702849.5	120.8	Variance	45763574.5	2001.5
Observations	5	5	Observations	5	5
Hypothesized Mean Difference	0		Hypothesized Mean Difference	0	
df	4		df	4	
t Stat	2.212121194		t Stat	2.157722954	
P(T<=t) one-tail	0.045705001		P(T<=t) one-tail	0.048568335	
t Critical one-tail	1.533206274		t Critical one-tail	1.533206274	
P(T<=t) two-tail	0.091410001		P(T<=t) two-tail	0.097136669	
t Critical two-tail	2.131846786		t Critical two-tail	2.131846786	

t-Test: Two-Sample Assuming Unequal Variances t-Test: Two-Sample Assuming Unequal Variances

Striped Bass x Flounders Striped Bass x Flounders

	Variable 1	Variable 2	Variable 1	Variable 2
Mean	3090	198 Mean	6570	1153.4
Variance	9702849.5	53814.5 Variance	45763574.5	1030546.8
Observations	5	5 Observations	5	5
Hypothesized Mean Difference	0	Hypothesized Mean Difference	0	
df	4	df	4	
t Stat	2.070296826	t Stat	1.770582304	
P(T<=t) one-tail	0.053597052	P(T<=t) one-tail	0.07566839	
t Critical one-tail	1.533206274	t Critical one-tail	1.533206274	
P(T<=t) two-tail	0.107194104	P(T<=t) two-tail	0.151336779	
t Critical two-tail	2.131846786	t Critical two-tail	2.131846786	

t-Test: Two-Sample Assuming Unequal Variances t-Test: Two-Sample Assuming Unequal Variances

Spiny Dogfish x Skates			Spiny Dogfish x Skates		
	Variable 1	Variable 2		Variable 1	Variable 2
Mean	41.8	6	Mean	14414.2	1257.8
Variance	1254.7	19.5	Variance	230117095.7	1500711.7
Observations	5	5	Observations	5	5
Hypothesized Mean Difference	0		Hypothesized Mean Difference	0	
df	4		df	4	
t Stat	2.242586629		t Stat	1.93301889	
P(T<=t) one-tail	0.044184062		P(T<=t) one-tail	0.062689687	
t Critical one-tail	1.533206274		t Critical one-tail	1.533206274	
P(T<=t) two-tail	0.088368125		P(T<=t) two-tail	0.125379374	
t Critical two-tail	2.131846786		t Critical two-tail	2.131846786	

t-Test: Two-Sample Assuming Unequal Variances t-Test: Two-Sample Assuming Unequal Variances

Spiny Dogfish x Flounders			Spiny Dogfish x Flounders	
	Variable 1	Variable 2	Variable 1	Variable 2
Mean	41.8	198 Mean	14414.2	1153.4
Variance	1254.7	53814.5 Variance	230117095.7	1030546.8
Observations	5	5 Observations	5	5
Hypothesized Mean Difference	0	Hypothesized Mean Difference	0	
df	4	df	4	
t Stat	-1.488372537	t Stat	1.950338496	
P(T<=t) one-tail	0.10543879	P(T<=t) one-tail	0.06145471	
t Critical one-tail	1.533206274	t Critical one-tail	1.533206274	
P(T<=t) two-tail	0.210877579	P(T<=t) two-tail	0.12290942	
t Critical two-tail	2.131846786	t Critical two-tail	2.131846786	

Spiny Dogfish x Atlantic Sturgeon Spiny Dogfish x Atlantic Sturgeon

	Variable 1	Variable 2	Variable 1	Variable 2
Mean	41.8	8.4 Mean	14414.2	42
Variance	1254.7	120.8 Variance	230117095.7	2001.5
Observations	5	5 Observations	5	5
Hypothesized Mean Difference	0	Hypothesized Mean Difference	0	
df	5	df	4	
t Stat	2.013729682	t Stat	2.118516854	
P(T<=t) one-tail	0.050084202	P(T<=t) one-tail	0.050755744	
t Critical one-tail	1.475884049	t Critical one-tail	1.533206274	
P(T<=t) two-tail	0.100168405	P(T<=t) two-tail	0.101511487	
t Critical two-tail	2.015048373	t Critical two-tail	2.131846786	

t-Test: Two-Sample Assuming Unequal Variances t-Test: Two-Sample Assuming Unequal Variances t-Test: Two-Sample Assuming Unequal Variances t-Test: Two-Sample Assuming Unequal Variances

Skates x Atlantic Sturgeon			Skates x Atlantic Sturgeon		
	Variable 1	Variable 2		Variable 1	Variable 2
Mean	6	8.4	Mean	1257.8	42
Variance	19.5	120.8	Variance	1500711.7	2001.5
Observations	5	5	Observations	5	5
Hypothesized Mean Difference	0		Hypothesized Mean Difference	0	
df	5		df	4	
t Stat	-0.453072193		t Stat	2.217732141	
P(T<=t) one-tail	0.33474012		P(T<=t) one-tail	0.045420539	
t Critical one-tail	1.475884049		t Critical one-tail	1.533206274	
P(T<=t) two-tail	0.669480241		P(T<=t) two-tail	0.090841078	
t Critical two-tail	2.015048373		t Critical two-tail	2.131846786	

t-Test: Two-Sample Assuming Unequal Variances t-Test: Two-Sample Assuming Unequal Variances

Skates x Flounders		Skates x Flounders		
	Variable 1	Variable 2	Variable 1	Variable 2
Mean	6	198 Mean	1257.8	1153.4
Variance	19.5	53814.5 Variance	1500711.7	1030546.8
Observations	5	5 Observations	5	5
Hypothesized Mean Difference	0	Hypothesized Mean Difference	0	
df	4	df	8	
t Stat	-1.850367133	t Stat	0.146729437	
P(T<=t) one-tail	0.068965396	P(T<=t) one-tail	0.443487905	
t Critical one-tail	1.533206274	t Critical one-tail	1.39681531	
P(T<=t) two-tail	0.137930792	P(T<=t) two-tail	0.886975811	
t Critical two-tail	2.131846786	t Critical two-tail	1.859548038	

t-Test: Two-Sample Assuming Unequal Variances t-Test: Two-Sample Assuming Unequal Variances

Atlantic Sturgeon x Flounders			Atlantic Sturgeon x Flounders		
	Variable 1	Variable 2		Variable 1	Variable 2
Mean	8.4	198	Mean	42	1153.4

Variance	120.8	53814.5	Variance	2001.5	1030546.8
Observations	5	5	Observations	5	5
Hypothesized Mean Difference	0		Hypothesized Mean Difference	0	
df	4		df	4	
t Stat	-1.825520801		t Stat	-2.445683236	
P(T<=t) one-tail	0.070981942		P(T<=t) one-tail	0.035386783	
t Critical one-tail	1.533206274		t Critical one-tail	1.533206274	
P(T<=t) two-tail	0.141963883		P(T<=t) two-tail	0.070773565	
t Critical two-tail	2.131846786		t Critical two-tail	2.131846786	

Early Shepard

t-Test: Two-Sample Assuming Unequal Variances

Striped Bass x Spiny Dogfish

	Variable 1	Variable 2
Mean	1404.545455	19
Variance	4627580.873	1246.4
Observations	11	11
Hypothesized Mean Difference	0	
df	10	
t Stat	2.135903527	
P(T<=t) one-tail	0.02921854	
t Critical one-tail	1.372183641	
P(T<=t) two-tail	0.058437081	
t Critical two-tail	1.812461123	

Late Shepard

t-Test: Two-Sample Assuming Unequal Variances

Striped Bass x Spiny Dogfish

	Variable 1	Variable 2
Mean	2986.363636	6551.909091
Variance	46774542.65	207061361.3
Observations	11	11
Hypothesized Mean Difference	0	
df	14	
t Stat	-0.74224246	
P(T<=t) one-tail	0.235105553	
t Critical one-tail	1.345030374	
P(T<=t) two-tail	0.470211106	
t Critical two-tail	1.761310136	

t-Test: Two-Sample Assuming Unequal Variances

Striped Bass x Skates

	Variable 1	Variable 2
Mean	1404.545455	2.727272727
Variance	4627580.873	22.41818182
Observations	11	11
Hypothesized Mean Difference	0	
df	10	
t Stat	2.161274704	
P(T<=t) one-tail	0.027994459	
t Critical one-tail	1.372183641	
P(T<=t) two-tail	0.055988918	
t Critical two-tail	1.812461123	

t-Test: Two-Sample Assuming Unequal Variances

Striped Bass x Skates

	Variable 1	Variable 2
Mean	2986.363636	571.7272727
Variance	46774542.65	1469694.618
Observations	11	11
Hypothesized Mean Difference	0	
df	11	
t Stat	1.152989512	
P(T<=t) one-tail	0.136677045	
t Critical one-tail	1.363430318	
P(T<=t) two-tail	0.27335409	
t Critical two-tail	1.795884819	

t-Test: Two-Sample Assuming Unequal Variances

Striped Bass x Atlantic Sturgeon

	Variable 1	Variable 2
Mean	1404.545455	3.818181818
Variance	4627580.873	45.96363636
Observations	11	11

t-Test: Two-Sample Assuming Unequal Variances

Striped Bass x Atlantic Sturgeon

	Variable 1	Variable 2
Mean	2986.363636	19.09090909
Variance	46774542.65	1304.690909
Observations	11	11

Hypothesized Mean Difference	0	Hypothesized Mean Difference	0
df	10	df	10
t Stat	2.159587285	t Stat	1.438940962
P(T<=t) one-tail	0.028074321	P(T<=t) one-tail	0.090361308
t Critical one-tail	1.372183641	t Critical one-tail	1.372183641
P(T<=t) two-tail	0.056148642	P(T<=t) two-tail	0.180722615
t Critical two-tail	1.812461123	t Critical two-tail	1.812461123

t-Test: Two-Sample Assuming Unequal Variances t-Test: Two-Sample Assuming Unequal Variances

Striped Bass x Flounders			Striped Bass x Flounders		
	Variable 1	Variable 2		Variable 1	Variable 2
Mean	1404.545455	90	Mean	2986.363636	524.2727273
Variance	4627580.873	49172	Variance	46774542.65	1147305.818
Observations	11	11	Observations	11	11
Hypothesized Mean Difference	0		Hypothesized Mean Difference	0	
df	10		df	10	
t Stat	2.016042762		t Stat	1.179596965	
P(T<=t) one-tail	0.035725346		P(T<=t) one-tail	0.132731006	
t Critical one-tail	1.372183641		t Critical one-tail	1.372183641	
P(T<=t) two-tail	0.071450692		P(T<=t) two-tail	0.265462012	
t Critical two-tail	1.812461123		t Critical two-tail	1.812461123	

t-Test: Two-Sample Assuming Unequal Variances t-Test: Two-Sample Assuming Unequal Variances

