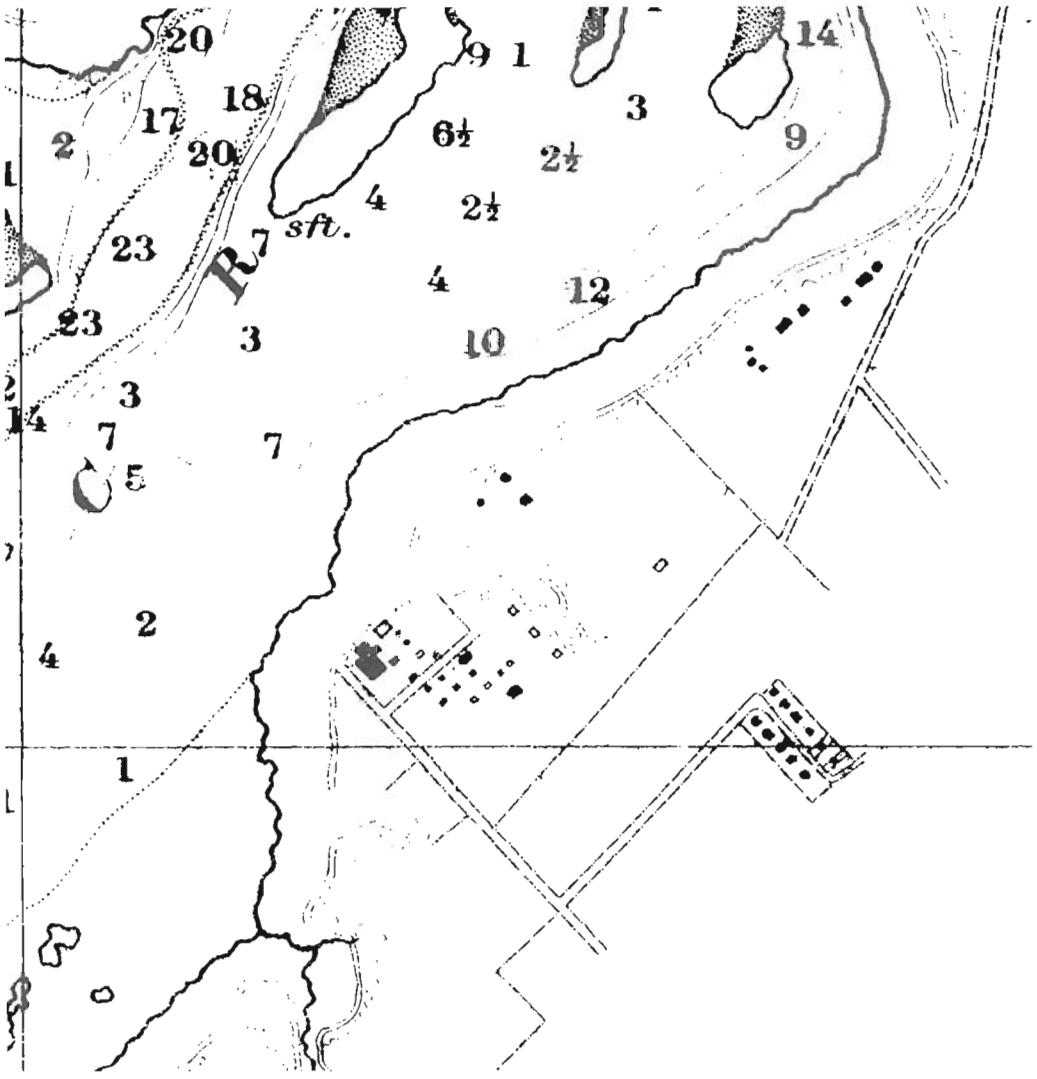
ARCHAEOLOGICAL EXCAVATIONS AT 38BU96, A PORTION OF COTTON HOPE PLANTATION, HILTON HEAD ISLAND, BEAUFORT COUNTY, SOUTH CAROLINA



CHICORA FOUNDATION RESEARCH SERIES 21

ARCHAEOLOGICAL EXCAVATIONS AT 38BU96, A PORTION OF COTTON HOPE PLANTATION, HILTON HEAD ISLAND, BEAUFORT COUNTY, SOUTH CAROLINA

RESEARCH SERIES 21

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October 1990

ISSN 0882-2041

Library of Congress Cataloging-in-Publication Data

Archaeological excavations at 38BU96, a portion of Cotton Hope Plantation, Hilton Head Island, Beaufort County, South Carolina / contributors: Debi Hacker ... [et. al.] ; Michael Trinkley, editor.
p. cm. -- (Research series, ISSN 0882-2041 ; 21)
"October 1990."
Includes bibliographical references.
1. Cotton Hope Plantation Site (S.C.) 2. Hilton Head Island (S.C.)--Antiquities. 3. Excavations (Archaeology)--South Carolina--Hilton Head Island. I. Hacker, Debi. II. Trinkley, Michael. III. Series: Research series (Chicora Foundation) ; 21.
F279.C77A73 1990
975.7'99--dc20 90-20356
CIP

The paper used in this publication meets the minimum requirements of American National Standard for Information Sciences - Permanence of Paper for Printed Library Materials, ANSI Z39.48-1984.

We do not inherit the land, we borrow it from our children.

-- Native American proverb

ABSTRACT

Site 38BU96 is situated on Skull Creek at the north edge of Hilton Head Island in Beaufort County, South Carolina. It represents an outlying slave settlement associated with the Scull (Skull) Creek Plantation during the late colonial period and the Cotton Hope Plantation during the antebellum period. The site was determined by the South Carolina State Historic Preservation Officer as being eligible for inclusion in the National Register of Historic Places and data recovery excavations were conducted to mitigate the impacts of development activity.

This report represents the first detailed archaeological investigation of plantation occupation on Hilton Head Island and incorporates historic research, archaeological excavations, artifact analyses, and the examination of floral and faunal remains.

The investigations reveal the changing role of the site through time. Originally a domestic slave settlement in the late eighteenth century, by the nineteenth century the site became a focus of cottage or other specialized activities. This functional change is observed in the orientation of structures, their construction, the site's relationship to the total plantation complex, and the artifacts present at the site.

The complexity of nineteenth century plantation settlements is often overlooked by archaeologists who focus on one or two aspects of the social system, such as "the slave row" or "the main house." Site 38BU96 reveals that the Cotton Hope Plantation was more complex than this simplistic reconstruction would allow and that archaeological research should strive to examine the wide diversity of plantation complexes.

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ACKNOWLEDGEMENTS

This work was funded by BBHH Associates of Hilton Head Island in the amount of $29,836.00. While the present research was conducted to comply with requirements of the South Carolina Coastal Council and the South Carolina State Historic Preservation Office, I wish to thank Mr. Robert Gerhart of Vanguard Realty for his unconditional support and interest in the history of Hilton Head Island. His desire to protect and study the historical resources of the island has been unwavering and his interest and enthusiasm has contributed greatly to the success of this project. His participation is also a clear statement that archaeology and development can be integrated together not only successfully, but also beneficially.

I must also thank Dr. Patricia Cridlebaugh, Staff Archaeologist with the South Carolina Department of Archives and History who reviewed the scope of work, for her enthusiasm and professionalism. The job of reviewing this document was ably handled by Dr. Linda Stine, also with the South Carolina State Historic Preservation Office. Mr. Michael Taylor, Director of the Environmental and Historical Museum of Hilton Head Island assisted in arranging for the curation of the materials for this study and provided much needed assistance.

I wish to express my considerable thanks to my co-authors for their interest in this project, dedication to scholarship, and willingness to meet stringent deadlines. I also wish to acknowledge the skill and dedication of my field crew, Mr. Scott Akeman, Mr. Bernie Slaughter, Ms. Mona Grunden, and Ms. Liz Pinckney, as well as my laboratory supervisor, Ms. Debi Hacker. Obviously, much, perhaps most, of this work should be credited to them. I must also thank Dr. Mark Paris for his assistance during the project.

Finally, I appreciate the peer review comments offered by Dr. Jack Wilson, Jr., Ms. Debi Hacker, Ms. Martha Zierden, and Ms. Natalie Adams.

INTRODUCTION

Michael Trinkley

Background

Site 38BU96 was first examined by Chicora Foundation, Inc. in 1987 as part of a reconnaissance survey of Hilton Head Island conducted for the Town (Trinkley 1987). Additional survey of the site, including the excavation of 53 shovel tests, was conducted by Chicora, again for the Town of Hilton Head Island, in 1988 (Trinkley 1988). Based on this survey, the State Historic Preservation Office concurred that the site was eligible for inclusion in the National Register of Historic Places. In early 1990, Mr. Robert W. Gerhart advanced plans to develop a 14 acre tract of land on which site 38BU96 is situated. In accordance with the Coastal Zone Management Act of 1977, the South Carolina Coastal Council, in consultation with the South Carolina State Historic Preservation Officer, stipulated in its permitting process that archaeological data recovery at site 38BU96 should be conducted by the developer. Mr. Gerhart verbally requested that Chicora Foundation prepare a data recovery plan for the site. This proposal, dated March 6, 1990, was submitted to Mr. Gerhart and to the South Carolina State Historic Preservation Office (S.C. SHPO). The data recovery plan was approved by the SHPO (letter from Dr. Patricia Cridlebaugh to Mr. Robert W. Gerhart, dated March 20, 1990) and a Memorandum of Agreement between the developer and the SHPO was signed on April 2, 1990. Chicora's proposal for data recovery was approved by the developer on March 12, 1990.

This property is situated on the northwest edge of Hilton Head Island, bordering Skull Creek to the north, Hilton Head Plantation to the east and south, and the Melrose docking facilities to the west. Hilton Head is located about 30 miles from Savannah, Georgia, 90 miles from Charleston, South Carolina, and about 20 miles south of Beaufort (Figure 1).

The proposed development plan for the site involves a number of amenities, such as a putting green, a clubhouse, and artificially constructed lagoons, interspersed with town house lots. This plan will involve the clearing, grubbing, filling, and paving of the road network; the construction of the putting green, clubhouse, and associated support structures; the construction of below ground utilities; the excavation of the lagoons, and the development of individual lots. These development activities will result in considerable land alteration and damage to the archaeological site known to exist on the property.

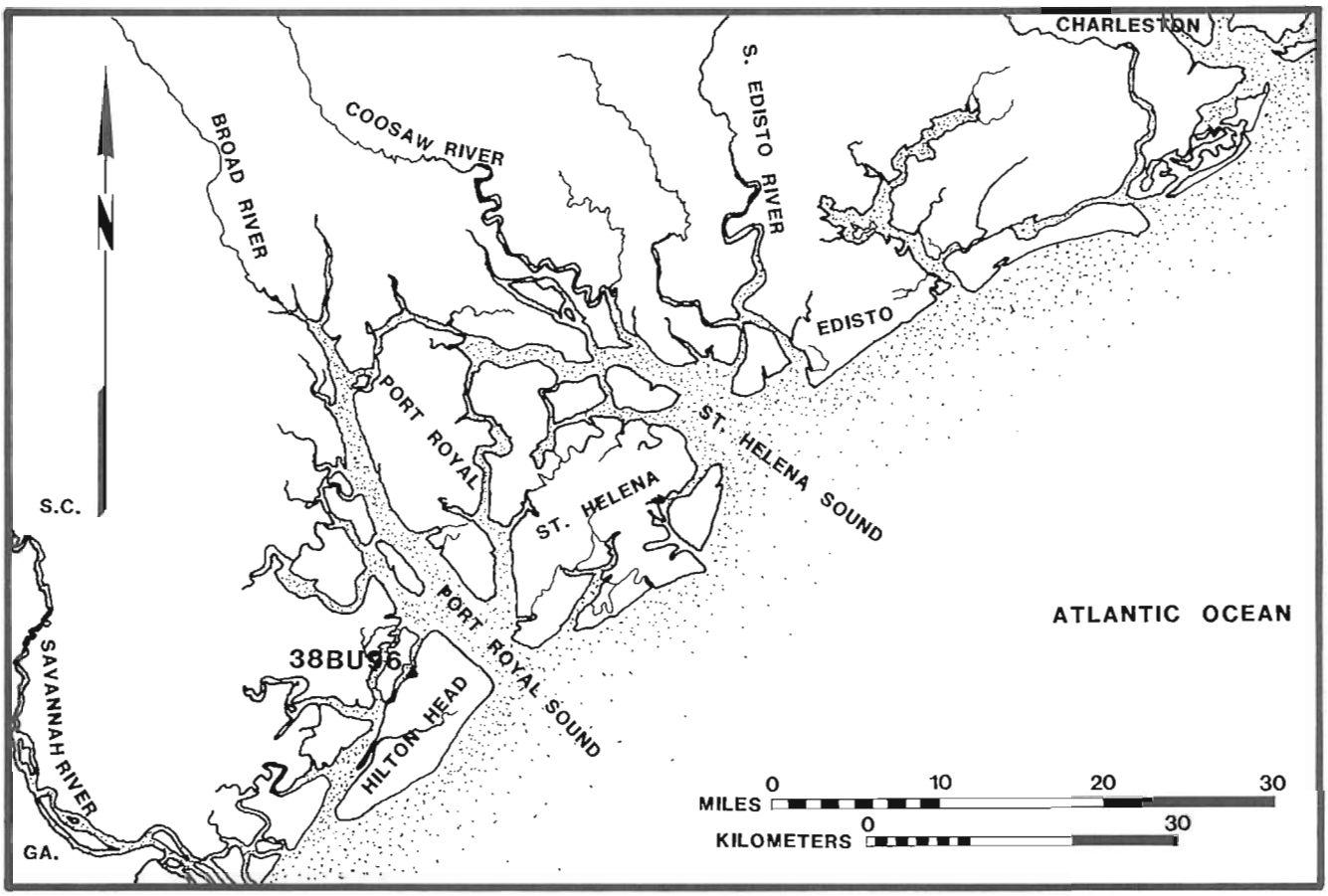


Figure 1. Vicinity of Hilton Head Island, showing the location of 38BU96.

The background and archival research specific to this project was conducted on June 5 through 8, 1990 and June 27, 1990 by Ms. Mona Grunden and the author. The field work at 38BU96 was conducted from March 26, 1990 through April 20, 1990 by a crew of five, including the author. The report preparation (including the necessary laboratory studies) was conducted intermittently from April 28 through June 8, 1990. A management summary was provided on April 23, 1990. A total of 671.5 person hours were devoted to the field work at 38BU96, while an additional 30 person hours were devoted to the initial field processing of specimens. Conservation of archaeological specimens is currently in process at the Chicora Foundation laboratory in Columbia.

Scope and Goals

As will be discussed in greater detail in a following section, site 38BU96 is recognized as a portion of the antebellum Cotton Hope Plantation on Hilton Head Island. An 1862 chart of Skull Creek shows this plantation and indicates that site 38BU96 consisted of at least eight structures in a non-linear arrangement. While this patterning does not preclude a slave settlement, it was recognized as unusual and, in itself, worthy of additional study. Previous research at the site produced a mean ceramic date of 1810 and an artifact pattern analysis similar to the Revised Carolina Artifact Pattern (Trinkley 1988:52-53). In spite of this, a large proportion

of the recovered ceramics were either colono wares or utilitarian Euro-American wares. In addition, the previous research at the site had produced a large quantity of animal bones, revealing the potential for excellent faunal preservation and recovery.

Site 38BU96 was recognized as a significant aspect of the total plantation complex, although it appeared unusual in both form and possibly function. Contributing to the complexity of research at 38BU96 was the realization that it is only one small segment of the entire Cotton Hope Plantation complex. Excavations at 38BU96 would be in a vacuum, with no opportunity to compare and contrast the recovered materials to the main plantation house area or the known slave settlement associated with the plantation. In fact, no adequate comparative antebellum plantation data exists for any site on Hilton Head Island (cf. Trinkley 1989b).

Consequently, this research was guided by relatively simple, but fundamental, explanatory objectives and questions: who lived at 38BU96, when was the site occupied, what activities were performed at the site, and how does the site relate to the larger plantation complex? The excavations at 38BU96 were viewed as an opportunity to examine at least one aspect of plantation life on Hilton Head Island. Although there would be few comparative data on Hilton Head, it was anticipated that the data from 38BU96 would be suitable for comparison with other sea island cotton plantation research, such as that conducted by Singleton (1980) in Georgia and Zierden et al. (1986) in South Carolina.

Areas of more specific research which might be appropriate at 38BU96, depending on the data recovered, were recognized as:

1. The lifestyle of slaves on Hilton Head Island, as evidenced by the artifacts recovered from 38BU96;

2. The procurement, preparation, and dietary significance of various food sources at the site; and

3. The examination of functional changes at the site over time.

Each of these research questions would involve obtaining adequate samples to allow analysis, but there was a reasonable expectation that they were appropriate for 38BU96.

As work progressed at the site, it became evident that not only were these research questions realistic, but it also became necessary to explore questions concerning our understanding of plantation complexes and architectural trends in the South Carolina low country. In particular, this work revealed that while most archaeological investigations operate on a "tripartite" mental

template (i.e., owner - overseer - slave), the actual situation was, of course, much more complex. Likewise, the plantation, functionally, consisted of more than simply main house - overseer's house - and slave settlements. There were a number of support structures and perhaps even settlements with very constrained functions.

While the various architectural studies of slave structures (summarized by Adams 1990) have attempted to synthesize patterns and temporal changes, it is clear that there remains a great deal of diversity in slave architecture. The work at 38BU96 contributes to a better understanding of this diversity.

The scope of the 38BU96 excavations was detailed in Chicora's proposal. Generally, it involved a two phase approach. The first phase included intensive auger testing in order to determine structural locations suitable for more intensive investigation. The second phase included limited excavations within definable concentrations with the possibility of expansion into block excavations should the archaeological remains warrant that level of attention.

There is a tendency in archaeology today to believe that a site's data potential can be maximized by large-scale stripping using mechanical equipment. This approach usually involves some limited hand excavation to verify the depth to subsoil and perhaps to collect a small sample of artifacts. Following this, large areas are stripped of topsoil and features (such as pits and post holes) are plotted. Perhaps a sample of these features may also be excavated.

This approach was rejected at 38BU96 by both the developer (who did not want the topography of the site altered) and the Town of Hilton Head (which has an aggressive tree ordinance). Regardless of these restrictions, it is also clear that the mechanical stripping of sites such as 38BU96 is extraordinarily destructive of the archaeological record.

The general interpretative value of "plowzone" artifacts has been amply demonstrated by Ward (1980) at prehistoric sites in North Carolina and it seems that there should be little debate over this issue. Of even greater significance to historic sites such as 38BU96, these upper levels of soil frequently contain much (if not all) of the significant architectural data available. This data is in the form of artifacts, such as glass and architectural hardware, as well as in the form of physical remains, such as daub or mortar with lath impressions. Once the soil containing these remains is stripped from a site the remaining features offer, at best, only ambiguous or tentative evidence of many architectural forms. Such an approach therefore can not only result in the inability to interpret the archaeological record, but what is perhaps worse, can lead to erroneous interpretations.

As more plantation sites are intensively investigated it should be possible to better estimate the level of effort required to fully explore the archaeological and architectural records. Rather than resorting to the quick, but damaging stripping of sites, research designs should strive to ensure that adequate time is allotted to fully explore the site.

Curation

The field notes, photographic materials, and artifacts resulting from Chicora Foundation's investigations have been curated at The Environmental and Historical Museum of Hilton Head Island as Accession Number 1990.4. The artifacts from data recovery excavations at 38BU96 have been cataloged as ARCH 2353 through ARCH 2569 (using a lot provenience system). The artifacts have been cleaned and/or conserved as necessary, or are in the process of conservation. Further information on conservation practices may be found in the Artifact Analyses section of this report. All original records and duplicate copies were provided to the curatorial facility on pH neutral, alkaline buffered paper and the photographic materials were processed to archival permanence.

NATURAL SETTING

Michael Trinkley

Physiographic Province

Beaufort County is located in the lower Atlantic Coastal Plain of South Carolina and is bounded to the south and southeast by the Atlantic Ocean, to the east by St. Helena Sound, to the north and northeast by the Combahee River, to the west by Jasper and Colleton counties and portions of the New and Broad rivers. The mainland primarily consists of nearly level lowlands and low ridges. Elevations range from about sea level to slightly over 100 feet above mean sea level (MSL) (Mathews et al. 1980:134-135). Hilton Head is located between Port Royal Sound to the north and Daufuskie Island to the south. The island is separated from Daufuskie by Calibogue Sound and from the mainland by a narrow band of tidal marsh and Skull Creek. Between Hilton Head and the mainland are several smaller islands, including Pinckney and Jenkins islands.

Hilton Head is about 11.5 miles in length and has a maximum width of 6.8 miles, incorporating just under 20,000 acres of highland and 2400 acres of marsh (Figure 2). Elevations range from sea level to 21 feet mean sea level (MSL) at the top of the highest natural beach ridges (Mathews et al. 1980).

Hilton Head is situated in the Sea Island section of South Carolina's Coastal Plain province. The coastal plain consists of the unconsolidated sands, clays, and soft limestones found from the fall line eastward to the Atlantic Ocean, an area of more than 20,000 square miles or about two-thirds of South Carolina (Cooke 1936:1-3). Elevations range from just above sea level on the coast to 600 feet MSL adjacent to the Piedmont province. The coastal plain is drained by three large through-flowing rivers -- the Pee Dee, Santee, and Savannah -- as well as by numerous smaller rivers and streams. On Hilton Head there are two major drainages, Broad Creek which flows almost due west into Calibogue Sound, and Jarvis Creek which empties into Mackay Creek just north of Broad Creek.

From Bull Bay southward, the coast is atypical of the northern coastline. The area is characterized by low-lying, sandy islands bordered by salt marsh. Brown (1975) classes these islands as either Beach Ridge or Transgressive, with the Transgressive barrier islands being straight, thin pockets of sand which are rapidly retreating landward with erosion rates of up to 1600 feet since 1939. The Beach Ridge barrier islands, however, are more common and consist of islands such as Kiawah and Hilton Head. They are characterized by a bulbous updrift (or northern) end.

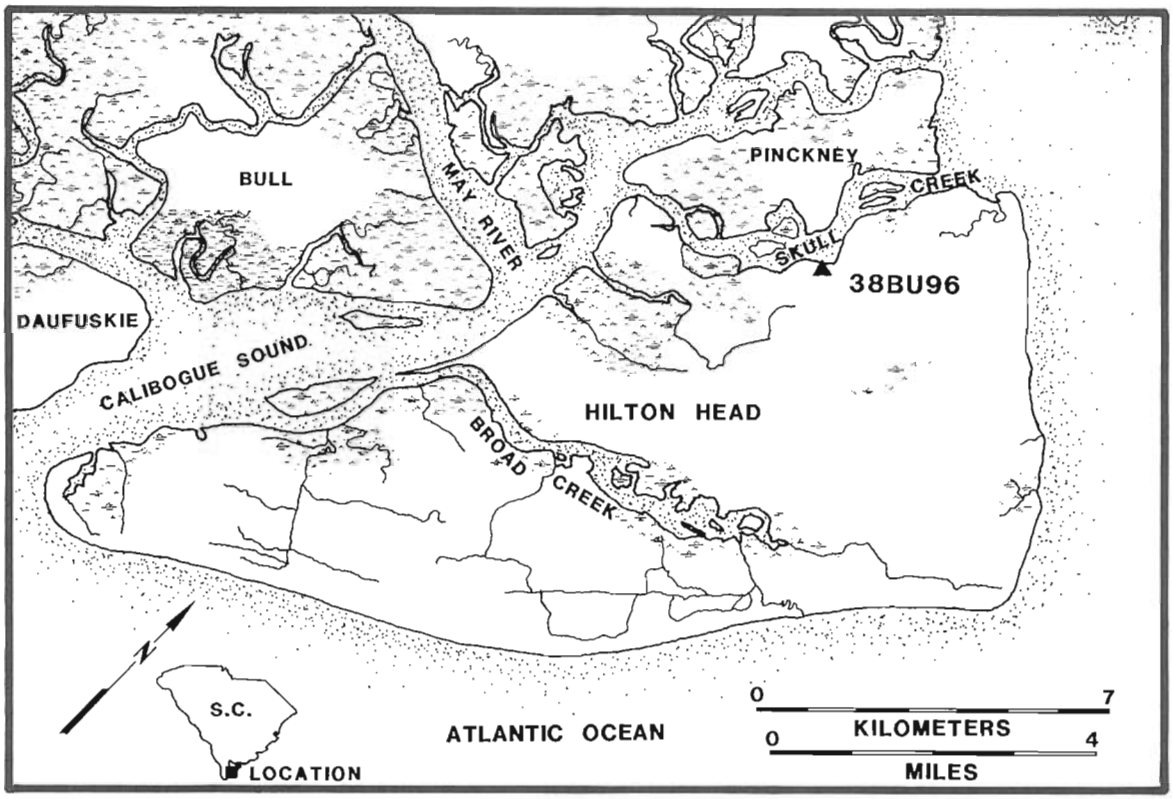


Figure 2. Hilton Head Island.

Kana (1984) discusses the coastal processes which result in the formation of barrier islands, noting that the system includes tidal inlets at each end of the barrier island with the central part of the island tending to be arcuate in shape while the ends tend to be broken. Hilton Head has the typical central bulge caused by sand wrapping around the tidal delta and then depositing midway down the island. Further, the south end has an accreting spit where sand is building out the shoreline. The central part of the island, however, has experienced a 25 year erosion trend averaging 3 to 10 feet a year (Kana 1984:11-12; see also U.S. Army Corps of Engineers 1971). More recent work by Kana et al. (1986) confirms considerable shoreline reorientation.

Hilton Head, however, is also a different shape than most of the other islands since it has a Pleistocene core with a Holocene beach ridge fringe. To understand the significance of this situation, it is important to realize that technically the sea islands and the barrier islands are different from a historical perspective. The classic sea islands of colonial and antebellum fame (such as James, St. Helena, and Sapelo islands) are erosional remnants of coastal sand bodies deposited during the Pleistocene high sea level stands. They are crudely elongate, parallel to the present day shoreline, and rectangular in outline. Their topography is characterized by gentle slopes, poorly defined ridges and swales, and elevations from 5 to 35 feet MSL. Typical barrier

islands include Pawleys, Kiawah, and Hunting islands. Some islands, such as Hilton Head, Daufuskie, and St. Catherines, have an oceanward fringe of beach dune ridges which were constructed during the Holocene high sea level stands (Mathews et al. 1980:65-71; Ziegler 1959). Ziegler (1959:Figure 6) suggests that Hilton Head Island is composed of several sea or erosion remnant islands, joined together by recent Holocene deposits.

Site 38BU96 is situated on the northwest edge of Hilton Head Island adjacent to Skull Creek. The site area consists of a relatively level sandy ridge with the topography dropping off into a wetland area to the east. There are several gullies, perhaps evidence of remnant springs, on the bank overlooking Skull Creek in the site area.

Climate

In the early nineteenth century the Beaufort climate was described as "one of the healthiest" (Mills 1826:377), although Thomas Chaplin's antebellum journal describing life at nearby Tombee Plantation on St. Helena Island presents an entirely different picture (Rosengarten 1987). In 1864 Charlotte Forten wrote that "yellow fever prevailed to an alarming extent, and that, indeed the manufacture of coffins was the only business that was at all flourishing" (Forten 1864:588). By 1880, however, Henry Hammond wrote that "the sea islands enjoy in a high degree the equable climate peculiar to the islands generally" and that the seasonal variation in temperature "destroys the germs of disease, as of yellow fever and of numerous skin diseases that flourish in similar regions elsewhere" (Hammond 1884:472). Of course, Hammond also mentions that, "doubtless the prophylatic use of quinine has had something to do with the apparently increased healthfulness of this section" (Hammond 1884:474).

The major climatic controls of the area are the latitude, elevation, distance from the ocean, and location with respect to the average tracks of migratory cyclones. Hilton Head's latitude of about 32°13'N places it on the edge of the balmy subtropical climate typical of Florida. As a result, there are relatively short, mild winters and long, warm, humid summers. The large amount of nearby warm ocean water surface produces a marine climate, which tends to moderate both the cold and hot weather. The Appalachian Mountains, about 220 miles to the northwest, block shallow cold air masses from the northwest, moderating them before they reach the sea islands (Landers 1970:2-3; Mathews et al. 1980:46).

Maximum daily temperatures in the summer tend to be near or above 90°F and the minimum daily temperatures tend to be about 68°F. The summer water temperatures average 83°F. The abundant supply of warm, moist and relatively unstable air produces frequent scattered showers and thunderstorms in the summer. Winter has average daily maximum and minimum temperatures of 63°F and 38°F

respectively. Precipitation is in the forms of rain associated with fronts and cyclones; snow is uncommon (Janiskee and Bell 1980:1-2).

The average yearly precipitation is 49.4 inches, with 34 inches occurring from April through October, the growing season for most sea island crops. Hilton Head Island has approximately 285 frost free days annually (Janiskee and Bell 1980:1; Landers 1970). This mild climate, as Hilliard (1984:13) notes, is largely responsible for the presence of many southern crops, such as cotton.

Hilliard also points out that "any description of climate in the South, however brief, would be incomplete without reference" to a meteorological event frequently identified with the region -- the tropical hurricane. Hurricanes occur in the late summer and early fall, the period critical to antebellum cane, cotton, and rice growers. These storms, however, are capricious in occurrence:

> [i]n such a case between the dread of pestilence in the city, of common fever in the country, and of an unexpected hurricane on the island, the inhabitants . . . are at the close of every warm season in a painful state of anxiety, not knowing what course to pursue, nor what is best to be done (Ramsay, quoted in Calhoun 1983:2).

The coastal area is a moderately high risk zone for tropical storms, with 169 hurricanes being documented from 1686 to 1972 (0.59 per year) (Mathews et al.1980:56). The last Category 5 hurricane which hit this area was the August 27, 1893 storm which had winds of 120 miles and hour and a storm tide of 17 to 19.5 feet. Over 1000 people in South Carolina were reported killed by this storm (Mathews et al. 1980:55). Other notable historic storms have occurred in 1700, 1752, 1804, 1813, and 1885.

Geology and Soils

The Sea Island coastal region is covered with sands and clays originally derived from the Appalachian Mountains and which are organized into coastal, fluvial, and aeolian deposits. These deposits were transported to the coast during the Quaternary period and were deposited on bedrock of the Mesozoic Era and Tertiary period. These sedimentary bedrock formations are only occasionally exposed on the coast, although they frequently outcrop along the fall line (Mathews et al. 1980:2). The bedrock in the Beaufort area is below a level of at least 1640 feet (Smith 1933:21).

The Pleistocene sediments are organized into topographically distinct, but lithologically similar terraces parallel to the coast. The terraces have elevations ranging from 215 feet down to sea level. These terraces, representing previous sea floors, were apparently formed at high stands of the fluctuating, although

falling, Atlantic Ocean and consist chiefly of sand and clay (Cooke 1936; Smith 1933:29). More recently, research by Colquhoun (1969) has refined the theory of formation processes, suggesting a more complex origin involving both erosional and depositional processes operating during marine transgressions and regression.

Cooke (1936) found that most of Hilton Head is part of the Pamplico terrace and formation, with a sea level about 25 feet above the present sea level. Colquhoun (1969), however, suggests that Hilton Head is more complex, representing the Princess Anne and Silver Bluff Pleistocene terraces with corresponding sea levels of from 20 to 3 feet.

Another aspect of Sea Island geology to be considered in these discussions is the fluctuation of sea level during the late Pleistocene and Holocene epochs. Prior to 15,000 B.C. there is evidence that a warming trend resulted in the gradual increase in Pleistocene sea levels (DePratter and Howard 1980). Work by Colquhoun et al. (1980) clearly indicates that there were a number of fluctuations during the Holocene. Their data suggest that as the first Stallings phase sites along the South Carolina coast were occupied about 2100 B.C. the sea level was about 3.9 feet lower than present. However, by 1600 B.C., when a number of Thom's Creek shell rings were occupied, the sea level had fallen to a level of about 7.2 feet lower than present levels. By the end of the Thom's Creek phase, about 900 B.C., the sea level had risen to a level 2.6 feet lower than present, but over 4.5 feet higher than when the shell rings were first occupied. Quitmyer (1985a) does not believe that the lower sea levels at 2100 B.C. would have greatly altered the estuarine environment, although drops of 10 feet would have reduced available tidal resources.

Data from the nineteenth and twentieth centuries suggest that the level is continuing to rise. Kurtz and Wagner (1957:8) report a 0.8 foot rise in Charleston, South Carolina sea levels from 1833 to 1903. Between 1940 and 1950 a sea level rise of 0.34 feet was again recorded at Charleston. These data, however, do not distinguish between sea level rise and land surface submergence.

Within the Sea Islands section of South Carolina the soils are Holocene and Pleistocene in age and were formed from materials that were deposited during the various stages of coastal submergence. The formation of soils in the study area is affected by this parent material (primarily sands and clays), the temperate climate, the various soil organisms, topography, and time.

The mainland soils are Pleistocene in age and tend to have more distinct horizon development and diversity than the younger soils of the Sea Islands. Sandy to loamy soils predominate in the level to gently sloping mainland areas. The island soils are less diverse and less well developed, frequently lacking a well-defined B horizon. Organic matter is low and the soils tend to be acidic.

The Holocene deposits typical of barrier islands and found as a fringe on some sea islands, consist almost entirely of quartz sand which exhibits little organic matter. Tidal marsh soils are Holocene in age and consist of fine sands, clay, and organic matter deposited over older Pleistocene sands. The soils are frequently covered by up to 2 feet of salt water during high tide. These organic soils usually have two distinct layers. The top few inches are subject to aeration as well as leaching and therefore are a dark brown color. The lower levels, however, consist of reduced compounds resulting from decomposition of organic compounds and are black. The pH of these marsh soils is neutral to slightly alkaline (Mathews et al. 1980:39-44). Historically, marsh soils have been used as compost or fertilizer for a variety of crops, including cotton (Hammond 1884:510) and Allston mentions that the sandy soil of the coastal region, "bears well the admixture of salt and marsh mud with the compost" (Allston 1854:13).

There are three main soil associations on Hilton Head. The Wando-Seabrook-Seewee association consists of excessively well drained to somewhat poorly drained sands found on the interior. The Fripp-Baratari association consists of excessively drained and poorly drained sands found along the Atlantic shore of the island. The Bohicket-Capers-Handsboro association consists of very poorly drained mineral and organic marsh soils (Stuck 1980).

The soils in the immediate vicinity of 38BU96 consist of the rapidly permeable Wando series which are composed of thick sandy coastal plain sediments found on high ground. The Wando sands are excessively well drained with the water table at least 6 feet below the surface throughout the year. The Cotton Hope main plantation complex is situated on well to moderately well drained Seabrook soils, while the slave settlement for the plantation (38BU1233) is situated on somewhat poorly drained Coosaw series soils.

