Red Banks Landing is a frequented fishing location along the Tar River. Although many residents know its location, very few people know about its history. In 1995, Dr. John E. Byrd, formerly of East Carolina University, cursorily assessed the landing at Red Banks Landing on the Tar River as part of a larger survey of archaeological sites in Greenville, North Carolina (Byrd 1995). He recommended that further study be undertaken at the site. This thesis is centered on an archaeological survey both on land and in the Tar River at Red Banks Landing. This project was one of archaeological discovery, and it also provided an opportunity to test several theories concerning settlement patterns, evolving landscapes, and the perception of landscapes within its occupants’ psyches – specifically, the connection of an inland site to a maritime landscape. Examining Red Banks Landing through a framework of Central Place Theory, Maritime Landscapes Theory, and Cultural Landscapes Theory connects the importance of this landing site to other landings and maritime infrastructures throughout the world. Through extensive historical research and terrestrial and underwater archaeological survey, this thesis elucidates Red Banks Landing’s contribution to settling eastern North Carolina with its occupation peaking during the late 1700s.

The research into Red Banks Landing reconciles activity from the river flowing by the landing with the habitation of the terrestrial region of the site. From the research, one can understand the importance of the landing structure to the inhabitants of the region. This study provides a starting point for landing surveys in the United States,
where very few of these studies have commenced to this date. The study allows for context of interface sites within the United States and their importance to the settlement process. Survey of the river as well as the river bank provides a complete picture of the activity that took place at this interface site, and its contribution to the economy of eastern North Carolina and its inhabitants.
LANDSCAPES IN TRANSITION: REDBANKS LANDING ON THE TAR RIVER, GREENVILLE, NORTH CAROLINA

A Thesis
Presented to
the Faculty of the Department of History
East Carolina University

In Partial Fulfillment
of the Requirements for the Degree
Master of Arts in History

by
Kathy Ann Welliver Southerly
May 2006
LANDSCAPES IN TRANSITION: REDBANKS LANDING ON THE TAR RIVER, GREENVILLE, NORTH CAROLINA

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ACKNOWLEDGMENTS

This thesis is the result of a long process of research, fieldwork, writing, rewriting, rewriting, and rewriting. Its completion would not have been possible without the encouragement and feedback from many individuals.

I would like to thank my committee members for taking the time to read my thesis and give me feedback in order to make it better. Specifically, I would like to thank Dr. Nathan Richards, who saved the day by giving me unfaltering direction to devise a theoretical approach to frame the material for this document. I would also like to thank him for all of the support and encouragement he gave during the massive editing process this project underwent. Special thanks goes to Dr. Charles Ewen who helped decipher the historical ceramics and Dr. David S. Phelps who examined the prehistoric artifacts and gave enlightening commentary on them.

I would like to thank the volunteers from ECU’s Anthropology Department and Maritime Studies who worked so hard to complete the fieldwork for this project. Also, I would like to thank Kristian Nixon of Nixon Surveying for bringing his total station to the site and trusting me to row him and his very expensive equipment across the Tar River. He shot in the site and produced site maps for me in AutoCAD for the project, essential for depicting the site.

I would like to thanks my parents Bill and Nancy Welliver and my sister Debra Hoak for their support during this very long process. They gave me many words of encouragement and much prodding forward when I felt this project would never come to fruition.
Finally and most importantly, I would like to thank my husband Chris who showed me that I could do anything I wanted to academically. He also painstakingly read every word of this thesis, good and bad, and encouraged me to finish no matter what it took. I want to thank him for all of the hours he spent with our boys to “give Mommy some quiet time.” Thanks, also to Nick and Will for that quiet time. I missed many hours of play time while rewriting this document. I look forward to spending many hours playing now that this process is complete.
FOR CHRIS, NICK & WILL
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Chapter One: Red Banks Landing Thesis Introduction

Introduction

In March 2000, fieldwork at Red Banks Landing commenced both on land and underwater. The landing is located on the north side of the Tar River in Greenville, North Carolina, a quarter of a mile west of the Arthur Tripp Bridge, just below the mouth of Parker’s Creek (Figure One). From this point, the Tar flows southeast to Washington, North Carolina, where it becomes the Pamlico River, emptying into the Pamlico Sound. The Tar River itself flows one hundred and forty miles from its headwaters in Person County, to the town of Washington in Beaufort County, (North Carolina Department of Environment and Natural Resources 2003).

The landing was used from the mid-1700s until the beginning of the 1900s, but it fell into disrepair during the first half of the twentieth century (Figure Two). This project was one of discovery concerning the history and archaeology of the landing, but it was also designed to answer a broader scope of questions such as: where do landings fit in the process of settlement and community development, do landings perpetuate a connection to a maritime landscape far beyond the ocean’s shoreline, and what happens to a landing site once its primary purpose becomes obsolete? This thesis answers these questions and shows the connection between landings, historic settlement patterns, the evolution of commerce relating to river travel, and resource allocation in a developing landscape.
Figure 1 Red Banks Landing in Greenville, NC. Inset map shows Red Banks Landing’s location within North Carolina. Overlay created by Kathy Southerly in *ArcView 3.2*, October 2003.

Figure 2 Red Banks Landing viewing from the northwest on the Tar River. Photo taken January 2000 by Kathy Southerly. Photo not to scale.
Interface Sites in a Landscape

Red Banks Landing is a site where the water meets the land, or in archaeological parlance, Red Banks Landing is an interface site. Other interface site types include ports, harbors, wharves, jetties, and landings. Landings are commonplace along the shores of navigable rivers throughout the world, yet these sites often are ignored in the historical record and overlooked by archaeological investigations. A landing, as defined by *The Compact Edition of the Oxford English Dictionary*, shortened from landing-place, has been in common usage since 1611. The term means “a place where passengers and goods are or can be landed or disembarked” (1971:1566). By its definition, a landing is a transmitting point for commerce. It is also a transmission point for culture.

Archaeologists have often overlooked these transmission points as an important component to maritime archaeology even though they represent a crucial link to maritime cultures. In the United States, for example, there have been few studies that focus on landings. These sites are a common component on watercourses around the world and provided access to areas that could be reached most easily by navigable rivers. Chapter Two of this thesis, “Global Maritime Infrastructure Sites: A Review of Literature,” provides an overview of past studies regarding different types of interface sites. The sites described include landings, wharves, jetties, piers, docks, harbors, and sites that incorporate many different features. As Chapter Two illustrates, a common weakness of past interface site studies is their lack of theoretical context that existed within the study.

Chapter Three, “Central Place Theory, Maritime Cultural Landscapes, and Cultural Landscapes Theory as an Interpretation Tool for Maritime Infrastructure Sites,”
formulates theoretical concepts concerned with the study of interface sites and their relationship to area surroundings. The discussion in this chapter provides a theoretical argument concerning interface sites and their contribution to the maritime past.

As described by Keith Muckelroy (1998:23) in “Introducing Maritime Archaeology” and later by Christer Westerdahl in his theory of maritime cultural landscapes, maritime archaeology describes people and their relationship to the sea (1992:5). For some theorists, such as Westerdahl, the maritime concept does not rely on a distance to the sea but on the sea’s influence on a place’s identity. Theorist Walter Christaller’s, geographically-based Central Place Theory, adds further insight into the complexity of interface site development. Christaller (1966:14-23) pointed out specific characteristics that give meaning to a settlement in economic terms. A landing acts as a core component to a central place – a mediator of commerce and a key factor in the importance of a maritime connection. Other theories such as Cultural Landscapes Theory, illustrate the transient nature of the landscape (Duncan 2000:14). When one type of activity dominates the landscapes then ceases, another activity takes over.

**Red Banks Landing: A site-specific example**

Chapter Three provides a theoretical rationale for the fieldwork that took place at Red Banks Landing. The fieldwork is described in Chapter Four, “Methodology, and Field Research at Red Banks Landing.” The methodology included historical research, terrestrial fieldwork, underwater survey and sidescan sonar survey, the compilation of a GIS for data analysis, artifact analysis, and interpretation. Completing field research at
Red Banks landing provided an opportunity to connect the land with the water in one cohesive site analysis. This research filled gaps in previous research regarding landings, and it broadened the understanding of archaeological sites in eastern North Carolina. The concept of landscape and its influence on cultural development will also be explored through the examination of a specific landing – Red Banks Landing.

Chapter Five, “The History of Red Banks Landing,” relates the results of the historical research concerning Red Banks Landing, and its implications to maritime cultural landscape studies. It illustrates the relevance of the landing in a larger transportation network, the economics that factor into the landing’s development, its early history, and the political implications that affected its role in the settlement of the region. Chapter Five illustrates the landing’s role in commerce within eastern North Carolina, and its vital role as a transition point for riverine travel to overland transportation. Its riverine topography connected the landing with a maritime cultural landscape, but perhaps even more significantly the landing’s implicit link to naval stores, goods used in shipbuilding, may have had the more important role in shaping the local cultural identity as a maritime landscape.

Chapter Six, “Archaeological and Artifact Analysis,” illustrates the systematic recovery or artifacts, and the stratigraphic condition of the site. The artifact assemblage provides answers to the primary question of this study: Was Red Banks Landing a prominent central place of the region? It also reveals the site’s identity as a maritime cultural landscape even though it was far beyond the shoreline of the ocean. The artifact
analysis also allows for an estimate for the site’s decline and how Red Banks Landing transformed from its primary commercial purpose into a secondary recreational one.

Chapter Seven, “Theoretical Approach to the Archaeology of Red Banks Landing,” provides a site-specific analysis and theoretical context for interpreting Red Banks Landing. This chapter provides an innovative perspective from previous reports concerning interface sites. Through the use of three distinct theories, Central Place Theory, Maritime Landscapes Theory, and Cultural Landscapes Theory understanding the colonial settlement patterns of the immediate region becomes apparent by revealing social structures as well as technological developments that create conditions favorable to settlement. Each theory used to describe the landing’s role in the community adds a different facet of meaning to the story of Red Banks Landing and its evolution or decline, depending on one’s point of view. Finally, Chapter Eight provides the conclusion, drawing its meaning from the other chapters of the thesis.

Summary

At a site-specific level, this thesis links Red Banks Landing’s importance to two distinct cultures: Native American groups as well as European settlers. The thesis demonstrates the landing’s value as a link in a transportation network as well as its decline because of a shift in commodities production, transportation needs, and technological development. Specifically, Red Banks Landing declined because of a shift in naval stores production in the mid-1850s. Red Banks Landing’s usefulness declined with the advent of the railroad in the nineteenth century, and then paved roads and motor
transport in the twentieth century. With these technological shifts, river transport on the Tar River became obsolete. New means of travel redefined population centers, and sites such as Red Banks Landing were abandoned as landing sites for commerce. Red Banks became a footnote in history because it was no longer useful economically as a landing, and thus became a relict landscape but remained a recreational location for fisherman in the area according to locals who gathered at the landing during the excavation of the site.

On a more global level, this thesis continues the study of landings as a component to central place development and as an extension of maritime cultural landscapes. Because a landing is a point of interaction between water activities and terrestrial activities, a landing is a deliberate attempt to extend maritime culture. No matter how far the location is from the ocean’s shoreline, its identity relies on its connection to the shore for the transport of goods and for the transport of people farther inland as this thesis demonstrates. It shows the connection between landings, historic settlement patterns, the evolution of commerce relating to river transport, and resource allocation in a developing landscape. The thesis provides a conceptual starting point for future landscape studies and broadens the concept of central place development for riverine systems. Finally, this thesis introduces a new perspective for sites that are often considered abandoned. The relict status of a site within a landscape offers secondary purpose for its use. Although Red Banks ceased being a functioning landing, it remained a recreational site for fishing. Though its purpose changed, it is still a functioning location for human activity. Red Banks Landing, though no longer a site for commerce and shipping, remains a vibrant part of the landscape.
Introduction

Maritime infrastructure sites such as landings, wharves, piers, and jetties were economic links to a transcontinental culture connected by the sea. Their commonality, however, created an aura of invisibility for their value as archaeological sites. In the past, infrastructure sites were not examined as closely as shipwreck sites, but since the 1970s, the importance of maritime infrastructure sites has won greater recognition – sites such as the Holdfast Bay investigation in Australia (Terry Drew 1983). Unlike shipwrecks, which usually represent a synchronic point in time, sites that interface between land and water exhibit diachronic use through time. Since the advent of underwater archaeology and the inception of the United Nations Educational Scientific and Cultural Organization’s (UNESCO) treaty that makes interface sites more significant to global development, these sites have gained importance for their value as part of a maritime landscape, a landscape in which a culture is defined by its connection to the sea (UNESCO 2001). The common link that maritime interface sites share is that they are essential components of the maritime landscape.

In the past forty years archaeologists and volunteer groups have examined many infrastructure sites worldwide. Like Red Banks Landing, these sites are central to a region’s definition as a maritime landscape, but earlier analyses failed to fully develop that connection. In order to understand Red Banks Landing and its importance as an archaeological resource, it is essential to place it in the context of other interface sites that
include maritime infrastructure. Chapter Three establishes that context and provides a framework on which to hang Red Banks Landing and its importance to regional development. As there are many different interface site types, this chapter will examine a broad range of site types such as wharves, jetties and piers, docks and harbors, landings, and site interpretations that integrate their characteristics into a holistic study. These studies are variations on the theme of interface sites meeting the necessity for access to commercial centers.

**Wharves**

*The Compact Edition of the Oxford English Dictionary* (1971:3747) defines a wharf as a “substantial structure of timber, stone, etc. built alongside the water’s edge, so that ships may lie along side for loading and unloading.” Larger than landings, wharves tend to extend the landscape into the water. These sites are also found worldwide and perhaps because they consist of a more substantial infrastructure and their economic role was more significant, they receive more attention from researchers than more modest landings. They are an important facet of maritime archaeology worldwide. Archaeologists from the United Kingdom, Australia, and the United States have produced reports that examine wharf structures and acknowledge their importance to maritime culture.

In the United Kingdom, several wharf-related projects have been conducted as a result of infrastructure improvement projects such as the Highbridge Wharf project in Greenwich (English Heritage 1997). This project revealed a waterfront development in
the late medieval and post-medieval period. Evidence of a sugar refinery and a pottery from the eighteenth and nineteenth centuries were also associated with the site. Researchers acknowledged that the findings from this project contributed to the “special historic landscape of the foreshore, especially features associated with maritime activity and fishing.” This inclusion of the special historic landscape acknowledges the important influence of maritime activities on English culture. This site and others like it are links from interface sites to the maritime landscape on the waterways of the United Kingdom (English Heritage 1997).

In recent years, wharves have become an important subject for archaeological investigations in Australia. In “Merimbula’s Forgotten Gateway: The Old Steamer Wharf (2005),” Donald Kerr reported the history and archaeology of the Merimbula Wharf, a timber sea wharf on the New South Wales coast. The wharf played a significant role in the development of New South Wales after Australia became a commonwealth. The wharf’s history illustrated the importance of interconnected transport on a developing landscape. The article pointed out that the wharf had a short-lived existence because of transportation shifts within the state of New South Wales. The extension of the railway in the 1920s and later the development of roadways after World War II ended maritime dominance in the region and marked the end of the wharf’s economic necessity (Kerr 2003:85-96). This article illustrated the economic importance of maritime shipping points in Australia, and how indispensable these structures were to the settlement process.

In 2003, the remains of a wharf on the North Esk River in Launceston, Tasmania, were assessed, but the site initially suffered from a mistaken identity. Researchers
initiated the report as a study of a shipwreck or an abandoned derelict along the riverbanks, but further study revealed that the structure was an abandoned wharf instead of a shipwreck. Researchers briefly surveyed its remnants and suggested that more research be undertaken at the site to determine the wharf’s history and significance (Richards 2003).

In the United States, wharves as archaeological sites have also been examined. One study by Andrea Heintzelman (1985) examined wharf technology of the eighteenth and nineteenth centuries. Her studies indicated that early wharf construction was a response to commercial stimulation. These structures were typically built “in response to a particular increased interest and involvement in maritime commerce” (Heintzelman 1985:193). She asserted that the size of the wharf reflected the economic success of its owner and that the wharf’s evolution reflected its most affluent time. Her assessment of wharves associated them with economic instruments of commerce, suggesting a link between the economic success of a region and its development of a maritime culture.

**Jetties and Piers**

Like wharves, jetties also receive more attention than landings. They are structures that extend into the harbor, river, or lake to form a landing place for vessels (OED 1971:1507, 2169). Often, they are more substantial structures than a landing, but less structurally substantial than wharves. Like landings and wharves, they are built to satisfy the economic demands of an area. These structures create artificial space for accommodating goods, the transshipment of commodities, and the movement of
passengers. Their common function throughout the world is to facilitate the transfer of goods as a safer and easier endeavor. Jetty studies represent the bulk of studies completed on infrastructure sites, and these studies have taken place primarily in Australia. Other sources for archaeological investigations of this type were sought from other regions, but none were located. These structures are important resources for this thesis in that they provide a context from which to examine Red Banks Landing and its importance to the settlement of the Tar River region.

Philip Drew alluded to wharves and jetties as an expression of a maritime identity in his examination of coastal life in Australia. He describes the Australian identity as an outward looking culture, existing on the edge of the continent and defining the people by a maritime perspective. He best described the importance of wharves and jetties as an expression of this perspective and its relationship to the landscape. He asserted that “the finger wharfs and jetties that jut outwards from the land towards invisible countries over the horizon are tangible monuments to a similar outwardness” (Philip Drew 1994:9). These tangible monuments are also monuments to colonialism and an extension toward a homeland far beyond the horizon. Inversely, these sites attract inwardly from the outside world to the place of colonization.