Spiny Dogfish x Skates			Spiny Dogfish x Skates		
	Variable 1	Variable 2		Variable 1	Variable 2
Mean	19	2.727272727	Mean	6551.909091	571.7272727
Variance	1246.4	22.41818182	Variance	207061361.3	1469694.618
Observations	11	11	Observations	11	11
Hypothesized Mean Difference	0		Hypothesized Mean Difference	0	
df	10		df	10	
t Stat	1.51515475		t Stat	1.373489551	
P(T<=t) one-tail	0.080341889		P(T<=t) one-tail	0.099803414	
t Critical one-tail	1.372183641		t Critical one-tail	1.372183641	
P(T<=t) two-tail	0.160683779		P(T<=t) two-tail	0.199606828	
t Critical two-tail	1.812461123		t Critical two-tail	1.812461123	

t-Test: Two-Sample Assuming Unequal Variances t-Test: Two-Sample Assuming Unequal Variances

Spiny Dogfish x Atlantic Sturgeon			Spiny Dogfish x Atlantic Sturgeon		
	Variable 1	Variable 2		Variable 1	Variable 2

Mean	19	3.818181818 Mean	6551.909091	19.09090909
Variance	1246.4	45.96363636 Variance	207061361.3	1304.690909
Observations	11	11 Observations	11	11
Hypothesized Mean Difference	0	Hypothesized Mean Difference	0	
df	11	df	10	
t Stat	1.400643995	t Stat	1.50572622	
P(T<=t) one-tail	0.094446408	P(T<=t) one-tail	0.081526696	
t Critical one-tail	1.363430318	t Critical one-tail	1.372183641	
P(T<=t) two-tail	0.188892815	P(T<=t) two-tail	0.163053391	
t Critical two-tail	1.795884819	t Critical two-tail	1.812461123	

t-Test: Two-Sample Assuming Unequal Variances t-Test: Two-Sample Assuming Unequal Variances t-Test: Two-Sample Assuming Unequal Variances t-Test: Two-Sample Assuming Unequal Variances

Spiny Dogfish x Flounders		Spiny Dogfish x Flounders		
	Variable 1	Variable 2	Variable 1	Variable 2
Mean	19	90 Mean	6551.909091	524.2727273
Variance	1246.4	49172 Variance	207061361.3	1147305.818
Observations	11	11 Observations	11	11
Hypothesized Mean Difference	0	Hypothesized Mean Difference	0	
df	11	df	10	
t Stat	-1.048721476	t Stat	1.385459978	
P(T<=t) one-tail	0.15840105	P(T<=t) one-tail	0.098016588	
t Critical one-tail	1.363430318	t Critical one-tail	1.372183641	
P(T<=t) two-tail	0.316802099	P(T<=t) two-tail	0.196033175	
t Critical two-tail	1.795884819	t Critical two-tail	1.812461123	

Skates x Atlantic Sturgeon		Skates x Atlantic Sturgeon		
	Variable 1	Variable 2	Variable 1	Variable 2
Mean	2.727272727	3.818181818 Mean	571.7272727	19.09090909
Variance	22.41818182	45.96363636 Variance	1469694.618	1304.690909
Observations	11	11 Observations	11	11
Hypothesized Mean Difference	0	Hypothesized Mean Difference	0	
df	18	df	10	
t Stat	-0.437536795	t Stat	1.511226521	
P(T<=t) one-tail	0.333463391	P(T<=t) one-tail	0.080833682	
t Critical one-tail	1.330390944	t Critical one-tail	1.372183641	
P(T<=t) two-tail	0.666926783	P(T<=t) two-tail	0.161667363	
t Critical two-tail	1.734063607	t Critical two-tail	1.812461123	

t-Test: Two-Sample Assuming Unequal Variances t-Test: Two-Sample Assuming Unequal Variances

Skates x Flounders		Skates x Flounders		
	Variable 1	Variable 2	Variable 1	Variable 2
Mean	2.727272727	90 Mean	571.7272727	524.2727273
Variance	22.41818182	49172 Variance	1469694.618	1147305.818
Observations	11	11 Observations	11	11

Hypothesized Mean Difference	0	Hypothesized Mean Difference	0
df	10	df	20
t Stat	-1.305019425	t Stat	0.097290909
P(T<=t) one-tail	0.11055799	P(T<=t) one-tail	0.461731884
t Critical one-tail	1.372183641	t Critical one-tail	1.325340707
P(T<=t) two-tail	0.221115981	P(T<=t) two-tail	0.923463767
t Critical two-tail	1.812461123	t Critical two-tail	1.724718243

t-Test: Two-Sample Assuming Unequal Variances t-Test: Two-Sample Assuming Unequal Variances

Atlantic Sturgeon x Flounders		Atlantic Sturgeon x Flounders		
	Variable 1	Variable 2	Variable 1	Variable 2
Mean	3.818181818	90 Mean	19.09090909	524.2727273
Variance	45.96363636	49172 Variance	1304.690909	1147305.818
Observations	11	11 Observations	11	11
Hypothesized Mean Difference	0	Hypothesized Mean Difference	0	
df	10	df	10	
t Stat	-1.288398392	t Stat	-1.563355196	
P(T<=t) one-tail	0.113309048	P(T<=t) one-tail	0.074517129	
t Critical one-tail	1.372183641	t Critical one-tail	1.372183641	
P(T<=t) two-tail	0.226618096	P(T<=t) two-tail	0.149034259	
t Critical two-tail	1.812461123	t Critical two-tail	1.812461123	

Early Hour
t-Test: Two-Sample Assuming Unequal Variances

Late Hour
t-Test: Two-Sample Assuming Unequal Variances

Striped Bass x Spiny Dogfish		Striped Bass x Spiny Dogfish		
	Variable 1	Variable 2	Variable 1	Variable 2
Mean	574.4	8 Mean	1362.2	2984.52
Variance	184050.5	38.66666667 Variance	215986	365759.51
Observations	25	25 Observations	25	25
Hypothesized Mean Difference	0	Hypothesized Mean Difference	0	
df	24	df	45	
t Stat	6.600534922	t Stat	-10.63506152	
P(T<=t) one-tail	3.96728E-07	P(T<=t) one-tail	3.64798E-14	
t Critical one-tail	1.317835934	t Critical one-tail	1.300649332	
P(T<=t) two-tail	7.93457E-07	P(T<=t) two-tail	7.29596E-14	
t Critical two-tail	1.71088208	t Critical two-tail	1.679427393	

t-Test: Two-Sample Assuming Unequal Variances

t-Test: Two-Sample Assuming Unequal Variances

Striped Bass x Skates		Striped Bass x Skates		
	Variable 1	Variable 2	Variable 1	Variable 2
Mean	574.4	1.2 Mean	1362.2	251.56
Variance	184050.5	0.916666667 Variance	215986	7932.756667
Observations	25	25 Observations	25	25

Hypothesized Mean Difference	0	Hypothesized Mean Difference	0
df	24	df	26
t Stat	6.680463627	t Stat	11.73540489
P(T<=t) one-tail	3.27801E-07	P(T<=t) one-tail	3.42971E-12
t Critical one-tail	1.317835934	t Critical one-tail	1.314971864
P(T<=t) two-tail	6.55602E-07	P(T<=t) two-tail	6.85942E-12
t Critical two-tail	1.71088208	t Critical two-tail	1.70561792

t-Test: Two-Sample Assuming Unequal Variances — t-Test: Two-Sample Assuming Unequal Variances

Striped Bass x Atlantic Sturgeon — Striped Bass x Atlantic Sturgeon

	Variable 1	Variable 2	Variable 1	Variable 2
Mean	574.4	1.68 Mean	1362.2	8.4
Variance	184050.5	1.893333333 Variance	215986	30.25
Observations	25	25 Observations	25	25
Hypothesized Mean Difference	0	Hypothesized Mean Difference	0	
df	24	df	24	
t Stat	6.67485167	t Stat	14.56402121	
P(T<=t) one-tail	3.32215E-07	P(T<=t) one-tail	1.02999E-13	
t Critical one-tail	1.317835934	t Critical one-tail	1.317835934	
P(T<=t) two-tail	6.64429E-07	P(T<=t) two-tail	2.05998E-13	
t Critical two-tail	1.71088208	t Critical two-tail	1.71088208	

t-Test: Two-Sample Assuming Unequal Variances — t-Test: Two-Sample Assuming Unequal Variances

Striped Bass x Flounders — Striped Bass x Flounders

	Variable 1	Variable 2	Variable 1	Variable 2
Mean	574.4	39.6 Mean	1362.2	230.68
Variance	184050.5	1085.25 Variance	215986	9006.143333
Observations	25	25 Observations	25	25
Hypothesized Mean Difference	0	Hypothesized Mean Difference	0	
df	24	df	26	
t Stat	6.214644036	t Stat	11.92747631	
P(T<=t) one-tail	1.00738E-06	P(T<=t) one-tail	2.39689E-12	
t Critical one-tail	1.317835934	t Critical one-tail	1.314971864	
P(T<=t) two-tail	2.01476E-06	P(T<=t) two-tail	4.79378E-12	
t Critical two-tail	1.71088208	t Critical two-tail	1.70561792	

t-Test: Two-Sample Assuming Unequal Variances — t-Test: Two-Sample Assuming Unequal Variances

Spiny Dogfish x Skates — Spiny Dogfish x Skates

	Variable 1	Variable 2	Variable 1	Variable 2
Mean	8	1.2 Mean	2984.52	251.56
Variance	38.66666667	0.916666667 Variance	365759.51	7932.756667
Observations	25	25 Observations	25	25

Hypothesized Mean Difference	0	Hypothesized Mean Difference	0
df	25	df	25
t Stat	5.404092017	t Stat	22.35353562
P(T<=t) one-tail	6.57426E-06	P(T<=t) one-tail	2.41524E-18
t Critical one-tail	1.316345073	t Critical one-tail	1.316345073
P(T<=t) two-tail	1.31485E-05	P(T<=t) two-tail	4.83049E-18
t Critical two-tail	1.708140761	t Critical two-tail	1.708140761

t-Test: Two-Sample Assuming Unequal Variances

t-Test: Two-Sample Assuming Unequal Variances

Spiny Dogfish x Atlantic Sturgeon		Spiny Dogfish x Atlantic Sturgeon		
	Variable 1	Variable 2	Variable 1	Variable 2
Mean	8	1.68 Mean	2984.52	8.4
Variance	38.66666667	1.893333333 Variance	365759.51	30.25
Observations	25	25 Observations	25	25
Hypothesized Mean Difference	0	Hypothesized Mean Difference	0	
df	26	df	24	
t Stat	4.961786915	t Stat	24.60394066	
P(T<=t) one-tail	1.8585E-05	P(T<=t) one-tail	7.75998E-19	
t Critical one-tail	1.314971864	t Critical one-tail	1.317835934	
P(T<=t) two-tail	3.71699E-05	P(T<=t) two-tail	1.552E-18	
t Critical two-tail	1.70561792	t Critical two-tail	1.71088208	

t-Test: Two-Sample Assuming Unequal Variances

t-Test: Two-Sample Assuming Unequal Variances

Spiny Dogfish x Flounders		Spiny Dogfish x Flounders		
	Variable 1	Variable 2	Variable 1	Variable 2
Mean	8	39.6 Mean	2984.52	230.68
Variance	38.66666667	1085.25 Variance	365759.51	9006.143333
Observations	25	25 Observations	25	25
Hypothesized Mean Difference	0	Hypothesized Mean Difference	0	
df	26	df	25	
t Stat	-4.712919603	t Stat	22.49203845	
P(T<=t) one-tail	3.58554E-05	P(T<=t) one-tail	2.08428E-18	
t Critical one-tail	1.314971864	t Critical one-tail	1.316345073	
P(T<=t) two-tail	7.17108E-05	P(T<=t) two-tail	4.16856E-18	
t Critical two-tail	1.70561792	t Critical two-tail	1.708140761	

t-Test: Two-Sample Assuming Unequal Variances

t-Test: Two-Sample Assuming Unequal Variances

Skates x Atlantic Sturgeon			Skates x Atlantic Sturgeon		
	Variable 1	Variable 2		Variable 1	Variable 2
Mean	1.2	1.68	Mean	251.56	8.4