Eight soil series occur within the approximated boundaries of the antebellum Cotton Hope Plantation. Two of these soil series (Seabrook and Wando) are well drained and account for 28.8% of the total area. The remaining six series (Baratari, Capers, Coosaw, Ridgeland, Rosedhu, and Williman) are all poorly drained and account for 71.2% of the Cotton Hope tract. Soil drainage may reasonably be expected to impact historic settlement patterns, as well as cultivation (and hence plantation wealth) during the colonial and antebellum periods. Plants such as indigo and cotton require well drained soils, while rice required flooding (and therefore soils capable of holding the water) (Hammond 1884; Hilliard 1984; Huneycutt 1949). A number of period accounts discuss the importance of soil drainage. Seabrook explained:

> subsoil so close as to be impervious to water; so that the excess of the rains of winter cannot sink. Nor can it flow off, because of the level surface. . . . The land thereby is kept thoroughly water-soaked until late in the

> spring. The long continued wetness is favorable only to the growth of coarse and sour grasses and broom sedge . . . acid and antiseptic qualities of the soil . . . sponge-like power to absorb and retain water . . . is barren, (for useful crops) from two causes - excessive wetness and great acidity. The remedies required are also two; and neither alone will be of the least useful effect, without the other also. Draining must remove the wetness - calcareous manures the acidity (Seabrook 1848:37).

Hammond expands on this mentioning that:

> drainage . . . has of necessity always been practiced to some extent. The remarkably high beds on which cotton is planted here, being from 18 inches to 2 feet high, subserve this purpose. The best planters have long had open drains through their fields. These were generally made by running two furrows with a plow and afterwards hauling out the loose dirt with a hoe, thus leaving an open ditch, if it made be so termed, a foot or more in depth (Hammond 1884:509).

Thus, while Cotton Hope had a large percentage of land unsuitable for the cultivation of most crops, it is clear that adequate drainage could be constructed. Ditching and draining, however, required constant attention and were relatively intensive plantation activities.

Floristics

Hilton Head today exhibits four major ecosystems: the coastal marine ecosystem where land has unobstructed access to the ocean, the maritime ecosystem which consists of the upland forest area of the island, the estuarine ecosystem of deep water tidal habitats, and the palustrine ecosystem which consists of essentially fresh water, non-tidal wetlands (Sandifer et al. 1980:7-9).

Mathews et al. (1980) suggest that the most significant ecosystem on Hilton Head is the maritime forest community. This maritime ecosystem is defined most simply as all upland areas located on barrier islands, limited on the ocean side by tidal marshes. On sea islands the distinction between the maritime forest community and an upland ecosystem (essentially found on the mainland) becomes blurred. Sandifer et al. (1980:108-109) define four subsystems, including the sand spits and bars, dunes, transition shrub, and maritime forest. Of these, only the maritime forest subsystem is likely to have been significant to either the prehistoric or historic occupants and only it will be further discussed. While this subsystem is frequently characterized by the dominance of live oak and the presence of salt spray, these are less noticeable on the sea islands than they are on the narrower

barrier islands (Sandifer et al. 1980:120).

The barrier islands may contain communities of oak-pine, oak-palmetto-pine, oak-magnolia, palmetto, or low oak woods. The sea islands, being more mesic or xeric, tend to evidence old field communities, pine-mixed hardwoods communities, pine forest communities, or mixed hardwood communities (Sandifer et al. 1980:120-121, 437).

Several areas of Hilton Head evidence upland mesic hardwood communities, also known as "oak-hickory forests" (Braun 1950). These forests contain significant quantities of mockernut hickories as well as pignut hickory. Other areas are more likely to be classified as Braun's (1950:284-289) pine or pine-oak forest. Wenger (1968) notes that the presence of loblolly and shortleaf pines is common on coastal plain sites where they are a significant sub-climax aspect of the plant succession toward a hardwood climax. Longleaf pine forests were likewise a common sight (Croker 1979).

Robert Mills, discussing Beaufort District in the early nineteenth century, stated:

> [b]esides a fine growth of pine, we have the cypress, red cedar, and live oak . . . white oak, red oak, and several other oaks, hickory, plum, palmetto, magnolia, poplar, beech, birch, ash, dogwood, black mulberry, etc. Of fruit trees we have the orange, sweet and sour, peach, nectarine, fig, cherry (Mills 1826:377).

He also cautions, however, that "[s]ome parts of the district are beginning already to experience a want of timber, even for common purposes" (Mills 1826:383) and suggests that at least 25% of a plantation's acreage should be reserved for woods. On Cotton Hope, it is reasonable that those areas of poorest drained soils were never exploited for cultivation, but were left in woods. These areas were probably not opened for cultivation until the twentieth century, after extensive late nineteenth and early twentieth century logging.

The estuarine ecosystem in the Hilton Head vicinity includes those areas of deep-water tidal habitats and adjacent tidal wetlands. Salinity may range from 0.5 ppt at the head of an estuary to 30 ppt where it comes in contact with the ocean. Estuarine systems are influenced by ocean tides, precipitation, fresh water runoff from the upland areas, evaporation, and wind. The tidal range for Hilton Head Island is 6.6 to 7.8 feet, indicative of an area swept by moderately strong tidal currents. The system may be subdivided into two major components: subtidal and intertidal (Sandifer et al. 1980:158-159). These estuarine systems are extremely important to our understanding of both prehistoric and historic occupation because they naturally contain such high biomass (Thompson 1972:9). The estuarine area contributes vascular

flora used for basket making, as well as mammals, birds, fish (over 107 species), and shellfish.

The last environment to be briefly discussed is the freshwater palustrine ecosystem, which includes all wetland systems, such as swamps, bays, savannas, pocosins and creeks, where the salinities measure less than 0.5 ppt. The palustrine ecosystem is diverse, although not well studied (Sandifer et al. 1980:295). A number of forest types are found in the palustrine areas which attract a variety of terrestrial mammals. On Hilton Head the typical vegetation consists of red maple, swamp tupelo, sweet gum, red bay, cypress, and various hollies. Also found are wading birds and reptiles. It seems likely that these freshwater environs were of particular importance to the prehistoric occupants, but probably of limited importance to historic occupants (who tended to describe them in the nineteenth century as "impenetrable swamps."

HISTORICAL OVERVIEW

Michael Trinkley

Previous Archaeological Studies

Hilton Head's historical sites have received surprising little detailed archaeological attention. The earliest record of archaeological investigations at a historic site on the island comes from the modest collections made from the Spanish Wells (38BU59/869/1163) and Baynard (38BU58/1161) plantation sites by Allen Calmes in the late 1960s. Regrettably, no notes, photographs, or other documentation survive from these investigations and the collections are, consequently, of little interpretative value.

In 1973 Stanley South conducted a four day project at the Indian Springs site (38BU24) on Hilton Head, about 2500 feet north of Cotton Hope. Work at the site was limited to the excavation of a 2-foot wide trench bisecting the site north-south and east-west, with each axis a total of 100 feet in length. This work revealed 83 features, including both prehistoric pits, post holes, and a possible palisade line, as well as historic pits. The historic remains from the site date from the late eighteenth through early nineteenth century, based on South's preliminary observations (South 1973). No historic research has been conducted for this area, although it appears likely that the site is of the same general time frame as a portion of the Cotton Hope site. The Indian Springs site, however, was destroyed by development activities before any additional research was conducted.

No additional historical archaeology of substance was conducted on Hilton Head until the 1986 excavations at the Mitchelville site (38BU805) by Chicora. Mitchelville is a freedmen's village originally established by the Union army in 1862 (Trinkley 1986). Investigations at the site provide detailed documentation of the architectural and material culture remains of Hilton Head's black population into the late nineteenth century. The work is particularly useful for comparing and contrasting slave and freed lifeways. While additional investigations have been conducted at another portion of the Mitchelville site by Brockington and Associates in 1989, no published report of this work is currently available.

Limited test excavations at the Drayton Fish Hall Plantation slave row (38BU806) were conducted by Chicora in 1989 (Trinkley 1989a). The excavation of three 5-foot units and the architectural recordation of standing tabby chimneys provides the only published archaeological documentation of a slave settlement on Hilton Head

Island. The artifact pattern analysis from this site closely resembles that of nineteenth century coastal slave sites and, as expected, is distinct from the patterns discovered at the freedmen's site of Mitchelville.

Although there is only limited comparative data available on Hilton Head Island, additional investigations have been conducted in the area, such as those at Haig Point Plantation on Daufuskie Island (Trinkley 1989b), Spring Island (Trinkley 1990), and Dataw Island (Grunden 1985). The published work from Haig Point provides information on a late antebellum slave row. Additional research in progress incorporates a second antebellum slave row, a portion of the original plantation house, a colonial slave settlement, and a postbellum structure. Work at Spring Island is limited to test excavations at the main plantation complex, but includes data from the early nineteenth century. Grunden's analysis of data from Dataw includes an examination of ceramics at two antebellum slave settlements and a postbellum tenant site.

Two articles summarize the progress of plantation archaeology (Fairbanks 1984; Otto 1984; see also Joseph 1989). Fairbanks emphasizes the slave archaeology conducted primarily on the Georgia coast by University of Florida researchers. These studies include Kingsley Plantation on Fort Georgia Island, Florida (Fairbanks 1974), Ryefield on Cumberland Island, Georgia (Asher and Fairbanks 1971), Cannon's Point, St. Simons Island, Georgia (Otto 1984), Hampton Plantation on Butler Island, Georgia (Singleton 1980), and the LeConte Plantation near Riceboro, Georgia (Hamilton 1980). Data from these projects have shed light on the socioeconomic status, diet, and housing of slaves. However, little has been learned about black ethnicity, burial practices, or creolization.

Orser's (1984) review is a critical evaluation of plantation archaeology, emphasizing three areas: plantation slavery, plantation social structures, and the value of cultural resource management studies. Several of his observations are significant to a complete understanding of recent plantation research. Orser notes that the work at Yaughan and Curriboo plantations in Berkeley County, South Carolina (Wheaton et al. 1983) addresses the process of slave acculturation as seen in the artifact patterns, architectural remains, and food preparation practices. Orser also contrasts the work of Otto (1984) and Sue Mullins-Moore (1981). Otto suggests that social status is observable in the archaeological record and notes that the archaeological remains of planter, overseer, and slave are all distinct. Mullins-Moore argues that it is perhaps economic position which is being observed archaeologically, so that the material culture of a small planter may be similar to that of an overseer at a large, wealthy plantation. The conclusion from this comparison is, of course, that history, as reflected in archaeological data, is not simple.

The work at Yaughan and Curriboo is perhaps the most useful

archaeological investigation at colonial period plantation sites in South Carolina (Wheaton et al. 1983), while Singleton's (1980) archaeological investigations at Butler Island and Otto's (1984) work from Cannon's Point remain the most useful comparative data from nineteenth century Georgia coastal plantations.

Historical Overview of the Beaufort Area

The Spanish Period

The first Spanish explorations in the Carolina low country were conducted in the 1520s under the direction of Lucas Vasquez de Ayllon and Francisco Gordillo. One of the few areas explored by Gordillo which can be identified with any certainty is Santa Elena (St. Helena). Apparently Port Royal Sound was entered and land fall made at Santa Elena on Santa Elena's Day, August 18, 1520. "Cape Santa Elena," according to Quattlebaum (1956:8) was probably Hilton Head (Hoffman 1984:423).

Gordillo's accounts spurred Ayllon to seek a royal commission both to explore further the land and to establish a settlement in the land called Chicora (Quattlebaum 1956:12-17). In July 1526 Ayllon set sail for Chicora with a fleet of six vessels and has been thought to have established the settlement of San Miguel del Galdape in the vicinity of Winyah Bay (Quattlebaum 1956:23). Hoffman (1984:425) has more recently suggested that the settlement was at the mouth of the Santee River (Ayllon's Jordan River). Ferguson (n.d.:1) has suggested that San Miguel was established at Santa Elena in the Port Royal area. Regardless, the colony was abandoned in the winter of 1526 with the survivors reaching Hispaniola in 1527 (Quattlebaum 1956:27).

The French, in response to increasing Spanish activity in the New World, undertook a settlement in the land of Chicora in 1562. Charlesfort was established in May 1562 under the direction of Jean Ribaut. This settlement fared no better than the earlier Spanish fort of San Miguel and was abandoned within the year (Quattlebaum 1956:42-56). Ribaut was convinced that his settlement was on the Jordan River in the vicinity of Ayllon's Chicora (Hoffman 1984:432). Recent historical and archaeological studies suggest that Charlesfort may have been situated on Port Royal Island in the vicinity of the Town of Port Royal (South 1982a). The deserted Charlesfort was burned by the Spanish in 1564 (South 1982a:1-2). A year later France's second attempt to establish its claim in the New World was thwarted by the Spanish destruction of the French Fort Caroline on the St. John's River. The massacre at Fort Caroline ended French attempts at colonization on the southeast Atlantic coast.

To protect against any future French intrusion such as Charlesfort, the Spanish proceeded to establish a major outpost in the Beaufort area. The town of Santa Elena was built in 1566, a

year after a fort was built in St. Augustine. Three sequential forts were constructed: Fort San Salvador (1566-1570), Fort San Felipe (1570-1576), and Fort San Marcos (1577-1587). In spite of Indian hostilities and periodic burning of the town and forts, the Spanish maintained this settlement until 1587 when it was finally abandoned (South 1979, 1982a, 1982b). Spanish influence, however, continued through a chain of missions spreading up the Atlantic coast from St. Augustine into Georgia. That mission activity, however, declined noticeably during the eighteenth century, primarily because of 1702 and 1704 attacks on St. Augustine and outlying missions by South Carolina Governor James Moore (Deagan 1983:25-26, 40).

The British Proprietory Period

British influence in the New World began in the fifteenth century with the Cabot voyages, but the southern coast did not attract serious attention until King Charles II granted Carolina to the Lords Proprietors in 1663. In August 1663 William Hilton sailed from Barbados to explore the Carolina territory, spending a great deal of time in the Port Royal area (Holmgren 1959). Almost chosen for the first English colony, Hilton Head Island was passed over by Sir John Yeamans in favor of the more protected Charles Town site on the west bank of the Ashley River in 1670 (Clowse 1971:23-24; Holmgren 1959:39).

Like other European powers, the English were lured to the New World for reasons other than the acquisition of land and promotion of agriculture. The Lords Proprietors, who owned the colony until 1719-1720, intended to discover a staple crop whose marketing would provide great wealth through the mercantile system, which was designed to profit the mother country by providing raw materials unavailable in England (Clowse 1971). Charleston was settled by English citizens, including a number from Barbados, and by Huguenot refugees. Black slaves were brought directly from Africa, as well as Barbados.

The Charleston settlement was moved from the mouth of the Ashley River to the junction of the Ashley and Cooper Rivers in 1680, but the colony was a thorough disappointment to the Proprietors. It failed to grow as expected, did not return the anticipated profit, and failed to evidence workable local government (Ferris 1968:124-125). The early economy was based almost exclusively on Indian trade, naval stores, lumber, and cattle. Rice began emerging as a money crop in the late seventeenth century, but did not markedly improve the economic well-being of the colony until the eighteenth century (Clowse 1971).

Meanwhile, Scottish Covenanters under Lord Cardross established Stuart's Town on Scot's Island (Port Royal) in 1684, where it existed for four years until destroyed by the Spanish. It was not until 1698 that the area was again occupied by the English.

Both John Stuart and Major Robert Daniell took possession of lands on St. Helena and Port Royal islands. The town of Beaufort was founded in 1711 although it was not immediately settled. Spring Island was granted to John Cockran in 1706 in two parcels of 500 acres each (S.C. Department of Archives and History, Colonial Series, Royal Grants, volume 39, page 6). One grant mentions that the land is "part of an Island over against Alatamaha Town."

While most of the Beaufort Indian groups were persuaded to move to Polawana Island in 1712, the Yemassee, part of the Creek Confederacy, revolted in 1715. By 1718 the Yemassee were defeated and forced southward to Spanish protection. Consequently, the Beaufort area, known as St. Helena Parish, Granville County, was for the first time relatively safe from both the Spanish and the Indians. The Yemassee, however, continued occasional raids into South Carolina, such as the 1728 destruction of the Passage Fort at Bloody Point on Daufuskie Island (Starr 1984:16). In the same year the English raid on St. Augustine succeeded in breaking the Spanish influence and the remnant Indian groups made peace with the English. The results for the Beaufort area, however, were mixed. While there was a semblance of peace, frontier settlements were largely deserted, population growth was slow, and the Indian trade was diverted from Beaufort to Savannah.

In 1728 a survey of the Port Royal area was conducted by Captain John Gascoigne and Lieutenant James Cook. Gascoigne's 1729 map ("A True Copy of A Draught of the Harbour of Port Royal"), based on this survey, identifies "Hilton Head Island," while Francis Swaine, using the same survey, identifies Hilton Head as "Trench Island" on his 1729 "Port Royal" map. By 1777 J.F.W. Des Barres produced a map entitled, "Port Royal in South Carolina," still using the 1728 Gascoigne-Cook survey, which identifies Hilton Head as "Trench's Island" (see Cumming 1974).

The British Colonial Period

Although peace marked the Carolina colony, the Proprietors continued to have disputes with the populace, primarily over the colony's economic stagnation and deterioration. In 1727 the colony's government virtually broke down when the Council and the Commons were unable to agree on legislation to provide more bills of credit (Clowse 1971:238). This, coupled with the disastrous depression of 1728, brought the colony to the brink of mob violence. Clowse notes that the "initial step toward aiding South Carolina came when the proprietors were eliminated" in 1720 (Clowse 1971:241).

While South Carolina's economic woes were far from solved by this transfer, the Crown's Board of Trade began taking steps to remedy many of the problems. A new naval store law was passed in 1729 with possible advantages accruing to South Carolina. In 1730 the Parliament opened Carolina rice trade with markets in Spain and

Portugal. The Board of Trade also dealt with the problem of the colony's financial solvency (Clowse 1971:245-247). Clowse notes that these changes, coupled with new land policies, "allowed the colony to go into an era of unprecedented expansion" (Clowse 1971:249). South Carolina's position was buttressed by the settlement of Georgia in 1733.

By 1730 the colony's population had risen to about 30,000 individuals, 20,000 of whom were black slaves (Clowse 1971:Table 1). The majority of these slaves were used in South Carolina's expanding rice industry. In the 1730 harvest year 48,155 barrels of rice were reported, up 15,771 barrels or 33% from the previous year (Clowse 1971:Table 3). Although rice was grown in the Beaufort area, it did not become a major crop in South Carolina until after the Revolutionary War. Rice was never a significant crop on the Beaufort Sea Islands, where ranch farming was favored because of its economic returns and favorable climate (Starr 1984:26-27). Elsewhere, however, rice monoculture shaped the social, political, and economic systems which produced and perpetuated the coastal plantation system prior to the rise of cotton culture.

Although indigo was known in the Carolina colony as early as 1669 and was being planted the following year, it was not until the 1740s that it became a major cash crop (Huneycutt 1949). While indigo was difficult to process, its success was partially due to it being complementary to rice. Huneycutt notes that planters were "able to 'dovetail' the work season of the two crops so that a single gang of slaves could cultivate both staples" (Huneycutt 1949:18). Indigo continued to be the main cash crop of South Carolina until the Revolutionary War fatally disrupted the industry.

A decade prior to the Revolutionary War, James Cook produced "A Draught of Port Royal Harbour in South Carolina" (1766) which identified 25 families on Hilton Head Island. This is significant in understanding the Colonial ownership of the island, since most property records were destroyed either in 1864 (by events during the Civil War) or in 1883 (by a fire).

During the Revolutionary War the British occupied Charleston for over two and one-half years (1780-1782). A post was established in Beaufort to coordinate forays into the inland waterways after Prevost's retreat from the Battle of Stono Ferry (Federal Writer's Project 1938:7; Rowland 1978:288). British earthworks were established around Port Royal and on Ladys Island (Rowland 1978:290). The removal of the royal bounties on rice, indigo, and naval stores caused considerable economic chaos during and after the war with the eventual "restructuring of the state's agricultural and commercial base" (Brockington et al. 1985:34).

The Antebellum Period

While freed of Britain and her mercantilism, the new United States found its economy thoroughly disrupted. There was no longer a bounty on indigo, and in fact Britain encouraged competition from the British and French West Indies and India "to embarrass her former colonies" (Huneycutt 1949:44). As a consequence the economy shifted to tidewater rice production and cotton agriculture. Lepionka notes that "long staple cotton of the Sea Islands was of far higher value than the common variety (60 cents a pound compared to 15 cents a pound in the late 1830s) and this became the major cash crop of the coastal islands" (Lepionka et al. 1983:20). It was cotton, in the Beaufort area, that brought a full establishment of the plantation economy. Lepionka concisely states that:

> [t]he cities of Charleston and Savannah and numerous smaller towns such as Beaufort and Georgetown were supported in their considerable splendor on this wealth . . . . An aristocratic planter class was created, but was based on the essential labor of black slavery without which the plantation economy could not function. Consequently, the demographic pattern of a black majority first established in colonial times was reinforced (Lepionka et al. 1983:21).

Mills, in 1826, provides a thorough commentary on the Beaufort District noting that:

> Beaufort is admirably situated for commerce, possessing one of the finest ports and spacious harbors in the world . . . . There is no district in the state, either better watered, of more extended navigation, or possessing a larger portion of rich land, than Beaufort: more than one half of the territory is rich swamp land, capable of being improved so as to yield abundantly (Mills 1826:367).

Describing the Beaufort islands, Mills comments that they were "beautiful to the eye, rich in production, and withal salubrious" (Mills 1826:372). Land prices ranged from $60 an acre for the best, $30 for "second quality," and as low as 25 cents for the "inferior" lands. Grain and sugarcane were cultivated in small quantities for home use while:

> [t]he principal attention of the planter is . . . devoted to the cultivation of cotton and rice, especially the former. The sea islands, or salt water lands, yield cotton of the finest staple, which commands the highest price in market; it has been no uncommon circumstance for such cotton to bring $1 a pound. In favorable seasons, or particular spots, nearly 300 weight has been raised from an acre, and an active field hand can cultivate upwards

of four acres, exclusive of one acre and half of corn and ground provisions (Mills 1826:368).

Reference to the 1860 agricultural census reveals that of the 891,228 acres of farmland, 274,015 (30.7%) were improved. In contrast, only 28% of the State's total farmland was improved, and only 17% of the neighboring Colleton District's farm land was improved. Even in wealthy Charleston District only 17.8% of the farm land was improved (Kennedy 1864:128-129). The cash value of Beaufort farms was $9,900,652, while the state average by county was only $4,655,083. The value of Beaufort farms was greater than any other district in the state for that year, and only Georgetown listed a greater cash value of farming implements and machinery (perhaps reflecting the more specialized equipment needed for rice production).

The record of wealth and prosperity, such as it was, is tempered by the realization that it was based on the racial imbalance typical of Southern slavery. In 1820 there were 32,199 people enumerated in Beaufort District, 84.9% of whom were black (Mills 1826:372). While the 1850 population had risen to 38,805, the racial breakdown had changed little, with 84.7% being black (83.2% were slaves). Thus, while the statewide ratio of free white to black slave was 1:1.4, the Beaufort ratio was 1:5.4 (DeBow 1853:338).

Civil War and the Postbellum

Hilton Head Island fell to Union forces on November 7, 1861 and was occupied by the Expeditionary Corps under the direction of General T.W. Sherman. Beaufort, deserted by the Confederate troops and the white towns-people, was occupied by the Union forces several weeks later. A single white person, who remained loyal to the Federal government, was found on Ladys Island (Johnson 1969:189). Hilton Head became the Headquarters for the Department of the South and served as the staging area for a variety of military campaigns. A brief sketch of this period, generally accurate, is offered by Holmgren (1959), while a similarly popular account is provided by Carse (1981). As a result of the Island's early occupation by Union forces, all of the plantations fell to military occupation, a large number of blacks flocked to the island, and a "Department of Experiments" was born. An excellent account of the "Port Royal Experiment" is provided by Rose (1964), while the land policies on St. Helena are explored by McGuire (1985).

Recently, Trinkley (1986) has examined the freedmen village of Mitchelville on Hilton Head Island. One result of the Mitchelville work was to document how little is actually known about the black heritage and postbellum history of the sea islands. Even the social research spearheaded by the University of North Carolina's Institute for Research in Social Science at Chapel Hill in the

early twentieth century (e.g. Johnson 1969, Woofter 1930) failed to record much of the activities on islands such as Hilton Head.

McGuire (1982, 1985) provides a detailed account of the land policies in the area during the Civil War and her studies should be consulted for detailed information. In general, however, blacks slowly came to own a large proportion of the available land. Certificates of possession were eventually issued for a number of the sea island plantations (McGuire 1982:36). During the postbellum period previous owners slowly came forward to reclaim, or redeem, land confiscated by the Federal government. The 1872 redemption process was not totally successful, partially because some tracts had such low value. By the 1890s a program was established to provide owners unsuccessful at either restoration or redemption with token compensation (McGuire 1982:77; S.C. Department of Archives and History, Secretary of State Records, Beaufort County Tax Claims, Direct Tax Compensation Book IX/2/4/3B).

During the late nineteenth century most of the sea island plantations continued as a rural, isolated agrarian communities. The new plantation owners attempted to forge an economic relationship with the free black laborers and found a multitude of problems, including the need to pay higher wages, increasing problems with the cotton boll weevil, and decreasing fertility. The letters of G.C. Hardy, the manager of the Eustis Plantation on nearby Ladys Island in the 1870s, clearly reveal the problems faced during this period. Hardy, in his letters to Frederic Eustis, discusses the rising labor costs and the serious losses of cotton to the boll weevil (South Caroliniana Library, Frederic A. Eustis Collection).

In the 1870s a new form of livelihood was introduced -- the mining of phosphate for fertilizer. While both land and river rock mining were conducted in South Carolina, the Beaufort area saw primarily river dredging to acquire the phosphate ore present as gravel, although land mining of phosphate nodules also took place (Mathews et al. 1980:27, 31). As the industry began to decline in the early twentieth century, blacks returned to agriculture and oyster factories.

Woofter (1930) provides information on the agricultural practices of the St. Helena blacks in the early twentieth century, noting that the population was largely stable, with most blacks remaining in the vicinity of their parents' "home" plantations (Woofter 1930:265). While islands, such as St. Helena, which were large and easily accessible began to change more rapidly during this period, the smaller, more isolated islands, such as Hilton Head, maintained very clear connections with the past which have been repeatedly documented through oral histories.

Cotton Hope Plantation

As previously mentioned, the early records for Beaufort County have been destroyed and colonial ownership on Hilton Head Island is very difficult to document. The several secondary sources available, such as Holmgren (1959) and Peeples (1970), provide only sketchy, and often contradictory, accounts (cf. Trinkley 1988:33-37). Consequently, our understanding of Cotton Hope Plantation prior to about 1838 is pieced together largely from oblique references, buttressed by logic and occasional nineteenth century documentation.

An early postbellum reference indicates that Cotton Hope was also known as "Scull Creek Plantation" (National Archives, Record Group 58, E114NC151, Application for Redemption by Eliza Woodward). This provides a starting point for the colonial history. In an effort to identify any memorial or plat for the plantation, the Combined Alphabetical Index at the South Carolina Department of Archives and History was consulted. While there were no listings for Scull or Skull Creek Plantation, there were numerous references to Scull and Skull Creek, since all place names occurring in memorials, deeds, and plats have been incorporated in the index. The available references were checked, but provided only limited assistance.

Benjamin Green was given a memorial for 200 acres of land on Skull Creek, originally part of John Bailey's 1725 patent, on August 10, 1768. The boundaries of the tract are listed as "Nward on land called Coll. Barnwell's [apparently part of Myrtle Bank Plantation, see Colonial Memorials, Volume 3, page 76, South Carolina Department of Archives and History] on the Westward on Scull Creek to the Eward & Sward on lands belonging to Alexander Trench" (Colonial Memorials, Volume 8, page 160). The rather general boundaries place this plantation in the vicinity of Cotton Hope and a Green is shown in this area by the 1775 Henry Mouzon map entitled "The Harbour of Port Royal" (Figure 3). Peeples (1970:2) mentions that a Samuel Green also lived on Hilton Head and owned Fish Hall and Colginse (Coggins) Point plantations in the first half of the eighteenth century.

It seems more likely, however, that the original owner of Cotton Hope or Scull Creek Plantation was Thomas Henry Barksdale, a view first advanced by Peeples (1970:9), although he also suggests that Barksdale pieced together the plantation from "lands formerly owned by Ladson, Talbird [Talbot], Flyer, Currel, Conyers, and Wallis [Wallace] families" (Peeples 1970:9). Unfortunately, this assertion cannot be documented at this time.

Barksdale died in 1832 and, although his will cannot be located in either Charleston or Beaufort, two legal cases involving the Barksdale estate provide some information. The first case, George Edwards et al. v. Martha S. Barksdale (Thomas' widow) et al.

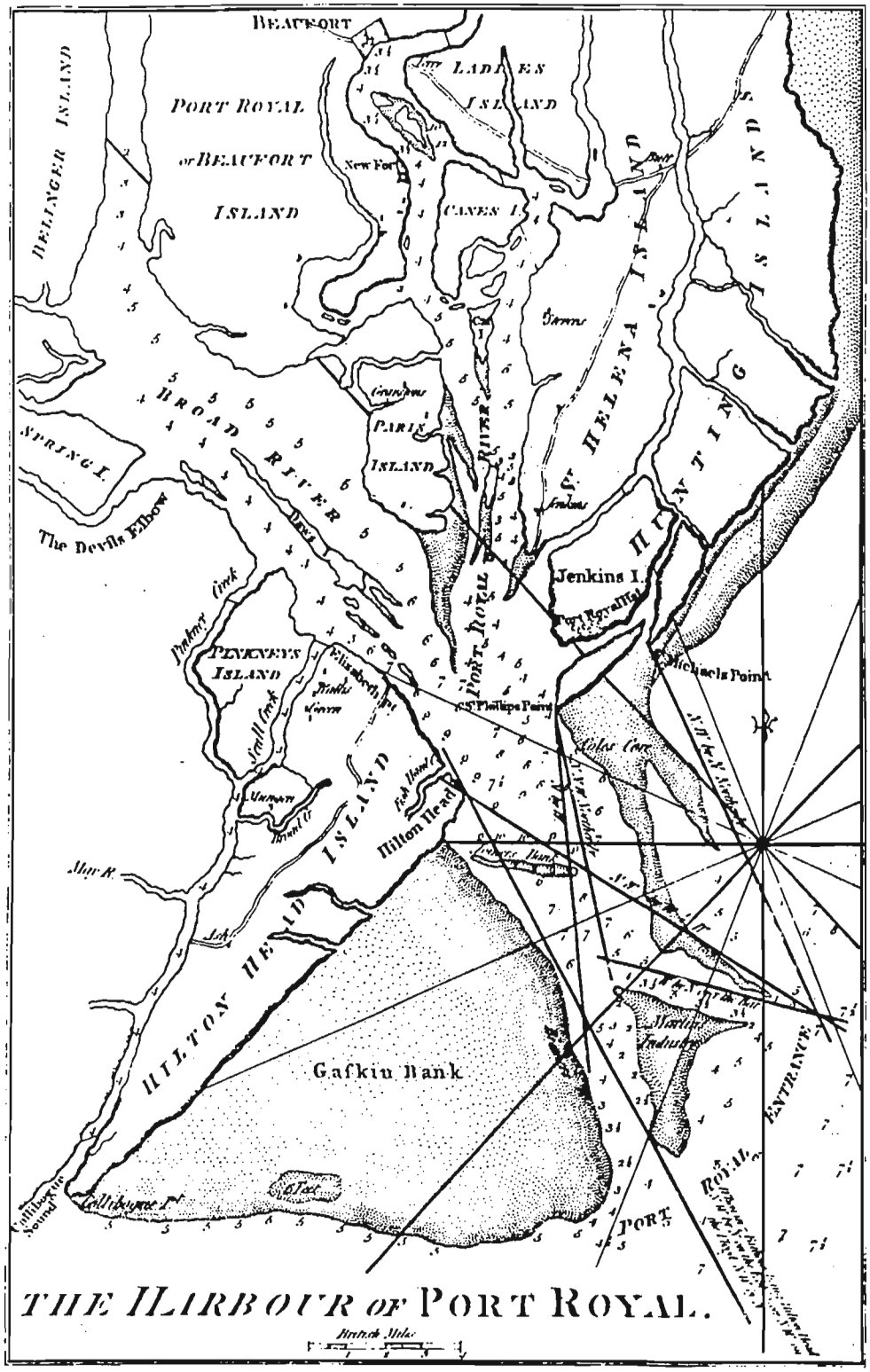


Figure 3. Hilton Head in 1775.

and Henry Bona v. Martha S. Barksdale et al. (2 Hill, Eq. 184) indicates that Thomas H. Barksdale was a minor when his father, George died around 1798. George Barksdale's will provided that his estate should pass to his daughter and son, although in the case of their death, or if they failed "to have issue," the estate would go to George Edwards. George Barkdale's daughter died in 1808, but Thomas Henry came of age and the estate was surrendered to him. When he died intestate in 1832, however, he left no children. George Edwards contested Martha S. Barksdale's inheritance of some aspects of the estate. Henry Bona claimed that he was more closely related to George Barksdale than the others and that the estate should go to him, rather than to the others. The court ruled, in 1835, that most of the claims by Edwards, Bona et al. should be dropped, although the next of kin arguments were sent back to the circuit court for a ruling.

The second case, involving the same parties as the first, but entitled George Edwards et. al. v. Martha S. Barksdale (2 Hill, Eq. 416), was heard in 1836. The court ruled that all of the plaintiffs were legitimate next of kin and should be included in the provisions of the estate settlement.

Barksdale's Inventory and Appraisement was not conducted until the court cases were settled (post dating March 1, 1836). The inventory describes "The Plantation at Scull Creek, on which the Dwelling House Stands, containing 2600 Acres, valued at £10,200." The acreage appears to have been altered and the 600 acre figure seems to be correct. Finally, the collection contains "A List of property of Est. of Thomas H. Barksdale appraised and divided by Wm. Pope, Senr., James B. Sealy, & Wm. E. Baynard, Esq. on 18 March 1836 between Mrs. M.S. Barksdale, Widow and the next of kin agreeably to an order of the Court of Equity." The next of kin (which would have included Thomas B. Bona, George Edwards, Mary Holbrook, Mrs. Coe, and Mrs. Kirk) received "the plantation at Scull Creek with Dwelling House of 600 acres" (Lawton Family Papers, South Caroliniana Library). Significantly, the 600 acre figure is again used for this plantation.

Lawton, as Administrator for Thomas Henry Barksdale's estate, entered into at least two agreements with Peter Broughton, in April 1835 and December 1835, to "take charge of the plantation of said Estate at Scull Creek" (Lawton Family Papers, South Caroliniana Library). Lawton apparently continued to serve in some administrative capacity since there is a payment made to George Edwards as late as 1839 for the hire of a servant for a month "to take charge of Scull Creek Plantation" (Alexander J. Lawton Estate Accounts, South Caroliniana Library).