In Australia, many jetty studies have taken place. These structures have been an archaeological subject since the mid-1970s when the Holdfast Bay Jetty was excavated (Terry Drew 1983). It was the first jetty project undertaken in the country. The Society for Underwater Historical Research (SUHR), an avocational archaeology group, chose the Holdfast Bay Jetty for its first underwater archaeology project because it was easy to
access and no specialized equipment was required for excavations. In 1975, the Historic Reserve recognized SUHR for its excavation efforts. The site was declared a Historical Reserve, the first underwater site to be recognized in South Australia. The Holdfast Bay project spawned many follow up investigations since the initial project in 1974.

Jennifer Rodrigues published several papers concerning the artifacts of SUHR’s excavations at Holdfast Bay (1999:2-8). Her thesis for Flinders University was the first of these studies to focus on the Holdfast Bay Jetty in South Australia. The goal of this study was to examine the artifacts associated with the jetty and the structures near it and determine if this site was significant as a maritime heritage site. She asserted that, unlike a shipwreck whose artifacts are limited to a specific time span and to limited activities, the artifacts retrieved from the Holdfast site (the jetty having been in place since the 1850s) represented varied activities over a long period of time. This study concluded that the Holdfast site was an important maritime heritage site with rich cultural resources and important historical significance. Rodrigues (1999:2-8) echoed what other researchers have asserted about the site that it was inseparable from the town, and it was a popular recreation location in South Australia.

In 2002, Rodrigues revisited several key issues from her thesis in a series of articles for the *Bulletin of the Australasian Institute for Maritime Archaeology*. The first article outlined the need for examining the Holdfast Bay artifacts from the 1974-1978 excavations by the Society for Underwater Historical Research (SUHR) at the jetty site. Because the artifacts were examined out of context of the jetty, vital information concerning their use in relation to the jetty was lost (Rodrigues 2002a:27-34).
Rodrigues’ second article was an assessment of the assemblage of 5,000 artifacts recovered by the SUHR in its 1974-1978 excavations. Although the assemblage lacked provenance, limited inferences concerning function and sub-function of many artifacts could still be made. The article concluded that the assemblage analysis confirmed the site’s significance to South Australia’s past (Rodrigues 2002b:35-42).

The artifacts of the Holdfast Bay Jetty inspired other studies on artifact deposition at the Holdfast Bay site in South Australia. Christopher Lewczak’s (2000) thesis examined artifact patterning, the manner in which artifacts were positioned throughout the site. It was a comparative study that tested several theories of artifact distribution within the sediment. The thesis described the environmental factors of Holdfast Bay, the material recovered from the site, and the site’s chronology.

In 2002 Holdfast Bay Jetty research came full circle with an article that reassessed the underwater excavations conducted by the Society for Underwater Historical Research between 1974 and 1978. The Holdfast Bay Jetty site became the first underwater site in South Australia to be protected by legislation. The project revived interest in SUHR’s work, and it provided a vehicle for answering important maritime archaeological questions relating to site formation process (Richards and Lewczak 2002:22).

Australian researchers initiated other jetty projects after the Holdfast Bay project established the paradigm for these interface sites circling the continent. In 1995, archaeologists for LandCorp asserted that the Albany Town Jetty, built in 1838 and improved throughout its history, was a maritime gateway for the region, connecting the community with the global economy. The report suggested that the pattern of
abandonment behavior and the tendency to use the water as a dumping ground was in practice at the jetty. The authors noted that the rail line provided a barrier for town’s people to the shoreline and that the jetty was not used as a promenade. The report concluded that areas of the jetty should be left undisturbed by future development and any refurbishment should be limited to prevent impact on the seabed. The authors also suggested that the jetty be included in a comparative study for jetties throughout Australia (Garratt et al. 1995).

In 1996, Adam Wolfe examined the 1893 section of the Albany Town Jetty. The report detailed the history of the site, examined its structural development, and gave insight into the groups who used it, primarily the yacht club and whaling company. It described building details of the structure, and the report could be used as a research tool for a larger study (Wolfe 1996).

Dena Garratt authored many reports that focused on jetties throughout Western Australia. The Eucla Jetty report outlined the origins, significance, and recommendations for determining the future of the site. The jetty, related to the telegraph station built in the late nineteenth century, was an important link to the rest of the world for the local population. It was also an important shipping point for the region’s wool and sandalwood trade. Because of its substantial structural integrity, it is a rare example of nineteenth century jetty technology. The report suggests that the jetty should be included in a comparative study with other jetty sites (Garratt 1994a).

The town jetty in Esperance, Western Australia, was also examined in 1994. The report described the site’s condition, management considerations, associated shipwrecks,
and landings sites. According to the report, the Esperance town jetty was an important link for residents to the rest of the world. This was the primary location for receiving mail and supplies from other regions. There is little left of the jetty, as much of the structure has been removed and dredged extensively (Garratt 1994b).

The Hamelin Bay inspection report described the submerged remains of the jetty and a video recording of the underwater site and terrestrial material associated with the site on land. The inspection concluded that the jetty, built in 1881 by a timber merchant, was nearly intact, and the structure was reasonably sound. The author suggested that the site be considered for a comprehensive study for “jetty deposition patterns” (Garratt 1993).

In 1994, Dena Garratt examined the Long Jetty in Fremantle. The Long Jetty, completed in 1873, was an integral part of the export trade of the Fremantle Colony. Residents shipped wool, wheat, and timber from the colony, but the jetty was difficult to access because of its exposure to westerly gales and the harbor’s shallow water. The popularity of the Long Jetty climaxed in the 1890s during the gold rush in Australia. When Fremantle Harbor opened, the jetty became obsolete. The jetty’s historical significance is tied to the area’s economic development and a tangible link to its maritime past (Garratt 1994c).

In 1996, John Taylor developed a plan for conserving One Mile Jetty, in efforts to convert it to a tourist attraction. One Mile Jetty, located in Carnarvon, Western Australia, was built over one hundred years ago and had various uses over time. The jetty was an important shipping point for the exportation of wool, a commodity important to the
development of Western Australia. The structure fell into decline in the 1960s because larger ships could not use the shallow harbor. Taylor argued that the jetty had significant value for the town, as it was an important artifact of the maritime landscape (Taylor 1996:38). Its size made it the largest jetty in Western Australia, and it represented an economic link through the Carnarvon tramway. Also, the construction design was an important technological achievement. Aesthetic, historic, scientific, and social value were all listed as arguments for conserving the structure (Taylor 1996).

A comparative study completed in 2000, examined four jetties and compared their construction to the change in government policies in South Australia (Ford 2000). The thesis argued that jetties enabled settlement to occur more quickly, and the state of repair reflected the structure’s current state of use. Jetties used for work were better maintained than jetties used for recreation, as recreational use seemed to be a secondary purpose for these structures.

Another study completed in 2002, compared jetty structures and concluded that many small structures including jetties, groynes, and landings were of historical importance and should be protected as heritage sites within Western Australia. Several sites including the Fremantle Long Jetty, Albany Town Jetty, Mail Steamer Jetty, and Whaler’s Jetty were excavated for the purposes of the study. The results from these excavations added resources for comparative studies within Australia and globally. They also broaden the understanding of artifact deposition in the sediment at jetty sites (McCarthy 2002:7-18).
In 2003, Peter Davies and Susan Lawrence examined the Gabo Island Jetty Shed. Their article addressed the terrestrial archaeology of a maritime support site. Researchers determined that the jetty shed was a residence from the 1840s. Once believed to be associated with the whaling and sealing industry of the early nineteenth century, the archaeological excavations determined that the structure was likely built after the peak of the whaling industry in that region. This study was significant because it examined structures related to a maritime industry that were rarely studied until recently (Davies and Lawrence 2003:19-24).

Like researchers in Australia, researchers in the United States have recognized the importance of piers and their connection to distant shores. In Maryland, a volunteer organization, the Maritime Archaeological and Historical Society (MAHS), examined one of the early piers of a colonial home in the eastern part of the state (Read 1997). Much like the Holdfast Bay site in Australia, avocational archaeologists spearheaded this site survey. This site, known as Hancock’s Resolution, was active from the mid-1600s and was used primarily for transportation. The non-invasive survey consisted of a wading reconnaissance of the area to determine the pier extents. The MAHS volunteers discovered an extension to the pier that reached out into deeper water for accommodating larger vessels with a deeper draft. The group mapped the pier remains but recovered no artifacts from the site. The research effort was primarily one of discovery. The group recommended that further research should be conducted at the site (Read 1997). Jetties and piers constitute an important resource for archaeologists. In Australia extensive research has taken place at jetties and piers at the time of this writing this type of
investigation is peculiarly an Australian phenomenon. This is perhaps the case because
Australia’s colonial history is so recent that its inhabitants recognize even seemingly
mundane structures as having important historical significance. Few studies of this type
have taken place elsewhere, but these studies are important because they demonstrate the
importance of maritime structures as access points within a global market system.

**Docks and Harbors**

Docks and harbors are also important maritime infrastructure sites that have
received little research attention in the past. In the late 1970s and early 1980s, Clive
Cook wrote a series of reports concerning Masons Cove in Tasmania (Cook 1979; Cook
1980). The investigation determined that the waters in the Port Arthur area should be
investigated for their archaeological potential. Among these areas were the jetties of
Long Bay, Opossum Bay, Carnarvon Bay, and Masons Cove. The investigator also
suggested that associated slipways, landings, anchorages, and dumping areas be
investigated for their archaeological potential (Cook 1979:4).

The second report provided a description and brief history of Masons Cove and its
significance for early boat building. The objectives of this survey were to establish the
types of artifacts and their concentrations found on the seabed and to raise threatened
objects. The survey was conducted using shore-based theodolites for triangulation. It
combined terrestrial and maritime archaeological techniques to complete the survey
(Cook 1980).
In 1983, Clive Cook stated that the Australian government should extend reserve status afforded terrestrial sites to underwater sites for preservation. His article referred to the Port Arthur Historic Site Management Plan and its failure to address preservation for items removed from the site as a reason for this type of legislation. In this document, the author recommended protection be given to these sites, and until protection was granted irreparable damage would continue to occur at Port Arthur (Cook 1983:38-41). Cook’s article was significant because it addressed the issue of protection for underwater sites that had rarely been addressed in the past.

In 1990, Richard Gould examined the underwater structures associated with docks and harbors at the Royal Naval Dockyard, Bermuda, and a possible structure beyond the docks once thought to be part of the reef system that surrounds the island. It was revealed to be an artificial structure to prevent small boats from approaching the dockyard complex. This was an important defense barrier put in place to protect the dockyard from invaders. The study suggested that further research should be conducted at the site and within historical archives (Gould 1990:71-86).

In 2000, Port Arthur was examined for the Port Arthur Historic Site Management Authority. It presented a comprehensive study of Port Arthur and Carnarvon Bay, focusing on the Port Arthur Penal Station and its occupation during the nineteenth century. The study consisted of historic research, hydrographic examination, and a shoreline survey. This report was significant because it examined ports, transportation hub routes, anchorages for lightering, and maritime industry locations. It described the transportation network between Port Arthur, satellite settlements, and the outside world.
The report provided a study of interaction between land and water environs (Coroneos 2000: 21-41). Although docks and harbors are common throughout the world, their study is not as commonplace. As with jetty studies, most of the reports written concerning these sites as archaeological resources have been produced in Australia.

**Landings**

Landings represent a minority of infrastructure sites that have been examined throughout the world. These sites often have the least amount of structure associated with them and are more commonplace than larger infrastructure sites. Their common occurrence on the landscape may contribute to their lack of study since these sites may be taken for granted. Three key studies were consulted concerning landings. These studies follow chronologically.

Hogtown Landing in Martin County, North Carolina, was examined for the Department of Cultural Resources in 1981. This report (Angley 1983) chronicled the history of the landing beginning with the Native American occupation, and its eventual inclusion in Edward Moseley’s land patent of 1713. The landing gained some importance in the 1750s after a road was built connecting it to the settlement. It became a center of commerce for the region, and its connection to commerce was an important facet of the report (Angley 1983:5). The report illustrated that legislation enacted to build a road to the landing was an impetus for the landing becoming an economic center. The creation of infrastructure through the swampy terrain of eastern North Carolina created inroads and a gateway to larger centers of commerce connected by the water.
Donald Linebaugh’s 1982 study of landings in Ottawa County, Michigan, demonstrated that they could provide a cohesive unit in which to base a study of human activity within a region. Linebaugh described several landing types within a river system that could apply to many systems throughout the world. The first type he described was the larger urban center landing that was located at harbors, the fall line, or was centrally located. The second type was based near sawmills or in farming areas. These were usually located at the “confluence of a small creek and near good timber and soil resources” (Linebaugh 1982:104-108). The third type of landing was associated with small groups of houses or a single farm. These landings were not associated with any specific industry such as milling and timbering. Instead, they were used for small-scale transport of a variety of items. Linebaugh’s study provided a description of archetypes that could be useful when describing other river system landings. It also provides the first framework for a larger study of landings in the United States.

In 1995, John E. Byrd of East Carolina University conducted an archaeological survey to inventory sites in Greenville, North Carolina. Red Banks Landing was included as a component of a larger predictive model for the community. The goal of this study was to provide a background summary, a description and evaluation of each site, and a predictive model for determining the locations of other archaeological sites within the vicinity (Byrd 1995:1-2). The study asserted that a key component to sites within the investigations was their proximity to the river.

Landing studies are rare subjects of study. They dot the landscapes of many countries and provide access to the river highways inland where travel was sometimes
difficult by other means. These sites represent an important archaeological resource that has yet to be realized.

**Holistic Studies**

Comparative and holistic studies also represent a unique view of maritime infrastructure sites. In this context, holistic studies refer to maritime history that is not a shipwreck. The term is not used in its classically defined sense. These studies address important issues that are unique to interface sites where land and water techniques can be employed. In 1987, Clive Cook examined two sites in Tasmania that illustrated these issues. His subsequent article (Cook 1987:1-11) addressed the importance of studying both the terrestrial and underwater components of a site. The author reiterated Keith Muckelroy’s (1998:23) definition of a maritime site as anything connected to seafaring. Cook also furthered the contention that wreck sites and land sites are intrinsically interconnected. The author stated that the weakness of the study lies with the lack of land excavation at Sarah Island and more research of the region was needed (Cook 1987:1-11).

Michael McCarthy illustrated that the trend of using holistic approaches in maritime studies in his 2003 article concerning Western Australia has a negative effect on the discipline. The article addressed the fact that many people do not understand the difference between maritime history and maritime archaeology. He suggested that a holistic approach is decades old and is politically charged and costly to maritime studies (McCarthy 2003:31). He suggested that the negative effect the holistic approach has on
maritime studies is that the number of those who focus on maritime archaeology are diminishing and funds for this specialized discipline diminishing (McCarthy 2003:25-34). Holistic studies have really only emerged as a part of Australian maritime archaeology. There are very few reports produced that have used this approach to studying maritime history.

**Conclusion**

Infrastructure sites are an important resource for studying the global settlement process. Unlike shipwrecks, where much of the material culture represents a specific time period, infrastructure sites transcend specific periods. Although landing assessments have been limited thus far, sites such as Hogtown Landing show links between the landing’s development and the commercial needs of a community. Donald Linbaugh also demonstrated that landings were an important framework from which to base regional studies.

Wharves are also important infrastructures that further the study of a maritime landscape. These structures are an important accomplishment for their builders because they reclaim land from the sea. They extend the landscape into the water largely for commercial means. As Andrea Heintzelman pointed out (1985:193), wharves are a response to commercial needs. She illustrated that the size of a wharf reflected its owner’s wealth. Other wharf assessments have supported a structure’s connection to an area’s economic development, as was the case for the Merimbula Wharf in New South Wales, Australia.
Jetties and piers have received the most attention of researchers in the past thirty years. Many jetty studies have taken place in Australia where a cultural awareness of Australia’s reliance on the sea for its existence seems particularly poignant. Australians seem to be acutely aware of their culture’s dependence on a maritime landscape for their country’s development, and jetties are tangible artifacts representing this connection. Most of the jetty reports examined for this project conclude with a recommendation that a comparative study with other jetties of the region be completed. Comparing sites would give researchers a broader understanding of depositional material and lifeways of the people who used these sites. Docks and harbors represent more opportunities to examine the lifeways of shore dwelling peoples.

All maritime infrastructures are an expression of a culture reliant on a maritime landscape for development of its community. These structures are artifacts that connect distant shores both culturally and economically. In many cases, these structures were the first contact point between a colony and its mother country. As will be explored in later chapters, the questions remain: How far inland do these maritime landscapes reach? Are they solely related to the shoreline of an ocean, or do they stretch inland as far as navigable waters can take them? Later chapters will consider these questions as the case study for Red Banks Landing supports the assertion that culture follows the boat as far as it can, and that it is far beyond the breaking waves that the maritime landscape diminishes from the psyche of a community.
Chapter Three: Combining Central Place Theory, Maritime Cultural Landscapes Theory, and Cultural Landscapes Theory to Examine Maritime Infrastructure Sites

Introduction

As discussed in the previous chapter, researchers have documented many sites that include maritime infrastructure. Those researchers, however, primarily assessed infrastructure as cultural artifacts for a region. Many assessments ignore the impact that an infrastructure site such as a pier, wharf, or landing has on the development of a region. Favorable environmental conditions influence the placement of infrastructure sites and are central to the development of a community. For example, when examined in a theoretical context, infrastructure sites provide clues to why settlements arose where they did.