Variance	0.916666667	1.893333333	Variance	7932.756667	30.25
Observations	25	25	Observations	25	25
Hypothesized Mean Difference	0		Hypothesized Mean Difference	0	
df	43		df	24	
t Stat	-1.431719967		t Stat	13.62459494	
P(T<=t) one-tail	0.079726483		P(T<=t) one-tail	4.32168E-13	
t Critical one-tail	1.301551608		t Critical one-tail	1.317835934	
P(T<=t) two-tail	0.159452966		P(T<=t) two-tail	8.64337E-13	
t Critical two-tail	1.681070703		t Critical two-tail	1.71088208	

t-Test: Two-Sample Assuming Unequal Variances Skates x Flounders

	Variable 1	Variable 2
Mean	1.2	39.6
Variance	0.916666667	1085.25
Observations	25	25
Hypothesized Mean Difference	0	
df	24	
t Stat	-5.82576542	
P(T<=t) one-tail	2.61879E-06	
t Critical one-tail	1.317835934	
P(T<=t) two-tail	5.23757E-06	
t Critical two-tail	1.71088208	

t-Test: Two-Sample Assuming Unequal Variances Skates x Flounders

	Variable 1	Variable 2
Mean	251.56	230.68
Variance	7932.756667	9006.143333
Observations	25	25
Hypothesized Mean Difference	0	
df	48	
t Stat	0.802154264	
P(T<=t) one-tail	0.213208712	
t Critical one-tail	1.299438879	
P(T<=t) two-tail	0.426417424	
t Critical two-tail	1.677224196	

t-Test: Two-Sample Assuming Unequal Variances Atlantic Sturgeon x Flounders

	Variable 1	Variable 2
Mean	1.68	39.6
Variance	1.893333333	1085.25
Observations	25	25
Hypothesized Mean Difference	0	
df	24	
t Stat	-5.750358611	
P(T<=t) one-tail	3.15717E-06	
t Critical one-tail	1.317835934	
P(T<=t) two-tail	6.31434E-06	
t Critical two-tail	1.71088208	

t-Test: Two-Sample Assuming Unequal Variances Atlantic Sturgeon x Flounders

	Variable 1	Variable 2
Mean	8.4	230.68
Variance	30.25	9006.143333
Observations	25	25
Hypothesized Mean Difference	0	
df	24	
t Stat	-11.69156986	
P(T<=t) one-tail	1.06929E-11	
t Critical one-tail	1.317835934	
P(T<=t) two-tail	2.13858E-11	
t Critical two-tail	1.71088208	

Striped Bass Ttests

t-Test: Two-Sample Assuming Unequal Variances

Depth

	Early	*Late*
Mean	1316	656.375
Variance	183122	875812
Observations	3	8
Hypothesized Mean Difference	8	0
df	0	12
t Stat	1.13395	3
P(T<=t) one-tail	0.13948	7
t Critical one-tail	1.35621	0.27896
P(T<=t) two-tail	7	1.78228
t Critical two-tail		8

t-Test: Two-Sample Assuming Unequal Variances

G Size

	Variable 1	*Variable 2*
Mean	2575	5475
Variance	516628	289320
Observations	6	6
Hypothesized Mean Difference	0	
df	7	
t Stat	-1.21649	
P(T<=t) one-tail	0.13161	
t Critical one-tail	1	
P(T<=t) two-tail	1.41492	
t Critical two-tail	4	
	0.26322	
	2	
	1.89457	
	9	

t-Test: Two-Sample Assuming Unequal Variances

Atlantic Sturgeon Tests

t-Test: Two-Sample Assuming Unequal Variances

Depth

	Early	*Late*
Mean	4	9.625
Variance	18.5714	198.267
Observations	3	9
Hypothesized Mean Difference	8	8
df	0	
t Stat	8	
P(T<=t) one-tail	-1.08043	
t Critical one-tail	0.15572	
P(T<=t) two-tail	1.39681	
t Critical two-tail	5	
	0.31144	
	1	
	1.85954	
	8	

t-Test: Two-Sample Assuming Unequal Variances

G Size

	Variable 1	*Variable 2*
Mean	7	35
Variance	55.2	1255.2
Observations	6	6
Hypothesized Mean Difference	0	
df	5	
t Stat	-1.89466	
P(T<=t) one-tail	0.05833	
t Critical one-tail	1.47588	
P(T<=t) two-tail	4	
	0.11666	
	2	
	2.01504	
	8	

t-Test: Two-Sample Assuming Unequal Variances

%OrgC

	Variable 1	*Variable 2*
Mean	2207.143	4692.857
Variance	115357	530529
Observations	56	24
Hypothesized Mean Difference	7	7
df	0	
t Stat	8	
P(T<=t) one-tail	-0.81832	
t Critical one-tail	0.21843	
P(T<=t) two-tail	5	
t Critical two-tail	1.39681	
	5	
	0.43687	
	1.85954	
	8	

t-Test: Two-Sample Assuming Unequal Variances

W Temp

	Variable 1	*Variable 2*
Mean	1931.25	4106.25
Variance	675275	233359
Observations	4	27
Hypothesized Mean Difference	8	8
df	0	
t Stat	11	
P(T<=t) one-tail	-1.12151	
t Critical one-tail	0.14297	
P(T<=t) two-tail	9	
t Critical two-tail	1.36343	
	0.28595	
	7	
	1.79588	
	5	

t-Test: Two-Sample Assuming Unequal Variances

A Temp

% OrgC

	Variable 1	*Variable 2*
Mean	6	30
Variance	108.666	2641.667
Observations	7	7
Hypothesized Mean Difference	0	
df	6	
t Stat	-1.21079	
P(T<=t) one-tail	0.13575	
t Critical one-tail	1	
P(T<=t) two-tail	1.43975	
t Critical two-tail	6	
	0.27150	
	2	
	1.94318	

t-Test: Two-Sample Assuming Unequal Variances

W Temp

	Variable 1	*Variable 2*
Mean	5.25	26.25
Variance	42.2142	1651.071
Observations	9	1
Hypothesized Mean Difference	8	8
df	0	
t Stat	7	
P(T<=t) one-tail	-1.44344	
t Critical one-tail	0.09605	
P(T<=t) two-tail	7	
t Critical two-tail	1.41492	
	4	
	0.19211	
	4	
	1.89457	
	9	

t-Test: Two-Sample Assuming Unequal Variances

A Temp

	Variable 1	*Variable 2*
Mean	3090	6570
Variance	970285	457635
Observations	0	75
Hypothesized Mean Difference	5	5
df	0	
t Stat	6	
P(T<=t) one-tail	-1.04484	
t Critical one-tail	0.16817	
P(T<=t) two-tail	7	
t Critical two-tail	1.43975	
	6	
	0.33635	
	4	
	1.94318	

t-Test: Two-Sample Assuming Unequal Variances

Shepard

	Variable 1	*Variable 2*
Mean	1404.54	2986.36
Variance	462758	467745
Observations	5	4
Hypothesized Mean Difference	1	43
df	0	
t Stat	11	
P(T<=t) one-tail	-0.73175	
t Critical one-tail	0.23918	
P(T<=t) two-tail	5	
t Critical two-tail	1.35621	
	7	
	0.47836	
	9	
	1.78228	
	8	

t-Test: Two-Sample Assuming Unequal Variances

Hour

	Variable 1	*Variable 2*
Mean	8.4	42
Variance	120.8	2001.5
Observations	5	5
Hypothesized Mean Difference	0	
df	4	
t Stat	-1.63088	
P(T<=t) one-tail	0.08912	
t Critical one-tail	6	
P(T<=t) two-tail	1.53320	
t Critical two-tail	6	
	0.17825	
	1	
	2.13184	
	7	

t-Test: Two-Sample Assuming Unequal Variances

Shepard

	Variable 1	*Variable 2*
Mean	3.81818	19.0909
Variance	2	1
Observations	45.9636	1304.69
Hypothesized Mean Difference	4	1
df	0	
t Stat	11	
P(T<=t) one-tail	-1.37829	
t Critical one-tail	0.09775	
P(T<=t) two-tail	1.36343	
t Critical two-tail	0.19550	
	1	
	1.79588	
	5	

t-Test: Two-Sample Assuming Unequal Variances

Hour

	Variable 1	*Variable 2*
Mean	574.4	1362.2
Variance	184050.5	215986
Observations	25	25
Hypothesized Mean Difference	0	
df	48	
t Stat	-6.22782	
P(T<=t) one-tail	5.62E-08	
t Critical one-tail	1.299439	
P(T<=t) two-tail	1.12E-07	
t Critical two-tail	1.677224	

	Variable 1	*Variable 2*
Mean	1.68	8.4
Variance	1.893333	30.25
Observations	25	25
Hypothesized Mean Difference	0	
df	27	
t Stat	-5.92644	
P(T<=t) one-tail	1.28E-06	
t Critical one-tail	1.313703	
P(T<=t) two-tail	2.57E-06	
t Critical two-tail	1.703288	