It seems likely, since the Scull Creek Plantation became the property of multiple heirs, that it was sold sometime in the 1830s. Unfortunately, no deed, either in Charleston or Beaufort, has been identified. A deed for the purchase of Seabrook Plantation by

William Seabrook from Joseph Wallace in 1833, however, states that the property borders lands of William Pope to the south (Charleston County RMC, DB Q10, p. 74). The application for redemption of Cotton Hope Plantation after the Civil War states that William Pope owned the property "23 years before the War," indicating a purchase date of 1838. While none of this evidence is conclusive, and each piece offers a slightly different date, it does strongly suggest that Pope acquired the property from the Barksdale heirs sometime in the 1830s, perhaps as early as 1833 or as late as 1838.

William E. Pope, or Squire Pope as he was also known, owned a number of plantations on Hilton Head, including Coggins Point, Point Comfort, Leamington, Piney Woods, as well as Cotton Hope. In addition, Pope purchased the Daufuskie Island Haig Point Plantation as late as 1850 (Trinkley 1989b). The 1850 Agricultural Census for St. Lukes Parish lists four properties owned by Pope, all probably on Hilton Head Island. It, however, has not been possible to match these with the known plantations on Hilton Head Island. It is possible, therefore, only to examine Pope's agricultural activity in general terms. These four plantations incorporated a total of 3250 acres, 1750 acres (54%) of which were improved. The value of Pope's holdings were listed as $33,000, with an additional $1950 of agricultural equipment. Pope reported a total of 74 bales of cotton (one bale per 23 acres of improved land), 2700 bushels of corn, 7360 pounds of rice, 550 bushels of peas and beans, and 2600 bushels of sweet potatoes.

In comparison, Pope's neighbor to the north, James B. Seabrook, produced 52 bales of cotton on 400 acres of improved land (or one bale per 7 acres of improved land) as well as 1850 bushels of corn, 800 bushels of peas and beans, and 2500 bushels of sweet potatoes, although no rice was produced. While this comparison can only suggest that Pope was not as efficient as some of his neighbors, Pope himself wrote on January 23, 1859:

> I assure you I have been greatly discouraged at my want of success in planting for some years past - instead of improving, I seem to do worse. The last year I thought I had the best prospect of a crop I had for years at the three plantations on H.H. down to August. I shall realize lefs than half of what seemed to be a very moderate calculation - were it not for breaking up old cherished afsociations, and almost destroying home affections, it would be to the interest of my family to sell out my whole property, if I could get the proceeds judiciously & safely invested - negroes are selling so high, would be a great inducement, but I doubt if my Lands would bring half what they cost me (South Carolina Historical Society, Pope Correspondence File 11-550).

When Hilton Head fell to Union forces in November 1861, William Pope and his family took refuge in Sandersville, Georgia,

where he died in 1862 (Bailey et al. 1986:1296). A March 20, 1862 letter from Gertrude Pope Woodward informed Heppy (Heph J. Pope), one of Pope's granddaughters, of his death, remarking, "his health was bad for a long time - but the loss of his property, & the loss of his grandchildren, all coming upon him at once, was more than he could bear, [and] he soon sunk under the weight of his afflictions" (South Carolina Historical Society, Pope Correspondence File 11-550).

Pope's property, including Cotton Hope, was confiscated by the Federal Government when the advertised taxes were not paid. The plantation, listed as 400 acres by the Direct Tax Commission and valued at $1600, was sold to the Federal Government for $1000 (National Archives, Record Group 217, Records of the Beaufort, S.C. Tax District, Valuation Volume; Senate Documents, 1st Session, 47th Congress, Executive Document 82).

The plantation is described by a Union soldier early in the 1860s:

> the plantation of "Square Pope," as the negroes called him, was a lovely place indeed. The fine old southern mansion was situated in a large grove of live oak trees, with ample grounds neatly fenced. Large groves of orange trees, whose fragrance filled the air and gave ample evidence of the home of contentment and wealth, but the occupants had fled and left their household goods to the mercy of the soldiers. Two spacious libraries were in the house, filled with books. Heavy plate glass mirrors and fine oil paintings adorned the walls, which together with the rich furniture, made the place seem too good to be destroyed by the ruthless hand of war (Cadwell 1875:29-30).

Captain A.P. Ketchum, with the Freedmen's Bureau, indicated that in 1867 Cotton Hope consisted of 1250 acres, 400 of which were cultivated (perhaps explaining the low acreage listed by the District Tax Commission), 150 acres of which were cleared but not cultivated, and 700 acres in woodlands. The only structures reported were "quarters," probably a reference to the slave quarters. Why the main house was not listed is unknown (Monthly Report of Lands, South Carolina, June 1867, S.C. Department of Archives and History). In July 1867, Ketchum listed the population of the plantation at 216 (Monthly Report of Lands, South Carolina, July 1867, South Carolina Department of Archives and History).

The 1862 "Preliminary Chart of Calibogue Sound and Skull Creek" (Figure 4) shows a diffuse occupation broken into three loci. The first locus, to the south, consists of the main house and the technical nucleus of the plantation. A series of 26 structures are observed in an area measuring about 1320 by 825 feet (or 25 acres). A portion of this area is defined by archaeological site

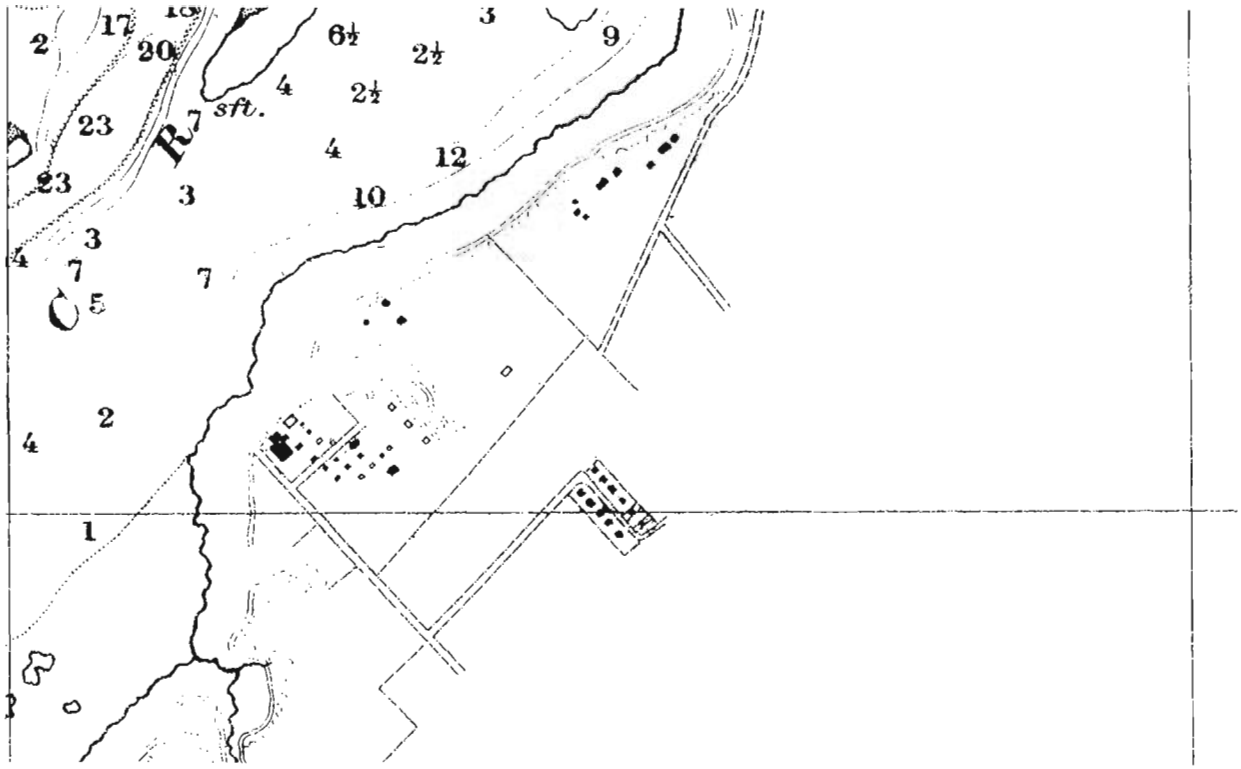


Figure 4. Cotton Hope Plantation in 1862.

38BU834. The second locus is situated to the east and is a slave settlement represented by a double row of 11 structures. This locus measures about 260 by 130 feet and has been defined archaeologically as 38BU1233. The third locus, known as 38BU96, is situated to the northeast and consists of eight irregularly arranged structures scattered over an area 460 by 130 feet.

Some additional information concerning Pope's holdings is provided by a claim made by the estate of William Pope for a "plantation." Review of the claim, however, suggests that it represents a compilation of the property owned by Pope on Hilton Head. The claim lists 201 slaves, 11 bales of cotton from the 1860 crop valued at $1650, three bales from that same crop which were not packed valued at $300, 100 bales from the 1861 crop valued at $15,000, 300 bushels of corn valued at $3000, 15,000 oranges valued at $750, 18,000 sheets of peas, potatoes, rice, 150 head of turkeys, $150 worth of fowls, 50 head of geese, and 20 guinea fowls. Livestock included 15 horses, 10 mules, 100 cows, 60 sheep, and 100 hogs. The furniture in the Cotton Hope Plantation house was valued at $1000. Also claimed was a library of books valued at $2000, a flat valued at $150, five wagons and seven carts, one small flat valued at $100, one "10-oared boat" valued at $700, two "8-oared boats" valued at $1200, four "5-oared boats" valued at $1500, and three boats valued at $450 (Abstract of Property in the

State of South Carolina lost by the Citizens thereof from the War, South Carolina Historical Society, File 34/309/1-2).

During the Civil War, Cotton Hope was leased by the Federal Government. An undated document signed by G. Pinckney, "Gen'l Supt., 3rd Div" stated that:

> Messrs. Vail and Fowler occupy all the available portions of . . . Cotton Hope . . ., employing the people thereon. They employ two men as plowmen, by the month. These they have ordered up; the others are employed by the day (National Archives, Record Group 393, Part 1, 4195, Engineers Orders Received).

An 1874 letter by District Tax Commissioner William Cloutman states that Cotton Hope Plantation was being leased by the Federal Government on a year-by-year basis (National Archives, Record Group 58, E114NC151, Application for Redemption). While not specific, it seems probable that the Tax Commission, by the 1870s, was leasing the tract directly to freedmen.

The 1873 Coast Chart 55 shows the Cotton Hope site with relatively few changes. The main house and many of the associated outbuildings were still standing. The slave settlement to the east was intact, and six of the eight structures at 38BU96 were still standing (Coast of South Carolina and Georgia, Hunting Island to Ossabaw Island, South Carolina Department of Archives and History).

At least by 1868 Pope's wife, Sarah, had returned to the Beaufort area and was living in Bluffton. In one letter Sarah Pope remarked:

> our village is very dull, everybody seems discouraged at the times and finding it so hard to live - It is a great pity for this is such a pleasant place to live at, if it were only the same that it was before the war (South Carolina Historical Society, Pope Correspondence File 11-550).

None of her letters, however, mention any of the former plantations. The redemption of Cotton Hope for the Pope heirs was handled by two attorneys, Fred P. Stanton and I.S. Farrow and the property was returned to Eliza Woodward, Admx. of the Estate of William Pope, Sr. on July 31, 1874 (Beaufort County RMC, DB 8, p. 450; Certificate of Redemption 140).

Eliza Woodward held the property until March 8, 1889 when she sold her interest in the 1000 acre plantation to John E. Woodward, another heir (Beaufort RMC, DB 16, p. 272). John Woodward also obtained deeds from Stanton and Farrow for their interest in the property (Beaufort County DB 15, p. 266, 267) on January 24, 1887, as well as the interest of Heph J. Pope and nine other heirs in the

property (February 2, 1889; Beaufort County RMC, DB 16, p. 271, 272).

After consolidating the property, John Woodward sold the plantation to his wife, Mary M. Woodward on December 11, 1889. The tract was described as bounded to the "north by Currill's plantation land lines, on the East by lands belonging to the Estate of R.C. McIntire, dec'd on the South by Grahams and Stoney Plantations and on the West by Scull Creek" (Beaufort County RMC, DB 16, p. 495). The reference to the eighteenth century "Currill's plantation" seems to be out of place, especially since the other boundaries are all clearly based on nineteenth century neighbors.

John and Mary Woodward appear to have had no intention of maintaining Cotton Hope as a working plantation. The Woodwards, living in Atlanta, may have had no desire or insufficient capital to hold the tract as one working plantation. John Woodward had sold several tracts prior to deeding the property to his wife (Beaufort County RMC, A.O. Christensen files). Less than a year after Mary Woodward was deeded the property, she began to sell off tracts ranging in size from 1/2 to 25 acres to Hilton Head freedmen. A series of fourteen deeds are still extant for these transactions, with evidence of at least an additional six transactions. It is likely that there were many more since the known deeds account for less than 200 of the 1000 acres (Beaufort County RMC, DB 17, pp. 45, 81; DB 19, pp. 101, 158, 505, 517, 541, 564, 631; DB 21, p. 735; DB 24, pp. 90, 637; DB 30, p. 99; DB 54, p. 198). Known purchasers include Isaac Jones, William Jones, Thomas Young, Sr., Gilbert Miller, Patz Brothers, Martha Fields, Polly Fields, William Simmons, Ben H. Wiggens, J.R. Hutson, Abram Fields, Gelzer Williams, Binah Collins, Edward Murry, Tony Smalls, John Miller, and Dave Williams.

The identified deeds indicate that the plantation had been divided into a variety of parcels, or lots, designated by both upper and lower case letters, double letters, and numbers. This would suggest that there were a minimum of 74 lots laid out. Many of the deeds make reference to a plat of the plantation by J. Reed Stoney, dated June 10, 1891, and in the "hands of Cuffy Fields for the use of each and every purchaser." Unfortunately, it has not been possible to locate a copy of this plat.

Holmgren (1959) suggests that Woodward also sold several large portions of Cotton Hope to Roy A. Rainey. No evidence of this transaction has been found, although William P. Clyde sold 9000 acres of Hilton Head real estate to Rainey on April 17, 1917 (Beaufort County RMC, DB 17, p. 61). This sale appears to include a significant portion of Cotton Hope, although it was not clearly listed. Rainey, in turn, sold the same parcel to Landon K. Thorne and Alfred C. Loomis on May 21, 1931 (Beaufort County DB 48, p. 117). In 1951 Thorne and Loomis sold their holdings on Hilton Head Island to Olin T. McIntosh, et al. (Beaufort County RMC, DB 70, p.

55). That same year McIntosh and his partners formed Honey Horn Plantation and sold the 9174 acres of highland and 985 acres of marsh to the corporation (Beaufort County RMC, DB 72, p. 495).

During this period of land acquisition and speculation several plats of the island are available. The first, produced for Thorne and Loomis and based on an unidentified 1930 A.O. Christensen survey, shows that about half of the Cotton Hope tract is in private ownership, while the remainder is incorporated into the Thorne and Loomis holdings (Beaufort County RMC, PB 8, p. 15) (Figure 5). A 1950 plat of Honey Horn Plantation shows identical boundaries and again indicates that while a portion of the Cotton Hope Plantation was sold to small black farmers, a large portion was maintained intact (Beaufort County RMC, PB 12, p. 56) (Figure 6). None of these plats show any structures in the vicinity of the main house, the slave settlement, or the area of site 38BU96. The 1945 edition of the Hilton Head topographic map (Figure 7) also reveals that the plantation had fallen into ruins prior to the early twentieth century. Figure 7 also reveals the different land use pattern on the Honey Horn tract (where there are very few structures and on the main portion of Cotton Hope (where there are numerous structures relating to the earlier division of the tract).

In 1957 Honey Horn Plantation sold the property to the Hilton Head Company for $1.00 (Beaufort County RMC, DB 88, p. 129). It was also necessary to clear the title by obtaining a deed for the same property from Olin T. McIntosh et al. (Beaufort County RMC, DB 88, p. 131; see also PB 33, p. 119). The tract which incorporates 38BU96 is today owned by the Hilton Head Plantation Partnership and is known as Area Q (Beaufort County RMC, DB 434, p. 37; PB 33, p. 119).

Cotton Hope Plantation has been impacted by a number of developments, as shown by Figure 8. The main house area (38BU834) has been heavily damaged by both commercial and residential developments, while the slave settlement to the east (38BU1233) has been at least partially destroyed by a mobile home park. Only the diffuse settlement to the north (38BU96) has remained undisturbed since the nineteenth century.

Summary

The historical record for Cotton Hope is sparse and offers few clear statements. It is possible that a colonial plantation was established in the immediate area as early as the mid-eighteenth century, and Thomas Henry Barksdale had certainly established a working farm in the Cotton Hope area, known as Scull Creek Plantation, by the last quarter of the eighteenth century. Although there is no record of Barksdale's activities at this plantation, his inventory suggests a man of wealth. Holmgren quotes a period account describing the property of Benjamin Guerard, "those famed, healthy and pleasantly located indigo lands on Scull Creek"

Figure 5. Area of Cotton Hope Plantation in the 1930s.

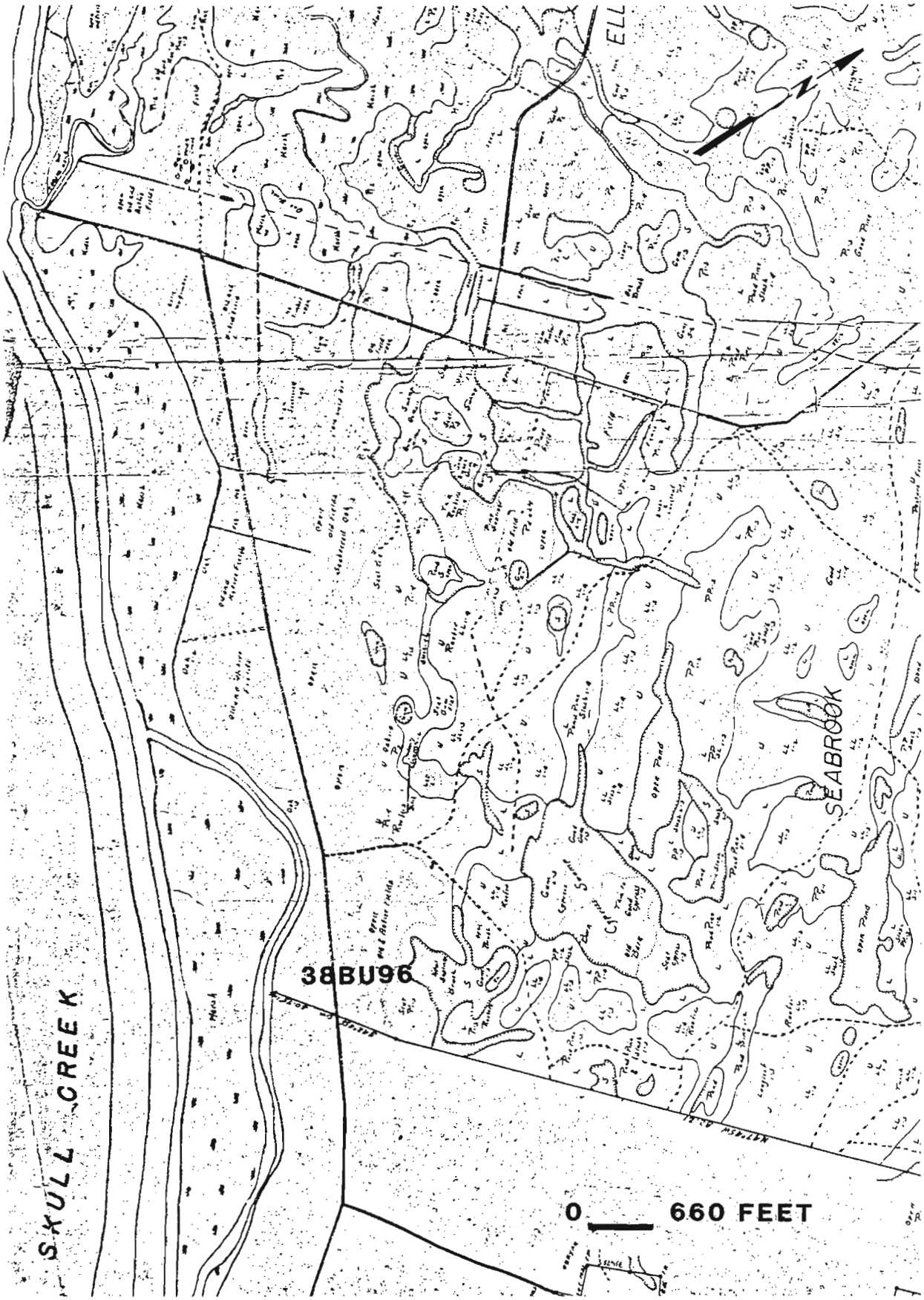


Figure 6. Area of Cotton Hope Plantation in the 1950s.

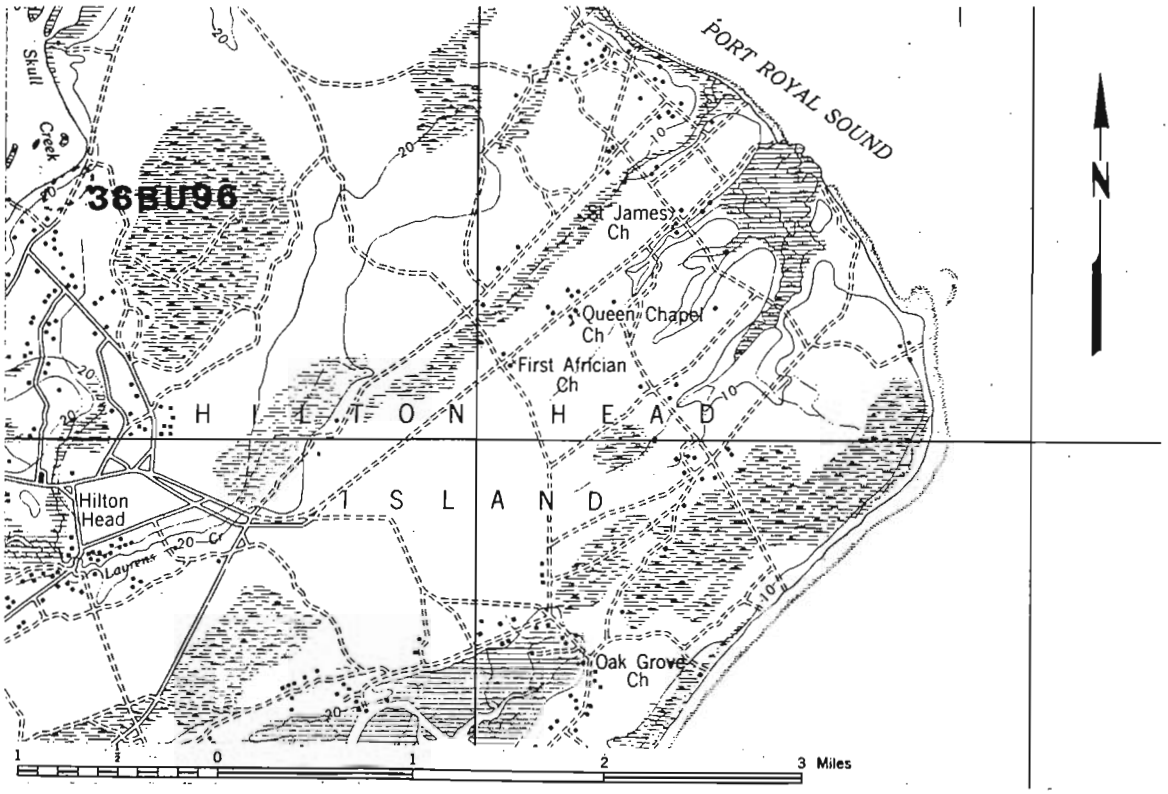


Figure 7. A portion of the 1945 Hilton Head topographic map.

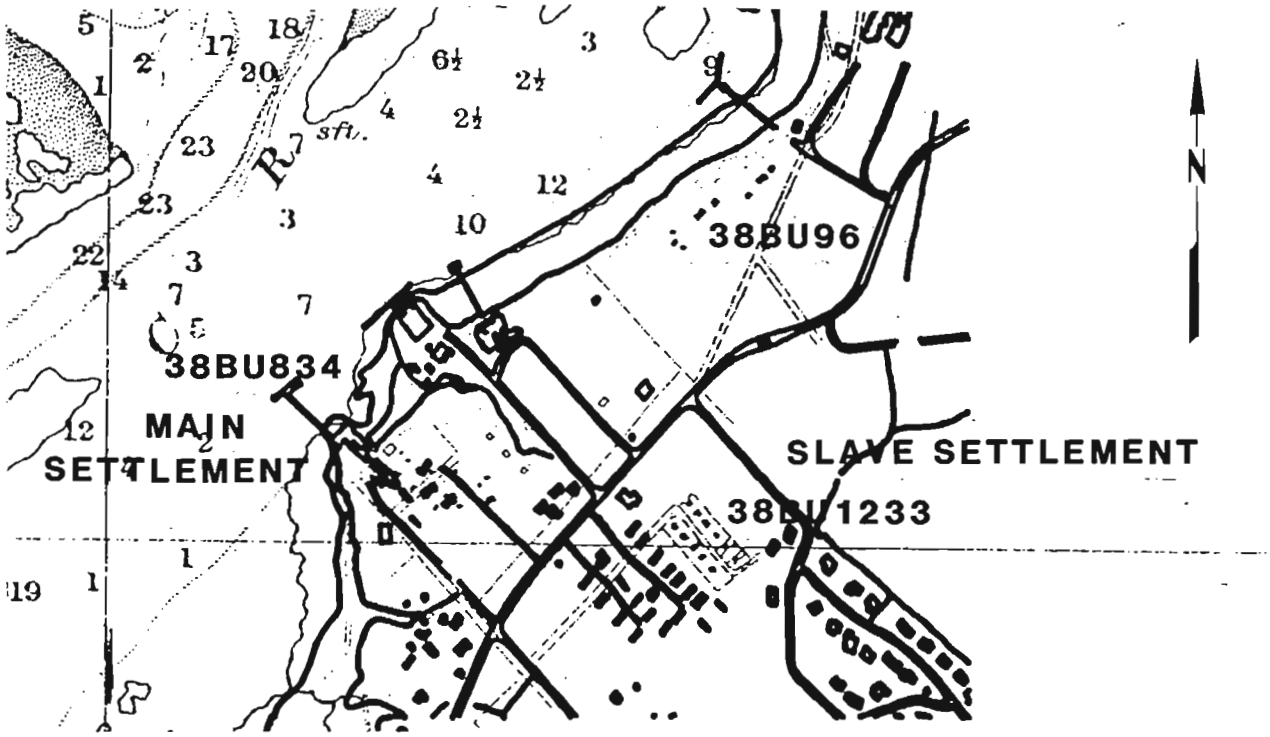


Figure 8. An overlay of the 1862 Cotton Hope map on modern Hilton Head developments.

(Holmgren 1959:59). It is therefore likely that Barksdale also relied on indigo as the cash crop.

Sometime in the 1830s William Pope acquired the tract and named the plantation Cotton Hope. It appears, however, that Pope's dream of wealth from cotton monoculture was just that -- an unfulfilled hope. Pope was relatively unsuccessful at agriculture, although his inventory indicates that he was a wealthy, if not successful, Hilton Head planter. When Hilton Head Island fell to Union troops in 1861, Cotton Hope was abandoned and eventually purchased by the United States Government. From about 1861 through 1874 the property was leased, both to overseers and eventually to tenants, for cotton farming.

Shortly after the property was redeemed by the Pope heirs, the plantation was subdivided and sold to freedmen. A portion of Cotton Hope (containing 38BU96) was maintained intact and eventually found its way into the major development of Hilton Head. The remainder of the plantation, however, is still divided into small parcels owned by primarily Blacks.

EXCAVATIONS

Michael Trinkley

Strategy and Methods

As previously discussed, site 38BU96 was first examined by Chicora Foundation in 1987. That initial survey resulted in the recommendation that the site be considered eligible for inclusion in the National Register of Historic Places (Trinkley 1987), although no subsurface investigations were conducted. Additional work at the site was conducted by Chicora Foundation in 1988, including the excavation of 53 1-foot square shovel tests along two transects parallel to the Skull Creek marsh (Figure 9). This work allowed site boundaries to be established and confirmed that the site was eligible for inclusion in the National Register (Trinkley 1988). Artifacts recovered from this phase of investigations provided a mean ceramic date of 1810 and suggested a relatively low status domestic occupation. Some additional investigations were conducted at the site, including the excavation of additional

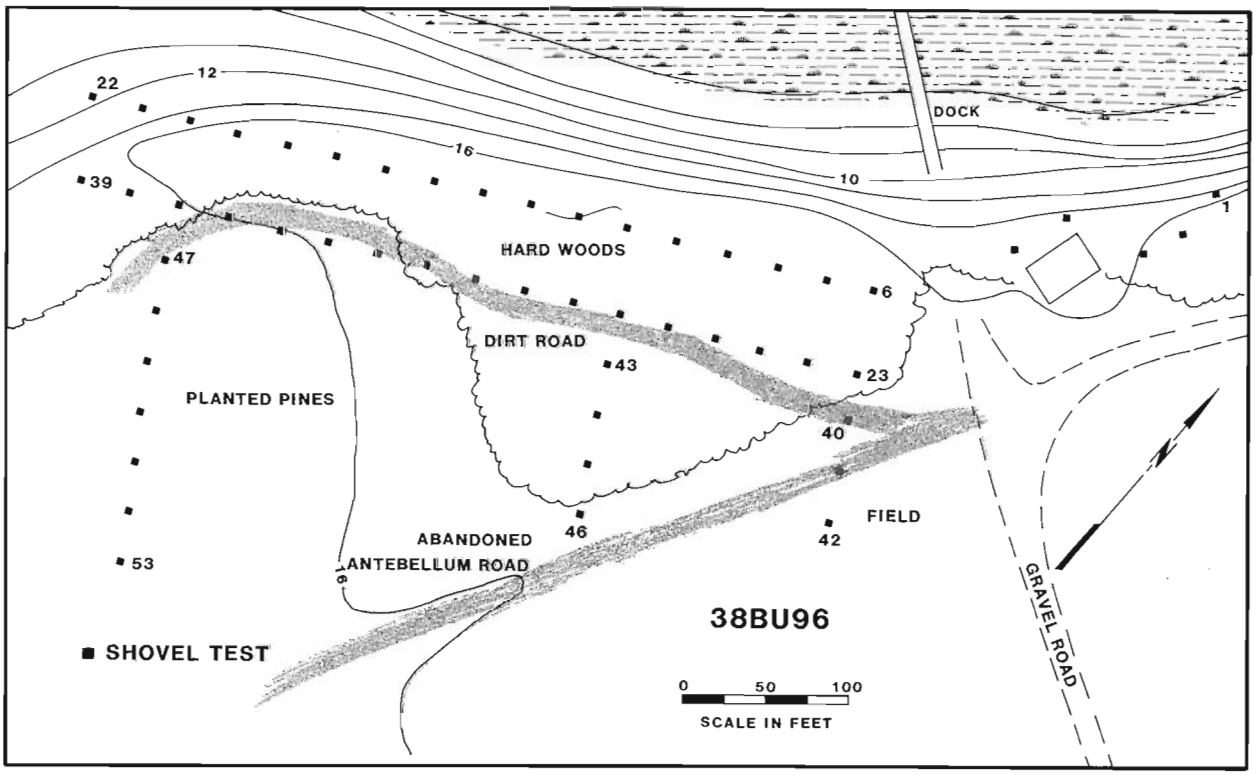


Figure 9. Chicora investigations at 38BU96 in 1988.

shovel tests and several 3-foot (or 1-meter) units, by the firm of Brockington and Associates in 1989. Neither the developer of the property nor the Environmental and Historical Museum of Hilton Head Island have received information on the materials recovered or the associated field notes, and the Brockington and Associates investigations therefore are not incorporated into this study.

The first phase of the current investigations involved the completion of an auger test survey at 25 foot intervals. These data would be used to generate computer density maps of the site in order to guide the second phase of the investigations -- block excavations of significant site areas.

An auger survey was chosen over the more traditional shovel testing for several reasons. Auger testing has been found to be less destructive to the archaeological remains and to also be more efficient than individual shovel tests (see Trinkley 1990). The 25-foot interval was selected based on previous work at slave settlements with intervals ranging from 10 to 50 feet. These studies have revealed that intervals of 50 or more feet provide very little structure specific data, allowing only gross site boundaries to be established. Intervals of 25 feet generally tend to provide adequate definition of structural remains, although decreasing interval distance tends to increase definition capability. The 25-foot interval was selected as the maximum acceptable for the study at Cotton Hope.

Block excavations using hand dug and screened 10-foot units were chosen at Cotton Hope, rather than large scale stripping, for several reasons. The first was grounded in the various local ordinances intended to protect vegetation on Hilton Head Island. Town officials have expressed considerable reservations concerning large scale stripping because of the likelihood of causing serious damage to live oaks. The second reason related to the environmental and aesthetic damage caused by such operations in a development oriented area. It is both difficult and costly to restore large site areas after such mechanized stripping. The final reason for conducting detailed, hand excavation relates to the nature of the archaeological record. Chicora has recently investigated several eighteenth and nineteenth slave settlements where the bulk of the architectural evidence was found in the upper foot of the soil, with very few data being found as features or post holes in the subsoil. The data recovered included traditional artifacts, such as window glass and nails, which have long been used by historical archaeologists for structural reconstructions. In addition, structural evidence such as plaster, mortar with wattle or lath impressions, mortar log chinking, and similar materials tend to be largely confined to the upper zones of the site. Large scale stripping would have removed much of the data with greatest interpretative value for architectural studies.

It was for very similar reasons that site stripping was not

proposed after the completion of the block excavations -- such activities have the potential for damaging site vegetation, restoration is complex and expensive, and the process is likely to contribute little additional information because structural remains tend to be ephemeral.

Auger Testing

The auger test grid, oriented S55°30'W, was placed parallel to the marsh edge. Grid north, therefore, is 55°30' off magnetic north. Based on the 1862 map of Cotton Hope, it was anticipated that this grid also would follow the same orientation as the antebellum structures (see Figure 4). The grid was tied into several nearby permanent points in order to maintain long-term horizontal control over the site. Two iron rebars with aluminum caps were established for this work, although it is likely that the proposed development activities will destroy these stations.

The site was marked out into 25-foot grid units for the auger survey, with each point numbered from west to east and south to north. Initially a total of 182 auger points were laid in over an area measuring 250 feet by 500 feet. This grid was eventually expanded to the south by an additional 22 auger tests in an area 100 by 175 feet (Figure 10).

The auger testing was conducted with a two-person power auger equipped with a 10-inch bit. Each test was augered to a depth of 1.5 to 2.0 feet. All soil was screened through 1/4-inch mesh and all remains, including brick, shell, mortar, and tabby, were collected. Measured profile drawings of all auger tests were collected and the tests were then backfilled.