Waterways were the highway systems of their day, and maritime infrastructure operated as interstate on ramps or off ramps do today, providing much the same function for entering and exiting major conduits of travel. Just as logic dictated the placement of modern off ramps, it also dictated the placement of these structures along waterways. Research concerning the placement of piers, jetties, wharves, and other infrastructure sites is an important facet of the evolution of these sites. Their distance from one another and their distance to major trade centers reveal much about the logic behind settlement patterns.

Theories such as Central Place, Maritime Cultural Landscapes Theory, and Cultural Landscapes offer different perspectives on site interpretation. Each of these theories can be used to interpret a site based on its interaction with the landscape and with
neighboring sites. These theories, however, cannot create a complete picture of how a site was used in the past. Arguably, no theory can fully uncover a complete understanding of the past, but when theories are combined, a more robust knowledge of the past may be revealed.

Central Place Theory has been used primarily in geographic studies based on economic laws of supply and demand, but archaeologists found it useful for describing a site’s development based on settlement pattern studies. Maritime Cultural Landscapes Theory, a relatively new theory developed in the 1980s, has been used to describe Scandinavian cultures and the importance of the boat in their development. A third paradigm known as Cultural Landscapes Theory has also been used extensively in archaeological studies to describe how a site’s use evolves over time. Alone, these theories describe a site based on a single theme, economic development, technological dependence, or evolutionary change. By combining them, we may reveal more complex patterns of development.

Many features of a maritime infrastructure site make the combination of these theories appealing. First, these sites are both terrestrial and marine in nature, allowing for two kinds of special dynamics. Because these sites interface between land and water, it was here that travel by boat intersects with overland travel. This movement allowed for regions of the world to be settled that were previously inaccessible. Second, technological developments were essential components in making these sites useful. Finally, infrastructure sites, like terrestrial sites, evolved over time. By combining Central Place Theory, Maritime Cultural Landscapes Theory, and Cultural Landscapes
Theory, the evolution of maritime infrastructures are of central importance to the economic development and its role in maritime development of the region, and the evolution of its use. What follows is a brief synopsis of the three aforementioned theories.

**Central Place Theory**

Walter Christaller, a German geographer, developed Central Place Theory in the 1930s, primarily to articulate why some towns grew larger, and some remained small. Christaller asserted that this question not only concerned geographers, “but also … historians, sociologists, economists, and statisticians” (Christaller 1966:2). Many archaeologists recognized the validity of using this theory to interpret archaeological sites. Scholars such as Michael E. Smith, Carole Crumely, Alice Bee Kasakoff and John W. Adams, and Michael F. Dacey have used the geographically based theory to explain settlement patterns and archaeological sites.

Christaller considered centralization the key component to order. Human beings demand order in thinking, imagination, and expression. Order, however, is not the ruling factor, but centralization exists as an “inherent pattern of matter” (Christaller 1966:14). Christaller cites examples from community life as an expression of order in the form of public buildings such as: “the church, the city hall, the forum, the school” (Christaller 1966:14).

Christaller pointed out specific characteristics that give meaning to a settlement in economic terms. He argued that the chief function of a town was to act as the mediator
of local commerce as it interacts with the outside world. Residents from rural surroundings gravitated to the resources offered and dispersed from these centers.

A central place, as Christaller described it, is a settlement that provided services for the surrounding population and was arranged in an established hierarchy. Low order settlements offered low order services such as basic supplies. High order settlements offered high order or specialized services and were surrounded by low order settlements. Christaller also labeled other settlements that were not centers as dispersed places such as agricultural areas, point bound settlements, and harbors (Christaller 1966:16-17). Figure Three illustrates a simplified conceptualization of Central Place Theory. The largest point in the center of the illustration represents a high order settlement. Radial lines extend from the center, representing travel routes to satellite settlements, and low order settlements extend into the rural frontier from the satellite settlements.

Several key components were built into Christaller’s Central Place Theory, but economic motives were the cornerstone of the theory. The relationship of the consumer and producer of goods and their proximity, and the distribution of goods that gave this theory meaning. Christaller (Christaller 1966:20) stated:

But chiefly, it is not the production of goods, but the offering of goods and the rendering of services, which are bound to the central place. … To these central services belong, first of all, trade, which is center-oriented almost exclusively (an exception is the huckstering of the peddler), then banking, many handicraft industries (repair shops), state administration, cultural and spiritual offerings (church, school, theater), professional and business organizations, transportation and sanitation.
Although Central Place Theory was devised to explain how central places developed geographically, it has been adapted for understanding the archaeological landscape. Many archaeologists have used Central Place Theory to explain the evolution of urban centers that provide service and market activities. For example, Michael E. Smith (1979:110) used Central Place Theory to analyze settlement locations of the Aztecs in the Valley of Mexico. He showed that commercial factors were important components of determining settlement patterns before the Spanish conquest in 1519 (Smith 1979:110). Scholars have also used the theory to explain pre-industrial and pre-historic site development (Dacey 1966:550). Several archaeologists have used this theory to describe site development in pre-contact Meso-America and in marriage.
patterns in island cultures (Crumley 1976:60; Kasakoff and Adams 1977:48-64). Central Place Theory, however, fails to adequately address all facets of the settlement process.

Addressing the issue of water transport and its influence on the settlement process was a primary weakness in Central Place Theory. Christaller labeled places on the periphery that did not fit in his model as dispersed places. These dispersed places covered regions that were not centers including “all those settlements which are bound to certain points of the surface of the earth, i.e., bound at absolute points … for instance, bridges and fords, border or custom places, and especially harbors” (Christaller 1966:16). Places bounded by water, Christaller argued, had fixed boundaries, but he failed to account for these points as components in a larger transportation network for the distribution of goods. Central Place Theory weaves very concentric patterns of urban settlements across the landscape of southern Germany, but in other regions when it reaches a water boundary, it begins to unravel. Central Place Theory provided an important starting point for landscape studies, but as it is applied to real landscapes, natural forces within the terrain create insurmountable barriers. Combing this theory with other landscape theories provides compelling arguments for settlement distribution.

Maritime Cultural Landscapes Theory

Although Maritime Cultural Landscapes Theory was not created as a response to Christaller’s Central Place Theory, it does address many weaknesses that Central Place Theory possessed. Christer Westerdahl’s theory addressed maritime landscapes as a cultural creation. He asserted that maritime preoccupation within a culture created its
identity, not a culture’s physical proximity to the shore. In his view, culture “follows the
boat and its crew even inland,” to establish a cultural component to settlement related to
inhabitants’ reaction, exploitation, and dependence on maritime resources (Westerdahl
2003). Further, he described the maritime cultural landscape in economic terms, much
like Christaller’s assertions on site development using Central Place Theory. Westerdahl
stated that “the maritime cultural landscape signifies human utilization (economy) of
maritime space by boat: settlement, fishing, hunting, shipping and its attendant
subcultures, such as pilotage, lighthouse and seamark maintenance” [emphasis in
original] (Westerdahl 1992:5). Westerdahl distilled his theory into two primary concepts:

1. The long perspective, where heavy transport was the central issue to creating
central zones of travel. This corridor of travel applied to land as well as sea
travel.

2. The means of transport, where ship construction and means of propulsion were
“adapted to the natural geography of the zone in question, the details of roads,
coasts, routes, harbours and the directions of prevailing currents and winds within
the zone” (Westerdahl 2003). Cargoes and their loading practices were taken into
account in this concept.

These concepts embodied the means of travel, as well as the manner of travel within a
maritime culture as it attempted to unite water and land in a cultural context. The manner
in which people exploited the land was a direct result of how they exploited the water,
thus creating the nuances of their culture. The sea, for instance, could influence a culture
that was farther inland because the main corridor for transporting goods relied on the
water. Rivers were the main method of travel for many settlements, so transporting goods far inland from a seaport influenced a culture farther upstream. Figure Four illustrates zonal distribution.

Figure 4 Christer Westerdahl's Depiction of Transport Zones (Westerdahl 1992:11)
Westerdahl’s theory enveloped material byproducts of cultural processes such as ship construction and ship adaptation as a reaction to natural as well as cultural influences. It also addressed the natural obstacles that shape zones such as sea routes for open water, mountain ranges, shallows, banks, portages, rapids, and other obstacles to transport.

Maritime Cultural Landscapes Theory has been applied to both Bronze Age Scandinavian sites as well as Medieval European sites, and these examples provided insight into the development of ports and maritime cultures of these regions (Westerdahl 2003). The theory also documented the existence of established waterways in Scandinavia and the coastal development patterns that included “fishing on shoals as well as navigation, harbour constructions, fords, bridges, ferry sites and intentional sailing blockages. Accordingly, a vision of the total topography of the waterfront area [developed from the formation of this theory]” [emphasis in original] (Westerdahl 1992:6).

Maritime Cultural Landscapes Theory has been never implemented in the United States as a theory of development and settlement, especially colonial development of the East Coast. Because this theory is a relatively new development, that factor may contribute to its lack of use at this point in the United States. In northern Europe, Maritime Cultural Landscapes Theory provides a method of understanding transportation patterns in areas where different cultures throughout time inhabited. Areas that were centrally situated provided evidence of relict patterns of transportation. These studies revealed patterns of adaptation for transportation networks from different cultural
influences as well as different time periods. Much like the studies in northern Europe, Maritime Cultural Landscapes Theory provided insight into adaptation patterns of early colonial settlers (Westerdahl 1992:6). Specifically, this theory can be useful in understanding how cross-cultural adaptations were made from observing the behaviors of Native American inhabitants and adopting their methods of travel to explore new routes for a region. Maritime Cultural Landscapes Theory provides insights into interface sites by addressing the issue of cross-cultural land use. It also can reveal maritime technology evolution and development by considering terrain, water routes, and river conditions for a specific region.

Cultural Landscapes Theory

As Maritime Cultural Landscapes Theory evolved, so did its terrestrial counterpart Cultural Landscapes Theory. In the early 1990s, some terrestrial archaeologists embraced the concept that landscapes provided the ability to unify sites as a larger network of human activity instead of viewing a site as an isolated entity. This theory, like Central Place Theory, originated as a theoretical concept in the discipline of geography. The geographer Carl Ortwin Sauer, initialized this concept in 1925. According to Sauer, the human landscape shaped the physical landscape, and material culture is the result. In Sauer’s view, the material culture left on the land helped to define the landscape (Sauer 1963:315-350; Lewis 1983: 243).

Fred B. Kniffen, one of Sauer’s students, furthered the concept of defining the landscape through material culture,. In 1936, Kniffen wrote about house types in rural
Louisiana – the most significant artifact of everyday life. For the next thirty years, he expanded this study to include the entire southeastern United States. He concluded that the houses formed patterns across the southeast, and they represented surrogates for movements of cultural ideas (Kniffen 1936:192; Lewis 1983:244-245). Other geographers such as Hildegard Binder Johnson described political influences on shaping the landscape. In her book, *Order Upon the Land* (1976), she illustrated her theory on the development of the American rectangular survey system, and the role of culture and immigration as an integral component to the formation of landscapes (Lewis 1983:254; Johnson 1976:15).

During the 1950s, W.G Hoskins most thoroughly developed the concept of Cultural Landscapes as a geographical theory in *The Making of the English Landscape* (1977). His concept ascribed organization to the English countryside according to the land’s possible use and its environmental constraints. The use and reuse of the landscape resulted in new cultural layers forming over earlier ones. By examining the landscape, researchers could uncover social, cultural, economic, spiritual, and administrative realities of a region (Hoskins 1977).

The English landscape has repeatedly been an intriguing topic for geographers. With its long history, Great Britain’s landscape has been adapted and reused countless times over the duration of its history. Distinct features that have defined the English landscape for centuries include hedgerows and walled fields. There are approximately 616,000 miles of hedgerows providing a matrix across the countryside. These rows enclose approximately 80 percent of agricultural land in the country (Lowenthal and
Prince 1964:317). They not only define field lines, but they give definition to the overall landscape – separating rural from urban, agricultural from industrial.

The English landscape, and arguably any landscape subject to human interaction, is in a constant state of change, but “cultural landscape can itself capture different even competing, sets of meaning, or independent thematic networks of knowledge – networks presenting the landscape as nature, habitat, or history – and that these really are inherent in each cultural landscape” (Schein 1997:663). In other words, different viewers of the landscape will observe different components of it because of what the viewer brings to that experience and the complex nature of the landscape itself. Lowenthal and Prince best describe the use of the English landscape throughout time in this way:

Just as they accommodate industrial artifacts to attractive rural landscapes, so the English find something potentially worthwhile in the dreariest wastelands. In worked-out mining country subsidence pits become lakes and ponds, noxious marshes are drained to create pasture and heathland, and colliery tips, when pioneer vegetation colonizes their distinctive topography, embellish flat terrain as intriguing landmarks. No landscape is abandoned as beyond hope (Lowenthal and Prince 1964:346).

The World Heritage Committee further defined this concept of adaptive reuse as a part of cultural landscapes. Three categories constituted this concept: defined landscapes, organically evolved landscapes, and associative landscapes (Rossler 2000:137). Defined landscapes described highly managed environments that were intentionally designed such as parks and gardens and were usually associated with monuments or religious structures. Organically evolved landscape described terrain that evolved over time and reflected their specific features such as a mining region or an urban center such as New York City. On a smaller scale, Greenville, North Carolina would also constitute an organically
evolved landscape. A relict landscape was a subcategory of organically evolved landscape. It referred to a region where this process or activity that defined the terrain had ended. A continuing landscape was also a subcategory of organically evolved landscape. It referred to an activity that was still defining the area. Finally, an associative landscape referred to terrain linked to the natural environment with “powerful religious, artistic, or cultural associations” (Duncan 2000:11-13). Gettysburg Battlefield would be an example of an associative landscape because it is associated with an important historical event.

According to Brad Duncan, Cultural Landscapes Theory’s application to terrestrial archaeological sites may not adequately provide evidence of contemporary usage of the land. He stated, however, that ethnographic data and historical information provided another source for revealing information concerning a landscape. This holistic approach applied to regional studies offered a multi-disciplinary methodology for understanding a landscape. Duncan stated:

This concept acknowledges that any one given area may host a range of divergent societies and usage, and therefore has the ability to integrate their resultant cultural values into an overall view of regional utilisation, which does not rank one value above another, but considers all values equally as integral components of a dynamic regional cultural framework (Duncan 2000:14).

Cultural Landscapes Theory evolved from the discipline of geography to archaeology. The theory intrinsically connected the human activity with shaping the landscape. The concept of theory became a legal reality when the World Heritage Committee used theory to define landscape classifications for protecting cultural sites globally.
Conclusion

Each of the above outlined theories offered insight into maritime infrastructure sites. As interface sites are complicated by their maritime as well as terrestrial nature, each theory suggested an interpretation that, on its own, offered a distinctive picture of the site’s development throughout its history. When these theories combine, however, a more holistic picture emerges. As this thesis will demonstrate in the following chapters, Red Banks Landing provides an ideal setting to illustrate the evolution of central place types its riverine environment reveals its evolution as a travel route in the absence of adequate roadways. Its economic importance connects it to a culture dependant on the land for agricultural production and forest industry -- especially the production of naval stores -- and on the water for transporting goods.

Central Place Theory addresses economic factors such as supply, demand, and volume needed to create stable urban centers. It also explains population pressure as a factor of the settlement process. By applying a hierarchy to settlements and their relationship to one another, a network of cooperation for goods and resources becomes a key factor in the evolution of not only urban centers but smaller hamlets as well. In chapter two, several archaeological site reports implied that this interface between water and land was an essential economic link for the region’s development (Kerr 2003:85-96). Central Place Theory provides an economic explanation to interface site development as distribution points for a surrounding community.

Maritime Landscape Theory provides the means to understand the resistance factors to settlement that Central Place Theory lacks. It offers insights into how
resistance shaped settlement preferences. It addresses how material adaptation occurred to accommodate different regions such as boat design and technological change. The theory also addressed the manner in which cultural pressure defines settlement boundaries. As addressed in Chapter Two, the Holdfast Bay Jetty was a technological achievement, making the jetty appealing for recreational outings as well as accommodating the movement of commercial goods from distant ports to the region (Richards and Lewczak 2002). This site represented how technology accommodated a maritime culture in an economic manner as well as a recreational one. Maritime Cultural Landscapes Theory provides a different explanation through which to interpret maritime infrastructure sites. This theory offers insights into the importance of maritime transport and marine technology for settling a region that was an otherwise nearly impenetrable terrain.

Cultural Landscapes Theory further defined landscape archetypes that classify landscape development. Cultural Landscapes Theory connected human activity and topography over time. The theory can also connect water routes and human activity. Water, like land, has topology that affects the manner in which people interact with it, and its use evolves over time.

Specifically, Cultural Landscapes Theory defined organically evolved sites. It provided an interpretation of the relict nature of an interface site, and its dependence on maritime technology that other forms of transportation technology eventually supplanted. Several Australian jetty projects acknowledge site evolution and in turn, community evolution as a factor in its popularity and decline. The report for conserving the One
Mile Jetty in Carnarvon, Western Australia, discussed the relict nature of the jetty. In his report, John Taylor cited its shallow harbor as the reason the jetty fell into disuse. The technology of cargo ships had simply evolved beyond the jetty’s capabilities.

No infrastructure studies have embraced theoretical models as part of their interpretations for archaeological sites, but some site reports have implied theories at work as mentioned in Chapter Two of this thesis. Central Place Theory, Maritime Cultural Landscapes Theory, and Cultural Landscapes Theory provide important opportunities for researchers to understand not only the importance to maritime infrastructure sites, but also their importance to the developing landscape.

