

Abstract

“From Quiet Woods to Tide Kissed Shore:”
Searching for the Colonial Port of Sunbury, Georgia’

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This thesis chronicles efforts to examine a unique colonial waterfront complex in Sunbury, Georgia comprised of four distinct colonial wharf sites. To carry out an explanation of these features and Sunbury’s overall land-water interface, this thesis utilizes Immanuel Wallerstein’s World-Systems Theory in conjunction with extensive historical research and archaeological survey. The project’s primary aim will be to identify novel aspects of Sunbury’s economy and society through archaeology. Secondary goals include an investigation into the port’s role locally and abroad. A corollary to this aim will be to connect the lifespan of the wharf sites to larger forces affecting the town.

“From Quiet Woods to Tide Kissed Shore:”
Searching for the Colonial Port of Sunbury, Georgia

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by

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CHAPTER ONE: INTRODUCTION

Introduction

Sunbury is located on the lower coastal plain of Georgia in Liberty County, immediately west of St. Catherine's Sound on the south shore of the Medway River (Figure 1.1). The area adjacent is part of a much larger dynamic estuarine ecosystem encompassing portions of mainland, barrier and back-barrier islands, marshland, swamp, coastal sounds, rivers, feeder streams, and tidal creeks. The region's formal origins date back to the early-1700s when European colonists established fortified agrarian homesteads along the coast. At the time, Georgia's purpose was that of a strategic barrier, colonized ostensibly to buffer the British Carolinas from Spanish Florida. By the dawn of the American Revolution, Sunbury was a well-established maritime community, yet with war came economic and social declines that would never fully mend.

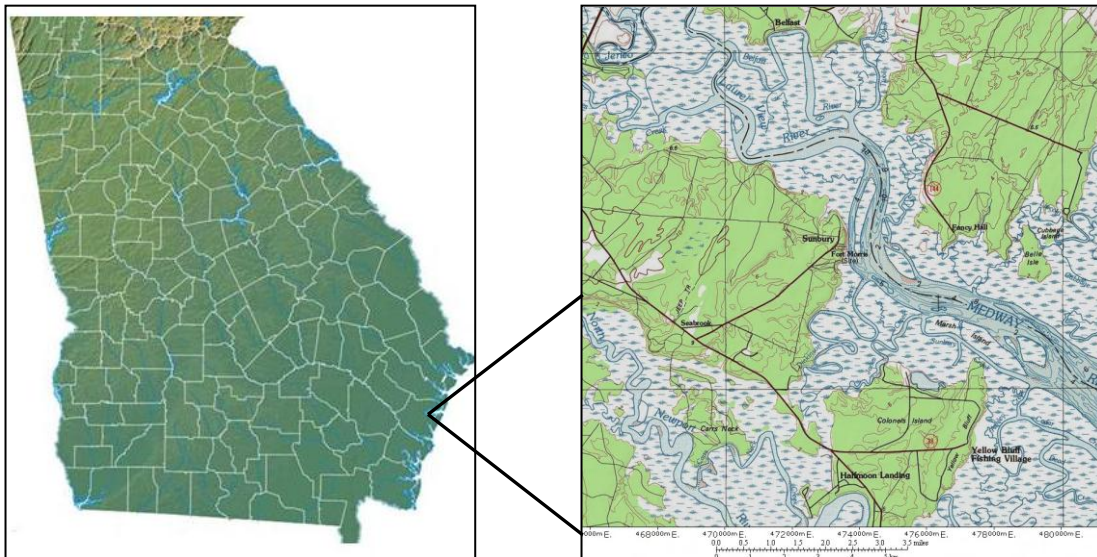


FIGURE 1.1- Details of Georgia and the approximate location of Sunbury. (Image on left courtesy of Georgia State Map Collection and Georgia Humanities Council. Image on right from Elliott 2005:1).

Like many colonial towns on the Atlantic seaboard, Sunbury played an influential but often overlooked role in the origins of the United States. Author and historian Paul McIlvaine claimed that Sunbury “probably produced more famous people per square foot of real estate than any other town in America” (McIlvaine 1971:1). While this statement undoubtedly exaggerates the distinction of the small coastal community, it is not without certain legitimacy. Notable figures Button Gwinnett and Lyman Hall, both signers of the Declaration of Independence, were leading citizens of Sunbury- impressive residents for a small remote frontier town of less than a mile square (Jones 1878:140).

Equally noteworthy yet overlooked was Sunbury’s importance as an early strategic and economic marine terminal. The town was one of only two ports-of-entry in colonial Georgia, important enough to be protected by an earthworks fortification and shore battery. During the 1760s, despite the post Seven Years War recession felt in northern ports, the town’s economy prospered. Located at the southern edge of Britain’s colonies, the port developed under the agrarian colonial regime best exhibited in the low country of Charleston, South Carolina, as well as the Caribbean, adopting an export economy (Sheftall 1977:1-15). The main resources shipped from Sunbury were lumber, rice, turpentine, and animal skins, which sailed to ports around the Atlantic, mainly in the Caribbean but also to England, the northern colonies, and even main land Spanish ports. Smaller coasting vessels locally supported this burgeoning trade (Martin 1763:CO5/709; Lee 1764:CO5/709; 1765:CO5/709; 1766: CO5/709; 1767:CO5/709).

Yet, Sunbury’s maritime tenure was short-lived. The lack of a hinterland limited the town’s development. Lacking the same influence, power, and global support networks created by other established merchants, aptly called “citizens of the world” by historian David Hancock because of their knowledge and frequent traveling to ports around the Atlantic, many of

Sunbury's merchants utilized connections in Savannah and Charleston to access larger markets for supplies and to fill demand (Hancock 1995). This pattern established Sunbury as a secondary port without major capital investment (Price 1974:124-185).

Outside forces pushed and pulled the citizens of Sunbury away from the town. For example, after suffering an occupation by the British, which led to the burning of a portion of the town in 1779, disease, changes in the market, and several hurricanes left the town vacant and neglected, but not entirely without substance. In 1878, historian Charles C. Jones wrote, "A stranger pausing here would find no trace of the past once full of life and importance, but now only existent in the skeletal memories which redeem place and name from that oblivion which sooner or later is the common lot of all things human" (Jones 1878:221).

Certain things remained from oblivion: those items resistant to weathering such as stone grave markers or artifacts preserved underground or underwater like glassware, ceramics, and wharf pilings. This thesis will investigate these preserved aspects of Sunbury's maritime heritage and archaeological footprint. They include four separate colonial era wharf sites: "Lamotte's Wharf" (9LI1908), "Fisher, Jones, and Hughes Wharf" (9LI1909), "Darling and Company Wharf" (9LI2013), "Kelsall and Spalding's Wharf" (9LI2039), those artifacts recovered along the waterfront and an artifact assemblage from a house site, the occupation of which dates to the 1790s.

Archaeological Definitions

Past work on maritime infrastructure such as landings, piers, jetties and other sites influenced much of the study. For this thesis, the accepted definition of a wharf is "a structure at which vessels may land and load their cargoes and passengers. It may be either marginal or projecting... A pier is a wharf projecting from the shore" (Greene 1917:1). Previous work on

wharf sites led to further terminology and approaches utilized later in this thesis. In 1985, as part of her master's thesis research, Andrea Heintzelman studied three wharf sites in New England and developed terminologies describing construction details evident on the wharves. She also studied the environmental, social, and economic factors affecting wharf construction (Heintzelman 1985). Joseph Norman (1987) researched eighteenth-century wharf construction techniques used in Baltimore. His work also provided further construction definitions. These terms include bulkhead walls, which are the walls of marginal wharves constructed along the shore. These walls usually require supports to retain fill (Norman 1987:7). Norman also describes another wharf feature: pilings. Norman explains these as:

Pile and pilings are terms that describe any columnar members which are driven vertically, or near vertically, into the ground to form a foundation for construction purposes or to act as a barrier against horizontal forces. Piles include basically two types: sheeting piles, which are used to enclose or confine an area, and bearing piles, which act either in isolation or in groups as supports for construction (Norman 1987:17).

Archaeologist David Beard, working in South Carolina, also devised his own set of definitions and typologies because he correctly concluded most previous wharf research centered on large wharf sites located in the urban areas of the Northeast and Mid-Atlantic, and therefore had little in common with the smaller sites located in the rivers of the low country (Hatch 1942; Heintzelman 1985; Norman 1987; Beard 1991, 1993, 1997:64). Beard's typologies are as follows: "General purpose plantation landings, special purpose plantation landings, ferry landings, and shipyard landings" (Beard 1993:63). Beard limited his study to the classes mentioned but noted the possible existence of other types (Beard 1993:63). He further subdivided the primary features of the sites into two groups using construction techniques: 1) wharves and piers and 2) causeways (Beard 1993:63; 1997:63). Continuing the division using construction techniques Beard wrote:

Wharves and piers consist of pilings and cross-timber construction or log cribbing. These two construction methods can then be divided into categories of rough-hewn timbers or finished timbers. Causeways can consist of packed fill, around puncheons, or filled cribbing. The fill material may then consist of soil, brick, stone, shell, derelict vessels, and mixed fill (Beard 1997:63).

Beard's point is important because Sunbury was not an urban area so its waterfront resembled sites similar to those Beard investigated.

Broad Forces Influencing Sunbury

There is a direct relationship between Sunbury's rise and decline based on the port's inclusion into the world-system. Understood through the theoretical perspective of World-Systems Theory, a global world economy (capitalism) spread beyond political borders to truly global proportions via zones of exchange. Maritime transport fueled this expansion through entrepôts which are ports, cities, or other centers where goods are brought for import and export, and for collection and distribution. Ports are the gateways for the zones of exchange and facilitate development. (Wallerstein 2007:27; Delgado 2009:16). These zones of exchange include peripheral zones which supply raw materials to the core zone(s) and core zones that dominate politically and economically (Delgado 2009:15). When cycles fluctuate, or when ventures exhibit diminishing returns, capital investors leave the peripheral zone, abandoning it for more profitable investments (Wallerstein 2007:25-30).

From this perspective, both Sunbury's rise and decline can be explained. The port served as a center for British imperial order in the area and acted as a router for customs, cultural meanings, and economic structuring through the expansion of the world-system. Militarily, the port was central for defense and imperial authority. After the Revolution, the needs of the system changed, and with it, the previous patterns of profitable production.

Even though Sunbury was a small unit within the world economy, the citizens there created physical manifestations of their participation in the global exchange. This process affected ports all over the world. The physical expressions of these global processes are the wharves. Maritime archaeologist Virginia Dellino-Musgrave described this relationship when she wrote, “Global processes such as capitalism, colonialism, and consumption are influenced by local forces and manifested in events at a local level” (Dellino-Musgrave 2006:1).

The connections between Sunbury and other related Atlantic maritime communities are central to understanding the significance of the port. World-System Theory readily lends itself to the precepts of a material cultural analysis because imported artifacts from core cities such as Charleston or London supply the material evidence of these linkages in the form of manufactured goods. The rise of the port and its involvement in the world economy will be considered in the context of the historical forces affecting the seaport. These include mercantilism, the spread of agricultural capitalism and the inculcation of the plantation complex.

Research Questions

This thesis examines Sunbury’s maritime archaeological record because these data reveals insights into the port’s society and economy. Contextually, these processes are assessed on a local and regional level, but also on a much wider macro-scale as regional aspects of greater processes, following the model provided by James Delgado (Delgado 2009:28). In addition, the archaeological record is examined for clues relating to the specific and often catastrophic events affecting Sunbury to discover whether there is a connection between disasters and the town’s cultural, social, and economic phases. This work is essential to determining the causes that led to the town’s abandonment and closure as a port of entry, as well as understanding peoples’ decisions to abandon the town.

The primary research questions driving this thesis is: what does the archaeological record reveal about the society or economics of Sunbury that was not already illustrated in the historical record and what connections can be made from the archaeological record concerning the effects of greater historical forces on Sunbury? Secondary lines of questioning generated different paths of inquiry including the direct observation of the archaeological remains regarding the formation processes affecting the sites. Secondary questions derived from this inquiry include in a random order:

1. What do artifact locations reveal about behaviors associated with maritime practices?
2. Can links be found that correlate substantive connections between the relationship of artifacts underwater with those on land or in the tidal zone?
3. What was the role of war on the creation and distribution of artifacts? Did these forces truly affect the port to the degree evidenced in the historical literature (Jones 1887; McIlvaine 1971; Sheftall 1977)? Can an archaeology of disaster be determined?
4. How does Sunbury fit a conventional definition of an abandoned settlement? In this case, what does it mean to be abandoned? Is the process of forced migration evident in the archaeological record? Does a status of abandonment have any bearing on the archaeological record?
5. What are the local geographic and environmental factors affecting the site today? What role do these factors play in site transformation?
6. Is there a correlation between artifacts and the colonial shipping records? In other words, does the archaeological record reflect changes in Sunbury's economic prosperity or decline?

The maritime archaeological sites located along Sunbury's waterfront have the potential to reveal a great deal of anthropological information. This thesis assesses these sites individually, and as a whole, to learn more about the behaviors and driving forces that created them.

The town's history also provides the researcher with a unique lens to carry out a comparative analysis with other ports. Sunbury's 60 years of viability is narrower compared to other ports that underwent more years of sustained occupation. Therefore, Sunbury's uniquely circumscribed maritime history makes it an archaeological case study for this period and can be compared to other areas that may have undergone similar transitions. The grim realities of these all but forgotten towns help illustrate the advancing "connectedness" of these widely dispersed places as part of a world-economy.

Research Design

Sunbury's waterfront represents a short period in colonial history. This thesis utilizes Immanuel Wallerstein's World-Systems Theory for analysis (2004). In addition, site formation processes proposed by Schiffer (1987) are also analyzed. Chapter Two discusses each theoretical perspective as they apply to the research. Additionally, where appropriate, limitations of the different approaches are discussed. This theoretical work provided a partial foundation for the methods by which researchers carried out archaeological surveys.

Chapter Three describes the methods utilized by the author to carry out the archaeological and historical research. This chapter breaks down historical research by elaborating on locations of archives visited, followed by a brief description of the holdings. The last section of the chapter discusses the methods employed for the archaeological surveys as well as explanations of the analyses of the compiled data.

Chapters Four and Five provide the data for the analyses. Chapter Four highlights the history of the town of Sunbury, providing the context for the archaeological analyses. Chapter Five provides the results of the archaeological surveys. This assessment includes the wharf sites and the Community Property Lot. This chapter is divided into the components comprising each individual wharf site.

Chapter Six describes and presents the correlated results of the archaeological and historical data. This chapter provides the combined results from the application of the theories described in Chapter Two and the data from Chapters Four and Five. This information is utilized to describe the behaviors and processes evident in the archaeological record.

Chapter Seven concludes the thesis. Within the conclusion is the assessments of the data and the concomitant evaluations of the methods by which the data is derived and the viability of the applied theoretical perspectives for the work. Another section of the chapter specifically answers any previously unaddressed research questions. Perhaps most importantly, the last section of the thesis addresses future work at the site and proposes new directions for research based on the assessment of this project.

Conclusion

This study is the first systematic underwater archaeological examination of the waterfront at Sunbury, Georgia as well as the first to address maritime perspectives for the archaeology of the port town. In the past, metropolises dominated the study of maritime history, but since our knowledge of the world-economy is more sophisticated, it is clear that smaller ports play different, but no less integral roles in the maritime-system. Smaller ports, many of which were abandoned and no longer exist, can now be perceived in a different context, one in which they play a vital role. Maritime historian Gordon Jackson noted this change in perception:

So the study of a port was validated by examining the interplay of facts and comparisons between ports and people; in short, anything for which statistics were available. Moreover, the true significance of ports appeared to be based not only on comparisons between their various internal functions – size, tonnages, acreages of water and so on – but also on their role within two extended systems: the collection and distribution of good[s] within their hinterland and the economic development there and else where in the national economy (Jackson 2001:4).

This quote, among other things, concisely sums up several main avenues of inquiry included in this thesis. Locally, this thesis expands the history of the port town by looking at the people on the waterfront, the industries they developed, the wharves they produced, and the specific events that affected the port. The port was part of larger developments in the world-system that altered the places connected to it. Consequently, the archaeology of this small port town contributes to the knowledge of these much larger transformative processes.

CHAPTER TWO: THEORETICAL APPROACHES

Introduction

Recognizing that the practice of archaeology does not occur in a vacuum, it is important to highlight particular theories applied to the research and field methods. The intertwined associations of social, political, and economic forces, and the effects of geography and landscape on site formation often make a simple straightforward approach inappropriate. Therefore, this chapter outlines applicable theories from maritime archaeology, site formation and abandonment behavioral archaeology, and broad sociological and historical concepts such as World-Systems Theory and the Atlantic World historical approach.

Some have criticized the sub-discipline of maritime or marine archaeology for the paucity of stated theoretical paradigms informing fieldwork (Muckelroy 1979; Lenihan and Murphy 1981; Cockrell 1990; Fontenoy 1994). The criticisms include the site-specific nature of past work, the concentration on shipwrecks, and the historical particularist priorities of past work. These biases represent some of the fundamental weaknesses in the development of the field. In order to move past these deficiencies, some critics called for multiple interpretations of the past and a distinct move from the *process* by which maritime material cultural remains were produced to the *reasons* behind the creation of those specific material remains (Jasinski 1993; Flatman 2003). Explicit in this approach is the rejection of Muckelroy's assertion that maritime archaeology must only be concerned with those remains that are found beneath the sea (Muckelroy 1979). Essentially, critics like Jasinski wrote that Muckelroy's approach limited the field's scope to submerged environments only. This approach is unacceptable because the separation between landed and maritime societies is not as dualistic as previously believed

(Muckelroy 1979; Jasinski 1993). Furthermore, as a field that relies so heavily on ship remains, a natural research priority is the cultures that produced the ships which eventually ended up on the seafloor. Inevitably, scholars proposed a wider, more holistic cultural approach, one that included sites on land (Hunter 1994). Gould may have contended, "...that generalizations about various ways the human species has adapted to the conditions of voyaging and its use of the maritime habitat may be possible on the basis of evidence provided by shipwrecks," but the same argument, can be used for other maritime cultural resources as well (Gould 1983:6).

In the field, there is a distinct call for postprocessual endeavors, such as the incorporation of a multitude of interpretations of the past, and intercontextual approaches incorporating the various elements of broader "interpretative endeavors," such as social and cultural history, cultural anthropology and ethnography (Chadwick 2003; Flatman 2003). These ideas recognized, as Cedurland wrote, "that a precondition to archaeological theory is a multiplicity of voices and thoughts" (Cedurland 1995:11). Through these robust theories and frameworks, maritime archaeologists are expanding the range and scope of maritime archaeological research beyond shipwreck sites (Flatman 2003). It is the aim and scope of this investigation to carry on in this tradition by surveying the waterfront sites of a colonial seaport. To do so, the researcher used various theories as they applied directly to the unique circumstances surrounding this area. The following is an outline of the applied theoretical approaches utilized for this thesis.

Abandonment and Other Site Formation Processes

The abandonment of the town is a contributing factor to the presence of the remains at Sunbury. An archaeological definition of abandonment assumed here is "the absence or near absence of evidence for habitation of appreciable magnitude or duration in a locus of previous occurrence" (Fish and Fish 1993:99). Schiffer defined abandonment as "the process whereby a

place—an activity area, structure, or entire settlement—is transformed to the archaeological context” (Schiffer 1987:89). Other definitions of abandonment cover sociological aspects of abandonment or strictly maritime aspects of the abandonment of vessels (Richards 2008; Smith 2010:31-33). In order to grasp the processes that created Sunbury’s archaeological footprint, it is necessary to apply the theoretical concepts surrounding abandonment and site formation processes.

Approaches pioneered by behavioral archaeologists specializing in abandoned sites allow novel approaches to material culture. For example, Michael B. Schiffer stressed that artifacts are best understood in the context of these formation processes (Schiffer 1987). These formation processes include cultural site formation processes (c-transforms) which are human-based behaviors that affect the site or artifacts and noncultural site formation processes (n-transforms) which are not based on culture. Understanding and identifying the site formation processes is crucial to understanding patterns associated with the archaeological context. Critical to these studies is the acceptance of the importance of discerning site formation processes on the given artifact assemblage before drawing conclusions. For instance, scholars such as Steve Tomka, Catherine M. Cameron, and Ricky Lightfoot recognized abandonment as a part of the archaeological formation of their sites (Cameron 1993:3-10; Lightfoot 1993:165-177; Tomka 1993:11-24). They also acknowledged the importance of artifact assemblages as a means to understand the behaviors and motivations for abandonment.

The range in artifacts assessed at Sunbury includes everything from small ceramic sherds to individual wharf sites to the landscape comprising the entire waterfront, approximately 2,000 meters. The temporal and spatial ranges of these artifacts shift perspectives from the wide and regional to smaller household units. Past archaeologists influenced this work by dividing these

perspectives into two segments: the abandonment of settlements and the abandonment of structures and activity areas within settlements (Cameron 1993:4). At the heart of the matter is the “abandonment process,” or what Professor Catherine Cameron noted as “those activities that occur during abandonment-including behavior such as the curation or caching of tools, dismantling of structures, and the interruption of normal disposal patterns” (Cameron 1993:3). As a result, this thesis follows suit by discussing individual sites as well as the town and region.

Other studies provide relevant theoretical and methodological approaches to abandonment sites. For example, Stevenson was the first to assess the effects of abandonment conditions on the proportion of curated and discarded artifacts (Stevenson 1982:237-265). Stevenson also outlined several factors affecting quantities of *de facto* refuse at abandonment sites such as the manner by which sites are abandoned. For example, gradually and planned versus rapid and unplanned or whether or not return is planned, the means of transportation, the distance to the next site, and the season of abandonment (Stevenson 1982:237-265; Schiffer 1987:90-91). *De facto* refuse consists of “tools, facilities, structures, and other cultural materials that, although still usable (or reusable), are left behind when an activity area is abandoned” (Schiffer 1987:90-91). Wharves, by this definition, are considered *de facto* refuse in this thesis and underlying the analysis is a means of understanding what factors contributed to the amounts of the wharves left along the waterfront.

Other archaeologists contributed to this discussion. In Steve A. Tomka’s article, “Abandonment Among Transhuman Agro-Pastoralists,” the author noted a “steady decrease in assemblage size associated with increased abandonment length” (Tomka 1993:15). Ricky R. Lightfoot contributed to this discussion through his study of rates of abandonment as derived through a method for scientifically evaluating *de facto* refuse depletions. Through his work, he

attempted to answer questions about what a systemic context should look like, and what factors affect *de facto* refuse. One conclusion concerning the amount of *de facto* refuse on a site related to site accessibility. He found that occupants prioritized their material lives. If a new occupation site was close by, then salvage rates would be high, along with rates of curate behaviors. Curate behaviors are those processes of “removing and transporting still-usable or repairable items from the abandoned activity area for continued use elsewhere” (Schiffer 1987:90). The authors noted, however, that a plethora of activities contribute to *de facto* refuse, therefore using it as a sole means to assess a systemic context is unreliable (Stevenson 1982; Schiffer 1987; Lightfoot 1993).

Useful and directly relevant to this study are Schiffer’s discard processes affecting artifacts. This study considers the artifacts located along the waterfront as refuse. An artifact is considered refuse when it is no longer participating in a behavioral system (Smith 2010:28). The *spatial dimension*, or an artifact’s location, is the last discard process and the most pertinent for this study. Considering the behavioral aspects of an artifact’s location is critical because it allows for analyses based on location and spatial dimensions of the artifacts. This is accomplished through differentiating the discard space between primary refuse and secondary refuse. Primary refuse occurs when artifacts are discarded in the primary activity area associated with that artifact’s function while secondary refuse derives from artifacts discarded away from its primary activity area (Schiffer 1987:1-25).

The context of Sunbury presented the author with multiple perspectives to consider. Previous literature on the subject dealt with various levels of abandonment cases. For instance, archaeologists established spatial differentiations for abandonment cases from small to large, such as household sites or mining camps to regional abandonments in the American Southwest (Stevenson 1982; Schiffer 1985; Cameron and Tomka 1993). The sites at Sunbury blur the lines

and defy easy distinctions. For instance, family members abandoned house sites as they decided to leave. As time went on, the town, port, and waterfront were abandoned, making it an abandonment of an entire settlement. The last thing to consider is the abandonment of rice agriculture and the transition to new agricultural forms. Archaeologists Joyce and Johannessen argued, “the scale of abandonment must also be considered when examining material patterning in the archaeological record” (Joyce and Johannessen 1993:151). In their study, they found that the scale of the abandonment resulted in the differential treatment of buildings (Joyce and Johannessen 1993:151). Their approach informed this study by citing the need to sample multiple structures (wharves) to assess any differential treatment.

Reclamation processes are also associated with an abandonment complex. These include salvaging, looting, and collecting. Of the terms mentioned, only reuse, in this case land reuse, can be considered a transformative enterprise. Schiffer defined the reclamation process as the transformation of artifacts from the archaeological context back to the systemic context (Schiffer 1987:99). The other processes are depletion processes which remove the artifacts from their archaeological context. Smith (2010:35) argues that, regardless of their reductive potential, looting, salvaging, and collecting should be considered reclamation processes in their own right. Regardless of the theoretical position, those processes are considered in this analysis as reductive processes (Seeb 1997; Smith 2010).

Definition of the Atlantic World

This study of Sunbury is not particularistic in the sense that it places Sunbury in the wider Atlantic World and investigates the peoples’ interconnections with wider regions. It is necessary, therefore, to define “Atlantic World” or describe some of the parameters of Atlantic history. The definition of “Atlantic World” in Michael Jarvis’s work (2010) succinctly defines the framework

as the study of different groups of people who lived around the Atlantic Ocean and became more interconnected after 1492. Put another way, this paradigm considers a specific place from the multiple perspectives of those who directly or indirectly encountered it. The simplicity of this definition should not infer a casual or simple approach to Atlantic history. To the contrary, maritime historians have formulated a complex assessment pertaining to what should be considered the Atlantic World.

Daniel Vickers, in his 1993 article, “Beyond Jack Tar,” outlined some of the features of Atlantic history. As Vickers wrote, maritime historians differed from their traditional counterparts because, “...maritime history must be conceptualized, researched, and written from a variety of North Atlantic perspectives” (Vickers 1993:420). Finally, Vickers cautioned maritime historians against embracing only international contexts. He specifically stressed the need to research ports when he wrote,

There can be a cost to maintaining too strict an international perspective, if the shoreside communities from which mariners sprang and to which they returned upon retirement from the sea are neglected... The challenge to the maritime historian, therefore, is to integrate what we now know about life at sea with our increasingly sophisticated understanding of life in port (Vickers 1993:421-422).

Answering this call, scholars like David Armitage and Alison Games contributed to maritime theory regarding the Atlantic World (Armitage 2002; Games 2004). Armitage noted three concepts of Atlantic history: “circumatlantic,” the transnational history of the Atlantic World, “transatlantic,” the international history of the Atlantic World, and “cisatlantic,” the national or regional history within the Atlantic context. Jarvis summarized Armitage’s emphases on Atlantic history using the contexts,

David Armitage notes the often overlapping transatlantic, circumatlantic, and cisatlantic facets of recent Atlantic studies, stressing transnational networks and cross-cultural sharing, the circulation of peoples, ideas, diseases, and commodities

within geographic systems, and the impact of global and Atlantic forces, events, and exchanges in particular communities (Jarvis 2010:5).

The approach for this study utilizes all three of Armitage's concepts but emphasizes the cisatlantic history of Sunbury.

World-Systems Theory

There is a link between the Atlantic World conceptualization posited by historians such as David Armitage and Michael Jarvis and aspects of World-Systems Theory stated by Immanuel Wallerstein. In other works, maritime archaeologists and other specialists have accepted some of the basic premises of World-Systems Theory (Lillios 1993:110-120; Johnson 1996; Lewis 1999:3-13; Hornsby 2005). It is important to clarify the perspectives advocated by Wallerstein as advanced in this thesis. These clarifications also elucidate the many linkages between the historical theoretical stance taken here with the Atlantic World and World-Systems Theory.

In the 1970s, historian and sociologist Immanuel Wallerstein developed World-Systems Theory as a critical and oppositional perspective to the traditional academic structures within the historical sciences (Wallerstein 2004:1-20). As a theory, it is a critique and counterpoint to the division of social sciences and the barriers erected between them. It also served as a critique of the unit of analysis and timescales employed in the social sciences (Wallerstein 2004:16). In any world-systems examination, the world-system replaces the traditional unit of analysis, the nation-state. By replacing the nation-state as the object of study with world-systems, Wallerstein includes “historical systems” that he believes always existed, so called minisystems, and world-systems of which there are world-economies and world-empires into his analysis (Wallerstein 2004:16). Consider the hyphen in world-system which denotes that a world system is not a

construct that geographically encompasses the whole world, but is theoretical worlds unto themselves integrating different institutions and activity zones across various political and cultural units (Wallerstein 2004:16). Wallerstein defined the world-economy as

...a large geographic zone within which there is a division of labor and hence significant internal exchange of basic or essential goods as well as flow of capital and labor. A defining feature of a world-economy is that it is *not* bounded by a unitary political structure. Rather, there are many political units inside the world-economy, loosely tied together in our modern world- system in an interstate system (Wallerstein 2004:23).

According to Wallerstein, the modern world-system originated in the 16th century. This modern world-system is comprised of a capitalist world-economy. Originally, the world-system was bounded in parts of Europe and the Americas. Since the 16th century, the world-system expanded to cover the whole globe. Part of this expansion can be explained through the British maritime hegemony of the 18th and 19th centuries. Therefore, this study explains Sunbury's development using world-system analysis and posits that Sunbury grew as an appendage to the expanding capitalistic world-economy via British expansion.

Wallerstein's basic premise of capitalism is "a system that only gives priority to the endless accumulation of capital" (Wallerstein 2004:24). To borrow from Karl Marx, capital here can mean, "...not only the sum of material products; it is a sum of commodities, of exchange values, of *social magnitudes*" (Marx 1891:208). At first, Wallerstein's definition seems limiting, as it does not mention anything about the modes of production, or the division of labor. Again, Marx can offer a succinct summary of the universe-like expansion of capitalist production envisioned by Wallerstein, "Capitalist production, is not merely the production of commodities, it is essentially the production of surplus value. The labourer produces, not for himself, but for capital... That labourer alone is productive, who produces surplus-value for the capitalist, and thus works for the self expansion of capital" (Marx 1873:418).

Wallerstein also expanded on the role of the capitalist system in the world-economy. He wrote, “A capitalistic world-economy is a collection of many institutions, the combination of which accounts for its processes, and all of which are intertwined with each other” (Wallerstein 2004:24). The basic institutions he mentions are: various markets, various states, in an interstate system, and on the individual scale, households, classes, and status-groups (Wallerstein 2004:24).

Wallerstein sought to explain change within the modern capitalist world-economy. Those processes of change he mentions are the most prescient to this study. For example, labor in the capitalist system is divided along a core-peripheral axis. This relational concept defines profitability of the production processes. Core-like production processes are those controlled by quasi-monopolies and therefore most profitable. Peripheral production is almost truly competitive and thus far less profitable. The movement of production along the core-periphery axis is a main driver of change (Wallerstein 2004:28). Wallerstein described this change, “Since, as we have seen, quasi-monopolies exhaust themselves, what is core-like process today will become a peripheral process tomorrow. The economic history of the modern world-system is replete with the shift, or downgrading, of products, first to semiperipheral countries, and then to peripheral ones” (Wallerstein 2004:29). It is important to note that the core-peripheral axis does not inherently necessitate the types of goods flowing from peripheral to core or vice versa. For the purposes of this study, the production that generates the raw materials and agricultural goods exported from Sunbury starts out as core-like in that quasi-monopolies (plantations) controlled production of rice, which garnered high market demand. Over time, however, these core-like commodities downgraded to peripheral products.

The axial relationship between core and periphery produces geographic consequences on the landscape. Wallerstein found that core-like processes tended to group themselves in limited numbers of states but constituted a majority of production in those areas. On the other hand, peripheral processes tended to be spread out along many states, but still constituted primary production activity (Wallerstein 2004:20-31). Along these zones of exchange flowed goods and ideas. Core zones dominated peripheral zones politically and socially, creating a flow regime. Typically, raw materials flowed to the core zone from the periphery, and finished goods, as well as cultural values and symbols moved to the periphery. There are more peripheral zones supplying a core zone or city. This geographical consequence, along with a mechanism for economic change applies directly to the study of Sunbury.

Maritime archaeologists and other scholars are applying these concepts and adding to them with another subset: the maritime-system. They see the maritime-system as the expansion of trade and interconnectedness within the capitalistic world-economy via the pathways of the sea. The scholars are most interested in studying the role(s) of maritime transport in creating the world-economy, to quote Delgado, “Wallerstein’s world systems theory has been accepted by some maritime archaeologists, including me, who consider the global maritime trade of the eighteenth, nineteenth, and twentieth centuries to be the main driver of expansion of a global world system” (Delgado 2009:21). This is also a primary motivation for this study, as it highlights the applicability of archaeology to studying economic changes and expansion in new ways. Delgado noted, “The key to incorporating the new zones was the use of effective decision-making bodies that could control production and merchandizing decisions, one model being the plantation system of grouping primary production in large units” (Delgado 2009:18).

Consequently, Sunbury's development can be considered as part of a larger mercantilist-capitalistic development of the world-system.

Conclusion

Alison Games, in an article about the definitions of Atlantic history, described the characteristics of the field of study. These characteristics emphasized a multiplicity of approaches. Geographically, Atlantic history encompasses more than just the region bounding the Atlantic Ocean. Its purveyors attempt to chronicle the transformations wrought by the intersection of four continents following Columbus's voyages (Games 2004:3). Therefore, it also deemphasizes national identities. To this end, she wrote, "Atlantic history provides an approach that requires the rejection of national histories" (Games 2004:3). According to Games, it also privileges "interactions and connections" making a "history without borders" (Games 2004:4). This rehash of the themes found in the Atlantic World is important because of the similarities between this historical approach and World-Systems Theory, both of which apply to this thesis.

Understanding these contexts is crucial to understanding Sunbury's rise and fall as exhibited in the archaeological record. Finally, these theories develop an approach to the interpretation of the individuals at Sunbury who deposited the material in the record. Linking the time scales is important because it can be a path for the archaeology of capitalism. Archaeologist Matthew Johnson wrote, "One future avenue for an archaeology of capitalism is to link these different scales of analysis together, from the level of the capitalist world-system through the circulation of commodities to the individuals and households at either end of the chain..." (Johnson 1996:210). Consequently, the theoretical framework outlined here is the foundation of analysis for Sunbury.