Spiny Dogfish Tests

t-Test: Two-Sample Assuming Unequal Variances

Depth

	Early	*Late*
Mean	15.125	1083.625
Variance	385.2679	213079.9
Observations	8	8
Hypothesized Mean Difference	0	
df	7	
t Stat	-2.07018	
P(T<=t) one-tail	0.038598	
t Critical one-tail	1.414924	
P(T<=t) two-tail	0.077196	
t Critical two-tail	1.894579	

t-Test: Two-Sample Assuming Unequal Variances

Skate Tests

t-Test: Two-Sample Assuming Unequal Variances

Depth

	Early	*Late*
Mean	1.375	97.875
Variance	2.839286	25525.84
Observations	8	8
Hypothesized Mean Difference	0	
df	7	
t Stat	-1.70828	
P(T<=t) one-tail	0.065669	
t Critical one-tail	1.414924	
P(T<=t) two-tail	0.131339	
t Critical two-tail	1.894579	

t-Test: Two-Sample Assuming Unequal Variances

G Size

	Variable 1	*Variable 2*
Mean	34.83333	12011.83
Variance	1458.567	2.68E+08
Observations	6	6
Hypothesized Mean Difference	0	
df	5	
t Stat	-1.79076	
P(T<=t) one-tail	0.066667	
t Critical one-tail	1.475884	
P(T<=t) two-tail	0.133334	
t Critical two-tail	2.015048	

t-Test: Two-Sample Assuming Unequal Variances

	0	*0*
Mean	6	1257.8
Variance	27.5	199932.2
Observations	5	5
Hypothesized Mean Difference	0	
df	4	
t Stat	-1.97959	
P(T<=t) one-tail	0.059429	
t Critical one-tail	1.533206	
P(T<=t) two-tail	0.118858	
t Critical two-tail	2.131847	

t-Test: Two-Sample Assuming Unequal Variances

% OrgC

	Variable 1	*Variable 2*
Mean	29.85714	10295.86
Variance	1660.143	2.04E+08
Observations	7	7
Hypothesized Mean Difference	0	
df	6	
t Stat	-1.90107	
P(T<=t) one-tail	0.052997	
t Critical one-tail	1.439756	
P(T<=t) two-tail	0.105994	
t Critical two-tail	2.446914	

t-Test: Two-Sample Assuming Unequal Variances

% OrgC

	Variable 1	*Variable 2*
Mean	4.285714	898.4286
Variance	30.90476	119565.6
Observations	7	7
Hypothesized Mean Difference	0	
df	6	
t Stat	-2.16345	
P(T<=t) one-tail	0.036863	
t Critical one-tail	1.439756	
P(T<=t) two-tail	0.073725	
t Critical two-tail	1.943180	

t-Test: Two-Sample Assuming Unequal Variances

W Temp

	Variable 1	*Variable 2*
Mean	26.125	9008.875
Variance	2040.982	1.62E+08
Observations	8	8
Hypothesized Mean Difference	0	
df	7	
t Stat	-1.99825	
P(T<=t) one-tail	0.04292	
t Critical one-tail	1.41492	
P(T<=t) two-tail	0.08584	
t Critical two-tail	1.89457	

t-Test: Two-Sample Assuming Unequal Variances

A Temp

	Variable 1	*Variable 2*
Mean	41.8	14414.2
Variance	1254.7	2.3E+08
Observations	5	5
Hypothesized Mean Difference	0	
df	4	
t Stat	-2.11855	
P(T<=t) one-tail	0.05075	
t Critical one-tail	1.53320	
P(T<=t) two-tail	0.10150	
t Critical two-tail	2.13184	

t-Test: Two-Sample Assuming Unequal Variances

Shepard

W Temp

	Variable 1	*Variable 2*
Mean	3.75	786.125
Variance	55.3571	181896
Observations	8	8
Hypothesized Mean Difference	0	
df	7	
t Stat	-1.64075	
P(T<=t) one-tail	0.07242	
t Critical one-tail	1.41492	
P(T<=t) two-tail	0.14485	
t Critical two-tail	1.89457	

t-Test: Two-Sample Assuming Unequal Variances

A Temp

	Variable 1	*Variable 2*
Mean	6	1257.8
Variance	19.5	150071
Observations	5	5
Hypothesized Mean Difference	0	
df	4	
t Stat	-2.28491	
P(T<=t) one-tail	0.04216	
t Critical one-tail	1.53320	
P(T<=t) two-tail	0.08432	
t Critical two-tail	2.13184	

t-Test: Two-Sample Assuming Unequal Variances

Shepard

	Variable 1	*Variable 2*
Mean	19	6551.909
Variance	1246.4	2.07E+08
Observations	11	11
Hypothesized Mean Difference	0	
df	10	
t Stat	-1.50575	
P(T<=t) one-tail	0.081524	
t Critical one-tail	1.372184	
P(T<=t) two-tail	0.163048	
t Critical two-tail	1.812461	

	Variable 1	*Variable 2*
Mean	2.727273	571.7273
Variance	22.41818	146969.5
Observations	11	11
Hypothesized Mean Difference	0	
df	10	
t Stat	-1.55665	
P(T<=t) one-tail	0.075304	
t Critical one-tail	1.372184	
P(T<=t) two-tail	0.150608	
t Critical two-tail	1.812461	

t-Test: Two-Sample Assuming Unequal Variances

Hour

	Variable 1	*Variable 2*
Mean	8	2984.52
Variance	38.66667	365759.5
Observations	25	25
Hypothesized Mean Difference	0	
df	24	
t Stat	-24.6077	
P(T<=t) one-tail	7.74E-19	
t Critical one-tail	1.317836	
P(T<=t) two-tail	1.55E-18	
t Critical two-tail	1.710882	

t-Test: Two-Sample Assuming Unequal Variances

Hour

	Variable 1	*Variable 2*
Mean	1.2	251.56
Variance	0.916667	7932.757
Observations	25	25
Hypothesized Mean Difference	0	
df	24	
t Stat	-14.0539	
P(T<=t) one-tail	2.22E-13	
t Critical one-tail	1.317836	
P(T<=t) two-tail	4.45E-13	
t Critical two-tail	1.710882	

Flounders Tests

t-Test: Two-Sample Assuming Unequal Variances

Depth

	Early	*Late*
Mean	25.625	130.75
Variance	1263.69	22881.3
Observations	6	6
Hypothesized Mean Difference	8	
df	0	
t Stat	8	
P(T<=t) one-tail	-1.91354	
t Critical one-tail	0.04601	
P(T<=t) two-tail	4	
	1.39681	
	5	
	0.09202	
	8	
	1.85954	
t Critical two-tail	8	

t-Test: Two-Sample Assuming Unequal Variances

G Size

	Variable 1	*Variable 2*
Mean	165	961.166
Variance	99158.8	115953
Observations	6	7
Hypothesized Mean Difference	6	
df	0	
t Stat	6	
P(T<=t) one-tail	-1.73828	
t Critical one-tail	0.06641	
P(T<=t) two-tail	3	
	1.43975	
	6	
	0.13282	
	6	

Clupeids Tests

t-Test: Two-Sample Assuming Unequal Variances

Depth

	Early	*Late*
Mean	22.375	247.5
Variance	1671.12	107840.
Observations	5	9
Hypothesized Mean Difference	8	
df	0	
t Stat	7	
P(T<=t) one-tail	-1.92415	
t Critical one-tail	0.04787	
P(T<=t) two-tail	2	
	1.41492	
	4	
	0.09574	
	4	
	1.89457	
t Critical two-tail	9	

t-Test: Two-Sample Assuming Unequal Variances

G Size

	Variable 1	*Variable 2*
Mean	38.8333	1622.16
Variance	3	7
Observations	3179.76	661705
Hypothesized Mean Difference	7	4
df	6	6
t Stat	0	
P(T<=t) one-tail	-1.50734	
t Critical one-tail	0.09604	
P(T<=t) two-tail	2	
	1.47588	
	4	
	0.19208	
	4	

t Critical two-tail	1.94318	

t-Test: Two-Sample Assuming Unequal Variances
% OrgC

	Variable 1	*Variable 2*
Mean	141.4286	823.8571
Variance	43568.95	172828.5
Observations	7	7
Hypothesized Mean Difference	0	
df	6	
t Stat	-1.35641	
P(T<=t) one-tail	0.111892	
t Critical one-tail	1.439756	
P(T<=t) two-tail	0.223784	
t Critical two-tail	1.94318	

t-Test: Two-Sample Assuming Unequal Variances
W Temp

	Variable 1	*Variable 2*
Mean	123.75	720.875
Variance	30486.79	102642.1
Observations	8	8
Hypothesized Mean Difference	0	
df	7	
t Stat	-1.64283	
P(T<=t) one-tail	0.072211	
t Critical one-tail	1.414924	
P(T<=t) two-tail	0.144422	
t Critical two-tail	1.894579	

t Critical two-tail	2.015048	

t-Test: Two-Sample Assuming Unequal Variances
% OrgC

	Variable 1	*Variable 2*
Mean	33.28571	1390.429
Variance	1673.905	444581.5
Observations	7	7
Hypothesized Mean Difference	0	
df	6	
t Stat	-1.70262	
P(T<=t) one-tail	0.069767	
t Critical one-tail	1.439756	
P(T<=t) two-tail	0.139534	
t Critical two-tail	1.94318	

t-Test: Two-Sample Assuming Unequal Variances
W Temp

	Variable 1	*Variable 2*
Mean	29.125	1216.625
Variance	1662.696	516161.9
Observations	8	8
Hypothesized Mean Difference	0	
df	7	
t Stat	-1.47814	
P(T<=t) one-tail	0.091449	
t Critical one-tail	1.414924	
P(T<=t) two-tail	0.182897	

	1.89457	
t Critical two-tail	9	

t-Test: Two-Sample Assuming Unequal Variances

A Temp

	Variable 1	*Variable 2*
Mean	198	1153.4
Variance	53814.5	103054 7
Observations	5	5
Hypothesized Mean Difference	0	
df	4	
t Stat	-2.05156	
P(T<=t) one-tail	0.05474 8	
t Critical one-tail	1.53320 6	
P(T<=t) two-tail	0.10949 7	
t Critical two-tail	2.13184 7	

t-Test: Two-Sample Assuming Unequal Variances

Shepard

	Variable 1	*Variable 2*
Mean	90	524.272 7
Variance	49172	114730 6
Observations	11	11
Hypothesized Mean Difference	0	
df	11	
t Stat	-1.31676	
P(T<=t) one-tail	0.10734 6	
t Critical one-tail	1.36343	
P(T<=t) two-tail	0.21469 3	

	1.89457	
t Critical two-tail	9	

t-Test: Two-Sample Assuming Unequal Variances

A Temp

	Variable 1	*Variable 2*
Mean	46.6	1946.6
Variance	2959.3	617394 2
Observations	5	5
Hypothesized Mean Difference	0	
df	4	
t Stat	-1.70944	
P(T<=t) one-tail	0.08127 4	
t Critical one-tail	1.53320 6	
P(T<=t) two-tail	0.16254 8	
t Critical two-tail	2.13184 7	

t-Test: Two-Sample Assuming Unequal Variances

Shepard

	Variable 1	*Variable 2*
Mean	21.1818 2	884.818 2
Variance	2868.56 4	445023 3
Observations	11	11
Hypothesized Mean Difference	0	
df	10	
t Stat	-1.35736	
P(T<=t) one-tail	0.10225 4	
t Critical one-tail	1.37218 4	
P(T<=t) two-tail	0.20450 8	

	1.79588
t Critical two-tail	5

t-Test: Two-Sample Assuming Unequal Variances

Hour

	Variable 1	*Variable 2*
Mean	39.6	230.68
Variance	1085.25	9006.14
Observations	25	25
Hypothesized Mean Difference	0	
df	30	
t Stat	-9.51064	
P(T<=t) one-tail	7.26E-11	
t Critical one-tail	1.31041 5	
P(T<=t) two-tail	1.45E-10	
t Critical two-tail	1.69726 1	

	1.81246
t Critical two-tail	1

t-Test: Two-Sample Assuming Unequal Variances

Hour

	Variable 1	*Variable 2*
Mean	8.96	389.32
Variance	417.623	142915.3
Observations	25	25
Hypothesized Mean Difference	0	
df	24	
t Stat	-5.02333	
P(T<=t) one-tail	1.96E-05	
t Critical one-tail	1.31783 6	
P(T<=t) two-tail	3.92E-05	
t Critical two-tail	1.71088 2	