Materials from these tests were sorted in the field laboratory, with brick, shell, tabby, and mortar weighed and discarded. Historic artifacts were counted, although no attempt was made to distinguish between artifact classes for the purpose of the computer maps. The tabby, mortar, and brick weights were combined (since all three represent structural remains) and this information, as well as the tabulated artifact data, served as the basis for the computer density maps generated by Demiurge Electronics of Beaufort, South Carolina (Figures 11 and 12).

The density maps revealed five areas of artifact concentrations and six areas of structural remains, three of which correlated with the artifact concentrations. One area of "structural" remains on the east edge of the site, however, represents an isolated brick recovered from the auger testing. This false concentration clearly demonstrates the need to compare the computer generated maps with the data and auger test notes. These maps, available during the first week of the field investigations were used to guide the placement of various block excavations.

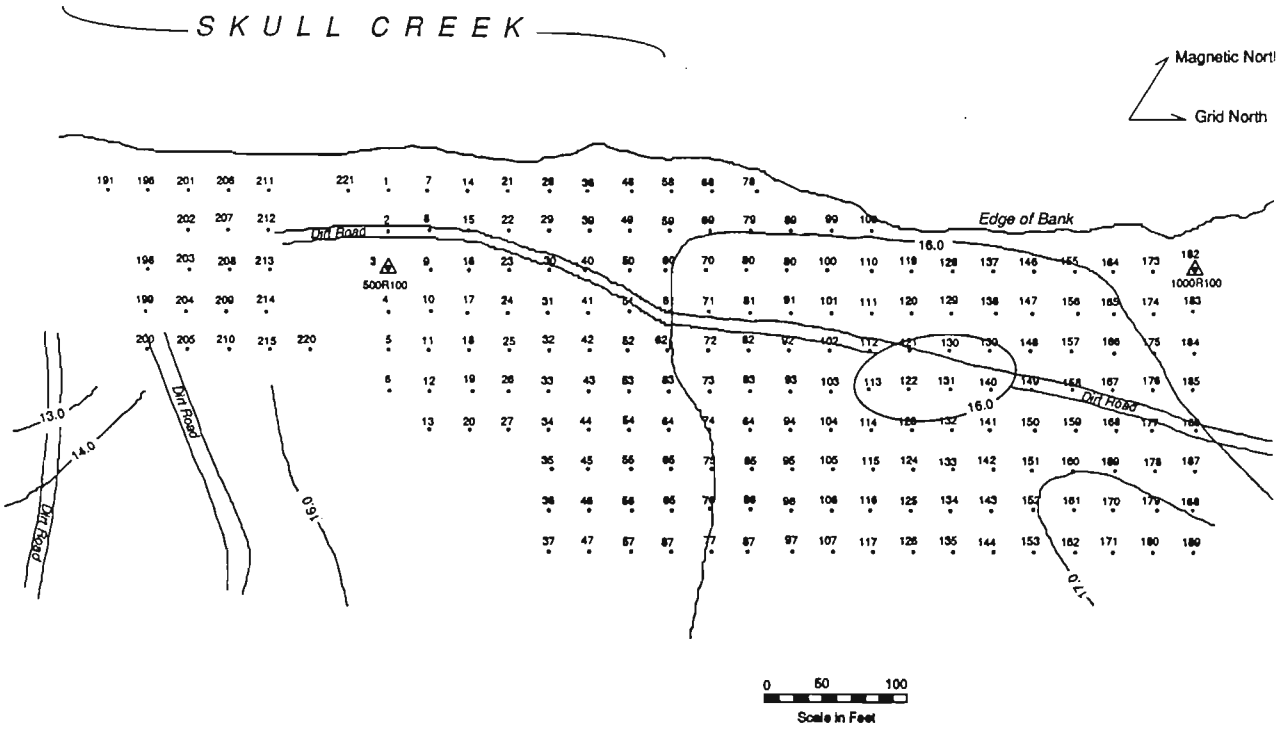


Figure 10. 38BU96, auger testing grid.

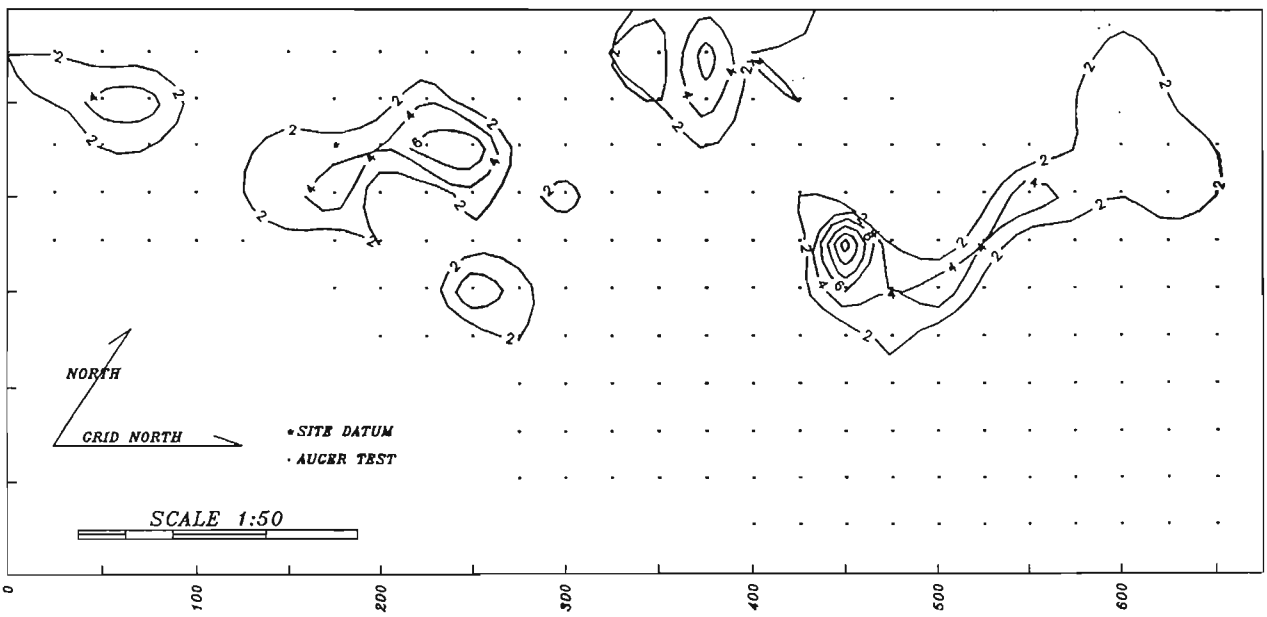


Figure 11. Artifact density map for 38BU96.

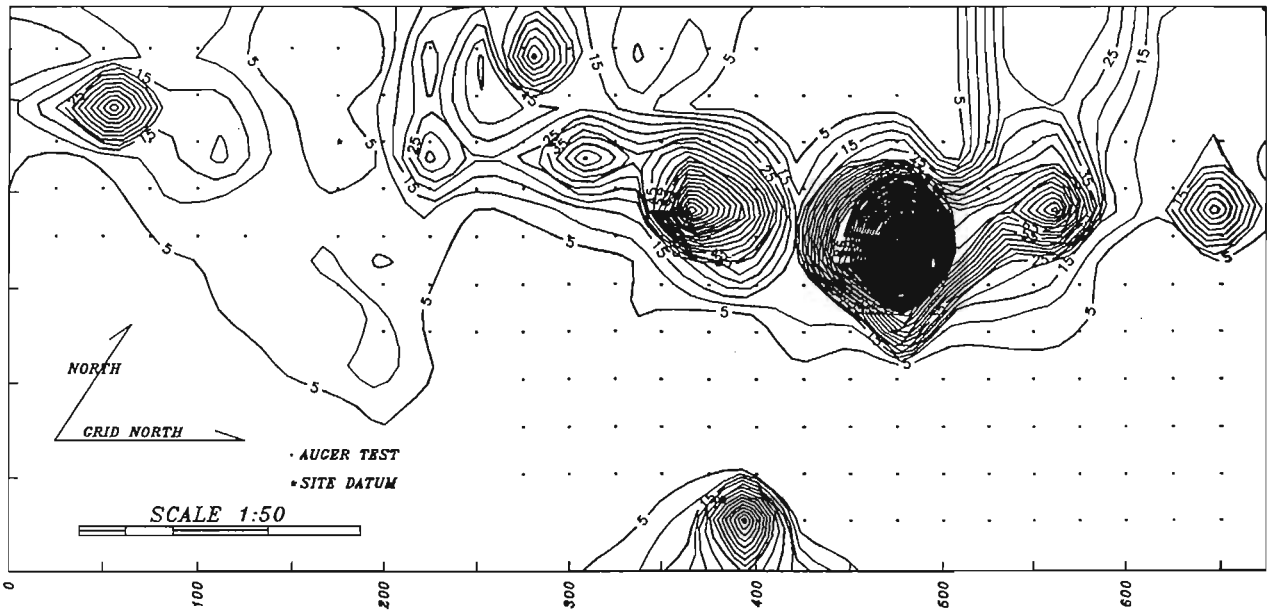


Figure 12. Brick, mortar, and tabby density map for 38BU96.

Block Excavations

The previously established auger test grid served as the basis for the general site grid (Figure 13). A modified Chicago 10-foot grid was established, with each square designated by its southwest corner from a 0R0 point off site. Auger Test 182 at the north edge of the site was designated 1000R100, while Auger Test 3 at the south edge of the site was designated 500R100. Thus, square 800R200 would be located 800 feet north and 200 feet right (or east) of the 0R0 point (or 300 feet north and 100 feet right of the 500R100 point).

Vertical control at the site was maintained through the use of an elevation datum established in the center of the site by Chicora. Elevations are expressed in feet above mean sea level (MSL) as determined by reference to the established datum (18.59 feet MSL marked by a nail at the base of a live oak tree). This system allows widely separated areas of the site to be precisely compared and the vertical controls can be easily re-established in the future.

Soil from the block excavations was screened through 1/4-inch mesh using mechanical sifters. Soil from the two shell middens encountered was screened through 1/8-inch mesh to improve the recovery of small faunal remains. Wing and Quitmyer (1985:57)

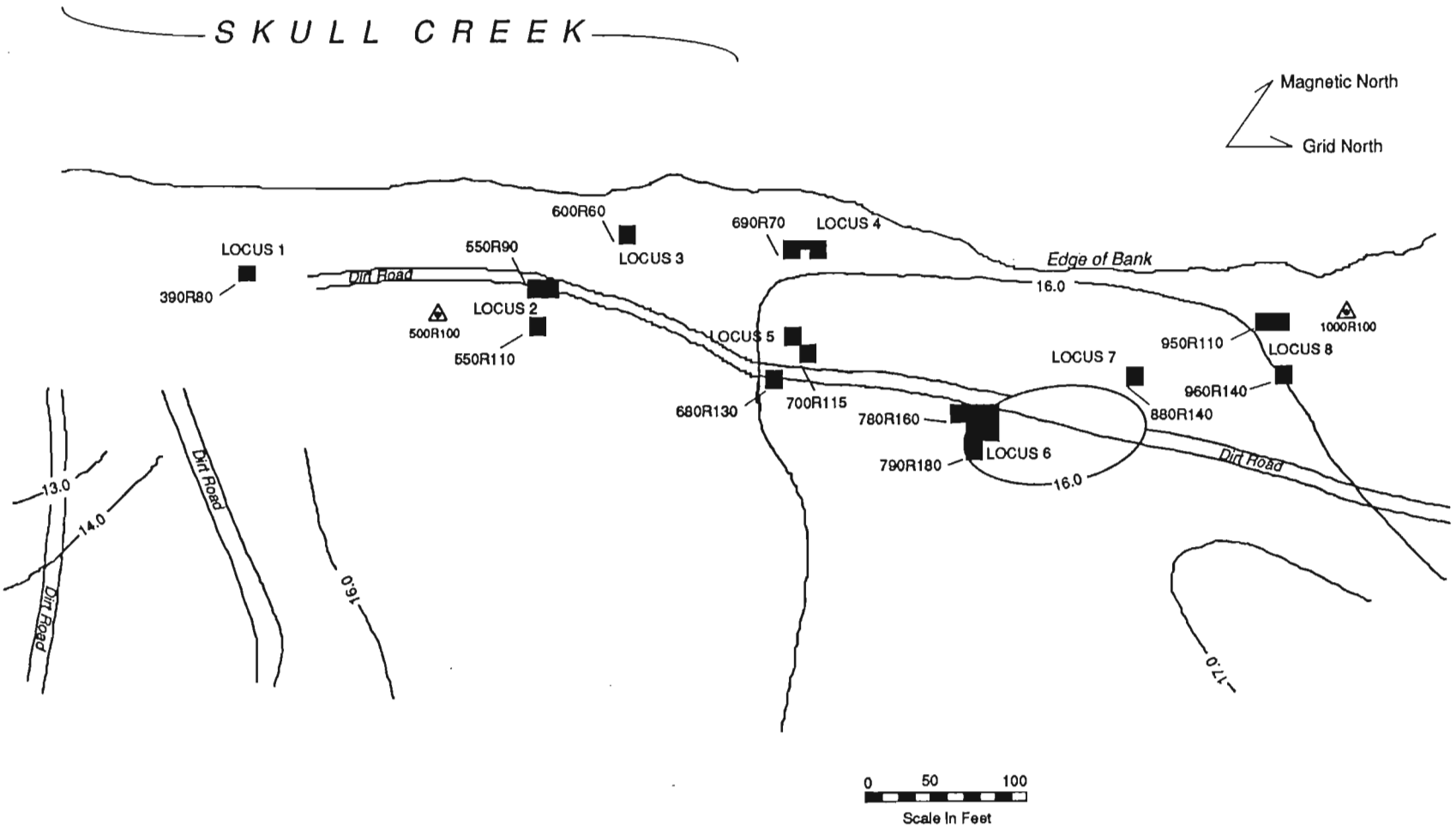


Figure 13. 38 BU96 site plan.

note that the percentage of fish, relative to other organisms, increases from 34% with the use of 1/4-inch mesh to 76% with the use of the finer 1/8-inch mesh. While ideally water screening through 1/16-inch mesh would be used for faunal recovery, this approach was not logistically feasible at 38BU96.

A 2.25 foot square sample of the two identified shell middens was weighed prior to sifting and the shell, collected for analysis, was weighed after screening. This provided a quantified statement of shell density for each of the middens and also provided a uniform shell midden sample for specialized analysis. Brick, mortar, tabby, and shell were quantified by weight in the field and discarded (except for selected samples).

Units were troweled at the top of the subsoil, photographed in black and white and color, and plotted. Excavation was by natural soil zones and soil samples were routinely collected. Features were usually bisected, with both small soil samples (approximately 2 quarts) and flotation samples (5 gallons) collected. Features were excavated by natural soil zones and were separately photographed, plotted, and profiles drawn during their removal. The feature fill was dry screened through 1/8-inch mesh to improve the recovery rate of faunal materials.

Field notes were prepared on pH neutral, alkaline buffered paper and photographic materials were processed to archival standards. All original field notes, with archival copies, are curated at the Environmental and Historical Museum of Hilton Head Island as Accession Number 1990.4. All specimens have been evaluated for conservation needs and have been treated prior to curation (this process is discussed in greater detail in a following section of this discussion).

Archaeological Remains

Stratigraphy

Stratigraphy at the site was relatively uniform. Typically only one zone, consisting of brown humic sand overlying a mottled tan to yellow sand subsoil, is found at the site. Zone 1 varied from about 0.7 to 0.9 foot in depth. Evidence of plowing is limited to unit 550R100 which is situated on the edge of a field of planted pine. The remainder of the site is within a maritime live oak forest which has received only minimal disturbance and does not appear to have been plowed. Zone 1 appears to be a mixture of the original humus soil at the site and more recent deposition. Mixing is probably the result of natural activities.

Occasionally the typical Zone 1 soils were underlain by a slightly lighter brown sand with a reduced quantity of tabby or mortar rubble. Where such soils could be identified they were designated Zone 2 and they appear to represent the original humus

at the site capped by the tabby rubble of Zone 1. Zone 2 was rarely over 0.3 foot in depth and in areas evidencing Zone 2 soil, Zone 1 tended to be 0.2 to 0.3 foot in depth.

Locus 1

This locus, at the south end of the site in an area of moderate to heavy disturbance caused by the construction of the Melrose dock at Salty Fare, was defined as an area of both dense artifact and rubble (see Figures 11 and 12). Given the extensive disturbance, only one unit (390R80) was excavated in this locus. The excavations revealed a dense accumulation of primarily mid-nineteenth century remains within the brown sandy loam of Zone 1, although brick and mortar was not as dense as anticipated given the computer mapping (see Table 1). No clear evidence of structural remains was encountered, although numerous tree disturbances were found at the base of Zone 1. No additional work was conducted in this area.

Locus 2

This locus, also at the south end of the site, was revealed by the auger tests to be a dense artifact and rubble area (Figures 11 and 12). Examination of the area, however, revealed that about half of the locus is situated in the heavily plowed planted pine field, while the remainder is in the vicinity of a dirt road. This area had been previously defined by shovel testing in 1988.

Excavations in this area included three 10-foot units, 550-560R90 and 550R110. Unit 550R110 was situated entirely within the area of planted pines and exhibited a recent plow zone about 0.9 foot in depth. The Zone 1 deposits in the other two units were less disturbed and were about 0.6 foot in depth. The base of each unit consisted of a heavily mottled yellow to tan sand subsoil. Tabby rubble was very dense in 550-560R90, but declined dramatically to the east, probably because of the extensive plowing (see Table 1).

Excavation in these units revealed a complex arrangement of tabby features (Figure 14) which have been interpreted to represent two distinct structures. Artifacts from this area, however, suggest only a mid-nineteenth century date, so it is likely that the two structures are representative of a short time period. A series of three features were identified in the excavation, as well as two post holes.

Feature 5 is a tabby fire box (Figures 14 and 15) measuring 5.7 by 4.1 feet. This feature is interpreted to represent Structure 1. This feature was encountered about 0.1 foot below the current ground surface and is the source for the bulk of the tabby rubble recovered in the excavations at this locus. The fire box is oriented due magnetic east-west and the remains are 0.38 foot in

Table 1.
Rubble Weights from Excavated Units.

Unit	Brick/Mortar	Tabby	Shell
390R80	5.0		199.0
550R90	19.0	510.0	
550R110	10.0		116.0
560R90	26.0	467.0	
600R60	2.0		143.0
680R130	4.0		14.0
690R70	11.0		357.0
700R65	3.0		136.0
700R115	208.0		151.0
704R70	10.0		653.0
780R160	6.0		366.0
790R160	13.0		178.0
790R170	50.0		263.0
790R180	34.0		151.0
800R160	8.0		94.0
800R170	67.0		385.0
880R140	61.0		174.0
950R110	5.0		426.0
960R110	6.0		507.0
960R140	1.0		11.0

weight rounded to the nearest whole pound.

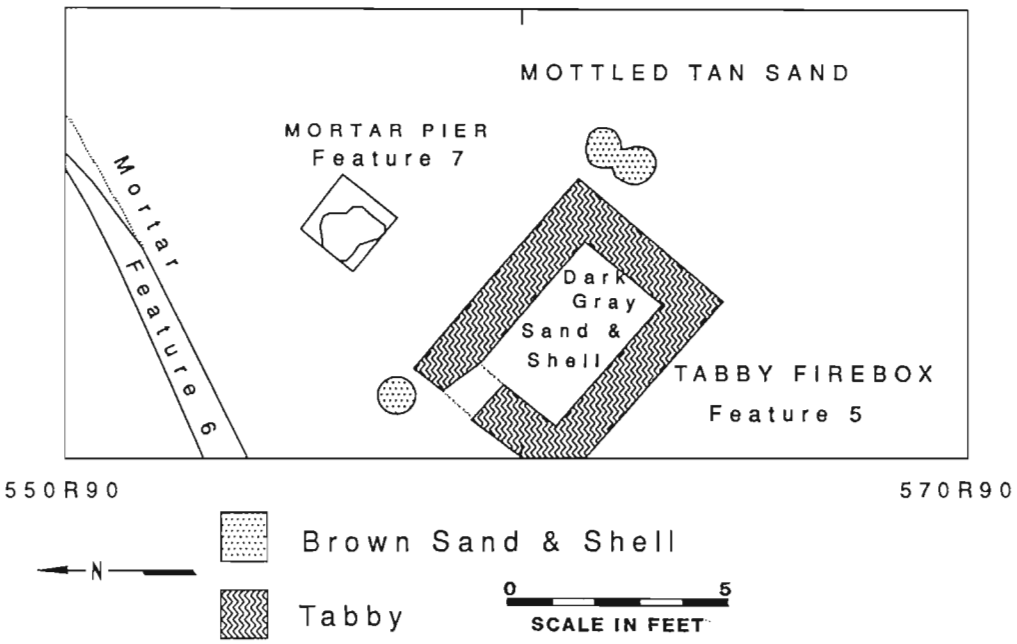


Figure 14. Locus 2 excavations.

Figure 15. Feature 5, tabby fire box of structure 5, view to the southeast.

depth (representing only about 1/5th of a typical tabby pour, based on similar tabby chimneys examined in the Beaufort area). The exterior edges of the tabby were relatively well defined, although the interior edges showed evidence of extensive damage, probably from the heat associated with the fire box. The interior of the feature was filled with a dark brown sand which graded into the yellow sand typical of the subsoil. This dark sand is interpreted to be a leach zone from the hearth area at a higher elevation. While there is no clear archaeological evidence of this structure, other similar tabby fire boxes were filled with shell and the hearth was paved with either brick or a mortar slurry.

At the northwest and northeast edges of the fire box were two large post holes. The northwestern example consisted of a single hole about 0.7 foot in diameter and 0.8 foot in depth. The northeastern example consisted of two posts (suggesting replacement) with the first 1.0 foot in diameter and 0.8 foot deep, while the intrusive post was about 0.7 foot in diameter and 1.3 feet deep. These posts are interpreted to represent piers for the structure associated with this building. Their placement would indicate that Structure 1 extended to the southeast (or magnetic east) from the fire box. No corner pier was observed in 550R110, but the depth of plowing was greater than the depth that the piers were originally set. Consequently, it is impossible to speculate on the size of Structure 1, although the archaeological remains

clearly indicate that it was of frame construction with glassed windows and was domestic in nature.

To the north of Feature 5, a segment of a wall, evidenced by a mortar footing designated Feature 6, was found in 560R90. This feature has a different orientation than Feature 5 and is therefore designated as Structure 2 (Figure 14). This feature was found at the base of Zone 1 and averaged 0.8 foot in width. Upon excavation it was found to be a maximum of 0.25 foot thick. The mortar was apparently poured into a shallow trench and was used as a footing for a brick wall a maximum of two bricks in width. The maximum exposed length of this wall is 7.5 feet, with the feature more heavily damaged to the northeast (by plowing) than to the southwest.

Associated with Feature 6 is a small mortar base measuring 1.5 feet square and designated Feature 7 (Figure 14). It has the same orientation as the wall and consists of a bed of mortar about 0.1 foot in depth.

The wall designated Feature 6 is rather poorly constructed and it seems unlikely that it could have been very substantial. Regardless, both the wall and the associated pier have been robbed out and underlie Structure 1. This tentatively suggests that Structure 2 predates Structure 1, although not by a considerable amount given the artifacts recovered from this area. In addition, the demolition of Structure 2 was accompanied by a change in the orientation of structures in this portion of the site.

Locus 3

This locus, situated adjacent to the bluff edge at the south end of the site, was identified on the computer maps as an area of low artifact density but high brick and mortar density (Figures 11 and 12). One unit, 600R60, was excavated in this area. This unit consisted of a brown humic sand Zone 1 overlying a yellow sand subsoil. Excavation revealed a low density of brick and mortar (see Table 1), suggesting that the computer density map had been skewed by a single, aberrant auger test. Artifact density is relatively low and there is only limited evidence of structural remains (no historic features were encountered). The recovered material dates from the first quarter of nineteenth century and this portion of the site, adjacent to the bluff edge, may represent a refuse area.

Toward the base of the unit the quantity of prehistoric ceramics increased and several possible prehistoric pits were observed at the base of the unit, but were not excavated due to a lack of field time. The abundant shell recovered from this unit is probably related to the heavily disturbed prehistoric occupation.

Locus 4

This locus is situated in the central area of the site, adjacent to the marsh edge. It was originally shown on the computer generated density maps as an area of high artifact density but only moderate brick and mortar (Figures 11 and 12). A series of two units (690R70 and 704R70) and an inset (700R65) were excavated in this area (Figure 16). Brick and mortar was sparse in these units, although the shell density was quite high but tended to decrease toward the south (Table 1). Zone 1 was the typical brown humic loam, while the subsoil was a mottled tan sand.

Recovered were abundant domestic artifacts spanning the late eighteenth and early nineteenth centuries. In addition, evidence of two structures (Structures 3 and 7) were encountered. Structure 3 is documented by a series of eight post holes and a dripline (Feature 11). Seven of these post holes form a portion of the structure's western wall and are oriented north-south on the grid. Six of these posts are consistent in profile, being about 1.4 foot in diameter and from 0.4 to 0.9 foot in depth. The seventh post hole appears to be for a replacement post and is only 1.0 foot in diameter. The eighth post hole is on the north end of the structure and is generally consistent with those on the west side. Spacing of these posts is somewhat inconsistent, varying from 1.5 to 3.0 feet along the west wall and about 5.0 feet along the north wall. Feature 11 consists of a shallow (0.4 foot) depression filled with brown sand which parallels the north wall of the structure. It appears to represent a dripline. The southern extension at the west end may relate to roof construction or may be an erosional drainage area at the corner of the structure.

Given the number of support posts, and their size, it is likely that Structure 3 was a fairly massive building. The posts were probably used to support a sill raised off the ground several feet. Both window glass and nails are uncommon in this block, suggesting that the structure may have had pegged construction, perhaps with subsequent repair using machine cut nails. The drip line suggests a gable roof construction, with the gable end facing the marsh. This structure architecturally appears to have been utilitarian, although the archaeological evidence is more suggestive of a domestic dwelling. Alternatively, the domestic material present in this area may be the result of dumping activities on the bluff edge. Materials found within Feature 11, the dripline, indicate that the structure was used during the first quarter of the nineteenth century.

Structure 7 is situated immediately north of Structure 3 in unit 704R70 and is represented by only the corner of a shallow trench designated Feature 10 (Figure 16). This feature was identified at the base of Zone 1 and was found to be a maximum of 0.44 foot in depth. Its width ranges from 1.5 to 2.2 feet. The fill contained very few artifacts, although the one lead glazed slipware

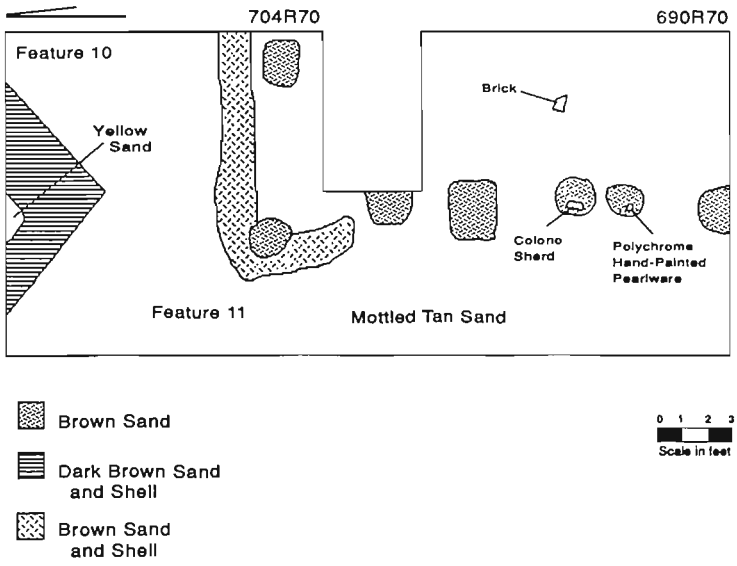


Figure 16. Locus 4 excavations.

ceramic found suggests an early eighteenth century date. This feature, which indicates a structure oriented northeast-southwest on the grid, appears to represent a shallow wall trench. It is similar to Feature 12, associated with Structure 4 (discussed below).

Locus 5

This locus is situated in the central area of the site, east of Locus 4. It was revealed during auger tests as an area of dense rubble, but low artifact content (Figures 11 and 12). The area was explored by the excavation of three 10-foot units (680R130, 690R105, and 700R115) shown in Figure 17. These excavations revealed a small, tightly confined area of material dating from the last quarter of the eighteenth century associated with dense mortar rubble (Table 1).

Zone 1 varied from 0.7 to 1.0 foot in depth and overlaid a mottled yellow to tan subsoil. The most noticeable aspect of the associated mortar rubble were fragments of chinking (Figure 18) similar to those found at an eighteenth century structure on Daufuskie Island (Trinkley 1989b). While no indication of a structure was found at the base of Zone 1 in 680R130, excavation in 700R115 revealed three features (Features 12, 13, and 14) providing evidence of Structure 4. Unit 690R105 was excavated to verify the continuation of Feature 12 and to trace the length of the structure.

Feature 12 represents a trench up to 0.4 foot in depth forming the west and north edges of Structure 4. This trench is about 1.1 foot in width and the long axis is oriented northeast-southwest (the same as Feature 10 of Structure 7, discussed above). In the

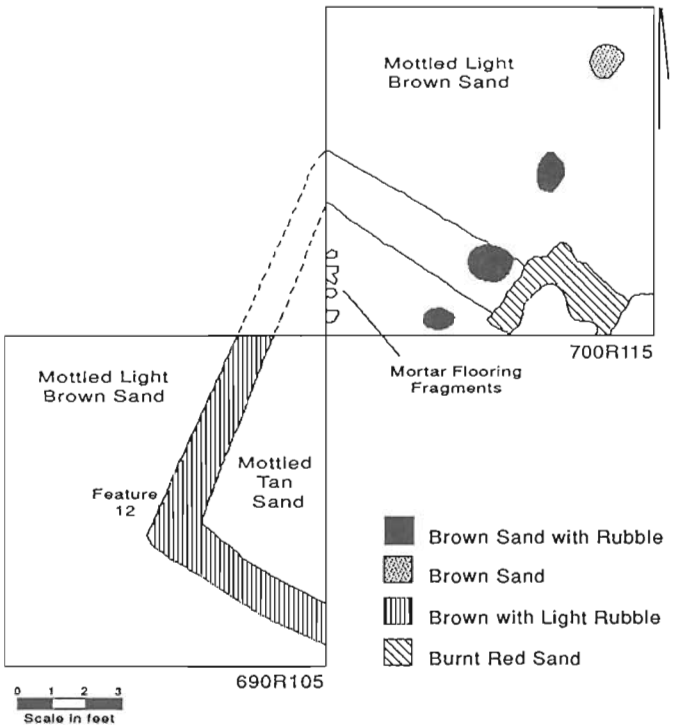


Figure 17. Locus 5 excavations.

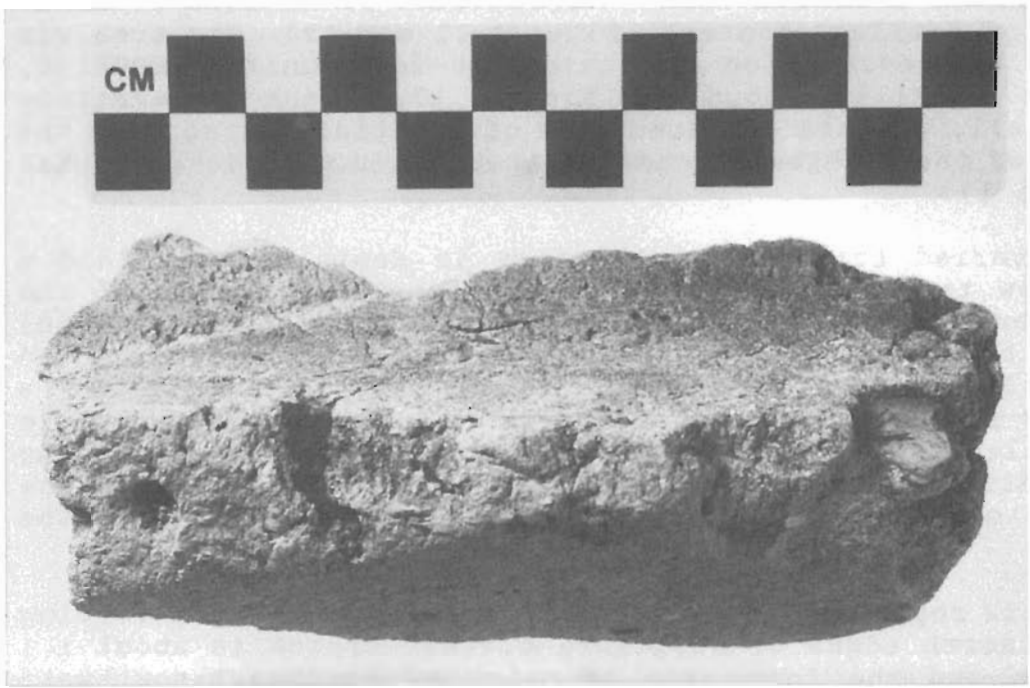


Figure 18. Mortar chinking fragments from Structure 4.

middle of the north extension of Feature 12, a stain representing a chimney was identified and designated Feature 13. Like Feature 12, the chimney feature was only 0.3 to 0.4 foot in depth. Its maximum width was 1.8 feet. In the hearth area was burnt red sand, designated Feature 14. Excavation within the confines of Structure 4 provided evidence of a mortar floor, about 0.1 foot in thickness. This floor had thoroughly broken up and only fragments were recoverable.

Based on the location of the chimney (Feature 13), it is probable that the structure was 14 feet in width. Excavation in 690R105 provided evidence for the structure's southwest corner, yielding a length of 16 feet. The low incidence of nails and the presence of mortar chinking strongly points toward log construction. It is likely that Feature 12 represents a shallow trench excavated for the placement of the first log course, perhaps to assist in leveling the structure. The structure was built at grade, with a thinly laid mortar floor (0.1 foot in depth) being added and the exterior covered with a mortar stucco. The chimney was of stick or wood lathe construction, and had also been plastered with mortar. The heavy burning of the sand is consistent with a structure built at grade. Roofing details are largely lost, but either a gabled or hipped solution would be possible.

Structures 4 and 7 appear to represent a row of log structures built in the last quarter of the eighteenth century, probably as slave housing. It seems unlikely that these structures would have remained serviceable for more than 20 years and they were probably abandoned by the turn of the nineteenth century.

The presence of three post holes in 700R115 provides tenuous evidence of a later structure overlying Structure 4. Termed Structure 5, there is very little which can be said about this building, except that in a general sense it may be similar to Structure 3 (although it is at a different orientation, more closely paralleling the orientation of Structure 1.

Locus 6

This locus is situated in the central area of the site and was identified in the auger survey as an area of dense artifacts and rubble (Figures 11 and 12). Brockington and Associates also excavated a one-meter unit in this structure. This study examined the area through the excavation of six 10-foot units (780R160, 790R160-180, 800R160-170). Recovered materials included both eighteenth and nineteenth century material and a large quantity of tabby rubble, mortar, and fired brick fragments (Table 1).