CHAPTER THREE: METHODOLOGY

Introduction

This chapter discusses the methods used for data acquisition, interpretation, and analyses relevant to both historical and archaeological investigations. Historical research was carried out at various libraries in several states and research institutions around the country and in Great Britain. This research helps explain Sunbury's history and the port's relationship with the wider Atlantic World evident in the archaeological record. Archaeological project investigations include multiple digital side-scan sonar surveys, inter-tidal visual inspections, GIS mapping, limited low-tide surface collection, wood-type analysis, previously un-cataloged house site artifact assemblage analysis, and one piling remnant excavation. In addition, historical statistical data from the shipping lists of Sunbury for the years 1763-1767 is correlated with the archaeological record. The northern boundary of the research area is an east-west line across the Medway River beginning at the unnamed creek on the northeastern side of the river's East Channel. The southern boundary is Sunbury Creek. Survey areas include both underwater and inter-tidal shoreline environments. The researcher merged historic and archaeological data through data collection and analysis and when possible created a synthesis between the two using GIS layering.

Archival Research

Archives utilized in this study consist of both public and private institutions in Georgia, North Carolina, Washington, DC, and London, England, all of which provided both primary and secondary sources. Public institutions include local, state, and federal data repositories with the primary resources being relevant shipping lists, tax and property

records, maps, navigational charts, aerial photographs, and coastal topographic surveys, merchant trade logs, personal letters, and political and imperial correspondence. Private institutions consist of historical societies and private collections that maintain information specific to the period and associated locations. Each collection's contribution to this study is described.

Previous Historical Research

The historical research consisted of visiting multiple libraries and archives as well as talking to local informants. Data compiled by archaeologist Dan Elliot (2005), historian John Sheftall (1977), and C.C. Jones Jr. (1878)- whose work remains a landmark for the history of the port town- and provides a starting point for this study. These sources help illustrate maritime connections to the West Indies, greater Georgia, and the wider Atlantic. The researcher specifically targeted primary documents pertaining to the town's social, economic, maritime, and political history. Additionally, the researcher sought documents pertaining to specific individuals related to maritime activities on Sunbury's waterfront.

Charles C.C. Jones Jr. remains the best historical source on Sunbury. He was raised in Sunbury but emigrated after the town became abandoned. His history is one of the most cited. It was written in the late 19th century making it a secondary account. Jones greatest contributions are the map of the town he redrew from his father's original, which was lost in New York City, and a recording of the names and lots owned by many original settlers. Unfortunately, Jones did not cite many sources for his history.

John Sheftall (1977) also wrote a history of Sunbury. Sheftall's exhaustive, well-cited work primarily centered on the military history of the town and its many contributions during the American Revolution. Sheftall also consulted many sources not mentioned in Jones' work such

as tax records, county records, probate records, newspaper accounts, and other maps. Sheftall's work contributed to this study through the land ownership titles. He recorded title ownership for many of the house sites. Together, Sheftall and Jones covered much of Sunbury's history.

J.Y. Joyner Library and Special Collections-East Carolina University

Joyner Library maintains a large collection of secondary sources pertaining to Georgia. The online electronic databases provided by the library proved invaluable tools for this study. One such electronic database was "Early American Newspapers Series I, II, and III, 1690-1922". This resource enables students to search for any historic newspaper, that has been scanned, within a given time range in the United States of America. For this study, a "Sunbury Newspaper Database" was compiled pertaining to every mention of the port town in any newspaper in the North American colonies and England from 1758 until 1820. The most important primary newspaper cited is the *Georgia Gazette*. Many primary documents pertaining to Sunbury do not survive to the present. References to the town's luminaries, shipping, shipwrecks, war involvement, interactions with Native Americans, and other information found within the newspapers represented an under-utilized and beneficial historical dataset.

Ruppé Library-East Carolina University

The East Carolina University's Program in Maritime Studies at Eller House maintains the Ruppé Library. It is a repository for rare sources relating to maritime research, but its most important value is as a source for past student theses such as those by Franklin Price (2006) and Lindsay Smith (2010). This invaluable resource was utilized on numerous occasions and provided both maritime historic and archaeological data, especially those relating to colonial wharf sites, maritime landscapes, port studies, and colonial era shipwrecks.

River Campus Library-University of Rochester

River Campus Library holds an extensive collection of colonial shipping lists on microfilm and the librarians there will digitize these collections according to a person's specific demands. Consequently, the Sunbury shipping lists utilized in this study came from University of Rochester before they could be verified from the original source in England. These lists only provided data for the limited timeframe of 1763 to 1767.

Hargrett Rare Book and Manuscript Library-University of Georgia

The University of Georgia's Hargrett Rare Book and Manuscript Collection hold one of the finest collections of primary source material on early Georgia history anywhere in the world. This collection was vital to providing crucial information about Sunbury. Pertinent information included: probate records and tax records for St. John's Parish, letters from citizens in Sunbury, colonial surveys of plantations near Sunbury, the 1787 shipping list, and the Des Barres 1780 chart of Georgia showing Sunbury and nearby plantations.

State Archives in Georgia

The Liberty County Records collection held in Hinesville, Georgia consists of early tax and municipal records that were once held in Sunbury but moved around 1800. From these, the most important piece was *County Record DD part 1*, a document in Dutch describing the storefront two Dutch merchants owned. This wharf and storefront was formerly the Fisher, Jones and Hughes wharf site (9LI1909). Besides this document, various other property deeds were recorded. Due to the focus on the waterfront, only deeds pertaining to waterfront property, or those belonging to people directly associated with the waterfront were assessed.

Georgia Coastal Underwater Archaeology Field Station Repository

The underwater branch of the Historic Preservation Division's Archaeology Unit holds an extensive maritime history and maritime archaeology repository at their office on Priest Landing at the Skidaway Institute of Oceanography in Savannah, Georgia. This repository consists of reports, site forms, student theses and dissertations, and other valuable, often site-specific archaeological information. The researcher consulted various site reports from Georgia to use as a means of comparison between Sunbury and other sites in Georgia.

State Archives

Located outside of Atlanta, GA, the State Archives hold many of the Georgia's historic documents. Important to this study are the *Colonial Records of the State of Georgia*, copied by Allan Candler from the original in 1902. This collection includes: original papers, correspondence of Governor Wright, merchant James Habersham, the Earl of Hillsborough, the Earl of Dartmouth and others, Indian treaties, relinquishments, tax records, and colonial assessments from surveyors and customs officials, including export and import figures from the 1760s to the 1770s.

Georgia Historical Society-Savannah, GA

Georgia's Historical Society located in Savannah, GA also has vital information in the form of documents from the colonial era. For example, some of the information utilized for this study is the Read-Mossman Papers 1765-1766. This collection contains ledgers from James Read and James Mossman, two merchants operating in Savannah, Georgia in the 1760s. The 657-page book contains entries and detailed purchase information for goods and services from merchants operating in Sunbury, such as Dunbar, Young and Company and Kelsall and Spalding, as well as

Button Gwinnett and Grey Elliott. Despite the short time span of the ledgers, they reveal a significant amount of information on the often overlooked aspects of coastal shipping such as the types of goods Sunbury merchants imported from Savannah, and the types of vessels transporting goods to and from the ports.

National Archives-Washington, DC

Many rare secondary sources are housed in the Library of Congress and National Archives. For this study, the researcher located pertinent charts and maps in the repositories as well as primary documents pertaining to 19th and early 20th century residents of the port. For example, the researcher located a detailed, first hand account of hurricane damage in Sunbury from 1824 (Stevens 1824:1-3).

International Archives

The most important colonial documents pertaining to this study are housed in the National Archives in London, England. They were accessed over the course of a week spent at the archive in the summer of 2009. Among these documents are Sunbury shipping lists from 1763-1767, Governor Wright correspondence, custom official reports, and colonial maps and charts. These documents reveal the purposes for establishing the town from the perspective of the British as well as how they engineered its development during various phases of significant change. Complementing this top down view of Sunbury's establishment are documents that identify individual actions, choices, and efforts. Some of these, such as the Loyalist Claims are very personal, while others, such as the reports on smuggling attempts, are not. Both help the researcher find details about the less known actors operating in Sunbury such as slaves, sailors, and common workers.

Past Archaeological Research

In 2002, Dr. Gordon Watts, of Tidewater Atlantic Research Inc. contracted with Mr. Terry Lyle of Shrimp Docks at Sunbury, Inc. and Mr. DeGejuchte of Half Moon Builders to conduct a remote sensing survey in the Medway River at Sunbury, GA. As a cultural resource management project, the scope of the investigation was limited. The businesses wanted to expand their docking operations by building a larger dock system into the Medway River. This expansion included the installation of “pilings to support 140 foot wide floating dock facilities extending approximately 175 feet into the river” (Watts 2002:1). In this projected expansion area Tidewater employees scanned the bottom for cultural resources. Watts described the area as a nine hundred foot long, 275 foot wide corridor on the Medway River in front of the existing Shrimp Dock Restaurant (Watts 2002:1-7; Figure 3.1). Watts and his team used a magnetometer and a side scan sonar to accomplish their survey. Upon completion of their survey, they located four anomalies. Two anomalies produced both magnetic and acoustic signatures. These were investigated by divers and found to be modern debris: one was a trawler door; the other anomaly was the remains from a construction project, including copper piping, concrete debris, and other disregarded objects (Watts 2002:21-34). The other two anomalies, however, produced characteristics suggesting potentially significant submerged cultural resources. These anomalies were outside of the proposed construction project so Watts did not investigate further.

In 2005, Dan Elliott, of the LAMAR Institute Inc., performed an archaeological survey of Fort Morris. The fort is located just south of Sunbury proper, overlooking the Medway River. Elliott carried out the first official archaeological survey of the area.

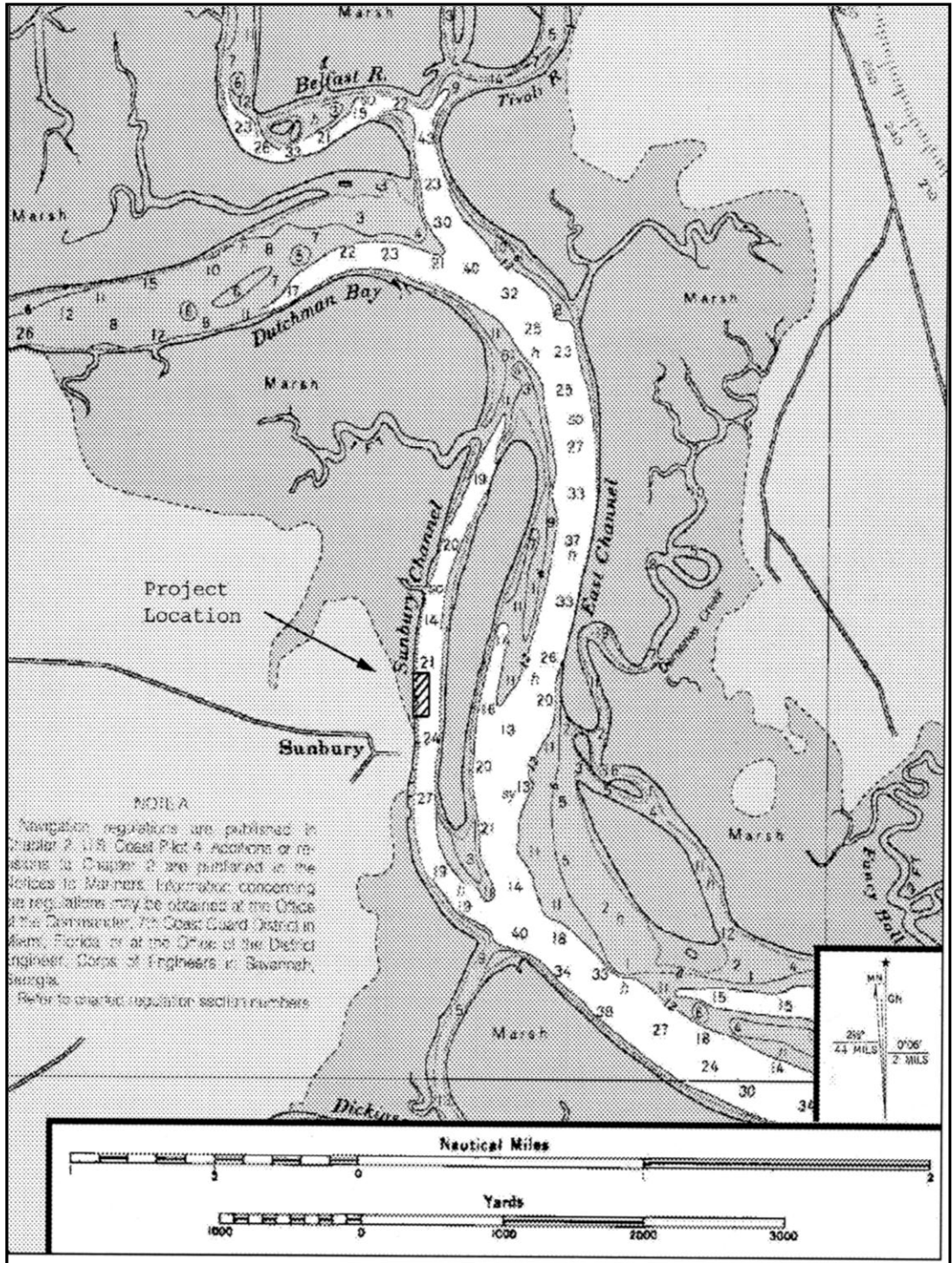


FIGURE 3.1: Chart illustrating coverage area of Tidewater Atlantic's survey (Watts 2002:4).

Using ground penetrating radar and metal detectors, Elliott executed an intensive series of test excavations around the town and the fort (Figure 3.2). The submerged resources of the area, were

beyond the capabilities of the survey, but Elliott highlighted just as Watts did, the need for further investigation into Sunbury's submerged historical resources (Elliott 2005:139-140). Elliott also compiled intensive archival research to accompany his physical findings. Unlike Watts, Elliott recovered many artifacts, over 3,000 objects. Lastly in 2006, Deputy State Archaeologist-Underwater, Jason Burns, with the aid of Shawn Jordan, carried out a one-mile side scan sonar survey along Sunbury in the Medway River. This work only produced raw data that had not been analyzed at the time of this writing.

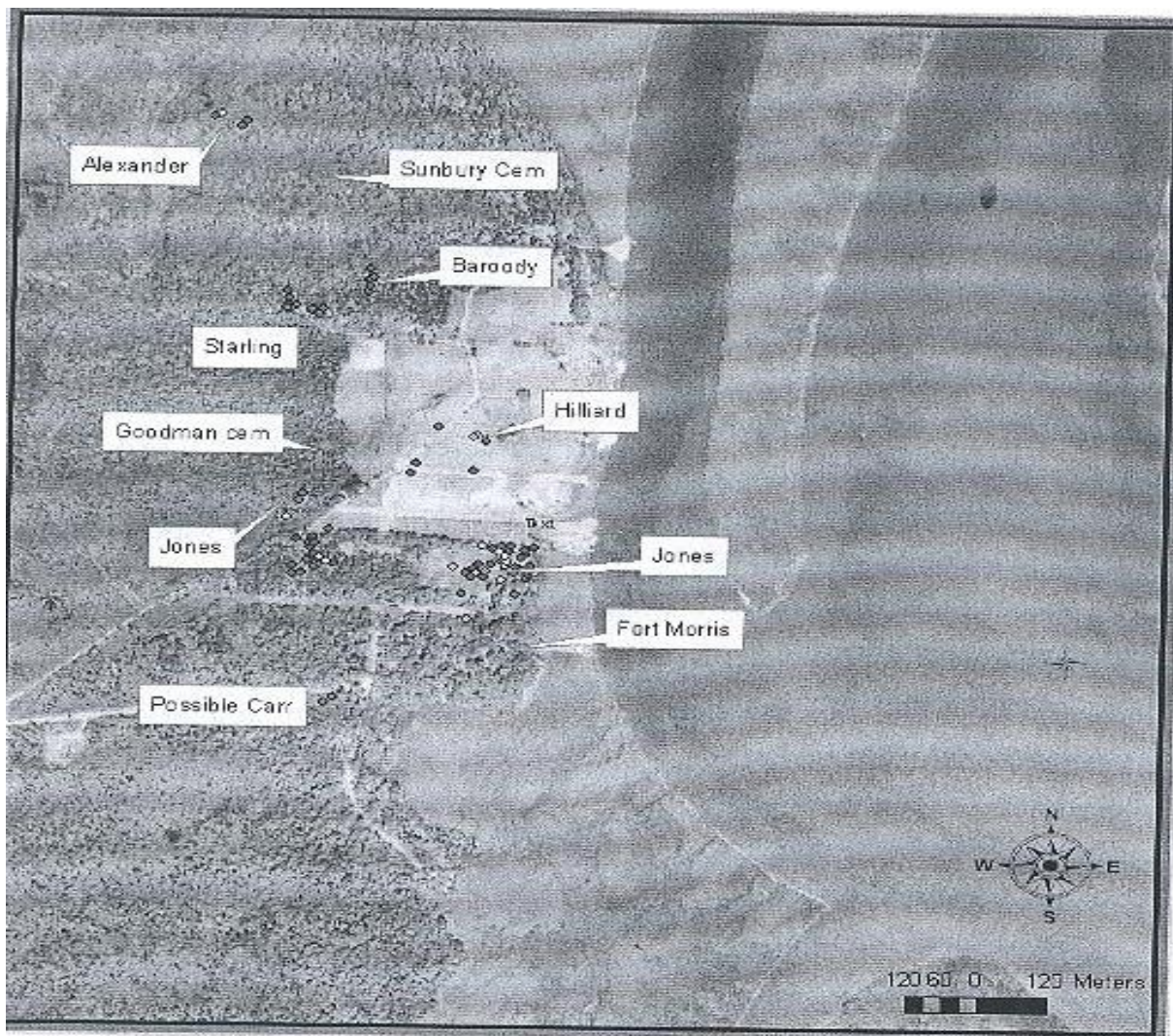


FIGURE 3.2: Dan Elliott's terrestrial survey loci at Sunbury 2004 (Elliott 2005:152)

The previous research on the submerged cultural resources of Sunbury lacked a driving theoretical approach. As the proprietor of a CRM company and bound by a contract, Watts needed only to search the small contracted area affected by the new construction. The contract only outlined the search and report prerogative because he had no need for an underlying theoretical approach. In addition, the data produced by Burns and Jordan was merely an exercise in testing out a new side scan sonar with site selection based on their awareness of potential acoustic anomalies in the area. They did not approach the site with any archaeological theory in mind.

Problems with Primary Source Material

Unfortunately, many of Sunbury's records were destroyed during the Revolutionary and Civil Wars, as well as lost during various changes in repositories. Furthermore, many of Sunbury's first families relocated taking their documents with them. Consequently, some of the best repositories for records pertaining to Sunbury are dispersed and inaccessible.

Another problem encountered was a lack of diverse voices in the primary records. The wealthy elite wrote most of the records pertaining to the town. This elite group consisted primarily of wealthy white men. Although typical for the period, it makes obtaining the historical research difficult, highlighting the need for archaeological exploration since most of the voices from Sunbury's past were not recorded.

Archaeological Fieldwork

The Georgia Coastal Underwater Archaeology Field Station, under the direction of Mr. Christopher McCabe, conducted a comprehensive side scan sonar survey in the Medway River around Sunbury, GA during multiple days in the Spring and Fall of 2009 and 2011. Repeated equipment failure and budget constraints account for the extended survey periods. Numerous

GPS points were also collected on the shore of Sunbury in the month of June 2009. The points coordinated with wharf posts from the colonial era.

Researchers use a Klein System 3000 side scan sonar for the surveys and a differential global positioning system Hemisphere A100 Receiver/Antenna. This particular side scan system utilizes dual frequencies at 100 kHz and 500 kHz. For this particular portion of the survey, shallow depths ranging from 1-40 feet at high tide, researchers utilized a low frequency of 100 kHz but the high frequency was recorded as well for later post processing. The researchers attempted a high frequency survey but found the equipment was unable to accurately record the data so they were forced to switch to the lower frequency. The sonar system has a range of beam swath widths, from 25 to 1000 meters. A range of 50 meters was used because it offered good resolution as well as acceptable coverage from the riverbank to the middle of the channel.

The survey began just south of the modern boat ramp located at Sunbury, GA. Starting at the western edge, the team utilized four lanes to cover the entire inner Medway channel area extending from Sunbury to the nearest edge of the unnamed marsh island. Researchers moved north turning around at the mouth of the unnamed creek north of Sunbury. After the team finished surveying the channel, they moved south and covered an area extending from the modern boat ramp to the mouth of Sunbury Creek. Researchers used a 25-meter beam width in tertiary streams, such as creeks and other small waterways, which produced data at a higher resolution. The total number of prioritized targets to date is 17.

Data obtained by the towfish was transferred to a Dell Precision M20 computer running *Sonar Pro* 12.0 data collection software. The program integrated GPS and sonar data into files known as *geotiffs*- a geographically rectified tagged image file format. These files were copied and moved to other computers for processing and analyzing.

In May 2011, the survey continued in the wide portion of the river of the Medway River using 50 meter spaces lanes which ensured 100% overlap. These data was also recorded as *geotiffs* and **.xlf* files. In November of 2011, archaeologist Brendan Burke at the Lighthouse Archaeological Maritime Program (LAMP) in St. Augustine Florida graciously allowed the researcher to use the program *Sonar Wiz 5* by Chesapeake Technologies, Inc. to georectify, mosaic, and assess the data obtained in May.

At low tide, researchers investigated four archaeological sites located along the waterfront. The methodology employed at each site varied slightly based on factors such as time, tide, weather windows, and site features. Each methodology employed is listed below.

Site locations and extents were recorded on 11 August 2010, using a Trimble GeoXT differential GPS (DGPS) handheld unit. The procedure consisted of walking the marsh line at low tide where the remains are visible. Researchers recorded site dimensions and extents by walking the length and width (where possible) of each site with the “line function” on.

Once recorded, researchers entered the DGPS data into the Trimble computer program and corrected the data. This process occurs by the program taking all of the points and triangulating those positions from satellites and a selected base station. In total 767 points were taken (one per second). These points were then loaded onto an *ESRI ArcGIS* layer.

Investigated chiefly at low tide, the survey team split their duties to ensure recording of the maximum amount of information in the limited tide and weather window at site 9LI1908. Christopher McCabe took scaled digital images and analyzed surface finds, while the author used a survey-grade DGPS unit to gather spatial data on piling orientations and artifact groupings. Points were also taken at specific locations on Fort Morris to associate known historic locations with the sites on the Medway’s foreshore. The GPS data were subsequently rectified to sub-half

meter accuracy and digitally plotted in *ArcGIS 9.3*.

Working from the water's edge on the ebb tide, the features of the site were mapped inland to the marsh-grass boundary line. The approximate dimensions and shapes of the visible remnants were also recorded and mapped. Researchers excavated a single piling remnant from the known wharf piling complex; one from a group believed to be the furthest from shore. This location was secured with a DGPS. In total, researchers uncovered 42 artifacts from the surface of the site which serve as dating and diagnostic tools (Appendix One).

The remnants at 9LI1909 are oriented along the waterfront, essentially north south. The team utilized a baseline offset method to map the remnants of the wood structure found underneath ballast stone piles. When necessary, McCabe and the author relocated ballast stones and shell to reveal wood structure beneath. Researchers mapped in detailed drawings of the wharf structure and developed a plan-view site map for further analysis. A limited number of artifacts was also collected, 12 in total (Appendix Two). The baseline offset method was also utilized for sites 9LI2013 and 9LI2039. Field data allowed the researchers to create plan-view maps of the sites.

Community Property Lot-Artifact Assemblage Analysis

It is important to gather data about the wharves because they acted as the land-water interface which facilitated trade in the town. It is equally important to gather data about the actual trade that occurred over the wharves. The study and inclusion of a previously un-cataloged artifact assemblage helps supply this crucial link.

In 1999, a rescue archaeological operation occurred in a Community Lot Property in Sunbury, GA. This property consisted of domestic lots during the colonial era. A developer dug trenches to place pipes for a septic field and accidentally found the house site. He allowed

members of the community to carry out an investigation. Mr. Larry Sheffield a resident of Sunbury with some undergraduate archaeological experience, led the excavation (Elliott 2005:96). It is uncertain how long the excavation lasted. The site was backfilled after the excavation and later heavily disturbed during construction. Attesting to the disturbance, archaeologist Dan Elliott excavated eight shovel tests in the same vicinity of the Community Lot Property in 2003 and 2004 as part of an American Battlefield Protection Program (Elliott 2005:95-97). He reported that six out of the eight shovel tests yielded cultural materials such as nails, brick, aboriginal pottery and oyster shell. The soils in these units, however, were heavily disturbed and exhibited poor research potential (Elliott 2005:97).

Sheffield's excavation yielded a large amount of artifacts from the 18th and 19th centuries. The artifacts were to be studied by anthropology students at Georgia Southern University (GSU) in Statesboro, Georgia (Elliott 2005:96). Unfortunately, the students moved on to other projects and the collection remained unstudied at GSU's archaeology lab. In 2011, the author visited another member of the Sunbury community who informed him of the status of the artifacts. Sue Moore of GSU's archaeology department agreed to allow the author to catalog the artifacts and utilize the information for research purposes with the agreement that, once completed, the artifacts would be donated to Fort Morris State Historic Site for public display and dissemination. The artifacts have subsequently been donated to Fort Morris.

The author categorized the artifacts following up GSU's framework of artifact analysis which used a system developed by Stanley South (1977). In his classification, South ordered artifacts based on broad functional groupings. These were: Activities, Architectural, Arms, Clothing, Furniture, Faunal, Kitchen, Personal, and Tobacco groups (South 1977). The author

cataloged the artifacts and digitized the collection using *SPSS 17* for rapid quantitative analysis (Appendix Three).

Analysis

Upon completion of the data acquisition phase, the information was added to several databases. The data pertaining to historic maps and charts, modern aerial images, site locations including the house site, and other data was incorporated into a GIS as multiple layers.

The rest of the pertinent data was analyzed via comparative analyses and through the construction of tables and graphs. Wharf construction features were compiled into a table and then analyzed and compared to wharf sites found around the eastern United States. This analysis included comparing frequencies of ceramic types and function with those from other similar assemblages. Historic data, like the shipping lists was also graphed and tabled. Together, the layered maps, charts, and aerial photographs, coupled with the assessed data provide a view of the landscape and its evolution.

As a result of this work, researchers filled out Georgia Archaeological Site forms and sent them to officials at the University of Georgia Archaeological Laboratory in Athens, GA. Consequently, these sites received official state archaeological numbers and are recognized as archaeological sites. The numbers are: 9LI1908 (Lamotte's Wharf), 9LI1909 (Fisher, Jones, and Hughes Wharf), 9LI2013 (Darling and Company Wharf), and finally 9LI2039 (Kelsall and Spaulding Wharf).

CHAPTER FOUR: THE HISTORY OF SUNBURY – AN ATLANTIC WORLD

PERSPECTIVE

Introduction

While acknowledging important aspects of the port's military history, the majority of this chapter develops themes relevant to the waterfront. Instead of concentrating solely on Sunbury, this section encompasses the larger Atlantic World by illustrating connections to other ports via the movement of people, diseases, ideas and goods. These perspectives are divided based on broader topics such as the effects of immigration, economic development, the American Revolution, and the case of the decline of the port.

Founding and Colonization

English contact with the area that was Sunbury began soon after they arrived in Savannah. James Oglethorpe, founder of Georgia, first visited the bluffs on the Medway River in January 1734 during a reconnaissance missions to the extremes of his new territory (Jones 1883:496). The first white settlers displaced Creek tribes occupying the territory. The first migration began in 1747 when small groups of settlers, some veterans of Oglethorpe's militia, moved to the lowland area bordering the Medway River around 25 miles south of Savannah. They came to plant rice, trade furs, raise livestock, and produce lumber and other products. Many were from South Carolina and saw an opportunity in Georgia for economic ventures. The Georgia colonial government deemed the area settled by this first migration the Midway District, as it lies between the North Newport and Medway Rivers (Sheftall 1977:5). These settlers included Captain Mark Carr, the eventual founder of Sunbury (Sheftall 1977:5). Throughout the 1750s, Carr established land tracts along the Medway River, ultimately developing land along a

prominent bluff about 13 miles from the open ocean. This 500 acre land tract became the port of Sunbury.

International politics played a decisive role in the development of the greater colony and Sunbury alike. This is illustrated via two major factors: the limitation of land ownership and the closely related topic of slave ownership. After the primary immigrants settled, demand for labor slowly grew. Whites imported slaves not only to meet this demand but to populate a colony that was not self sustaining (Morgan 2010). The Trustees governing the fledgling colony during the 1740s and 1750s recruited white people to settle Georgia from all over Europe to bolster the colony's demographics (Coleman 1976:1-50). Initially, the Trustees banned slavery. From 1735-1750, Georgia was unique among the colonies for legally instituting the prohibition of slavery (Wood 1984:1-10). The Trustees had a "social vision" for Georgia which they hoped would serve as a haven for the destitute. Their vision was a colony whose economy was not dependent upon slavery, but instead, developed by industrious, militant, and hard-working whites from the lower classes of Europe (Wood 1984:6). They also planned to limit the stratifying effects of unfettered agricultural capitalism, a phenomenon that would be reinforced by slavery in the colony. As proof of the Trustees' steadfastness in integrating their plan, they limited land acquisition to a maximum of 500 acres directly affecting the Carr family and other settlers in the area. According to historian Betty Wood, the Trustees' aversion to slavery did not come from moral or ethical concerns for African slaves. The officials believed that the institution of slavery, as exemplified by the South Carolinian and West Indian plantation societies, "encouraged 'idleness' and 'luxury' in white society" (Wood 1984:6). What they feared most was a pyramid-like, agricultural society, controlled by a few wealthy elite (Wood 1984:90).

The lack of slavery was also strategic. According to Wood, the Trustees correctly recognized the dispersed settlement patterns of the large plantation societies in Virginia and the Carolinas. Sunbury and other Georgia towns were in part founded as strategic barriers. Populations had to be concentrated and white to maximize defense. Slaves could easily flee to freedom in Spanish Florida (Wood 1984:7). There was also a fear that, if the Spanish invaded, they would arm the slaves to fight their former masters. By 1750, the Trustees found their vision unsustainable and acquiesced to the demands of South Carolina planters and merchants, resulting in the repeal of the slavery ban (Candler 1904:56-62).

In 1757, Carr began selling lots to mercantile firms and private citizens (Sheftall 1977:6). On 5 April 1757, Carr received a grant from King George II giving him the legal right to use the tract for a town (Sheftall 1977:6). The lots, laid in grid fashion just as in nearby Savannah, began next to the water and spread west (Figure 4.1). Mark Carr's release of conveyance for the town of Sunbury established the civil organization and the framework by which Sunbury developed. Most importantly in the conveyance was the stratification of the cost of the lots; the waterfront lots being the most expensive (Sheftall 1977:7).

The colonists did not have a difficult choice in selecting a location in which to develop their port. A number of natural characteristics made the location of Sunbury ideal. First, the area had a natural harbor that enabled ships of deep berth safe passage. The well traveled naturalist William Bartram described Sunbury after a brief visit, "...the town and harbor are defended from the fury of the seas by the north and south points of St. Helena [Ossabaw] and South Catharine's Islands; between which is the bar and entrance into the sound: the harbor is capacious and safe, and has water enough for ships of the great burthen" (Bartram 1791:32-33).

Bartram also pointed out a second positive attribute, St. Catherine's Island protected the port because it is located about 12 miles upstream from the ocean.

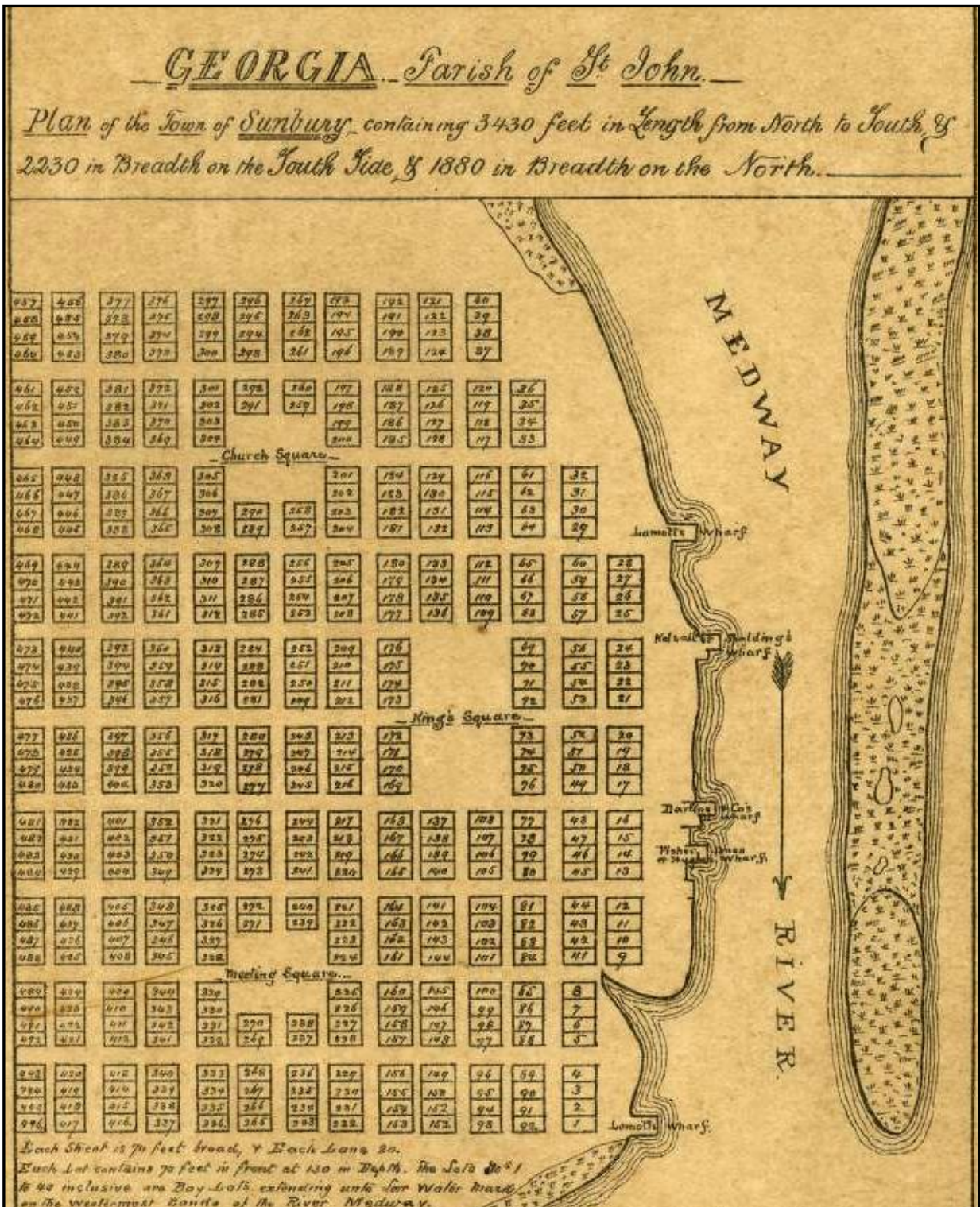


FIGURE 4.1: Georgia, Parish of St. John, plan of the town of Sunbury, by C.C. Jones Jr. 1883 (Image courtesy of Hargrett Rare Book and Manuscript Library/ University of Georgia Libraries).