Red Drum Tests

t-Test: Two-Sample Assuming Unequal Variances

Depth

	Early	*Late*
Mean	0.625	1.25
Variance	0.55357 1	4.5
Observations	8	8
Hypothesized Mean Difference	0	
df	9	
t Stat	-0.78637	
P(T<=t) one-tail	0.22593	
t Critical one-tail	1.38302 9	
P(T<=t) two-tail	0.45185	

Other Sciaenids Tests

t-Test: Two-Sample Assuming Unequal Variances

Depth

	Early	*Late*
Mean	9.375	61.125
Variance	271.410 7	10856.7
Observations	8	8
Hypothesized Mean Difference	0	
df	7	
t Stat	-1.38754	
P(T<=t) one-tail	0.10392 2	
t Critical one-tail	1.41492 4	
P(T<=t) two-tail	0.20784 4	

	1.83311	
t Critical two-tail	3	

t-Test: Two-Sample Assuming Unequal Variances
G Size

	Variable 1	*Variable 2*
Mean	1	7
Variance	1.2	123.2
Observations	6	6
Hypothesized Mean Difference	0	
df	5	
t Stat	-1.3177	
P(T<=t) one-tail	0.122374	
t Critical one-tail	1.475884	
P(T<=t) two-tail	0.244748	
t Critical two-tail	2.015048	

t-Test: Two-Sample Assuming Unequal Variances
% OrgC

	Variable 1	*Variable 2*
Mean	0.857143	6
Variance	1.47619	147
Observations	7	7
Hypothesized Mean Difference	0	
df	6	
t Stat	-1.11667	
P(T<=t) one-tail	0.153424	
t Critical one-tail	1.439756	
P(T<=t) two-tail	0.306847	
t Critical two-tail	1.894579	

t-Test: Two-Sample Assuming Unequal Variances
G Size

	Variable 1	*Variable 2*
Mean	25	236.8333
Variance	790.4	90903.37
Observations	6	6
Hypothesized Mean Difference	0	
df	5	
t Stat	-1.71356	
P(T<=t) one-tail	0.073641	
t Critical one-tail	1.475884	
P(T<=t) two-tail	0.147279	
t Critical two-tail	2.015048	

t-Test: Two-Sample Assuming Unequal Variances
% OrgC

	Variable 1	*Variable 2*
Mean	21.42857	203
Variance	870.619	62025
Observations	7	7
Hypothesized Mean Difference	0	
df	6	
t Stat	-1.91552	
P(T<=t) one-tail	0.051955	
t Critical one-tail	1.439756	
P(T<=t) two-tail	0.103911	

t Critical two-tail	1.94318	

t-Test: Two-Sample Assuming Unequal Variances

W Temp

	Variable 1	*Variable 2*
Mean	0.75	5.25
	2.21428	71.3571
Variance	6	4
Observations	8	8
Hypothesized Mean Difference	0	
df	7	
	-	
t Stat	1.48389	
	0.09070	
P(T<=t) one-tail	4	
	1.41492	
t Critical one-tail	4	
	0.18140	
P(T<=t) two-tail	8	
	1.89457	
t Critical two-tail	9	

t-Test: Two-Sample Assuming Unequal Variances

A Temp

	Variable 1	*Variable 2*
Mean	1.2	8.4
Variance	1.2	54.8
Observations	5	5
Hypothesized Mean Difference	0	
df	4	
	-	
t Stat	2.15141	
	0.04891	
P(T<=t) one-tail	3	
	1.53320	
t Critical one-tail	6	
	0.09782	
P(T<=t) two-tail	7	
	2.13184	
t Critical two-tail	7	

t Critical two-tail	1.94318	

t-Test: Two-Sample Assuming Unequal Variances

W Temp

	Variable 1	*Variable 2*
Mean	18.75	177.625
	683.071	61385.9
Variance	4	8
Observations	8	8
Hypothesized Mean Difference	0	
df	7	
	-	
t Stat	1.80369	
	0.05713	
P(T<=t) one-tail	2	
	1.41492	
t Critical one-tail	4	
	0.11426	
P(T<=t) two-tail	5	
	1.89457	
t Critical two-tail	9	

t-Test: Two-Sample Assuming Unequal Variances

A Temp

	Variable 1	*Variable 2*
Mean	30	284.2
Variance	779.5	55485.2
Observations	5	5
Hypothesized Mean Difference	0	
df	4	
	-	
t Stat	2.39631	
	0.03732	
P(T<=t) one-tail	7	
	1.53320	
t Critical one-tail	6	
	0.07465	
P(T<=t) two-tail	5	
	2.13184	
t Critical two-tail	7	

t-Test: Two-Sample Assuming Unequal Variances

Shepard

	Variable 1	*Variable 2*
Mean	0.545455	3.818182
Variance	3.272727	80.16364
Observations	11	11
Hypothesized Mean Difference	0	
df	11	
t Stat	-1.18831	
P(T<=t) one-tail	0.129868	
t Critical one-tail	1.363430	
P(T<=t) two-tail	0.259736	
t Critical two-tail	1.795885	

t-Test: Two-Sample Assuming Unequal Variances

Shepard

	Variable 1	*Variable 2*
Mean	13.63636	129.1818
Variance	605.2545	50150.16
Observations	11	11
Hypothesized Mean Difference	0	
df	10	
t Stat	-1.70101	
P(T<=t) one-tail	0.059887	
t Critical one-tail	1.372184	
P(T<=t) two-tail	0.119774	
t Critical two-tail	1.812461	

t-Test: Two-Sample Assuming Unequal Variances

Hour

	Variable 1	*Variable 2*
Mean	0.24	1.68
Variance	0.19	2.226667
Observations	25	25
Hypothesized Mean Difference	0	
df	28	
t Stat	-4.63153	
P(T<=t) one-tail	3.8E-05	
t Critical one-tail	1.312527	
P(T<=t) two-tail	7.59E-05	
t Critical two-tail	1.701131	

t-Test: Two-Sample Assuming Unequal Variances

Hour

	Variable 1	*Variable 2*
Mean	6	56.84
Variance	10.41667	3342.39
Observations	25	25
Hypothesized Mean Difference	0	
df	24	
t Stat	-4.39007	
P(T<=t) one-tail	9.79E-05	
t Critical one-tail	1.317836	
P(T<=t) two-tail	0.000196	
t Critical two-tail	1.710882	

APPENDIX F

IACUC APPROVAL AND AUP

East Carolina University

Animal Care and
Use Commitee
212 Ed Warren Life
Sciences Building
East Carolina University
Greenville, NC 27834
252-744-2436 office
252-744-2355 fax

January 3, 2013

Roger Rulifson, Ph.D.
Department of ICSP
Flanagan 385
East Carolina University

Dear Dr. Rulifson:

Your Animal Use Protocol entitled, "Cooperative Winter Tagging Cruise 2013-2015" (AUP #D286) was reviewed by this institution's Animal Care and Use Committee on 1/3/13. The following action was taken by the Committee:

"Approved as submitted"

A copy is enclosed for your laboratory files. Please be reminded that all animal procedures must be conducted as described in the approved Animal Use Protocol. Modifications of these procedures cannot be performed without prior approval of the ACUC. The Animal Welfare Act and Public Health Service Guidelines require the ACUC to suspend activities not in accordance with approved procedures and report such activities to the responsible University Official (Vice Chancellor for Health Sciences or Vice Chancellor for Academic Affairs) and appropriate federal Agencies.

Sincerely yours,

Susan McRae, Ph.D.
Chair, Animal Care and Use Committee

SM/jd

enclosure

EAST CAROLINA UNIVERSITY
ANIMAL USE PROTOCOL (AUP) FORM
LATEST REVISION SEPTEMBER, 2012

Project Title:

Cooperative Winter Tagging Cruise 2013-2015

	Principal Investigator	Secondary Contact
Name	Roger A. Rulifson	Jillian H Osborne
Dept.	ICSP	ICSP
Office Ph #	252.328.9400	252.328.9407
Cell Ph #	252.412.4411	704.232.5172
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Email	rulifsonr@ecu.edu	osbornej06@students.ecu.edu

For IACUC Use Only

AUP # D286			
New/Renewal New 1/2/13			
Full Review/Date	DR/Date		
Approval Date 1/3/13			
Study Type tag implantation / migration			
Pain/Distress Category D			
Surgery ✓	Survival ✓	Multiple	tag implantation - boat dock
Prolonged Restraint			
Food/Fluid Regulation			
Other			
Hazard Approval/Dates	Rad	IBC	EHS
OHP Enrollment ✓			
Mandatory Training ✓			
Amendments Approved			

I. Personnel

A. Principal Investigator(s):

Roger A. Rulifson

B. Department(s):

Institute for Coastal Science and Policy

C. List all personnel (PI's, co-investigators, technicians, students) that will be working with live animals and describe their qualifications and experience with these specific procedures. If people are to be trained, indicate by whom:

Name	Role(s) and Responsibilities for this Project	Required ECU Training (Yes/No)	Other Relevant Animal Experience/Training
Osborne, Jillian, ECU	Surgery, data scribe	Yes	Has taken surgery class; worked at a hatchery 2 years
Bangley, Charles, ECU	Surgery, fish wrangler, spiny dogfish/coastal shark necropsy	Yes	Has taken surgery class; cruise experience; shark lavage; surgery experience; field survey
Rogers, Walter, ECU	Fish wrangler, sampling of all collected alosine species	Yes	Has taken surgery class; experience as lab technician, cage culture of invertebrates and fish; field survey
Zurlo, Daniel, ECU	Fish wrangler, striped bass necropsy	Yes	Has taken surgery class
Click here to enter text.	Click here to enter text.	Choose an item.	Click here to enter text.
Click here to enter text.	Click here to enter text.	Choose an item.	Click here to enter text.
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Click here to enter text.	Click here to enter text.	Choose an item.	Click here to enter text.
Click here to enter text.	Click here to enter text.	Choose an item.	Click here to enter text.

II. Regulatory Compliance

A. Non-Technical Summary

Using language a non-scientist would understand, please provide a clear, concise, and sequential description of animal use. Additionally, explain the overall study objectives and benefits of proposed research or teaching activity to the advancement of knowledge, human or animal health, or good of society. (More detailed procedures are requested later in the AUP.)

Do not cut and paste the grant abstract.