For these reasons, the case studies outlined in Chapter Two may be seen to represent several missed opportunities for a theoretical approach to inform an archaeological study. In Chapter Four, these three theories will be used to describe Red Banks Landing, one of many landings located along the navigable stretches of the Tar River.

Chapter Seven will explain that by combining Central Place Theory, Maritime Cultural Landscapes Theory, and Cultural Landscapes Theory a clearer picture of an interface site emerges. The evolution of Red Banks Landing illustrated its importance to the economic development of the region, its role in maritime development, and its use by different cultural entities.
Chapter Four: Methodology and Field Research at Red Banks Landing

Introduction

On the Tar River in eastern North Carolina, there are seventeen landings between Tarboro and Washington (Stout Map 1978). None of these sites, however, has been the subject of an archaeological study. Their relationship to each other, their participation in shipping on the Tar, and their economic impact on the region are largely unknown. Completing field research at Red Banks Landing provided an opportunity to test theories concerning Central Places, the landing’s connection to a maritime landscape identity, and its status as a relict to the historical landscape. The research also attempted to connect the land with the water in one cohesive study. This study was designed to fill gaps in material regarding landings and to broaden the understanding of archaeological sites in eastern North Carolina. Like landings, the area of eastern North Carolina as a whole was also subject to a lack of archaeological research in the past.

From 1958, William G. Haag stated, “very little specific knowledge is available about the cultural succession of aborigines in the whole of coastal Carolina. Even more specifically, it may be said that the bordering lands of the Carolina Sound – that great stretch of the Albemarle, Pamlico, Croatan, and Roanoke Sounds – are terra incognita to the archeologist” (Haag 1958:1). By 1983, Joffre Coe dismissed this long held belief that the Coastal Plain was still a mystery to most archaeologists. He stated that as late as 1979 this statement was still being published as a truism to describe research of the
Coastal Plain. He stated that archaeological research in the region increased, but quantitative analysis of the data recovered was still largely absent (Coe 1983:161-162).

In the mid-1990s when Red Banks Landing was assessed for the first time, it was part of a larger study that was conducted for the Greenville area (Byrd 1995:1-2). The research of the Red Banks site was limited to a general confirmation that it was an archaeological resource. Red Banks Landing provided an opportunity to compile information from other sites in the Coastal Plain and assess its relationship to them. It also provided the opportunity to formulate hypotheses concerning how central places in eastern North Carolina evolved, and what role landings such as Red Banks had in developing these central places.

The work conducted for this thesis attempted to broaden the knowledge of Red Banks Landing and take it from a qualitative component to a quantitative whole. In other words, this work was an attempt to bring in depth analysis to a landing site by conducting historical research, a terrestrial survey, an underwater survey, and make observations concerning the interconnectedness of these two environments.

**Historical Research**

Before ground was broken at Red Banks Landing, an intensive historical investigation began to discover what had been written previously concerning the landing. This historical investigation continued during the field project and after the fieldwork was completed. The author consulted local histories concerning Greenville, Pitt County, and eastern North Carolina. Henry T. King’s, *Sketches of Pitt County* (1976), was an
important resource early in the project. This text only briefly mentioned Red Banks Landing, but this discussion led to the discovery of the original land patent and patent holder. This information was located in the Beaufort County and Pitt County Deeds offices. These primary sources were critical starting points for tracing the lineage of the property to its current owners. These records provided insight into how the property was used throughout its recorded history. This deed search was essential in offering clues to land use as there were very few other records concerning the property or its owners.

*The Colonial Records of North Carolina, second series* (1963) was another important primary source this author consulted. These materials recorded the official colonial proceedings for the colony and provided several references to appropriations to establish an inspection station at Red Banks Landing (Clark 1963:581). This reference provided a link to tobacco, naval stores, and other import goods for the region. It also led to vital secondary sources such as “The Naval-Stores Industry in the Old South, 1790-1860” (Perry: 1968:509-526), “Inland Navigation in North Carolina” (Crittenden 1931:145-154), and various articles by Alan D. Watson concerning the regulation of roads, bridges, and ordinaries in eastern North Carolina and the ferry system. These primary and secondary sources offered clues to what might be discovered archaeologically at Red Banks Landing. These, along with many others listed in the references section of this thesis, were used to discover what Red Banks Landing’s habitation may have been like for the duration of its occupation. The historical resources provided limited answers concerning activity at the landing. The fieldwork and archaeological evidence uncovered at the site enhanced the historical records.
Fieldwork at Red Banks Landing

Field research at Red Banks Landing was conducted on land and in the water and paralleled an assertion that Clive Cook made for Masons Cove in Tasmania. He believed that a shore based survey would enhance the underwater survey that had taken place (Cook 1982:1-5). Although the Red Banks fieldwork took place before the author consulted the Masons Cove resource, the assertions for both Red Banks and Masons Cove were similar in nature. Completing both types of survey at Red Banks would provide links about the land and its relationship to the river. One important question for the terrestrial survey was to determine if there was intact archaeological deposits, or stratigraphy, at the site. Sites in the Coastal Plain rarely contain intact stratigraphy, or undisturbed soil layers that hold material culture in a temporal order (Phelps 1983:19-20). Discovering if Red Banks Landing contained deep intact stratigraphy would further understanding of the archaeological record in the region.

With an assessment of Red Banks Landing, I could address other concerns such as the relationship between the landings on the river and demonstrate their connection to a maritime landscape. As Chapter Five will demonstrate, the history of Red Banks Landing revealed a fraction of its connection to the maritime landscape. The archaeological analysis, however, reinforced this connection through the artifacts recovered from the site, closer examination of the structure, and experimentation concerning environmental effects on the site.

Several broad objectives guided the research design for Red Banks Landing’s excavation. These were broken down into land objectives and water objectives. The
terrestrial survey goals were to examine Red Banks Landing’s stratigraphy and assess the types of artifacts recovered from the site. The primary underwater goals were to establish the size of the landing structure and to assess the physical characteristics of the river that made the site ideal for building a landing in the river at that location. Fulfilling these goals would lead to answers regarding the landing’s place within the landscape as a center for development in the region and determine its maritime connection.

In March 2000, two crews, a terrestrial crew comprised of students from East Carolina University’s Department of Anthropology, and a maritime crew comprised of students from ECU’s Program in Maritime Studies, began fieldwork to meet the stated goals for Red Banks Landing. After an initial reconnaissance to relocate the site, a pedestrian survey determined the site boundaries, noting disturbed features of the landscape and surface scatter in the area. The plow zone delineated the terrestrial boundaries of the archaeological site since no useful data could be recovered from the disturbed terrain. The US Army Corps of Engineers dug and maintained the river channel and created the underwater boundary of the Red Banks Landing site.

**The Terrestrial Field Work**

The terrestrial survey was conducted within the boundaries of the riverbank, the mouth of Parkers’ Creek, and the sand pit operation that bordered the fieldwork area. This boundary area coincided with the Department of Cultural Resources site designation for the Red Banks Landing site. It actually had two designations of 31PT525 and 31PT525** because of its prehistoric and historic components. From the field research,
the field archaeologists created a site map to depict all archaeological activity that proceeded at the site (see Figure Five).

Some of the tasks undertaken during the fieldwork were beyond the scope of this thesis. Such was the search for a recorded grave on the site. During the walkover of the site, the field crew conducted a search for John Speir’s grave, the original land grant holder of Red Banks Landing during the late eighteenth century. Several historical accounts and local informants reported the grave’s location within the property’s boundaries near the riverbank and the landing (Eastern Reflector 1903). The grave, however, was never located.

Before any field-testing was done, the researchers determined the boundaries of Red Banks Landing. The river provided a natural boundary for the terrestrial site, and the plow zone and sand pit operation provided boundaries north and east of the landing. Once the test site was determined, shovel test units were laid out thirty feet apart for optimum coverage of the undisturbed areas of the site. Shovel test units are holes a shovel width in size dug to sterile soil. Field researchers dug these to determine the presence or absence of material culture deposits and to indicate stratigraphy within the soil layers.

The units were laid out in three transects labeled rows A, B, and C (Figure Six). Each individual test unit received a unique number within the row for reference. The parallel transects spread thirty feet apart began at the mouth of Parkers’ Creek at the northwest corner of the site and preceded in a southeasterly direction one hundred and
Figure 5 Site map created from the 2000 fieldwork at Red Banks Landing. Site plan drawn by Kristian Nixon, March 2000.
fifty feet. A total of thirty-four shovel tests were excavated at Red Banks Landing, which gave complete, systematic coverage of the site.

After the author laid out the shovel test locations, she established an arbitrary datum at the site as a reference point for measurements. The author tied the datum point into the benchmark near the Arthur Tripp Memorial Bridge using two control points to establish its location for precise geo-referencing. Figure Six shows the location of shovel test rows, as well as the datum located in a very large cypress in the swampy region of the site area.

![Figure 6 Shovel test rows at Red Banks Landing designated alphabetically and numbered sequentially. Site plan drawn by Kristian Nixon, March 2000.](image)

Once the datum was established, researchers recorded site reference points using a Lietz total station. The author and the surveyor for the project set up the total station on the opposite shoreline in order to obtain a line of sight vantage point for the entire site.
This approach was necessary since the terrain and forest cover prevented total visibility of the site on the same side of the river.

The data collected with the total station included the latitude and longitude of each point taken as well as the elevation. The surveyor downloaded these data points directly into AutoCAD 2000 to decrease the possibility of human error by eliminating a step in the conversion process. The computer program interpolated these data points to depict elevation contours and data points as they related to the established datum.

Once the surveyor recorded the datum, shoreline, and shovel test locations with the total station, shovel test excavations commenced. Field crew members dug shovel tests to sterile soil, where no artifacts were present. The crew measured and described soil stratigraphy, and they recorded overall depth of the finished shovel test (Figure Seven). The crew sifted all soil from the excavation through ¼-inch mesh screen for artifact recovery. Workers then placed all artifacts in artifact bags and labeled for future reference and study.

After completing the shovel tests, the author analyzed data to determine the best location for a full excavation unit. The author assessed data from the prehistoric and historic periods to determine their site location. The region with the highest concentration of both prehistoric and historic artifacts, and the region that had the least modern human intrusions was the most suitable area for excavation. The researcher determined this location based on the artifact distribution, diversity among the shovel tests, and the terrain of the site. Although there were several regions within the site boundaries that contained both prehistoric and historic artifacts, there was a limited area
that was left undisturbed and had terrain suitable for an excavation unit. Figure Eight
depicts the distribution of pre-historic and historic material as well as the location for the
excavation unit.

Based on stragraphic analysis in the field, the field researcher deemed that only
one area was suitable for an excavation unit. The excavation unit was three feet by six
feet systematically dug in arbitrary levels and natural layers to reveal artifacts and their
location within different soil layers (Figure Nine). The field crew dug the unit to
determine if there was intact stratigraphy at the site, primarily if the soil layers remained
distinct layers and held a temporal progression of artifacts, or if the soil layers
intermingled thus mixing the artifacts from one time period to the next. The crew
removed artifacts from the site; they cleaned, analyzed, and the author returned to the
property owners when she completed the study.
Figure 8 Location of the test unit was based on the distribution of pre-historic and historic artifacts found at Red Banks Landing. Overlay by: Kathy A.W. Southerly
The Maritime Fieldwork

While the field crew conducted terrestrial survey, maritime studies students completed the two water surveys that the research design outlined. The first survey consisted of recording bathymetric readings perpendicular to the bank of the Tar River, for the purpose of recording the contours of the river bottom. Figure Ten depicts the starting points for this survey.
Figure 10  Bathymetric lanes were spaced sixty feet apart on the bank of the river. These points are depicted with crossed squares. Site plan drawn by Kristian Nixon, March 2000.

A twenty-one foot inboard/outboard power boat served as the survey vessel for the bathymetric study. The survey tools comprised a rope, marked at ten-foot intervals to maintain consistent distance measurements from shore into the river, a compass to maintain a consistent bearing away from the shoreline, and a measured probe, to measure the depth of the river. The researcher entered the data into Surfer 7 (Golden Graphics), a contour-modeling program, to develop a graphic representation of the bottom contours of the river (Figure Eleven). These data answered important questions concerning the placement of the landing. The bathymetric survey illustrated the characteristics of the river bottom that made this location ideal for a boat landing. Even though the water is
shallow in this area of the Tar River, the relatively abrupt slope of the bank made it suitable for a boat to come close to the shore without touching the river bottom.

Figure 11 Contour map produced from the bathymetric data taken at Red Banks. Numeric increments are in feet. Map created by Kathy Southerly, August 2000.

The second survey that the maritime studies students conducted was a presence/absence survey for material culture surrounding the landing. The goal of this systematic survey was to determine if remains of the landing structure, or material culture that had been discarded from the landing, were present beneath the tannic water of the Tar River. To complete the survey, the crew established two lanes parallel to the shore
and the visible pilings in the river. Two buoys marked the beginning and ending points for each lane (Figure Twelve), and the crew probed the river at ten-foot intervals for the presence or absence of material culture. The researcher recorded the presence/absence data for later analysis. Once the survey was complete, ground-truthing, or verifying points where material culture may have been located, began. Researchers used snorkeling equipment to verify the findings of each survey point, and the crewmembers described their findings. To establish a shoreline reference for the fieldwork, the crew took survey points using the total station to establish the existing shoreline. They also surveyed the visible pilings and the retaining wall that shored up the bank and included these data on the site map.

After completing the terrestrial and underwater surveys, the author, Dr. Bradley A. Rodgers, and Mr. Frank Cantelas conducted a side scan sonar survey at Red Banks Landing, using a MarineSonics Sea Scan Sidescan sonar with a 600 Khz tow-fish. There was some concern that because of its proximity to the riverbank there would be significant echo that would distort the readings, but there was little distortion from the shoreline observed in the actual images recorded from the sonar data. From an outboard motorboat, the group made several passes at the landing to obtain sonar data. The sonar device recorded each pass of the landing and then Mr. Cantelas downloaded these data into a computer. The author interpreted these data using the Sea Scan PC review software. The side scan data is depicted in Figure Thirteen. The author interpreted and compared these data to the presence/absence survey conducted at the site several months earlier. The side scan images verified the presence of the second row of pilings that the
Figure 12 Arrows mark the starting points for the bathymetric survey and the buoys used to create the presence/absence survey. Site plan drawn by Kristian Nixon, March 2000.
crew observed in the field. Their uniform spacing paralleled that of field observations and locations recorded using the total station. Achieving the same results from the side scan sonar survey as from the field observations strengthens the assertions that the landing was much larger than it appears from the visible remains that break the water’s surface.

Figure 13 Side scan data from Red Banks Landing. Note the row of pilings on the left side of the data. Data produced on June 29, 2000.
Data Interpretation Methods

Once the author processed the artifacts (see Chapter Six), she then consulted with several leading experts and data analysis tools to interpret the data. After consulting Dr. David S. Phelps of East Carolina University, the author classified the prehistoric artifacts by ware type and date range. Dr. Charles Ewen of East Carolina University assisted the author in assigning a ware type to the historic ceramic artifacts as well as assessing the date range for each ware type. The author also used several type collections for identifying artifacts (Saint Mary’s City University Archaeology Database 2003; Diagnostic Artifacts in Maryland 2003). For analyzing various artifacts, the text, *A Guide to the Artifacts of Colonial America*, was a vital resource (Hume 1969).

Although the artifact collection was rather small (211 artifacts) for Red Banks Landing, the author applied several dating formulas to the artifacts for an indication of a date range that the landing was the most active. The mean ceramic date formula provided the calculations for dating the ceramic assemblage (South 1978:72). One can express the formula thusly:

\[
\text{Mean ceramic date} = \frac{\sum (d_1 f_1)}{\sum f_1}.
\]

This formula provided a date midpoint for the time period in which the landing was the most active. The author applied a dating method to the small collection (five pieces) of pipe stems recovered from Red Banks Landing. According to J.C. Harrington, (1978:63-65) pipe stems can be used as a dating tool for a site, and Lewis Binford
(1978:66-67) furthered the study by deriving a mathematical formula for stem evaluation. Binford expressed the formula thusly:

\[ Y = 1931.85 - 38.26X. \]

Both researchers argued that an adequate sample of pipe stems must be used for any semblance of accuracy in dating. Although the artifact assemblage was small, the researcher applied these statistical methods at Red Banks Landing to provide a timeframe for human activity at the site.

**Conclusion**

Historical documentation for the Red Banks Landing project established background knowledge from which to inform the excavations at the site. The field methodology established parameters to answer questions concerning the landing, specifically how the terrestrial site and the underwater site were related. Also, several methodologies corroborated each other’s findings. For instance, the presence/absence survey located a second row of pilings beyond the visible row above the waterline, and the side scan sonar provided additional evidence of the second row that was not apparent during the physical survey.

The waterline and pilings created several technical problems when surveying between land and water. For example, the first boat employed for the bathymetric survey was too large, so the crew replaced it with a smaller craft to maneuver between the shore and the pilings. At Red Banks Landing, the structure became an artificial extension of the land, and the field researchers set out to establish the significance of that connection.
The field investigation successfully reinforced this connection in the historical documentation of the landing as illustrated in Chapter Five.