A third beneficial characteristic is the town's location on top of the bluff, overlooking the water. The location allowed for cooler oceanic climates, compared to the low lying swamp land surrounding the town. The change in climate and sea breezes also has a practical advantage. Besides the cooling effect, the breeze repels mosquitoes carrying malaria, a disease that killed many people in the past (McCall 1816:177). Lastly, soldiers could easily defend the port from an attack by sea with a well placed fort. A bluff overlooking the Medway River offered a commanding position. There were many advantages in landscape – location, climate, and military defense all made building Sunbury on the Medway River an advantageous choice.

Another distinct migration involved a group of Congregationalists who came to Sunbury from New England via Dorchester, SC. In South Carolina they exhausted their fields and needed to move to new tracts. They came as a large group to the Midway District during 1752-1754 in pursuit of land just as Captain Mark Carr had done (Sheftall 1977:5-6). The groups of frontiersman and Congregationalists lived in close proximity and complimented each other. New policies enacted by the Trustees and British colonial government eased their migration and included the free control of land and the legalization of slavery, the consumption of rum, and the practicing of law.

Mid 20th century historian James Callaway described the resultant surge in land ownership. On 11 July 1752, 45 people received 21,700 acres of land in the Midway district. In August the same year, 28 more settlers received 9,650 acres nearby (Callaway 1948:43). Wealthy planters noticed the influx and soon began to travel south to join the Congregationalists near the swamps surrounding the Medway River. Callaway placed the population of whites in the Midway district in the 1750s around 350, while the population of slaves was close to 1,500 (Callaway 1948:43). It is likely Callaway inflated the numbers of slaves by mistake.

Early plantations in part succeeded due to the African slaves' resistance to malaria, while whites exhibited a high mortality rate (Callaway 1948:43). The success of the initial settlers and Congregationalists attracted other new arrivals. It quickly became clear to the local planters that the old hastily built road to Savannah was not suitable for their burgeoning needs. The population continued to grow steadily and soon settlers occupied lots 1-300 on Mark Carr's original tract (Figure 4.1).

This growth influenced the last large migration to the town and caused a gradual shift in raw material production and the attraction of capital investment. By 1761, Sunbury was prospering. One early historian, writing in 1816, had this to say about the town's growth: "soon after its settlement and organization as a town, it rose into considerable commercial importance. Emigrants came from different quarters to this healthy maritime port..." (McCall 1816:177). This was in part due to the recent peace in North America between the French, British, and Native Americans following the Seven Years War. At the conclusion of the war, Britain took control of vast amounts of land. Consequently, there was a rush to fill the void left by the defeated French and Spanish. Therefore, according to historian Gary Nash, while many other ports and cities in the north felt a crippling effect from the post-war depression, many Georgians were not as negatively affected as the rest of the colonies on account of the availability of new land (Nash 1979:246).

There was fierce competition to entice settlers into the various colonies. Merchants from London, who had not diversified during the war, saw their chance to capitalize on the enormous opportunities presented by the British victory. In addition, as historian David Hancock asserted, this was the "golden age" for early American agriculture (Hancock 1995:146). Men such as Alexander Grant, John Mill, and Michael Herries invested heavily in developing plantations in

nearby East Florida (Hancock 1995:144). Merchants with land investments devised different schemes to encourage settlement in their colonies. For example, the Board of Trade advertised to the public that, “it would survey quickly and make available the 20,000 acre grants to all applicants who would commit themselves to settle the lands at their own expense in a timely manner and who were either from His Majesty’s other colonies or from foreign parts” (Bailyn 1986:432). Merchants extended their influence to a point where they wanted to populate this hinterland with colonists they could obtain, employ, and outfit cheaply. The situation in Sunbury was similar.

It was in this environment that the last distinct emigrant group made its way to Sunbury. Alexander Grant, an investor in Florida, grew excited at the prospect of a group of Bermudians coming to populate recently British East Florida. The Bermudians had particular skill sets that Grant prized – they were excellent ship-builders and mariners. Land shortages forced many Bermudians off their island. They heard about the opportunity to own large tracts in America (Bailyn 1986:462). Instead of sailing directly to Florida, Bermudians took the land route from Savannah on their journey to East Florida. As they traveled south, they came across Sunbury and were drawn to the town and many decided to stay. Around 70 people came to reside in Sunbury from Bermuda (McIlvaine 1971:10).

Not long after arriving many Bermudians died of disease, some however, survived and thrived in the town (Jarvis 2010:340-343). Men like Paytner Dickinson and Stephen Dickinson took to the sea as sailors, captains, ship-builders, and owners. They integrated well, maintaining connections abroad by sailing around the world, but called Sunbury home. Their stories were not unlike many other immigrant groups that formed the port’s population. After settling, the community blossomed as trade developed in earnest.

Port Development

Sunbury's golden years in terms of economic development, prosperity, and importance occurred between 1761 and 1775. The town's merchants established themselves in the Atlantic World, farmers refined rice planting, and some modest shipbuilding took place. It is important to highlight specifics about the port's economic growth since these developments helped propel Sunbury onto the national scene.

By the 1760s, Sunbury's economy grew as it integrated with Atlantic world trade networks. Maritime commerce and population growth fueled this development. In 1761, the white male population had increased to between 800 and 1,000 (Sheftall 1977:15). At this time, Savannah had a white population of 5,000 whites (Coleman 1976:1-50). Consequently, the port of Sunbury grew rapidly as it handled the increasing demands of the people. Mark Carr stipulated in the original conveyance for the town that anyone occupying lots along the river faced a penalty for not building houses on the property in one year (Mark Carr in Sheftall 1977:7). After 1762, the British elevated the town to "Port of Entry" status. This official designation was extremely important because of the development it generated. A port of entry could receive large ships and issue bonds clearing them for international voyages. Accordingly, townspeople, very likely aided by slaves, built a customs house in the same year to oversee the maritime trade. Sheftall listed some of the town's new accommodations reflecting the elevated status, "The port boasted packers, and inspectors of a wide variety of goods such as lumber, flax, hemp, and tanned leather. The town also had cullers, a comptroller, and collector of country duties" (Sheftall 1977:15). Merchant firms built wharves along the waterfront. 22 merchant firms existed in Sunbury throughout its colonial history (Elliott 2005:144). More plantations built along the Medway also reflected this prosperity (Figure 4.2).

Overland transportation around Sunbury was difficult at best and not economically viable. It was well known in the 1760s that the Sunbury Road leading to Savannah from Sunbury was treacherous and inefficient. Charleston merchant Henry Laurens complained in 1767 that “[the Sunbury Road was] extremely bad, and dangerous even for a Person well acquainted with it. The Grand Jury of *Georgia* presented it as being impassible at that very time” (Laurens 1767[5]: 298). As illustrated, land transportation was so poor and inefficient that most took to the waterways around Sunbury, making them the highways of their time.

Ships transported Sunbury’s exports all over the Atlantic World. Shipping lists from 1763-1767 reveal some patterns. In every year where there are records over 90% of all ships sailing with lumber from Sunbury called on Caribbean sugar colony ports (Martin 1763:CO5/709; Lee 1764:CO5/709; 1765:CO5/709; 1766:CO5/709; 1767:CO5/709). Sunbury merchants easily marketed these raw materials in the demanding economies in the West Indies with whom they had extensive ties. Aggregate rice exports of Georgia suggest Sunbury had few ties with the most developed ports in the Atlantic World, such as London, Amsterdam, and New York. In 1770, for example, Georgians exported 5,470,752 pounds of rice to England. In the same year, they exported 11,587,800 pounds of rice in total from the colony (Bruchey 1966:5-8). Bruchey’s table did not proportionally break down Savannah and Sunbury’s contribution to the trade, but what is clear was that merchants exported around six million pounds of rice to places other than England. Much of it probably made its way to Northern Europe whose demand for foodstuffs was high at the time. The lists reveal the majority of rice leaving Sunbury found its way to the port of Corves in Great Britain and the Caribbean. Therefore, the lists show trade expanded over the five-year period.

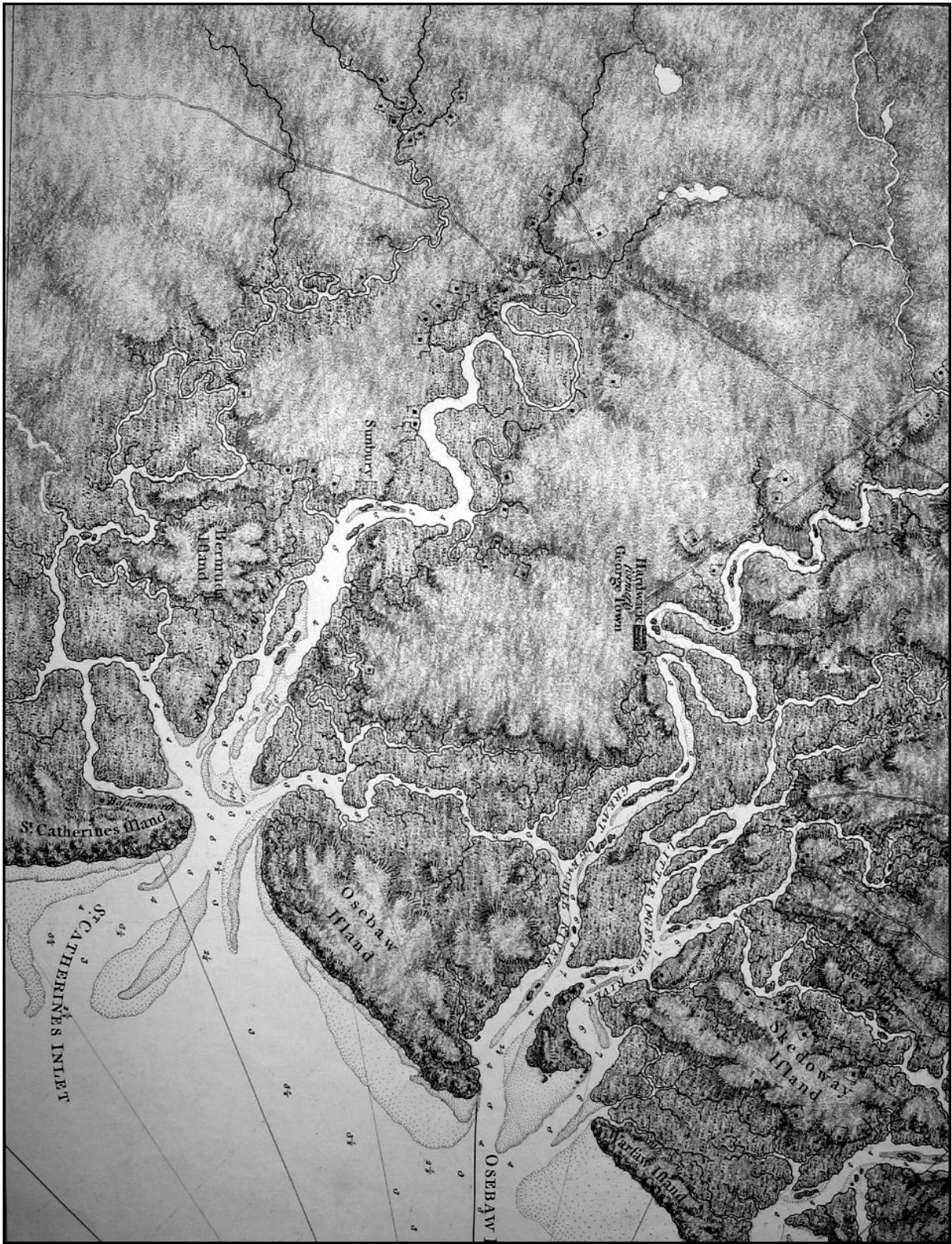


FIGURE 4.2: *Detail from Part of the Coast of Georgia with the Savannah River*, by Joseph F.W Desbarres, 1780- illustrating Sunbury's expansion (Image courtesy of Hargrett Rare Book and Manuscript Library/ University of Georgia Libraries).

Sunbury's hinterland supported extensive raw material extraction but limited commerce, in part due to the Medway River's limited penetration into the interior on account of it being a tidal river. One historian, Mart A. Stewart, commented on the connection between Sunbury's location and its export commodities:

Rice, indigo, lumber, staves shingles, naval stores, and barrels of meat... these commodities, all of which were extracted from or produced in the coastal plain environment, made the wheel of commerce turn on the Georgia coast. By the 1770s, Sunbury... had become another port for the colony... and gave Georgia a second port in which the circuits of commodity production and commerce could connect (Stewart 1996: 96).

Merchants in Sunbury exported what its hinterland could produce.

Sunbury, above all else, participated in a colonial merchant trade dominated by small coasting vessels (Walton 1968:369). By trading with other firms in larger ports, merchants in Sunbury gained increased access to overseas markets. They also participated by owning shares in vessels, or in some limited cases, vessels entirely. For example, the following merchants in Sunbury owned their own vessels outright: Bermudians John and Ephraim Gilbert; Button Gwinnett, a signer of Declaration of Independence who lived on nearby St. Catherines Island and conducted business in Sunbury; the firm Dunbar, Young and Simpson which owned a wharf on and owned several vessels (including one built in Sunbury, *Beggars B*); the firm Fisher, Jones, and Hughes, wharf owners in Sunbury; James Maxwell, a merchant in Sunbury and Savannah; and Sam Miller (Martin 1763:CO5/709; Lee 1764:CO5/709; 1765:CO5/709; 1766:CO5/709; 1767:CO5/709). Other vessels coming and going from the port were co-owned by merchants in town. Despite this, the majority of voyages entering and leaving Sunbury happened on vessels not owned by the merchants. Of all the vessels recorded as entering and leaving Sunbury from

1763-1767 only 23% were owned or co-owned by a merchant in Sunbury (Martin 1763:CO5/709; Lee 1764:CO5/709; 1765:CO5/709; 1766: CO5/709; 1767:CO5/709).

Based on the data from the shipping lists the majority of vessels bringing goods into Sunbury were not owned by local merchants. Of the 31 voyages logged in the lists that incorporated vessels owned or co-owned by Sunbury merchants, only nine vessels entered the port. None of these vessels carried anything more refined than Bermuda saws, which were brought into the port on the Bermuda sloop *Dispatch* owned by John Gilbert. Gilbert probably made money prior to this voyage when he brought in seven hogsheads of sugar, one hogshead of rum, and 64 bushels of salt, likely from Turks and Caicos, to Sunbury on 26 December 1766. Using the money from the sale of these goods, Gilbert then sent the *Dispatch* to Bermuda for saws to be used in lumbering at Sunbury. His vessel returned with these on 8 June 1767.

Other generalizations can be made about Sunbury's coasting economy based on these data. For example a total of 7,925 tons entered and departed the sea port. The mean size (tonnage) of vessels entering and leaving Sunbury was 58.272 tons. The majority of vessels at the port were 60 tons or less (Martin 1763:CO5/709; Lee 1764:CO5/709; 1765:CO5/709; 1766: CO5/709; 1767:CO5/709).

Trade Networks

Ledgers of two prominent Savannah merchants, James Read and James Mossman, who conducted profitable business in colonial Georgia in the 1760s, outline connections exhibited by different merchants in Sunbury and illustrates a core/periphery pattern (Read and Mossman 1765-1766:MS 1635). The information in the ledger elucidates some aspects of colonial trading between firms in Savannah and Sunbury. They included vessels employed to carry on trade and the names of the clients and business partners to which goods came through Savannah to the

peripheral Sunbury. In essence, the ledgers details the relationship developing between Georgia's only two ports of entries. This in turn elucidated wider relations between colonial Georgia and the rest of the Atlantic World. Sunbury merchants such as Grey Elliott, Button Gwinnett, Dunbar, Young and Simpson, Darling and Co., Roger Kelsall, Simon Munro, and James Spalding all did business with Read and Mossman. In fact, the relationships went much deeper. For instance, right after the inception of Sunbury as a port of entry, James Read, who co-owned the Georgia-built 20 ton schooner *Ogeechee*, ordered the vessel to Sunbury. There they picked up 11,400 shingles and 400 staves bound for Havana, Cuba. Around the same time, however, Dunbar, Young, and Simpson ordered their vessel, *Georgia Packet* also 20 tons, to Havana with goods such as blankets, salt, and gun powder. Later in the decade, these merchants continued to conduct business with each other and each other's vessels. For instance, the Read-Mossman ledgers indicated many merchants in Sunbury relied on merchants in Savannah and other larger ports for refined conspicuous items. In 1765, Dunbar and Co. imported many goods including port wine, taunton ale, and gloster cheese. Kelsall, Darling, and Munro imported a variety of goods including shoes, tobacco, raisins, cordage, ribbon, pipes, combs, pumps, tea, and jackets in the same year. Grey Elliott imported a chamber pot, playing cards, nails, blue thread, and a padlock (Read-Mossman Ledgers 1765-1766:MS1635). They carried on this trade using smaller schooners and sloops, which they owned. In this way, Savannah merchants complimented Sunbury merchants, at the same time extending trade and commerce into the frontier.

Many merchants in Sunbury dealt directly with better connected factors in the coasting trade such as Henry Laurens. This is important because factors were vital to trade in Sunbury. As maritime historian Michael Jarvis noted about the Bermudian economy, understanding the process of business is as important as the quantity of business (Jarvis 2010:119). For example, as

early as 1763 Henry Laurens mentioned the firm Dunbar, Young, and Simpson as owning a vessel that he used (Laurens 1763[4]:19). The wealthy South Carolina merchant often acted as a factor for many of the merchants in Sunbury by offering extended credit and access to goods they otherwise could not get. He did this for Kelsall, Munro and Spalding, some of the most affluent merchants in Sunbury (Laurens 1765 [5]: 369-375; 1768[5]:484). Merchants in Sunbury also helped keep Laurens abreast of current events in their region. Edward Jones and Thomas Hughes corresponded with Laurens and transported letters for the merchant to his plantation on the Altamaha River (Laurens 1768[6]:176; Laurens 1769[7]:129).

James Spalding conducted regular business with Laurens along the Georgia coast (Figure 4.2). According to Sheftall, Spalding was active with the firm Kelsall and Spalding from 1771-1774 (Sheftall 1977:220). Spalding, like many other merchants in Sunbury, emigrated to the town in the 1760s. He was born in Perthshire, Scotland in 1734 and moved to Charlestown in 1760. In 1763, after Spain ceded East Florida to Britain, Spalding relocated further south (Coulter 1940:2). Like many other Scotsmen, Spalding began a trading firm, dealing primarily in the Native American fur trade (Coulter 1940:2; Hancock 1995). Unlike other merchants in Sunbury, however, Spalding did not limit his storefront and merchant dealings solely to that port. He prolifically established storefronts from St. Johns Parish south to Frederica and St. Simon's Island and the St. John's River, Florida and across into the Gulf of Mexico (Coulter 1940:2; Lewis 1969:1-50). His partnership with Roger Kelsall lasted until the outbreak of the American Revolution, when both fled the colony as Loyalists. Interestingly, when William Bartram came to Georgia he stayed at Spalding's home in Frederica and later used his stores on the St. John's River in Florida as his expedition headquarters (Harper 1943:121-242). Bartram even sent his

findings back to England onboard Henry Lauren's schooner *Mermaid* from Spalding's home at Frederica. They stopped at Sunbury to offload rice as well.

Laurens also factored goods to Sunbury. Besides purchasing the schooner *Brother's Endeavour* from the Dickinson brothers in Sunbury in 1769, Laurens and certainly other merchants like him, brought goods and wealth into the port (Laurens 1770[6]:233). The *Papers of Henry Laurens* revealed he dealt with Sunbury merchants in slaves, rice, cheese, flour, apples, and rum (Laurens 1760[7]:224). This service extended into organizing rice production to fulfill previously established contracts. In 1775 for instance, Laurens chartered his ship *Mermaid* to carry 800 barrels of rice to Cowes, England. Originally, Laurens employed Roger Kelsall to help fill this order but underestimated the yield from his own plantation in Georgia and had to send some rice back to Sunbury (Laurens 1775[10]:83). Furthermore, he also acted as a factor for goods abroad. Laurens wrote to Sunbury planter John Stewart, "...and contains an Invoice & Bill of Loading for sundry Articles which I have ship'd on board the said Schooner on your account, the Amount whereof being £246.2/, is charged to your account. I have purchased these Goods for you at the lowest possible price..." (Laurens 1770[7]:222). This relationship illustrated the core-peripheral means of production and the limited access to wider markets for Sunbury's merchants.

The statistics show that Sunbury's merchant class reached expanded markets through factors in larger ports. Unfortunately, much of the coasting trade remains hidden since imperial agents rarely recorded the smaller vessels plying the coasting trade. Governor James Wright, however, did mention the state of Georgia's trade when he wrote, "There are few Sea Vessels belongong [belonging] to, or owned by Persons who are settlers and Inhabitants of this Town [Savannah], Viz: 2 Ships of 200 tons each, 2 Brigantines of 120 tons each, and 6 schooners of 40 tons each, besides the coasters and small craft and these are navigated with about 100 seamen in

all...” (James Wright 1766[28]:Microfilm 40/51-69). Wright went on to correctly predict the increase in trade over the next few years. Highlighting the role of Charleston merchants in facilitating trade, Wright also wrote in the same letter to the Board of Trade, “I am in great expectation that some vessels will be very soon fixed in a direct Trade between London and this Province hisherto [heretofore] all European goods consumed here have been first carried to Charles Town in South Carolina and from thence reshipped here...” (James Wright 1766[28]:Microfilm 40/51-69). Wright continued his assessment by mentioning the need for larger ships to carry rice. In 1766, he wrote that small craft transported much of Georgia’s rice and deerskins to Charlestown for reshipment to Great Britain for vessels large enough to carry on the trade directly with the mother country (James Wright 1766[28]:Microfilm 40/51-69).

The connections in Charleston facilitated deals and helped Sunbury’s economy expand. Sunbury’s networks continued to grow in this fashion until the 1770s when exports reached an apex. (Braund 1773:104-105). According to Bernard Romans, a skilled navigator and traveler who may have owned a lot in Sunbury, the total exports of Savannah in 1773 were £121,677 “Of the above aggregate the Port of Sunbury exported last year £20,876” (Braund 1773:104-105). In 1772, Wright estimated 161 vessels entered and cleared in Savannah, and 56 in Sunbury (James Wright 1772[38]:Microfilm 40/51-69). Based on Wright’s estimations, the 1770s represent the acme of Sunbury’s trading and commercial importance. About a third of the colony’s wealth lay in the town and a fourth of the colony’s shipping commenced at the port (Jarvis 2010:342).

The Ravages of War

Tensions between the colonists and the British rose in 1765 with the Stamp Act. From 1765-1775 protests gradually increased as the British Parliament passed more stringent tax laws. Americans protested these laws with boycotts, written protestations, and by force of violence. By

1775, Sunburians openly agitated against the British in the port and led the way in Georgia as vocal proponents of revolution (Sheftall 1977:18-22).

Participation in the American Revolution proved costly for the people of Sunbury. American sea power was too constrained to be effective against the British in a conventional sense. With the entrance of France and Spain into the war against England, the British fundamentally shifted sea power strategy and priorities. Instead of limiting their attacks, they went on the offensive, especially in the relatively unprotected waters of the south. This led to the occupation and ultimately to the destruction of Sunbury (Sheftall 1977:32-57). As the British evacuated Sunbury in 1782, Captain Scallion of the British galley *Arbuthnot*, burned the town to the ground. A witness to the destruction described the scene, “Confusion and disorder and violence seem to reign in this place” (Sheftall 1977:56). Although victorious in their struggles, many American towns and ports paid a grievous cost and Sunbury was no exception. The British destroyed much of the town.

Decline of the Seaport 1783-1824

The fundamental shifts to the world economy wrought by the Revolutionary War detrimentally retarded Sunbury’s recovery, causing changes in economic trends, transportation networks, and demographics. These factors sharply altered the future of the town in such a regressive way that eventually the population declined to individual household units. Hurricanes also contributed to the decline of the port town.

Many of Sunbury’s influential merchants fled during the American Revolution. Together, they owned numerous lots along the waterfront. Their loss represented a major setback to the port’s economy. In fact, the Loyalist migration away from Sunbury following the Revolutionary War can be considered the last migration affecting the town. Far from an isolated event, this

understudied mass migration greatly affected the entire United States. Historian Michael Jarvis wrote, “The American Revolution is rarely considered as a major migration event, but it was among the most profound in American history” (Jarvis 2010:423). Jarvis, in his history of Bermuda, also described the damage inflicted on the Bermudian population remaining in Sunbury during the Revolution: “Sunbury, another significant Bermudian port of call, was lost to island mariners after British forces razed the town in January 1779 and scattered another group of Bermudian emigrants” (Jarvis 2010:430). Due to this expulsion, it was difficult for the town to rebound since many of the Loyalist had carried on the town’s trade.

Evaluating this movement can be partially accomplished by assessing Loyalist claims. Among those who abandoned the town were James Fisher, James Spalding, Roger Kelsall, and Thomas Young. Between them, they owned over 12 lots in town, most along the waterfront (Coldham 1980:794-795). They also owned lots connected to the wharves seen in the Jones Map (Fig 4.1).

These accounts represent some of the core members of Sunbury’s merchant class. Their departure exemplifies a prime example of the effects of the war. Jarvis wrote, “Within the maritime Atlantic world, the war disrupted intercolonial and international trade patterns more than a century in the making...The war, in short, was a major watershed in Atlantic history” (Jarvis 2010:438). These men, Young, Kelsall, Spalding, Munro, and others, all worked to develop Sunbury’s primary trade networks. Their departure left a void in the town’s merchant class. As a consequence, most trade ceased at the port for a number of years.

The effects of the war left the waterfront damaged. Both the British and the Americans targeted the maritime infrastructure of the town throughout the Revolutionary War. Paddy Carr, a revolutionary Patriot, supposedly “plundered and destroyed” Spalding and Kelsall’s store and

wharf at Sunbury during the war (Coulter 1940:7). Furthermore, the British destroyed much of the town during the amphibious assault and upon evacuating the town.

The substantial shortfall to shipping in Sunbury extended beyond the lack of a merchant class or the destruction of property. After the war, the British navigation system excluded American shipping. This meant that, while the profitable trade to the West Indies was open to American goods, no American ship could transport them. British vessels had to transport all goods going to the West Indies (Clauder 1932:15). The last estimations of the shipping at Sunbury indicated this would have meant a 90% decrease in business (Martin 1763:CO5/709; Lee 1764:CO5/709; 1765:CO5/709; 1766: CO5/709; 1767:CO5/709). Furthermore, the Articles of Confederation limited trading to a state's right. Georgia failed to act on behalf of its merchants and exporters (Buel 1998:250). Historians John McCusker and Russell Menard identified another change that occurred because of the war — rises in freight rates that hit exporters shipping specific goods the hardest. They explained this when they wrote, “Furthermore, the dramatic rise in freight charges and the decrease in tonnage available for commerce hit the relatively bulky exports with particular force...The net effect was steep decline in earnings from the export sector” (McCusker and Menard 1985:362).

Despite these adverse factors, coastal shipping still dominated Sunbury's economy. Before the war, Sunbury relied heavily on the coasting trade to export goods. After the war, the frequency of trading decreased dramatically. One result of the war was the disruption of trading networks between smaller merchants, tending to force them out of business and resulting in the consolidation of power in larger firms. In fact, as one maritime historian wrote, describing the similar downturn in Bermuda, “Globalization and greater market integration had eroded the viability of maritime slave labor, outstripped the business capabilities of self-organized families,

and undermined the sort of petty trade and shipping that had sustained Bermuda's (and much of Anglo-America's) eighteenth-century growth" (Jarvis 2010:458). Nothing highlights this dramatic turn more starkly than the 1787 shipping list. It revealed that virtually all trade between Sunbury and the West Indies ceased, and ships from Charleston mainly entered the port (Figure 4.3). Furthermore, the 1787 shipping list clearly shows the sharp decrease in shipping at the port. The *Georgia Gazette* and other colonial newspapers provides further data about Sunbury's trading in the post-war period. All of the advertisements surveyed from the post-war period mention shipping among the States and not abroad, reinforcing the point made earlier that the biggest shift in commercial patterns was the lack of international shipping.

Sloops and schooners continued carrying the goods that fueled the port's economy. Destinations commonly cited included Charleston, Savannah, and New York. One advertisement common for this time, demanded a vessel from Sunbury to ship barrels of rice to New York (Figure 4.4). Despite cotton's gradual rise as the south's preeminent crop, rice remained a valuable export from Sunbury. This reliance on a monoculture of agricultural produce, however, could not sustain the port town in the post-war years.

Over time, many in Liberty County conceded that Sunbury had lost its influence and viability as a port town. From the 1790s to the first decade of the 19th century, the town's merchants, while still active, did not handle nearly the same amount of shipping as they once had. Indeed, there were less people living around Sunbury after the war. Contributing to this was Sunbury's changing role following the post-war years. From the 1790s until the 1820s, Sunbury served as a seasonal escape from the unhealthy, disease-ridden inland swamps. Fewer planters had permanent homes in Sunbury and had greater access to markets via railroads.

Return of Vessels entering and leaving Georgia Ports, agreeably to the Import Act, at the Collector's Office, for the Port of Savannah.

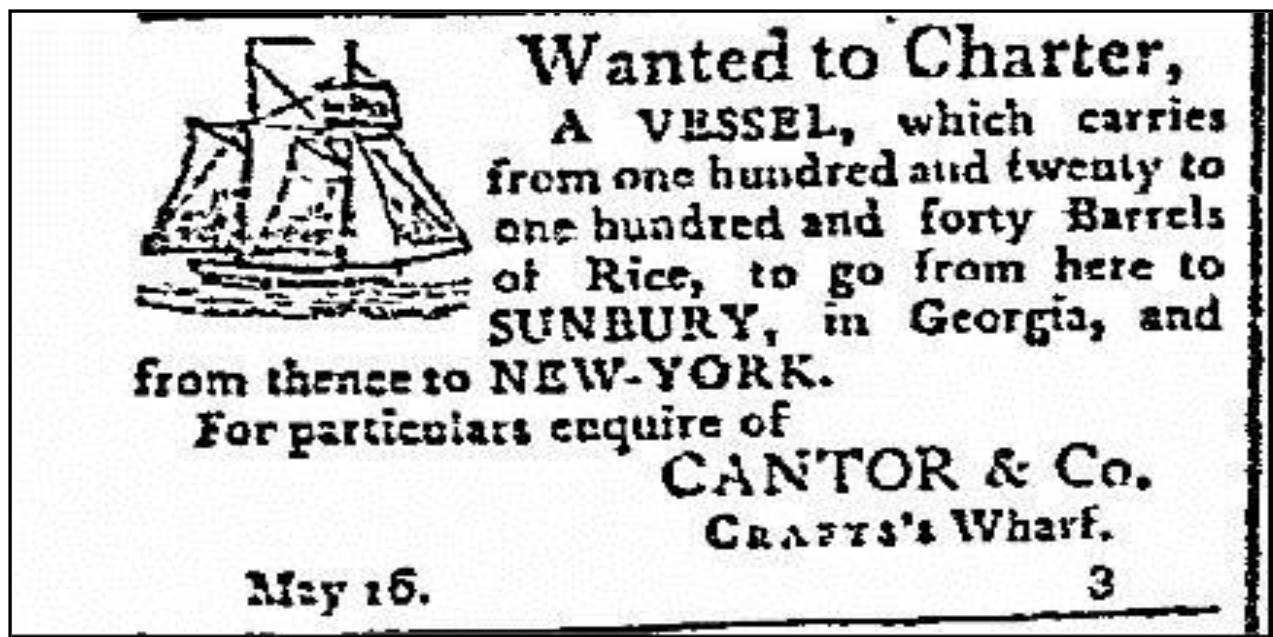
date	Vessel's Name	Commander's Name	from where	where belonging	Tons	Gross Tonnage		
						on Cargo	of Vessels	
1787								
Aug. 1 st 18 th	Coop's William	Robert Mylic	Florida	Savannah Bottom	44	10	13.13.0	
" 25 th	Schoner George Keith	Richard Beebe	Florida	American Bottom	37	2.19.1	5.14.7	
" 27 th	Coop's Bejwater	Andrew Cannon	Florida	Ditto	40	"	3.0.0	
Sept. 6 th	Schoner Little David	James Pea	Ditto	Ditto	40	3.5.9	6.5.9	
" 17 th	Coop's Wm. Ingham	James Eschbert	Ditto	Ditto	50	10.6.5	14.1.5	
" 18 th	Schoner two masted	Thomas Arthur	Ditto	Ditto	40	"	3.0.0	
" 20 th	Brig. Myrtane	Thomas Coats	Ditto	Ditto	104	"	7.16.0	
Oct. 15 th	Coop's Beadwell	David Gage	Ditto	Ditto	60	"	4.0.0	
" 21 st	Coop's Dejeux	Shubert Cannon	Ditto	Ditto	40	20.0.4	23.0.4	
" "	Schoner Bay Whiskie	Tommy Johnson	Ditto	Ditto	37	"	2.8.8	
" 4 th	Coop's Union	John Moore	Ditto	Ditto	50	"	3.8.0	
" 10 th	Schoner Little David	James Pea	Ditto	Ditto	40	14.1.7	17.1.7	
" "	Schoner Fairchild's	Job Gills	Ditto	Building Georgia	25	"	1.19.6	
" "	Coop's Nancy	Narcus Conway	Ditto	American Bottom	15	24.3.5	25.5.11	
" 25 th	Coop's Green Ship	John Wallace	Ditto	Florida Bottom	90	6.0.0	12.15.0	
" "	Schoner Charlotte	David Murry	Ditto	Ditto	84	"	6.6.0	
Total for the								
Year 1787								

FIGURE 4.3: Shipping List-1787 (Image courtesy of Hargrett Rare Book and Manuscript Library/ University of Georgia Libraries).

James Holmes, an observer who grew up in Sunbury, mentioned this transitional period in his memoirs, “For long years Sunbury had been the summer resort for planters whose plantations were located in the interior of the county” (Holmes in Presley 1976:214). Historian Erskine Clark put more of a precise date on Sunbury’s transition to resort-town:

By the summer of 1808 Sunbury had lost much of its commercial vigor. To be sure, its customhouse was still busy and its merchants were now seeking, beyond business with local planters, the trade of an expanding settlement in Central Georgia. But the quest for health and not commerce was now the rhythm of the town, as summering families swelled its population with their arrival in June and drained it with their departure in early November (Clark 2005:22).