The annual Cooperative Winter Tagging Cruise (CWTC) has been conducted for 24 years using Federal ships, funding from USFWS and NMFS, and volunteer time and effort of cooperators (eastern seaboard state agencies, federal agencies, universities, and NGOs). This year (2013) is the first of a 3 year grant funding for the CWTC through ECU. During the 7-10 day cruise offshore North Carolina, the R/V Cape Hatteras will ply continental shelf waters 24 hours a day trawling to capture target species, particularly striped bass *Morone saxatilis*. Trawls are deployed for 10 to 30 minute intervals; depending on catch size (smaller catches result in longer trawl times). When the trawl is complete, it is retrieved using a crane-like device and winches. The tail bag (cod end) will be untied, and the catch will be released to the deck. Temperatures at this time of year range from 20-40 degrees Fahrenheit between day and night samples, decreasing the stress to the fish and increasing survivability of the catch until release. Fish wranglers sort the catch by species - releasing non-target species and placing targeted species into flow through seawater tanks mounted on the deck. Fish slated for tagging will be narcotized and immobilized, morphometric data collected, anesthetized using a lidocaine block and implanted with tags using aseptic surgery techniques approved by ECU veterinarians. Tags and surgical implements will be sterilized prior to the trip, and a glass bead sterilizer will be used to sterilize any multiple use surgical instruments. Individuals undergoing tagging implantation procedures will have water piped through the mouth and over the gills as they are held immobile on the foam surgical cradle. Jillian Osborne will be the designated surgeon for implanting acoustic tags in striped bass; other ECU personnel will be designated fish wranglers or assistants. ECU staff is responsible for working all alosine catches during the cruise. Individuals from alosine species (American and hickory shads, alewife, and blueback herring) will be removed from the catch, narcotized and euthanized for later examination at ECU. Fin clips will be obtained from a single individual of each teleost species at the request of the North Carolina State Museum of Natural Sciences for DNA analysis and archiving.

B. Duplication

Does this study duplicate existing research? No

If yes, why is it necessary? (note: teaching by definition is duplicative)

This CWTC is conducted once a year, and always on the overwintering migratory grounds off the North Carolina coast. The work is required by the U.S. Congress under the Striped Bass Conservation Act. The 2 federally-mandated agencies are the USFWS and the NMFS. The work is necessary to estimate the spawning stock biomass (SSB) of the Atlantic Migratory Stock of striped bass.

C. Alternatives to the Use of Live Animals

Are there less invasive procedures, other species, isolated organ preparation, cell or tissue culture, or computer simulation that can be used in place of the live vertebrate species proposed here? No

If yes, please explain why you cannot use these alternatives.

Click here to enter text.

D. Literature search to ensure that there are no alternatives to all potentially painful and/or distressful procedures

1. **Please list the potentially painful or distressful procedures in the protocol:**

   Electronarcosis (electrosedation) to produce immobility
   Surgical implantation of tags

2. **For the procedures listed above, provide the following information (please do not submit search results but retain them for your records):**

Date Search was performed:	12/19/12
Database searched:	Google Scholar
Period of years covered in the search:	All
Keywords used and strategy:	electrosedation range saltwater fish, striped bass internal tagging
Other sources consulted:	Click here to enter text.

3. **Narrative indicating the results of the search (2-3 sentences) and explaining why there are no alternatives to your proposed procedures that have the potential to cause pain and/or distress:**

Electrosedation provides the quickest and safest form of inducing short-term immobility, both for the fish and the handlers. Because striped bass are taken for human consumption, traditional methods (such as MS-222 and clove oil) are not used due to the residual chemical and physiological effects on the fish. (Trushenshi and Bowker 2012).

Internal tagging of striped bass allows for much longer retention of the tag (sometimes up to several years), allowing multiple recaptures of the same fish over a long-term study. This provides valuable information into the population dynamics and structure of the stock, which cannot be observed with external tags that are more likely to be expelled from the fish after a short duration. (Waldman et al. 1991)

E. Hazardous agents

1. Protocol related hazards (chemical, biological, or radiological):
Please indicate if any of the following are used in animals and the status of review/approval by the referenced committees:

HAZARDS	Oversight Committee	Status (Approved, Pending, Submitted)/Date	AUP Appendix I Completed?
Radioisotopes	Radiation	NA	Choose an item.
Ionizing radiation	Radiation	NA	Choose an item.
Infectious agents (bacteria, viruses, richettsia, prions, etc.)	IBC	NA	Choose an item.
Toxins of biological orgins (venoms, plant toxins, etc.)	IBC	NA	Choose an item.
Transgenic, Knock In, Knock Out Animals---breeding, cross breeding or any use of live animals or tissues	IBC	NA	Choose an item.
Human tissues, cells, body fluids, cell lines	IBC	NA	Choose an item.
Viral/Plasmid Vectors/Recombinant DNA or recombinant techniques	IBC	NA	Choose an item.
Oncogenic/toxic/mutagenic chemical agents	EH&S	NA	Choose an item.
Nanoparticles	EH&S	NA	Choose an item.
Cell lines, tissues or other biological products injected or implanted in animals	DCM	NA	Choose an item.
Other agents		None	Choose an item.

2. Incidental hazards

Will personnel be exposed to any incidental zoonotic diseases or hazards during the study (field studies, primate work, etc)? If so, please identify each and explain steps taken to mitigate risk:

Atypical mycobacteriosis, osteomyelitis, and tenosynovitis, are the most common zoonotic diseases that personnel are likely to be exposed to. Other hazards that personnel will be exposed to include inclement weather, and working in proximity to heavy equipment. Personnel on deck will be fully clothed in winter gear for protection from the weather, wearing hard hats and safety glasses (if not wearing eyeglasses), fish-handling gloves, and waterproof boots, in addition to safety gear required for work aboard a federal vessel. Personnel will wash hands and other body parts that come into contact with fish thoroughly after every shift, and any open cuts/abrasions will be disinfected/treated with first aid and medical supplies. All personnel will be trained in safety concerns aboard the vessel and maintain safe working practices for the duration of the cruise. In the event of injury or illness beyond that which first aid or basic medical supplies can remedy, the affected crew member will be removed from the vessel and transported to the nearest medical treatment facility.

III. Animals and Housing

A. Species and strains:

Striped bass

Incidental species/bycatch: coastal sharks, Alosines, menhaden, skates, flounder species, seatrout, weakfish, and Atlantic sturgeon*

B. Weight, sex and/or age:

Juveniles to adults, both sexes, multiple age groups

C. Animal numbers:

1. Please complete the following table:

Total number of animals in treatment and control groups	Additional animals (Breeders, substitute animals)	Total number of animals used for this project
Striped bass – 3,000 tagged (expected range, 200-3,000) Incidental species/bycatch *sturgeon will be handled by VCU/NCDMF personnel*	+Click here to enter text.	3,000 Unknown (based on capture success)

2. Justify the species and number (use statistical justification when possible) of animals requested:

A minimum number of striped bass must be collected, and recaptured, within each year in order to estimate the population size of striped bass on the Atlantic coast. The more individuals tagged, the more representative the population estimate.

3. Justify the number and use of any additional animals needed for this study:
Click here to enter text.

a. For unforeseen outcomes/complications:
Click here to enter text.

b. For refining techniques:
Click here to enter text.

c. For breeding situations, briefly justify breeding configurations and offspring expected:
Click here to enter text.

d. Indicate if following IACUC tail snip guidelines: Choose an item. **(if no, describe and justify)**
Click here to enter text.

4. Will the phenotype of mutant, transgenic or knockout animals predispose them to any health, behavioral, physical abnormalities, or cause debilitating effects in experimental manipulations? Choose an item. **(if yes, describe)**
Click here to enter text.

5. Are there any deviations from standard husbandry practices?
No **If yes, then describe conditions and justify the exceptions to standard housing (temperature, light cycles, sterile cages, special feed, prolonged weaning times, wire-bottom cages, etc.):**
Click here to enter text.

6. Is it necessary for animals to be singly housed?
No **(If yes, describe housing and justify the need to singly house social species)**
Click here to enter text.

7. Are there experimental or scientific reasons why routine environmental enrichment should not be provided? Yes
(If yes, describe and justify the need to withhold enrichment)
Animals will be held a maximum of 45 minutes for this research, before being released into their natural environment or euthanized.

8. If wild animals will be captured or used, provide permissions (collection permit # or other required information):
Collecting permits are issued by the North Carolina Division of Marine Fisheries (cooperator). NC DMF permit # 706671 ("Scientific or educational collection permit". An additional permit is issued by the State of Virginia. For federal waters (outside 3 miles), a federal take permit is issued by the NMFS (cooperator). An Endangered Species permit is required for the Atlantic sturgeon (as issued by USFWS, cooperator). Endangered sea turtles will not be encountered. No marine mammals will be encountered.

9. List all laboratories or locations outside the animal facility where animals will be used. Note that animals may not stay in areas outside the animal facilities for more than 12 hours without prior IACUC approval. For field studies, list location of work/study site.

CWTC leaves from the Duke Marine lab in Beaufort. The survey will take place primarily from Cape Hatteras north to the Virginia line, and 1-6 miles from the coast. Animals will be retained aboard a commercial fishing vessel for approximately ½ hour to ¾ hour for surgeries. Fish will be released as close as possible to the point of capture.

IV. Animal Procedures

A. Outline the Experimental Design including all treatment and control groups and the number of animals in each. Tables or flow charts are particularly useful to communicate your design.

Fish (common name)	Procedures for Individuals of Fishes	Time if different than IV.P
Spiny dogfish and other coastal sharks	Enumerated, tonic immobility induced, morphometrics	
Striped Bass (200-3000 animals)	Enumerated, narcotized, immobilized, surgical implantation of tags, morphometrics	12-15 minutes
Alosines* (includes American and hickory shads, alewife, and blueback herring)	Enumerated, morphometrics, returned to water, narcotized and euthanized for samples	
Atlantic Sturgeon	Enumerated and placed in the care of VCU/NCDMF researchers	NA
Other species (incidental bycatch)	Sorted, enumerated and returned to water, fin clips for new species	30 seconds
*Please note that in the case of Herring, not all individuals captured will undergo narcosis and euthanasia. If they do not, then they will be returned to the water with only morphometric data being collected.		

Procedural Breakdown

1. Sorting and enumeration: Fish wranglers will identify individual fish captured by species, and if one of the targeted species, will transfer fish to appropriate personnel. Counts of individuals by species will be obtained with this method, and those species that are not needed for further data collection/research will be placed overboard to return them to the water.
2. Morphometrics: Individuals will be immobilized by researcher or fish wrangler and placed on a measuring board, or measured for length with flexible tape; gross examination of the exterior of the animal would provide gender identification; scale sample (noninvasive, no pain response associated with removal of scales by gently rubbing).
3. Narcotization: induced by electronarcosis unit to stun the animal, allowing wranglers/researchers to safely restrain the individual
4. Euthanasia: Individuals will be narcotized and then spinal cord will be severed
5. Tonic Immobility: for shark species, is conducted by turning the animal so that it lay on its dorsal side, and maintained if necessary, by massaging the animals snout. For other species of fish, it may be possible to achieve this by turning the animal onto its dorsal side, then covering its head with a clean cloth.
6. Fin clips: a small sample of the fin is removed from the individual and preserved in ethanol for later DNA analysis. As fish have no nerve endings in their fins, no anesthetic is required. Shears are ideal for this procedure as the fins can be extremely flexible membranes and a clean cut is preferred. Shears will be cleaned between samples by wiping with a clean cloth and placing in a glass bead sterilizer. These samples will only be taken from one individual of each teleost species captured, and size will likely range widely.