Although the artifact assemblage was small, the author used several research techniques to suggest date ranges for the active period of the landing. Chapter Six of the thesis illustrated the archaeological findings. These results combined with the historical research findings reinforce many of the assertions the field crew set out to prove.
Chapter Five: The History of Red Banks Landing

Introduction

Maritime culture in eastern North Carolina evolved from the region’s dependence on water travel and production of maritime related goods during the colonial period through the mid-nineteenth century. Specifically, the naval stores industry, forest products produced from pine trees such as tar, pitch, and turpentine used in shipbuilding, was the catalyst to settlement growth among the pocosins and swamps of the eastern region. Naval stores provided an economic incentive for growth, and landings along the watercourses provided the means to transport these crucial goods to larger markets (Bratton 1991:23).

These out of the way connections between water and land created a foothold for settlement on the frontier. As discussed in Chapter Three, Red Banks Landing’s development relied on its function as a dispersed place, an outpost along the waterway. Red Banks Landing was an attempt to extend the coastline farther inland as a commercial distribution point for a new settlement. Most importantly, the landing was a vital link in the supply chain for the naval stores industry that fueled the economic prosperity of the region. More than other goods such as tobacco, animal products, and grain that were shipped from the landing, the naval stores market affected the occupants of Red Banks Landing and their prosperity. The decline of naval stores affected the eventual decline of the landing (Outland 1996:31-32).
Naval stores provided an incentive for settlers to penetrate the wilderness and supported growth of the region throughout the colonial period. Eventually, some of these dispersed outposts became central places carved out of the surrounding wilderness. Some of these centers became vital components to central places on the new American frontier, and their marketable feature was their connection to a navigable waterway, with landings as important entry points. This was true for the growth of Red Banks Landing, and as noted in Chapter Three, the chief function of a town was to act as a mediator of local commerce as it interacts with the outside world (Christaller 1966:16-17). Other factors such as the topography of a region also affected its growth to become a central place. These factors played a role in the development of Red Banks Landing as well as playing a major role in hindering its ability to support the growth of a central place on the north side of the river. In eastern North Carolina, naval stores were the primary commerce. In the case of Red Banks Landing, its development relied on the naval stores market, although there were many other products shipped from the landing. When the naval stores industry declined as an economic force in the late 1850s, Red Banks Landing became a relict landscape (Powell 1989:136; Duncan 1966:11-13).

This chapter illustrates the intertwined development of a community and a commodity over the course of time. It also illustrates that factors that inhibit growth. The history of Red Banks Landing informs our theoretical understanding of the maritime landscape as discussed in Chapter Three. It highlights the resistance factors a central place may face even when other favorable components are in place. This chapter also provides background information for the interpretations made in Chapters Six and Seven.
Landings As Commercial Strong Points For New Settlements

North Carolina grew sluggishly as a colony in the eighteenth century, but Red Banks Landing and other sites like it made growth possible. The landing provided a gateway for the exchange of industrial products and consumable goods. From its earliest land patent, the owners of Red Banks created an access point to the British Empire and its larger markets. The landing was the first stop in an export chain for naval stores vital to the British navy and the merchant ships of the British Empire. It was also the end of the line for imported consumable goods that supported the settlement’s growth. The inhabitants of eastern North Carolina used the waterways as their primary means of transportation. They traveled the inland rivers and sounds by means of shallow draft vessels such as canoes, perriaugers, and flats. Early settlement only existed on creeks, rivers, and sounds because water transportation was much easier than land transportation (Clonts 1926:16).

Travelers from other colonies remarked as late as 1737 that everyone including men, women, girls, and boys could operate small craft in the rivers and sounds (Crittenden 1931:147). In 1741, James Murray wrote to a London merchant who had acquired a large tract of land in North Carolina that in order to do business in eastern North Carolina he would need a “cooper and a craft that will carry about 100 barrels.” His business endeavors had suffered because he lacked these items (Crittenden 1931:146). Murray’s statement was informative on two levels. First, he established the need for water travel in the east, and second, he demonstrated that the waterways were the economic life blood of the region.
Red Banks Landing was one of the first areas to be settled far inland on the Tar River (King 1976:26). The landing was established sometime between the end of the Tuscarora War in 1711 and 1725 when a tobacco inspection station was established there (Duncan 1966:3). Captain John Speir emigrated from Virginia in the early 1700s. He was the first to settle the land and built the landing (Eastern Reflector January 9, 1903). When the patent was recorded in 1744, Speir had already occupied the land for at least twenty years (Beaufort County Deed Book 3:416; John Speir Last Will and Testament 1760). Red Banks was one of many patents granted to Speir and included 412 acres of land accessible from the river (Beaufort County Deed Book 3:416).

In 1743, a year before Speir received the land patent for Red Banks, the colonial government passed an act that gave the justices of Beaufort County the authority to construct two warehouses, one at Bath and the other at Red Banks. The colonial officials intended that these warehouses serve as central locations for paying taxes and levies as well as for inspecting goods being shipped from the region. These goods included tobacco, “beef, pork, rice, tar, pitch, turpentine, fish, flour, butter and flax-seed, staves and headings, sawed lumber and shingles,” and in Pitt County there were six designated landings for inspection including Speir’s Red Banks Landing (Clark 1963: 581). Because landings were crucial to the development of the region, petitions for access to the landing were often requested as well as a road leading to the landing (Watson 1968b:406). Since the landing existed for several decades before the official warehouse was constructed, it is likely that a road connected the landing to areas without water access. Road access would add to the desirability of locating a warehouse at Red Banks (Watson 1974:249).
Twenty years after the first mention of the landing as an inspection station in the 1720s, there was sufficient growth in the region for the colonial government to allocate funds for a warehouse. Red Banks developed from a peripheral center for supplying the frontier to a commercial center for inspecting and storing goods produced from local constituents. While no description of the warehouse exists, it was probably a similar design to other official warehouses built in eastern North Carolina. For example, the Tyrrell County Court ordered a warehouse to be built at the “Scopernung” [Scuppernong] in September 1740:

It is ordered that the Said Edw[ar]d Phelps be allowed one Hundred and Thirty pound for Building the Said Warehouse by the Dementitons as followeth Vizt. Twenty five foot Long, fifteen foot wide, Seven foot Between [torn] and to be Set on falce Sills and to be a Strong framed ho[torn] and well Shingled and weatherboarded and to make a good Earthen f[oor] with Two Sufficient prizes in the Said house well Done and Str[ong?] and the house to be Twice Tarred in the Bargain, the Dore to be five foot wide with one window and a Small falling Table fastened between Two Studds. … (Angley 1981:4-5; Burr 1981:4-5).

The warehouse at Red Banks Landing provided a central location for Beaufort County residents to pay their taxes and bring their goods down river. The types of goods listed for inspection reveal the types of commodities that the colonists produced. Obviously, farming was an important endeavor for local residents. Settlers raised beef and pork, and harvested wheat and flax (Clark 1963 XXIV:581). There were also several forest products mentioned for inspection, including sawed lumber and shingles – materials used for building. It is interesting to note the number of products listed that supported the naval stores industry – tar, pitch, turpentine, and staves and headings that were used to
produce storage barrels. The wide range of goods that required inspection is evidence that there were varied products being produced from the new frontier.

**Ferry System and Red Banks Landing**

By the 1760s, a ferry became a necessary means of connecting the low lying north side of the Tar to the developing town of Martinsborough (later known as Greenville) on the higher ground of the south side of the Tar River. The growing town’s economic activity began to shift to the opposite side of the river and may have been offset Red Banks’ commercial growth. The ferry most likely accommodated the existing traffic at the landing in 1764, the Assembly also made provisions for establishing a ferry at Red Banks Landing to accommodate travelers (Saunders 1963:1231, 1234, 1294). By 1767, colonial officials enacted a law that required all ferrymen who collected “more than 4 pence for a man and a horse to keep ordinaries (an inn or tavern) at their ferries under penalty of a fine of £10 for each offense of refusing either entertainment or lodging” (Watson 1968a:74-75). This legislation suggested that an ordinary at Red Banks was probable, prolonging Red Banks Landing’s marginal status as a center for economic and social activity in the mid-eighteenth century in eastern North Carolina.

During the revolutionary period, Robert and Clare Salter owned Red Banks Landing. Robert Salter was a member of the Pitt County Safety Committee, which was formed to promote Whig propaganda, patrol for slaves, prevent insurrections, and make military preparations in the event of colonial revolt (Saunders 1963 IX:1075; and X:14). Clare Salter was the daughter of John Speirs, former owner of Red Banks Landing (John
Speir Last Will and Testament 1760). Robert Salter was the sheriff in Pitt County in 1771 (Pitt County Deed Book E: 94). He helped raise troops against the Regulators, and he participated in the Assembly from 1777 –1779 (Colonial Records XII: 2; XIII: 532). Salter was also a regiment captain under Brigadier-General John Ashe in 1776. The Provincial Committee of Safety formed the regiment that consisted of 659 men. This force was concentrated at Wilmington and was the impetus for Governor Josiah Martin’s departure to Charleston (King:78; Colonial Records X: 435-436).

Salter died in 1779, but not before attaining the rank of colonel. At the time of his death, he commanded the guard that patrolled the border between Virginia and North Carolina (Colonial Records XIV: 107-109). In the 1760s and 1770s, Salter appears in the deed books twelve times as a grantor or grantee of land. During those years he acquired 1,227 acres and disposed of 2,763 acres of land (Pitt County Deed Book F:363, 450, 451, 453; Book C:121, 327, 354). Red Banks Landing was one of the properties that remained in his estate.

Even in the beginning of the Federal Period, waterways were inseparably intertwined with travel and the development of towns in the east. In 1787, William Attmore traveled through eastern North Carolina and experienced typical interactions at landings in the region. “About dark, I arrived at Neuse River, where giving one or two halloes that made the Woods echo, the Ferryman on the other side heard and answr’d me – Then came over in the Ferry Scow and took me across to the Ferry House a little distance from the River, where Mrs. Curtis gave me hospitable entertainment” (Attmore 1787:21). See Figure Fourteen.
During his visit, Attmore traveled through Greenville, then known as Martinsborough. He described the small village “situated on the Southeast side of Tar River, at this place about 90 or 100 yards over, when the river is low; tho' near a mile wide when there are freshes in the river, and it is here about ten feet deep. The village consists of about fifteen families, and is a place of some trade, the planters in the vicinity, bringing their produce to this landing. The town stands high and pleasant” (Attmore 1787:31). Attmore conveyed the landing’s importance to the community, recognizing it as vital hub for river transport. Because Attmore mentions the village in relation to the landing and the “high and pleasant ground” on which the town stood, it is likely that the
landing he visited was not Red Banks but a nearby landing on the opposite side of the river.

Red Banks Landing was a strategic location for the exchange of goods before the establishment of the town on the opposite river bank. Perhaps this was the impetus for the Salter’s to acquire the opposite riverbank in the 1790s. Clare Salter granted 191 acres of property known as Red Banks Ferry to her son, John, on the south side of the Tar River across the river from Red Banks Landing (Pitt County Deed Book P:446). The ferry connected the flood prone north side of the river to the higher ground of the south side and the town of Greenville. In 1791, Clare Salter gave her son 320 acres of property on the north side of the Tar River, the tract known as Red Banks Landing. Ownership of both tracts on either side of the river gave its owner several economic advantages. He profited from the travel to and from Greenville via his ferry operation. John Salter’s control of the ferry was not his only economic endeavor. Although little is known about the man, census records and property deeds give clues to his economic status and what he did to make money in the late eighteenth and early nineteenth centuries.

**Red Banks Landing and Naval Stores Production**

John Salter’s name appeared in the census records of 1790, 1800, and 1810. These records indicate that Salter was above average economically. He would have been recognized as a member of the planter class, which placed him in North Carolina’s gentry. In other words, he would have been considered one of the elite in eastern North Carolina (Escott 1985:4). Over this twenty-year span, his slave holdings increased
dramatically, indicating his rising prosperity. During this time period, Red Banks Landing’s importance shifted from an important gathering point for the community to pay taxes as they had done in colonial days and ship goods their goods down the river, to an important private shipping point for John Salter’s business endeavors such as exporting his own products down the river.

The 1790 census records listed Salter’s slaveholdings at 8, in 1800 his holdings increased to 21 slaves (the most slaves owned in the county by one person), and by 1810, he owned 32 slaves (United States Bureau of the Census 1790, 1800, 1810). This was also Red Banks Landing’s most active time during the historic period as will be evident in the artifact analysis in Chapter Six. Although the census records did not indicate his profession, Salter’s business activities most likely included the production of naval stores.

In 1811, John Salter deeded Red Banks Landing to Archibald Parker, and the deed provided clues to Salter’s activities on the land. The deed indicated that several pine stumps delineated the boundaries for the property (Pitt County Deed Book S:290). Dead pines resulted from boxing the trees for sap collection and processing into turpentine, and later from harvesting the tree, or lightwood as it was called, for burning in the production of tar (Crow 1996:11). It is certain that Archibald Parker produced naval stores on the property because when he parcelled off a section of the property to William Brinkley, the deed referenced a “lightwood stump” as a boundary marker (Pitt County Deed Book KK:90).
Naval stores production accounted for the dramatic increase of Salter’s slave holdings, as the process proved quite labor intensive and required a large slave labor force to make the endeavor profitable. Naval stores production had a long established tradition in North Carolina dating to the late seventeenth century. With the establishment of the Naval Stores Act of 1705, Parliament provided that colonists would receive a subsidy for the production of naval stores (Perry 1968:511). Initially, these bounties equaled £4 a ton for tar, £4 a ton for pitch, and £3 a ton for turpentine (Gibson 1936:114). Even after independence, naval stores production remained profitable for North Carolinians, and the state had the means with which to continue its production. In 1840, North Carolina accounted for 95 percent of all naval stores produced in the United States, and by 1850, naval stores were the third largest export in the state. By the eve of the Civil War, the state produced 96 percent of all naval stores in the U.S (Outland 1996:31-32). The Civil War, however, had a deleterious effect on naval stores production. In fact, war periods from the Revolutionary War through World War II created significant reductions in naval stores production within North Carolina (Butler 1998:175).

Two important components to naval stores production were large tracts of land within the longleaf pine forests and an abundant slave labor force. John Salter and Archibald Parker had plenty of both. John Brickell, a North Carolina naturalist and one of the earliest historians of North Carolina, described the process of acquiring naval stores from the pine trees: “The planters make their servants or negroes cut large cavities on each side of the pitch-pine tree (which they term boxing the tree) wherein the turpentine runs” (Brickell 1737, 265; Fenn and Wood 1983:55). One tree ran for three
years before falling over, and it rendered one hundred barrels that were thirty-two gallons in volume. One man could tend 3000 of these boxed trees. During warm weather, one man could fill fifteen to twenty barrels of turpentine in a day. A slave usually performed these duties (Crow 1996:11).

Turpentine was arguably the easiest of the naval stores products to acquire. Tar and pitch were just as valuable commodities but required a much more labor-intensive process to produce. After the trees had fallen from the boxing process, the lightwood was cut into manageable sizes and taken to kilns, which were usually dug into the ground with a concave floor. The slaves piled up the wood and covered it with sod. They then cut holes in the sod to ignite the wood. A pipe drained the tar from the center of the floor outside of the kiln (Brickell 1737:265-266). The kilns had to be continuously manned until the fire subsided, which could take as long as two days (Crow 1996:11). This process was often very dangerous. Bricknell noted that “through ill management, and especially in too dry weather, that these kilns are blown up as if a train of gunpowder had been laid under them by which accident their negroes have been very much burnt or scalded” (Brickell 1737:265).

The production of pitch was an even more labor-intensive process. Once slaves extracted the tar from the lightwood, they burned it in cauldrons or pits dug in the ground and burned the tar to produce pitch (Fenn and Wood 1983:55). Slaves not only managed boxed trees, tar kilns, and pitch cauldrons, they also made the barrels for shipment of the product, loaded the barges for transport, and they delivered the products down river to the waiting ships (Crow 1996:12).
Naval stores production flourished in North Carolina until the Civil War when the industry declined. A decade after the war, naval stores production collapsed in North Carolina because the pine forests were so depleted. Like John Salter, Archibald Parker was also a slave owner and probably used this labor force to produce naval stores on the Red Banks property (Ellison 1968: DD-270, DD-273, EE-377).

During the first part of the nineteenth century, naval stores, lumber products, and shipbuilding were the primary manufactured goods of the Tar-Pamlico region, and farming primarily existed on a subsistence level. Unlike the piedmont region of the state, tobacco and cotton were not significant crops in eastern North Carolina during that time, although cattle and hogs were important to the region. In the 1830s a better fuel for lamps developed, a mixture of turpentine, camphor, and alcohol called camphene. This substance was also called Teveline and palmetto oil (Outland 1996:31). Camphene was a better illuminant than candles or whale oil, and this product gave a boost to North Carolina’s economy until the development of kerosene in 1856.

By 1846, Washington, North Carolina, had seven operational distilleries with fifteen turpentine stills serving them. That year, Washington made $643,738 in naval stores, producing 238,340 barrels (Outland 1996:32). Farmers tapped trees for raw turpentine to boost their income, and merchants distilled and exported turpentine and imported goods to sell to North Carolinians with a new found disposable cash flow. For nearly twenty years, the new use for turpentine fueled North Carolina’s economy (Cox 1989:34-35). Turpentine’s newfound success also encouraged a better means of transporting goods, and according to Mary Jo Jackson Bratton, “the advent of steamboats
on the Tar demonstrated the possibilities of the new technology. As early as 1834 two boats, the *North Carolina* and the *Petersburg* steamed up the Tar to launch the new age. 