At last, another leading citizen of Georgia, George Walton, a signer of the Declaration of Independence, offered his own analysis for the commercial failure of the town. He placed the blame on its geographic location and the changing demands of an expanding economy on a provincial town. While his testimony is lengthy, it is also prescient. Walton correctly understood the connection between a port’s economic viability and its connection to the hinterland.



Wanted to Charter,
A VESSEL, which carries
from one hundred and twenty to
one hundred and forty Barrels
of Rice, to go from here to
SUNBURY, in Georgia, and
from thence to NEW-YORK.
For particulars enquire of
CANTOR & Co.
CRAFTS'S Wharf.
May 16. 3

FIGURE 4.4: Newspaper advertisement for rice trade in Sunbury (Image from *City Gazette* 1797[2969:3])

He also correctly assessed the need of the port to be able to have access to larger markets:

During a residence of near 25 years in Georgia I have witnessed the fostered expectations of this town [Sunbury] one day rising into importance, and yet that day has not arrived; nor does it require any extra ordinary depth of sagacity to foresee that it never will. It is not now equal to what it was at the distant period I have mentioned; and the cause is to be found in its position. For a town to flourish in commerce, without manufactures, it is not only necessary that it should be in the neighborhood of a well cultivated country, but it must be washed by a navigable stream; not merely from itself to the sea, but from the fountain of its support the country so cultivated. Witness the splendid advancement of the town of Augusta, and the effects of a few years efforts at Newport preceding the Indian depredations.

It is certainly the interest of every county to promote the establishment of a town within it; it is the centre of its energy, and of its communication. It is also certain that Sunbury has declined, and is declining; that it never will rise above an healthy seat for education of youth, and a retreat for age and infirmity, for wealth and indulgence. Exertions have been exhausted to make it a place of business, and the prospect has vanished. If, then, you have failed here, would it not be wise to profit by experience, and to suffer the current of opinion to fix itself? (George Walton 1794[602]:2).

Written in the 1790s, outside observers saw the decline of the town. In his address, Walton informed on important points. He re-emphasized the need for hinterland access as a point of survival for the town in the new economy and indicated the inevitability of Sunbury's decline based on its geographic location.

Natural Disasters

Sunbury's transition from bustling port to deserted town was one that took many years and consisted of numerous factors, stresses, and changes. More abrupt events such as natural disasters also contributed to the decline. In the wake of declining population and importance, natural calamities struck the town. These events caused instantaneous and irreparable damage to the port and surrounding plantations, often killing some of the population and forcing people to leave the area. Two such cases were the hurricanes of 1804 and 1824. While not fatal to the port town, both storms caused significant damage, further advancing the decline of the seaport.

On 7 September 1804, a hurricane hit the area and wrought devastating damage to the area. The “Antigua-Charleston” hurricane was so destructive it ripped all the chimneys from the houses, completely destroying several homes. In addition, only two of the boats tending to the plantations survived (Duncan 1804:334; White 1806:349; Carter 1970:13). Making matters worse, plantation owners faced some of the worst damage because the storm surge overwhelmed their land and contaminated many crops with salt water. Due to the damage, the town was no longer self-sustaining, or even an attractive place to live. Indeed, as one author noted, “Liberty Hall had not been spared as the storm lashed inland, ruining rice and cotton and destroying most of the year’s labor. Such destruction had meant that provisions were scarce throughout 1805 and even into 1806 and 1807” (Clark 2005:12). In 1804 another citizen writing from Sunbury offered a grim post hurricane view of the damage done to the surrounding valuable maritime forests. He wrote, “I think this part of our country has suffered as Savannah and its vicinity, there have not been many lives lost, but invaluable loss in all kinds of stock, provisions and lumber. The whole country exhibits the appearance of one vast clearing” (*Poulson's American Daily Advertiser* 1804:3). The result of which was that there was not recorded shipping occurring at Sunbury after 1814.

Another storm hit the coast in 1824. Few storms have had as much of an impact on Georgia as those of 1804 and 1824. Most of what we know about these storms came from first-hand accounts. The residents of Sunbury and coastal Georgia testified to the destruction wrought by these hurricanes. Besides first-hand accounts of the storms and its effects on Georgia, there are several government studies pertaining to these events. In 1970, Horace Carter wrote a report entitled “Georgia Tropical Cyclones and Their Effect on the State” for the Environmental Sciences Services Administration under the Department of Commerce. In the report, Carter

assessed an eighty-three year period (1886-1968) in order to relate modern data to the past, lesser-known hurricanes affecting the coast. Hitting the coast was heavy to excessive rain associated with the weather events (Carter 1970:8).

In a NOAA report entitled “Chronological List of Tropical Cyclones Effecting North Florida and Coastal Georgia 1565-1899” the authors define various categories of tempests and weather events. The report’s aim was to reassess historic hurricanes and address questions pertaining to frequency and intensity of Georgia and North Florida’s storm history. The authors used historic tide data and recorded documents to assess a weather event’s severity. In the report, a hurricane was defined as a tropical cyclone in which the maximum one minute sustained 10 meter wind speed is 64 knots (74 mph) or greater. Based on the modern Saffir-Simpson Hurricane Intensity Scale, this definition described any storm of Category One or greater (Sandrik and Landsea 2003:3). A major hurricane was defined as a tropical cyclone in which the maximum one minute sustained wind speed is ninety six knots (111 mph) or greater. Based on the modern scale, this definition described any storm of Category Three or greater. The authors carefully noted that when they dealt with historical narrative descriptions their determination was subjective. For their study, a major hurricane had to cause devastating damage through either wind action or storm surge (Sandrik and Landsea 2003:4).

The researchers included the hurricane of 1804 in the analysis. In their remarks, the authors mentioned some of the documentary evidence pertaining to the hurricane. They noted a seven-foot rise in sea level above normal high water mark at St. Simon’s Island (recorded by Aaron Burr after his infamous duel with Alexander Hamilton) and the tide rose ten feet above mean sea level in Savannah, a full 60 miles north of landfall. Based on this information, they categorized the hurricane as a major hurricane for Georgia coastal waters (Sandrik and Landsea

2003:16). The report also cited the 1824 tempest and categorized it as a major hurricane for coastal Georgia waters as well (Sandrik and Landsea 2003:21). These classifications give some measure of scale to the power behind the storms that hit Sunbury. People's motivations become clearer as modern equivalents can easily be made to people abandoning an area after a major storm event.

Conclusion

Sunbury prospered as a colonial port town because it was situated in an area that was largely unsettled and uncultivated. The growth and prosperity that amazed historians like Jones and McIlvaine, when put into context, is simply a function of Sunbury's "frontier status." In the wilds and lowlands of southern Georgia, there was plenty of room to grow. Structurally and functionally, Sunbury executed its colonial role as an exporter of raw materials for other colonies and as an importer of finished goods. In the larger sense though, Sunbury did not fit much of the criteria, defined by Price (1974) necessary to become a first rate port town. Its hinterland was limited to rice, indigo, and lumber production. It was located next to the principal ports of Savannah and Charleston, two of the premier ports in colonial America.

By acting through the larger trade networks in Savannah and Charleston, the patterns exhibited by the merchants in Sunbury can be explained as rational adaptations to profitable systems. Sunbury merchants did not diversify because the market at that time demanded the goods their hinterland provided. When these products became less profitable the merchants moved or were expelled in the case of the Loyalists.

Perhaps what was most striking was the pathos imparted by those who knew the town when it was a reality and had lived to see it disappear. C.C. Jones was one of those people. He lamented most about the absence of any reminders of the town's past glories. Aptly, he wrote,

“Surely the buried treasures of the past are here far more conspicuous than the expectations of the present” (Jones 1889:13). Jones touched on the current opportunities for archaeologists to investigate the port.

CHAPTER FIVE: RESULTS OF ARCHAEOLOGICAL SURVEY

Introduction

The archaeological remains considered in this thesis consists of four separate wharf sites along the waterfront, ceramics, glass and rock artifacts found at those sites, as well as a separate artifact assemblage excavated from a Community Property Lot in Sunbury in 1999 (Figure 5.1). This chapter addresses descriptive information resulting from intertidal archaeological survey work on the wharf sites and side scan sonar remote sensing surveys of water around Sunbury. This information is then used as part of a taphonomic analysis of the wharf sites surrounding the presence of wood structures and any other cultural remains. Another significant portion of this chapter covers site formation processes observed along the waterfront through the lens of behavioral archaeology, specifically those outlined by Schiffer (1987) such as abandonment, reuse, and non-cultural processes. The terms utilized for the wharf construction component of the chapter introduced in Chapter One are defined by researchers such as structural engineer Carleton Greene (1917), and archaeologists Andrea Heintzelman (1985), Joseph Norman (1987), David Beard (1991; 1993; 1997) as well as Molly R. McDonald (2011).

The approaches proposed by Beard, Heintzelman, and McDonald create a framework for identifying wharves and assigning dates and functions to them based on construction details and historical data. They describe the sites on the micro-level from a structural, functional, and material point of view, and incorporate broader contextual information from ownership histories. Furthermore, these descriptions include the environmental impacts on the sites as a contributing factor to their structure. This approach provides more insights into the use and function of each wharf.

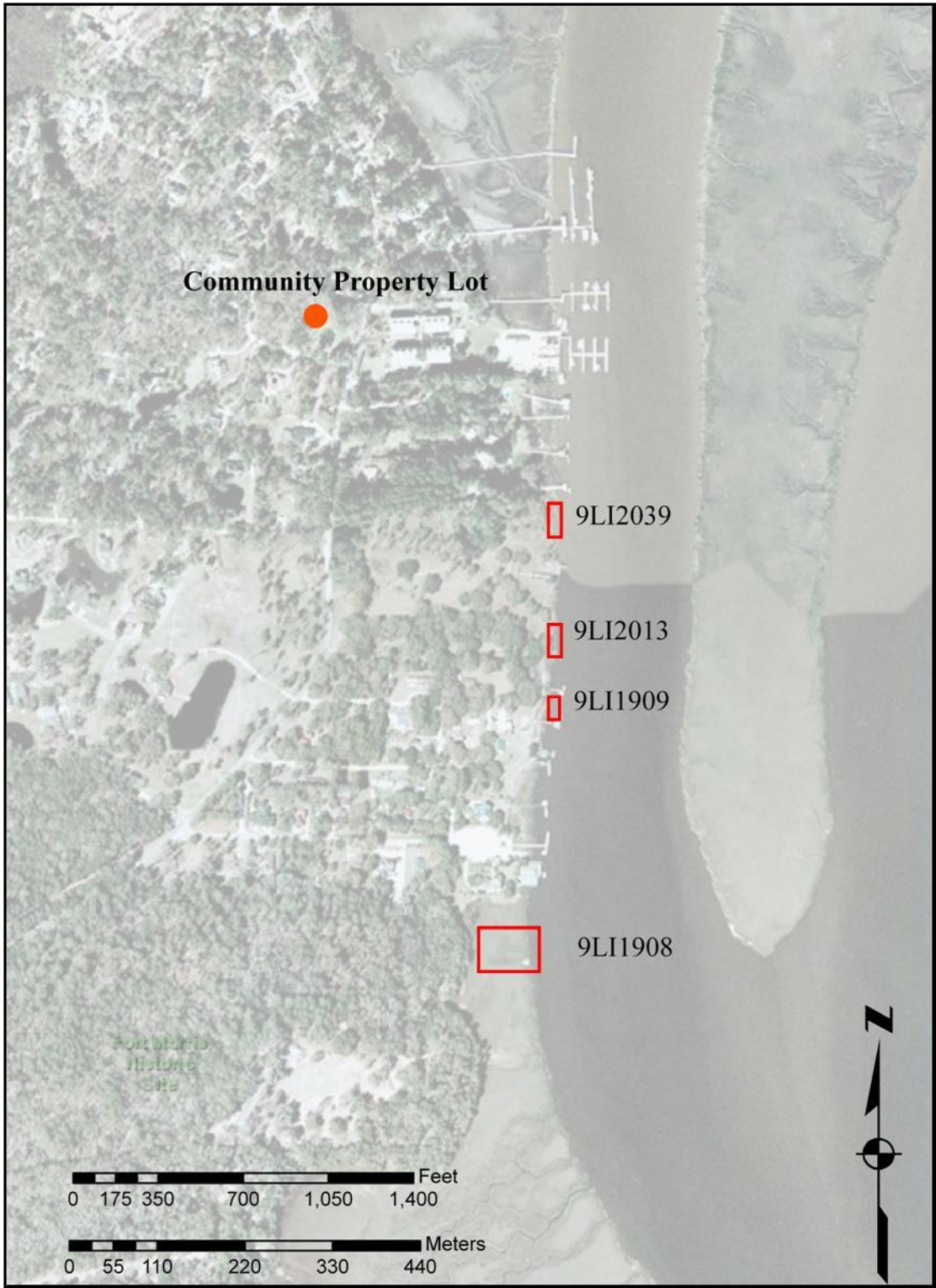


FIGURE 5.1: Aerial view of Sunbury showing location of each wharf site and the site of the Community Property Lot excavation (Image by author).

The synthesis of these data supplies some of the contextual information necessary for analyses on even broader levels as revealed in the next chapter. These prior studies also contribute examples of comparable wharf structures.

Andrea Heintzelman's thesis, written in 1985, discussed three wharf sites. She considered the effects of the environment, economy, and social change on wharf development. It was necessary to understand the use, function, and eventual modification of the wharves to understand their deposition and the affects of the site formation processes at work on the sites. Therefore, considering the theoretical questions raised earlier in Chapter Two, another portion of this chapter is devoted to describing the observed depositional and post-depositional site formation processes affecting each site. Archaeologist David Beard whose work relates to plantation landing sites in South Carolina, wrote, "It may be possible through archaeology to trace the evolution of a causeway from small-scale colonial plantation use, through massive antebellum rice or cotton agriculture..." (Beard 1991:73). Uncovering such an evolutionary process might also be possible along Sunbury's waterfront since three out of four sites exhibit different construction techniques yet are affected by similar environmental factors. This fact differentiates this study from Heintzelman's (Heintzelman 1985:204).

McDonald's work on tracing vernacular carpentry techniques on wharf structures furthers Beard's supposition. She emphasizes a new approach to land-retaining structures by stressing the "basic attributes of a feature" and "making a clear distinction between the various aspects of construction, such as structure material, fill material, form, structure type, and construction method" as opposed to applying "blanket typological terms" (McDonald 2011:44).

When considering the artifacts associated with the wharves it is important to consider functionality as well as formation processes. Along similar lines, Ervan Garrison and James

Tribble surveyed several ballast piles along the Intracoastal Waterway in Georgia. They contemplated the disposal processes responsible for the materials surveyed at their sites using Schiffer's n-and c-transforms and "hoped that this analytical consideration of the type and relationship of artifacts at these sites will suggest hypotheses that can be correlated to particular kinds of cultural behavior such as simple landscaping, planned erosion control, and overseas economic trade..." (Garrison and Tribble 1981:82). The information gathered at each Sunbury site was used to understand the motivations and rates behind the abandonment of the wharves.

Remote Sensing Survey

Multiple side scan sonar surveys over the course of 2009 and 2011 culminated in the generation of a limited list of prioritized anomalies. Equipment difficulties resulted in the need for multiple surveys of the area. Figure 5.2 shows the extents of the scanned area (Figure 5.2). The surveys did not locate any anomalies that stand out as obvious shipwrecks, however, 17 prioritized anomalies await diver verification (a process suspended until the completion of this study). The data also revealed a series of seabed formations characteristic of a high energy fluvial system such as troughs, dunes, anti-dunes, and ripples (Chester Jackson 2011, pers. comm.). This high energy system can be erosive and depositional and certainly contributes to site formation and masking.

Investigations at Lamotte's Wharf South (9LI1908)

Lamotte's Wharf South is located on the shoreline adjacent to the Fort Morris Historic Site and represents over 500 square meters (Figure 5.1). Investigated chiefly at low tide, the surface of 9LI1908 is comprised of multiple wharf piling remnants, pieces of ceramics and glass, ballast stones, and brick scatter. No metal or fasteners were located on the site. The location of the wharf site corresponds with the Jones Map (1887), seen layered in Figure 5.3.



FIGURE 5.2: Extents of side scan sonar coverage (Image by author and Google Earth).

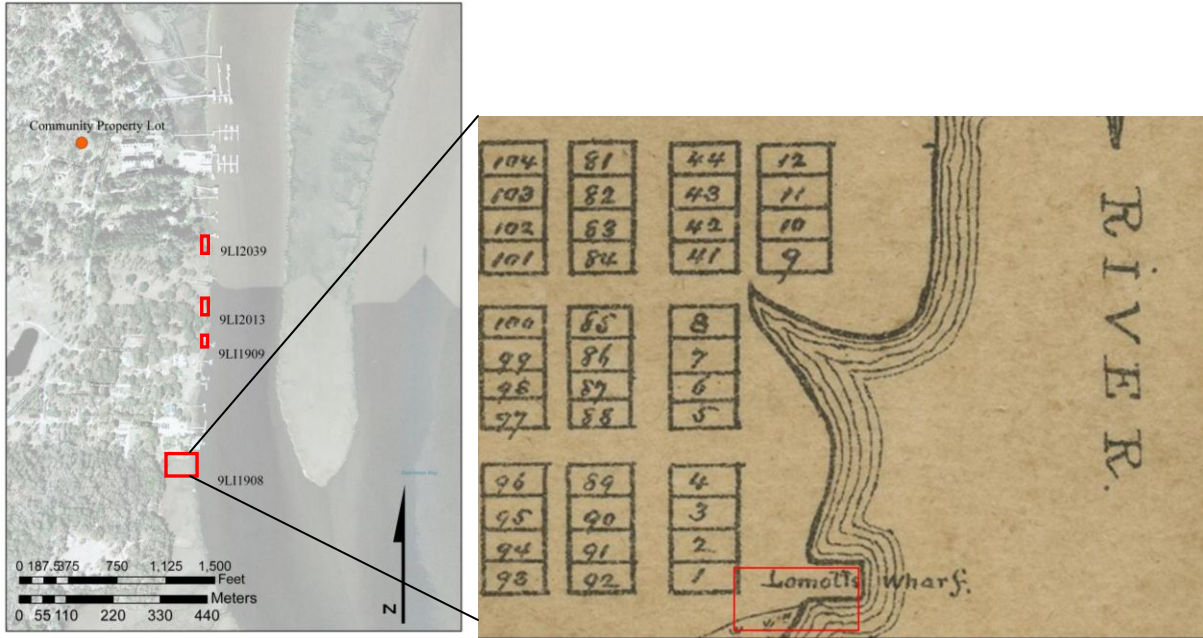


FIGURE 5.3: Image showing the location of 9LI1908 in Sunbury on the layered Jones Map.

At slack low water, the upper portions of the wharf post remnants are partially visible or detectable via probing. Analysis of historic geographic shore migrations confirmed minimal shoreline erosion during the 19th and 20th centuries (Robinson et al. 2010:312-326). Working from the water's edge on the ebb tide, the piling remnants were mapped inland to the marsh-grass boundary line using a Total Station in a one week period in March of 2010. Each individual piling or puncheon was recorded along with surface artifact locations. Piling diameters averaged 0.20 m, the largest being 0.33 m and the smallest being 0.12 m. A piling can be, "any columnar member driven vertically or near vertically to form a foundation for construction purposes or to act as a barrier against horizontal forces" (Norman 1987:17). Alternatively, a puncheon is described as "... smaller diameter logs or split logs driven vertically into the ground..." (Leech and Wood 1994:34). Hence, by these definitions both pilings and puncheons were present. Researchers plotted lines of pilings running east/west perpendicular to the waterline and multiple rows of pilings running north/south parallel to the river (Figure 5.4).

The line protruding furthest into the water is 14.5 meters in length. The line running adjacent to it and parallel to the water line is 15.8 meters in length (Figure 5.4). Researchers located several other wood features in the marsh and tidal creek west of the wharf structure. One feature consisted of a puncheon 0.10 m in diameter protruding out of a tidal creek. Running in front of it was a rough hewn timber. This timber was curved and broken. West of this feature, 13.32 m in the tidal creek, was another set of small puncheons. Adjacent to the puncheons and submerged in the mud lay a broken, rough hewn timber laying perpendicular to the marsh. Overall, its length from the end (probed in the marsh) to where it fractured, was 1.62 m and it was 0.13 cm thick. 9.8 m to the west and also lying perpendicular within the tidal creek is a saddle notched timber 2.95 m long. The notch measured 0.49 m in length, 0.10 m thick, and 0.22 m wide (the width of the timber). Following the tidal creek inland, two more timbers lie perpendicular to the water. They were also rounded and rough hewn measuring 0.25 m in width, and extend into the marsh. Their overall length is 3.94 m. Next to these timbers lie one set of five pilings extended across the tidal creek for 3.48 m creating a barrier to water flow, while another set of fourteen pilings lie together along the tidal creek edge. Many pilings were split into halves and even thirds before being driven. Lastly, researchers observed 19 puncheons extending from the upland into the marsh. Their diameters vary as individual timbers are at different levels of decay. They started out being spaced at 2.65 m intervals between centers, but then shortened to 1.5 m center to center. These timbers likely formed a foundation for the walkway from the land to the wharf site. It is unclear whether they were driven during the primary construction or added later. Their smaller sizes suggests a later construction date.

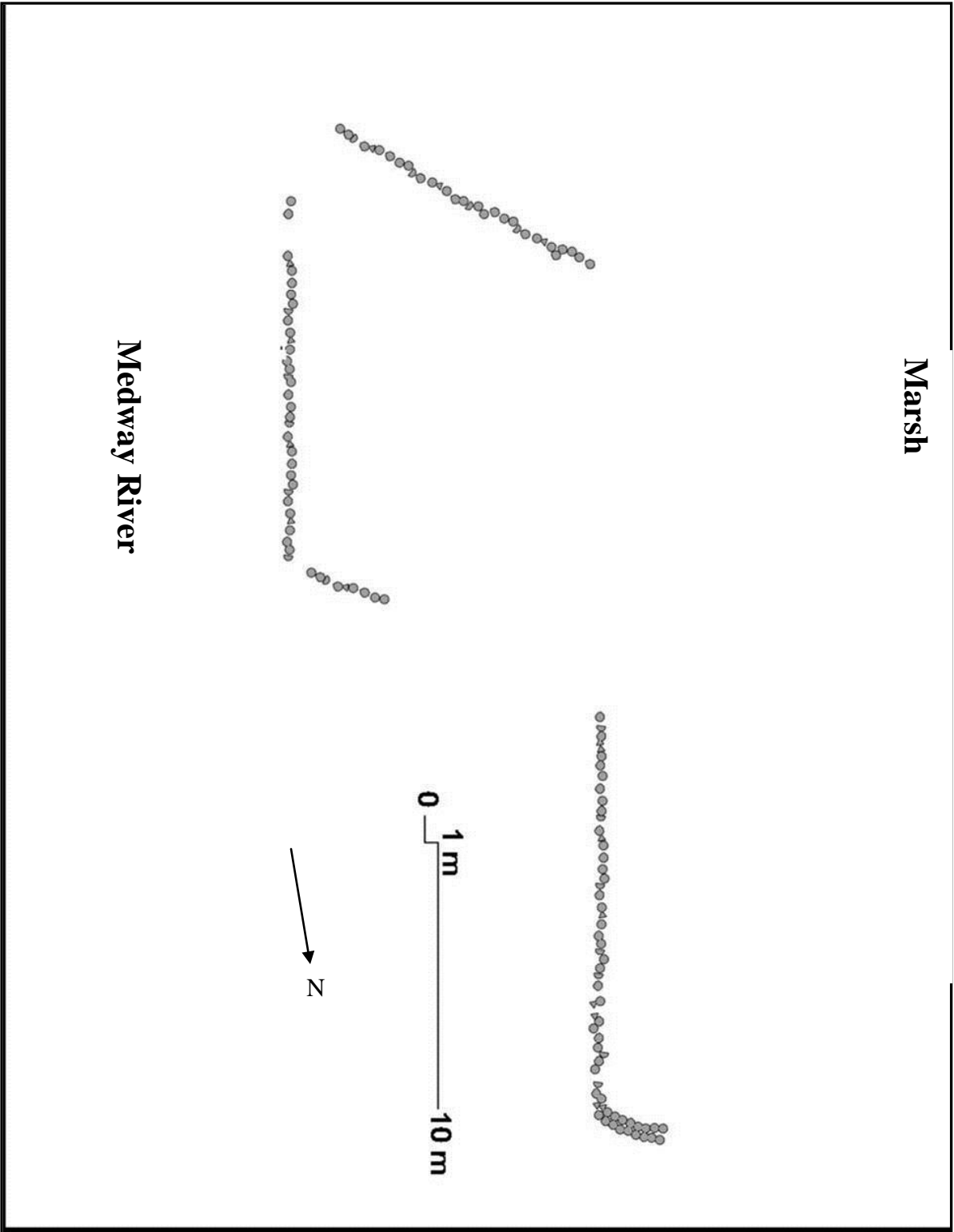


FIGURE 5.4: Site plan for 9LI1908 (Lamotte's Wharf) (Image by author).

Researchers excavated a single piling remnant from the structure closest to the water (underwater at high tide), believed to be furthest from shore thus possibly driven in the later stages of construction (Figure 5.5). Its remaining dimensions measure 0.47 m by 0.25 m and it was shaped into a wedge-like end. As with other remnants, the upper portion was destroyed by wood-boring marine organisms, however the lower section, which was buried in a thick anaerobic mud environment, remains incredibly well preserved. Bark remains on the wood specimen, typed as southern yellow pine (Wiemann 2011:1). In fact, all five wood samples were typed as southern yellow pine by Michael Wiemann from the Forest Products Laboratory in Madison, Wisconsin (Wiemann 2011:1). Pine was commonly used for building colonial wharf structures on the eastern seaboard (Heintzelman 1985; Norman 1987; Langley 2000).

Colonial woodworking experts from Holder Brothers Timber Frames in Monroe, Georgia examined photographs of the artifact to help determine which type of tool was used to form this particular piling end (Figure 5.5). Gabel and Whit Holder both agreed that the tool marks were relatively easy to read. They wrote: “The driven end was shaped completely with an axe. To shape the four sides of the point, the worker would have stood either on top of the log or (if the log were on the ground) just behind it and chopped downward with the axe, quickly shaping the point. Then the log would have been rolled a quarter turn and the process repeated” (Holder 2009 pers. communication).

According to the Holder brothers, shaping wood with iron hand tools often leaves “trail marks” (those in the direction of the swing caused by edge deformities) and “stop marks” (those that appear where the cutting edge comes to rest). In this case, an axe with a curved cutting edge measuring approximately 10.1 cm left these marks at angles to one another.



FIGURE 5.5: The driven-end of a piling remnant excavated from site 9LI1908 showing numerous tool marks (image by Christopher McCabe; amended by Gabel and Whit Holder).

An adze, for example, would have left perpendicular marks. These tool type and shaping techniques are consistent with colonial-era woodworking.

9LI1908's composition of the vertically driven timbers described above is informative. 9LI1908 stands out from many other sites mentioned in the literature because it consists of individually driven vertical wood piles, or puncheons in some cases, that form a bulkhead-style construction (Langley 2000:345). One peculiarity about 9LI1908 is that the majority of the wood along the shoreline is rounded, not planked or squared. This fact represents a discrepancy with some of the literature, but offers evidence about the manner of design of the structure. Norman contests that planked timbers were typically used for any type of piling wharf structure (Norman 1987:17-19). Norman also suggests however, that sheet planking need not be planked. Instead, the piles could be driven next to each other so closely that they serve the same function as planked timbers (Norman 1987:20). Sometimes rounded timbers indicate repairs, improvements, or additions (Watts 1996:153-214). The evidence at the site suggests that the colonists utilized rounded timbers making this structure a closed piling construction type wharf. This structure was different from the common "open pile construction" identified by scholars in Australia and elsewhere typifying wharf construction in the 19th century (Coroneos 2004:85). Open pile construction utilizes piles spaced at intervals. Many modern docks and wharves use this style.

Features at Lamotte's Wharf indicate the wharf was a hybrid design. Much of Sunbury's output consisted of rice. Naturally, many of the citizens of the town grew rice, or were knowledgeable in the functioning of the facilities that produced the crop. In fact, the Sunbury region was surrounded by agricultural estates (see Figure 4.2 in the previous chapter), where planters and merchants utilized rice plantation technology, knowledge, and infrastructure for their own waterfronts. Archaeologists have studied these plantation features, and they offer some

key insights into Lamotte's wharf via plantation technology.

In a report for the U.S. Army Corps of Engineers, archaeologists Richard Leech and Judy Wood surveyed a portion of the Back River near Savannah, GA in 1994. There they found many structures related to 19th century abandoned rice plantation platforms. In describing them they wrote, "...special methods were required to shape and maintain plantation landforms. Heavy use of sheet piling and puncheons was common emergency bank stabilization after washouts, as well as for planned construction projects" (Leech and Woods 1994:34). They also describe the function of puncheons,

Puncheons are the most common feature noted today on lands formerly used for rice culture. When driven in lines, they could stabilize banks and form bulkheads. When clustered, they created stable platforms with the necessary strength to support chimneys, masonry walls, and the like (Leech and Woods 1994:35).

The authors also provide an example of a puncheon support system (Figure 5.6). Use of clustered puncheons driven in lines is a hybridization of sheet piling and bearing piles and could support sizeable structures. At 9LI1908, evidence of both clustering and line driving is evident. The structure consists of lines of pilings and puncheons, but in some cases clustering occurred (Figure 5.7). Therefore, the evidence suggests that the relatively unique features of 9LI1908 functioned as both a retaining wall against horizontal forces while also shoring up the sediment as a form of bulk heading which provided load bearing strength for any structure placed above it. Indeed, the largest diameter timbers were those clustered together as they turned a corner into the marsh. As the foundation of a structure, these timbers had to withstand tremendous stresses.

Further in the marsh, researchers revealed more evidence of piling technology. Observing locations of piling features offers several scenarios for their presence. One glaring question is which came first, the creek or the wood features?

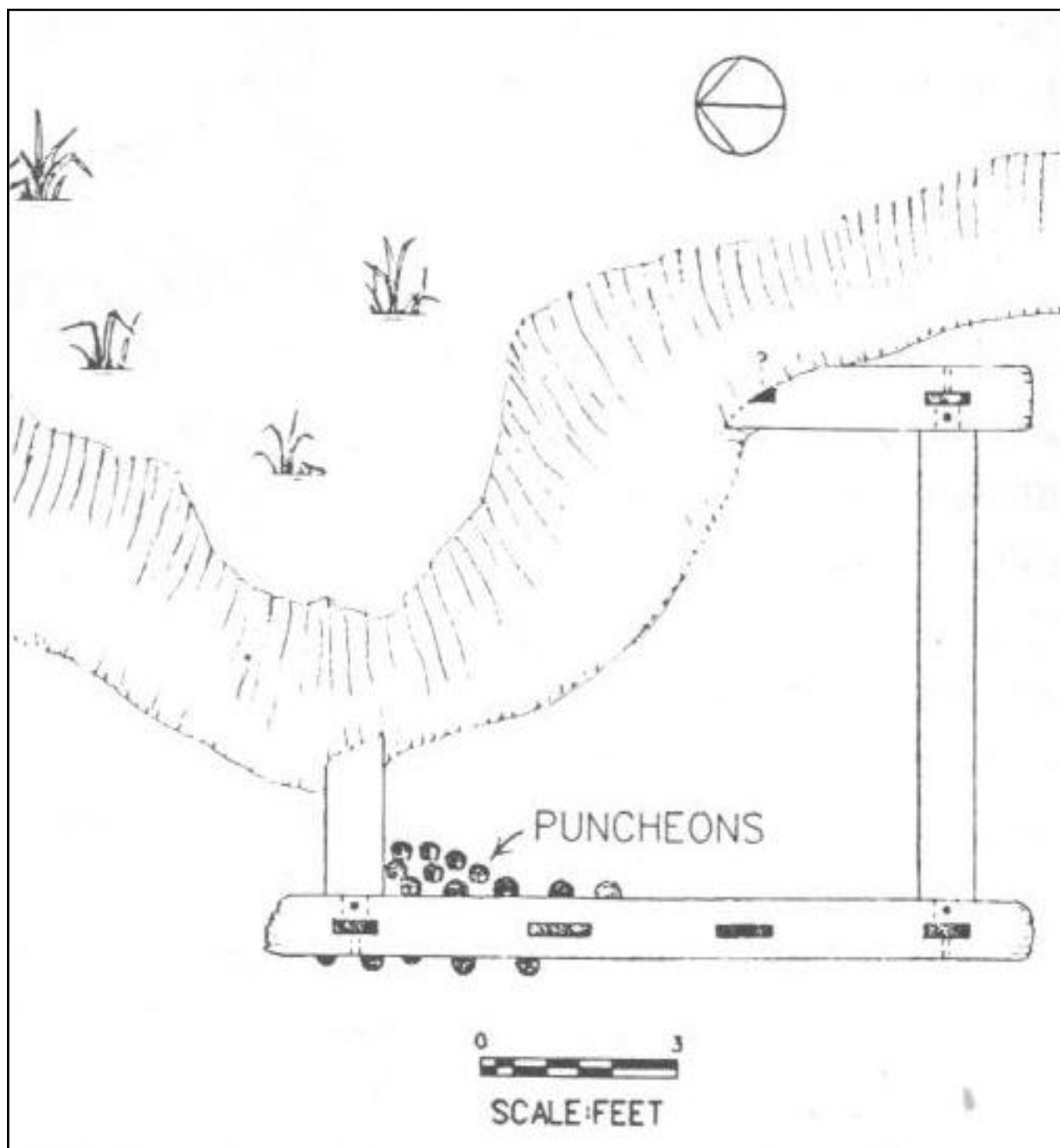


FIGURE 5.6: Crib wharf at Poplar Grove Plantation, GA. Note the puncheon cluster supporting the front timber (Image from Leech and Wood 1994:88).



FIGURE 5.7: Closed double piling reinforcement turning into the marsh at Lamotte's Wharf (Photo by Joseph Roberts).

The wood could indicate that at some point a tidal creek formed around the puncheons and pilings. Alternatively, the wood could have laid along the border of the creek which might have been used for lightering. It is important to analyze the natural and cultural processes affecting the site, as these can also yield information about the life cycles of artifacts and broader trends affecting the site (the subject of the next chapter).