In sections IV.B-IV.S below, please respond to all items relating to your proposed animal procedures. If a section does not apply to your experimental plans, please leave it blank.

Please refer to DCM and IACUC websites for relevant guidelines and SOPs.

B. Anesthesia/Analgesia/Tranquilization/Pain/Distress Management For Procedures Other than Surgery:

Adequate records describing anesthetic monitoring and recovery must be maintained for all species.

If anesthesia/analgesia must be withheld for scientific reasons, please provide compelling scientific justification as to why this is necessary:

For all procedures, excluding the surgical implantation of tags, no anesthesia is necessary, as they are all non-invasive techniques requiring a minimum amount of time handling the animal.

1. **Describe the pre-procedural preparation of the animals:**
   a. **Food restricted for** Click here to enter text. **hours**
   b. **Food restriction is not recommended for rodents and rabbits and must be justified:**
   Click here to enter text.
   c. **Water restricted for** Click here to enter text. **hours**
   d. **Water restriction is not recommended in any species for routine pre-op prep and must be justified:**
   Click here to enter text.

2. Anesthesia/Analgesia *for Procedures Other than Surgery*

	Agent	Concentration	Dose (mg/kg)	Max Volume	Route	Frequency	Number of days administered
Pre-procedure analgesic	Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.
Pre-anesthetic	Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.
Anesthetic	Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.
Post procedure analgesic	Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.
Other	Electro-narcosis	100-200V – dependent on species/size/and water conductivity	1-20 seconds	NA	extern al	once	1

3. Reason for administering agent(s):

Electronarcosis will be used to immobilize animals when necessary to allow for safe handling and transfer of animals. The electronarcosis provides immobility of the animal long enough for

morphometrics to be taken or for handlers to safely secure the animal for further procedures, with a minimum recovery time for the animal.

4. For which procedure(s):
As necessary for the safe handling of the animal/to allow for same immobilization for surgical implantation of tags

5. Methods for monitoring anesthetic depth:
Fish will be considered narcotized when an involuntary muscle twitch is observed, followed by no movement in the operculum.

6. Methods of physiologic support during anesthesia and recovery:
Water will be continuously flushed through the mouth and over gills to provide oxygen to the fish

7. Duration of recovery:
Maximum of 5 minutes.

8. Frequency of recovering monitoring:
Constant

9. Specifically what will be monitored?
Opercular movement (respiratory indicator), normal muscle movement/swimming behavior

10. When will animals be returned to their home environment?
Within 5 minutes of electronarcosis induction, or after full recovery from post-narcosis procedures

11. Describe any behavioral or husbandry manipulations that will be used to alleviate pain, distress, and/or discomfort:
Maintain individual in cool seawater

C. Use of Paralytics

1. Will paralyzing drugs be used? No

2. For what purpose:
Click here to enter text.

3. Please provide scientific justification for paralytic use:
Click here to enter text.

4. Paralytic drug:
Click here to enter text.

5. Dose:
Click here to enter text.

6. Method of ensuring appropriate analgesia during paralysis:
Click here to enter text.

D. Blood or Body Fluid Collection

1. Please fill out appropriate sections of the chart below:

	Location on animal	Needle/catheter size	Volume collected	Frequency of procedure	Time interval between collections
Blood Collection	Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.
Body Fluid Collection	Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.
Other	Fin (clipped using clean shears)	NA	1 gram	15 seconds	NA – once per individual

E. Injections, Gavage, & Other Substance Administration

1. Please fill out appropriate sections of the chart below:

	Compound	Location & Route of admin	Needle/catheter/gavage size	Max volume admin	Freq of admin (ie two times per day)	Number of days admin (ie for 5 days)	Max dosages (mg/kg)
Injection/ Infusion	Click here to enter text.		Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.	
Gavage	Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.
Other	Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.

2. For all injections and infusions, PHARMACEUTICAL GRADE compounds should be used. If not available, refer to IACUC Guidelines for non-pharmaceutical grade compound use and provide required information below:

Click here to enter text.

F. Prolonged restraint with mechanical devices

Prolonged restraint in this context means *beyond routine care and use procedures* for rodent and rabbit restrainers, and large animal stocks. Prolonged restraint also includes *any* use of slings, tethers, metabolic crates, inhalation chambers, primate chairs and radiation exposure restraint devices.

1. **For what procedure(s):**
   Surgical implantation of tags
2. **Explain why non-restraint alternatives cannot be utilized:**
Due to the pitch and roll of the ship, it is the safest way to protect the surgeon and the animal from undue injury and stress during the procedure.
3. **Restraint device(s):**
Foam surgical cradle
4. **Duration of restraint:**
Maximum 12 minutes
5. **Frequency of observations during restraint/person responsible:**
Constant/ surgeon or assistant
6. **Frequency and total number of restraints:**
1
7. **Conditioning procedures:**
Click here to enter text.
8. **Steps to assure comfort and well-being:**
Water flushed through mouth and over gills, foam surgical cradle, constant monitoring
9. **Describe potential adverse effects of prolonged restraint and provide humane endpoints (criteria for either humanely euthanizing or otherwise removing from study):**
Potential for the inability to recover normal swimming behavior (i.e. fish exhibits sporadic or lack of muscle movement, lack of opercular movement, or going 'belly up' after released from cradle and placed in the recovery tank) for the 30 minute observation time, fish will be euthanized by severing the spinal cord.

G. Tumor Studies, Disease Models, Toxicity Testing, Vaccine Studies, Trauma Studies, Pain Studies, Organ or System Failure Studies, Shock Models, etc.

1. **Describe methodology:**
Click here to enter text.
2. **Expected model and/or clinical/pathological manifestations:**
Click here to enter text.
3. **Signs of pain/discomfort:**
Click here to enter text.
4. **Frequency of observations:**
Click here to enter text.
5. **Describe potential adverse side effects of procedures and provide humane endpoints (criteria for either humanely euthanizing or otherwise removing from study):**
Click here to enter text.

H. Treadmills/Swimming/Forced Exercise

1. Describe aversive stimulus (if used):
Click here to enter text.
2. Conditioning:
Click here to enter text.
3. Safeguards to protect animal:
Click here to enter text.
4. Duration:
Click here to enter text.
5. Frequency:
Click here to enter text.
6. Total number of sessions:
Click here to enter text.
7. Describe potential adverse effects of procedures and provide humane endpoints (criteria for either humanely euthanizing or otherwise removing from study):
Click here to enter text.

I. Projects Involving Food and Water Regulation or Dietary Manipulation

(Routine pre-surgical fasting not relevant for this section)

1. Food Regulation

a. **Amount regulated and rationale:**
Click here to enter text.

b. Frequency and duration of regulation (hours for short term/weeks or months for long term):
Click here to enter text.

c. Frequency of observation/parameters documented (i.e. recording body weight, body condition, etc.):
Click here to enter text.

d. Describe potential adverse effects of procedures and provide humane endpoints (criteria for either humanely euthanizing or otherwise removing from study):
Click here to enter text.

2. Fluid Regulation

a. Amount regulated and rationale:
Click here to enter text.

b. Frequency and duration of regulation (hours for short term/weeks or months for long term):
Click here to enter text.

c. Frequency of observation/parameters documented (body weight, hydration status, etc.):
Click here to enter text.

d. Describe potential adverse effects of procedures and provide humane endpoints (criteria for either humanely euthanizing or otherwise removing from study):
Click here to enter text.

3. Dietary Manipulations

a. Compound supplemented/deleted and amount:
Click here to enter text.

b. Frequency and duration (hours for short term/week or month for long term):
Click here to enter text.

c. Frequency of observation/parameters documented:
Click here to enter text.

d. Describe potential adverse effects of procedures and provide humane endpoints (criteria for either humanely euthanizing or otherwise removing from study):
Click here to enter text.

J. Endoscopy, Fluoroscopy, X-Ray, Ultrasound, MRI, CT, PET, Other Imaging

1. **Describe animal methodology:**
Click here to enter text.
2. **Duration of procedure:**
Click here to enter text.
3. **Frequency of observations during procedure:**
Click here to enter text.
4. **Frequency/total number of procedures:**
Click here to enter text.
5. **Method of transport to/from procedure area:**
Click here to enter text.
6. **Describe potential adverse side effects of procedures and provide humane endpoints (criteria for either humanely euthanizing or otherwise removing from study):**
Click here to enter text.
7. **Please provide or attach appropriate permissions/procedures for animal use on human equipment:**
Click here to enter text.

K. Polyclonal Antibody Production

1. **Antigen/adjuvant used and justification for adjuvant choice:**
Click here to enter text.
2. **Needle size:**
Click here to enter text.
3. **Route of injection:**
Click here to enter text.
4. **Site of injection:**
Click here to enter text.
5. **Volume of injection:**
Click here to enter text.
6. **Total number of injection sites:**
Click here to enter text.
7. **Frequency and total number of boosts:**
Click here to enter text.
8. **What will be done to minimize pain/distress:**

Click here to enter text.

9. Describe potential adverse effects of procedures and provide humane endpoints (criteria for either humanely euthanizing or otherwise removing from study):

Click here to enter text.

L. Monoclonal Antibody Production

1. Describe methodology:

Click here to enter text.

2. Is pristane used: Choose an item.

Volume of pristane:

Click here to enter text.

3. Will ascites be generated: Choose an item.

i. **Criteria/signs that will dictate ascites harvest:**
Click here to enter text.

ii. **Size of needle for taps:**
Click here to enter text.

iii. **Total number of taps:**
Click here to enter text.

iv. **How will animals be monitored/cared for following taps:**
Click here to enter text.

4. What will be done to minimize pain/distress:

Click here to enter text.

5. Describe potential adverse effects of procedures and provide humane endpoints (criteria for either humanely euthanizing or otherwise removing from study):

Click here to enter text.

M. Temperature/Light/Environmental Manipulations

1. Describe manipulation(s):

Click here to enter text.

2. Duration:

Click here to enter text.

3. Intensity:

Click here to enter text.

4. Frequency:

Click here to enter text.

5. Frequency of observations/parameters documented:

Click here to enter text.

6. Describe potential adverse effects of procedures and provide humane endpoints (criteria for either humanely euthanizing or otherwise removing from study):
Click here to enter text.

N. Behavioral Studies

1. Describe methodology/test(s) used:
Click here to enter text.
2. Will conditioning occur? If so, describe:
Click here to enter text.
3. If aversive stimulus used, frequency, intensity and duration:
Click here to enter text.
4. Length of time in test apparatus/test situation: ***(i.e., each test is ~10 mins)***
Click here to enter text.
5. Frequency of testing and duration of study: ***(i.e., 5 tests/week for 6 months)***
Click here to enter text.
6. Frequency of observation/monitoring during test:
Click here to enter text.
7. Describe potential adverse effects of procedures and provide humane endpoints (criteria for either humanely euthanizing or otherwise removing from study):
Click here to enter text.

O. Capture with Mechanical Devices/Traps/Nets

1. Description of capture device/method:
Commercial Otter trawl – 65 foot
2. Maximum time animal will be in capture device:
30 minutes
3. Frequency of checking capture device:
10 to 30 minute intervals
4. Methods to ensure well-being of animals in capture device:
Minimal time in trawl, minimal time on deck, minimal handling
5. Methods to avoid non-target species capture:
Non-target species capture is not avoidable, but minimized by the methods (minimal trawl time).