... The landing in Greenville also became the starting point for the stagecoach traffic on the plank road to Wilson” (Bratton 1991:23). This improvement in transportation technology and the economy prolonged Red Banks Landing’s viability during the first half of the nineteenth century. In fact, the landing was improved to accommodate steamboats during the nineteenth century, as Chapter Six illustrates in the form of artifacts recovered from the site.

Archibald Parker was engaged in the turpentine market and possibly produced other naval stores as well throughout the first half of the nineteenth century (Pitt County Deed Book KK:90). According to the deed records, Parker increased his slave holdings and his acreage over this time period. Naval stores production increased his wealth, and the landing provided Parker with the ability to transport barrels of turpentine, pitch, and tar down to Washington, North Carolina, for export. He bought land to produce more forest products. He also increased his slave holdings during the 1820s and 1830s. Interestingly, he increased his labor force during the same period that turpentine had found a new market. In 1846, Parker sold Red Banks Landing to Arden Hatton just before the naval stores industry plummeted (Pitt County Deed Book MM:253).

**Red Banks As A Relict**

After the development of kerosene in 1856, turpentine production dramatically decreased in the region, and following the Civil War, the switch to iron hulled ships from
wooden vessels dealt another devastating blow to the naval stores industry (Powell 1989:136). As Chapter Three illustrated, the loss of its primary commodity sounded the death knell to the landing. It became a relict landscape, a landscape where the process or activity that defined the region had ended (Duncan 2000:11-13).

If Hatton still produced naval stores at Red Banks, surely the decline in the product affected his livelihood. He may have turned his efforts to another source of income to remain prosperous. By the mid-1850s many North Carolinians turned to cotton to fill the financial void left by the decline of naval stores. During this time, river travel remained the primary means of transporting goods to market, but the onset of the Civil War did much to quell the production and shipping of cotton from North Carolina (Cox 1989:41).

By 1860, the eastern part of the state was still the richest area of North Carolina. Twenty of the thirty-six banks located in the state were in eastern North Carolina. The average wealth per capita was $1,189 for this region, while the overall wealth per capita for the state was only $836 (Sitterson 1973:138). Economic shifts also occurred during this time period. From the 1860s though 1900, industrial growth occurred in cotton goods, tobacco, and lumber production, while turpentine and tar production experienced a devastatingly significant decrease (Carlton 1990:451).

During the last half of the nineteenth century, Red Banks Landing ceased functioning as a point of export. By 1889, the railroad line from Scotland Neck to Kinston was completed. The final phase of this project was the construction of a railroad bridge that spanned the Tar River in Greenville (King 1976:187). Once the bridge was
complete, the shift from water transport to railroad began, and the importance of Red
Banks Landing diminished. During the twentieth century, the landing had declined into a
recreational area for outings on the Tar River, as noted in Chapter Two; the shift from a
working infrastructure to recreational use was the first step in its structural decline.
Chapter Six will also demonstrate this connection through the artifacts found at the site.

Conclusion

Red Banks Landing developed as a foothold on the frontier. Because the
waterways in eastern North Carolina were so important to the region’s development, it
was not surprising that the landing became a center for commerce and shipping early in
its history. The connection to the river helped to develop the maritime culture that
sustained the settlement in a difficult region. Because of the swampy nature of the
eastern part of the state, water travel remained the best means of transport until the
railroad took hold in the 1880s.

Red Banks Landing was an entry point to a developing central place early in the
region’s settlement, but as the town of Greenville developed on the south side of the river
where the land was higher and less prone to flooding, the landing’s importance as a
central place declined. Red Banks Landing’s occupants’ involvement in naval stores
production provided the marketable commodity that kept the landing active as its
importance shifted from communal to private. Naval stores production was the impetus
for settling this hinterland and remained the important commodity for shipping
throughout the eighteenth and nineteenth centuries. These forest products sustained this
growth through the first half of the nineteenth century, and naval stores gave the region its connection to a maritime culture. Turpentine, tar, and pitch were prime ingredients in shipbuilding, and since Great Britain depended largely on a seafaring economy, it was natural for its subjects to seek out regions that this type of production could sustain growth.

After the Revolutionary War, this industry continued to thrive until new technologies in shipbuilding and lighting rendered it obsolete. At the collapse of the naval stores industry, Red Banks Landing declined as a point of export. The completion of the railroad bridge at Greenville dealt the final blow to Red Banks Landing as a point of shipment for goods, and the landing began to deteriorate and fall into ruin.
Chapter Six: Archaeological and Artifact Analysis

Introduction

The historical research and systematic recovery of artifacts at Red Banks Landing allowed for an informed interpretation of the site and provided many answers to how the site was used, who used it, and a span of time in which activity occurred. Like assemblages from most sites, the position of the artifacts also revealed the stratigraphy of the site and whether it was an exception to the rule that most riverine sites within eastern North Carolina lacked intact stratigraphy. The assemblage provided answers to the primary question of this study, as to whether Red Banks Landing was prominent as a central place of the region in both prehistoric and historic times. It also shed light onto the site’s identity as a maritime cultural landscape even though it was far from the coast. An estimate for the site’s decline and its relegation to relict status could also be determined from the artifacts recovered from Red Banks Landing. This chapter is an analysis of the artifacts from Red Banks Landing. This assemblage supports this author’s hypothesis that Red Banks Landing was a low ordered dispersed place, and its height of activity coincided with the Salter’s and Parker’s occupation of the site in the late 1700s and early 180s as described in Chapter Five.

As mentioned above, the Red Banks Landing assemblage consisted of 211 artifacts, not including un-dateable glass, organic material, brick, and coal samples taken from the site. These artifacts received only a field number, since they were not accessioned by the state of North Carolina but returned to the property owners. Once they received a field number, they were removed from the site, and manually cleaned for
interpretation. The assemblage included both prehistoric and historic artifacts, and consisted of the following categories: prehistoric and historic ceramics, lithics, metal, glass, brick, coal, pipe stems, and organic material such as shell, bone, and wood.

**Prehistoric Ceramics**

The ceramics recovered from the site included eighty-two prehistoric ceramic sherds (field numbers: 31PT525-1 – 31PT525-85). Of these, all were identified as either Cashie phase ceramics or deemed unidentifiable. The Cashie ceramics were further defined, as fabric impressed, simple stamped, or residual sherds (Phelps 2000).

The Cashie phase, named for the Cashie River, an eastern tributary of the Roanoke River and occupied by the Tuscarora, dated from AD 1150 ± 65 to AD 1425 ± 70. The Thorpe site, located at the falls of the Tar River, and Jordan’s Landing, on the northern section of the Roanoke River, in eastern North Carolina were the research sites on which these dates originated (Phelps 1983:43-47). Dr. David Sutton Phelps, however, extended these dates from AD 800 to AD 1715, ending when the Tuscarora were relegated to reservations in eastern North Carolina, and placed the occupation date from the Late Woodland Period (1000 AD – 1715 AD) (Byrd 1995:2). The tempering with small pebble-sized particles that often protrude through the vessel walls typified this pottery type. Sand tempering was also used in thin walled pieces (Phelps 1983:43-47). Figures Fifteen and Sixteen illustrate samples of the Cashie pottery from Red Banks Landing.
Figure 15 Two Cashie pottery sherds recovered from Shovel Test Pit C-1. These are examples of fabric impressed and simple stamped pottery. Photo taken by Kathy Southerly April 6, 2005.

The largest sherd of the Cashie ware found at Red Banks was 1½ inches (3.81 cm) by 1¼ inches (3.175 cm) by ½ inch (1.27 cm) thick. The smallest diagnostic example measured ½ inch (1.27 cm) by ¼ inch (.635 cm) by ½ inch (1.27 cm) thick. The sherds were recovered from each transect of shovel tests and in all zones of the test unit excavated for the project (as described in Chapter Four).

As discussed in Chapter Two, Dr. John E. Byrd of East Carolina University conducted a pedestrian survey of Red Banks. In that survey, he recovered prehistoric sherds, Deep Creek, and Hanover as well as the aforementioned Cashie ware. Deep Creek and Hanover pottery series extended the occupation of Red Banks Landing to the
Early Woodland Period. Deep Creek pottery was associated with Early Woodland cultures (1,000 BC – 300 BC), while the Hanover series (largely associated with the Mt. Pleasant series) was associated with the Middle Woodland Period (300 BC – 800 AD). No other artifacts were reported from his assessment (Byrd 1995:2-4, 18; Phelps 2000).

Figure 16 Four Cashie pottery sherds recovered from Shovel Test Pit C-4. These are examples of two fabric impressed and two unidentified pottery. Photo taken by Kathy Southerly April 6, 2005.
Lithics

From the fieldwork completed at Red Banks, residual flakes from flint knapping, or projectile point production, were also recovered from the site. Forty-nine flakes/debitage were recovered (31PT525-86 – 31PT525-134), and they were comprised of varied materials and represented various geographic regions. No complete projectile point was recovered at the site. Stone material for flint knapping consisted of red jasper, green Carolina slate, quartz, quartzite, and rhyolite. Red jasper was probably traded from the coastal sand banks region of the state. The Carolina slate originated from the Durham basin, as tools were commonly made from this substance in the Piedmont region (Phelps 2000). The quartz may have been collected from local sources. The rhyolite material found at Red Banks originated in the Uwharrie Mountain region of North Carolina. None of the flakes offered temporally diagnostic information that could be classified as a projectile type, but the varied material used at the site suggested a varied migration pattern of the people occupying Red Banks or an extensive trade network with other groups from other regions.

The oldest artifact recovered from Red Banks Landing was a Paleo-Indian (before 8,000 BC) pre-form (31PT525-135). A pre-form was a stone roughly knapped out in preparation for later making a finished projectile point. This artifact was recovered from surface scatter at Red Banks. When compared to other pre-forms, the stone appears to be similar to the rhyolite quarried in the Uwharrie Mountains in the western part of North Carolina (Daniel 1998:170-186; Underwater Archaeology Branch 2003). Of course, since this pre-form was a surface find in the flood plain, the possibility exists that the
artifact may be from another Paleo site upriver. While placing a date range based on one artifact is statistically unsound, this example suggests the *terminus ante quem* of Red Banks Landing to be 8,000 BC.

The presence of these prehistoric artifacts at Red Banks Landing suggests adaptive reuse of the area over time. Just as Shein (1997) argued in Chapter Three’s discussion of Cultural Landscapes Theory that the “cultural landscape can itself capture different, even competing, sets of meaning, or independent thematic networks of knowledge – networks presenting the landscape as nature, habitat, or history” (Schein 1997: 663). The prehistoric landscape of Red Banks Landing was in a constant state of change, though there were periods of rest throughout time where no occupation occurred. Occupation is indicative through the artifacts recovered as well as the absence of more artifacts. As Chapter Seven will illustrate, these prehistoric finds indicate that Red Banks was most likely part of larger trading networks during the prehistoric occupation to different Indigenous people.

**Historic Ceramics**

One hundred and eleven historic ceramics were recovered from the fieldwork at Red Banks Landing (31PT525-136 – 31PT525-247). Although some specimens were unidentifiable, some pieces provided form diagnostics so that generalizations concerning their use could be made, and some were temporally diagnostic pieces, useful for interpreting the historic occupation of the site. All basic historic ceramic classifications, earthenwares, stonewares, and porcelains were represented at Red Banks (Ewen 2000).
Table One provides ware type, provenience, number of ceramics found, and date ranges for historic ceramics that were discovered at Red Banks Landing.

Although most of these ceramic pieces were small, some were discernable as to their original use. For example the yellow ware (dated from 1840 to the present) was used for kitchen-wares and storage vessels (Saint Mary’s City University Archaeology Database 2003). Sponged ware (dated from 1840’s-1920’s) was among the cheapest ceramics available during their time period (Saint Mary’s City University Archaeology Database 2003).

<table>
<thead>
<tr>
<th>Ware Type</th>
<th>Date Range</th>
<th>Provenience</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yellow Ware</td>
<td>1840-present</td>
<td>(3) Z1,L1;(1)Z1,L2;(2) Z3,L2</td>
<td>6</td>
</tr>
<tr>
<td>Delftware</td>
<td>1580-1802</td>
<td>Z1,L1;Z2,L2</td>
<td>2</td>
</tr>
<tr>
<td>Annularware</td>
<td>1780-1820</td>
<td>C-10</td>
<td>1</td>
</tr>
<tr>
<td>Creamware</td>
<td>1720-1820</td>
<td>(6) Z3,L2; (1) Z3,L3; SURFACE</td>
<td>8</td>
</tr>
<tr>
<td>Feather Edged (Creamware)</td>
<td>1720-1820</td>
<td>Z3,L2</td>
<td>6</td>
</tr>
<tr>
<td>Polychrome Painted</td>
<td>1790-1820</td>
<td>Z2,L2</td>
<td>1</td>
</tr>
<tr>
<td>Transfer Print</td>
<td>1765-1815</td>
<td>Z3,L2</td>
<td>1</td>
</tr>
<tr>
<td>Bristol Slipware</td>
<td>1670-1795</td>
<td>Surface</td>
<td>1</td>
</tr>
<tr>
<td>Spongeware</td>
<td>1840-1920</td>
<td>Z1,L1</td>
<td>1</td>
</tr>
<tr>
<td>Pearlware (hand painted)</td>
<td>1780-1820</td>
<td>Z1,L1</td>
<td>1</td>
</tr>
<tr>
<td>Pearlware (flow blue)</td>
<td>1820-1840</td>
<td>Z1, L1</td>
<td>1</td>
</tr>
<tr>
<td>Pearlware (shell edged)</td>
<td>1780-1830</td>
<td>Surface</td>
<td>3</td>
</tr>
<tr>
<td>Stoneware (Rhenish)</td>
<td>1660-1760</td>
<td>C-4;Z1,L1</td>
<td>4</td>
</tr>
<tr>
<td>Albany Slipware</td>
<td>1850s-1900s</td>
<td>Z2,L2</td>
<td>1</td>
</tr>
<tr>
<td>White Salt Glazed Stoneware</td>
<td>1720-1805</td>
<td>Z3,L2</td>
<td>4</td>
</tr>
<tr>
<td>Porcelain (Modern)</td>
<td>1950s+</td>
<td>Z2,L2</td>
<td>1</td>
</tr>
<tr>
<td>Porcelain (English)</td>
<td>1745-1795</td>
<td>Z3,L2</td>
<td>1</td>
</tr>
<tr>
<td>Redbody Slipware</td>
<td>1650s-1800</td>
<td>Z3,L2</td>
<td>2</td>
</tr>
</tbody>
</table>

Table 1 Historic Ceramics at Red Banks Landing.
The earliest redbody slipwares (1650’s – 1800) were fine ceramics, but the later versions tended to be coarser and intended for the poor to middle class or intended for use in taverns (Diagnostic Artifacts in Maryland 2003). Albany slipped stoneware ceramics (1850 – 1900’s) were typically utilitarian vessels, “such as harvest bottles, cream pans, storage crocks, pinched-neck pitchers, and cuspidors” (Hume: 1969:101). Finally, white salt glazed stoneware (1720-1805) became common English tableware by the mid-eighteenth century (South 1978: 72; Hume: 1969: 114).

Although there were few artifacts to base an analysis, some basic generalizations can be drawn from these diagnostic pieces. These pieces were not fine ceramics, but either utilitarian or inexpensive table or kitchenware. Some were most likely intended for carrying marketable goods such as storage crocks. Others support the argument made in Chapter Five concerning a possible ordinary located at Red Banks Landing – redbody slipware cuspidors would certainly be present in a late eighteenth-century ordinary. An ordinary to accommodate travelers at a landing would signify “human utilization (economy) of maritime space by boat: settlement, fishing, hunting, shipping and its attendant subcultures” just as Christer Westerdahl described in Maritime Landscapes Theory discussed in Chapter Three (Westerdahl 1992: 5). An ordinary would strengthen Red Banks Landing’s maritime landscape identity, but even without an ordinary on the site, its status as a shipping point establishes that maritime connection. Even though the use of most other ceramics could not be discerned, their type could be identified; therefore, they could be used to establish a time frame for the historic occupation of Red Banks Landing. Although these artifacts do not represent a good statistical base for date
analysis, the variety of ware type primarily fell between 1750 – 1800 and gives a mean ceramic date of 1784 for a date of occupation or date of heaviest use during the historic period. Several types fall outside of this time period including spongeware, Albany slipped stoneware, and yellow ware. The floating bar chart in Table Two illustrates the date ranges in which each ware type was produced.

The ceramic sample is too small to provide a definitive date range for the historic occupation, but the variety of ware types combined with the date ranges they represent coincide with Red Banks Landing’s most prosperous time according the historical evidence examined in Chapter Five.

![Floating Bar Graph Describing Date Ranges of Historic Ceramics at Red Banks Landing.](image)
Pipe Stems

Other temporally diagnostic, historic artifacts were discovered in the shovel test pits and the test unit of Red Banks Landing besides ceramics. Pipe stems, for example, were found exclusively in the test unit in zone two, level two and zone three, levels two and three. Five pipe stems (31PT525-196 — 31PT525-201) were uncovered at this location. It is safe to say that five samples from one location at the site provided too small a sample to derive an accurate date solely from analyzing the pipe stems. With that said, these stems were undecorated examples; one piece is a fragment with no bore to evaluate. Using drill bits just as Harrington used to derive this method of measurement, the other four fragments bore diameter measured 1/16 of an inch (or 4/64th to correlate with Harrington’s analysis). This bore diameter is consistent with a date range of 1710 to 1800 (Harrington 1978:63-65; Binford 1978:66-67). Figure Seventeen illustrates pipe stem fragments recovered from Red Banks Landing.