Initially an attempt was made to excavate this area using two zones. Zone 1 consisted of dense tabby rubble in a brown sand matrix, while Zone 2 consisted of the more typical brown sandy zone which occurred throughout the site. The distinction between these

two levels was unreliable and this effort was abandoned after several units were excavated. The combined Zones 1 and 2 have a depth of 0.4 to 0.5 foot. Soil deposition in this area appears to have been significantly less than elsewhere on the site, perhaps relating to its function or intensive occupation.

The excavations documented the presence of a large tabby fire box, designated Feature 1 (Figures 19 and 20). This tabby block, originally cast as a solid mass, measures 7.3 by 4.1 feet and is oriented north-northeast by south-southwest. Excavation revealed that the block is about 1.0 foot in depth. The interior portion of the block has been severely damaged by fire, causing the disintegration of the central area. At each end of the feature there are vertical, hollow insets where wood beams were cast in place. The western hole measures 4-1/4 by 2-1/8 inches and is about 0.5 foot in depth. The eastern hole is 2-1/2 by 2-1/4 inches and is about 0.6 foot in depth. While these may have served as some type of support within the fire place, they may also represent a by-product of the casting process (see Brooker 1989).

Surrounding this feature was dense tabby rubble, designated Feature 2. This rubble represented the disintegration of Feature 1 and indicates that the chimney support was originally somewhat higher than documented archaeologically. The degree of heat damage, however, suggests that relatively little of the upper casting has been lost.

Features 1 and 2 document the presence of Structure 6. Excavations around this feature, however, failed to identify other structural evidence, such as walls or post holes. While Feature 1 could represent a central or single end chimney, both seemed somewhat unlikely and probing was conducted at 3.0 foot intervals on line with the feature to the northwest and southeast in the expectation that a matching end chimney would be identified. No match could be found and Feature 1 remains isolated.

Beneath Features 1 and 2 a smaller tabby fire box was identified and designated as part of Feature 2. This second fire box is oriented 90° off Feature 1 and indicates an earlier building episode, called Structure 8. The earlier fire box measured 5.4 by 2.6 feet. The central portion of Feature 2 had been cut out for the placement of the forms used for Feature 1, suggesting rather careful and detailed construction planning.

Also present in these excavations was a shallow trench filled with mortar, similar to Feature 6. Its depth ranges from 0.1 to 0.2 foot and it is about 1.0 foot in width. This wall may represent another structure, but the evidence is so inconclusive that it was not assigned a structure number.

Feature 9 was identified in the southwest corner of 780R160 and consisted of a dark brown stain with sparse shell. The one-

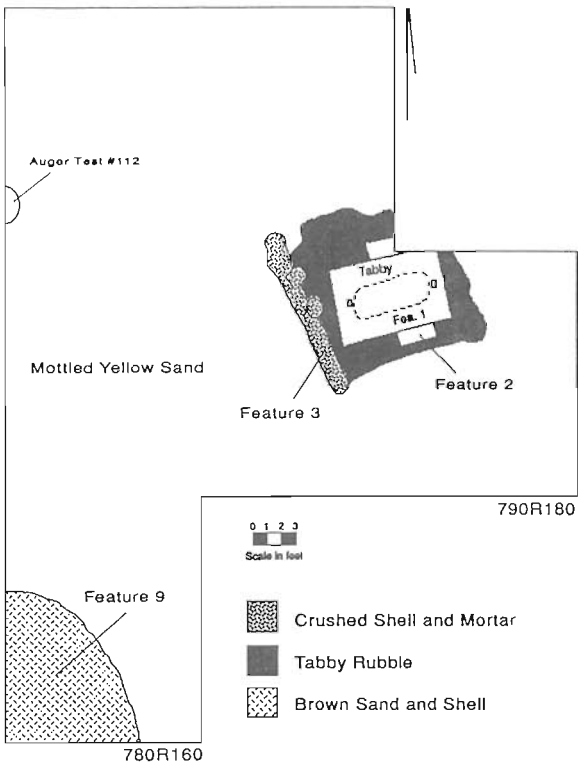


Figure 19. Locus 6 excavations.

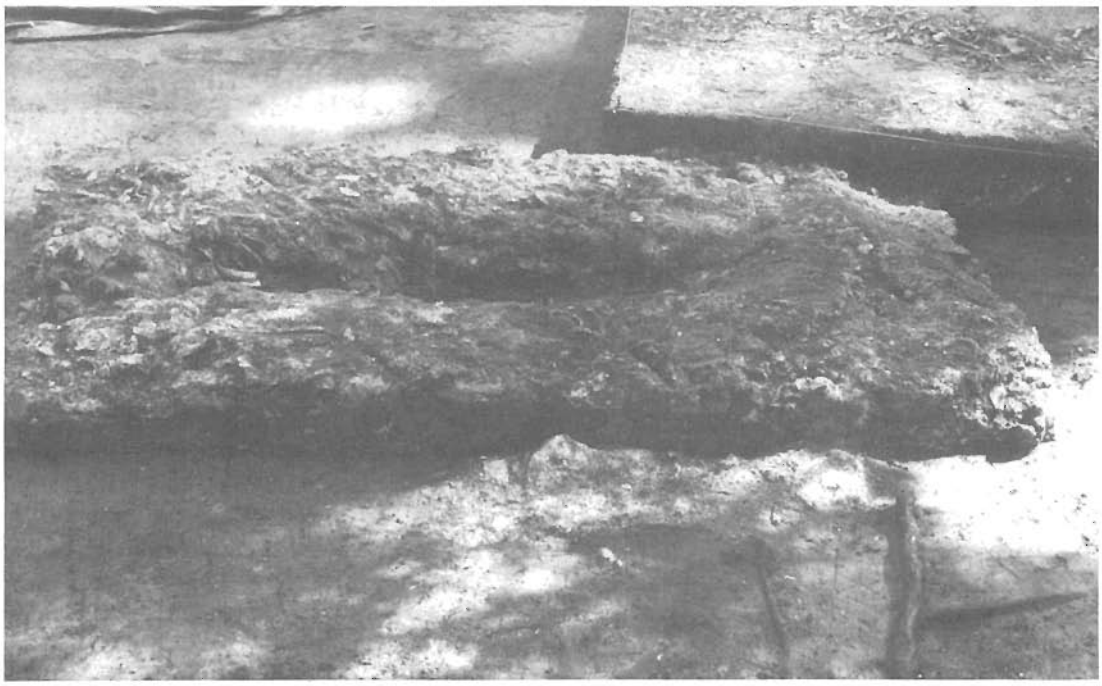


Figure 20. Features 1 and 2, looking northeast.

quarter exposed by the excavations measured about 7.5 by 6.2 feet, so it is likely that the feature was about 14 feet in diameter. Upon excavation it was revealed to be a maximum of 0.9 foot in depth. The fill contained a small quantity of domestic refuse, all of which appears to date from the mid-nineteenth century. There is no obvious function for this feature, except as a trash receptacle. Since Cotton Hope was occupied by Union troops during the Civil War, it is possible that this represents one of the trash pits referenced in military literature such as General Order 80 from the Headquarters of the Department of the South, issued on June 6, 1864, which reads in part:

> each camp must be thoroughly policed every morning and evening, and all garbage or refuse matter will be collected and buried in sinks . . . . Great care must be taken in the construction of proper sinks . . . and the debris will be covered every morning with at least six inches of sand.

Locus 7

This locus is situated in the north central portion of the site and was identified as an area of moderate artifact and dense rubble content (Figures 11 and 12). It was examined through the excavation of a single 10-foot unit (880R140). Zone 1 was about 0.9 foot in depth and consisted of brown humic sand. The underlying subsoil was yellow sand.

This excavation revealed evidence of mortar rubble (Table 1), clearly indicative of a structure which was probably situated slightly to the southwest of the unit. In addition, two partial tabby bricks were recovered; each measured 4-1/4 inches in width by 2-1/8 inches in thickness. This probable building has been identified as Structure 9. Artifacts from these excavations date from the second quarter of the nineteenth century. Feature 8 was identified within this unit and was found to be a series of post holes merging together that are probably the result of structural repair. Time did not allow the excavation of additional units to the southwest of 880R140.

Locus 8

This locus is situated at the north edge of the site and was revealed as an area of moderate artifact density and heavy rubble density by the auger tests (Figures 11 and 12). Shovel testing in 1988 had also indicated the presence of a dense faunal midden in this section of the site. The area was examined through the excavation of three 10-foot units (950-960R110 and 960R140) (Figure 21). These units failed to reveal clear evidence of structural remains and the 960R140 unit was heavily disturbed by unidentified construction activity.

The 950-960R110 units, however, provided the opportunity to sample two different shell middens. The midden in 950R110 covered the southern two-thirds of the unit and appears to be an intentional deposit of food refuse about 0.3 foot in depth. The midden was found to be 22% shell by weight and the shellfish remains are discussed in greater detail by Lawrence in a following section. Artifacts from the midden are predominately early nineteenth century domestic material.

The midden in 960R110 was found along the eastern edge of the unit and appeared immediately distinct from that found in 950R110. The midden was 26% shell by weight, similar to that from the southern midden, but the shell was largely crushed and was only 0.1 foot in depth. Artifacts and animal bone were much less common in the northern midden. While the available evidence is inconclusive, it is possible that the northern midden represents a road bed or some similar prepared surface.

A small shell pit, designated Feature 4, was found in the northeast corner of 960R110 underlying, and unrelated to, the shell midden deposit. The exposed portion of this feature measured about 3.2 by 1.4 feet. The pit had a maximum depth of 0.7 foot with gradually in-sloping walls. The fill consisted of brown sand and shell. The only artifacts were a single colono sherd and three nail fragments (one of which was hand wrought). The function of this pit is unknown, although it may date from the late eighteenth century.

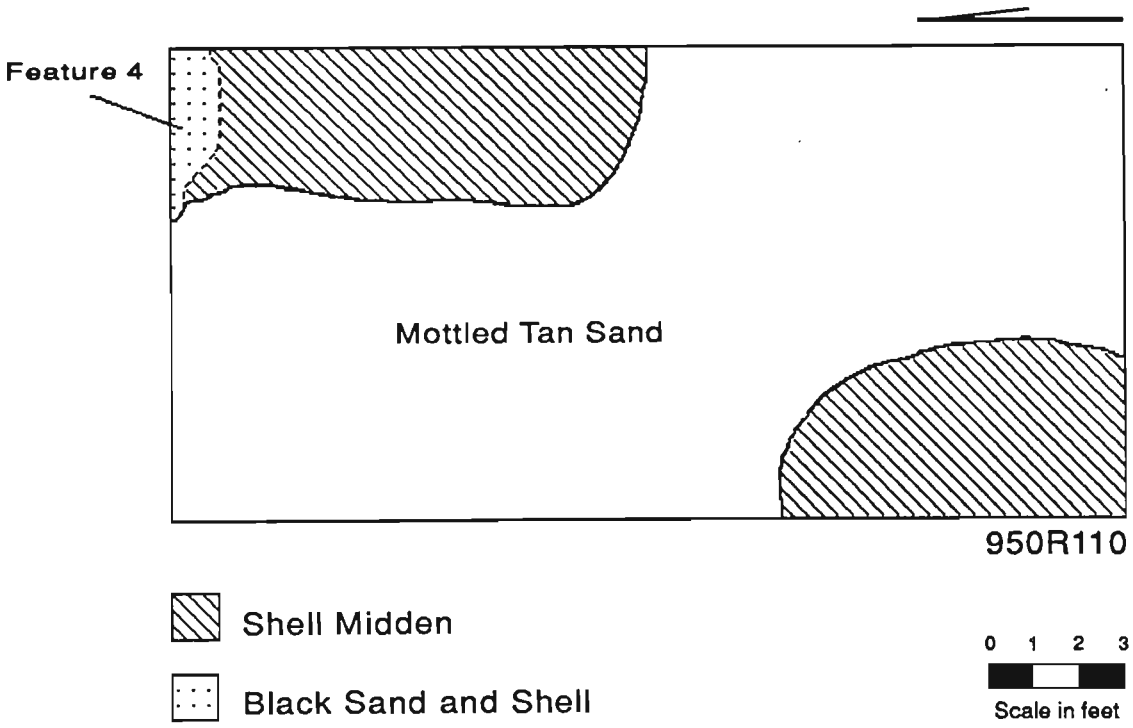


Figure 21. Locus 8 excavations.

Summary

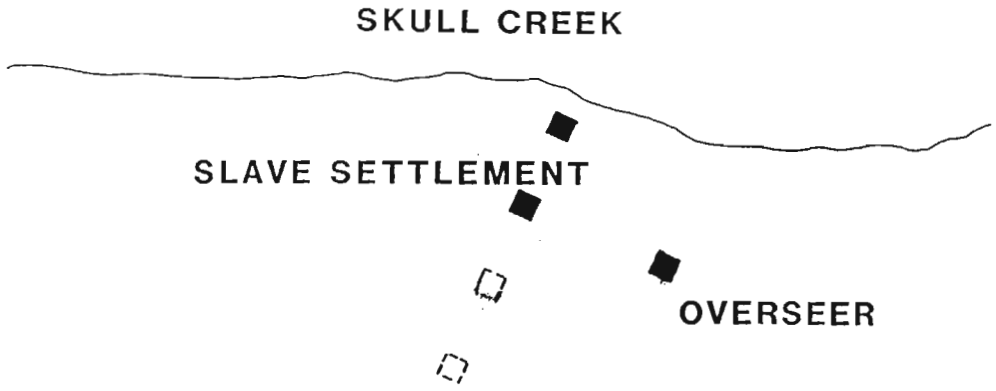
The excavations at 38BU96 yielded a variety of archaeological remains, including the evidence of at least nine structures. A comparison of the 1862 plan of the site and the archaeological remains (see Figures 4 and 13) reveals that there is very little overlap. There is, however, evidence of at least three distinct building episodes.

The first occurred in the late eighteenth century and is represented by Structures 4, 7, and 8 (Figure 22). Structures 4 and 7 are log slave dwellings which form a portion of a slave row oriented north-south. Structure 8 is a tabby fire box oriented N20°W. Although little information is available regarding Structure 8, it not only exhibits an orientation slightly different from the slave row, but also more substantial construction (based on the size of the tabby fire box).

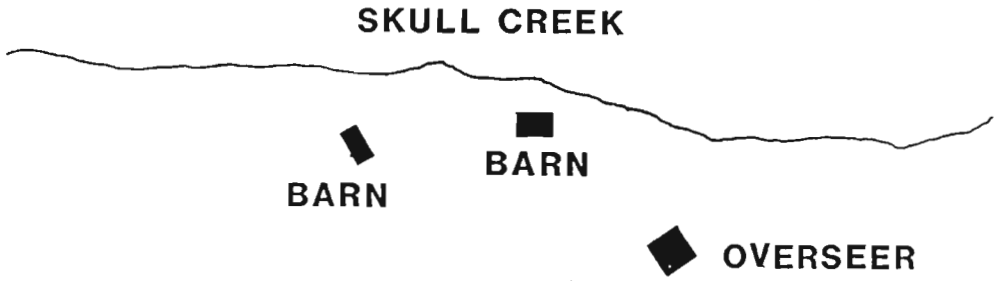
The second construction phase at 38BU96 occurred during the first quarter of the nineteenth century and is revealed by Structures 2, 3, and 6 (Figure 22). Structures 2 and 6 are both oriented E28°S. Structure 2 consists only of a wall fragment, while Structure 6 consists of a massive tabby fireplace base. Structure 3 is a barn or similar utilitarian building oriented N57°E.

The third construction phase, dating to the mid-nineteenth century, includes three identified structures (Figure 22). Structures 1 and 5 are both oriented east-west and include a probable slave dwelling and a barn. Although Structure 9 has been hypothesized based on architectural remains, no information is available on its orientation. It is possible that Structure 1 is the same as the southwestern most structure shown on the 1862 map (Figure 4), while Structure 5 may correlate with the large rectangular building in the center of the settlement.

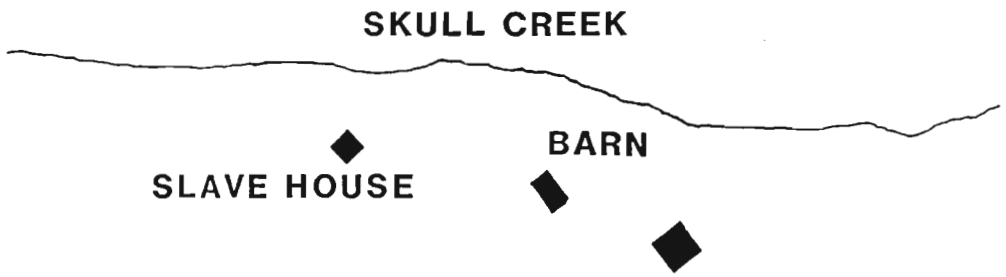
While these three plantation construction phases remain somewhat conjectural, they do suggest not only changes in the pattern and organization of the settlement in this area over time, but also a change in settlement function. In the late eighteenth century there is evidence that 38BU96 served as a slave settlement consisting of rather poorly constructed log dwellings, as well as a somewhat more permanent structure. By the early nineteenth century the earlier slave settlement was abandoned and probably demolished. In its place at least one utilitarian structure was constructed, as well as a more massive, and probably higher status, dwelling. By the mid-nineteenth century the site was again affected by a restructuring of the plantation. During this construction episode, represented by the 1862 map, the site was transformed into a mixture of utilitarian buildings and slave dwellings, probably having a special plantation support function. These changes in the organization and apparent function of this settlement over time will be further explored in the following section of this study.



LATE EIGHTEENTH CENTURY



EARLY NINETEENTH CENTURY



MID—NINETEENTH CENTURY

Figure 22. Settlement pattern changes at 38BU96 from the late eighteenth through mid-nineteenth centuries.

ARTIFACT ANALYSES

Debi Hacker and Michael Trinkley

Introduction

The 1990 excavations at 38BU96 have produced 10,157 historic period artifacts, the bulk of which date from the late eighteenth through mid-nineteenth centuries. All of these remains are attributable to those living at Cotton Hope (or Scull Creek) Plantation and most of the remains are associated with the Black slaves who made the plantation economically viable.

The investigations at 38BU96 revealed evidence of nine structures and intensively investigated three areas (one associated with the late eighteenth century slave occupation in Locus 5, the second associated with the mid-nineteenth century occupation in Locus 2, and the third associated with the early nineteenth century occupation in Locus 6). In addition, excavation in five other areas produced variable quantities of historic artifacts. We have chosen to discuss the remains in one section, in spite of their dispersed distribution. Following the descriptive statements, we have dealt with the topics of dating, patterns, and status and in each case we offer these observations by structure and locus, as appropriate.

The previous excavation section provides a thorough discussion of the various blocks and features and should be consulted for detailed information. These data, however, are synthesized here for the convenience of those using this section:

Locus 1 (100 square feet) - This unit revealed disturbed mid-nineteenth century remains with no clear structural evidence.

Locus 2 (300 square feet) - These units revealed evidence of a probable slave dwelling dating from the mid-nineteenth century (Structure 1), as well as evidence of a slightly earlier building (Structure 2).

Locus 3 (100 square feet) - This unit provided no evidence of structural remains and only limited evidence of bluff edge refuse disposal during the early nineteenth century.

Locus 4 (220 square feet) - Excavation in this area revealed a late eighteenth century slave dwelling (Structure 7) and an early nineteenth century utilitarian building (Structure 3).

Locus 5 (300 square feet) - These units provided excellent information on Structure 4, a late eighteenth century slave

dwelling similar to Structure 7 at Locus 4. Also identified was a probable barn or similar building (Structure 5) dating from the mid nineteenth century.

Locus 6 (600 square feet) - These excavations revealed two construction episodes. The first, in the late eighteenth century, included a small tabby fireplace designated Structure 8, although other evidence could not be identified. The second episode, during the early nineteenth century, included the demolition of the earlier structure and its replacement by a larger tabby fireplace at a different orientation (Structure 6).

Locus 7 (100 square feet) - This unit revealed evidence of a nearby building (Structure 9), dating from the mid-nineteenth century.

Locus 8 (300 square feet) - These units evidenced no structural remains, although a midden and other evidence of refuse disposal were common.

Descriptions and Interpretations

The 10,157 historic artifacts from the 38BU96 excavations will be discussed using South's (1977) artifact groups (e.g., kitchen, architecture, etc.) since such an approach allows the quantification and discussion of artifacts in a broad functional framework. Several modifications of South's original classificatory scheme, however, are worthy of mention. First, following the lead of Garrow (1982b:57-66), Colono ceramics will be discussed with (and tabulated in) the Kitchen Artifact Group. In addition, the stub stem pipes have been included in the Tobacco Artifact Group (rather than in the Activities Artifact Group). Second, for the purposes of this site we have chosen to place military buttons not in the military objects class of the Activities Group, but rather in the Clothing Artifact Group. We have done this largely based on the historical evidence which suggests that military items quickly filtered into the freed slave settlements (see Trinkley 1986). Items of more certain military significance (such as insignia) have been left in the Activities Group since it seems unlikely that freedmen would have been given such items. Third, beads are included in the Personal Artifact Group, rather than in Clothing, since they were used by Black slaves as personal jewelry items.

A large quantity of the historic artifacts from Cotton Hope have required some form of conservation by Chicora prior to curation by The Environmental and Historical Museum of Hilton Head Island. Ceramic and glass artifacts did not require stabilization after the initial washing; no reconstruction of artifacts was attempted at this stage.

Brass items, if they exhibited active bronze disease, were subjected to electrolytic reduction in a sodium carbonate solution with up to 4.5 volts for periods of up to 72 hours. Hand cleaning

with soft brass brushes or fine-grade bronze wool followed the electrolysis. Afterwards, the surface chlorides were removed with deionized water baths and the items are dried in an acetone bath. The conserved cuprous items were coated with a 20% solution of acryloid B-72 in toluene.

Ferrous objects were treated in one of two ways. After the mechanical removal of gross encrustations, the artifacts were tested for sound metal by the use of a magnet. Items lacking sound metal were subjected to multiple baths of deionized water to remove chlorides. The baths were continued until a conductivity meter indicated a level of chlorides no greater than 1.0 ppm. The specimens were dewatered in acetone baths and given an application of 10% acryloid B-72 in toluene, not only to seal out moisture, but also to provide some additional strength. Items which contained sound metal were subjected to electrolytic reduction in a bath of sodium carbonate solution in currents no greater than 5 volts for a period of 5 to 20 days. When all visible corrosion was removed, the artifacts were wire brushed and placed in a series of deionized water baths, identical to those described above for the removal of chlorides. When the artifacts tested free of chlorides (at a level less than 0.1 ppm), they were dewatered in acetone baths and a series of phosphoric (10%) and tannic (20%) acid solutions were applied. The artifacts were air dried for 24 hours and coated with a 10% solution of acryloid B-72 in toluene.

As previously discussed, the materials have been accepted for curation by The Environmental and Historical Museum of Hilton Head Island as Accession Number 1990.4 and have been cataloged using that institution's accessioning practices (ARCH 2353 through ARCH 2572). Specimens were packed in plastic bags and boxed. All material will be delivered to the curatorial facility at the completion of the conservation treatments.

Kitchen Artifact Group

Excavations produced 5251 Kitchen Group artifacts. These include 3201 Euro-American ceramics (60.9% of the group total); 457 colono ceramics (8.7% of the group total); 1376 glass container fragments (26.2% of the total); 61 specimens of tableware (1.2% of the group total), including 52 tumbler fragments, three goblet fragments, one glass bowl fragment, and one pitcher handle fragment; and 156 kitchenware items (3.0% of the group total), including 109 container fragments, 29 kettle fragments, one cork screw, seven iron utensil handles, one white metal utensil handle, three bone utensil handles, three knife fragments, two spoon fragments, and one fork fragment.

The ceramics include a variety of both eighteenth and nineteenth century wares. Those with mean ceramic dates (MCD) typical of the eighteenth century include one underglazed blue Chinese porcelain (MCD 1730; South 1977:210), 21 Westerwald

stonewares (MCD 1738; South 1977:210) (Figure 23c), 23 white salt-glazed stonewares (MCD 1758; South 1977:210), 15 specimens of white salt-glazed stoneware with scratch blue decoration (MCD 1760; South 1977:210) (Figure 23a), six specimens of black basalt stoneware (MCD 1785; South 1977:211), 124 sherds of lead glazed slipware (MCD 1733; South 1977:211), 10 examples of Jackfield ware (MCD 1760; South 1977:211), 30 "clouded" wares (MCD 1755; South 1977:211), 13 examples of decorated delft (MCD 1750; South 1977:211), five specimens of plain delft (MCD 1720; South 1977:212), and 621 specimens of creamware (South 1977:212).

The creamware is recognized by an off-white (cream colored) paste and a distinctive yellowish lead glaze which exhibits a greenish color where thickly puddled (Brown 1982:15-16; Norman-Wilcox 1965:139). Types identified include 31 examples of annular decoration (MCD 1798; South 1977:212), 21 specimens of hand painted creamware (MCD 1805, with a range of 1790-1820; South 1977:212) (Figure 23f-h), one specimen of black transfer printed creamware (MCD 1790; South 1977:212), and 568 examples of undecorated creamware (MCD 1791; South 1977:212). These examples include several molded border designs, as well as fragments from plain vessels.

The nineteenth century specimens include 1,111 specimens of pearlware, 1,298 examples of whiteware, and 25 sherds of yellow ware. In addition, gray or brown salt-glazed stonewares account for 68 specimens, alkaline glazed stoneware accounts for 15 fragments, while there are 16 examples of other stonewares. A total of 13 fragments of white porcelain were also recovered. Red earthenwares, which have a very long temporal range (see, for example, Lasansky 1979:6), account for an additional 44 specimens and include clear, black and brown lead glazed, as well as unglazed examples. A total of 43 burnt ceramics were recovered from the site and further classified.

Pearlware, characterized by a cream colored paste and a blue to white glaze, was perfected by Josiah Wedgewood in 1779 (Noel Hume 1970:128; Price 1979; South 1977:212). The most common type at Cotton Hope is undecorated (N=565), which probably represents fragments of an edge decorated ware and has a Mean Ceramic Date of 1805 (South 1977:212). Decorated pearlwares include 97 polychrome hand painted examples (MCD 1805; South 1977:212) (Figure 23j), 53 blue hand painted specimens (MCD 1800; South 1977:212), 192 specimens of blue transfer printed pearlware (MCD 1818; South 197:212) (Figure 23k), 130 specimens of either blue or green edged ware (MCD 1805; South 1977:212) (Figure 23i, l), and 74 examples of annular ware (MCD 1805; South 1977:212).

The edged decorated wares include both the shell-edge motif and other molded designs typical of pearlwares, such as plumes (Price 1979:17). Both well and crudely painted edged pearlwares are found, which suggests that the wares cover a fairly long time range

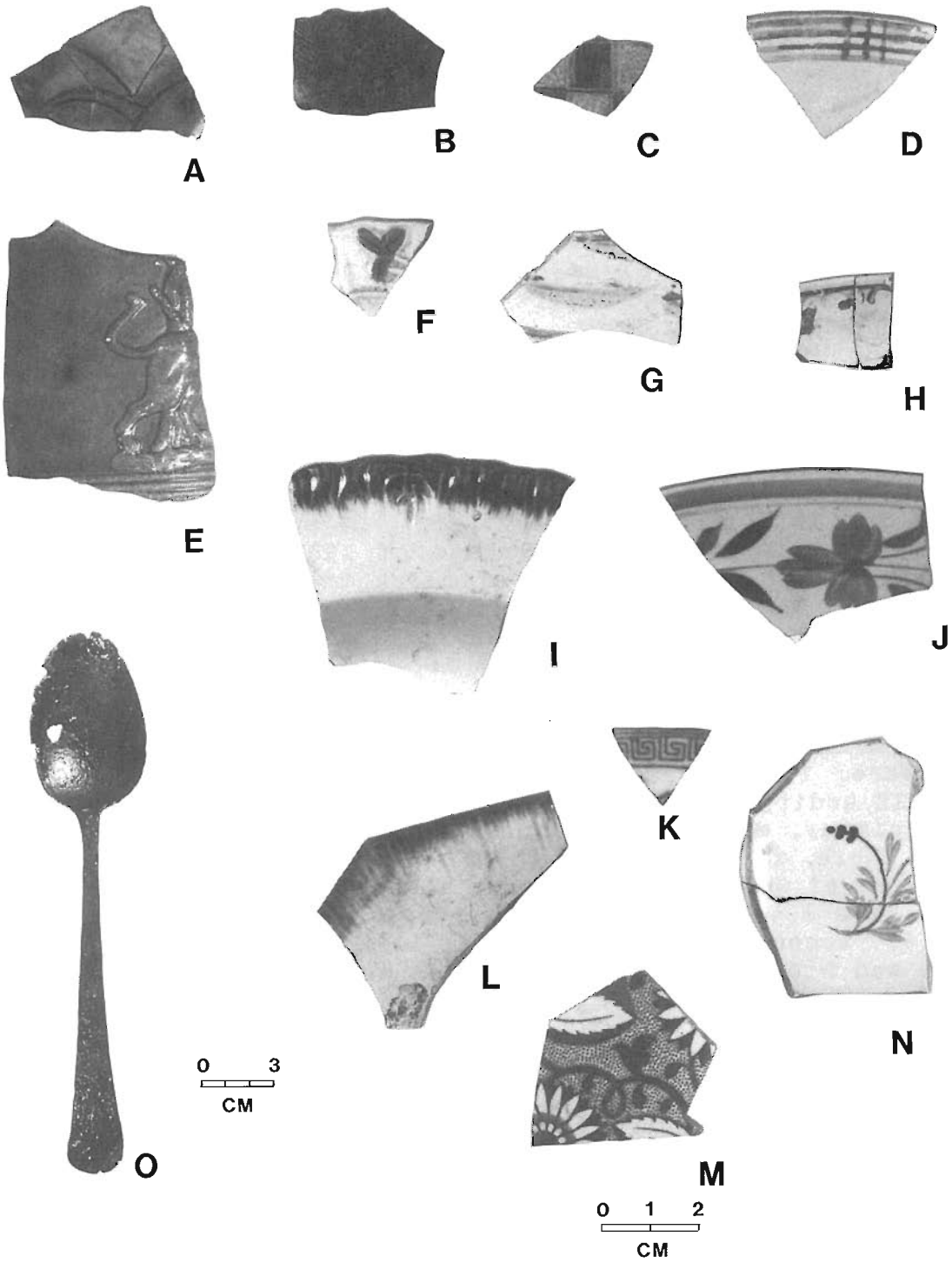


Figure 23. Kitchen artifacts. A, white salt-glazed stoneware, scratch blue; B, elers ware; C, Westerwald; D, polychrome hand painted porcelain; E, jasperware; F, molded and polychrome hand painted creamware; G-H, hand painted overglaze creamware; I, edged pearlware; J, polychrome hand painted pearlware; K, blue transfer printed pearlware; L, edged pearlware; M, black transfer printed whiteware; N, polychrome hand painted whiteware; O, spoon.

(see Brown 1982:18; Noel Hume 1970:131; Price 1979:18). The annular decorated fragments suggest an earlier date range because of the earthen color palette (Noel Hume 1970:131; Price 1979:18). The blue transfer printed pearlwares are found primarily in a dark cobalt blue, as are the hand painted specimens. The polychrome hand painted pearlware specimens exhibit earthen colors (Noel Hume 1970:128-129; Price 1979:20-21).

The largest category of ceramics from 38BU96 consists of whitewares (N=1298). The difficulty distinguishing between whiteware and ironstone has been discussed by South (1974:247-248), who uses an "ironstone-whiteware" category, and Price (1979:11), who uses a "whiteware" category which includes ironstone. Both researchers point out that differentiating between whiteware and ironstone using vessel hardness (or degree of vitrification) is an uncertain or even invalid approach (cf. Worthy 1982). For the purposes of this study, whiteware will encompass both categories of ceramics. In general, however, there are very few examples of ceramics which might be potentially classified as "ironstone" at Cotton Hope.

Undecorated whiteware includes 711 specimens. Price notes that while undecorated whitewares "were probably introduced somewhat earlier [than decorated varieties], undecorated whiteware vessels were most common in the period following the Civil War" (Price 1979:22). It seems likely, therefore, than many of the fragments simply represent undecorated portions of decorated vessels.

Rather than using the broad category of "whiteware" for dating all specimens, regardless of decoration, we have chosen to use the dates offered by Bartovics (1978) and Orser et al. (1982). Plain whiteware has a Mean Ceramic Date of 1860 (South 1977:211). Other specimens include nine green edged examples (MCD 1828), 103 blue edged (MCD 1853), 75 polychrome hand painted examples (MCD 1848) (Figure 23n), 118 blue transfer printed (MCD 1848), 41 non-blue transfer printed examples (MCD 1851) (Figure 23m), 227 annular wares (MCD 1866), and 14 sponge decorated examples (MCD 1853).

Only two whiteware ceramics evidence legible maker's marks. One is a printed Davenport mark on an undecorated plate fragment. Praetzellis et al. (1983:28) indicate that this mark has a date range of 1830 to 1887. The other, also on an undecorated fragment of whiteware, is attributable to William Adams & Sons and has a date range of 1800 to 1864 (Godden 1964:21).

Yellow ware, distinct from the yellow-glazed earthenwares of the eighteenth century, is a simple kitchen and table ware with a buff or yellow paste and a clear glaze (Ramsay 1947:7). It occurs both plain and with bands of white, blue, and black decoration. A total of 25 specimens were recovered from 38BU96 and the Mean Ceramic Date is 1853 (Bartovics 1978). The examples recovered from Cotton Hope appear to be from American manufacturers, although none

are marked.

A total of 14 examples of Canton porcelains were recovered from 38BU96. These are generally considered to represent the deterioration of Chinese trade wares typical of the early nineteenth century (Noel Hume 1970:261-262). South (1977:210) provides a Mean Ceramic date of 1815. Also recovered are 13 examples of soft paste porcelains with a sharp white color which probably represent American late nineteenth century porcelain.

Three major categories of nineteenth century stonewares are present at Cotton Hope: alkaline glazed (N=15), salt-glazed (N=68), and slip glazed (N=16). The alkaline glazed stonewares are discussed by Burrison (1975) and Greer (1977, 1981). This glaze, distinctively Southern, was developed about 1810 in Edgefield District, South Carolina and spread into North Carolina, Georgia, Florida, Alabama, and Texas. The glaze consists of an alkaline flux (such as wood ashes or slaked lime) combined with silica (such as clay, sand, or glass) and water. The colors range from cream to browns on oxidized vessels and from a pale yellow-green to deep olive on the vessels fired in a reducing atmosphere. The glaze, which is hard and durable, exhibits a variety of textures depending on firing conditions, temperatures, and preparation techniques.