Artifacts and Site Formation Processes Observed at 9LI1908

This section outlines the visible artifacts and site formation processes evident at site 9LI1908. Among the most pertinent processes discussed are abandonment, reuse, and natural draw-down from forces such as tidal and hydrologic action, storms, and teredo worm infestation. Following the temporal path of the wharves is important theoretically and methodologically because understanding the site formation of the artifact leads to a truer understanding of the artifact itself and hence of Sunbury. In the case of the wharves, it is important to establish their active use to help answer the underlying questions driving this thesis.

An examination of the surface finds at 9LI1908 reveals a quantity of colonial ceramics and glass on the surface of the site that must be considered secondary refuse. The presence of these late 17th and 18th century artifacts in immediate proximity, indeed within the boundaries of the wharf piling remnants, suggests the assemblage is related to the disposal activities which occurred at the intact wharf structure.

Although small in number (the assemblage consists of 42 artifacts) all date to the 18th century. Among the ceramic sherds are several pieces of utilitarian glazed redware, refined earthenware with a lead glaze, and British brown saltglazed stoneware (Figure 5.8; Appendix 1). Also included are four pieces of combed Staffordshire slipware from the period 1670-1795, interesting as potentially the site's earliest finds. One unique artifact is a ceramic sherd identified

as French rouen faience. The faience piece (lower right hand sherd in Figure 5.8), is interesting due to its rarity and the possibility that it may connect the site to the former owner, Anthony Lamotte. Ivor Noel Hume suggested several years ago that limited research had been carried out on French ceramics in America, making the faience difficult to date (Hume 1969:140).

Wharves are sites of various activities such as merchant trade, waste disposal, leisure activities, and fishing. Therefore, colonial wharf sites are commonly associated with a variety of finds (Beard 1993:73). The artifact assemblage is too small to make any broad generalizations about life in Sunbury, but added to the piling information, helps confirm the site as Lamotte's Wharf south. Many of the artifacts recovered consisted of drinking vessels. This is consistent with disposal patterns at colonial wharf sites (Heintzelman 1985:1-25; Beard 1993:70). Among the 9LI1908 finds are glass shards, bottle fragments, and a nearly intact liquor bottle partially embedded in the mud and concreted with oyster shells (for a complete list of artifacts discovered on this site see Appendix One).

The bottle artifacts are made of dark olive green glass which in some cases appears black. They consist of individual pieces, bottle necks and bottoms, and indicate an approximate manufacture date range of 1740-1785 (Hume 1969:60-68; Jones 1971; 1986:53). One noteworthy bottle neck appears to have a remaining red-brown layer of its former contents adhered to its interior, although this has not been confirmed with chemical analysis.



FIGURE 5.8: Selection of artifacts from Lamotte's Wharf (9LI1908) (Photo by Christopher McCabe: 2010).

The glass bottoms are all push-up with sandy pontil marks, with varying diameters of bases (0.07-0.10 m) consistent with English wine bottles of the eighteenth century (Jones 1986:53; Appendix One). The bases are rounded and slightly elliptical. The necks, lips, and finishes are also different. They have a cracked-off lip formation or cracked-off and fire-polished lip formations, with a v-shape and a string rim shape. Some were down-tooled while others were not (Jones 1986:53). The down-tooling style created a longer upper slope of the lip than the underslope of the lip (Jones 1986:37). This style can be dated to the 1780s (Jones 1986:37).

The functionality of the majority of artifacts consisted primarily of "hollow wares" or vessels utilized for drinking (including glass) or were too small to derive any type of

functionality. Secondary refuse in the form of drinking vessels is consistent with function of the wharf as a disposal area. Perhaps most important was the lack of other materials located at the site. No artifacts recovered were primary refuse, nor were any artifact categories found outside of South's Kitchen Group (with the exception of several ballast stones and brick fragments). It would be expected that there would be more refuse located at the site if sustained occupation occurred for more than thirty to forty years.

A scarcity of artifacts can be attributed to the n-transforms affecting the site. Besides the semi-diurnal tides, there are also the periodic hurricanes, major storm/flooding events, and the salty, acidic environment (Sandrik and Landsea 2003:3-4). Along with the teredo worm damage observed in all the wood remains along the waterfront, these non-cultural transforms degrade the archaeological record and are the most likely processes that have affected the site. Therefore, it is plausible that primary artifacts such as shipwright tools, fasteners, blocks, or other material culture remnants that would have been in their systemic contexts have been removed by natural forces.

Salvage is one observable cultural formation processes affecting the site. The lack of any wood other than those pilings that were vertically driven into the marsh suggests that people may have removed portions of the wharf site for reuse elsewhere. Another possible cultural transformation is lateral cycling. It can be very difficult to determine lateral cycling of artifacts, however, historical records are a source for making these inferences. Schiffer concurred when he wrote, "Another approach to inferring lateral cycling is highly indirect, and depends upon understanding, generally, the *causes* of this process. If the requisite initial conditions are documented in a specific setting, then one has a basis for positing that lateral cycling took place" (Schiffer 1987:29).

The historical data confirm multiple use in areas directly in use adjacent to the site up to 1794 (lots 1-4). The only documented previous owner of the wharf, Anthony Lamotte, an emigrant from France who married into a wealthy Charleston family, moved to Sunbury in 1768. After buying Lot One, he developed the wharf for trade with his partners in Guadeloupe (*Georgia Gazette* 1768[268]:3; 1768[271]:4). Unfortunately for Lamotte, he came under financial trouble after a robbery and the wrecking of a ship he owned and ended up in debtor's prison in Savannah (*Georgia Gazette* 1769[303]:2; 1770[343]:2). This forced him to sell the Lot One, to whom is unknown (Sheftall 1977:185). Based on the construction of the site and the age of the artifacts found within it, it is possible the wharf was in use after the Revolutionary War. Unfortunately, there is not enough of the wharf structure to determine, using Beard, Polk, and McDonald's suggestions, any systematic or dateable changes made to the wharf structure which could indicate lateral cycling or reuse. For example, if more of the structure existed, it might be possible to find repairs or alterations made to the wharf over time.

Using the data from the site survey, researchers observed no evidence for lateral cycling despite historical evidence proving to the contrary. Events such as the occupation and burning of the town by the British certainly hastened its abandonment. Disease and hurricanes also lessened incentives for return.

Unfortunately, the exact rate of abandonment cannot be determined from the wharf remains. No other modern structures are near or on the site. Aside from gaps in the line of pilings, there is no evidence of reuse. In fact, the existence of colonial era artifacts at the site suggests the site's relative security from looting and modernity in general. Since the only structure is the piling remnants, it is not possible to pinpoint an exact cause or pace of cultural formations affecting the site.

9LI1909-Fisher, Jones, and Hughes Wharf

Investigated over the course of 2009-2011, Fisher, Jones, and Hughes Wharf (9LI1909) also consists of the remnants of a wood structure, ballast stones, bricks, and other artifacts which can be seen at low tide. Based on historical records, and the site location layered with the Jones Map, this site is likely associated with the merchant firm Fisher, Jones, and Hughes (Figure 5.9). Artifacts recovered from the site included coarse red earthenware, probably ceramic roofing tiles or piping; bases of English wine bottles dating from the 1750s to 1790s; grey salt glazed stoneware; and coral (for a complete list of recovered objects see Appendix Two). The coral was identified by Dr. Chester B. Jackson as being from the Caribbean, a *scleractinian* of unknown genus (Chester B. Jackson 2011, pers. comm.). The site is located 297 meters north of 9LI1908 and 169.6 meters north of the public landing ramp and dock.

9LI1909 consists of 59 timbers running perpendicular to the water and five timbers laying parallel to the water. The perpendicular timbers are laid tightly down next to each other. They differ in size and dressing. Some of the timbers were rough hewn while other timbers were finished and planked. The timbers also varied in size, some being as wide as 0.50 m while others were 0.01 m wide. Researchers observed no fasteners at the site; apparently the timbers were laid down in the mud and covered in rubble to keep them fitting tightly next to each other. The only indication of any type of fastening is from two large timbers (0.50 m wide) that have notches cut out at their ends. These notches are also 0.50 m wide and could have been cut to receive cross timbers for stabilization (headers). All of the timbers are worm-eaten and in various stages of decomposition.

The wood structure is 23.2 meters long. Strewn about the site are ballast and cobble stones, brick, ceramic tiles, live oysters, and oyster shell. Researchers probed the gaps between the wood planking with a 1.5 m probe and found no wood underneath the mud. It is unclear whether the gaps are intentional or if they are a product of n-and c-transforms on the site. Researchers were unable to detect the extent of the wood in the marsh because they were unable to probe the sediment on private property. They did visually observe and feel the wood extending back into the marsh and bluff. The timbers furthest extent from the marsh toward the water is two meters. Some of the timbers varied in length as well. Generally, the timber extents became shorter moving north to 0.50 m or less. In the middle of the structure, the wood extended for one meter.

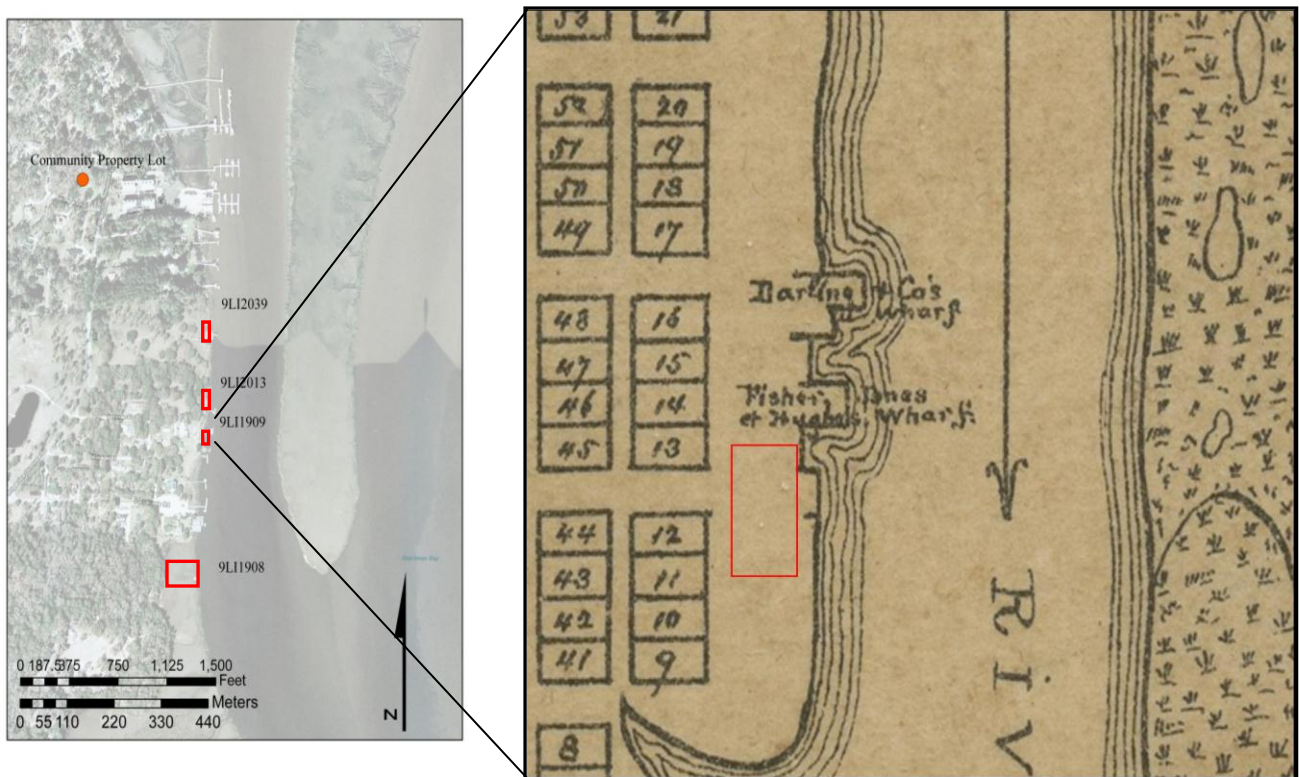


FIGURE 5.9: Location of 9LI1909 overlaid on the Jones Map (Jones 1887:1)(Image by author).

Unlike 9LI1908, 9LI1909 contains no vertically driven piles or puncheons. Instead, the style employed to create the structure can best be termed “grillage”. Archaeologist Molly McDonald wrote: “The grillage form differs from the crib form in that each perpendicular course of stacked logs is continuous, creating a more solid raftlike structure rather than a boxlike crib with a void in the center” (McDonald 2011:45). Five timbers running lengthwise parallel to the shoreline extend at various intervals into the ends of the perpendicular timbers running width wise forming butt joints. These timbers closely resemble headers in the crib and cobb style wharf construction, consistent with colonial era wharf building techniques (Heintzelman 1987:7-9; McDonald 2011:45). Unfortunately, all that remains of this wharf without excavation appear to be the floor of the structure.

Crib style wharves were constructed by layering timbers in alternative rows formed by the headers and stretchers and were the most common form of colonial wharf construction (Beard 1993:67). Commonly, colonists built a floor by filling the open space created by the headers and stretchers with sand or stone (Norman 1987:10-26). In the case of 9LI1909, its location in the littoral next to the bluff indicated that the floor was constructed in the mud. Ballast and cobble stones were laid on top to settle the structure into place. No sinking was necessary. Based on the extents of the site, this wharf was also marginal and did not extent far into the channel (Figure 5.10).

An alternative theory for the structure suggests that the timbers are the remains of a bulkhead. This idea supposes the timbers were originally driven together vertically as sheet planking. Over time, without any site maintenance or cleaning, the weight of the fill and marsh might have overcome the timber’s resistance and caused them to fail. The blown out sheet

planking might then have been covered by the fill. Figure 5.11 is an image of the remains of a failed bulkhead on the Savannah River in Georgia surveyed by Gordon Watts (Watts 1996:191).

Watts noted “no structural elements or fasteners were found associated with the planks” (Watts 1996:190). This is a corresponding feature of the Fisher wharf site, however, it does differ in that the timbers were packed tightly together and are much larger both in thicknesses and lengths. Furthermore, the presence of header timbers and ballast on top of the timbers indicate the wood functioned as a floor and not a bulkhead. If the timbers were part of a bulkhead, the expected deposition would not be neat orderly timbers laid flush next to each other, but timbers that are spaced and flayed out, much as they are in Figure 5.11. The pattern presented by the floor of the wharf is consistent with a grillage style wharf construction. Note the similarities between the floor of the landing surveyed by William Barr and 9LI1909 (Figure 5.12).

Similar to 9LI1908, the wharf at 9LI1909, would not, at least indicated by the floor of the wharf, openly allowed water to flow through it. This structure was built sturdily, as a means to extend land into the water (McDonald 2011:53). The chance for siltation at the site would have been high due to high tidal flow and turbidity.



FIGURE 5.10 Isometric site plan of 9LI1909 Fisher, Jones and Hughes Wharf (Image by author).



FIGURE 5.11: Site GR SR 22-Remains of a 19th or 20th century failed bulkhead, note the vessel in the background (Photo from Watts 1996:191).

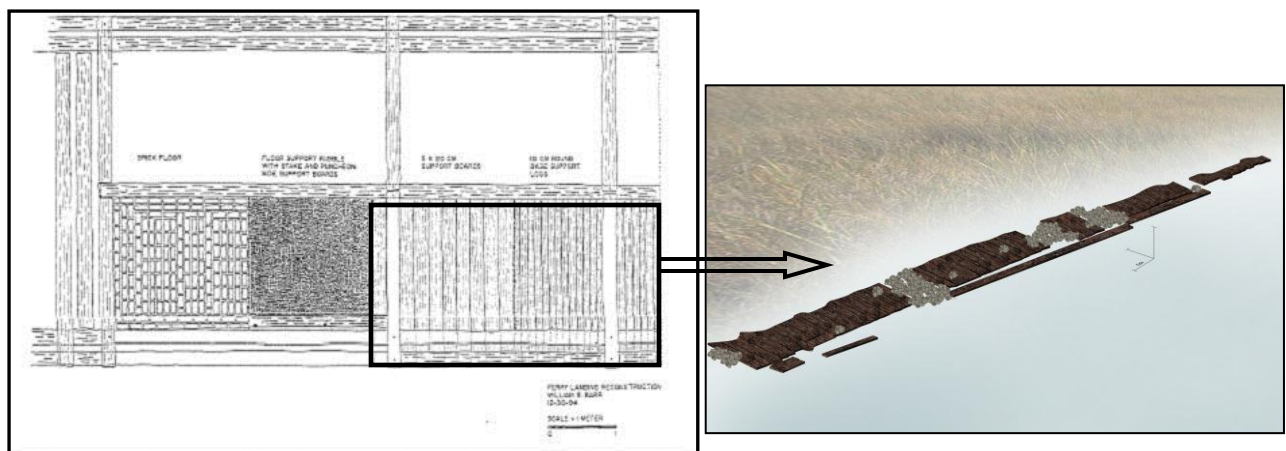


FIGURE 5.12: Comparison of wharf floor similarities (Image on left by William Barr 1995:91; Image on right by author).

Artifacts and Site Formation Processes at 9LI1909

The differences between 9LI1908 and Fisher, Jones, and Hughes Wharf extended beyond construction details. Considering the first level of active use and subsequent abandonment description mentioned above, there were far less surface artifacts at 9LI1909 than at 9LI1908 (Appendix Two). In total there were only 13 artifacts collected. With the exception of the objects in the Kitchen Group, such as the glass bottoms and stoneware sherd, the other artifacts were probably deposited intentionally as fill for the cribbing. Under this designation, they are still secondary refuse. The stoneware pieces and glass bottoms were also secondary refuse. The extremely limited quantity of artifacts makes any interpretations about past utilization of the site tenuous. Their presence shows that this wharf site, as well as 9LI1908, was utilized to some degree as a disposal area (Norman 1985:81). There were fewer colonial era artifacts, thus the difference of the quantity of secondary refuse at 9LI1909 may be the result of modern reuse behaviors, especially those pertaining to collecting. 9LI1909's location is near private property and adjacent to two modern docks. Conceivably, access to this site, as opposed to 9LI1908, is much easier. Over time, people may have walked over this site and taken artifacts. In fact, oral reports of people in the area finding and retrieving artifacts along the waterfront attest to this behavior (Elliott 2005:139). Those pieces of secondary refuse recovered also indicate that they were used as fill in the wharf as opposed to simply being discarded. Many more objects may have been removed from the site whenever the upper layers of the structure disappeared.

What was left in abundance at 9LI1909 however, are ballast and cobble stones. Ballast stones are difficult to classify using Schiffer's categories. Clearly, they can be considered secondary refuse by definition because they were utilized elsewhere, probably on ships as ballast

and dumped on site. At the same time, however, ballast and cobble stones served as an integral part of the construction of wharves by providing fill and the structural foundation on top of the floor (Heintzelman 1985:62-182; Norman 1987:47-85; Langley 2000:343). They also could serve as erosional revetments. Therefore, an argument can be made for them to be considered primary refuse in the sense that they were discarded at the place of use. Hence, they occupy both spaces simultaneously. Either way, their presence sheds light on some of the past functions of the wharf.

Ervan Garrison and James Tribble surveyed several ballast piles along the intracoastal waterway in Georgia (1981). They utilized three indices for assessing the disposal processes at their sites: artifact type, artifact distribution, and soil context (Garrison and Tribble 1981:84). Some of their conclusions from observations of ballast distribution were pertinent to this site. For instance, in both cases the ballast and cobble stones are the result of intentional dumping. Rock is not endemic to the Georgia coast so its presence indicates intentional human involvement (Howard and Frey 1980:66-134). Secondly, the source for the stones was also the same: sea going vessels. Vessels lighten for several reasons including navigating shallow waters, careening, or taking on cargo. They sailed into the port with ballast, and unloaded the stones before taking on goods. The distribution pattern at 9LI1909 suggests that once removed from incoming trading vessels, they were used as fill for the wharves.

Limited conclusions can be drawn from the presence of the stones. As secondary refuse, they show that at one time trading occurred on site. Unfortunately, however, the amount and location of the stones on site does not illuminate any discernable discard or reuse patterns. Furthermore, there is no clear connection between the amount and level of past trade carried on at the site.

The wooden structure itself offers very few clues about the deposition and abandonment of the site. Perhaps the most puzzling features of the wood structure are the gaps located in-between several sections of the floor. The gaps seem to indicate separate sections of wharves, as opposed to one large wharf. The headers though, stretching as they do across the gaps, show the structure was intended to be a complete block, not partitioned into cells (McDonald 2011:43). Instead, the gaps show the cultural site formation processes of salvage and or reuse. The site is near private property where contemporary citizens of Sunbury have built piers and wharves of their own. It was very likely the gaps were created by people who were intent on either building a modern wharf over the old one, or who needed the wood removed for other purposes.

The Loyalist merchants who were responsible for building the site either died or fled during the American Revolution. Interestingly however, in 1787, James Fisher sold lots 13 and 14 adjacent to the wharf to Dutch merchants Egidius Henry Schmidt and Jan Molich (Sheftall 1977:187). This historical documentation is the best information pertaining to the lateral cycling of the site (Stuart 1796:31-38). Considering its central location within the town, it stands to reason that this wharf would have been maintained longer than those on the periphery of the town, such as Lamotte's wharves south and north. Therefore, as an example of *de facto* refuse, this site might have been one of the last to be abandoned. It may have been considered by contemporaries as the most important wharf site at Sunbury and could represent both episodes of Sunbury's history, its rise in the 1760s, and its fall after the American Revolution.

9LI2013 – Darling and Company Wharf

Spread out over 40 meters, Darling and Company Wharf is comprised of two distinct wood structures, and are separated by 20.3 meters of marsh, mud, and oysters. The remains furthest to the south extends five meters along the shoreline at low water, and when overlaid on the Jones Map, lie closest to Darling and Company Wharf (Figure 5.13). These remains are comprised of eight timbers laid next to each other perpendicular to the water and are relatively the same size.

These timbers are much smaller lengthwise, measuring on average 0.80 m as compared to approximately one meter on average at 9LI1909. The ends are visible and only one timber appears to extend further into the marsh. Based on the extents surveyed, this too, must be considered a marginal wharf.

The structures are the back ends of timbers that would have extended further out into the

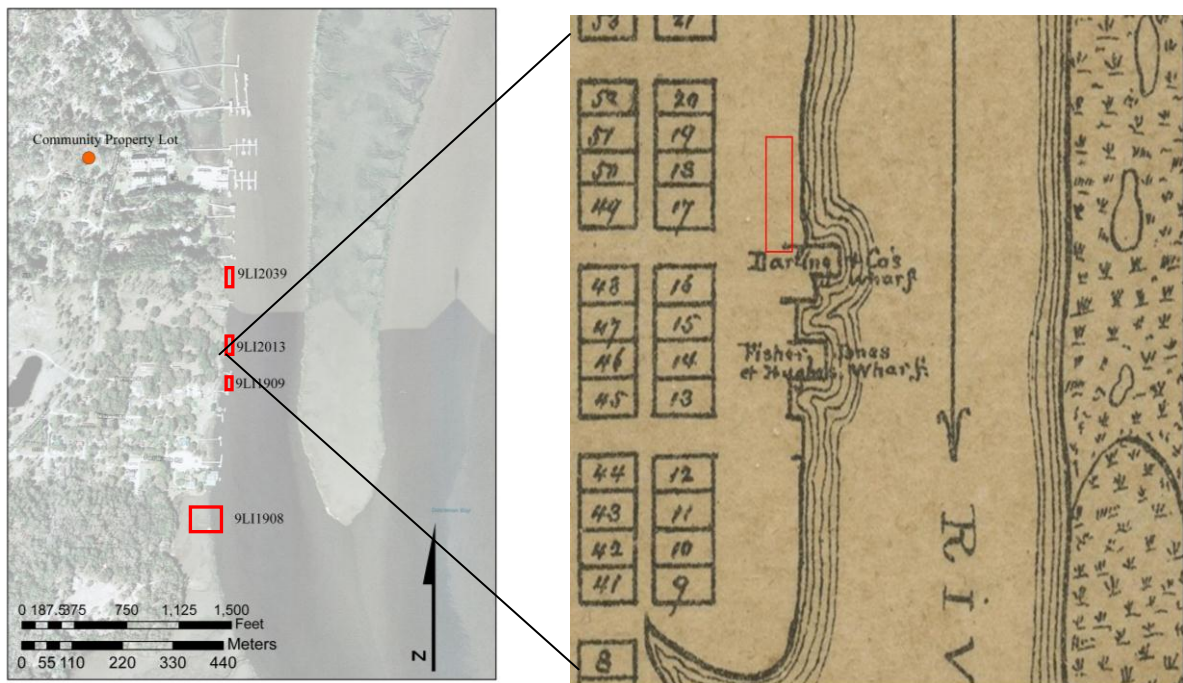


FIGURE 5.13: Site 9LI1935 overlaid on the Jones Map (Image by author).

water. Another possible explanation for the stunted timber lengths is that they were altered by modern property owners and reused. This site has a modern raised dock running through it, therefore it is plausible to suggest that some of the colonial timbers were removed to accommodate modern piles. Running perpendicular to the shortened wood pieces is another timber laid parallel to the water along an axis that is nearly south north. A small portion of this timber has another timber stacked on it with no fasteners evident. Both are planked and measure 0.23 m and 0.20 m respectively. The top piece lies at a slight angle indicating it was probably shifted by mud sloughing (Figure 5.14).

To the north is another wood structure associated with the Darling site. It consists of three cut timbers perpendicular to the water, one header, and two small puncheons. These timbers are larger than the timbers to the south, they too resemble the rudimentary framework of a crib wharf cell with one header and two stretchers making the box-like structure and no backend evident. Importantly, there does not appear to be a floor or grillage associated with this cribbing. The perpendicular timbers are 0.40 m wide and cut end where they meet with the header. The other perpendicular timber is only 0.15 m wide. These timbers are 1.20 meters and 1.10 meters long, but were observed to continue into the marsh upland. The header is 4.20 meters in length. The timber is consumed by shipworms and other degrading processes. While varying in width due to the degradation, at its widest it is 0.50 m. This is the most substantial header at Darling's Wharf. Their close proximity suggests that the two wood structures should be considered one site.

Researchers recovered a limited number of artifacts from this site, one glass bottle dating from 1930-1960. In addition, a brass handle with leaf flutings was also found at the site. Both of these artifacts are considered secondary refuse. The bottle was found exposed out of the marsh layer behind the site and it could have been deposited at the site during a construction phase

occurring on the upland. The functionality of the site cannot be inferred from the two artifacts. Instead, the absence of any other artifacts indicated there are significant formations affecting the site. Besides the n-transforms such as water flow and storm events, c-transforms such as collecting and reuse probably affect the site. In similar fashion to 9LI1909, collecting has probably lessened the number of artifacts on site.

The construction techniques on the southern structure at 9LI2013 are similar to 1909 but with slight changes. For example, the basic floor-like structural pattern consists of timbers tightly packed together and oriented perpendicular to the water. Both sites have milled faces, but also utilize un-milled timbers. They are smaller than their counterparts at site 9LI1909. The reasons are unclear for the slight differences in construction at the two wood structures comprising this site. This could illustrate differences in function. For example, the site to the south with the floor could have been used to handle heavier cargoes while the section to the north was meant to support lighter cargo. Their differences could also indicate temporal differences in construction times. After building the first section with the floor, Darling and Company might have felt the need to expand. Hence, they cheaply and quickly built the adjacent section to the north. The less material-intensive construction technique could represent a desire for a newer wharf design. Alternatively, the presence of planked timbers may be evidence of the development of the lumber industry in Sunbury.

Historical records show Andrew Darling was an important merchant in town. In business, he dealt with other merchants such as Simon Munro, Roger Kelsall, and James Spalding, but also went into ventures of his own. He died in 1772 after accruing a large amount of wealth (Atlanta Town Committee 1962:36). The family sold the wharf lot in 1775 prior to fleeing from Sunbury to Florida (Sheftall 1977:214-217).

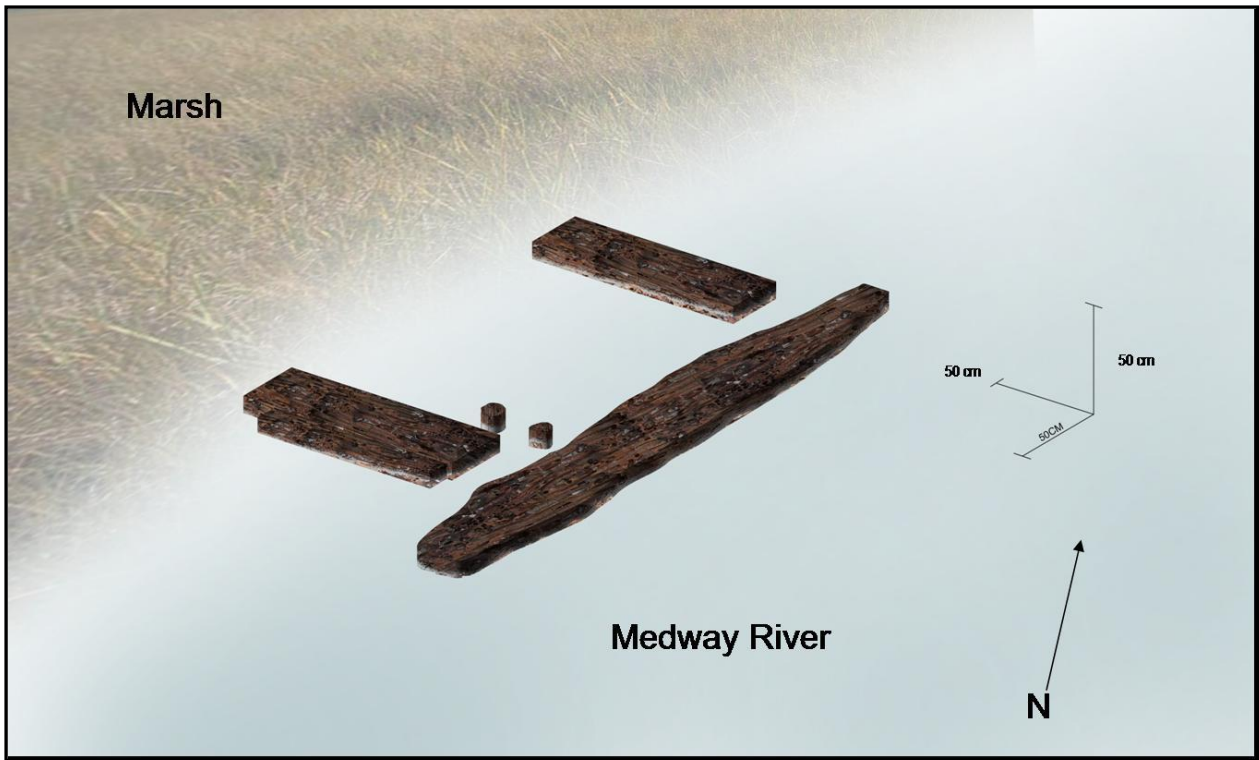
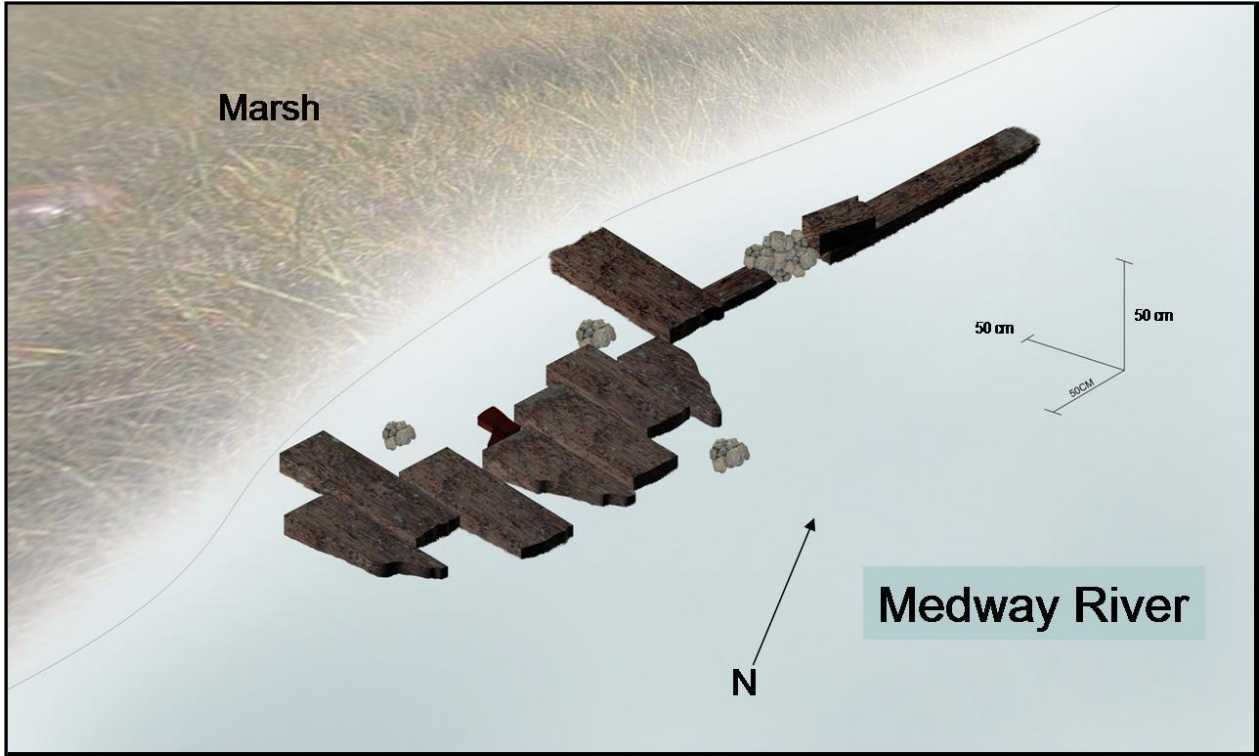


FIGURE 5.14: Isometric drawings of the components of site 9LI2013 (Drawings by author).

The archaeological data concerning the wood structure makes a proposition about the rate of abandonment impossible. As with the other sites, a higher degree of *de facto* refuse, more than just wharf sites themselves, needs to be evident at the wharf site to suggest a catastrophic or immediate abandonment.

9LI2039 – Kelsall and Spalding’s Wharf

9LI2039 extends 129.5 meters north of 9LI2013 and is presumed to be Kelsall and Spalding’s wharf site. It extends 18.9 meters along the marsh at low water (Figure 5.1). The location corresponds with Kelsall and Spalding’s Wharf on the Jones Map. It too was built of southern yellow pine and filled with ballast stones, brick, oyster, coral, and mud. Unlike 9LI1909 or 9LI2013, 9LI2039 only has stretchers of the crib cells left intact (Figure 5.15). Two of these stretcher pairs are stacked. There are no fasteners evident, only ballast stone and mud (Figure 5.16). The first set of stacked stretchers is 0.30 m wide and is 2.37 m. There is no notch for receiving a stacked timber. The next stacked set is 4.95 m to the north and is 0.25 m wide and its length is 2.10 m. This pair also has another timber laid directly next to it of the same width. Its length is one meter. Further north by 2.5 meters is a single timber 0.27 m wide and 0.30 m long. Lastly, 8.9 meters to the north of this lone timber, and 18 meters from the first timber, are a pair of timbers placed in a relative east-west orientation with a 0.10 m space between them. They are both 0.33 m wide and the longest timber in the pair is 3.38 meters in length while the shorter timber is 1.3 meters in length.