Figure 17 Pipe stem fragments recovered from Red Banks Landing. Picture taken by Kathy Southerly April 6, 2005.
Coal and Slag

There were 432.7 grams (15.3 ounces) of coal/slag samples taken from three large mounds of coal that had been dumped at Red Banks Landing and were overgrown with vegetation. This small sample taken was intended for determining the type of coal existent at Red Banks Landing. There were far too many deposits and abundance of coal to make total recovery practical. These deposits were scattered over the entire site and found in zone one, level two and zone three, level two of the test unit. The heaviest deposits were found near the shore line in shovel test pit A-11 and B-10. As mentioned above, the deposits formed a concentrated dumpsite that appeared as mounds on initial examination. Vegetation covered the mounds, making them appear as a part of the surrounding landscape. This overgrowth is reminiscent of the interpretation in Cultural Landscapes Theory that “no landscape is abandoned as beyond hope” (Lowenthal and Prince 1964:346). The presence of coal scattered throughout the site is consistent with a site visited by steamboats in the nineteenth and early twentieth centuries.

Brick

Some 325.2 grams (11.5 ounces) of brick fragments were also recovered from Red Banks Landing. Unfortunately, no whole bricks were recovered or any brickwork at the site detected for evaluation, which would have indicated a more accurate form of dating the bricks and their use at Red Banks Landing. The brick fragments all appeared to be modern because they were a uniform red color, tightly grained, and resistant to flaking (Hume: 1969:80-81).
**Metal**

There were some 790.8 grams (1.7 pounds) of metal fragments taken from the site. The temporally diagnostic specimens were nails or spikes. Seven nails (31PT525-202 – 31PT525-209) found on the site were hand wrought examples of nails, although none of these wrought examples had intact heads. Hand wrought nails were used throughout the seventeenth, eighteenth, and early nineteenth centuries, so using these solely as a method of dating is impractical (Nelson 1969).

Three fasteners were of particular interest to the study. One (31PT525-210) was a square cut flathead nail that was machine made, dating to after 1830 (Hume: 1969:252). This piece was found in the test unit, zone three, level three. A square wrought iron spike (31PT525-211), probably dating to the late nineteenth or early twentieth century, was found in shovel test B-4. This spike measured three-eighths of an inch square at the base of the head, it was three and a half inches in length, it was chisel-ended, and it had a rounded L-shaped head.

Finally, an iron spike (weighing 454.3 grams or 1 pound), also late nineteenth century or early twentieth century measuring thirteen and three-fourths inches in length and five-eighths inches in diameter, was recovered from the surface of the site. Figure Eighteen depicts the iron spike found at Red Banks Landing.
Glass

Some 186.6 grams (6.6 ounces) of glass fragments were recovered from the landing, most of which consisted of modern bottle glass, modern window glass, and molded glass. Colors included clear, blue, brown, and green glass fragments. The site was scattered with glass, and the test unit contained glass in each zone. None of the glass could be used as a diagnostic tool to date the site. Most of the glass was modern in
nature, and the other examples were too small and lacked any characteristics such as molds to determine their origin or age. The only piece that could be conclusively identified was a modern molded bottle, dating to 1967.

**Organics**

Organic materials, weighing 53.6 grams (1.9 ounces), also were present in the artifact assemblage. Burned wood was removed from shovel test pits A-7, B-8, and C-4. These samples were small, indeterminent, and inconclusive. Also six shovel test pits contained miscellaneous shell material that was taken from the landing. A pig tooth fragment was found in the test unit, zone three, level two. Two small bone fragments were found in the test unit, zone four, level four.

**Modern**

Finally, the site was not unexpectedly scattered with modern intrusions. Twenty-two caliber bullet casings, plastics, soda tabs, and a wine cork were discovered in zone one, level one. Plastic fragments were removed from shovel test pit B-11, and C-7.

**Conclusion**

These finds from the pipe stems to the modern intrusions at Red Banks Landing are consistent with other studies reviewed in Chapter Two. Pipes, soda tabs, wine bottles, and corks represent evidence of recreational use – items consumed and containers discarded at the site. This activity was a secondary function of Red Banks Landing and
also evidence that the landing was used similarly to a promenade described in several jetty studies in Chapter Two (Garratt et al. 1995). Some of these artifacts represent activities of spontaneous use and discard patterns date to a period after the peak of Red Banks Landing’s most active period (approximately 1784), which coincides with Julie Ford’s assertion that recreational use was a secondary function of jetties (and landings in the case of Red Banks). She argued that the structure’s state of repair reflected its current state of use. Working jetties remained in better repair than recreational ones, and this argument held true for Red Banks Landing (Ford 2000).

The artifact assemblage from Red Banks Landing supported the theory that the landing was what Walter Christaller called a low ordered dispersed place (1966:16-17) and a strategic location for the exchange of goods. Although the number of artifacts recovered was relatively few (211 artifacts), the diagnostic pieces helped determine the peak of activity at Red Banks Landing as well as the people who frequented the site. Shovel tests illustrated a wide range of use at the site.

Red Banks Landing was occupied from prehistoric to modern times, as evidenced by the artifact deposits ranging over the site. Temporally diagnostic artifacts within the test unit revealed the lack of stratigraphy at Red Banks Landing. For example, prehistoric artifacts were mixed with historic artifacts in zones one, two, and three. Modern artifacts appeared in zone two along with older artifacts such as delftware. This lack of intact stratigraphy can be explained by the site’s proximity to the river. With inundation, wash, and deposition from the periodic flooding events of the Tar River, artifacts could be washed out and redeposited over a period of time. As noted in Chapter
Four, intact stratigraphy on coastal Carolina sites is a rare occurrence, and its absence from Red Banks was not unexpected.

The artifact assemblage from Red Banks Landing was not an extensive collection. One artifact type alone could not be used to date the site and its period of occupation. Artifact types, when viewed in relation to other types, can suggest a time in which Red Banks Landing was most active. Although the pipe stem collection from the assemblage is very small, with only four samples, the date range of 1710 to 1800 coincides with the mean ceramic date of 1784, calculated from historic ceramics. Nails, on the other hand, represent a later date, and the wrought examples represent a wide span of time that is not very useful in dating the site.

The prehistoric artifacts represent an even earlier time of occupation, one that was perhaps, as active as the historic occupation. This occupation in comparison to the historic occupation would attest to the site’s usefulness as an entry point to a larger trading network for two largely distinct cultures. Flake disbursement over the site attested to a larger trading network, or a larger area of migration for collecting important resources. The presence of foreign manufactured historic material represented much the same scenario for its historic occupants.

The lack of artifactual evidence was also a good indication that Red Banks was a secondary center for activity in both prehistoric and historic times. In Christaller’s Central Place Theory Red Banks would fall into the category of a peripheral dispersed site. The large amount of coal and coal slag found at Red Banks Landing confirms the presence of steamboats at the site, since there were no structures on the site that could be
associated with coal burning. The variety of foreign material in both prehistoric (flakes), and historic (primarily ceramics) artifacts strengthens the analogy that sites were used in the past similarly to the way they are currently used. In the case of Red Banks Landing, the site was used as a point of dispersing goods from other areas into the region. Landings along the Tar River provided access points for extending the maritime landscape far inland from the coast.

The landing also created a firm connection to a maritime landscape in the psyche of the community even after the peak of its popularity for dispersing and receiving goods. Community members found other useful activities to pursue at the landing – that of recreation. These activities did not require extensive upkeep of the landing. Once the landing finally fell into the water, these recreational activities continued at the river’s edge, as Red Banks Landing became a relict to the landscape.
Chapter Seven: Theoretical Approach to the Archaeology of Red Banks Landing

Introduction

Central Place Theory, Maritime Cultural Landscapes Theory, and Cultural Landscapes Theory are ideal tools for analyzing the archaeological evidence from Red Banks Landing and the landing’s role in settling eastern North Carolina. Red Banks Landing is one of many landings located along the navigable stretch of the Tar River. The landing lies on the north side of the river with its remaining structure collapsing into the water. Like so many of the landings on the Tar, little information remains in municipal archives or in the colonial records concerning Red Banks Landing’s place in history.

Archaeological assessment is a vital link in recovering information concerning these sites. These landings are key components to deciphering settlement patterns in the southeastern region on North Carolina, revealing how early settlers perceived and exploited their environment and the maritime transportation system afforded by the river. As noted in Chapter Six, landings provided access to the river, extending the maritime landscape far inland from the coast. The dependence on maritime technology created a necessity for these sites and when technology changed, these sites became relics of the landscape. Terrestrial, maritime, and experimental archaeological techniques were vital tools in uncovering Red Banks Landing’s role in the history of eastern North Carolina.
Prehistoric Occupation and the Development of Central Places

Central Place Theory has been used in other regions to describe archaeological sites with network relationships to surrounding sites based on natural physiography of a region. Several studies of Indigenous peoples in Peru and Mexico assumed that “systemic and topographic boundaries are synonymous” with one another (Crumley 1976:63). Like the sites in these studies, Red Banks Landing’s site was tied to a physiographic element, the river, and combining with archaeological and literary source material. Evidence suggests that Red Banks was part of a larger network of sites that offered different resources for Indigenous people. As outlined in Chapter Three, this relational network can be explained based on Central Place Theory. Even though this is a historical thesis and not an anthropological study, it is important to address the occupation of all the former known groups of Red Banks Landing. I offer this section on the prehistoric occupation with the caveat that it is speculative based on the evidence recovered from Red Banks Landing.

The waterways of eastern North Carolina afforded a transportation network throughout the region for Indigenous people. Archaeological sites within one kilometer of the Tar River from the fall line at Rocky Mount to the mouth of the Pamlico Sound provide a comparative archaeological context for Red Banks Landing. There were 170 documented archaeological sites within a kilometer of the river. Of this number, 54 percent had a prehistoric component to the site and 28 percent were Woodland Era (1,000 B.C.E. to 1650 C.E.) sites. The research used to derive these statistics resulted from cultural resource compliance studies, primarily required of the National Historic
Preservation Act of 1966 (Office of State Archaeology 2003). Figure Nineteen depicts the sites used in this study.

As previously noted, Red Banks Landing was too vulnerable from the floods of the Tar River for a permanent settlement to develop, but its proximity to the river, ironically, was also its most important asset. Sixteen sites, that included elevation data, lay in the floodplain of the river. Not only does Red Banks lie on the floodplain, but it also sits near the confluence of Parkers’ Creek and the Tar River. Interestingly, four
other sites on the floodplain have this similar characteristic. Although these are in the minority of the sites studied, this characteristic may provide a clue of their formation.

Through experimentation in a small kayak, the research crew mentioned in Chapter Four discovered a water feature that made Red Banks Landing a good location for landing a small boat onshore. The peninsula upstream from the landing created an eddying current in the river, making the site ideal for gathering water, fishing, launching boats, or removing them from the water. The topographic features of Red Banks Landing made it a prime location for a seasonal camp to facilitate water access under the protection of the peninsula. Figure Twenty shows the topography, and the eddying effects experienced at the site.

Figure 20 Red Banks Landing at the confluence of Parker’s Creek and the Tar River. Map created in ArcView by Kathy Southerly, October 2003.
Red Banks was a transition point, traveling from the piedmont to the coast. It was not a high order settlement, but rather a low order settlement since it provided a distribution point for subsistence goods but was not inhabited permanently.

As illustrated in Chapter Six, artifacts that were not indigenous to the site, such as primary and secondary flakes were found distributed over the site. One such artifact was a rhyolite Paleo-Indian (before 8,000 B.C.E.) preform or scraper, quarried in the Uwharrie Mountains in the western part of the state (Daniel 1998:170-186, Underwater Archaeology Branch 2003).

The presence of this stone suggests that local Paleo-Indian groups may have traveled from the mountains to the coastal plain, or that they traded with other groups for this valuable resource (Phelps 1983:21; Daniel 2001a:247). The stone may have been used as a scraper or it may have been a preform, a stone roughly knapped and later made into a projectile point. The stone, as shown in Figure Twenty-One, suggests that Red Banks Landings’ identification was a low ordered settlement, but the lack of numerous finds negates it as a high ordered settlement. A high ordered settlement would have had a higher concentration of artifacts because of the larger population of inhabitants using the site. A higher ordered site somewhere to the west, would have offered specialized services such as quarried rhyolite. The Red Banks location offered basic supplies such as water and fishing and hunting access.
Red Banks can be defined as a dispersed place within the definitions of Central Place Theory, and thus be defined as an outpost for Native American groups en route from one higher ordered center to another. These places would differ from the classic definition of a higher ordered central place since its occupants were not sedentary, but these places because of the specialized resources such as rhyolite would be frequently occupied for using, collecting, and then distributing these resources. The distribution network was elongated and narrow based on resistance factors created by the terrain. The river aided in distribution, thus elongating a sphere of influence of a higher ordered settlement along the water, but the swampy terrain narrowed influence from beyond the riverbanks because overland travel was so difficult. Sites such as Red Banks Landing offered access points to different resources for a group of people with varied needs.
Whether early inhabitants followed the river’s winding path to the sound or used boats to speed their travel, the waterways of eastern North Carolina afforded a transportation network throughout the region. Each landing provided an access point in a larger network, linking resources of a larger region and providing a transportation access point for interacting beyond the regional network. Archaeological sites uncovered along the waters of eastern North Carolina give evidence to this elongated and narrow site distribution pattern throughout eastern North Carolina.

The physiography of these sites affected their sphere of influence with other central places. Through the river corridor Red Banks Landing was connected to other sites, primarily via boat. This connection introduces questions of boat size and type for navigating the often shallow stretches of the Tar River. This environment shaped the technology of river travel in the region. Once the cultural influence of the area changed, so did the habitation of sites such as Red Banks Landing.

Using Central Place Theory to define Red Banks only reveals part of the activities that persisted at the site. Red Banks can be defined economically using Central Place Theory, but it cannot be defined culturally. As a dispersed place or an outpost, Red Banks was point of a hinterland within a larger network. The site was a place of limited usefulness for resource disbursement since this site lacked raw materials for producing important goods. Even though prehistoric groups were not sedentary, they would most likely reuse good locations with good water access for campsites.

Also, centers in Central Place Theory are spatially equidistant, but the natural terrain distorts the concentric shape of the model. The river creates distortion, and even
though Christaller defined points along waterways as “dispersed places,” his theory cannot account for their importance the way Christer Westerdahl’s can in Maritime Cultural Landscapes Theory.

**Maritime Cultural Landscapes Theory and the Historic Occupation**

Maritime Cultural Landscapes Theory offers another view that accounts for the interaction of land and water unlike explanations offered by Central Place Theory. Red Banks Landing’s relationship to the river is of central importance for utilization of the site. The landing’s cultural importance can be established with this theory because Maritime Cultural Landscapes Theory addresses the cultural importance of maritime spaces including settlements, fishing access, and hunting activities.

Over time cultural groups changed, but the function of Red Banks remained constant. The danger of flooding at the site made Red Banks unsuitable for long term occupation, but this same proximity to water would have made a desirable temporary site for specialized activity and transport from one site to the next. Maritime Cultural Landscapes Theory gives cohesive unification to the submerged aspects of the site to the terrestrial ones and defines the site’s maritime identity.

Red Banks Landing provided a vital economic connection between the inland regions, yet to be developed, and the rest of the world, connecting the two by the network of waterways that wound their way through the inhospitable pocosins and swamps. The characteristics of the waterways, specifically the shallow water that is typical of rivers in eastern North Carolina, influenced vessel construction for use in the region.
As culture tends to follow the boat, landings created transitional points from water to land, carrying maritime life ways farther inland. The landing provided a gateway for the exchange of industrial products and consumable goods for over two hundred years in varying capacity. Economic conditions were the impetus for the landing’s existence and with the destruction of the naval stores industry and the decline for other turpentine markets, even the advent of steamboats on the Tar River could not forestall the decline of the landing. As discussed in Chapter Six from its earliest patent, the owners of Red Banks used the property’s position on the river for their economic benefit. Early colonists valued their position on the waterways and used their location to attract other settlers to their landings for the purpose of commercial exchange.

Landings like Red Banks were economic focal points in the Tar-Pamlico River basin even if major community growth took place elsewhere. For example, Greenville developed on the opposite side of the river where the ground was higher and less subject to flooding than the north side of the river where Red Banks Landing was located. The landing was established in the early 1700s as an inspection station before the town was laid out. Other landings along the river later developed and became inspection stations as well such as Edward Salter’s Landing, Dupree’s Landing, and Ellis’s Landing (King 1976:91). As long as the river remained a vital link in transportation of goods in eastern North Carolina, the landing structure remained operational. When transporting goods down river became obsolete and the production of naval stores declined, its owners no longer maintained the landing, and the site became a relict landscape of an obsolete economy.
The physical structure of the landing indicated that the landing was much bigger than observed by the visible row of pilings in the river. As discussed in Chapter Four, the systematic survey probing the river revealed another row of pilings some forty feet from the shoreline, making the landing twice as large as previously believed. The water reconnaissance revealed that the size and spacing of the pilings were consistent with the visible pilings indicating that they were contemporary. The structure was quite large for a river landing in eastern North Carolina, and just as Andrea Heintzelman argued, the landing evolved to match the economic prosperity of its owners (Heintzelman 1985:193). This prosperity was elevated because on naval stores production, and as the industry declined, the number of landings along the river, diminished. Once the landing became obsolete economically, it held little value except for recreational water access. As Julie Ford argued in the case of “The Use and Abuse of Jetties,” the landing’s loss of status meant loss of upkeep. This signaled the end for the landing and marked it a relict of the landscape (Ford 2000).