Salt-glazing was introduced in England during the late 1600s, and examples of eighteenth century salt-glazed wares at Cotton Hope include Westerwald and White Salt-Glazed. The nineteenth century examples, however, are typically industrial, wheel-thrown pottery. A total of 70 examples were recovered. The process and types of salt-glazed pottery are described by Greer (1981:180-192). The texture of salt-glazing may vary from a very fine salt texture with a thin glaze to a well-developed "orange-peel" texture to an extremely heavy salt texture with runs and agglutinations. Colors, reflecting impurities in the clay, include gray, beige, and brown. Vessel forms identified at Cotton Hope include at least one jug or bottle and one large straight-sided jar. One vessel fragment is impressed "CO... HARTFORD." Although Hartford, Connecticut was a major manufacturing area for stonewares, this partial mark has not been identified.

The last category, that of clay or slip glazes, includes only those pieces having no evidence of salt-glazing, e.g., Albany and Bristol slips. Greer notes that these slips were becoming significant by the beginning of the nineteenth century and the Albany slip was discovered in 1825 (Greer 1981:194). The 14 examples from 38BU96 are all typical Bristol slips.

The major types of pottery from Cotton Hope are summarized by Table 2. Earthenwares are the most common, accounting for over 95% of the total collection. Stonewares, while uncommon compared to sites such as the Freedmen village of Mitchelville where they

Table 2.
Major Types of Pottery at Cotton Hope

Slipware	124	
Jackfield	10	
Clouded wares	30	
Delft	18	
Creamware	621	
Pearlware	1111	
Whiteware	1298	
Yellow ware	25	
Red ware	44	
Total Earthenwares	3281	95.5%
White salt-glazed	38	
Black basalt	6	
Westerwald	21	
Salt-glazed	68	
Alkaline glazed	15	
Slip glazed	16	
Total Stonewares	164	4.7%
Underglazed Blue	1	
Canton	14	
White	13	
Total Porcelains	28	0.8%

account for 19.2% (Trinkley and Hacker 1986:226), appear to represent a portion of the assemblage typical of other nineteenth century slave settlements (e.g., Otto 1984:Table 3.24; Singleton 1980:Table 8). Porcelains are extremely rare, again typical of slave settlements.

Each of the various loci have sufficient quantities of ceramics to warrant application of South's Mean Ceramic Date Formula (South 1977:217-218). The dates range from about 1784 to 1844 (Table 3).

Locus 5, which evidenced a log slave dwelling, yields a mean date of 1784.2, while Locus 6 produced a date of 1797.9. This slightly later date represents the construction of Structure 6 over the pre-existing tabby fireplace designated Structure 8. Locus 4, which yielded evidence of another log slave dwelling, produced a mean date of 1809.5. This date represents the mixing of material from the eighteenth century slave structure (Structure 7) with the nineteenth century utilitarian building (Structure 3).

Loci 1 and 2, both at the south edge of the site, produced mean dates of 1843.9 and 1841.0 respectively. Locus 3, a trash dump area on the edge of the bluff produced a date of 1820.3, while

Table 3.
Mean Ceramic Dates for 38BU96

Ceramic	Mean Date	Locus 1		Locus 2		Locus 3		Locus 4		Locus 5		Locus 6		Locus 7		Locus 8	
	(xi)	(fi)	fi x xi	(fi)	fi x xi	(fi)	fi x xi	(fi)	fi x xi	(fi)	fi x xi	(fi)	fi x xi	(fi)	fi x xi	(fi)	fi x xi
Canton Porcelain	1815	10	18150	3	5445			1	1815								
Underglaze Blue Porcelain	1730											1	1730				
Westerwald Stoneware	1738	6	10428	1	1738			1	1738	12	20856	1	1738				
White SG Stoneware	1758	3	5274			1	1758	9	15822	10	17580						
White SG, Scratch Blue	1760									15	26400						
Black Basalt	1785											6	10710				
Lead Glazed Slipware	1733	1	1733	1	1733	1	1733	15	25995	50	86650	35	60655				
Jackfield	1760	1	1760	1	1760					6	10560	2	3520				
Clouded Wares	1755	3	5265	3	5265	2	3510	5	8775	16	28080	1	1755				
Decorated Delft	1750			1	1750			1	1750	8	14000	1	1750			2	3500
Plain Delft	1720	2	3440							1	1720	2	3440				
Creamware, annular	1798			1	1798			17	30566	7	12586					6	10788
hand painted	1805							1	1805	15	27075	5	9025				
undecorated	1791	1	1791	20	35820	11	19701	81	145071	161	288351	215	385065	4	7164	75	134325
Pearlware, poly hand paint	1805	3	5415	35	63175	3	5415	28	50540	14	25270	2	3610	7	12635	5	9025
blue hand paint	1800			4	7200	1	1800	9	16200	4	7200	32	57600	2	3600	1	1800
blue trans print	1818	1	1818	36	65448	15	27270	50	90900	9	16362	62	112716	14	25452	5	9090
edged	1805	3	5415	22	39710	3	5415	66	119130	8	14440	3	5415	7	12635	18	32490
annular/cable	1805	5	9025	8	14440	4	7220	23	41515	3	5415	13	23465	3	5415	15	27075
undecorated	1805	15	27075	191	344755	25	45125	198	357390	30	54150	32	57760	27	48735	47	84835
Whiteware, green edged	1828	3	5484	2	3656	2	3656			1	1828			1	1828		
blue edged	1853	15	27795	38	70414	3	5559	15	27795	1	1853	8	14824	19	35207	4	7412
poly hand paint	1848	13	24024	48	88704	4	7392	1	1848					8	14784	1	1848
blue trans print	1848	25	46200	68	125664	7	12936	5	9240	2	3696			10	18480	1	1848
non-blue trans	1851	17	31467	16	29616	2	3702	1	1851	1	1851			3	5553	1	1851
annular	1866	32	59712	152	283632	8	14928	10	18660	5	9330	6	11196	13	24258	1	1866
sponge	1853											13	24089	1	1853		
undecorated	1860	117	217620	352	654720	9	16740	61	113460	13	24180	109	196854	45	83700	5	9300
Yellow ware	1853	4	7412	10	18530			5	9265			3	5559	1	1853	2	3706
TOTALS		280	516303	1013	1864973	101	183860	603	1091131	392	699433	552	992476	165	303152	189	340759
MEAN DATES		1843.9		1841.0		1820.3		1809.5		1784.2		1797.9		1837.2		1802.9	

Locus 7 (in the vicinity of Structure 9) yielded a date of 1837.2. Locus 8, at the north edge of the site, suggested a mean date of 1802.9.

Comparison of these dates (Table 4) with the previously postulated construction episodes reveals a great deal of overlap, presenting a rather complex picture of plantation activities. In general, however, the dates support the contention that at least three episodes of construction and utilization are present at 38BU96.

Table 4.
Correlation of Loci, Structures, Construction Episodes, and Mean Ceramic Dates for 38BU96

Eighteenth Century		Early Nineteenth Century		Mid-Nineteenth Century
		Locus 2 (Struct 2)	*1841.9*	Locus 2 (Struct 1)
Locus 4 (Struct 7)	*1809.5*	Locus 4 (Struct 3)		
Locus 6 (Struct 8)	*1797.9*	Locus 6 (Struct 6)		
Locus 5 (Struct 4)		*1784.2*		Locus 5 (Struct 5)
				Locus 7 (Struct 9) *1837.2*

The sherds of Colono pottery bear special, if only brief, attention. The most cogent published discussion of these wares is provided by Wheaton et al. (1983:225-250), who suggest that the low-fired earthenwares were produced by black slaves for their own use. Pottery called River Burnished or Catawba is similar and was produced by Indians for sale or trade (see also Ferguson 1985). While there are a number of attributes separating the two wares, thickness and paste are of primary utility given the small specimens from Cotton Hope. The Colono sherds tend to be thicker and have a coarser paste than the Catawba or River Burnished pottery, which is very similar to the paste of modern or dated Catawba vessels.

Wheaton et al. (1983:225, 239) note that Colono pottery appears late in the seventeenth century, peaks in popularity (or at least abundance) during the eighteenth century, and appears to die out by about 1830. Research at the freedmen's village of Mitchelville on Hilton Head Island, however, found evidence of Colono pottery occurring into the third quarter of the nineteenth century (Trinkley and Hacker 1986:232). At Cotton Hope the collection of 457 sherds are all typed as Colono and are uniformly spread over the site, although 234 sherds (51.2% of the collection) occur in Loci 4 and 5, which appear to be the core of the eighteenth century occupation. If the Colono ceramics are incorporated into the Euro-American ceramics, they account for 11.6% of the total collection. If only the eighteenth century Euro-American ceramics are considered, Colono accounts for 32.7% of the collection.

The next collection to be considered in the Kitchen Artifact Group is the container glass. A total of 1376 fragments were recovered, 790 (57.4%) of which are an olive green color (appearing black in reflected light), 243 (17.6%) are aqua, 209 (15.2%) are clear, 52 (3.8%) are green or light green, with the remainder (8%) including brown, emerald, manganese, blue, and amber.

The "black" glass fragments are typical of wine or ale bottles. Bottle fragments with thicker walls, gentle lines, and kick ups are attributed to champagne, wine, or brandies, while those with thinner walls, pronounced shoulders, and flat bases are characteristic of stout or ale. Examples of both are found at the site, although it is impossible to exclude the bottles' use for other purposes after the original contents were consumed. Although a large number of fragments have been identified, the minimum vessel count is only 17.

The green and light green glass collection appears typical of non-alcoholic soda (and possibly mineral) water. Bottle necks and lips suggest cork closures. These bottles date from the mid-nineteenth century, with their popularity in Charleston, South Carolina, at its height from the late 1840s through the late 1880s. The minimum vessel count for these bottles at Cotton Hope is 11.

Four examples of clear or aqua panel bottles were recovered. These bottles probably contained proprietary or "patent" medicines. While these concoctions frequently contained a high percentage of alcohol, Wilson notes that it would be a mistake to assume these preparations were primarily consumed for their alcohol. He notes that nineteenth century living conditions were such that there were a "plethora of fevers and aches" to which proprietary medicines were routinely applied (Wilson 1981:39). That these "medicines" were frequently used as intended is evidenced by Cramp (1911, 1921, 1936). None of the examples found at Cotton Hope are lettered, suggesting that they predate 1867 (Lorrain 1968:40).

A single bitters bottle of brown glass was identified in the collection. Bitters, as a product, are only a step away from the proprietary medicines of the nineteenth century. Bitters were made from a variety of botanical substances, aromatic flavorings, alcohol (up to 40%), and occasionally sugar. A variety of cures were claimed and Wilson notes:

> bitters could be consumed without censure or guilt by women and others finding themselves in an environment influenced by the temperance movement. Doubtless there were guileless souls who took it regularly, sincerely believing in its medicinal value, as well as confirmed drinkers who cared not at all about its health benefits as long as its alcoholic content held up (Wilson 1981:24).

Five examples of possible whiskey bottles were also identified in the collection. Whiskey was usually transported in barrels or kegs and repackaged by the local vender in glass containers (Wilson 1981:13-14). Whiskey bottles might be colorless, amber, or occasionally brown and came in a variety of sizes and shapes (see Wilson 1981:16).

The excavations at Cotton Hope have produced a minimum vessel count of seven probable pharmaceutical bottles, including two examples of ground glass stoppers. Other examples include fragments of small, thin-walled vials of clear or aqua glass. The emphasis on "real" medicine over "off-the-shelf" cures is probably related to care given the slaves by the plantation owner.

The remainder of the glass collection consists of three clear bottles, one manganese bottle, and one blue bottle, all of unknown functions. It is possible that the clear glass bottles include food or condiment containers. The various containers are itemized by loci in Table 5.

Table 5.
Glass Containers Recovered from Cotton Hope

	Locus								
	1	2	3	4	5	6	7	8	Total
Black wine and ale bottles	1	2	1	3	4	2	2	2	17
Lt. green and green soda water bottles					3	6	1	1	11
Aqua and clear panel bottles		1				3			4
Brown bitter bottles						1			1
Pharmaceutical glass bottles	2			1	1	1	2		7
Whiskey bottles	1	2				2			5
Unidentified clear bottles		1		1		1			3
Unidentified manganese bottles						1			1
Unidentified blue bottles						1			1

The drinking containers from Cotton Hope represent a homogenous group, with the 52 tumbler fragments recovered representing a minimum count of 16 tumblers. These vessels include one clear glass with an engraved design, 10 plain clear glass examples, four tumblers of pressed glass with a ribbed pattern, one tumbler of pressed glass with a fluted design, one plain tumbler of manganese glass, and one clear tumbler of hand blown manufacture (Table 6).

The engraved design appears to have been done using wheel engraving (Jones and Sullivan 1985:56), which was common in the eighteenth and nineteenth centuries. The plain tumblers are of the "Steigel" type, common in the eighteenth century, but continuing in popularity into the nineteenth century (McNally 1982:129). The ribbed pattern is described by Jones and Sullivan (1985:58) as a repeating pattern of convex cuts parallel to each other on the

Table 6.
Minimum Counts of Tableware Vessels Recovered from 38BU96

	Locus								
	1	2	3	4	5	6	7	8	Total
Tumbler, clear, engraved					1				1
Tumbler, clear, plain		3			2	3		1	9
Tumbler, clear, ribbed		2		1		1			4
Tumbler, clear, fluted					1				1
Tumbler, manganese, plain					1				1
Tumbler, clear, blown, plain					1				1
Goblet, clear		1	1		1				3
Bowl, clear, pressed			1						1
Pitcher, handle, pressed						1			1

exterior of the container. The fluted design consists of a repeating pattern of distinct, concave units parallel to each other (Jones and Sullivan 1985:58). The single fluted specimen identified is similar to the cut motif known as "finger cutting," and probably dates from the 1840s (McNalley 1982:138). The single manganese tumbler suggests a date from the last quarter of the nineteenth century, although manganese was occasionally used earlier (Jones and Sullivan 1985:13). The single hand-blown tumbler may date from either the eighteenth or nineteenth century, although the various pressed glass items recovered probably post-date 1820 (Jones and Sullivan 1985:34).

Tin or light gauge iron containers are evidenced at Cotton Hope by the recovery of 109 fragments from the eight excavation areas. Of these, only one could be identified as a probable can fragment and this specimen failed to provide diagnostics useful for dating. Rock (1984) does suggest that its presence provides a TPQ of 1820. The remaining fragments all were parts of relatively small pails and one pail lug (or ear) attachment was recovered. These items were probably related to food preparation, storage, or transport. Woodhead (1981) mentions that such light weight tin items become more common in the last half of the nineteenth century, although the 1865 Russell and Erwin hardware catalog does illustrate some similar examples (Association for Preservation Technology 1980).

Kettles, while not common, do occur at the site, 29 fragments being collected from these excavations. All of the specimens recovered are from bulbous pot forms, indicative of vessels "to be suspended over an open fire for cooking by boiling and simmering" (Woodhead 1981:6). All of the identified specimens are body sections; no evidence of feet, handles, or lugs were identified. No evidence of shallower cast iron pots used in baking was recovered.

Utensils were fairly common at the site, with 17 examples

being recovered. These include seven iron handle fragments, three bone handle fragments, and one white metal fragment. The bone handle fragments were from either knives or forks, while the iron and white metal specimens were most likely from spoons or ladles. In addition, three knife blade fragments, two spoon bowl fragments, and one two-tine fork were recovered. The spoon bowls are ovate in form (Figure 23o).

Table 7.
Kitchenware Items from Cotton Hope

	1	2	3	4	5	6	7	8	Total
Iron utensil handles	1			2		1	2	1	7
Bone utensil handles				2		1			3
White metal utensil handles						1			1
Knife fragments	1					2			3
Spoon fragments		1		1					2
Fork fragments		1							1
Cork screw		1							1
Kettle fragments		4		6	1	14	4		29
Container fragments	7	17		11	28	34	10	2	109

These items represent primarily common, iron utensils of mass production which were inexpensively available. The bone handled utensils and the white metal handle are the only exceptions. The frequency of these utensils, however, seems to be higher than usually identified in slave settlements. Otto (1984:Table 4.5) found none in his Cannon's Point slave excavations, while only five specimens were recovered from the late antebellum 38BU634 slave settlement on Haig Point (Trinkley and Hacker 1989:144). Singleton (1980:160) notes a similarly small sample of utensils from her work at Butler Island.

Eight of the 17 (47.1%) utensils recovered are handle fragments. A similar situation was observed at the freedmen's village of Mitchelville on Hilton Head Island (Trinkley and Hacker 1986:236-237) and it was suggested that these handles may have been intentionally broken to create tools for basket manufacture. Rosengarten notes that:

> [f]or splitting the palmetto into strips and for making a space in the coil through which to pull the palm binder, basketmakers use a sewing awl they call a "bone" or a "nail bone." Earlier sewers made this tool from an actual animal bone . . . . Nowadays, most Mount Pleasant basket makers make their bones from metal teaspoons. They break off the bowl, hammer the neck flat and file it to a rounded point, then smooth and polish the surface by

thrusting it repeatedly into the dirt (Rosengarten 1986:8).

While clearly speculative, the broken utensils found at Cotton Hope may have served a similar function.

The one seemingly "high status" item in the tableware collection is a fragment of an iron cork screw. It is similar to examples illustrated by the 1865 Russell and Erwin hardware catalog (Association for Preservation Technology 1980:377).

Architectural Artifact Group

Excavations at Cotton Hope produced 4316 Architectural Group artifacts (Table 8). These remains include primarily nails (N=2439 or 56.5% of the group total). Other remains include 1871 fragments of glass, two construction hardware items, three spike fragments, and one door lock fragment. Not included in the totals, but briefly discussed in this section, are examples of the tabby, tabby bricks, and fired clay bricks.

Two types of nails have been recovered from 38BU96 -- hand wrought (N=162 or 10.2% of the recovered nails) and machine cut (N=1421 or 89.8% of the recovered nails). The hand wrought specimens, which range in size from 3d to 20d, date from the seventeenth through nineteenth centuries, with the peak popularity during the eighteenth century (Nelson 1968). The shanks are rectangular in cross-section and both round "rose head" and "T head" examples are found. While these two head patterns did serve different functions, it seems likely that they were used interchangeably at Cotton Hope.

"Modern" machine cut nails account for the overwhelming majority of the collection, although only 239 are sufficiently intact to allow penny weight measures. These nails were first manufactured in the late 1830s and have uniform heads and shanks with burrs on the edges (Nelson 1968:7; Priess 1971:33-34).

Table 8.
Architectural Artifacts from Cotton Hope

	1	2	3	4	5	6	7	8	Total
Wrought nails		1		9		47	2	5	64
Wrought nail frags		2		4	9	71	5	7	98
Cut nails	11	51	2	47	3	90	25	10	239
Cut nail frags	99	242	8	138	40	501	123	31	1182
Unidentifiable nails	30	67		48	28	549	110	24	856
Spikes						3			3
Window glass	48	1623	24	85	71	3	15	2	1871
Construction hardware						2			2
Door lock frags						1			1

Because different size nails served different self-limiting functions, it is possible to use the relative frequencies of nail sizes to indicate building construction details. Nails were early designated by their penny weight, which compared the weight of a nail to that of a silver penny. Gradually the term came to designate length rather than weight, but the equivalence varied over time and it was not until the 1890s that penny weights were thoroughly standardized (Orser et al. 1982:675). To avoid confusion, Table 9 lists both the penny weight size and the Standard Average European (SAE) size for the nails which were sufficiently complete for analysis. Of the nine structures identified in the eight loci, four have produced a sufficient quantity of nails for this study, although none of the samples is as large as would be preferred.

The collection of 47 wrought nails in Locus 6 have been attributed to Structure 8, while the 90 machine cut nails in the same block have been attributed to Structure 6. These results, however, must be carefully interpreted since this approach ignores the potential that the later structure may have incorporated both wrought and cut nails. The 51 cut nails in Locus 2 are attributed to the slave dwelling designated Structure 1. In Locus 4, the 47 cut nails are attributed to Structure 5 which is suggested to have been a barn or other utility building. The small collection of 25 cut nails in Locus 7 are associated with the relatively unknown Structure 9.

Table 9.
Intact Nails from Structures 1, 5, 6, 8, and 9
at Cotton Hope

Penny Weight	SAE	Structure 8 Wrought Nails	Structure 6 Cut Nails	Structure 1 Cut Nails	Structure 5 Cut Nails	Structure 9 Cut Nails
3d	1 1/4"	3	1	3	1	
4d	1 1/2"	18	1	6		2
5d	1 3/4"	6	3	3	2	2
6d	2"	2	5	13	17	6
7d	2 1/4"	1	11	9	4	2
8d	2 1/2"	8	20		3	2
9d	2 3/4"	2	18	3	4	
10d	3"	4	12	10	7	7
12d	3 1/4"	1	13	3	2	3
16d	3 1/2"	1	3	1	7	1
20d	4"	1	1			
30d	4 1/2"					
40d	5"		1			
50d	5 1/2"		1			

Table 9, however, provides only limited information, revealing peaks at the 4-5d and 8d sizes in Structure 8, a significant concentration of nails in the 7d to 12d size at Structure 6, peaks

at 6d and 12d for Structure 1, another peak at 6d for Structure 5, and minor peaks at 6d and 10d for Structure 9. One of the commonly accepted rules in nail length is "to have the nails a full three times as long as the Sheathing Board is thick (Bettesworth and Hitch 1981:2:n.p.). Within certain broad limits the size of nails used to perform a certain task is flexible, depending on the craftsman and the supply of nails. This variation is reflected in Orser et al. (1982:677). A rough guide, however, is provided by Table 10.

Table 10.
Probable Function of Intact Nails for
Structures 1, 5, 6, 8 and 9 at Cotton Hope

	Structure 8		Structure 6		Structure 1		Structure 5		Structure 9	
Function	#	%	#	%	#	%	#	%	#	%
Small timber, shingles (2-5d)	27	57.4	5	5.5	12	23.5	3	6.4	4	16.0
Sheathing, siding (6-8d)	11	23.4	36	40.0	22	43.1	24	51.1	10	40.0
Framing (9-12d)	7	14.9	43	47.8	16	31.4	13	27.6	10	40.0
Heavy framing (16-50d)	2	4.3	6	6.7	1	2.0	7	14.9	1	4.0

Structure 8, attributed to the late eighteenth century and associated with a small tabby fireplace in Locus 6, evidences a distribution of nails which appears typical for architecture during that period. There are a number of nails which would serve roofing and finishing purposes, a number for sheathing associated with frame construction, but relatively few for framing. The absence of framing nails suggests pegged construction techniques, consistent with the posited date of the structure.

Structure 6, also in Locus 6, is suggested to be an early nineteenth century structure overlying Structure 8. The distribution of nails indicates a substantial construction, probably of frame, although it is possible that pegged construction techniques were still used.

Structure 1, in Locus 2, is a mid-nineteenth century slave dwelling with a tabby fire place. The nail size distribution suggests a light frame construction, board sheathing, and wood shingles. The relatively low occurrence of heavy framing nails is consistent with the light framing typical of such structures. Very little is known about Structure 9 (in Locus 7), but is has tentatively been identified as a slave dwelling. The nail size distribution supports this view and its pattern is similar to that of Structure 1.

Structure 5, a probable barn situated in Locus 4, reveals a nail size distribution distinct from the other structures, with

14.9% of the nails characterized as "heavy framing." This pattern is consistent with its utilitarian function.

Very few nails (N=80, only three of which were intact) were recovered from the area of Structure 4 (the most intact eighteenth century slave structure identified at the site). Previous discussions have revealed that this structure was of log construction; hence the near absence of nails is consistent with other known construction details. It seems likely that the bulk of the nails recovered from this locus actually relate to the superimposed Structure 5.

The category of window glass includes 1871 fragments of primarily light green rolled glass. These specimens were classified as window lights based on thickness, degree of clarity, color, and lack of curvature. Of this collection 86.7% (N=1623) come from Locus 2 and are associated with Structure 1. Table 8 also reveals that the two posited utility buildings (Structure 3 and 5) contain relatively large samples of glass (accounting for 8.3% of the collection. While it may initially seem unusual for a barn or similar structure to be fitted with glassed windows, we have little data for this type of structure. Excavations by Lepionka (1986) at a similar structure on Spring Island in Beaufort County (38BU1) revealed an abundance of glass. These structures may have served a processing activity where light (but not open windows) was deemed necessary.

Structure 9 in Locus 7 also contains relatively abundant glass, consistent with its posited function as a slave dwelling. These data suggest that the nineteenth century slave housing at 38BU96 tended to have glassed windows.

Previous work in the region (see, for example, Trinkley and Hacker 1986:241-242 and Michie 1987:120-130) has attempted to use window glass thickness to determine the mean construction dates. The major shortcoming of this technique is that the regression formulae have a number of correction factors (for a detailed discussion see Adams 1980 and Orser et al.1982). Recent studies by Jones and Sullivan (1985) have cast doubt on the validity of this dating technique. They comment that, "the very nature of window glass suggests that one should take great pains to avoid using it for dating except under special circumstances" (Jones and Sullivan 1985:172). Based on this advise and the generally poor results obtained in previous studies, no effort has been made to date the recovered window glass from Cotton Hope.

The three spikes recovered from the site are fragments found in Locus 6 and probably associated with Structure 6. The category of construction hardware includes only two butt hinge fragments, both from Locus 6 and associated with either Structure 6 or 8. Likewise, the single door lock fragment was recovered from Locus 6, and provides some evidence of the more elaborate construction

involved with Structure 6.

Furniture Artifact Group

A total of 24 furniture items were recovered from the excavations at Cotton Hope, including 17 brass tacks, two small iron tacks, two brass drawer pulls (Figure 24b), one brass decorative hook, one furniture hinge, and a fragment of a decorative plate or escutcheon (Figure 24a) (Table 11). These items reflect relatively high status furnishings. The brass tacks were frequently found on chairs as both ornaments and as anchoring devices (Noel Hume 1970:227). The iron tacks would tend to have been placed in areas not visible. The single iron hinge recovered is typical of those associated with trunks or chests and consists of two joined elements. Unfortunately, all of these items are consistent with dating from the late eighteenth century through the nineteenth century.

The assemblage is larger and more variable than typically identified at other slave settlements, although six of the 24 items are associated with the larger structures associated with Locus 6. The slave structure in Loci 2, 5, and 7 produced 10 brass tacks, the furniture hinge, and the decorative brass plate fragment.

Table 11.
Furniture Hardware from Cotton Hope

	Locus								
	1	2	3	4	5	6	7	8	Total
Brass tacks	1	7		3	2	3	1		17
Iron tacks						2			2
Iron furniture hinge							1		1
Brass drawer pulls			1			1			2
Brass furniture hook	1								1
Brass decorative plate					1				1

Arms Artifact Group

This group includes 18 specimens, including one minie ball, four gunflints, five lead shots, three percussion caps, three .22 caliber shells, one 12 gauge shotgun shell, and one brass scabbard clip. The .22 caliber shells are all rim fire types, which were developed in the later 1850s and were common from the 1870s to the 1890s (.22 caliber rim fires are still found) (Johnson and Haven 1943:39, 42). The shotgun shell post-dates 1870. These four items are therefore considered intrusive into the archaeological record.

The lead minie ball is a .69 caliber and appears to be of molded manufacture and post-dates 1850 (Coggins 1962:31; Peterson

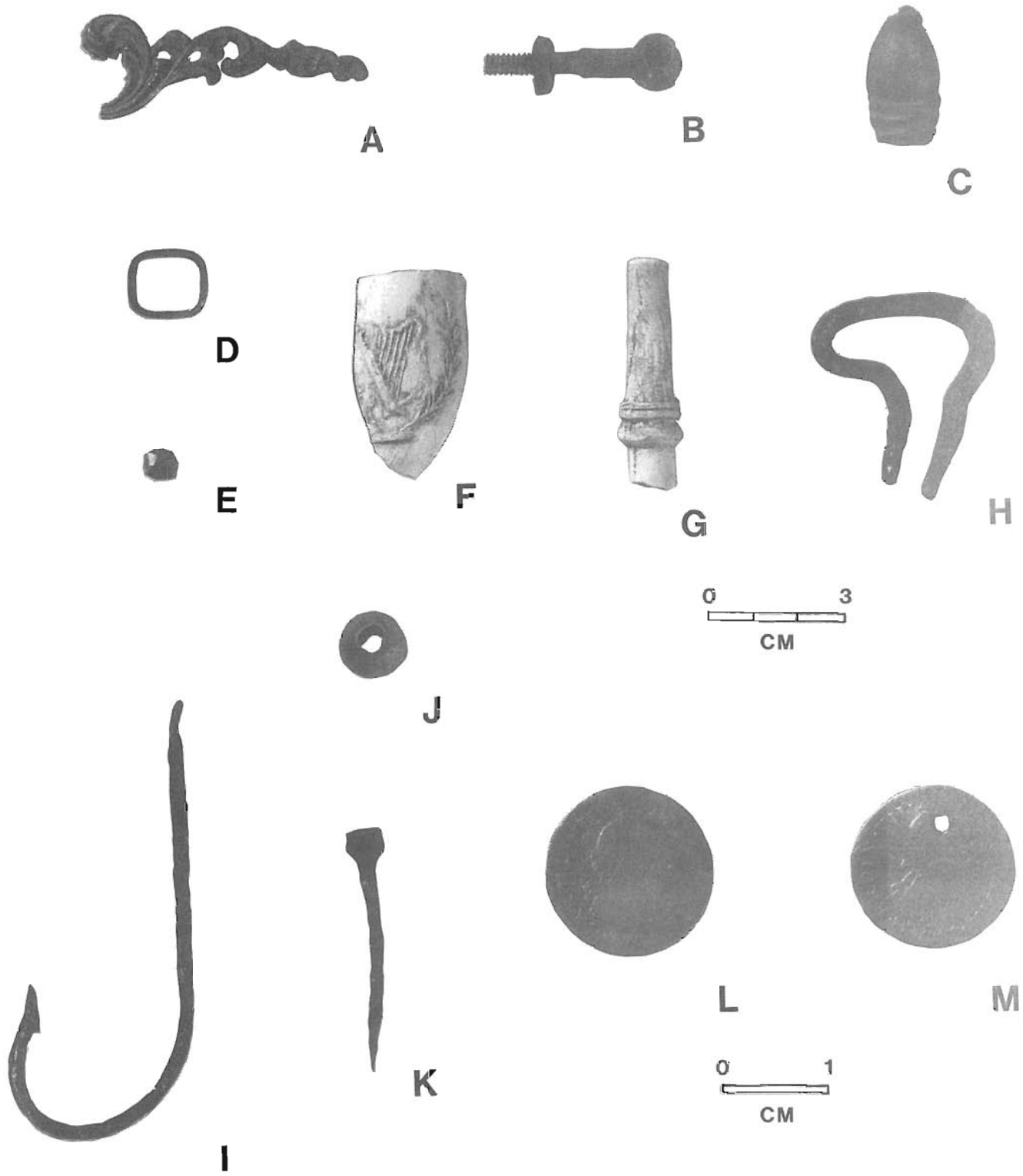


Figure 24. Furniture, Arms, Personal, Tobacco, and Activities artifacts. A, brass decorative furniture plate; B, brass drawer pull; C, minie ball; D, gilt jewelry setting; E, faceted glass bead; F, kaolin pipe bowl; G, kaolin pipe stem; H, jewsharp; I, fish hook; J, lead fishing weight; K, horse shoe nail; L-M, silver reals.

1964:219) (Figure 24c). The three percussion caps are all examples of the "top hat" variety commonly used for military arms (Moore 1963:77). The brass scabbard clip (also known as a sword frog) is "U" shaped and undecorated. These items probably date from the Union military occupation of Cotton Hope and are also considered intrusive into the eighteenth century and nineteenth century antebellum record. Their occurrence at this site is not surprising; what perhaps is more unusual is the relatively low density of military armament found at 38BU96.

The five lead shot vary from 8 to 9.5 millimeters in diameter and are typical sizes for use in shotgun shells or buckshot cartridges. Three of the four gunflints are gray flint, while the fourth is a dark brown. Their size indicates that they were intended for use in sporting rifles. These nine items are the only evidence available for arms at Cotton Hope.

The presence of flints, shot, or even gun parts, at slave sites is frequently interpreted as evidence of slaves owning, or having access to, firearms (see, for example, Joyner 1984:100; Otto 1984:44; Singleton 1980:166). Yet, the simple presence of the these items fails to support such assumptions since all of these items could be lost, stolen, or adapted for alternate uses. Gunflints in particular are useful to start fires. Lead shot could be encountered in butchered animals.

Singleton cites a historical account to document the availability of firearms, although the account states:

> I have sometime since taken all firearms from them as I think they have forfeited their charter from the swamps and their conduct. I am often glad my philanthropy in allowing them to have guns did not extend further than this (Roswell King, Jr., June 28, 1829, cited in Singleton 1980:166).

Other historians, however, have suggested that it is difficult, in the absence of a complete gun, to historically reconcile the Southern paranoia of slave revolt (see Kimble 1984:38-39, 342) with the presence of weapons at slave sites (Dr. Jack Meyer, personal communication 1989). We are inclined to agree with this caution.

Clothing Artifact Group

Recovered from the excavations at Cotton Hope are 87 clothing items, including 65 buttons, three brass buckles, three iron buckles, three small brass grommets, one brass eye, one metal snap, one brass aglet, one brass suspender clip, and one collar stud. Also recovered were five brass thimbles and three scissor fragments.

Buttons from Cotton Hope include 59 specimens which may be

placed in South's button taxonomy (South 1964), two military buttons (which are not placed in South's taxonomy because of their specialized nature), and four buttons which cannot be assigned to any of South's classifications (Figure 25f-r).

The non-military buttons are detailed in Table 12. Of the 65 buttons, only Types 8, 9, 10, and 13 are likely to be associated with the eighteenth century occupation of the site and three of these four examples came from areas with dense eighteenth century occupation (Loci 4 and 5).

The remaining 61 nineteenth century buttons are "dominated" by three types: bone buttons (Types 19 and 20) account for seven

Table 12.
Buttons Recovered from Cotton Hope

Type	Description	#	Other (measurements in cm.)
8	cast brass, eye in boss	1	1.7
9	brass, stamped face design	1	1.9
10	brass, soldered "U" eye	1	1.3
13	cast glass with brass eye	1	1.0 (black glass)
15	one hole bone disk	4	2-1.0, 2-1.8
18	stamped brass	3	1.9 (FINE/ORANGE/GILT), 1.8 (SUPERIOR/TO/GOLD PLATED), 1.4 (GILT with wreath)
19	5-hole bone	4	1.3, 1.7, 2.1, fragment
20	4-hole bone	3	1.3, 1.4, 1.8
21	4-hole, two piece iron	9	1.2, 1.3, 2-1.4, 1.6, 2-1.7, 1.8, 2.0
22	4-hole shell	1	1.0
23	4-hole white porcelain	12	1.0, 9-1.2, 1.2, 1.7
23	4-hole porcelain, painted brown	1	1.1
23	4-hole porcelain, painted rays ("Bias Sawtooth")	2	2-1.3
23	4-hole porcelain, painted rays ("Piecrust")	2	0.9, 1.1
24	fabric covered iron	3	1.1, 1.6, 1.9
27	domed, embossed brass	1	1.3 (dog design)
28	machine stamped brass	1	2.2
29	cast soft white metal	4	3-2.1, fragment
29	cast soft white metal with gilt	1	2.7
31	spun brass with drilled eye	1	1.7
32	4-hole stamped brass	1	1.3 (S.J. HOLMES & CO./EXTRA)
34	shell with hole for brass shank	1	1.5
--	2-hole porcelain	1	1.4
--	3-hole porcelain	1	0.8
--	black glass with molded eye	1	2.3
--	brass	1	1.0

specimens (11.5%), metal buttons (Type 21) account for nine specimens (14.8), and porcelain buttons (Type 23) account for 17 specimens (27.9%). While all were mass produced and inexpensive, they probably served different functions. The porcelain buttons tend to be found on shirts and undergarments, while the metal and bone buttons would be found on pants and other work clothes.