6. Method of transport to laboratory/field station/processing site and duration of transport:

Hauled aboard deck - 5 minutes

7. Methods to ensure animal well-being during transport:

Animals are in seawater, and transferred to tanks or release into the water as quickly as possible.

8. Expected mortality rates:

Target species: 0%. Bycatch species: less than 10%.

9. Describe potential adverse effects of procedures and provide humane endpoints (criteria for either humanely euthanizing or otherwise removing from study):

If individuals processed for research exhibit difficulties recovering from handling or surgical tag implantation, the spinal cord will be severed to quickly induce unconsciousness and death.

All individuals will be handled as gently as possible from the point of capture until release, however, if exhibiting adverse effects from capture (injury/death), if possible, the individual will be narcotized and the spinal cord severed.

P. Manipulation of Wild-Caught Animals in the Field or Laboratory

1. Parameters to be measured/collected:

Please see table in section IV.A.

2. Approximate time required for data collection per animal:

1 minute

3. Method of restraint for data collection:

handheld

4. Methods to ensure animal well-being during processing:

Minimal processing time

5. Disposition of animals post-processing:

Normal behavior when returned to water

6. Describe potential adverse effects of procedures and provide humane endpoints (criteria for either humanely euthanizing or otherwise removing from study):

If fish are severely injured or exhibiting signs of inability to recover from procedures, they will be narcotized and euthanized (please see table explanations in section IV.A)

Q. Wildlife Telemetry/Other Marking Methods

1. Describe methodology (including description of device):
Internal acoustic tags, implanted using aseptic surgery techniques, into the abdominal cavity and sutured closed. It is a small cylindrical tag (VEMCO acoustic tag, approximately 3 cm long and .75 cm diameter, which will be sterilized and held in sterile packaging until placed in the animal.

2. Will telemetry device/tags/etc. be removed? No **If so, describe:**
Click here to enter text.

3. Describe potential adverse effects of procedures and provide humane endpoints (criteria for either humanely euthanizing or otherwise removing from study):
If fish are severely injured or exhibiting signs of inability to recover from procedures, they will be narcotized and euthanized (please see table explanations in section IV.A)

R. Other Animal Manipulations

1. Describe methodology:
Please see table and explanations in section IV.A.

2. Describe methods to ensure animal comfort and well-being:
Minimum handling time

3. Describe potential adverse effects of procedures and provide humane endpoints (criteria for either humanely euthanizing or otherwise removing from study):
If fish are severely injured or exhibiting signs of inability to recover from procedures, they will be narcotized and euthanized (please see table explanations in section IV.A)

S. Surgical Procedures

All survival surgical procedures must be done aseptically, regardless of species or location of surgery. Adequate records describing surgical procedures, anesthetic monitoring and postoperative care must be maintained for all species.

1. Location of Surgery (Building & Room #):
On deck of the R/V Cape Hatteras

2. Type of Surgery (check all that are appropriate):
Click here to enter text.

☐ **Non-survival surgery (animals euthanized without regaining consciousness)**
X **Major survival surgery (major surgery penetrates and exposes a body cavity or produces substantial impairment of physical or physiologic function)**
☐ **Minor survival surgery**
☐ **Multiple survival surgery**
If yes, provide scientific justification for multiple survival surgical procedures:
Click here to enter text.

3. Describe the pre-op preparation of the animals:

a. **Food restricted for** NA **hours**
b. **Food restricted is not recommended for rodents and rabbits and must be justified:**
Click here to enter text.
c. **Water restricted for** NA **hours**
d. **Water restriction is not recommended in any species for routine pre-op prep and be justified:**
Click here to enter text.

4. Minimal sterile techniques will include (check all that apply):

Please refer to DCM Guidelines for Aseptic Surgery for specific information on what is required for each species and type of surgery (survival vs. non-survival).

X **Sterile instruments**
How will instruments be sterilized?
Pre-sterilization through ECU DCM and instruments and tags stored in sterile packaging, field sterilization using a glass bead sterilizer or disposable sterile instruments will be singly-used, and then disposed.

If serial surgeries are done, how will instruments be sterilized between surgeries:
Nolvasan disinfectant and Glass bead sterilizer.

☒ Sterile gloves
☒ Mask
☒ Cap
☐ Sterile gown
☒ Sanitized operating area
☐ Clipping or plucking of hair or feathers
☒ Skin preparation with a sterilant such as betadine (Can damage surrounding scales/mucus layer will be wiped with sterile gauze)
☒ Practices to maintain sterility of instruments during surgery
☐ Non-survival (clean gloves, clean instruments, etc.)

5. **Describe all surgical procedures:**

a. Skin incision size and site on the animal:

Incision on the abdomen 2/3 between the pectoral and pelvic fin on the midline of the animal, approximately 2-3 cm long.

b. Describe surgery in detail (include size of implant if applicable):

Fish will be immobilized using the electrosedation unit, then secured onto the foam surgery cradle on its dorsal side with a handler to monitor the animal. Tubing will be placed in the animal's mouth and water will be flushed continuously over its gills. A lidocaine block will be applied to the incision site, in the upper dermal layers of the skin. A small incision (2-3 cm) will be made in the abdomen at approximately 2/3 distance between the pectoral and pelvic fins on the midline of the fish. A sterilized (ethelyne oxide gas) transmitter will be inserted into the abdomen and gently pushed anterior to the incision. The incision will be closed using either simple continuous or simple interrupted surgical suture pattern. The fish will be placed into a recovery tank (live well with circulating sea water) and observed for 30 minutes pre-release.

c. Method of wound closure:

i. Number of layers

1

ii. Type of wound closure and suture pattern:

Simple continuous or interrupted surgical suturing

iii. Suture type/size/wound clips/tissue glue:

3-0 absorbable monofilament suture

iv. Plan for removing of skin sutures/wound clip/etc:

absorbable

6. **Anesthetic Protocol:**

a. If anesthesia/analgesia must be withheld for scientific reasons, please provide compelling scientific justification as to why this is necessary:
Click here to enter text.

b. Anesthesia/Analgesia For Surgical Procedures

	Agent	Dose (mg/kg or %)	Volume	Route	Frequency	Number of days administered
Pre-operative analgesic	Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.
Pre-anesthetic	Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.
Anesthetic	Lidocaine block	2%	<.5cc	injection	once	1
Post-operative Analgesic	Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.
Other	Electronarcosis (for sedation pre-anesthetic)	100-200V – dependent on species/size/ and water conductivity	1-20 seconds	external	once	1

c. Methods that will be used to monitor anesthetic depth (include extra measures employed when paralyzing agents are used):
Fish will be considered narcotized when an involuntary muscle twitch is observed, followed by no movement in the operculum. Lidocaine block will be considered effective immediately after being administered.

d. Methods of physiologic support during anesthesia and immediate post-op period (fluids, warming, etc.):
Animal will be held securely in foam surgical cradle during the operation with water flowing over gills, and placed in a recovery tank of cool seawater afterwards.

e. List what parameters are monitored during immediate post-op period. Provide the frequency and duration:
Constant for 30 minutes: swimming behavior, operculum action

f. Describe any other manipulations that will be used to alleviate pain, distress, and/or discomfort during the immediate post-op period (soft bedding, long sipper tubes, food on floor, dough diet, etc.):
minimal handling/procedure time, placed in recovery tanks with cool seawater, release into water as soon as recovery of normal swimming behavior is apparent

g. List criteria used to determine when animals are adequately recovered from anesthesia and when the animals can be returned to their home environment:

Normal swimming and breathing (operculum action) is observed, normal response to stimuli (i.e. the net that will take it out of the recovery tank)

7. Recovery from Surgical Manipulations (after animal regains consciousness and is returned to its home environment)

Animals will regain consciousness during the surgery, but will be immobilized by handlers and the surgery site will have the lidocaine block in effect prior to consciousness from the electronarcosis unit.

a. What parameters (behavior, appetite, mobility, wound healing, etc.) will be monitored:

Mobility, opercular activity

b. How frequently (times per day) will animals be monitored:

Once, constantly for 30 minutes

c. How long post-operatively (days) will animals be monitored:

Animals will be tracked with the implanted acoustic tags for up to three years, however, post-operative monitoring will last only 30 minutes or until animal exhibits normal behavior, whichever comes first.

8. Surgical Manipulations Affecting Animals

a. Describe any signs of pain/discomfort/functional deficits resulting from the surgical procedure:

none recorded to date

b. What will be done to manage any signs of pain or discomfort (include pharmacologic and non-pharmacologic interventions):

Lidocaine blocks and minimal handling time, combined with fresh, cool seawater are the standard ways to manage any discomfort the animal will endure. If fish do not exhibit normal recovery or adaptation of the implanted tag within the recovery period, they will be euthanized.

c. Describe potential adverse effects of procedures and provide humane endpoints (criteria for either humanely euthanizing or otherwise removing from study):

If fish are severely injured or exhibiting signs of inability to recover from procedures, they will be narcotized and euthanized (please see table explanations in section IV.A)

V. Euthanasia

Please refer to the AVMA Guidelines on Euthanasia and DCM Guidelines to determine appropriate euthanasia methods.

A. Euthanasia Procedure. ***All investigators, even those conducting non-terminal studies, must complete this section in case euthanasia is required for humane reasons.***

1. Physical Method- If a physical method is used, the animal should be first sedated/anesthetized with CO_2 or other anesthetic agent. If prior sedation is not possible, a scientific justification must be provided:
Sedation provided through electronarcosis when possible, and then the spinal cord will be severed or complete decapitation will be used.

2. Inhalant Method- Choose an item.
(if other, describe the agent and delivery method)
Click here to enter text.

3. Non-Inhalant Pharmaceutical Method (injectables, MS-222, etc.)- Please provide the following:

a. Agent:
Click here to enter text.

b. Dose or concentration:
Click here to enter text.

c. Route:
Click here to enter text.

B. Method of ensuring death (can be physical method, such as pneumothorax or decapitation for small species and assessment method such as auscultation for large animals):
Decapitation/pithing

C. Describe disposition of carcass following euthanasia:
Other/Incidental bycatch species: disposed of overboard vessel
Targeted species: retained and preserved by freezing for further study

I acknowledge that humane care and use of animals in research, teaching and testing is of paramount importance, and agree to conduct animal studies with professionalism, using ethical principles of sound animal stewardship. I further acknowledge that I will perform only those procedures that are described in this AUP and that my use of animals must conform to the standards described in the Animal Welfare Act, the Public Health Service Policy, The Guide For the Care and Use of Laboratory Animals, the Association for the Assessment and Accreditation of Laboratory Animal Care, and East Carolina University.

Please submit the completed animal use protocol form via e-mail attachment to iacuc@ecu.edu. You must also carbon copy your Department Chair.

PI Signature: e-mail Date: 1/2/13

Veterinarian: Date: 1/3/13

IACUC Chair: Date: 1/3/13