Red Banks Landing is a classic demonstration of economic resources playing a significant role in strategic placement for center development. The landing was a minor gathering place for the surrounding community on the north side of the river, as evidenced by other amenities that typically surrounded landings such as ferries and ordinaries (as discussed in Chapter Five) (Watson 1968a; Watson 1974).

The landing’s function during the colonial period also fits with the assertions of Maritime Cultural Landscapes Theory and defining maritime life ways as a cultural component with cohesive properties that helped form new communities along the
watercourses. For example, early in North Carolina’s history, the trend for wealthier plantation owners to acquire land along the river was commonplace because the rivers were the best means of travel in the eastern part of the colony. Francis Hawks stated that the "country [North Carolina] was wholly agricultural, and the products were taken in vessels directly from the banks of the water courses on which the plantations were almost invariably opened. Hence the slow growth of our towns" (Hawks 1858:85). Hawks recognized the importance of water access for community growth as did many of his contemporaries.

Access was so vital that by 1717 the colonial government found it necessary to provide public landings for those planters whose estates lay inland because plantation owners along the waterways hemmed in those without direct access (Clonts 1926:22). The creation of public landings was an early attempt to stimulate commerce and gradually provided support for economic growth inland. By opening public landings and providing a roadway to them, colonial officials attempted to extend the profitability of a waterfront to inhabitants farther inland. As described in Chapter Two, Hogtown Landing grew in response to legislation that provided a roadway to the landing. These improvements gave landlocked merchants a means to transport their goods to market hence extending the maritime landscape to those cut off from it. These efforts to include landlocked merchants in maritime trade asserted the cultural identity of new settlements in eastern North Carolina.

During the fieldwork at Red Banks Landing researchers discovered a roadbed as a part of the landscape features of the site. As depicted in Figure Twenty-Two, Red Banks
was one of many landings on the Tar River. Interestingly, roads connected each landing to a major thoroughfare. From the early 1700s, landings appeared along the river in Pitt County. According to the “Pitt County, Historical Research Map,” stretching from the northern section to the southern most part of the Tar River, in Pitt county, were Penny Hill, Dupree Landing, Parker Landing, Pillsboro Landing, Center Bluff Landing, Blue Banks Landing, Randolph Landing, Browns Ferry, Red Banks Landing, Barber Landing, Cherry Landing, Summit Hill Landing, Dixon Landing, Dixie Landing, Yankee Hall, and Grimes Landing.

Extending the maritime landscape artificially was still important to government officials in the mid-1800s. In 1846, the General Assembly appropriated twenty-five thousand dollars for improving the rivers specifically for steamboats (F. Johnson 1986:20-21). This effort illustrated the importance of river travel and river landings to its community both culturally and economically. Because landings provided commercial activity points between the economic centers of Tarboro, Greenville, and Washington during the colonial and early federal period, replicating them to create additional commercial centers became an important focal point for state funds, even as other methods of transport were emerging.

Landings on the Tar River were not uniformly dispersed between the three economic centers in the region. The highest concentration of landings occurred in Pitt County because the river was easily navigated between Washington and Greenville from the first arrivals of early settlers to the region. These landings appeared on both sides of the river. The route from Greenville to Tarboro was difficult to navigate, and before
1846, goods traveled up river to Greenville and then over land by wagon to Tarboro. After 1846, the state allocated funds for improvements on the Tar River to accommodate larger steamboats (Turner and Bridgers 1920:352).

River travel was at least as important culturally to eastern North Carolinians as it was economically as evidenced in the first steamboat excursion from Washington to Tarboro. Newspaper accounts date the earliest steamer to make regular runs from Washington to Tarboro as 1847, and its first trip was a pleasure cruise. According to the *North State Whig*, the steamer *Wayne* made an experimental trip up the Tar River.

She has made two trips to Tarboro. On Friday she brought down a party of 35 on a pleasure excursion from Tarboro, who returned on Saturday. They came down...
in 5 hours. On Sunday she took down a large party to Bath … We are glad to
learn that Mr. Dibble has determined to put a boat on the river in the Fall. The
Wayne returns to New Bern where she has been doing a most successful business
for several years (North State Whig 1847).

The importance of this first trip on the river signified the river’s cultural importance as
well as an economic advantage. To establish a route on the river, it was more important
to illustrate the river’s aesthetic qualities and the steamboat’s technological advantages
through a pleasure cruise than to demonstrate the boat’s ability to haul goods from one
distribution point to the next. This tactic appealed to the community’s cultural identity as
well as its economic needs. The steamboat’s owner appealed to his pleasure cruisers’
maritime identity. The introduction of the steamboat on the Tar River also marked a shift
towards the end of river many river landings as stops were concentrated to accommodate
centralized locations.

Cultural Landscapes, Cultural Relicts

Cultural Landscapes Theory defined the site as a relict landscape. As discussed in
Chapter Three, the human landscape shaped and reshaped the physical landscape, and
material culture was the result (Lewis 1983: 243). From this shaping of the landscape, a
primary function of the landing emerged – that of commerce and a secondary one
emerged – that of recreation. The material culture left on the land defined the landscape
and its intended functions as illustrated in Chapter Six.

Upon first observation of the site, one can determine its abandoned status. All
that remains of the landing are some pilings breaking the surface of the water, and the
retaining wall that shores up the bank. Cultural Landscapes Theory illustrates the site’s
primary purpose, its importance based on its proximity to the river to fulfill commercial needs of transporting goods. By the mid-nineteenth century, establishing new, private landings for commerce was impractical since the industries that relied on riverine technology were in decline. Steamboats stopped at the major commerce centers of Tarboro, Greenville, Washington, and a few landings in between that still attracted commerce. The erosion of an economy that relied on river travel brought about an erosion of a maritime identity for areas along the Tar River that were not major commercial centers still devoted to water transport.

Overland transportation, roadways and railroads, created competition for water transport, and for many farmers and merchants in the Tar-Pamlico River Basin it became easier and more cost effective to transport goods to major centers than to ship them down river themselves from their private landings. Although Red Banks had been an important landing in the eighteenth century, its decline in the mid-nineteenth century created its relict status on a shifting cultural landscape. The landing, however, held its cultural identity and its maritime connection in the form of its secondary purpose, that of recreation. Even as the landing fell into disrepair community members still visited the location. Local residents left behind beverage containers and other artifacts that held consumables on the site (see Chapter Six). Local informants also explained the landing’s value as a prime fishing location and well known among the area’s avid fishermen.

Like many private landings, Red Banks was a victim of centrally located shipping points, evolving technology, declining markets, and its physiographic condition. While the landing had access to a major road in the region, it was on the wrong side of the river
to become a major shipping point and unable to retain its maritime identity. The town of Greenville resided on the opposite bank of the Tar, which made Red Banks an unlikely center of shipping activity.

**Conclusion**

Landings provided a network of entry points to commerce in the region. Each landing was unique in the way it operated, the people it served, and the boat traffic it supported. The landings also shared several traits as well. For instance, each landing structure evolved to the height of its usefulness, and subsequently was abandoned as those uses faded – primarily as steamboat traffic shifted to serving major, more centralized landings. Most landings then faded altogether on the river. Red Banks was no exception to this trend.

Central Place Theory established Red Banks Landing’s importance, even though it was of minor importance, as a mediator of local commerce. Researchers can classify the site as a point of distribution for a low order settlement as described by Walter Christaller.

On a cultural level Maritime Cultural Landscapes Theory revealed the maritime identity of Red Banks Landing’s surrounding community. Even after the countryside was penetrated and other means of travel were available, government allocations still funded projects to clear the rivers, and entrepreneurs still invested in technology to ply the waters in the eastern part of the state.
Finally, Cultural Landscapes Theory focused on the decline of specialized activities of this relict site, activities made obsolete by changing economy. Cultural Landscapes Theory revealed continuity of the site’s usage over time and from different cultures. Economic change affected distribution patterns and relegated Red Banks Landing economically obsolete even though emerging technology, such as the advent of steamboats, could have enhanced the speed of riverine transportation. After its economic purpose faded, Red Banks Landing’s secondary purpose became a place of recreation and water access. Upkeep of the landing, however, was not a necessary component to its secondary purpose.

Using the three theories to explain the function of Red Banks Landing over time created a multidimensional image of the site. This approach revealed the site’s importance to people of different cultures and provided insight into the way that cultural identity shifted with the introduction of new technology within a region. The site’s maritime infrastructure, its large size, and the substantial retaining wall demonstrated that the landing was successful enough to support the construction of its infrastructure. As its economic purpose faded, its secondary recreational one emerged. Red Banks Landing became a relict on the landscape. Its primary purpose as an economic loading and unloading access point may have disappeared, but its shift into a recreational access point created new purpose for the site so that it was not completely abandoned. Instead “its cultural significance shifted into something new with different even competing, sets of meaning” (Schein 1997: 663).
Chapter Eight: Conclusion

The research regarding Red Banks Landing answered the questions discussed in Chapter One: Where do landings fit in the process of colonization and community development? Do landings perpetuate a connection to a maritime landscape far beyond the ocean’s shoreline? What happens to a landing site once its primary purpose becomes obsolete? Like all projects, the research at Red Banks inspired more questions about archaeology in eastern North Carolina.

First, where do landings fit in the process of colonization and community development? Red Banks Landing provided a foothold on the frontier with a convenient corridor of travel flowing beside it. It connected to a global highway that transported countless numbers of ships to countless destinations. Landings were essential in eastern North Carolina because the swampy terrain inhibited most other means of travel.

By using Central Place Theory, Maritime Cultural Landscapes Theory, and Cultural Landscapes Theory to explain the importance of interface sites to the settlement process, the study of Red Banks Landing provides a conceptual starting point for future landscape studies and broadens the concept of central place development for riverine systems. Landings, as well as other maritime interface sites as examined in Chapter Two, provided a starting point for disseminating culture around the world.

The research at the landing, however, answered more than just the question of colonization. Red Banks Landing’s purpose changed throughout its history. Initially, the site met basic needs of Native Americans such as access to fresh water as addressed in
the site report, “An Archaeological Inventory of Sites within the City of Greenville ETJ With Site Descriptions and Predictive Model.” Once European colonists arrived and the area became more populous, the landing became a point of commerce for dispersing goods from the area. The study of Red Banks Landing expanded Walter Christaller’s definition of Central Places by examining the importance of a low ordered dispersed place to a regional system and revealing the landing’s function as a minor center of commercial and social activity for several distinct cultural groups played an important role in developing the area. Red Banks Landing was a place for gathering resources and dispersing them to other regions. Chapter Seven showed a cross cultural connection. Many non-local artifacts from the prehistoric past were found at Red Banks Landing as well as non-local historical artifacts. No structures, other than the landing, were associated with these finds, which reinforced the site’s identity as a low ordered dispersed place. Although this method of describing Native peoples using European site functions is a tenuous application of Central Place Theory, at Red Banks Landing the application of such a theory is valid because the disbursement of artifacts from other regions of the state suggest that people residing at Red Banks Landing visited other regions to acquire important resources to inhabit the coastal plain at least seasonally.

Red Banks Landing’s role in establishing settlements during the colonial period was an extension of its role to the aboriginal past. Settlers used the site to disperse naval stores as evidenced through deeds and historical accounts, as discussed in Chapter Five, and archaeological artifacts recovered from the site and analyzed in Chapter Six. The community surrounding Red Banks Landing used the landing for commerce no matter
how far the location was from the ocean’s shoreline. Its identity relied on its connection
to the shore for the transport of goods and people farther inland; thus elongating the
landing’s sphere of influence along the river but not far from the shoreline.

From the early eighteenth century through the mid-nineteenth century, the river
provided the easiest means of travel throughout the region, and the most economical
means to transport goods. These goods, primarily naval stores, also defined the
community’s connection to a maritime cultural landscape. As discussed in Chapter Five,
naval stores production had a long established tradition in North Carolina dating from the
late seventeenth century until the industry’s collapse in the 1850s.

During the mid-1800s North Carolina accounted for the majority of naval stores
produced in the United States, and through deed research examined in Chapter Five, Red
Banks Landing was an active participant in this endeavor during that time period. A time
line of artifacts discussed in Chapter Six suggested a date of the late eighteenth century to
be the most active historic occupation of Red Banks Landing. During this time period,
John Salter owned the property as well as the property across the river connected by a
ferry. According to census records, he was one of the wealthiest plantation owners in
eastern North Carolina, owning the most slaves in Pitt County. Compelling evidence
suggests that he exploited their labor to produce naval stores on the property and shipped
them downstream from the landing.

The second question that formed the research parameters was do landings
perpetuate a connection to a maritime landscape far beyond the ocean’s shoreline? The
simplistic answer is yes, landings do extend the maritime landscape, but this study
accomplishes much more than the initial question implies. Not only does the study establish Red Banks Landing as a maritime landscape, it reveals it to be a complex landscape that transcended cultural affiliations and preserved characteristics of several time periods. Christaller’s Central Place Theory was a useful tool for interpreting the past human activity at Red Banks Landing. Red Banks Landing provided an ideal example of site development because the landing operated as a distribution point throughout its history for the Tar River region in eastern North Carolina. It was an important link in transportation within a trade route landscape. It was also an important link in the political network, since those with land and political influence would more likely own a landing than those without such resources.

Maritime Cultural Landscapes Theory offered general assertions that are readily applicable to the settlement process in eastern North Carolina and landings as a central component to that process. As different cultural groups occupied Red Banks Landing over several millennia, Cultural Landscapes Theory provides temporal continuity for studying the site and illustrates multifaceted uses and interpretations of a single place.

Settlers replicated the landing’s function as a mediator of local commerce and extended its use by building an infrastructure to accommodate their ever-evolving riverine technology. The landscape developed into interconnected places creating links in an economic web that sustained the region.

This system of interconnected places was not unique to eastern North Carolina. As demonstrated in Chapter Two, maritime infrastructures are commonplace throughout the world. Until recently the importance of these sites had not been recognized, and none
of the sites researched has truly embraced a theoretical model as part of their interpretations for archaeological sites. These maritime infrastructures were an expression of a culture reliant on a maritime landscape for their community’s development. The infrastructures were cultural artifacts that connected distant shores both culturally and economically.

Red Banks Landing functioned as a commercial connection to the sea and markets far beyond the American shores. Goods were rolled in barrels down the wooden planks of the landing and onto waiting flats and later onto the decks of sailing vessels bound for a global market. The landing also functioned as a cultural connection to a maritime landscape. The landing was not only a point of commerce, but a point of transition for people.

Some people stayed in eastern North Carolina, made their livings from the land, and sent their goods down river as their counterparts did. There were those who passed through the region taking impressions from the landscape, relating the importance of the water to the community in their correspondence to others. Whether it was James Murray in the early eighteenth century who lamented his lost revenue for the lack of a good boat and enough barrels to transport his goods, or Frances Hawkes in the mid-nineteenth century who blamed the slow growth of eastern North Carolina on its total dependence on the waterways, there is no denying that a maritime cultural landscape existed in the psyche of eastern North Carolinians (Crittenden 1931:146; Hawks 1858:85).

Red Banks Landing also showed the validity of defining inland sites as part of a maritime cultural landscape even though access to the ocean was many miles downstream.
at the mouth of the Pamlico Sound. The landing was an important point of interaction between water activities and terrestrial activities and a deliberate attempt to extend maritime culture far inland. Product mobility and the primary means of transportation relied on the boat, and global import and export remained the economic lifeblood of the community.

Finally, this study demonstrated what happens to a landing site once its primary purpose becomes obsolete. The Red Banks study showed the relict nature of a site as technological and commercial shifts rendered it economically obsolete. Steamboats that plied the waters of the Tar River visited the site. Residual coal left mounded near the shoreline provided evidence of this visitation. As these coal piles became overgrown with vegetation, they became interesting features of the ever-changing landscape. As the railroad and later trucking became preferred methods of transport, steamboats disappeared from the river, and so did the landings. A secondary purpose evolved at Red Banks Landing no matter how seemingly minor. The Red Banks landscape was never abandoned beyond hope, just as Lowenthal and Prince (1964:346) stated about the continually transforming English landscape.

The maritime culture of eastern North Carolina transitioned as the global market for naval store crashed, and the landscape became a webbed mass of railroad track and roads where impassable swamp once hemmed in the population. As the region lost its maritime identity, Red Banks Landing’s primary purpose faded. As it became a relict of the landscape, a secondary purpose became significant to the site – that of recreation.
This purpose, however, did not require a functioning landing. With disuse, the structure that once connected global markets, collapsed into the water.

Studying Red Banks Landing demonstrated further potential to contribute to the historical record. Although this investigation concentrated on this landing solely, Red Banks should be incorporated into a larger study of landings on the Tar River. A larger study could lead to a better understanding of the interconnectedness of landings in the region and their overall contribution to the settlement process. Although the Red Banks Landing study revealed a facet of the region’s development, it cannot provide a complete picture of the region. This study provides a starting place for understanding landings and their very important contribution to the American landscape.
Bibliography

Primary Sources:


Beaufort County Deed Books. Beaufort County Court House, Washington, NC.


Pitt County Deed Books. Pitt County Court House, Greenville, NC.


Speir, Elizabeth. 1773 Last Will and Testament. Reprinted in *Pitt County Genealogical Quarterly*, Greenville, NC.


Secondary Sources:


Ellison, Judith DuPree.  *Index and Abstracts of Deeds of Record, Pitt County, North Carolina, IV (1817-1823)*. Miami, FL: Old South Historical Research, 1968.