The porcelain style, known as "small chinas" or "Prosser" buttons after the inventor, Richard Prosser (Peacock 1972:98). The style dates from the nineteenth century and Luscomb (1967:183) notes that most were between 3/8 and 3/4 of an inch. The collection from Cotton Hope has produced not only the common white variety, but also one example of a brown painted white porcelain, two examples known as "piecrust buttons" which have a molded edge of fine lines, and two examples of "sawtooth buttons" which have slanted fine lines on the edge of the button which have been painted (Luscomb 1967:152).

The single button which exhibits a marker's make is the Type 32 brass button stamped "S.J. HOLMES & CO./EXTRA." The term "EXTRA," like "GILT," "RICH/ORANGE," and others were not specifically related to quality, but do signal a post-1800 date. Samuel Judd Holmes formed a short lived partnership with Elizur E. Pritchard in the 1840s, although he apparently was in business by himself at other times (McGuinn and Bazelon 1984:54).

The two military buttons recovered include one specimen of a General Service button with a spread eagle and lined shield identified as Albert's Type GI 94 (Albert 1969). This button would post-date 1854 and may be assigned to the Union occupation of Hilton Head Island. The second button shows an eagle and globe device on a shield with 13 stars above and the motto "EXCELSIOR" below. This is identified by Albert (1969) as a staff button for the New York Militia and is given his Type NY 30.

The remaining clothing items all tend to be utilitarian items characteristic of the nineteenth century. While the iron buckles (Figure 25a-e) were probably used with belts, Stone (1974:25) cautions that such functional assessments are largely subjective and the items may have been harness or spur buckles.

Eight items in the Clothing Artifact Group are related to sewing, including five brass thimbles (Figure 25s-t) and two iron scissor fragments. The thimbles are all utilitarian examples of stamped brass typical of the nineteenth century (Johnson 1980:5). The three scissor specimens include one blade fragment and two handle fragments. These remains are indicative of light household sewing. Curiously, five of these specimens (three thimbles and two scissor fragments) were recovered from Locus 4, which is suggested to represent a late eighteenth century slave structure underlying a nineteenth century utility building.

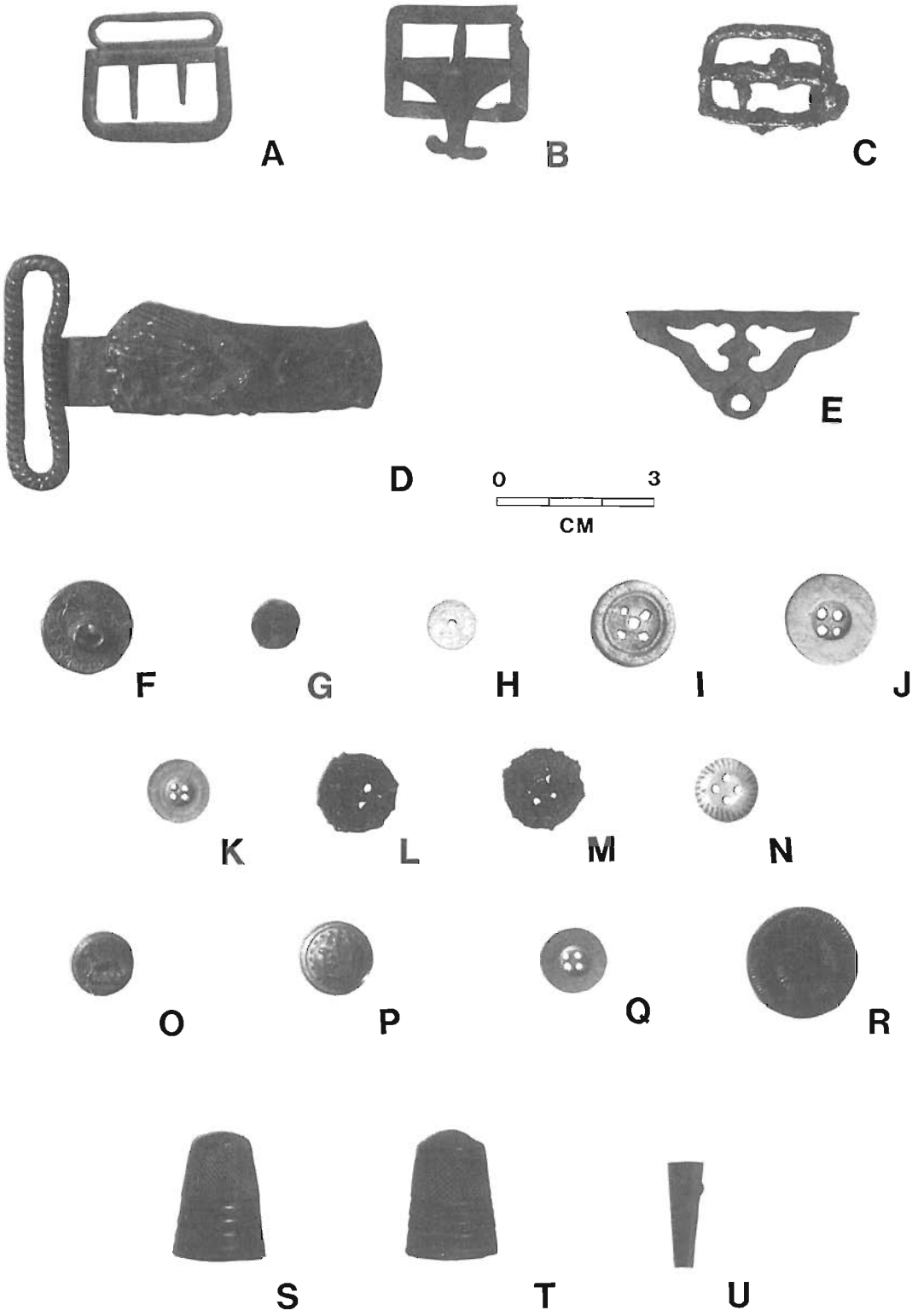


Figure 25. Clothing artifacts. A-D, buckles; E, suspender clip; F, Type 7 brass button; G, Type 13 black glass button; H, Type 15 bone button; I, Type 19 bone button; J-K, Type 20 bone buttons; L-M, Type 21 iron buttons; N, Type 23 porcelain button; O-P, Type 27 brass buttons, Q, Type 32 brass button; R, black glass button; S-T, brass thimbles; U, brass aglet.

Personal Artifact Group

The Personal Artifact Group includes only 22 specimens, including seven slate pencil fragments, two jewelry settings, one unidentifiable silver object, one unidentifiable brass object, one fragment of an eyeglass lens, two mirror fragments, one oval picture fragment, two key fragments, three glass beads, and two silver coins (Table 13).

Slate pencils continued to be widely available into the late nineteenth century and by 1869 were still much less expensive than lead pencils (costing about .1 cent each compared to 2 cents each for lead pencils [Trinkley and Hacker 1986:255]). The two jewelry items include one glass stone while the other is a small gilt setting (Figure 25d). Such items were common throughout the nineteenth century (Johnson 1980:13) and may represent fragments of hatpins, rings, or brooches.

Table 13.
Personal artifacts found at Cotton Hope

	Locus								
	1	2	3	4	5	6	7	8	Total
Slate pencils	1					6			7
Jewelry setting	1					1			2
Eyeglass lens		1							1
Mirror fragments		2							2
Picture glass oval		1							1
Key fragments				2					2
Beads				1		2			3
Silver coins			1	1					2
UID silver object	1								1
UID brass object	1								1

The two fragments of mirror glass were all found associated with Structure 1. Although the specimens were not chemically examined, prior to 1865 most reflective backings were either a thin sheet of tin amalgam or a sheet of tin foil attached to glass by means of an amalgam of mercury. Even after silvering was perfected, tin continued to be used through the late nineteenth century.

The three beads identified include one faceted emerald green drawn bead (type If3) (Figure 24e), one round white wire wound bead (type W1b2), and one doughnut-shaped wire wound clear glass bead (type W1d-) (Kidd and Kidd 1970). Smith (1983:F-1) notes that the two wire wound bead types are found in probable eighteenth century contexts at Yaughan-Curriboo, although firm dating is not presently available. Otto notes that beads in general, but especially faceted

hexagonal beads, "may prove to be reliable indicators of slave status on Old South plantation and farm sites" (Otto 1984:74). Two of the beads from Cotton Hope are found in Locus 6, associated with what may be higher status dwellings, while one is found in Locus 4. While these beads are not clearly associated with a nineteenth century slave structure they almost certainly are associated with the slave occupation and activities taking place at 38BU96.

One coin was found in Locus 4 and is a silver one real minted in Mexico in 1811 during the reign of "Ferdin (Ferdinand) VIII." This coin has a hole punched for use as jewelry, possibly on a bracelet or necklace. The other, also a silver one real minted in Mexico, is dated 1780 during the reign of "Carolus (Charles) III" and was found in Locus 3 (see Chamberlain and Reinfeld 1960:181). Foreign coinage was very important to the American colonies during the Revolutionary War and for a number of years afterwards. The one real was valued at 1/8th of a Spanish milled dollar (eight reals) or one dollar in Continental money (see Porteous 1969:225).

Tobacco Artifact Group

The tobacco category includes 263 items, including 67 pipe bowls and 197 pipe stems. All but one were manufactured from ball or kaolin clay (Figure 24f-g).

All of the few pipe bowls which were relatively intact are of the Irish style made in standard molds from about 1850 through 1910 (Ayto 1979). This, however, does not include the vast majority which are heavily fragmented. Thirty seven of the 67 bowls were plain (55.2%), while the remainder were decorated. Decorative motifs identified include ribs (8; 26.7%), molded "T.D." (5; 16.7%), and simple leaves (3; 10%). The remaining design motifs account for 46.6% of the decorated bowls, but no more than two pipes bear the same motif. One unique motif is a harp surrounded by a wreath, which is similar to other nineteenth century Irish motifs (see Atkinson and Oswald n.d.:41-42). As Wilson observes:

> [t]hat we find such a seemingly limitless variety of clay pipes is not surprising when we consider, for example, the production of the William White company of Glasgow. Arnold Fleming, in his Scottish Pottery (p. 243), states that the White factory in 1867 comprised five stories and "is filled throughout with the most modern appliances. There are six kilns, each holding 300 gross, and, as the firing process only lasts some twelve hours, we get an idea of the vast quantity of pipes produced from their *700-odd varieties of patterns*" (Wilson 1971:14-15; emphasis added).

Unfortunately, very limited work has been conducted which provides temporal indicators. The "T.D." pipes have been discussed by Hopkins (1937), Humphrey (1969), Walker (1966), and Wilson

(1971). Whatever the origin of this mark might be, by the mid-nineteenth century several makers were using it as a style and about 1875 the D. McDougall and Co. of Glasgow were advertising them as "Plain T.D." at a cost of £ 1.10 per gross (Sudbury 1980:45-46).

The pipe stems provide some additional temporal information. Ten of the 197 specimens evidence molded maker's marks, including one example of "R/R" on a foot, one example of"INC--DA/A--ARNARY," one foot with a molded "4," one example of "T. --/G[LASGOW]," one example of a molded "78," one molded "BAN--/[GLAS]GOW," one example of "[G]LASGOW," one specimen of "MCDOUGALL/GLASGOW," and two "W. WHITE/GLASGOW."

The McDougall pipe was manufactured by the D. McDougall Company of Glasgow, which was the "largest export manufacturer" of pipes in the mid-nineteenth century. These pipes post-date 1846 (Humphrey 1969:17-18). William White of Glasgow operated from 1805 through 1845 when the firm became William White and Son (later "Sons") (Walker 1977:1031). Humphrey (1969:18) mentions that many W. White pipes also have the number "78" incorporated with the name, which probably identifies one additional specimen from Cotton Hope as being manufactured by White. The one complete W. White pipe stem recovered from Cotton Hope, however, is also impressed with the number "72." No reference to the use of this number has been found in the available literature. The impression "BAN--/--GOW" probably represents C. or Carrick Bannerman, who operated at least as early as 1842 through 1865 (Walker 1977:1005). The remaining pipe marks could not be conclusively identified.

Also identified in the collections was one pipe stem of kaolin clay with a clear lead glaze. A small collection of similar pipe stems were found at the freedmen's village of Mitchelville on Hilton Head (Trinkley and Hacker 1986:256), although such pipes have not been referenced in the literature. The one pipe stem not manufactured of white ball or kaolin clay is an example of a colono pipe made to imitate a stub stem pipe.

Activities Artifact Group

While not the largest of the various categories, this group contains the most diverse assemblage, including 174 specimens. Examples of tools (N=3), fishing equipment (N=3), storage items (N=19), stable and barn related items (N=5), miscellaneous hardware items (N=27), toys (N=3), and a rather general category of other items (N=114) are included. These items are detailed in Table 14. Most are self-explanatory and few are temporally sensitive, so little discussion will be offered.

A review of the recovered items, however, reveals very little evidence for any specific site functions. The fishing gear does include two net weights and a single fish hook (Figure 24i-j), but

Table 14.
Activity Group Artifacts from Cotton Hope

Tools		Miscellaneous Hardware	
triangular files	2	iron wood screws	12
flat files	1	brass wood screws	1
		brass nails	6
Fishing Gear		brass spikes	2
lead weights	2	brass washer	1
fish hook	1	iron tacks	1
		staple	1
Storage Items		chain (6 links)	1
iron strap metal	18	bolts	2
lead bale seal	1		
		Other Items	
Stable and Barn Items		UID lead	2
horseshoe nails	4	lead rod	1
plow part	1	lead puddles	2
		brass strips	4
Toys		brass rod	1
porcelain doll's foot	1	brass sheets	3
jew's harp	1	UID brass	11
harmonica reed	1	UID iron	86
		worked slate	1
		UID clay	3

this seems to be too small assemblage to justify a special activity area associated with fishing. There are, however, a small number of brass nails and spikes, typically associated with ship building and repair, found at the site. Equally perplexing is the relative absence of items usually associated with agricultural activities, such as hoes. The only item directly related to agricultural production is the plow part, a fragmentary trace hook.

Dating Synthesis

The previous discussions have indicated that a number of artifacts may provide temporally sensitive information with which to date the various components at Cotton Hope. Ceramics, in particular, have been shown to be useful for obtaining mean occupation dates (South 1977). Other artifacts, while useful in dating, are often not found in sufficient numbers to provide confidence in their associations. Some artifacts are useful for providing terminus post quem (TPQ) dates, or a date after which the assemblage was deposited. Most artifacts, however, provide only a general time frame, such as "typical of the nineteenth century." On slave sites, additional caution must be exercised since it is possible that specimens might have long periods of use, or curation, so that eighteenth century materials may find their way into nineteenth century contexts.

The ceramic dates have been previously considered in Table 3, with the site yielding two eighteenth century dates, two early nineteenth century dates, and four mid-nineteenth century dates. A closer examination, however, reveals that even though the materials span a period of 70+ years, there are clear concentrations of materials in each locus which are associated with the various plantation developments. It is useful to examine the various loci from the perspective of the proportion of eighteenth (i.e., creamware, lead glazed slipware), early nineteenth (i.e., pearlware), and mid-nineteenth (i.e., whiteware) ceramics identified.

Locus 1, with the mean ceramic date of 1843.9, is not associated with any architectural remains. Of the 280 ceramics recovered, 80.7% date from the mid-nineteenth century and it appears that this portion of the site was only lightly used during the earlier plantation developments.

Locus 2, with a mean ceramic date of 1841.0, contains evidence of two Structures (1 and 2). While 67.7% of the 1013 ceramics date from the mid-nineteenth century, 29.2% date from the early nineteenth century. This locus was therefore only lightly used during the early period of the plantation, but some occupation may have begun in the early nineteenth century, possibly associated with Structure 2. The primary occupation was during the mid-nineteenth century and was associated with the slave dwelling designated Structure 1.

Locus 3, with a mean ceramic date of 1820.3, appears to be a trash disposal area adjacent to the bluff and there is no evidence of structural remains. Of the 101 ceramics, 50.5% date from the early nineteenth century and 34.7% date from the mid-nineteenth century. This suggests that the area was only lightly used during the late eighteenth century, with use or trash disposal beginning in the early nineteenth century and continuing through the mid-nineteenth century.

Locus 4, with a mean ceramic date of 1809.5, contains evidence of two structures. One, Structure 7, is an eighteenth century slave dwelling, although only a corner was identified by the excavations. The other, Structure 3, is a utility building which, based on the associated remains, dates from the early nineteenth century. Of the 603 ceramics recovered from Locus 4, 62.0% date from this period.

Locus 5, with a mean ceramic date of 1784.2, evidences two structures. One, Structure 4, is an eighteenth century slave dwelling, while the other, Structure 5, is a later, intrusive building. Of the 392 ceramics, 76.8 date from the eighteenth century, while 17.3% are indicative of the early nineteenth century and probably date Structure 5.

Locus 6, with a mean date of 1797.9, contains the remains of

two structures. Both are evidenced only by tabby fire places, with Structure 6 being smaller and pre-dating Structure 8. Of the 552 ceramics, 48.7% are eighteenth century remains, while early to mid-nineteenth century ceramics are about equally represented. This suggests that the first occupation (Structure 6) dates to about the same period as the eighteenth century slave settlement, while the larger structure was probably built in the early nineteenth century and continued to be used into the 1860s.

Locus 7, with a mean ceramic date of 1837.2, suggests the existence of a structure (9) in the immediate area, although no clear architectural remains were identified. Of the 165 ceramics recovered 61.2% date from the mid-nineteenth century, while 36.4% date from the early nineteenth century. This suggests that occupation may have been in this area during the early nineteenth century and continued to the Civil War. The situation in this area is almost identical to that found in Locus 2. This suggests that the plantation construction episodes in the early to mid-nineteenth century may reflect re-building of the existing structures (although clearly re-orientation of the structures also took place).

Locus 8, with a mean ceramic date of 1802.9, failed to exhibit structural remains and the area appears to be a midden or trash area. Of the 189 datable ceramics recovered, eighteenth and early nineteenth century varieties are equally represented (43.9% and 48.2% respectively). Mid-nineteenth century remains are sparse. These data suggest that this site area began its use early in the history of Cotton Hope, but activities shifted elsewhere by the mid-nineteenth century.

Reference to the previous discussions concerning plantation development (see Figure 22) reveals that these mean dates are entirely consistent with the suggested settlement pattern changes and observed architectural remains. There are some tenuous indications that the shift from the eighteenth century to the nineteenth century was more significant (with a change not only in plantation orientation but also function) than the shift in the nineteenth century, which seems to have primarily involved re-orientation of existing structures.

Comparison of this ceramic dating synthesis to the other artifacts identified at Cotton Hope indicates a high level of agreement. The distribution of wrought (i.e., typically eighteenth century) and machine cut (i.e., nineteenth century) nails is appropriate for the suggested reconstruction. There is evidence for what amounts to "cultural swamping" in the nineteenth century, with much larger quantities of artifacts found later in time. Since the three eighteenth century structures found were each built-over in the nineteenth century, there is considerable mixing of remains. Some artifacts, such as tobacco pipes, cannot accurately be divided between the various occupations. Those which can be dated on the

basis of manufacturer, however, tend to represent mid-nineteenth century deposits, representing this "explosion" in material remains during the period.

Pattern Analysis

Up to this point we have used South's artifact groups and classes as simply a convenient and logical means of ordering data, clearly recognizing that other methods are available (e.g., Sprague 1981). In this section we will use these functional categories for an "artifact pattern analysis" developed by South (1977) who believes that the patterns identified in the archaeological record will reflect cultural processes and will assist in delimiting distinct site types. South has succinctly stated that, "we can have no science without pattern recognition , and pattern cannot be refined without quantification" (South 1977:25). The recognition of patterns in historical archaeology is not an end in itself, but rather should be one of series of techniques useful for comparing different sites with the ultimate goal of distinguishing cultural processes at work in the archaeological record (South 1988).

There can be no denying that the technique has problems (see, for example, Joseph 1989), some of which are very serious, but no more effective technique than South's has been proposed. While a number of factors influence the construction of the pattern, Joseph states:

> [w]hatever its flaws, the value of artifact patterning lies in the fact that it is a universally recognized method for organizing large collections of artifactual data in a manner which can be easily understood and which can be used for comparative purposes (Joseph 1989:65).

Even at this level of a fairly simple heuristic device, pattern analysis have revealed five, and possibly seven, "archaeological signatures" -- the Revised Carolina Artifact Pattern (Garrow 1982b; Jackson 1986:75-76; South 1977), the Revised Frontier Artifact Pattern (Garrow 1982b; South 1977), the Carolina Slave Artifact Pattern (Garrow 1982b; Wheaton et al. 1983), the Georgia Slave Artifact Pattern (Singleton 1980; Zierden and Calhoun 1983), and the Public Interaction Artifact Pattern (Garrow 1982b), as well as the less developed and tested Tenant/Yeoman Artifact Pattern (Drucker et al. 1984) and the Washington Civic Center Pattern (Garrow 1982b) which Cheek et al. (1983:90) suggest might be better termed a "Nineteenth Century White Urban Pattern." Recent work at the freedmen's village of Mitchelville on Hilton Head Island has revealed a loose clustering of artifact patterns midway between that of the Georgia Slave Artifact Pattern and the Tenant/Yeoman Artifact Pattern (Trinkley and Hacker 1986:264-268). Several of these patterns are summarized in Table 15. A careful inspection of these patterns surprisingly reveals no overlap in the major categories of Kitchen and Architecture, which suggests that

these two categories are particularly sensitive indicators of either site function (including intra-site functional differences) or "cultural differences" (see Cheek et al. 1983:90; Garrow 1982a:4; Joseph 1989:60; South 1977:146-154).

Table 16 presents the artifact patterns for the various loci excavated at Cotton Hope. A comparison of Tables 15 and 16 reveals that Loci 3, 4, 5, and 8 bear a strong resemblance to the Revised Carolina Artifact Pattern, while Locus 2 fits the Georgia Slave Artifact Pattern.

Previous researchers (e.g., Zierden and Calhoun 1983; Joseph 1989) have offered a variety of reasons for the differences in the Revised Carolina Slave Artifact Pattern and the Georgia Slave Artifact Pattern. Zierden and Calhoun suggest that the differences are largely related to different architectural construction techniques, although "another possible reason for the contrast between [the two patterns] is the temporal difference" (Zierden and Calhoun 1983:43). Joseph echoes this view, stating,

> the Carolina and Georgia slave patterns represented different cultural groups. . . . The sites employed in the South Carolina pattern were predominately of the Colonial period, and featured high quantities of Colonoware ceramics and architectural styles, such as mud-wall or post construction, which would leave few permanent architectural artifacts. The Georgia slave sites were 19th century in origin, did not possess Colonowares, and featured frame dwellings. These variations are considered as responsible for the difference between the Georgia and South Carolina slave artifact patterns (Joseph 1989:64).

With these factors in mind, it is reasonable that Locus 5 evidences a Revised Carolina Slave Artifact Pattern. It is clearly eighteenth century and the architecture was rather ephemeral. The other loci, however, are somewhat more problematical.

Locus 3 dates from the early nineteenth century, not the colonial period, and appears to be primarily a trash area. This latter feature may account for the observed pattern. As a trash disposal area it seems likely that kitchen items would be commonly discarded than architectural remains. The problems of excavation strategy and sampling are touched upon by Joseph (1989:58-59) and it seems clear that the application of pattern analysis to a single 10-foot unit excavated in isolation of the total plantation complex is inappropriate. Consequently, while the pattern study from Locus 1 may be useful for eventually revealing discard behavior, it probably does not reflect a true Carolina Slave Artifact Pattern. Locus 8 may be discounted for similar reasons, although it does contain a significant eighteenth century component, which may be reflected in the pattern study.

Table 15.
Various Archaeological Pattern Comparisons

Artifact Group	Revised Carolina Artifact Pattern[a]	Revised Frontier Artifact Pattern[b]	Carolina Slave Artifact Pattern[c]	Georgia Slave Artifact Pattern[d]	Piedmont Tenant/ Yeoman Artifact Pattern[e]
Kitchen	51.8 - 65.0%	35.5 - 43.8%	70.9 - 84.2%	20.0 - 25.8%	45.6% (40.0 - 61.2%)
Architectural	25.2 - 31.4%	41.6 - 43.0%	11.8 - 24.8%	67.9 - 73.2%	50.0% (35.8 - 56.3%)
Furniture	0.2 - 0.6%	0.1 - 1.3%	0.1%	0.0 - 0.1%	0.4%
Arms	0.1 - 0.3%	1.4 - 8.9%	0.1 - 0.3%	0.0 - 0.2%	-
Clothing	0.6 - 5.4%	0.3 - 1.6%	0.3 - 0.8%	0.3 - 1.7%	1.8%
Personal	0.2 - 0.5%	0.1%	0.1%	0.1 - 0.2%	0.4%
Tobacco	1.9 - 13.9%	1.3 - 14.0%	2.4 - 5.4%	0.3 - 9.7%	-
Activities	0.9 - 1.7%	0.5 - 5.4%	0.2 - 0.9%	0.2 - 0.4%	1.8%

Sources:

[a] Garrow 1982b
[b] Garrow 1982b
[c] Garrow 1982
[d] Singleton 1980
[e] Drucker et al. 1984:5-47 (no range was provided, but has been partially reconstructed for the Kitchen and Architecture Groups)

Table 16.
Artifact Patterns at Cotton Hope

	Locus 1	Locus 2	Locus 3	Locus 4	Locus 5	Locus 6	Locus 7	Locus 8
Kitchen								
Ceramics	321	747	109	596	425	591	189	223
Colono ceramics	63	12	22	136	98	28	48	50
Glass	77	219	37	227	189	532	38	57
Tableware		21	2	8	11	15	4	
Kitchenware	9	24		22	29	53	16	3
Subtotal	470	1023	170	989	752	1219	295	333
%	68.1	33.0	78.6	69.7	77.7	45.0	47.9	
Architecture								
Window glass	48	1623	24	85	71	3	15	2
Nails	140	363	10	246	80	1258	265	77
Spikes						3		
Door lock parts						1		
Construction						2		
Subtotal	188	1986	34	331	151	1267	280	79
%	27.2	64.0	15.7	23.3	15.6	46.8	45.4	18.1
Furniture Group								
Furniture hardware	2	7	1	3	3	6	2	
Subtotal	2	7	1	3	3	6	2	
%	0.3	0.2	0.5	0.2	0.3	0.2	0.3	0.0
Arms Group								
Shot	2	6		2	1	2		1
Flints		1		1		1	1	
Subtotal	2	7		3	1	3	1	1
%	0.3	0.2	0.0	0.2	0.1	0.1	0.1	0.2
Tobacco Group								
Pipe stems	6	12	8	43	31	73	11	9
Pipe bowls	4	6		11	9	28	6	3
Other		3				1	1	
Subtotal	10	21	8	54	40	102	17	12
%	1.5	0.7	3.7	3.8	4.1	3.8	2.9	2.7
Clothing Group								
Buttons	3	11	1	12	1	24	5	7
Other	2	3		6	2	5	2	2
Subtotal	5	14	1	18	3	29	7	9
%	0.7	0.5	0.5	1.3	0.3	1.1	1.3	2.1
Personal Group								
Beads				1		2		
Other	4	4	1	3		8		
Subtotal	4	4	1	4		10		
%	0.6	0.1	0.3	0.3	0.0	0.3	0.0	0.0
Activities Group								
Tools				1	1	1		
Fishing gear	1	1				1		
Storage		5		2	2	9		1
Stable and barn		3					1	
Misc. hardware	4	4		2	1	14	3	
Toys		1				1		1
Other	4	26	1	12	14	47	9	1
Subtotal	9	40	1	17	18	73	13	3
%	1.3	1.3	0.5	1.2	1.9	2.7	2.1	0.7

Locus 4 is somewhat more difficult to explain. While a small portion of an eighteenth century structure is contained within the excavations, the artifact assemblage, including the mean ceramic date, seems to be largely influenced by the overlying early nineteenth century non-domestic structure. It seems likely that the pattern analysis begins to break down as a useful tool when there is mixing of components and probable functions. Certainly this should not be surprising based on how the pattern is formulated.

Locus 2 exhibits a relatively good fit for the Georgia Slave Artifact Pattern. The structures found in this area date from the nineteenth century and were probably frame construction -- fitting the background of the pattern. It appears, with only minor deviations, that Structures 1 and 2 were domestic slave quarters which are typical of the Georgia Slave Artifact Pattern.

Locus 1, at the south edge of the site, appears to be refuse disposal area and as such one might expect it to fall into the pattern observed at Loci 3 and 8 (although the mean ceramic dates are clearly nineteenth century). Reference to Tables 15 and 16, however, reveals that the remains from this single 10-foot unit bear close similarity to the Revised Carolina Artifact Pattern. It is not possible to discount bias and sampling error since the sample is small and isolated. On the other hand, it is possible that the unit reflects different activities taking place on the south edge of the site, outside the sphere of the slave settlement.

Locus 6, which has a fairly large collection obtained from block excavations, exhibits an assemblage similar in most respects to the Revised Frontier Artifact Pattern. In fact, the only artifact groups which differ from the established ranges are those of Arms (very low for the Revised Frontier Pattern) and Personal (which is slightly higher than would be expected). This pattern at a late eighteenth century site is unexpected, although Lewis observes that the "frontier model deals primarily with adaption to a frontier situation" and that it has largely developed from the study of colonization (Lewis 1976:13). Even by the late eighteenth century it may be appropriate to view settlement on Hilton Head from this perspective. Signs of "impending change" may be evidenced by the reduced reliance on (or need for) weapons toward the end of the eighteenth century and the increased quantities of personal artifacts available.

Alternatively, this pattern may reflect the construction and subsequent demolition of two structures, producing a higher than expected ratio of architecture to kitchen artifacts. South observes that a, "short occupation span would . . . produce a higher Architecture to Kitchen Group ratio" (South 1977:158).

Examination of the pattern analysis for Locus 7 reveals a pattern almost identical to that associated with Locus 6. Unfortunately, too little is known about Locus 7 for it to shed any

appreciable light on the reason for this pattern.

The pattern studies at Cotton Hope reveal that the complexity of the archaeological remains is reflected in the pattern analysis -- there are no simple answers for complex problems. Site 38BU96 reflects intensive occupation over a relatively brief span of time (about 70 years). To complicate the situation even further, there appear to have been significant changes in the nature of housing and the function of the site. The pattern studies reveal this complexity.

Status and Lifestyle Observations

Miller (1980) has suggested a technique for the analysis of ceramic collections to yield information on the economic value of the assemblage which, as Garrow notes, "theoretically provides a means of roughly determining the economic position of the household that used and discarded the ceramics" (Garrow 1982b:66; see also Spencer-Wood and Heberling 1987 and Garrow 1987). While this technique could revolutionize our perception of the economic status of historic peoples, it has not been embraced by all historic archaeologists. It is limited to the cream colored wares (and a few other ceramics) of the nineteenth century, its methodology has not been perfected, and index values do not exist for all of the decoration/wares types for all of the time periods. In spite of these problems it, like South's pattern analysis, provides another significant analytical technique.

This technique has been used for only Loci 2 and 5 at Cotton Hope. These two areas contain a relatively large sample of vessels from the nineteenth century and can be associated with specific structures. Locus 2 is a slave dwelling from the nineteenth century and our work suggests that the bulk of the recovered materials are associated with Structure 1.

Application of Miller's technique to the Structure 1 assemblage is shown in Table 17. The index values for this structure range from 1.32 to 1.92. The index values for the plates and bowls form a tight range of 1.32 to 1.38, with the cups and saucers evidencing some degree of divergence. The index values for the plates and bowls are similar to those values obtained by Miller (1980) for his tenant farmer sample. The results of this study are also similar to those obtained from the late antebellum slave row at Haig Point on Daufuskie Island (Trinkley and Hacker 1989:168). Cups and saucers (excepting the plain wares) tend to have higher index values than plates and bowls because they were intended to be used in highly ritualized tea ceremonies. In a slave setting such as Cotton Hope, it seems likely that these vessels would not have been purchased for slave use, but rather would have been obtained as discards from the main house or from other non-status-related methods of acquisition (Spencer-Wood and Heberling 1987:70, 73). Consequently, their higher index value is perceived as an indicator

Table 17.
Ceramic Index Values for Structure 1

Plates	Index Value Assigned (date)	Number	Product
undecorated	1.00 (1839)	16	16.00
edged	1.29 (1839)	18	23.22
blue transfer print	2.45 (1839)	4	9.80
flow blue	2.44 (1836)	1	2.44
		39	51.46

Average Value = 1.32

Bowls	Index Value Assigned (date)	Number	Product
undecorated	1.00 (1846)	8	8.00
annular	1.10 (1855)	9	9.90
blue/poly hand painted	1.60 (1846)	6	9.60
blue transfer print	2.80 (1846)	3	8.40
		26	35.90

Average Value = 1.38

Cups/Saucers	Index Value Assigned (date)	Number	Product
undecorated	1.00 (1846)	8	8.00
annular	1.77 (1846)	7	12.39
blue transfer print	4.00 (1856)	4	16.00
		19	36.39

Average Value = 1.92

of the status of the owner rather than the slave. It seems likely, however, that many of the plates and bowls (particularly those with transfer printed or hand painted motifs) would have been obtained as cast off pieces from the main house (see discussion below).