All timbers were rough hewn or too poorly degraded to distinguish refinement. The timbers adjacent to each other might have been stacked at one time judging by the similarities in timber widths. Eight meters in the marsh behind the northernmost timbers and perpendicular to the water is a timber protruding out of the marsh. Unfortunately, it was too buried to find its true

extent, but its presence indicates the possible back-end of the crib cells. It is also 0.30 m wide. If this timber truly represents the back end header of the crib structure, and is nine meters, the furthest extent of the wood to the low water mark would have made the wharf area 151.2 square meters. Considering the extent of the timbers to the low water mark, this site too must be considered a marginal wharf.

All of the artifacts located on the site could be considered fill. The site is covered with stone, brick scatter, and some coral. The amount of ballast stone corresponds with the relative size of the wood structure underneath. The brick is unidentified but consisted of fragments with a sandy temper. Just 48 meters to the north of the site lies another ballast pile, but researchers located no wood structure at this site therefore the space possibly acted as a dump site for vessels.

The entire site's relative importance is hard to distinguish because of its drawn down nature. Roger Kelsall and James Spalding were important merchants who dealt in a thriving Caribbean rice trade, but had established stores in the St. John's area of Florida, intent on capitalizing on their expanding inland business (Goggin 1949:35-38; Herndon 1979:131).

These factors should reflect a site able to handle high levels of merchandise. The stacking of the stretchers certainly advances the notion that the wharf was substantially built as a crib cell. Historical records show Roger Kelsall arrived in Sunbury in 1763 by way of Charleston. It is possible that having observed other wharf styles there (and along the waterfront at Sunbury), he was convinced of the positive qualities of the crib cell style. He was among the Loyalists that fled Sunbury in 1775. It was said his wharf was specifically targeted by Americans during the ensuing fighting because he was particularly hated as having led Loyalist raids against his former neighbors (*South-Carolina Gazette and General Advertiser* 1784[Iss:288]:1). This evidence

shows that the abandonment process at Kelsall's was more rapid and destructive than at the other sites. Based on the limited remains there is no way to differentiate this site's abandonment from the others based on the extensive degradation of the wood. Finally, this site, more than any of the others, has a three dimensional quality with its stacked stretchers. The stacked stretchers show another level of construction not seen at any of the other sites. Interestingly, the other sites have floors, while this site does not.

Common Property Lot House Site

In total there are 5,460 artifacts from the Community Property Lot site, the majority of which are ceramics pertaining to the kitchen functional category (2,939 in all). The majority of ceramics are cream and pearlwares. One cross mending effort yielded a nearly complete brown shelled edged pearlware bowl with hand painted, star-like patterns. Other ceramic types include a variety of stonewares such as pieces of Nottingham, white salt glazed stonewares, Rhenish grey, Fulham, brown salt glazed pieces and various unidentified stoneware types. The author categorized other refined earthenwares such as yellow wares, agate ware, sgraffito, basalts, and also jasper ware pieces. Some fine porcelain specimens were also recovered including blue overglaze and polychrome with varying motifs. Many of these sherds were bases for saucers, tea cups, bowls, plates, and similar vessels. Among the other artifacts recovered were numerous nails, a few buttons, window and drinking glass shards, bottle necks and bases, slate, gunflints, furniture hardware, the faunal remains of pigs, fish species, cows, deer, and other animals, which led Elliott and others to interpret the site as a house midden (Elliott 2005:95-96).

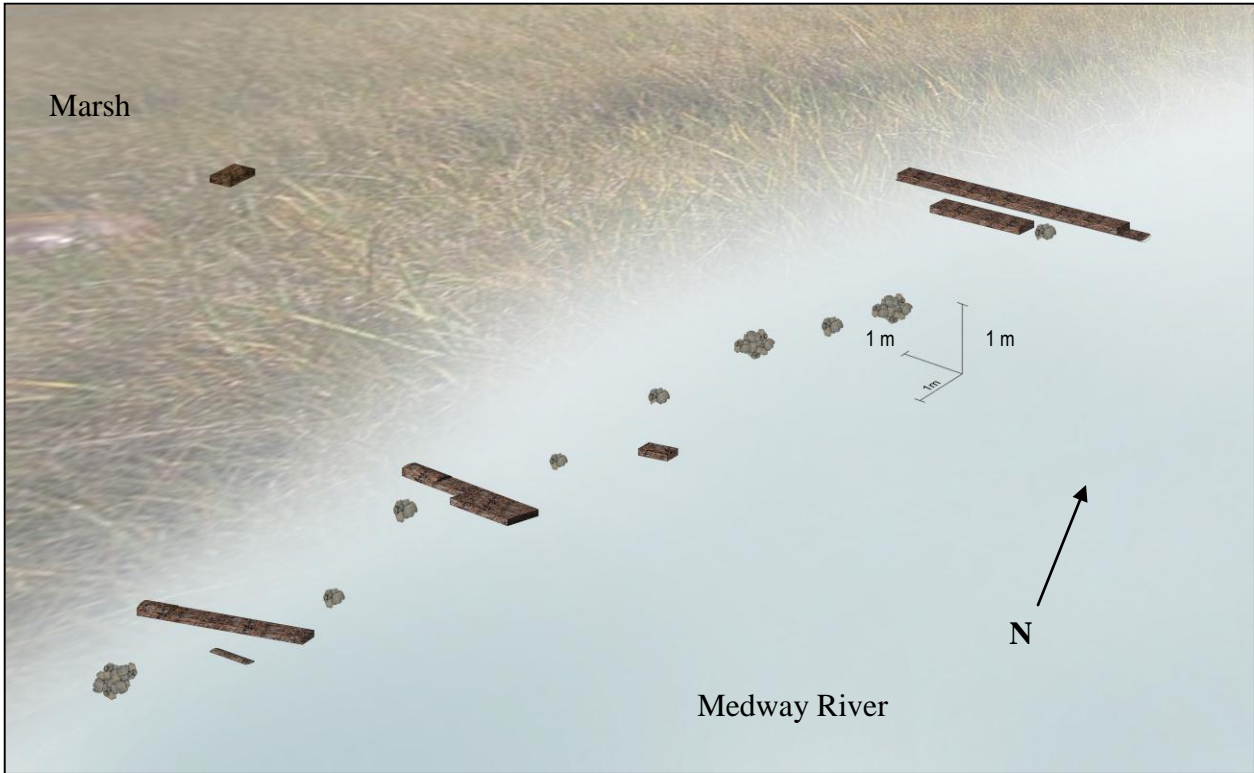


FIGURE 5.15: Isometric illustration of site 9LI2039 (image by author).

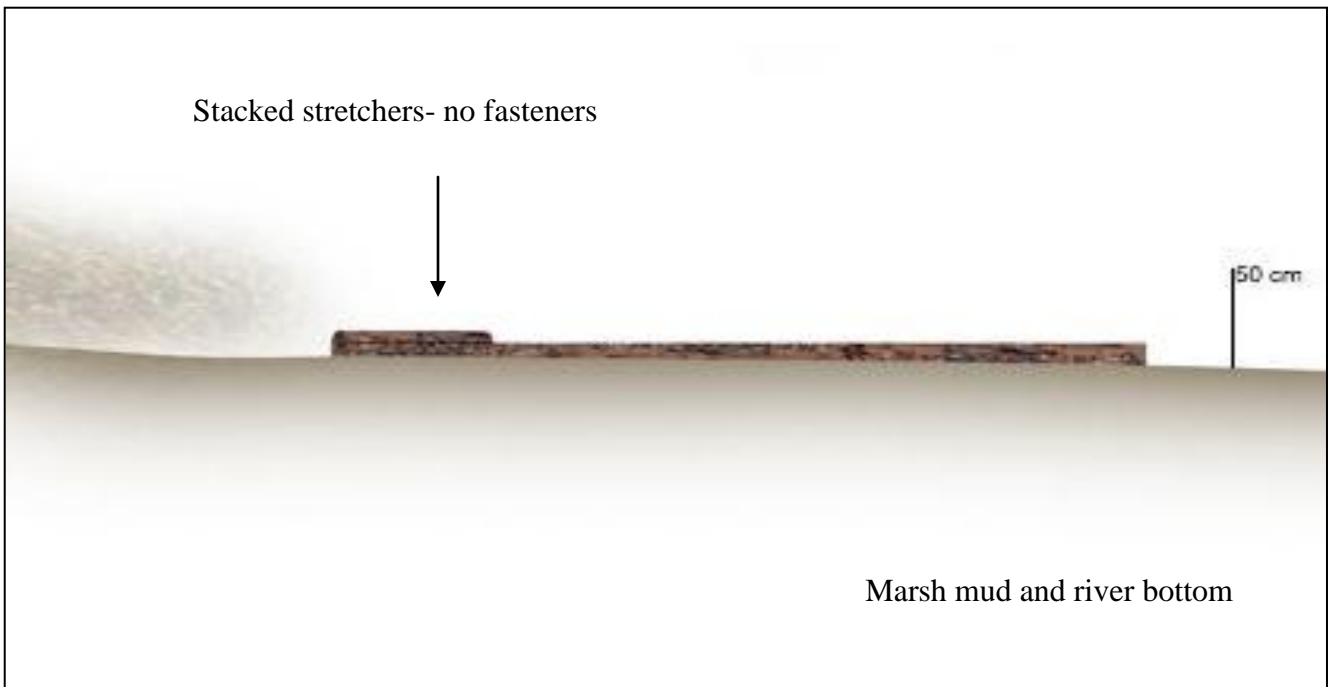


FIGURE 5.16: Profile view of a stacked stretcher (Image by author).

The lack of excavation data makes reconstructing the site impossible. The information contained within the “site file” indicated that many of the artifacts were excavated out of a floor feature at the ruined house site (Elliott 2005:96). Some of the artifacts were burned, including 87 ceramics, suggesting that some garbage disposal took place. The small percentage of artifacts burned also indicated that the house itself was not burned by the British during their occupation in 1779 as might have been suggested by the historical record. Many of the ceramics were pearlwares dating to post British occupation. Those digging the site did not record stratigraphic information, however, sample soil was removed as a form of control. Neither Elliott nor the author located a burned level in the strata which would indicate a massive burning event.

To obtain a date for the site, the author conducted a series of analytical tests using the ceramics. The first was to acquire a Mean Ceramic Date (South 1977) for the site. The author used 15 different ceramic types with a total sherd count of 2,250 and arrived at a date of 1794.5. The author also assessed the less statistically reliable pipestem dating method proposed by Binford (1961) using 320 pipestems in total. The author arrived at a date of 1740.6. There were also 102 4/64 inch pipestems, indicating an occupation date as late as 1800 (Deetz 1993:7).

Overlapping the historical Jones map with the site location, the author was able to identify the former owner. Based on this GIS layering, the site was located in the vicinity of Lot number 128, owned by Samuel Jeanes [Jones] (Sheftall 1977:196; Figure 5.1). There was no other documentary evidence on Samuel Jeanes.

Conclusion

This chapter described the results of several intertidal and remote sensing surveys the data from which describe four colonial era wharf sites and the water around Sunbury. Dated using construction techniques and associated artifacts, the wharf sites are consistent with 18th

century wharf construction. The wharves represented adaptations to environmental factors. Structurally, there was not a preferred wharf construction method. All the sites exhibited different traits. This is important because all of the sites operated under relatively the same environmental stresses. The variability in design can then be assigned to other forces. These variances also allow for broad characterizations of the sites using a system similar to Beard's typologies since Sunbury's waterfront combined commercial aspects of larger ports such as Savannah, Charleston, Baltimore, or New York with aspects observed at smaller riverine landings (Heintzelman 1985; Norman 1987; Beard 1993:67; McDonald 2011:43-54). Beard's proposed typologies, based solely on plantation sites, did not go far enough since all of the wharf sites dealt in mercantile commerce and probably plantation goods as well (Beard 1993:67). Instead, assuming similar function throughout the complex, assigning hierarchical classifications to the site based on construction details is possible.

Fisher, Jones, and Hughes Wharf (9LI1909) was the primary wharf site along the waterfront. Construction details and historical documentation support this conclusion. Large amounts of the wharf and the timber used for the grillage indicate that the wharf was well constructed using a large amount of materials and investment capital. The site is centrally located and the presence of ballast stones suggests the wharf was the location of trade.

9LI1908 (Lamottes Wharf) and 9LI2039 (Kelsall and Spalding) were Sunbury's secondary wharf sites. These two sites lie on the periphery of the waterfront. 9LI1908 was heavily constructed, and access to the site was limited due to larger areas of marsh. Repairs and transportation costs would have been higher than at other wharf sites. Construction indicates there might have been a warehouse or similar structure built on the site, but this could not be confirmed. The artifacts show that it too was a site of trade. 9LI2039 could have accommodated

vessels of almost any size if the theorized marsh timber extent is true. Furthermore, the stones on site and in the pile north of the site indicate its connection with other maritime markets.

Historical documents also show Kelsall and Spalding as being influential merchants. It was possible that Sunbury was not their main economic focus, so they did not invest as heavily as they might have otherwise (Goggin 1949:34-38).

The tertiary wharf site was 9LI2013 (Darling and Company). This site is the smallest in overall size, had lower amounts of stone, and is the most disturbed. Historical records do not illustrate any evidence of lateral cycling. These observations indicate this site could have been abandoned first and was the least important along the waterfront.

The chapter also described observed site formation processes affecting the sites. Conclusions are based on the evaluation of the observed processes affecting the wharves. Sunbury sites do not overwhelmingly suggest a catastrophic or rapid abandonment. More *de facto* refuse would be expected if the town was rapidly abandoned due to a catastrophe. Furthermore, the structural foundations of the sites, the limited stratigraphic evidence gleaned from the Community Property Site, and the remote sensing data do not support the notion that any catastrophic events led to immediate abandonment. The majority of the wharves were only intact to the foundation level, but those foundations were still whole. All the wharf sites except one show signs of some sort of recycling, thus abandonment of the waterfront complex and hence the town was a gradual process. Forced migration is not evident in the archaeological record. This is consistent with processes affected by the world-system.

The next chapter places the wharves in the context of their social and economic functions. It will show that they represent cultural norms brought on by mercantile economics and the spread of the European world economy. In doing so, it places the wharves in the context

of their builders' society and illuminates the motivations for both creating and abandoning them. This information clarifies the important role Sunbury played in the Atlantic World and world-system.

CHAPTER SIX: ANALYSIS

Introduction

The rise and fall of Sunbury is linked to the expansion of the world-system and the port's integration into it. It is necessary to introduce the main theoretical perspectives driving this research, mainly World-System Theory and site formation processes to show the inter-relations between the archaeological and historical data. It is also necessary to outline the town's maritime history. Chapters Two and Four accomplished this. This chapter, drawing from archaeological and historical data, defines and elucidates Sunbury's role in the world-system. The data show that the burgeoning world economy spread to Sunbury via the British Empire and created frameworks that shaped the rise, development, and decline of Sunbury from the 1740s until 1814. During this time however, individuals and families in Sunbury negotiated these changes to best suit their needs within the framework established through the rubric of the world-system. Data from the wharf sites and the artifact assemblages show the colonists' decision-making as exhibited through the different construction episodes and individualistic nature of the waterfront sites at Sunbury.

This chapter draws from economic, cultural, and social history, as well as archaeology and historical geography. Essentially the archaeological and historical data of the four waterfront sites and the house site reveal novel aspects of the town not discernable from the documentary evidence. This includes the behavioral information pertaining to the adaptive strategies brought on through changing market demand. The chapter shows the various ways Sunburians participated in the world-system.

The citizens of the seaport served as both actors and reactors in the world-system. The following assessment shows the effects of the citizens' decisions based on outside forces. It begins by placing Sunbury in the context of the expanding British world-system. It follows by showing how patterns influenced the development of the town into an export oriented semi-peripheral port and concurrently created an unsustainable structural foundation for the port's economy. Finally, it shows how the course of political events and shifting economic whims brought on in the post-Revolution order shifted the aims of the citizens from a way of life established under the pre-Revolution regime. By doing so the author posits a direct causal relationship between the expansion of the world-system and the rise and eventual abandonment of the seaport which shows peripheral seaports played an understated but essential role for the expansion and rise of the current world-system.

Integrating Sunbury into the Expanding World-System

The colonization of Sunbury was part of a decades-long process where the British expanded the world-system across the eastern portion of North America. The particular form of colonization around Sunbury can best be described as agricultural colonization (Lewis 1999:194). As archaeologist Kenneth Lewis illustrated, the nexus for this particular process started in Charlestown, South Carolina where planters eager for new land, spread to Georgia. The seaport's development cannot be seen as an isolated event, but rather as a result of the complex interplay of political, economic and social expansion of the British Empire, and the burgeoning capitalistic world economy. A strict reading of Wallerstein simply explains the origin of modern colonies as the, "economic expansion of the world-system" (Wallerstein 2004:55). Indeed, the world-system did integrate new extractive areas known as semi-peripheries, a process that certainly drove settlement. Hence, Sunbury, an export-oriented seaport on the fringe of the

British North American colonies, formed in the pattern dictated by World-System Theory. The port's peripheral role in the southern frontier region clearly shaped its functions and development. A closer examination however, reveals the process and pace of this integration, which took decades (Delgado 2009:163). Again Lewis, describing the colonization and development of Charleston, summarizes patterns with World-Systems Theory, "The dominance of Charleston was a result of the city's role in the formation of a cultural landscape that was shaped by a larger process of agricultural colonization. This process involved the region's settlement as well as its incorporation within a European world economy" (Lewis 1999:194).

Prior to General James Oglethorpe's landing on the banks of the Savannah River in 1733, the process of European colonization of the Atlantic coast had been taking shape for over 200 years. An important aspect of this colonization was the competition between the world's main powers at the time: Spain, France, and England. A classic view of their clashes tends to gravitate toward an analysis based on nation-state narratives, a limitation discussed in Chapter 2. Instead, as Wallerstein reiterates, what is important is the unit of analysis, mainly the spread and development of the proto-capitalistic world economy best exemplified by British and Dutch economies. Therefore, it is important to explain the long-term colonization efforts of the major European powers, especially those of the British, because wars and constant competition created networks of interconnectivity that became the hallmark of the world economy. The following brief synopsis shows the course of British expansion leading up to the founding of colonial Georgia.

The movements started with early voyages from Spain and Portugal west to the New World. Rich in precious metals, Latin and South America became bastions of Spain's Empire in the Americas. From there, they spread through the Caribbean, around Cape Horn to the west

coast of South America, and north along the east coast of America. By the first quarter of the 16th century, the first Spanish colonizers attempted to claim the land that is modern Georgia. Men such as Juan Ponce de Leon and Lucas Vasquez de Ayllon were repulsed by the resident Native Americans (DePratter and Howard 1990:40). By the mid-16th century, French interest in the New World increased. After several clashes in the 1560s between the French and Spanish, the Spanish ultimately eradicated the French from the southeastern coasts. The Spanish dominated the region until the 17th century, creating missions as far north as Georgia (DePratter and Howard 1990:41).

The third main interloper, England, intervened against both Spain and France. Having acquired vast sums of capital in the form of precious metals and other goods captured from Spanish ships during Phillip II's war against England (1585-1604), English merchants continuously attempted to find a passage to the Indies. They also organized companies to finance colonization ventures along the eastern seaboard of America. Blocked in the north by French interests and in the south by the Spanish Empire, English colonies sprung up in the middle, on the edges of the other two empires. As historian Stephen Hornsby wrote, by 1632, the English established colonies in the West Indies such as St. Kitts, Barbados, Nevis, Montserrat, and Antigua, which were on the outer rim of the Spanish Main and profitable due to the close proximity to international trade brought on by Spain's exploitation of Latin and South America. These colonies became crucial to the development of England's other territories (Hornsby 2005:24).

British influence in the area increased while Spanish interests decreased. After 1632, Spain's ability to maintain control of its Empire declined. During this decline, England's interests along the east coast spread in the form of successful colonies. In 1663, Charles II granted an area called "Carolina" to some backers. In 1670, Spain and the England signed a

treaty establishing English ownership (DePratter and Howard 1990:43). Charlestown was founded in that same year. Consequently, English power extended from the Hudson to Charlestown, and with it the burgeoning world-economy. The area that became Georgia, while devoid of stable European colonizers, was never completely devoid of Europeans. Recognized as a “commons” by Bermudians, and being well endowed with plentiful stocks of various woods necessary for shipbuilding, Bermudians started sailing to Georgia in 1663 to exploit the rich maritime forests (Jarvis 2010:237). Fighting for control of the southeastern territory, the French, Spanish, and English skirmished in various parts of the southeast.

Finally, in 1732 James Oglethorpe, backed by the Trustees, landed in Georgia and founded the last British colony along the east coast of America. Disparate groups influenced the founding of the new colony south of South Carolina, including the Trustees for Founding the Colony of Georgia of whom Oglethorpe was a member, South Carolina merchants, and imperial officials (Coleman 1976). This colony Georgia, named after King George II, would extend British power further south directly adjacent to the Spanish in Florida. Georgia was on the fringes of Empire, quite literally on the edge of the English frontier. After the conclusion of the Seven Years War in 1763, Britain would emerge as the hegemonic power in North America. As archaeologist James Delgado wrote of the ceded land following the war, “These colonies added new peripheral zones to an increasingly British world system...” (Delgado 2009:18).

The settlement pattern evident at Sunbury was an extension of the particular kind of agricultural colonization first established in South Carolina. Kenneth Lewis described the various stages of this process:

Agricultural colonization involves the occupation of territory, accompanied by the establishment of production, the internal integration of the region

through the creation of a transportation and communications system, and the eventual opening of reciprocal economic links with the homeland and other region (Lewis 1999:195).

Using historical data about the migratory patterns of settlement occurring at Sunbury from Chapter Four, what follows shows that Sunbury's settlement continued on this course. The first stage was the initial movement of rugged settlers and the difficult, slow transformation of "first nature" to "second nature" which entails modifying the natural landscape into forms that could be economically utilized (Lewis 1999:194). The planters specifically moved to land adjacent to the marshes, as these held the richest soils for planting. According to one historian, first hand accounts describe the soil as unsurpassed in quality (Chaplin 1993:145). In Sunbury, settlers such as Mark Carr, the Laws, and others came to the marshes surrounding the Medway River and forged new frontier homesteads. Shortly thereafter Congregationalists followed from New England by way of Dorchester, South Carolina. They cut back some of the forests, planted crops for sustenance, and both legally and illegally imported slaves. They also started building farms and the rudiments of plantations, and making settlements, ferries, and waterfronts. In doing so, they established what historical geographers call "hearth" cultures (Chaplin 1993:289). These "hearth" cultures represent regional changes and adaptations of a particular colonial culture that traveled with a particular group as they moved into new places. The establishment of the Old Midway Congregational Church in Midway, Georgia, which many residents in Sunbury attended, best exemplifies a hearth culture. Even Sunbury's name, derived from a town in England, begets a link to their Puritan ancestors in Britain.

Integration of the region proceeded through the influx of white Congregationalists, Bermudians, other recruited whites, and imported enslaved Africans, through a hierarchical system which facilitated transportation and immigration (Lewis 1999:194). The "hierarchy of

settlements” to use archaeologist Kenneth Lewis’s term follows the core-periphery relationship, with an entrepôt serving as a central place and providing most services. In this region, Savannah served the needs of the colonists as the primary political, economic, and social center of the region. Outside of the entrepôt are frontier towns and lesser-nucleated gatherings of people. Low population densities and difficult access characterize these settlements. Over time, as population and agricultural production increases, conditions become conducive for creating viable export trade. On the frontier, a port is necessary to connect the hinterland with the market. In order to further develop, the port needs a processing and transportation infrastructure. These steps are the second and third phases (Lewis 1999:194-195). Consequently, historic data pertaining to specific immigration episodes at Sunbury reveal stages of agricultural colonization as laid out by Lewis. They highlight the beginning of the integration into the world-system.

Sunbury’s population increased in the 1750s such that the composition of the settlement began to shift. Its priorities shifted from survival to profit. Agricultural production in the marshes developed to the point where transportation and waterfront infrastructure became essential.

Steadily, from the early 1750s until 1761, Mark Carr sold lots on his 500 acre tract on the Medway River and lobbied for a town charter, which the British granted in 1757. The vestiges of the budding settlement sprouted up along areas of viable rice planting and their associated waterways connecting the entrepôt of Savannah with these frontier communities. Mark Carr carefully constructed the town in an organized manner. Its architecture, structure, and layout mirrored Savannah on a smaller scale. The organizers carefully planned house and street sizes and set prices for waterfront lots (Jones 1878:1-50). Consequently, the last and perhaps most visible symbol of the “hearth” culture was the design of the town itself. These lots can be seen in a surviving plate of the seaport (see Figure 4.1). The similarities with Savannah extend from the

town squares to street and lane grid pattern as well as the town's orientation to the river.

Designed to be primarily aesthetically pleasing, the squares were also defensive, being areas for the mustering and marching of the militia. As archaeologist Angèle Smith pointed out, "Maps are cultural artifacts that reflect the choices about and the interpretations of the land, the people, and their culture" (Smith 2008:51). Observing the plate via this lens it is possible to perceive the perceptions held by the mapmaker(s). The evident value of order, structure, and development suggests British influences. It also emphasizes the importance of the waterfront, as it is central in the plat.

From this image, it is possible to begin to discern some of the social meanings encapsulated in the waterfront structures. They represented progress, the second nature sought after by the colonists, a taming of the wilds, and an open declaration of the colonist's desire for commercialism and trade. Historian Joyce Chaplin, in writing about the social and philosophical history of the planter class during this time wrote, "Admiration for the industrial order did not diminish over time; instead whites' fascination intensified as industrialization itself expanded..." (Chaplin 1993:115). The settlement pattern and demands of the planters consequently set the stage for the development of the port.

This settlement pattern was a function of the connections made through the expanding British world-system and is consistent with colonization efforts stemming specifically from South Carolina, but also adapted to the exigencies of the novel environment. At the most basic level, European settlement in Georgia was enabled by the absence of Native Americans who had occupied the land for at least 4,000 years prior, but had undergone significant demographic depletions prior to their arrival. The introduction of European diseases decimated many Native populations across the continent, therefore the settlement of Sunbury should not be seen as an

isolated expansion of South Carolina planters or the random Bermudian influx, but as a small example of larger processes at work in the Atlantic World.

The consequences of Sunbury's prosperity and positive European population growth created new economic and social linkages with Savannah, as well as the rest of the Atlantic World. Kenneth Lewis described this last phase of the process:

The incorporation of a frontier region in a national economy immediately enmeshes exchange in a larger context that not only increases its volume, but also its complexity. This brings about a drastic reshuffling of services in the area of colonization, with the result that many are acquired by lower level settlements while the overall proliferation of services expands in those that become central places (Lewis 1999:195).

As was highlighted in Chapter Four, during the 1760s and early 1770s, an increasing amount of exchanges, both in volume and complexity of material goods, took place at the port. The absorption of the port town into the world-system introduced those changes. Archaeological and historical analyses of the material evidence reveal some of these developments.

Functional Analysis of Sunbury

In a paper called "Economic Function and the Growth of American Port Towns in the Eighteenth Century," historian Jacob Price studied the differences in the developments of various seaports, analyzing urban growth, populations, and industry (Price 1974:123-185). While answering fundamental questions about development and longevity, Price provided a framework by which to analyze economic function and growth in seaports. Specifically, Price analyzed the characteristic occupations and commercial factors influencing ports in general. Additionally, he accurately described the determinants influencing the growth or stagnation of the port (Price 1974:123-185). Similar source material and evidence is analyzed and displayed, such as

occupational records, shipping records, and overall tonnages of output for a colony or state, showing a complex confluence of many factors influencing a port town.

Price utilized a functionalist approach to analyze the life of the select seaports in his study. This approach moved beyond simply explaining development as a means of direct relationships between the geography of production and markets and the technology of transportation (Price 1974:129). These relationships were appropriate, but do not explain all developments. He argued convincingly that development had to be understood as a function of the *quality* of economic activity. Incorporated in this term “quality” was the nature of the commodities, as well as the institutional and legal framework surrounding the development of a seaport (Price 1974:129). Although Price used the term “quality” arbitrarily, for the purposes of this thesis it can be defined as core-like or peripheral-like production. For example, the economic activity of exporting cash crops was very profitable, but Price did not consider it a high quality function, compared to other activities like shipbuilding, because exporting cash crops did not inherently create opportunities for growth and diversification. Rather, it created a dependence on a certain way of life. Using the stated theoretical constructs of Wallerstein it is possible to reclassify the salient production processes at Sunbury. First, agricultural production can be considered low quality due to its relatively high competitiveness, lower relative profitability, and low development of ancillary production processes, as well as inducing fewer incentives for capital reinvestment.

Shipbuilding, on the other hand, was “high quality” or core-like because it supported ancillary activities such as sail making, coopering, and blacksmithing. This analytical framework compliments world-systems analysis. The core-periphery relational pair of production assesses the means of production based on profitability or level of monopolization. Price’s assessment of

the quality of certain forms of production are also statements about the low levels of monopolization available for that work. Taking the same examples given, raw material exports were not highly monopolized, with perhaps the exemption of the plantation rice growing class, however, even rice production though, was more monopolized by the higher developed planters of South Carolina. Shipbuilding, on the other hand, required a high degree of specialization and skill as well as industrial infrastructure, making it inherently more monopolized than other productions. Therefore, the systematic analysis of Sunbury's economic structure shows the affects of the world-system on the port as a peripheral producer.

Core-Like Processes in Sunbury – Shipbuilding

Shipbuilding in Sunbury, like in other southern colonies, was not a high priority (explained in next section). Nonetheless, shipwrights built vessels in and around Sunbury. For example, Bermudian Paytner Dickinson launched a large vessel near Bermuda Island next to Sunbury as early as 1755 (Jarvis 2010:239). The brothers Stephen and Jeremiah Dickinson, of Bermudian descent, also built the aptly named *Brothers Endeavor*, which they sold to Henry Laurens of South Carolina for £3,150 S.C. currency (Laurens 1770[6]:233; Laurens 1771[6]:422-423). Besides building these larger schooners, plantation owners employed shipwrights to build and mend the ubiquitous plantation vessels that plied the waters around Sunbury.

Peripheral Production in Sunbury – Rice, Lumber, Naval Stores

The main exports of the port town during 1763-1767 were lumber and rice, comprising over 90% of exports per volume. The colonists had abundant timber from the surrounding maritime forests and supplied rice from the nearby swamp plantations (Martin 1763:CO5/709; Lee 1764:CO5/709; 1765:CO5/709; 1766: CO5/709; 1767:CO5/709). A total of 9,247 barrels of rice were exported over the four-year period and a prodigious 1,294,841 feet of lumber as well as

968,745 shingles. In 1763, Sunbury rice amounted to 37% of Georgia's total rice exports (Bureau of the Census 1960:767, Series Z 262-266). On average, Sunbury amounted to 18% of the colony's total rice exports. In 1764, Sunbury lumber exports in feet totaled 291,841, or 22% of Georgia's total output (Martin 1763:CO5/709; Lee 1764:CO5/709; 1765:CO5/709; 1766:CO5/709; 1767:CO5/709; Bureau of the Census 1960:771, Series Z 308-313). The ability of traders in a town to infiltrate and connect with wider markets around the world, or the lack of that ability, ultimately directs the economy of that town.

As has been shown, Sunbury's economy supported numerous mercantile firms. Even though there were many merchants, the extent to which they exported Sunbury's goods is an important factor in development. Price outlined another categorization of merchants and their abilities and duties: "In America, this distinction separated the smaller merchants who dealt only with the West Indies from their bigger conferrers who traded to Europe. This hierarchy of traders created a hierarchy of trading towns" (Price 1974:139). A port's function heavily depends on its capitalist activities. Essentially, the more capital merchants could accrue and risk on voyages, the higher status they could potentially achieve. This is the fundamental core-peripheral axial division of the world-economy. Sunbury's activities suggest the port had a limited hinterland. There is little supporting evidence that its market demands were ever seen as more than a "limited mart" defined by Price as an area "where only the most restricted range of goods could be bought and sold" (Martin 1763:CO5/709; Lee 1764:CO5/709; 1765:CO5/709; 1766:CO5/709; 1767:CO5/709; Price 1974:139). Surely many demands were met, but the range of connections Sunbury merchants established across the Atlantic were limited. One thing is clear from Price's analysis. The colonial port economies that were the most successful combined one or two elements of industry in their economy. For example, Boston established a strong

shipbuilding industry to service the fishing industry, the effects of which transformed the port town from a mere shipping point to a shipping center and market where goods and ships could be bought and sold (Price 1974:139-142).

In comparing the busier ports of Charleston to New York in 1770, Price emphasized a few points that applied directly to Sunbury. Charleston's large population of planters created a high demand for handicraft goods demanded by a resident gentry class (Zierdon and Calhoun 1986:29-43). The same was true for Sunbury, especially after the Revolution when the town became well known as a resort community for planters and their families during the "sickly months" (Clark 2005:5-26; Appendix Three). The artifact analysis confirms this. When compared to artifact assemblages in Charleston from the period, the percentages of types of wares is similar (Zierdon and Calhoun 1986:31-46; Appendix Three). Secondly, Charleston never developed a large shipbuilding industry comparable to New York, and especially to Boston. The reason for this phenomenon was most of the considerable export trade was handled in British bottoms, not local ships. This was also true for Sunbury. Many were coasting vessels manufactured in the North, Bermuda, or taken as prizes during the Seven Years War. The nature of the smaller, more maneuverable vessels such as sloops, schooners, brigantines, and the vague "plantation" vessel carrying out colonial trade and calling at Sunbury, was consistent with the patterns from other ports highlighted by historians such as Michael Jarvis and Daniel Vickers (Vickers 1996:229-238; Jarvis 2010:122). Lastly, Price noted a distinct lack of an "autochthonous business community" in Charleston (Price 1974:169). English merchants moved to the port because they wanted the valuable exports from Charleston. Therefore, American firms in the southern colonies had trouble establishing dominance over their British counterparts. In the northern colonies, the situation was different. The British did not compete as heavily with the

American merchant firms and left on their own, those merchants ended up dominating trade and creating their own business class. Many of Sunbury's largest merchant firms were British or British loyalists. They left the town after the war greatly reducing the number of influential merchants thereby limiting networking capabilities (Elliott 2005:144).

The picture presented by these data did not represent a formula for growth and diversification. Significantly, these numbers showed Sunbury's function in the wider region was one of exporter. Most people participated in the direct movement of goods or in servicing that role. Emphasizing this point, historian Michael Jarvis noted differences among maritime industries such as boat building and ownership were important because they funneled money back into their colonial economies. He stressed that, to understand a port's maritime "orientation," a port's distinct businesses had to be studied. He looked at the location of vessel construction and ownership. In his study of Bermuda, Jarvis found that Bermudians overwhelmingly built and owned the vessels coming and going out of their port (Jarvis 2010:113). Analyzing Sunbury's port records in a similar fashion revealed that Georgia built and owned vessels comprised a mere six percent of the total number of vessels entering or leaving the ports (Martin 1763:CO5/709; Lee 1764:CO5/709; 1765:CO5/709; 1766: CO5/709; 1767:CO5/709). This data show Sunbury's peripheral, albeit important, role in the colony. These data offer one perspective on Sunbury's development, but the archaeological record offers insights into the personal decisions of the merchants along the waterfront.

Artifact Assemblage Analysis – Evidence of the World System

An archaeological analysis of the waterfront reveals novel aspects about the town's economy and the forces affecting the merchants' decision-making. The integration process incorporated new features at Sunbury during the years 1761-1775 when Sunbury's economy

matured and expanded. Documentary evidence illustrates this expansion through increases in exports and imports during the years 1763-1767. As Lewis stated, increased incorporation into the world-system corresponds with increasing services at developing ports, which first hand observers carefully noted. Merchants adapted strategies to conform to the ever expanding “empire of goods” as historian T.H. Breen labeled the expanding marketplace of consumer goods of the 1760s and 1770s (Breen 2004). This expansion into Sunbury which created modest prosperity, coinciding with an expanding consumer product market flowing from England, creating demand for these goods. Sunbury’s expansion and greater inclusion into the world-system can be summed through graphs and tables compiled from the Shipping Lists of 1763-1767 (Martin 1763:CO5/709; Lee 1764:CO5/709; 1765:CO5/709; 1766: CO5/709; 1767:CO5/709). They show that in almost every major category of exported goods expansion took place. The nature of the exports is also telling. They were exports wrought from competitive production processes. It is important to reiterate the view of Sunbury’s role in the world-system here. Essential to the world-system is the accumulation of capital. Monopolies, being the most profitable means of production are sought after but rarely achieved. Those countries with more monopolistic production became wealthier. Instead, quasi-monopolies generally formed. The relational concept most important to this analysis, however, lies in what Wallerstein called, “The axial division of labor...” (Wallerstein 2004:28). That is the profitability of certain production processes and the geographic consequences of that profitability. Flows of capital move from periphery to the core, keeping the periphery in a subordinate role and vulnerable state compared to the core. Since profitability is directly linked to the degree of monopolization, core-like production processes originate from quasi-monopolies and peripheral production originates under truly competitive processes. Sunbury’s primary exports fall mostly in the competitive

category, with the exception of rice which is considered a quasi-monopoly with the majority of output coming from a wealthy minority class.

The artifacts further our understanding of trade at Sunbury and add to the information about the development and abandonment of the town. The house site data provides the archaeologist with a look at the types of commodity chains flowing into the town. From these commodity chains inferences can be made about market access, the role of the port in the world-system, and the transmission of social values from the core to the periphery. The implications of this assemblage do not deal with the personal lifestyles of the homeowner, but on larger-scales of global flows into the town.

Archaeologists such as James Deetz (1996), James Delgado (2009), Stephen Silliman and Thomas Witt (2010) observed broad trends in the archaeological patterning of artifact assemblages. These patterns indicate core-peripheral relationships between Great Britain and the colonies along supply lines. Supply networks linked global commodity chains so that merchants in a local port town on the periphery of an Empire could still supply the people with goods that were fashionable in London or other urban areas. These patterns also indicated increases in the sophistication of the world economy, mainly marketing and the extension of credit, which affected the local retail and service sectors, a development that in turn prompted demand and social stratification in the local community as well as conspicuous consumption (Lewis 1999:199). The artifact assemblages reflect these broad changes in technology, cultural values, and economic interconnectedness with the world economy. Therefore, if Sunbury was truly linked to the world system as theorized, the artifact assemblage located at a house site in the port town should reflect some of these similar changes. The following outlines some of the patterns observed in the artifact assemblage that reflects these trends.

The merchants of Sunbury labored under a system in which their control of product flows into the town was marginal at best; they had to rely on complex supply networks stemming from merchants in Savannah and Charleston. Merchants in Sunbury linked networks in the Atlantic World particularly in the Caribbean and low country, but also connected with ports in Portugal and England. These individuals expanded trade via networks in colonial Georgia, along the eastern seaboard, and across the ocean. The extent of the trade being carried out by merchants such as Anthony Lamotte, Roger Kelsall, and James Spalding and others is described in Chapter Four. The patterns exhibited by the traders along Sunbury's waterfront were consistent with a port operating in a peripheral production capacity. The relationship between core and peripheral production establishes surplus value flows away from peripheral areas to core production centers. Ports on a secondary tier did not have as much access to the markets as primary ports. Instead, these communities relied on the principal ports in the region to supply them with necessary goods. Merchants in Sunbury contracted through merchants in Savannah and Charleston for this purpose. Although no exact amount is known, when the shipping lists and the ledgers of James Mossman and James Read are compared, it shows merchants in larger ports supplied almost all the manufactured goods arriving in Sunbury (see Chapter Four). Some did business in the West Indies, but this was in the raw materials trade. As suppliers of the rice growing hinterland, Sunbury merchants certainly handled greater volumes and variety of goods than their individual plantation counterparts, but did not meet the same levels as those in greater ports.

Noting the role of commission merchants operating in San Francisco, archaeologist James Delgado wrote that, as people who handled a variety of services such as freight, insurance, and transfers, they acted as "agents of the world system" (Delgado 2009:91). Delgado's essential

point is, as agents who controlled the flow of goods, merchants socialized that area into the world-system through their decisions about the types of goods entering or leaving an area. By doing so, they adopted similar flow regimes from other core ports already incorporated. In this way, they defined the development of the area to fit particular needs. Archaeologist Mark Staniforth also highlighted this point when he wrote, “Many of those who chose the types of goods that were sent to Australian and other British colonies-were born and raised in Great Britain. Therefore, they shared a worldview or *mentalité*, that arose out of the extensive similarities in their socio-cultural background and upbringing” (Staniforth 2003:106). This also occurred in Sunbury, but in a context reflecting the relative peripheral function of the port in the world-system.

Again, the documentary evidence points to this relationship as the letters of Henry Laurens and the ledgers of Read and Mossman of Savannah reveal. Although not able to have direct access to many of the consumer goods, merchants in Sunbury quickly and creatively adapted to the spread of the world-economy. They utilized similar marketing strategies found throughout the colonies. They also incurred debt and extended credit to get and sell various consumer goods. Indeed, compared to the analysis by James Delgado of San Francisco, a glaring difference between the development of the two ports was the relative speed by which the inhabitants of Sunbury demanded goods beyond those necessary for survival. For example, the advertisements put out by Kelsall and Spalding, and other merchants highlight their participation in the expansion of the consumer marketplace as early as the 1760s (Darling 1765[107]:3;Kelsall 1769[323]:2). Historian T. H. Breen linked the rise in newspaper advertising with the rise in consumer demand for expanding British goods spreading throughout the colonies, “It is sufficient here to observe that examination of imported goods advertised in the major provincial

newspapers between the 1720s and the 1770s provided strong evidence of a mid-century take-off in the number of different British manufactures sold in the colonies” (Breen 2004:55). The ledgers of Read and Mossman also point to the types of conspicuous consumption taking place in Sunbury during the 1760s and 1770s.

The Community Property materials reveal these consumption patterns. The dating of the ceramics from this house site spans the 1750s to the early 1800s. An analysis of the material culture reveals the pervasive influence of British material cultural norms. The most salient artifacts in the assemblage, and the easiest to follow temporally, were the ceramics. The artifact patterning from the house-site clearly shows a dramatic expansion of the consumption of British refined earthenwares such as creamwares and pearlwares in the late 1760s, 1770s, and through to the 1790s. For example, in the collection, stonewares including Nottingham, Fulham, basalts, brown salt-glazed, and Rhenish grey (the only non-British ceramics in the collection) are the oldest pieces in the collection dating from 1700 to 1775. They represent however, only 4.59% of the collection (131 sherds out of 2,852). This is compared to 1,459 sherds of creamwares (51.50%) and 1,029 sherds of pearlwares (36.00%) comprising the bulk of the collection. Different types of wares in the collection signify a variety of choice in the consumption practices of these homeowners. During the 1760s through to the 1790s, Sunbury witnessed increased access to the wider consumer market coupled with profits from trade within the British world-system. The material evidence for this incorporation is reflected in the artifact assemblage.

Another telling feature of the assemblage is the overall patterning of artifact groups. Following Stanley South’s example (1977), all of the artifacts are grouped based on function. During his research, South theorized the *Carolina Artifact Pattern* which relates the relative higher frequency of secondary refuse classified in the Kitchen Group in relation to the

Architecture Group. Inversely, he also characterized a *Frontier Pattern* which has the inverse, high frequency of Architectural Group secondary refuse compared to the Kitchen Group frequencies. Using this method simply for characterization purposes only, the artifact assemblage showed patterning similar to the *Carolina Artifact Pattern* (Table 6.1). Of the 5,460 artifacts in the assemblage, those representing the Kitchen Group represented 65% (3,556 sherds and shards), while the Architecture Group represented 21% (1,150 sherds and shards). South, using data from five colonial sites, derived a Kitchen Group percentage of 63.1% and an Architecture Group percentage of 25.5% (South 1978:229; Table 6.1).

	South (1978) Carolina Artifact Pattern	South (1978) Frontier Pattern	Dilk Sunbury Pattern
Kitchen Group	63.1%	27.6%	65.0%
Architecture Group	25.5%	52.0%	21.0%

TABLE 6.1: Table showing similarities between South's (1978) Carolina Artifact Pattern and the artifact patterning in Sunbury (Table by author).

Using the patterning as an interpretation of cultural processes, it clearly shows a relative uniformity in British cultural processes and behavioral systems. This includes similar consumption patterns, distribution and transportation, and discard processes. Importantly, the pattern shows normal discard processes were not interrupted or changed during the occupation, this is more evidence showing no immediate or catastrophic abandonment occurred at Sunbury. Showing the spread of British culture in this way also illustrates the expansion of the world-system, and can lead to greater scrutinizing over British distribution systems and empire building.

South's site selection for developing this pattern further illustrates this point. One of the most important features of South's analysis was his site selection. The data used to derive

South's *Carolina Pattern* came in part from Brunswick Town, North Carolina, itself a colonial port abandoned after the American Revolution. Founded in the early 18th century, Brunswick Town quickly became a bustling port exporting naval stores (tar and pitch). By the time of the American Revolution, it was virtually abandoned. Like Brunswick Town, Sunbury's material culture reflects the influence of the British world-system and exemplifies typical discard practices. Similarly, South derived his data for the *Frontier Pattern* in part from Spaulding's Lower Store in Florida, which was run by James Spaulding, a merchant who owned a wharf site in Sunbury (9LI2039). The differences between these sites become more apparent with the analysis of the wharf structures later in this chapter.

The ceramics also reveal more information about Sunbury's society. The ceramic evidence shows Sunbury's society stratified as it grew more complex. As symbols of power, prestige, and wealth, these items shaped roles of identity in the seaport. Similar to other colonial sites in Georgia, this collection revealed almost no colono-ware or other types of home-made ceramic types. The lack of local production is explained economically through the world-system. Advanced manufacturing, producing mass quantities on a large scale, of items such as cream ware ceramics was limited to a minority of places in England and in the United States, making ceramic production a core-like process. Domestic production occurred, just not on a scale comparable to Josiah Wedgwood's production levels. Significantly, these patterns materially illustrate the nature of Sunbury's colonial economy in ways that the documents cannot. Most specific documentary evidence does not reveal any information about ceramic imports or its meanings in the stratifying society. Ultimately, the most important insight gained from this data reveal the degree to which the people of Sunbury became socialized into the world-view of the British world-system through their merchants. The artifacts show they actively participated in

consumption patterns dictated by the world-system. These markets functioned by imitating flows from core areas. In Sunbury, a peripheral port town with little manufacturing, many rituals and identity formation occurred based on the symbolism of material goods. Therefore, the goods brought in by the merchants served as a means of engaging in social rituals and identity formation. Those merchants taking inspiration from England, worked to incorporate the town through the goods they imported. They supplied basic goods necessary for survival as evidenced through the shipping lists, but also imported much more. Through advertisements and credit lending, they created greater demand for luxury goods and developed colonists' tastes from abroad. The selections, while varied, stayed within the framework of the world-economy. Those in Sunbury, wanting to stay fashionable and eager to display their cultural maturity, applied social meanings to those goods in the context of British genteel culture.

Wharf Construction as Indicators of Economic Change

Wharves were one of the integral pieces of technology allowing for the linkages to the world-system. Bridges of land to water, and water to land, wharves served multiple functions, most notably physically bridging the gap between ships sailing from far off places with the people in the seaport. As artifacts, they occupy complimentary functions of having "socio-technic" and "technomic" functioning as both technological adaptations to their environment as well as being social objects imbued with meanings by their creators (Deetz 1977:74-76). Just as frogs can indicate a healthy ecosystem, so too can active wharves indicate various levels of economic health or prosperity. As devices created to facilitate the movement of goods and people, wharves are key indicators to a region's relative growth. That is, they are built for a specific function but at the same time invested with social meaning based within a framework developed through the world-system.

This socio-technic symbolism makes it possible to discuss individual agency and behaviors. At Sunbury, each wharf site is different, and among them there is a variety of construction features. The archaeological data therefore offer clues into how individual merchants navigated the framework established by the world-system not as it was dictated to them, but rather how they understood their roles within the system and how they decided to best fulfill those roles.

In the archaeological literature on wharf sites, a crucial question to ask is if changes in wharf construction dictate wider trends in economic and social structuring. Specifically, the question that has been addressed in several of the most comprehensive reports on excavated waterfronts anywhere in the United States asked, “Is there a decrease in the diversity of methods of wharf construction in the late eighteenth and early nineteenth centuries along the United States’ eastern seaboard” (Klein 1990:6.80)? This query, posed from a world-system perspective, questions the degree of influence of the world-system on technological change along waterfronts across the eastern United States. It stands to reason that as the world-system spread, technologies, especially those involved in shipping, might become standardized. It has already been shown that there was a standardization of other economic forces such as marketing, and the types of goods being shipping. Therefore, these questions get to the heart of this thesis by directly linking to the primary objective of uncovering novel aspects of Sunbury’s society and economics through the archaeological remains via their locations and the linkages to maritime practices. Since some of the relations between core and the periphery affecting Sunbury have already been explored through the remains at the Community Property Lot, it is rational to assume that these forces might also be evident along the waterfront as well. The diversity evident along the waterfront clearly shows that there were various influences affecting the merchants

who built the wharves. Do the changes evident along the waterfront reflect greater influences from the core via the world-system? Alternatively, did the mercantile relationships established through the world-system set-up the framework by which merchants constructed wharves in a similar way tobacco monoculture in the Chesapeake directly mandated earth-fast house construction (Deetz 1977:125-165)? Basically, what do the observed variations mean? That is to say, do the wharves reflect a peripheral export economy?

Comparative Analysis

As was shown in the previous chapter, Sunbury's waterfront consists of four sites, each exhibiting wharves of slightly different dimensions and construction techniques. An overriding question is: how do these sites compare to other colonial era archaeologically surveyed wharf sites along the eastern United States? In a thorough report, archaeologist Edward M. Morin compiled a list of surveyed wharf and landfill sites and their construction details (Morin 1990:V.21-V.23). Based on this research, he discovered that there was little standardization among wharf construction throughout the eastern seaboard. Furthermore, Morin also found that there was clustering of waterfront types by geographic region. He came to the conclusion that the diversity of wharf construction methods did not decrease throughout the eighteenth and early nineteenth centuries (Morin 1990:V.1-V.25). Some of the most important features considered during the comparison of the wharf sites were fill type, material used for the wharf, and overall architecture, joinery evident, the latter being perhaps the most important. In Morin's words,

Joinery represents one of the major engineering components of a wharf, and it is linked to the types of activities that were planned to occur in relation to the wharf. These activities would include how the ships were to dock along the wharf, the types of cargo that was to be unloaded, whether cargo was to be stored on the wharf, and so forth" (Morin 1990:V.25).

It is along these same lines that some observations can be made of Sunbury's waterfront structures. Contrary to Morin's conclusion, a review of the evidence does show many similarities.

The wharves at Sunbury resemble many of the wharf sites found along the eastern United States in several ways. First, all but one (Kelsall and Spalding Wharf) utilized log construction in some or all of their structures. Lamotte's Wharf was comprised of nearly all logs. The linear form created by the logs makes it unique among the waterfront structures. Archaeologist Molly McDonald concluded that linear retaining walls composed of vertically driven logs may represent a specific American adaptation. She claims the influences for that construction feature derives from a variety of factors (McDonald 2011:64). Oddly though, all of the logs are not uniform. As was shown in the last chapter, in places builders used puncheons, while in others odd wedge and half circle shapes were cut out of the logs and driven along the line (see Figure 5.4). The exact reasoning behind the odd shapes is currently unknown, but the use of the puncheons is a feature directly related to rice plantations and the landings associated with them. Therefore, it is possible to suggest that, of Sunbury's wharves, Lamotte's Wharf (9LI1908) represents an amalgamation of forms and traditions. This is important because it shows a relationship between economic function and intended use. Fisher, Jones, and Hughes Wharf is comprised of a mixture of logs and cut timbers interspersed along the structure, as did the Darling and Company Wharf.

Except for Lamotte's Wharf, the structures also represented general wharf forms found along the east coast. Archaeologists have uncovered open celled cribs and grillage wharf sites all along the east coast dating from the early 18th century to the end of the 19th century (Morin 1990:V.21-V.23). In this way, the wharf sites at Sunbury fit into the most general pattern of

waterfront development. It is important to note that within the specifics of each site there are not standardized joinery, wood types, wharf sizes, or fill types. Along these lines, the sites in Sunbury distinguish themselves as there was no record of any joinery utilized at any of the sites. The only timbers that appear stacked seem to be held in places by the weight of the overlying marsh mud and ballast stone. Excavation at the site could reveal joinery details.

These patterns are important because they reveal aspects of Sunbury's economic and social structuring via the framework of World-Systems Theory. This fact in itself is a departure from earlier archaeological research done on the subject. For example, the authors of two separate reports on fully excavated waterfront structures (Morin 1990:V.1-V.25; Kilkenny 2002:6.1-6.85) concluded that they could not find any link between economics and the form of the structure. Morin wrote, "Time, and the urban economic and social processes that change through time, do not appear to be factors. With the current database, it is not possible to determine whether engineering aspects of these structures, like wood joining, change through time. Also, the link between the economic function of a structure and the engineering features used cannot be identified" (Morin 1990:V-25). Kilkenny also made a similar point by agreeing with Morin that no discernable standardization occurred and that construction techniques appeared to, "fulfill site specific objectives" (Kilkenny 2002:6.82). Currently, there is not enough data from Sunbury to validate or dispute questions about joinery on waterfront structures, yet the data from the wharves can be seen from an alternative perspective than those proposed by Morin and Kilkenny. For example, Molly McDonald persuasively traced and compared waterfront structures to their vernacular cultural origins. She found that log-construction, probably stemming from the Delaware Bay region and being Swedish and Finnish in origin, dominated American waterfronts. The specific cultural origins need not concern this discussion at the

moment, but rather McDonald's conclusion about the spread of these norms of wharf construction. She wrote, "On the whole, American retaining structures appear to have drawn most heavily from the log-construction tradition, even in parts of North America dominated by British or Dutch culture. This pattern is striking, because the log-construction tradition is not native to Britain or the Netherlands and was not used for land bound buildings or waterfront retaining structures in those locations" (McDonald 2011:64). Her argument, one the author accepts based on the data at Sunbury, posited that despite predominate cultural norms, merchants of various ethnicities in America built structures that were known to work. The structures are typified as log construction and exhibited in everything from bulk heading to open walled crib structures. These structures are exhibited in Sunbury. This buffering, or the lack of cultural or ethnic continuity, speaks to other cultural values at work. An explanation of this cultural suspension can be interpreted as the dominating core processes of production that spread with the world-system. Since the log-based construction worked, and its prerequisites (raw timber, limited engineering knowledge, lots of cheap labor) could be readily met in most colonies, the form replaced traditional building conventions familiar to the merchants. Furthermore, it also shows a cultural shift away from hearth cultures to a generalized value system emphasizing regularity. The object was to be profitable and efficient, a value engendered through the world economy.

Wharf Sites Reflecting Economic Status

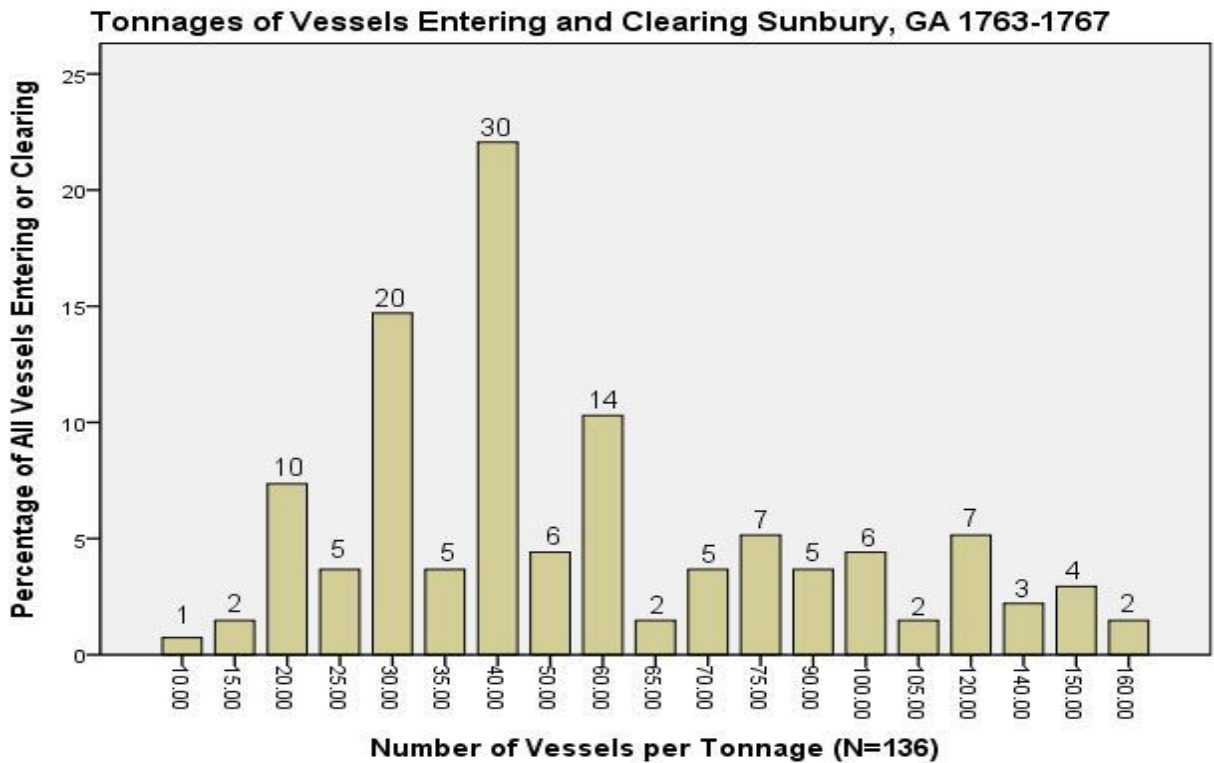
Further analysis links Sunbury's peripheral status with its waterfront structures. Compared to the sizes of other wharf structures, those surveyed along Sunbury were found to be smaller. Again, part of this analysis has to be inferred based on the decayed nature of the remains and the limited archaeological survey, but the remains do allow for a potentially valid analysis of the waterfront based on economics as a determining factor for construction. The overall sizes of

the wharves at Sunbury reflect economic realities faced by the merchants operating in the town and their expectations for the future. A comparison of other archaeologically documented wharf sites revealed that there is a correlation between core and periphery production processes and wharf size. For example, of those sites sampled that originated from core production centers (New York, Virginia, Baltimore, Savannah) all the sites had at least one wharf larger in length and width than any at Sunbury. The Papot Wharf, in Savannah for example, was 56.39 m long and 10.67 m wide (Honerkamp 1990:54). Compared to Sunbury's largest extant wharf structure, 21.03 m long at 9LI1909, it suggests that Sunbury's wharves reflected its peripheral status. In fact, those wharf sites located in Georgia differed greatly in size and construction and reflected the owner's relative economic status and expectations. The historical evidence confirms this.

Maritime archaeologist Harding Polk also raised another important point relevant to the size and shape of the wharf structure. In his article on the Town Wharf at Yorktown, Virginia, Polk considered which size and types of vessels could be accommodated at the wharf (Polk 1993:133). What do the historical records indicate about shipping practices at Sunbury and do they relate to the physical remains related to shipping? After analyzing Sunbury's shipping lists, the author found that the largest vessel recorded entering or leaving Sunbury was 160 tons. The majority of vessels were 100 tons or less (Martin 1763:CO5/709; Lee 1764:CO5/709; 1765:CO5/709; 1766: CO5/709; 1767:CO5/709; Polk 1993:133). Graph 6.2 diagrams the vessel size entering and clearing Sunbury from 1763-1767. Polk offered an equation to translate tonnage into length with the given formula:

$$\text{Length} \times \text{Breadth} \times \frac{1}{2} \text{Breadth} \times 94 = \text{tonnage (assuming a 3:1 length to beam ratio)} \text{ (Polk 1993:133).}$$

Working in reverse, a 160 ton vessel equated approximately to 19.81 m long. Using the same formula for ships of 100 tonnage, the corresponding ship length shortens to 16.76 m long. According to the shipping lists, this was the size of the majority of vessels at Sunbury, 16.76 m or less. Other data presented in works on the Georgian colonial maritime trade offer little reason to doubt this claim (Leech and Wood 1994:52; Fleetwood 1995:45-84; Jarvis 2010:238-239). With each section parallel to the water only 14-15 m in length, the wharf structure was large enough to accommodate many of the vessels at Sunbury, but not the largest, they probably



GRAPH 6.1: Tonnages of vessels entering and clearing the port of Sunbury 1763-1767 (Martin 1763:CO5/709; Lee 1764:CO5/709; 1765:CO5/709; 1766: CO5/709; 1767:CO5/709).

utilized a lightering system.

Yet, Heintzeman cautioned against such explanations in her thesis and noted a more accurate indicator of the size of a wharf and shipping. She argues a consideration made on the basis of the wharf size needs to include the number of warehouses expected to be built or utilized on the site (Heintzeman 1985:190-203). Unfortunately, historical documentation pertaining to warehouse specifics is not available for Sunbury.

Gordon Watts surveyed various sites in the state and found evidence of a crib wharf at the Poplar Grove Plantation that was only 2.5 m by 3.4 m and utilized mortise and tenon construction and had puncheon supports (Watts 1996:190-191). At Pennyworth Plantation, however, he located wharf piles extending for over 60.96 m, each .3 m square piles and incorporated as sheet piling (Watts 1996:88-160). These observations lend more support to archaeologist David Beard's suppositions that the forms of the wharves in the American southeast reflect the physical manifestations of the individualized specific export economy of the South, what he called the "prevailing cultural scene" (Beard 1997:63). Implicit to his argument is the direct link between site function and the economy of the area with the size and form of the wharf. Whether Sunbury's wharves represent the divide Beard observed from wharves built for "general commercial activities" or those function-specific riverine landings will be discussed further in the chapter (Beard 1997:63-64).

This economic influence also explains some of the construction decisions made by the merchants in Sunbury. The evidence from archaeologically documented wharf sites shows variability based on the rational expectations of the merchants dictated by the mandates of the world-system. Hence, despite overall differences in construction technique, basic log construction and crib forms dominated wharf construction. McDonald's (2011) research on log

construction influences emphasized this point. Two other archaeologists excavating in Manhattan concluded that in New York a transition occurred between non-specialized and specialized wharf construction labor. They theorized that this occurred in New York in the late 18th century, during a time in which “rapid growth of the waterfront required greater investment of capital, was accomplished by more standardized construction techniques” (Kardas and Larrabee 1991:26). In Sunbury, the waterfront construction probably began in the late 1750s and blossomed during the late 1760s and early 1770s. The only surviving deed directly linking a wharf site to the correlating lot in Sunbury shows that as early as 1761, James Fisher and Edward Jones owned Lot 14 and in all probability initiated their wharf construction at that time (Sheftall 1977:110). The deeds do show that by 1770 construction was probably completed because all the wharf owners owned waterfront lots adjacent to their wharf sites (Sheftall 1977:110). The historical documentation suggests this was a very prosperous time for Sunbury, and merchants would have rushed to engage in increasingly profitable maritime trade. Therefore, it is reasonable that they would have employed the cheapest and fastest means to construct their wharves and had the capital necessary to invest in proper wharf construction. The closed piling construction at 9LI1908 certainly points to speed as a primary influence on construction.

The differentiated piling shapes could indicate the need to quickly enclose the structure despite not having all the proper rounded piles to drive. Instead, they may have split the available timber utilizing it as best they could. The various shapes used intermittently (not sparsely) also show the wedge and half log shapes were not meant to be “Dutchmen,” as the fillers of gaps in wood construction are known.

The unfinished log construction at the other sites also points to the speed of construction and a paucity of investment capital. The other sites are similar in that they do not have any

joinery and finished timbers despite the fact documentary evidence shows Sunbury did have some timber refining at the port (see Chapter Four). This may be attributed to the fact that no archaeological excavation took place to reveal these details. Instead, the sites exhibit basic forms of wharf construction and engineering. Probably operating with warehouses on the bluff, merchants built floored crib wharves with minimal widths to the water. At low tide, their slaves could drive in the floor and secure it with ballast stones instead of having to sink the structure, a fact that would have required greater joinery. In fact, all the sites were filled with homogenous marsh mud, brick, and ballast stone. The wharf sizes, while not as large as those surveyed in core ports such as New York, Savannah, or Charleston, are certainly bigger than the plantation landings surveyed by Beard and Watts. Consequently, they could represent a Southern hybrid wharf form, built within the limited functions of a peripheral export port, but with characteristics reflecting other general mercantile activities like importing ceramics as reflected by the presence of European wares in the Community Property Lot and at Lamotte's Wharf.

Kelsall and Spalding's wharf site is interesting in this regard because Spalding also built and operated other wharves and storefronts throughout the Southeast. According to Lewis, his primary storefront was located along the St. John's River in Florida (Lewis 1969). Kelsall and Spalding's waterfront property can be seen as an extension of their trade networks in the area. Hence, the form of wharf structure they decided to utilize is telling. Their site has the only stacked logs along the waterfront and almost certainly represents the base layer of a crib wharf with cells being demarcated by the stacked courses perpendicular to the water. This was a wharf that required minimal investment and could be easily filled with ballast stone. This stone might have come from their other stores as backward integration (by definition the owning of every means of production from the goods being marketed to the vessels and ballast of the vessels

transporting the goods). Therefore, since it is documented that this was not their primary waterfront property, its similar overall size to the wharves in Sunbury shows the limited expectations of Kelsall and Spalding for this site.

On the other hand, as the largest continuous wood structure along the waterfront, 9LI1909 represents the largest investment of wood and labor, but was built and then run by three investors instead of one or two. Its large size reflects a greater amount of investment capital. 9LI1909's structure and extents are indicative of the forces that shaped its formation. The evidence suggested by the archaeological remains indicates that they built this wharf with the expectations of dealing with large volumes of trade. It is probable that this wharf was built in the late 1750s or early 1760s. The overall length of the wharf suggests that it was built to handle large sailing vessels or two small vessels at once. The thick pieces and heavy floor construction are consistent with wharves developed for handling large weights. The heavy floor also suggest that a warehouse may also have been located directly on the wharf, although it could easily have been on the upland needing to overcome only a short distance across the marsh. For example, thicknesses at this site correspond with wharves handling large traffic in larger ports such as New York and Virginia (Morin 1990:V.1-V.25). Documentary evidence also supports these theories. Jones, in his history of Sunbury, wrote, "Within a short time [after incorporation in 1758] substantial wharves were constructed, the most marked of which were subsequently owned and used by the following merchants: Kelsall and Spalding, Fisher, Jones and Hughes, Darling & Co. and Lamott" (Jones Jr. 1878:154). Many differences in wharf construction can be understood as individual adaptations to the real and imagined limitations imposed on the merchants by the world-system. The traders understood their role as secondary merchants supplying a peripheral town so they built wharves to reflect their level of trade.

This concept of economics linked to the waterfront mirrors other studies by Heintzelman (1985) and Beard (1997) and is crucial because it allows the researcher to draw inferences about economic decisions and the expectations of the merchants operating in the port. Clearly, the waterfront structures at Sunbury represent modest development in terms of overall sizes of the structures and the engineering techniques employed when compared to larger ports. Instead, compared to small plantation landings and wharves, they were larger and more developed. In fact, the wharves represent differences in form through time. Unfortunately, the documentary evidence is too fragmentary to historically pinpoint the exact construction dates of each site. Instead, archaeological details may illustrate a change in technology along the waterfront indicative of the incorporation into the world-system. Sites 9LI1908 and part of 9LI2013 utilized the simplest wharf technology in their construction. They probably did not utilize any joinery, but in the case of 9LI2013 the builders probably simply stacked timbers on top of each other while at 9LI1908, laborers drove pilings into the soft marsh mud.

As the world-system expanded, so too did some classic forms of wharf construction. At Sunbury, this phenomenon can be seen at Kelsall and Spalding's wharf site and probably at Fisher, Jones, and Hughes which may have been crib with joinery. British merchants connected with wider networks, predominantly in Charleston, built the wharves. They would have been familiar with the waterfront expansions going on there and would have brought with them those ideas. Henry Laurens said as much when he wrote,

...and also examining the Wharves, Docks, and Banks, in & about Portsmouth, Weymouth, Bristol, and London, I have improv'd and made a Model or plan for Banking, which will best suit our Cowper River below. It is simple, strong, and not expensive, and contrived to resist or more properly to elude the Force of the beating Waves in Charles Town Harbour, more effectually than any Thing I have met with (Laurens 1772[8]:252).

In a similar way, when the merchants came to Sunbury from abroad or other larger coastal ports, it is probable they brought these worldviews with them and incorporated them into the wharves. Consequently, the changes along the river reflect technological advancements as well as personal preferences.

Considering the documentary and archaeological data, comparatively 9LI1908, 9LI1909, and 9LI2039 (Kelsall and Spalding) do not represent single function structures. Site 9LI2013 may be a single function structure, however, as it is small and lightly built which could be a function of the processes affecting its site formation. From the evidence Beard (1993) provides for his single function wharf typologies, it is apparent that these wharf sites represent greater industry, capital, effort, and substantial returns than those he inspected. Therefore, it can be expected that they cannot be typed as “plantation landings” or any other single designation dealing solely in plantation use (Beard 1993:67). Rather, the sites exhibit characteristics in size, associated artifacts, and construction technique, of wharves used in larger scale commercial trading similar to those found in the northeast. It may be appropriate to conceptualize them as a median between the two. They may have dealt with plantation goods but the merchants operated in the global marketplace.

Environmental Considerations for Wharf Structures – Explaining Wharf Diversity

An aerial view of the site allows comparisons to be made about its location within the overall waterfront complex. Basically, 9LI1908’s location differentiates it from other sites along Sunbury’s waterfront. As the site furthest south and subsequently closest to St. Catherine’s Inlet, it was the first to provide ships with dockage. It also has the deepest water to accommodate the largest ships. These natural considerations can help explain both its large size and its structural components.

The substantial amounts of marsh between the wharf and land differentiates this site from the others. Slaves and other workers at this site had to cross the marsh, a large distance, compared to the others, to get to the water. While the wharf itself is still marginal since it does not protrude into the water, shoreline migration data support the idea that the marsh was extant at the time of the construction (Robinson et al. 2010). Since Lamotte was a rice merchant in the Caribbean, he would have needed to have ready access to the water to facilitate trade. His needs necessitated a warehouse on the water. It was simply too costly to pay for the movement of goods to and from the waterfront to a store house 65 meters away over a marsh.

Curiously 9LI1908, as the first wharf along the waterfront, also lies just outside the channel formed between the marsh island in the middle of the river and the shoreline. Several other colonial observers mentioned rows of pilings at the heads of ports or harbors. In his informative article on Dutch influences on New York City's waterfront development, archaeologist Paul R. Huey noted,

Old Slip [in New York City] provides an example of a type of Dutch-influenced waterfront development beginning in the late 17th century that contrasts with development of the waterfront in Boston, Philadelphia, and other cities initially settled by the English. Colonial American city waterfront development differed distinctly, on the other hand, from English precedents" (Huey 1984:15).

Huey outlined historical Dutch waterfront development and compared and contrasted these findings with the archaeological evidence from the excavated wharf site in the city. Huey discussed one predominantly Dutch style. It entailed placing rows of pilings at the entrance to a port or harbor. In the Dutch style, the row of pilings extended into the harbor creating a quieter water and additional mooring space. One informant of these rows was John Smeaton who toured South Holland in 1755. He wrote "The Heads of Jettys at the mouth [of the port] are wood piles, driven near each other, as is done every where in the Low Countries..." (Smeaton quoted in

Huey 1984:24). The resemblances between 9LI19808 and the Dutch style waterfront development stressed here are a closed piling structure somewhere at the entrance to a port.

Other colonial participants also observed the piling system. Across the Atlantic, in the American low country, William Gerard De Brahm advised Thomas Eaton in 1759 on how to build a wharf:

drive two Rows of Piles as far asunder as he desired his Wharf to be wide, and as far towards the River as low Water Mark; secure their Tops with plates and to Trunnel Planks within on the Piles; this done, then to brace the Insides with dry Walls of Stones, intermixed with willow Twigs, and in the same Manner to shut up the Ends of the two Rows with alike Front along the Stream, to build inside what Cellars he had Occasion for, then to fill up the Remainder with the Sand nearest at hand out of the Bluff... (Vorsey 1971:158-159).

Importantly, this plan was enacted in nearby Savannah. This evidence indicates the use of the piling system was far reaching and was well respected in other maritime nations (McDonald 2011:42-66).

Yet, colonists made other considerations when constructing this wharf in the tidal zone. One consideration was the space into the water with which to build. At Sunbury, a marsh island bisects the Medway River narrowing the channel along the waterfront. Consequently, the colonists had to consider the limited amount of sea room in the Medway caused by the island and a potential projecting wharf. This meant that whoever planned the site had future expectations of further development further north. Site 9LI1908, however, is south of the channel and faces the open water to St. Catherine's Sound. Those building at the site, however, no doubt would have considered that a lengthy pier running into the deepest water, while creating the greatest amount of wharf space, would have limited room for other wharf sites further north and would have been costly to build and maintain. Furthermore, they would have understood that a wharf projecting into the tidal currents would eventually silt in as sediments became trapped along the structure.

The water immediately off the site can get to 6.10 m or deeper, therefore, colonists built marginal wharves because they probably did not have the technology or knowledge to build in the deeper water (Bartram 1791:5-10). Civil engineer Carleton Green commented on this very point. He wrote of a dilemma faced by builders in New York City,

A pier at right angles to the shore would have required expensive dredging in the hard bottom or, if of sufficient length without dredging, would have extended into very deep water and would have obstructed the very congested waterway. The problem was solved by building a pile wharf parallel to the shore at a point where the water was sufficiently deep and connected to the shore at the middle by a roadway of similar construction (Greene 1917:24).

It is reasonable to infer from the data at the wharf site that the designers of the wharf had to account for similar factors.

Still other wharf remains have been archaeologically surveyed in Georgia. While post dating the wharf structure at 9LI1908, the Eastern Wharves in Savannah were surveyed in 1990 by Nicholas Honerkamp. The archaeologists, using data collected from their survey and documentary evidence from the original construction contract, reconstructed the wharf. Figure 6.1 shows the elevation of their proposed wharf reconstruction (Honerkamp 1990:77).

A close link can be seen for the foundation of this wharf and 9LI1908. Labeled N in the image, the anchor piles were .30 m in diameter and driven into the underlying geology. Then sheet planking “C” was driven in between. At low tide the area behind the sheeting would clear, allowing workers to fill in the space with ballast and dirt. The piles are also the “loading bearing basis of the waterfront” (Honerkamp 1990:73).

Papot Wharf features resembled features at 9LI1908. For instance, instead of using planked sheeting, the halved or wedged and rounded piles driven next to each other probably

performed the same function as the sheet planking. Another image, this one from Beaufort, South Carolina, clearly shows the closed piling structure (Figure 6.2).

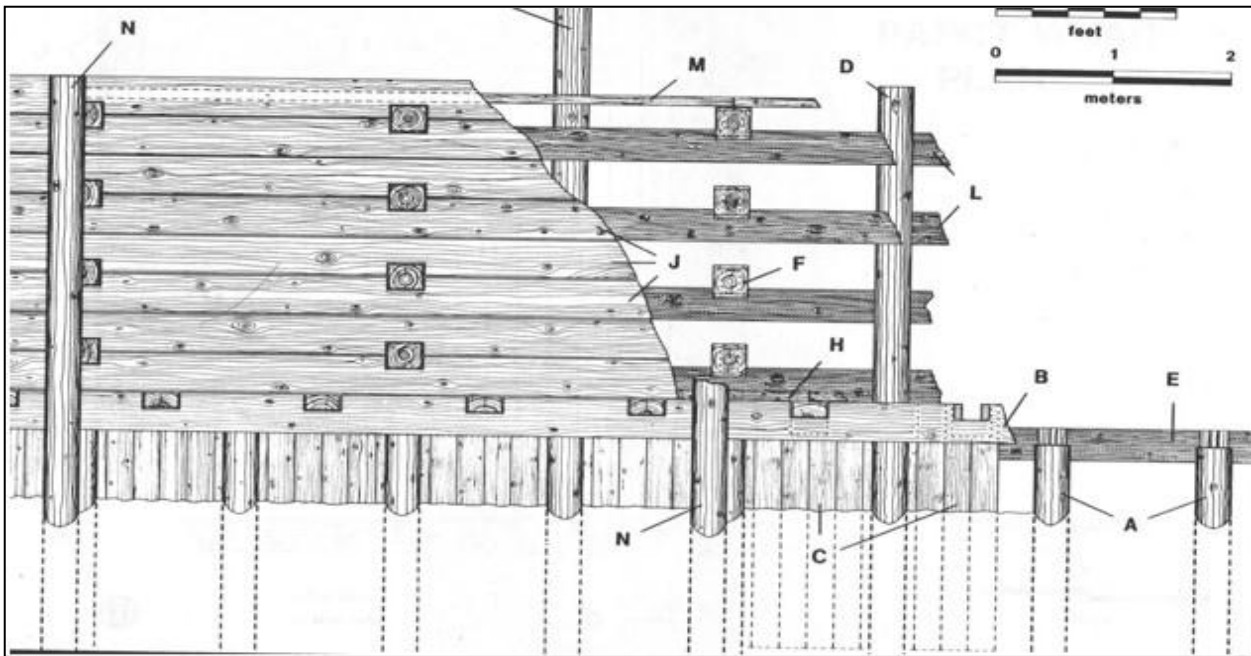


FIGURE 6.1: Elevation of the Papot Wharf. The foundation utilizes round pilings and sheet planking (labeled N and C drawings). (Image by Honerkamp 1990:77).

There was not a lack of lumber around Sunbury in fact lumber was a primary export of the town (Martin 1763:CO5/709; Lee 1764:CO5/709; 1765:CO5/709; 1766: CO5/709; 1767:CO5/709; Romans 1775:104; Herndon 1979:130-135). Instead of taking the time to create planks for sheeting, they simply split larger logs and drove them together as close as possible. Inevitably, these thicker piles would also have been stronger and more resistant to environmental factors like shipworms. Unfortunately, it is not possible at this time to project the reconstruction of the site without the remains of other parts of the structure.



FIGURE 6.2: Picture of Beaufort, SC waterfront 1862. Note the closed piling construction center of image. (Image from Fleetwood Jr. 1995:280).

Despite that setback, some educated inferences can still be made. For example, piles might have been preferred to sheet piling because much of the underlying strata is mud. The thin sheet piling might not have provided enough resistance to the changing tides or might have shifted too dramatically in the marsh mud to serve their purpose. It is possible that the colonists utilized sturdier rounded piles instead. On this same line of reasoning, the piles may also have been used because they supported a large warehouse or trade building above the wharf. Smaller sheet planks might not have provided suitable structural support for any structures built on top of

them due to the nature of the bottom sediments.

Naturally, another consideration is water depth. According to Polk, the majority of vessels in the 18th century drew slightly less than 3.02 m (Polk 1993:133). In front of 9LI1908, the water depth is as deep as 6.10 m (Bartram 1795:1-5; NOAA 1996:Chart 11511). Therefore, the water surrounding the wharf could accommodate vessels of every size sailing to Sunbury.

The Decline and Abandonment of Sunbury as a Port

The wharf sites also elucidate some of the abandonment processes occurring at Sunbury, but due to the surface depth of the survey, not all the questions pertaining to abandonment at the town could be adequately answered. The previous chapters described the individual waterfront sites as *de facto* refuse, and using the limited surface remains attempted to reconstruct the cultural and natural processes that formed the sites. This section of the chapter assesses the influences and forces behind the proposed cultural processes of abandonment, curation, and reuse on the sites with regards to World-Systems Theory. By doing so, this confirms assertions made earlier in the chapter regarding the influences of wide social, political, and economic forces brought on by the expanding world-system on Sunbury and the effects they had on the region.

Following the American Revolution Sunbury was a very different place than it had been before the war. Historical records point to a drastic decrease in population, merchant activity, and output (see Chapter Four). An important absence from the scene was the core merchant class that had built and maintained Sunbury's waterfront. Most importantly, however, was the gradual economic, and concomitant social and political shift away from rice and maritime transportation to cotton and regional railroad transport. This feature of Sunbury's history is key to understanding the processes that created the archaeological context. The previous archaeological and historical data have shown how Sunbury operated as an extension of the world-system,

especially as a peripheral-producer. Similarly through this same context, Sunbury's abandonment can best be understood.

Wallerstein noted the cyclic nature of quasi-monopolistic semi-peripheral processes when he wrote, "Since, as we have seen, quasi-monopolies exhaust themselves, what is a core-like process today will become a peripheral process tomorrow. The economic history of the modern world-system is replete with the shift, or downgrading, of products, first to semi peripheral countries, and then to peripheral ones" (Wallerstein 2004:29). Rice in this context was the downgraded product. Rice production continued in Georgia profitably well into the 19th century, but following the American Revolution production became more monopolized. Gone were the days of the individual family plantations and small-scale operations. This was what Wallerstein meant when he wrote, "Quasi-monopolies are self liquidating. But they last long enough (approximately thirty years) to ensure considerable accumulation of capital by those who control the quasi-monopolies. When a quasi-monopoly does cease to exist, the large accumulators of capital simply move their capital to new leading products or whole new leading industries" (Wallerstein 2004:27). When the economy could not support the old ways of rice production the accumulators of capital, primarily the Loyalist merchant class and larger farmers and landholders drifted away from the town and toward other areas. Coupled with hurricane damage, disease, and this downgrade, Sunbury met the requirements to be defined as abandoned from 1814 until the 20th century.

The archaeological sites reflect such a transition. It would be expected that more amounts of *de facto* refuse and curation and reuse processes be evident on the sites because of the port's role in the world-system as a peripheral or semi-peripheral producer which resulted in its gradual decline based on economic shifts instead of sudden catastrophic loss (Cameron and Tomka

1993;Deldago 2009:171-175). This patterning would hypothetically contrast cultural material patterning of other processes that create an “empty” landscape, such as expulsion or avoidance (Gazin-Schwartz 2008:25). By breaking down abandonment through the differing means of emptying a landscape, it is possible to find out more about the experiences of the people who left the area.

Two questions should be asked of this approach. What distinguishes the different processes that leave a space empty and is there a correlating pattern or patterns that can be recognized in the archaeological record? Archaeologist Amy Gazin-Schwartz outlined three differing variables of the process crucial to facilitating an analysis. The first is the cause of the emptying. The causes for emptying vary from ecological, cultural, to economic and political changes. She stressed that this change altered the way people engaged the landscape. The second variable is the response to the cause. It is important to understand why people respond to the changes in one way or another; essentially studying why emptying a place becomes more attractive than coping with the changes. The third variable to the question deals with the locus of decision-making, or who decides how and when to respond to changes (Gazin-Schwartz 2008:28).

Abandonment and expulsion have some similarities. For instance, expulsion, like abandonment, is brought on by cultural and economic change. Expulsion, however, deals directly with conflict and the loss of rights. This speaks to coercive action by an authority and consequently creates a limited ability to respond. Therefore, emptying the land is one of a few available choices left. The Loyalist population were expelled from Sunbury during and after the American Revolution. The effects from this variable on Sunbury’s archaeological record, however, is limited because those merchants were a small minority whose cultural values, if not

political, differed slightly from those that displaced them. Hence, they were quickly replaced. A question can be drawn as to whether or not those merchants who owned the wharves after the war conceptualized them in the same way as their previous owners had. It can be argued that some of the merchants, understanding the limitations of trading from Sunbury in the post Revolutionary War Atlantic, with the limitations applied via the British Navigation Acts, may not have strove to create international ties as ardently as their predecessors. This decision could have resulted in the repair and maintenance of the wharves that existed, not the construction of new ones or their expansion. Unfortunately, the limited data from the current project cannot yield answers to these questions.

Abandonment, on the other hand, differs from expulsion in one crucial way, the clear difference being the locus of decision-making and peoples' choices of response to changes. Most causes of abandonment are not directly linked with the limitation of rights, as is the case with expulsion. Furthermore, the decisions for expulsion are generally top down, coming from a powerful authority and imposed on individuals, families, communities, and regions. Alternatively, abandonment can be a very personal decision and involves scales of the individual up to the community or region. In this instance, cultural changes occurred over a period of decades. Increasing market access coupled with prosperity from the agro-capitalist system of rice production shifted demands under the dictates of the expanding world-system. Instead of the rugged individual enduring frontier hardships along the frontier, braving malaria, Native American attacks, and slave uprisings, people in towns like Sunbury paid attention to newspaper advertisements about which vessels were coming in, and more importantly, *what* they carried and from whence they came. These economic ties irrevocably linked them with far off peoples and to far off events, eventually coming home in the form of the American Revolution. Realizing

it or not, when the pattern shifted and their system of profitability started to diminish, the inhabitants of the community had to make choices about their cultural values. Did they value social cohesion? What value did they place on the environmental qualities of the area for economic production? The world-system was not the sole reason forcing the citizens away from Sunbury so much as it simply created opportunities elsewhere.

The surface remains along the waterfront can be interpreted as the autonomous choices made on the individual scale. They are the “features” of the abandoned landscapes as opposed to artifacts (Gazin-Schwartz 2008:41). Chapter Five showed that most material was located at 9LI1909, or Fisher, Jones, and Hughes wharf. This site had the largest floor structure and the longest surface length. The only other site comparably intact is 9LI1908 just to the south. Archaeologists studying abandonment point to different formation processes occurring at different sites based on wide variety of circumstances. The limited surface data indicate that the natural transforms affected each site to such a limiting degree that attributing cultural formation processes to any of the wharves is not tenable.

Conclusion

The American Revolution followed by the Industrial Revolution greatly altered worldwide patterns of production. Kenneth Lewis wrote, “The expansion of commercial production would eventually bring about a shift to more efficient water transportation of bulk goods, a change that markedly altered older patterns of processing and shipment (Lewis 1999:201). Sunbury, like many other seaports along the coast was caught up in this cycle of change. Unfortunately, for the town, the changes in production meant a decline in prosperity. This chapter, where possible, illustrates the links through the historical and archaeological data of the development of Sunbury and its eventual decline.

The decayed nature of much of the wood remains did not provide enough data for accurate conclusions about cultural site formation processes occurring at each site. The basic details derived from the wharf sites do reveal the context in which they were created and offer novel insights into the behaviors of those that designed and built them.

CHAPTER SEVEN: CONCLUSIONS

Introduction

This study of waterfront sites at the colonial port of Sunbury utilized a comparative method to study wharf remains as well as a material cultural analysis of an artifact assemblage. The methods used in this thesis illustrate a means by which answers can be derived from questions pertaining to the life of a port town. Together, individual answers to the questions posed here form conclusions about the applicability of World-Systems Theory in explaining colonial development, economic growth, and the affects these macro-forces have on individual decision making, mentalities, and world-views.

The individual lines of reasoning lead circuitously to the driving questions of this thesis, which pertain to the nature of abandonment at Sunbury and the degree to which archaeology can contribute novel knowledge about Sunbury's history, economy, and role in the region. These are discussed in Chapter One along with the organization of the thesis. This section of the thesis also introduced the community and outlined its significance.

The theoretical groundwork which influenced the archaeological fieldwork includes Wallerstein's World-System's Theory, as well as behavioral archaeology. Chapter Two covers these topics. Assessment of the archaeological and historic data commenced through these theoretical precepts. Many questions outlined in Chapter One require answers beyond a simple, local explanation. Therefore, it is important to move away from a historical-particularist framework and apply broader anthropological and behavioral motivations to the creation and deposition of the artifacts.

Observations

The main observation derived from the data is the direct relationship between the rise of the port with its incorporation into the expanding British world-system. Over time, as the port developed in this system, illustrated through the decisions made by the merchants via wharf construction details, what emerged was a peripheral production center. The Medway River is actually a complex tidal zone and does not penetrate far into the hinterland, thus early economic diversification was difficult. As a result, monocultural agricultural production developed as the principle function of the port. Once the profitability of this system shifted after the American Revolution, the town's decline became pronounced. Various other factors hastened the decline of the town resulting in near abandonment it by 1814.

One level of the assessment focused on the long term structures influencing the development of Georgia and Sunbury. This was the incorporation of the mercantilist and proto-capitalistic economic theory spread through the British world-system with the expansion of their Empire. Hallmarks of this system include extended credit, mass production of a variety of consumer goods, and the concurrent influx of marketing for those products. As the town developed, it attracted a growing class of merchants. These merchants emigrated from all over the Atlantic World and brought with them the tenets of the spreading commercial empire. Their efforts in reproducing these flows and systems through waterfront development, marketing, and the import and export of goods illustrate the influences of the larger forces on the development of the town. Therefore, it was possible to see Sunbury's role in a wider context through the archaeological record.

Following this influx was the development of the massive agricultural organizational framework — the plantation system. This wider contextual assessment provides reasons for the

directions of growth evident along the waterfront that might not have been evident otherwise. Along with the artifact assemblage, this wider contextualization provided a timeframe for the development of the town. By comparing wharf typologies, the author attempted to create a possible sequence of construction events for the wharves. This information is crucial to understanding the world view of the merchants who built the sites. Based on the proposed sequences of construction, it showed that the merchants may have moved away from larger wharves and into smaller wharf sites corresponding with the sizes of the vessels coming and going from Sunbury. This reflected the gradual incorporation of the port in the world-system. Furthermore, it showed the influence of the world-system on the town as the typologies reflected in the wharf structures signify a trend toward standardization, a development heavily influenced by larger ports. The surface data limits what conclusions could be drawn about the technology and style employed at each wharf site because the structural components of the surface remnants are limited.

Another level of assessment dealt with events: political, social, and economic, as well as meteorological, and their concomitant effects on Sunbury. Assessments covering these episodes were crucial to the understanding of the waterfront complex because as a port, Sunbury only lasted around 60 years. Singular events have a greater role in the history and life of a place if it only lasts for a short period of time.

The analysis began by highlighting the similarities between the development of Sunbury and other towns within the framework of agricultural capitalism, a crucial aspect of the world-system. People's motivations behind the migrations to the town were covered in this assessment. It also outlined the framework by which the British colonial government established landholdings, organized towns and cities, and altered the natural landscape to fit the needs of the

economy. Sunbury's rise took place as a result of the needs of the British and confirmed Wallerstein's notion that colonies stem from the expansion of the world-system (Wallerstein 2007:55). Crucial to the analysis is an explanation of the waterfront and how it illustrates the incorporation of the peripheral zone into the world-system. The integral thread through all of this is the utilization of the waterfront. Wallerstein emphasizes the central role of entrepôts and the integration of peripheral zones through maritime transport as key to the development of the modern world (Delgado 2009). It was necessary to show the development of the town, under the structures stated above, as a part of the incorporation of another peripheral zone. This is done through the port town's participation throughout the Atlantic World. Evidence supporting this is derived from the house site artifact assemblage, as well as the surface finds found along the waterfront, and the wharf structures. Sunbury fed the limited hinterland and accessed many world markets mainly through joint networks with larger ports such as Savannah and Charleston.

The limited historical timeframe covers 1776-1820; the period including the American Revolution and the town's economic decline following it. The data supported the notion of Sunbury's peripheral role because of its inability to adapt to the changes wrought by the war.

Unfortunately, the surface finds along the waterfront did not provide enough data to specifically and unequivocally answer some of the questions stated in the introduction pertaining to the abandonment of the town. In order to definitively answer the questions relating to the state of the abandoned wharves and the causes that brought them into the archaeological context requires systematic excavation. The drawn down nature of the sites limit what conclusions can be drawn about the differential affects of both cultural and natural site formation processes on the waterfront.

Limitations and Future Research

The two major limitations of the data were a lack of comprehensive remote sensing in the water around Sunbury and the limited surface extent of the surveys along the waterfront. Besides a side scan sonar survey that was accomplished as part of this thesis, researchers carried out no other remote sensing in the water around Sunbury, nor conducted any underwater ground-truthing. The environment of coastal Georgia necessitates a magnetometer as the viable means of locating submerged cultural resources. Future research needs to focus on completing the remote sensing of the water in the area. The data surrounding the potential shipwrecks could be used to answer varying questions. Their location might indicate actual shipping lanes used at Sunbury, and the sizes of any surveyed vessels could be compared to the wharves along the waterfront. Vessel types could also illuminate specifics about coastal trading and shipbuilding techniques in the southeast. If artifacts or cargo are recovered, they might shed further light on trading patterns, possibly refuting or refining some of the conclusions made here and in Chapter Six. Lastly, if the remains could be identified their presence might also further illuminate consumption patterns and relative wealth in the port.

Another severe limitation was the shallow level of survey along the waterfront. A two member team conducted the field work which imposed restrictions on what could be reasonably and responsibly undertaken for a survey of four wharf sites in the intertidal zone. The lack of excavation was necessitated due to personnel and time limitations, and a lack of a budget for excavation and subsequent conservation. Unfortunately, some of the research questions revolve around an in-depth analysis of the wharf structures which cannot happen since most are buried under thick marsh mud and strong tides. For example, an examination of the abandonment processes occurring along the waterfront is extremely limited by assessing surface finds only. An

excavation of the sites could reveal a plethora of new knowledge. By revealing the different layers of the wharves, the researcher could gain new insights into construction details of the wharf. These details are important because they can precisely indicate the wharf type, but also any additions, subtractions, or alterations to the wharf. This data can then be applied to issues about abandonment and site formation. Future research could reveal cultural processes affecting the wharf site and differentiate those from natural processes. The researcher could then answer questions pertaining to the nature of the abandonment and the timescales in which it took place. These changes may also reflect reoccupation after the American Revolution. The excavations could reveal changes made to the wharves, or rebuilding events occurring after the war. Comparing these changes, alterations, or repairs could expose a great deal about the effects of the war on the merchants' expectations upon reoccupying Sunbury. This could be discovered if merchants changed the size of their wharf, or in other ways radically altered it. Alternatively, the finds might also narrow the exact timeframes of the waterfront abandonment episodes. If a better time-scale of abandonment can be reached, it can then be linked to the historical data revealing specific trends in behaviors or causes for the movement of people away from Sunbury. Lastly, as revealed by the artifact assemblage retained from a "rescue excavation," the property on the land has high archaeological potential. More rigorous terrestrial archaeology would be immensely important to the study of the Sunbury. There are few port sites where land property has the potential to be excavated due a lack of development. Furthermore, these finds could then be temporally linked to a wharf landing and potentially to a shipwreck in the same vicinity. However remote, the possibility exists for this triumvirate linkage because the documentary record can link the owners of wharves to the potential shipwrecks in the area. The merchants who built the wharves also owned some of the historically documented wrecks. Therefore, the

area has the potential for a wide variety of questions pertaining to the entire range of life in a port town. Enabling a simultaneous holistic approach to a port via maritime and terrestrial studies seems the likely next step forward in port studies. As can be seen, one product of this initial research is the proliferation of more research questions pertaining to Sunbury.

Conclusion

One of the most interesting facets of this site is its potential due to limited development. It is precisely this lack of development and rich colonial heritage that created the archaeological sites. For the purposes of this thesis, the remains along the waterfront were considered as interconnected features that represent a wider regional view leading to insights about the culture(s) that produced the artifacts. James Delgado advanced this notion of viewing entrepôts and ports as macro-artifacts of the maritime system. He believes they can serve as models for integration and settlement along the maritime frontier (Delgado 175:2009). This thesis adds to his model by using archaeology to question the reasons for the rise, fall, and abandonment at a failed colonial port within the expanding world-system. Unlike San Francisco, Sunbury did not succeed as a viable community. It is precisely this reason that makes the study important, for the true story of the expansion of the world-system, as it is for evolution, is not one of constant success, but rather, of many failures leading to a select number of successes. By its very nature and definition, the maritime system is fluid, dynamic, and prominent. This addition to the model shows how part of the world-system's progression stems from managing failure by relying on the hardiness of those who have to endure it. For without the citizens who established and fought for these frontiers, the system could not expand. What is perfectly clear from descriptions by those who study ports and the rise of successful cities is that at their origin, and indeed for much of their development, no one is completely certain of the success rate of the venture. The story of

failure outlined in this thesis should not be interpreted as a cautionary tale or as a means to create a formula for success versus failure in developing port cities, but to illustrate that failure in many peripheral places is an integral part of the success for core zones in the world-system. The study of these failed zones should garner as much scholastic attention as the successful locations. This is the very meaning of the core-peripheral relationship. Without the periphery, the core could never survive.

It is possible that those past observers of Sunbury grasped the notion of this relationship. What else could explain the desertion of a place endowed with such natural gifts as arable land, renewable resources like forests, abundant sea life, fresh water, and access to the ocean? Perhaps it is in the failure of the town that the citizens, by way of abandoning it, left their enduring legacy. The lives of those settlers, rebels, and citizens, represented the harshest realities of the emerging system — and in doing so, demonstrated the negative side of the world-system. These failures should not be forgotten, however, for it is in our failures that we as people learn the most.

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APPENDIX A: ARTIFACTS RECOVERED FROM SITE 9LI1908

Object	Count
Brown salt-glazed mugs stoneware	1
Brown salt-glazed stoneware	1
Brown salt-glazed stoneware	1
Grey stoneware	1
Red coarse earthenware	1
Porcelain sherd, probably Overglaze Chinese	1
Black coarse earthenware	1
Red coarse earthenware	1
Delftware-English with blue painting unknown pattern probably Chinese	1
Nottingham-stoneware	1
Porcelain sherd	1
Nottingham- stoneware	1
Brown salt-glazed stoneware	1
Combed Staffordshire slipware	1
Combed Staffordshire slipware	1
Combed Staffordshire slipware	1
Combed Staffordshire slipware	1
French Faience Rouen	1
Grey coarse earthenware maybe a stoneware	1
Green glass shard	1
Green glass shard	1
Brown salt glazed stoneware	1
Stoneware unglazed	1
Coarse earthenware	1
Coarse earthenware	1
Coarse earthenware	1
Modern ceramic	1
Ironstone	1
Brown salt glazed stoneware	1
Ironstone	1
Jackfield earthenware	1
Glass shard	1
Bottle neck	1
Coarse red earthenware	1
Glass bottle bottom	1
Glass bottle neck	1
Stone	1
Glass bottom	1
Glass bottom	1
Full "onion" bottle	1
Brick	1
Wood piling	1
Handmade brick	1
Animal femur	1

APPENDIX B: ARTIFACTS RECOVERED FROM SITE 9LI1909

Object	Count
Coarse red earthenware	3
Coral piece	1
Glass shard	1
Glass shard	1
Melted glass shard or stone	2
White brick	1
Grey-salt glazed	1
Wine bottle bottom	1
Partial handmade brick	1

APPENDIX C: COMMUNITY PROPERTY LOT ARTIFACT ASSEMBLAGE

Object	Sum
Number of shell in bag	37
Number of brick and mortar fragments in bag	21
Count of porcelain plain pieces	58
Count of porcelain blue and white pieces	91
Count of porcelain polychrome pieces	10
Count of porcelain gold overglaze pieces	3
Count of Fulham pieces in bag	7
Count of British Brown pieces	16
Count of Brown saltglazed stoneware pieces	9
Count of Stoneware jasperware pieces	1
Count of Stoneware Nottingham pieces	37
Count of Stoneware Rhenish Grey pieces	23
Count of Stoneware white saltglazed pieces	27
Count of Other Stoneware	8
Count of unglazed stoneware pieces	3
Count of leadglazed slipware pieces	2
Count of Jackfield pieces	6
Count of red lead glazed slipware pieces	12
Count of red trailed slipware pieces	1
Count of yellow ware pieces	1
Count of Earthenware North Devon pieces	1
Count of unidentified earthenware	1
Count of Agate ware pieces	6
Count of Agate ware refined (sgraffito)	1
Count of redware lead glazed pieces	3
Count of Delft ware plain pieces	11
Count of Delftware handpainted pieces	5
Count of Delftware transfer print blue pieces	4
Count of Delftware polychrome spongepainted	2
Count of basalts or pieces of basalt	7
Count of 4/64" pipestem pieces	1
Count of 5/64" pipestem pieces	118
Count of 6/64" pipestem pieces	2
Count of pipebowl pieces	25
Count of creamware plain pieces	1425
Count of creamware molded pieces	4
Count of creamware handpainted pieces	8

Count of creamware handpainted polychrome pieces	6
Count of creamware transfer print black pieces	6
Count of creamware transfer print black pieces	9
Count of creamware annular pieces	1
Count of pearlware plain pieces	300
Count of pearlware transfer print black pieces	30
Count of pearlware transfer print blue pieces	172
Count of pearlware molded blue pieces	2
Count of pearlware annular pieces	19
Count of pearlware handpainted annular pieces	6
Count of pearlware handpainted polychrome pieces	98
Count of pearlware sponge pieces	13
Count of pearlware sponge painted purple pieces	3
Count of pearlware sponge painted grey pieces	1
Count of pearlware b-o-w handpainted pieces	142
Count of pearlware blue shelledged pieces	171
Count of pearlware green shell edged pieces	71
Count of pearlware hollowware green molded pieces	1
Count of caneware pieces	1
Count of colonoware pieces	7
Count of burned ceramics pieces	87
Count of wine bottle pieces	27
Count of wine bottle #4 pieces	253
Count of winestem pieces	13
Count of other dark green glass pieces	54
Count of other dark green glass #3 pieces	132
Count of pharmaceutical bottle glass #2 pieces	55
Count of pharmaceutical bottle glass #7 pieces	19
Count of pharmaceutical bottle glass #8 pieces	130
Count of pharmaceutical bottle glass #13 pieces	5
Count of pharmaceutical bottle glass #15 pieces	16
Count of glass window #1 pieces	35
Count of glass window #2 pieces	70
Count of glass window #2 pieces	67
Count of glass ware #8 pieces	2
Count of glass ring	1
Count of melted glass pieces	3
Count of nails square hand wrought	181
Count of square machine cut hand heads	180
Count of square machine cut nails	86

Count of nails round	1
Count of spike(s)	8
Count of unidentified nails	383
Count of screw(s)	1
French gunflint count	1
Count of southnumber #2 buttons	1
Count of buttons #8	2
Count of buttons #9	8
Count of buckle(s)	2
Count of straight pin(s)	1
Count of flat irons	3
Count of writing slate pieces	8
Count of other rocks	21
Count of charcoal pieces	5
Count of unidentified metal pieces	159
Count of construction hardware metal pieces including hinges	116
Count of faunal remains including remains from food (not specifics)	154
Count of unidentified faunal bird pieces	4
Count of unidentified faunal mammal pieces	127
Count of faunal turkey "Meleagris gallaparo" pieces	4
Count of fish drum "Pogonias cronis" pieces	10
Count of turtle pieces	2
Count of "Sus Scrofa" faunal remains	24
Count of "Bus Taurus" cow remains	47
Count of unidentified glass pieces	15
Count of barrel hoops or pieces of barrel straps/hoops	15
Count of metal cooking utensils pieces	2
Count of brass strap and or pieces	1
Count of metal pintel	1
Count of personal metal items	2
Count of parts of footwear	1
Count of wood pieces	1
Count of brass fineal	3
Count of brass handles	1
Count of aboriginal flint debitage	8
Count of tile pieces	1
Count of aboriginal ceramic pieces	32
Count of aboriginal arrowheads	6
Total	5,653