Locus 6 represents an occupation area associated with Structures 6 and 8, although the nineteenth century ceramics used in the analysis most likely are associated with Structure 6. The application of Miller's technique to the Structure 6 assemblage is shown in Table 18. The range is from a low of 1.29 (for plates) to a high of 1.83 (for cups and saucers). The figures, excepting plates, are high compared to the Daufuskie slave row (Trinkley and Hacker 1989:168) but are not directly comparable to any of those reported by Miller (1980). Only the index value assigned to the

Table 18.
Ceramic Index Values for Structure 6

Plates	Index Value Assigned (date)	Number	Product
undecorated	1.00 (1802)	7	7.00
edged	1.23 (1802)	2	2.46
sponged	1.25 (1855)	1	1.25
blue transfer print	3.43 (1802)	1	3.43
		11	14.14

Average Value = 1.29

Bowls	Index Value Assigned (date)	Number	Product
undecorated	1.00 (1802)	3	3.00
annular/sponged	1.10 (1855)	3	3.30
blue hand painted	2.33 (1802)	1	2.33
blue transfer print	2.80 (1814)	3	8.40
		10	17.03

Average Value = 1.70

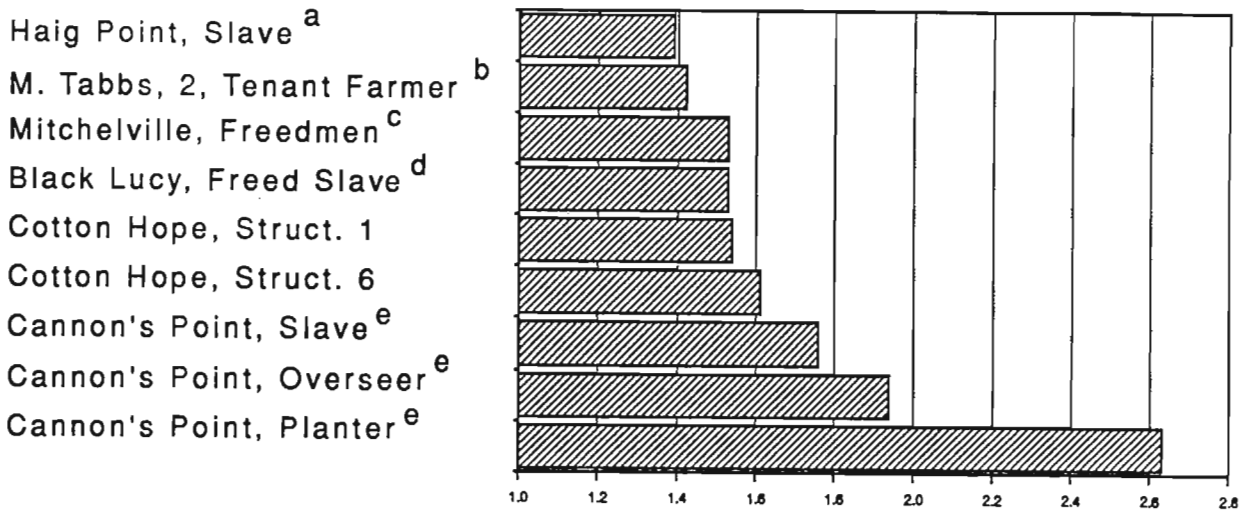
Cups/Saucers	Index Value Assigned (date)	Number	Product
undecorated	1.00 (1802)	2	2.00
annular	1.17 (1871)	1	1.17
blue transfer print	3.00 (1814)	2	6.00
		5	9.17

Average Value = 1.83

bowls at Structure 6 is significantly distinct from the index values obtained from Structure 1 at Cotton Hope. While there are some minor difference in costs or the economic scaling of vessels between Structures 1 and 6, they appear to be similar. None of the vessels used at Cotton Hope (as an assemblage) were as costly as those studied by Miller (1980) from a tavern assemblage (where index values ranged from 2.31 to 2.44. This suggests that the overall collection, while possessing some high status (i.e., costly) ceramics such as the transfer printed wares, is clearly at the low end of the economic scale.

This point is best illustrated by Figure 26, which compares ceramic vessel indices for nine sites. The Haig Point slaves, previously documented to be at the lowest end of the slave spectrum (Trinkley 1989b) exhibit a mean ceramic index of 1.39. The ceramic indices for both Mitchelville and Black Lucy, indicative of freed slaves, are 1.53. The ceramic index for the Cannon's Point slaves is 1.76. Midway between the freedmen and the Cannon's Point slaves are the indices for Cotton Hope. Although we have no data for the

Cotton Hope slave settlement (38BU1233) it seems likely (based on surface collections from this site which are dominated by undecorated and annular wares) that the index value would be at the low end of the scale, below the two indices available for 38BU96. This suggests that the studied Cotton Hope collections exhibit higher ceramic indices than the slaves on the plantation, although clearly below those found at the Cannon's Point site. These data have implications for the overall wealth and prosperity of Squire Pope, the plantation owner, as well as for the prosperity and/or treatment of those who worked on the plantation as either slaves or wage laborers.



[a] Trinkley & Hacker 1989
[b] Miller 1980
[c] Trinkley & Hacker 1986
[d] Felton & Schulz 1983
[e] Spencer-Wood & Heberling 1987

Figure 26. Ceramic vessel indices for nine sites, ranked by mean index value.

Tables 19 and 20 examine the percentage of flatware, hollowware, serving pieces, and utilitarian vessels from Structures 1 and 6 respectively. Structure 1 reveals a heavy dependence on plates, which account for 54.8% of the total vessels, although the total tableware accounts for 87.5% of the collection. When compared

Table 19.
Shape and Function of Ceramic Vessels from Structure 1

Shapes	#	%
Tablewares		
Plates/saucers	57	54.8
Bowls	29	27.9
Serving	5	4.8
Tea and Coffeeware	11	10.6
Utilitarian	2	1.9

Table 20.
Shape and Function of Ceramic Vessels from Structure 6

Shapes	#	%
Tablewares		
Plates/saucers	15	36.2
Bowls	15	36.6
Serving	6	14.6
Tea and Coffeeware	5	12.2
Utilitarian	0	-

to Otto's (1984) work at Cannon's Point, the total percentage of tablewares exceeds that found at slave, overseer, or planter contexts (although it is most similar to the slave household) and the reliance on plates, rather than bowls, is most similar to the overseer's assemblage. The collection, likewise, is distinct from that identified at a nineteenth century slave settlement on Haig Point (Trinkley and Hacker 1989).

The assemblage from Structure 6 reveals that a nearly identical proportion (87.4%) of the collection are tableware items. Again, this represents a much higher percentage than identified by Otto (1984), but is very similar to that found at the Haig Point slave row (Trinkley and Hacker 1989). The distribution of vessel shapes from Structure 6, however, indicates an equal reliance on plate and bowl forms, with about 50.8% of the collection representing serving flatware (plates, saucers, and serving pieces). This is similar to Otto's slave cabin assemblage (Otto 1974:69).

Structure 4, the eighteenth century slave dwelling in Locus 5, contains a predominance of bowl forms (Table 21). This appears to reflect a slave foodway which emphasized the preparation of "one-pot" meals. The emphasis on bowl forms would be even greater if it was possible to include the presence of colono ware vessels in the analysis. Comparison of Table 21 with Tables 19 and 20, however, clearly suggests that there was a shift away from a reliance on bowl forms within this segment of the Cotton Hope population during the nineteenth century.

Table 21.
Shape and Function of Ceramic Vessels from Structure 4

Shapes	#	%
Tablewares		
Plates/saucers	6	24.2
Bowls	14	48.3
Serving	3	10.3
Tea and Coffeeware	3	10.3
Utilitarian	2	6.9

Another potentially revealing analysis concerns the surface decoration of ceramics at the various structures under consideration. Otto (1984:64-67) found that at Cannon's Point the slaves tended to use considerably more banded, edged, and hand painted wares than the plantation owner, who tended to use transfer printed wares. The overseer appears to have been intermediate on this scale, although the proportions of decorative motifs were generally more similar to the slaves than the owner. Part of the explanation, of course, involves the less expensive cost of annular, edged, and undecorated wares compared to the transfer printed wares. And while transfer printed specimens were present in the slave assemblage at Cannon's Point, they represented a variety of patterns and Otto (1984:66) suggests that either the planter purchased mixed lots of ceramics for slave use, or the slaves themselves occasionally made such purchases. An additional, often advanced, explanation, involves the use by slaves of discarded ceramics from the main house.

Table 22 reveals that 46% of the vessels found in Structure 1 are annular, edged, or hand painted, while only 22% of the vessels in Structure 6 have these types of decorations. The bulk of the ceramics in Structure 6 were undecorated, although 18.6% were transfer printed.

Table 22.
Decoration of Ceramic Vessels from Structures 1 and 6

	Structure 1		Structure 6	
Type	#	%	#	%
Undecorated	34	39.1	18	56.3
Annular	9	10.3	3	9.4
Edged	18	20.7	2	6.3
Hand painted	13	15.0	2	6.3
Sponge			1	3.1
Transfer printed	13	14.9	6	18.6

These seemingly contradictory analyses may actually provide very significant information on the nature of the occupations at

38BU96. The economic scaling for Structures 1 and 6 reveal very little difference. While there are differences in individual categories, the overall means are 1.54 and 1.61. Both are indicative of rather inexpensive ceramics and there is some indication that more expensive wares were being re-cycled in the plantation complex. The examination of the shapes and functions of the vessels from Structures 1 and 6 indicates that tablewares are the most important forms, with Structure 6 having a slightly greater percentage of high status tea and coffeewares (12.2% compared with 10.6%) and a greater percentage of serving wares (14.6 compared with 4.8%). Finally, Structure 6 reveals a greater quantity of undecorated and transfer printed wares than Structure 1, indicative of a slighter higher status.

Garrow emphasizes the importance of converging evidence, stating, "the use of converging lines of evidence, as opposed to the use of one or even two of the techniques in question, should yield accurate statements concerning the relative socioeconomic status level of the household or group that generated the study collections" (Garrow 1987:230). Taken in combination, these data suggest that Structure 6 represents a overseer's dwelling, while Structure 1 represents that of a slave. The status of the slaves at Structure 1, however, appears to be higher than is typically found at slave sites. Previous discussions of Structure 1 have suggested an assemblage consistent with the Georgia Slave Artifact Pattern. The pattern analysis of Structure 6 is unusual, being most characteristic of the Revised Frontier Artifact Pattern, although the presence of two structures may have skewed the kitchen/architecture ratio. Another alternative presents itself based on the economic scaling and ceramic data -- overseers' houses may reveal a different, and previously unrecognized, artifact pattern.

FAUNAL REMAINS

Jack H. Wilson, Jr.

Introduction

The vertebrate faunal collection from the Cotton Hope Plantation site (38BU96) analyzed for this study consists of more than 1662 bone elements and fragments that weigh 2151.3 grams. The faunal material is from eight loci at the site, where 20 10-foot and one 4 by 5 foot unit were excavated. A total of 14 features and 10 post holes were uncovered. General fill from the various units was dry screened through 1/4-inch mesh; shell midden fill and feature fill were screened through 1/8-inch mesh. This report provides a description of the animal species found in the bone samples recovered by this work, the results of the zooarchaeological analysis of the remains, and a comparison of the data obtained from the eight loci with that for other sites of the appropriate time period from the coast of the Carolina Province.

The Carolina Province, the transitional zone between the tropical fauna of the southern Atlantic and the temperate fauna of the northern Atlantic, lies between Cape Hatteras, North Carolina and Cape Canaveral, Florida (Briggs 1974; Ekman 1953). Hilton Head Island, on which the Cotton Hope Plantation slave site is found, is part of the Sea Island section of the coast that lies south of the Santee River into northern Florida, with the area north to Cape Fear, North Carolina forming the northern embayed section (Emery and Uchupi 1972). Along the edge of the Continental Shelf, the warm Florida Current flows northward, bringing tropical marine species north as far as Cape Hatteras. Closer inshore, the cold Labrador Current flows southward, and temperate marine species may be found in these cool waters as far south as Cape Canaveral.

The Sea Islands possess relatively uniform temperature, rainfall, topography, and vegetation. The seaward side of each of the Sea Islands is usually lined with coastal beaches. and dunes which sometimes reach a height of seven or eight meters (Johnson et al. 1974; Mathews et al. 1980). Maritime oak forests and some pine forests grow behind the dunes. Freshwater creeks and ponds are occasionally found on these islands. The fringes and sometimes the interiors of the Sea Islands often possess salt marsh systems. The mainland side of typical Sea Islands usually have extensive salt marshes cut by tidal creeks that drain into large sounds, which in turn flow into the ocean between the Sea Islands. The maritime forests, freshwater creeks, salt marshes, and sounds define a number of diverse habitats that were exploited by both the prehistoric and historic inhabitants of the area.

Analytical Techniques

The faunal collection from 38BU96 was studied by the author using standard zooarchaeological procedures and the comparative faunal collections housed at Chicora Foundation, Inc. and the Museum of Natural History in Raleigh, North Carolina. The bone material was sorted to class, suborder or species, and individual bone elements were identified. The bones of all taxa and other analytical categories were also weighed and counted. The Minimum Number of Individuals (MNI) for each animal category was determined using paired bone elements and age (mature/immature) as criteria. A minimum distinction method (Grayson 1973:438) was used to determine the MNI for the archaeological component at 38BU96. This method provides a conservative MNI estimate based on the total faunal assemblage at a site -- for this study the site is the eight loci excavated at Cotton Hope.

As a measure of zooarchaeological quantification, MNI has a number of problems (Grayson 1973:438, 1984:28-92; Klein and Cruz-Uribe 1984:26-32). How one aggregates the MNI will affect the number of individuals calculated. If MNI is calculated based on the entire site, the number will be smaller than if it is calculated for each excavation unit and totaled for the site. Use of MNI emphasizes small species over large ones. For example, a collection may have only a few large mammals, such as deer, and scores of fish. Yet, the amount of mean contributed by one deer may be three times greater than contributed by a score or two of fish.

Given the problems associated with MNI as a zooarchaeological measure, an estimate of biomass contributed by each taxa to the total available for use by the inhabitants of a site is also calculated. The method used here to determine biomass is based on allometry, or the biological relationship between soft tissue and bone mass. Biomass is determined using the least squares analysis of logarithmic data in which bone weight is used to predict the amount of soft tissue that might have been supported by the bone (Casteel 1978; Reitz 1982, 1985; Reitz and Cordier 1983; Reitz and Scarry 1985; Wing and Brown 1979). The relationship between body weight and skeletal weight is expressed by the allometric equation $Y = ax^b$, which can also be written as Log Y = Log a + b(Log X) (Simpson et al. 1960:397). In this equation, Y is the biomass in kilograms, X is the bone weight in kilograms, a is the Y-intercept for a log-log plot using the method of least squares regression and the best fit line, and b is the constant of allometry, or the slope of the line defined by the least squares regression and the best fit line. Table 23 details the constants for a and b used to solve the allometric formula for a given bone weight X for each taxa identified in the archaeological record. In using allometric calculations to predict proportional biomass from bone weight it is important to note that the weight of the bone (or shell) used in the calculations obviously influences the results, and there are a number of factors, such as differential preservation or discard

Table 23.
List of Allometric Values Utilized in this Study to Determine Biomass in Kilograms (kg) Based on Bone Weight Expressed in Kilograms.

Faunal Category	log a	b	r^2
Mammal	1.12	0.90	0.94
Bird	1.04	0.91	0.97
Turtle	0.51	0.67	0.55
Snake	1.17	1.01	0.97
Chondrichthyes (shark)	1.68	0.86	0.85
Osteichthyes (boney fish)	0.90	0.81	0.80
Non-Perciformes	0.85	0.79	0.88
Siluriformes (catfish)	1.15	0.95	0.87
Perciformes (sea bass, bluefish, etc)	0.93	0.83	0.76
Sparidae (porgy)	0.96	0.92	0.98
Sciaenidae (drum)	0.81	0.74	0.73
Pleuronectiformes (flounder)	1.09	0.89	0.95
Callinectes (crab)	0.99	0.82	0.58

Derived from Table 4 in Reitz (1985:44) and Table 2.3 in Quitmyer (1985:40).

These variables are used to solve the formula $Y = aX^b$ or $\log Y = \log a + b(\log X)$; where Y is the biomass in kilograms, a is the Y-intercept, b is the slope, and r^2 is the proportion of total variance explained by the regression model (see Reitz 1985:44; Reitz and Scarry 1985:67).

practices, that may affect the weight of the bone recovered from an archaeological site. Thus, this technique of analysis may not give the precise results that the final numbers would appear to indicate.

Biomass was used to identify the 10 species/taxa that probably contributed the greater part of the total meat available for consumption by the inhabitants of 38BU96. Likewise, the identified species for the entire collection was summarized into faunal categories based upon vertebrate class and gross habitat preference. Other studies conducted include examination of the selected mammal bone elements for evidence of butchering (saw, cut, and chop marks), and burning; and analysis of the distribution of selected mammal bone elements by location as part of the skeleton.

Identified Fauna

Before considering the results of the zooarchaeological study of the faunal remains recovered from the Cotton Hope Plantation area, the general use and habitat preference for each identified species will be considered.

Domestic Mammals

Four animal species, cow (Bos taurus), pig (Sus scrofa),

Caprine (either goat [Capra hirca] or sheep [Ovis aries]), and dog (Canis familiaris) are the only domestic mammals identified in the collection. No domestic cat (Felis domesticus) remains are present.

Pigs are one of the most important domestic mammals used for food in the southeastern United States (see Hilliard 1972:91-111). Pigs require little care, as they can be allowed to roam free, or they can be penned. Their diet can consist of a variety of food resources, including seeds, roots, fruits, nuts, mushrooms, snakes, larvae, worms, eggs, carrion, mice, small mammals, kitchen refuse, feces, and grain. Pigs store about 35% of the calories they consume, and can gain about 2 pounds for every 15 to 25 pounds of feed (Towne and Wentworth 1950:7-8). Within 18 months, a pig can gain up to 200 pounds, of which about 120 pounds can be consumed. Dressed, a pig carcass can yield up 65 to 80% meat. An idea of the possible size of the pigs that were available to the inhabitants of 38BU96 can be gained from the average weight of 140 pounds for 4,000 southern pigs slaughtered in 1860 (Fogel 1965:206 in Reitz and Scarry 1986:70). Pork preserves very well, is satisfying due to its high fat content, and it is a good source of thiamin (Towne and Wentworth 1950:249).

Although cattle has been an important meat source during the history of the southeastern United States, it is in many ways a more burdensome meat resource to raise than pigs (see Hilliard 1972:112-140; Rouse 1973; Towne and Wentworth 1950, 1955). Cows provide less of a return for the energy input provided to raise them (Towne and Wentworth 1950:7-8). Cows feed on grain and grasses, and will not produce good weight gains without quality and quantity sources for either. Also, cattle store only 11% of the calories they consume and yield only 50 to 60% dressed meat. Balanced against the greater labor required to raise cattle above that required for swine and the fact that beef does not preserve as well as pork (Tomhave 1925:275), there is a demand for fresh beef, cattle hides, and a number of other foods made from milk products, such as milk, cheese, butter, and buttermilk, that can be obtained from cattle (see Hilliard 1972:119-135; Rouse 1973; Towne and Wentworth 1955).

The third domestic mammal that may have served as a food resource are the Caprines. Distinguishing between goat and sheep bone elements in an archaeological collection is an extremely difficult task (Reitz and Scarry 1985:71) and no attempt is made in this study to do so. Based on the historical research for Cotton Hope Plantation, it is likely that these Caprines are sheep (see page 29 of this study). Regardless, Caprines were only a minor food resource for Southern populations during the nineteenth century (Hilliard 1972:141-144). Goat milk is the only notable food product that was part of the Southern diet other than the flesh that the Caprines produced (Hilliard 1972:141-142). Sheep, of course, were a source of wool that could be used to make clothing, primarily for home use (Hilliard 1972:141-142).

The dog is considered here to be commensal species. That is, it was probably not part of the human diet, but instead was one of a number of species that were commonly found at human habitations. In this case its presence was probably encouraged given the dog's use in hunting, personal protection, group control, and vermin control.

Wild Mammals

The largest of the wild mammals in the assemblage is the white-tailed deer (Odocoileus virginianus). Apparently deer remained widely available in most areas of the Southeast into the middle of the nineteenth century (Hilliard 1972:74-78). The preferred method of hunting was with firearms, which restricted the availability of this food resource for slaves. Permission from the slave owner or overseer would probably be required for slaves to hunt deer and other animals with firearms, and firearms would also have to be available for use by the slaves to hunt. The latter situation would not be common among slave populations (Hilliard 1972:75-76). Presumably, the only uses that deer had for the inhabitants of the Cotton Hope Plantation slave area was as a food resource, and perhaps for hides. In general, the deer's preferred habitat is the edge of deciduous forests and open fields, although they will move to mud flats around marshes to feed on the grasses found there.

Raccoon (Procyon lotor) bones are present in small numbers in the 38BU96 faunal assemblages. This mammal served as a food resource for both whites and blacks, although its meat was apparently less prized than that of the opossum (Hilliard 1972:80). Gathering raccoons could be done using firearms and hunting dogs, to which blacks would presumably have had less access than whites prior to the later portion of the nineteenth century, or they could be obtained by trapping (Hilliard 1972:80). This nocturnal mammal is able to adapt to a variety of habitats, although they prefer wooded areas near water.

Remains of the opossum (Didelphis virginiana) are present in small quantities in the faunal sample from 38BU96. The opossum was generally preferred over the raccoon as a food source. Opossums could be kept, fattened, and "cleaned out" by "penning and feeding them for several days on milk and bread or roasted sweet potatoes" (Hilliard 1972:80). The preferred habitat of the opossum, a nocturnal animal, is wooded areas near water, but they are often found in and around human settlements.

The Eastern gray squirrel (Sciurus carolinensis) was a common food source in the area throughout the antebellum period (Hilliard 1972:79). Both whites and blacks prized squirrel as a food resource, although it was less accessible to slaves who had only limited access to firearms. However, squirrel could also be taken by traps and snares (Hilliard 1972:79). The Eastern gray squirrel

is found in heavily forested habitats with large stands of mature hardwoods and an understory of small trees and shrubs.

Domestic Birds

Chickens (Gallus gallus) are the most abundant bird identified at the site. The only other possible domesticated birds present are the turkey and Canada geese, which are discussed below. Chickens, like pigs, can be raised either by letting them run loose or by penning them, The meat of the chicken enjoyed a high status as a food by both whites and blacks during the nineteenth century. Also, besides serving as a meat resource, chickens also supplied eggs that could be consumed or used to prepare other food dishes (Hilliard 1972:46-47). Significantly, egg shell was found in the archaeological collections and chickens are listed in the inventory for Cotton Hope (see page 29 of this study).

Canada geese (Branta canadensis) is a migratory waterfowl that, as a wild species, winters along the Carolina coast where fresh water sources are present (Potter et al. 1980:79). Canada geese were also domesticated during the late 1800s, and by the end of the century standards of excellence for wild Canada geese as a poultry breed had been established (Johnson and Brown 1903). Although it could not be determined by examining the bone elements if the specimen was wild or domesticated, the Canada geese remains present at 38BU96 was placed in the domesticated bird category based on a reference to geese in the Cotton Hope inventory (see page 29 of this study).

Likewise, turkey (Meleagris gallopavo) remains found in the faunal sample are assigned to a domestic species, although wild specimens of turkey could be represented. By the late 1800s, standards of excellence for turkeys as a poultry breed had been established (Johnson and Brown 1903). Turkey was a valued food resource for antebellum whites and blacks (Hilliard 1972:80-81). Given this and the fact that turkeys are listed in the Cotton Hope inventory (see page 29 of this study) these remains are probably from domesticated turkeys. Although hunting with firearms is one method used to acquire wild turkeys, there is little likelihood that slaves, who had limited access to firearms would have been able to use this technique to obtain the animal. Another common way to take wild turkeys was by trapping (Hilliard 1972:80). It should be noted, however, that wild turkeys tend to avoid inhabited areas, and there would have been less chance for slaves to encounter them.

Reptiles: Turtles

A total of three difference species of turtle are present in the faunal collection from 38BU96 -- Carolina diamondback terrapin (Malaclemys terrapin centrata), mud turtles (Kinosternon spp.), and box turtles (Terrapene carolina).

The diamondback terrapin (Malaclemys terrapin) is a turtle that feeds on marine molluscs and is usually found in an estuarine setting or in brackish lakes and marshes along the coastal strip (Obst 1986:113). The subspecies Carolina Diamondback Terrapin, which inhabits the Atlantic Coast from North Carolina to Florida (Obst 1986:214), is probably the terrapin represented in the faunal collection. The diamondback terrapin was an important food resource in the southeast (Hilliard 1972:89) that became an accepted delicacy throughout the United States during the nineteenth and early twentieth centuries (Obst 1986:113, 183). The taste of diamondback terrapin flesh is considered to lie between that of chicken and fish. It was only the enactment of protective legislation 60 years ago that prevented the extinction of the diamondback terrapin (Obst 1986:113).

Another aquatic turtle present in small quantities in the faunal collection is the mud turtle. This turtle also dwells in the water, although it is usually found near freshwater sources (Obst 1986:109). Mud turtles were possibly used for food (see Hilliard 1972:89).

The third turtle present in very small numbers in the assemblage in the box turtle. This reptile prefers open, mixed forests, and they are often found near bodies of standing water. The box turtle is an aquatic turtle that is well on the way to becoming terrestrial, with certain populations living a long way from permanent bodies of water (Obst 1986:106). As with the other turtles, it is possible that the box turtle was used as a food resource (Hilliard 1972:89).

Pisces

Remains of fish are an important part of the faunal assemblage at the Cotton Hope Plantation settlement. The fish present are found in freshwater habitats, are fish that inhabit both freshwater and the tidal creek habitats, or are those found in a marine setting (that is they spawn in the estuary or use the area as a nursery). One of the predominately freshwater fish identified are the bullhead catfish (Ictalurus spp.). The bullhead catfish is found in pools and backwaters of sluggish streams, usually in areas of heavy vegetation (Lee et al. 1980:442). The most common freshwater catfish found in the sluggish waters and low salinity areas of the South Carolina estuaries is the white catfish (Ictalurus catus) (Wenner et al. 1981). Hilliard (1972:85-86) notes that catfish were a very important food fish throughout the South, and they could be taken with a variety of techniques including traps, trot lines, and set hooks that could be left untended.

Suckers (Catostomid) are also found predominately in freshwater. These fish are found in ponds, oxbows, sloughs, impoundments and similar waters that have bottoms of sand or silt mixed with organic debris. Aquatic vegetation is usually present in

the areas they inhabit (Lee et al. 1980:399).

Gar (probably longnose gar, Lepisosteus osseus) is one of the identified fish that could have been taken from a freshwater habitat or a tidal creek. Longnose gar commonly reach up to 150 centimeters in length and inhabit both fresh and brackish waters of larger streams and coastal inlets throughout the Coastal Plain of the Carolinas (Wiley 1980:49-50). Gar remains present in the bone sample consist primarily of scales and cranial fragments. These fish were probably taken as individuals with a hook and line, or possibly in traps.

The remaining fishes identified in the collections are primarily marine species that either spawn in the estuary or use the area as a nursery (see Boschung et al. 1983). The most abundant family in the collection are the drums (Sciaenidae). Members of the drum family include black drum (Pogonias cromis), silver perch (Bairdiella chrysoura), seatrout (Cynoscion spp.), spots (Leiostomus xanthurus), red drum (Sciaenops ocellatus), star drum (Stellifer lanceolatus), and Atlantic croaker (Micropogonias undulatus). All are commonly found in bays and estuaries. The star drum and the Atlantic croaker are good seasonal indicators, being present in the estuarine system from early spring with a maximum availability in the late fall.

Also encountered are flounder (Paralichthys spp.) and shark (Chondrichthyes). The southern flounder (Paralichthys lethostigma), which grows to about 3 feet in size, is a common estuarine and offshore inhabitant (Boshcung et al. 1983:741-742). Generally speaking, sharks are found in the estuaries of the more northerly waters of the Carolina Province only during the warm months (Schwartz and Burgess 1975; Dahlberg 1975). Common estuarine sharks include the dusky shark (Carcharhinus obscurus), bull shark (Carcharhinus leucas), and the bonnethead shark (Sphyrna tiburo) (Boschung et al. 1983:340-346).

Commensal Species

Commensal species include animals commonly found near human occupations that are not generally considered to be food resources. Such animals include the dog, previously mentioned, and pests or vermin such as the Hispid Cotton Rat (Sigmodon hispidus). The Hispid Cotton Rat is a major crop pest that has been called the most abundant mammal in Georgia (Golley 1962:134), and is commonly found in bushes around structures. Surprisingly, other commensal species such as a variety of snakes and amphibians are absent from the collection.

Results of the Faunal Analysis

The faunal collection from the 38BU96 portion of Cotton Hope Plantation consists of 1662 bone elements and fragments that weight

2151.3 grams. These totals include 15 crab claws that weight 13.3 grams. The Minimum Number of Individuals, number and weight of bone, and estimated meat yield (biomass) for the faunal sample are present in Table 24. A summary of the MNI and biomass calculations for seven faunal categories is listed in Table 25, and Table 26 ranks 10 species/taxa by MNI and biomass each contributed to the total biomass computed for 38BU96.

As would be expected, domestic vertebrates -- pig (Sus scrofa), cow (Bos taurus), Caprine, chicken (Gallus gallus), turkey (Meleagris gallopavo), and Canada geese (Branta canadensis) -- account for a vast majority of the total biomass. Although cow represent 20.52% (5.1723 kg) of the total biomass, only 1.92% of the total Minimum Number of Individuals identified are cow (MNI = 1). Pig accounts for 14.54% (4.6321 kg) of the total biomass, and 5.77% of the total number of individuals present (MNI = 3). Chicken has a different pattern, providing only 0.83% (0.2084 kg) of the total biomass while possessing only 3.85% of the total Minimum Number of Individuals for the collection (MNI = 2). Turkey accounts for only a small percentage (1.92%, MNI = 1) of the total number of identified individuals and for only a small percentage (0.04%, 0.0089 kg) of the total biomass. Canada geese likewise accounts for only a small portion of the number of identified individuals (1.92%, MNI = 1) and of the total biomass (0.07%, 0.0167 kg). Turkey and Canada geese are included with the domestic bird category based on the historic inventory for Cotton Hope.

The second most important faunal category according to biomass (with 2.8852 kg) are the fish, which are first in the total Minimum Number of Individuals (MNI = 30) identified for the assemblage. Fish identified include drum (Sciaenidae), catfish (Ictalurus spp.), gar (Lepisosteus spp.), sucker (Catostomid), shark (Chondrichthyes), and flounder (Paralichthys spp.). The suckers and catfish are predominately freshwater fish, the gar is found in either estuarine or brackish/freshwater habitats, and the drum, flounder, and shark are predatory species that are common in the waters of the estuarine system and/or in the bays and sounds around Hilton Head Island (Cain 1973). The drum occur in quantities sufficient to warrant a supposition that they may have been procured by nets or seines. This would suggest that the drum species present are either star drum or Atlantic croaker, drums that are found in large numbers in the estuarine habitat during the fall. The size of a number of large cervical vertebra fragments identified as drum supports these identifications. The other fish species were probably obtained as individuals by use of hook and line or perhaps by gigging, or as isolated individuals caught up in the general netting/seining process along with schooling fish. Of note to this discussion is the presence of two net weights and one fish hook in the artifact collection, which supports the use of setting/seining and hook and line to procure fish.

Table 24.
Minimum Number of Individuals (MNI), Weight, Number of Bones, and Estimated Meat Yield by Species for 38BU96.

Species	MNI #	MNI %	Number of Bones #	Number of Bones %	Weight gm	Weight %	Biomass kg	Biomass %
Cow, Bos taurus	1	1.92	39	2.35	353.7	16.44	5.1723	20.52
Pig, Sus scrofa	3	1.92	71	4.27	312.9	14.54	4.6321	18.37
Caprine, Sheep/Goat	1	1.92	5	0.30	12.7	0.59	0.2590	1.03
White-tailed Deer, Odocoileus virginianus	1	1.92	4	0.24	88.1	4.10	1.4804	5.87
Raccoon, Procyon lotor	3	5.77	10	0.60	12.0	0.56	0.2461	0.98
Opossum, Didelphis virginiana	2	3.85	15	0.90	17.1	0.79	0.3385	1.34
Eastern Gray Squirrel, Sciurus carolinensis	1	1.92	1	0.06	0.3	0.01	0.0089	0.04
Dog, Canis familiaris	1	1.92	3	0.18	9.7	0.45	0.2032	0.81
Hispid Cotton Rat, Sigmodon hispidus	1	1.92	1	0.06	0.4	0.02	0.0115	0.05
Unidentified Mammal	-	-	244	14.68	600.5	27.91	8.3287	33.04
SUBTOTAL	14	26.9	393	23.6	1407.4	65.4	20.6807	82.0
Chicken, Gallus gallus	2	3.85	15	0.90	12.8	0.59	0.2084	0.83
Turkey, Meleagris gallopavo	1	1.92	1	0.06	0.4	0.02	0.0089	0.04
Canada Geese, Branta canadensis	1	1.92	1	0.06	0.8	0.04	0.0167	0.07
Unidentified Bird	-	-	29	1.74	8.3	0.39	0.1405	0.56
SUBTOTAL	4	7.7	46	2.8	22.3	1.0	0.3745	1.5
Carolina Diamondback Terrapin, Malaclemys terrapin centrata	2	3.85	76	4.57	63.9	2.97	0.5131	2.04
Box Turtle, Terrapene carolina	1	1.92	2	0.12	1.1	0.05	0.0338	0.13
Mud Turtle, Kinosternon spp.	1	1.92	4	0.24	1.3	0.06	0.0377	0.15
SUBTOTAL	4	7.7	85	5.1	67.1	3.1	0.6110	2.4
Catfish, Ictalurus spp.	2	3.85	7	0.42	2.4	0.11	0.0458	0.18
Gar, Lepisosteus spp.	1	1.92	14	0.84	5.1	0.23	0.1104	0.44
Sucker, Catostomid	1	1.92	2	0.12	0.4	0.02	0.0140	0.06
Drum, Sciaenidae	24	46.15	74	4.39	184.6	8.58	1.8917	7.51
Flounder, Paralichthys spp.	1	1.92	1	0.06	0.8	0.04	0.0216	0.09
Shark, Chondrichthyes	1	1.92	2	0.12	8.6	0.40	0.8017	3.18
Unidentified Fish	-	-	50	3.01	23.0	1.07	0.3740	1.48
SUBTOTAL	30	57.7	150	9.0	224.9	10.5	3.2592	12.9
Crab	-	-	15	0.9	13.3	0.6	0.2831	1.1
Unidentified	_	_	973	58.5	416.3	19.4	-	-
TOTAL	52	100	1662	100	2151.3	100	25.2094	100

Table 25.
Summary of Faunal Categories Expressed as Counts and Percentages for MNI and Biomass.

Faunal Category	MNI #	MNI %	Biomass kg	Biomass %
Domestic Mammals (Cow, Pig, Caprine)	5	9.62	10.0634	62.28
Domestic Birds (Chicken, Turkey, Canada Geese)	4	7.69	0.2340	1.46
DOMESTIC TAXA TOTAL	9	17.3	10.2974	64.1
Wild Mammals (Deer, Raccoon, Opossum, Squirrel)	7	13.46	2.0739	12.92
Wild Birds	-	-	-	-
Reptiles (Diamondback Terrapin, Mud Turtle, Box Turtle)	4	7.69	0.5846	3.64
Fish (Drum, Catfish, Gar, Sucker, Flounder, Shark)	30	57.69	2.8852	17.97
WILD TAXA TOTAL	41	78.8	5.5437	34.5
Commensal Species (Dog, Hispid Cotton Rat)	2	3.8	0.2147	1.3
TOTAL	52	100	16.0558	100

Wild mammals comprise an important part of the faunal collection from the Cotton Hope site. This category ranks third behind domestic mammals and fish in terms of biomass (2.0739 kg), and it ranks second in terms of numbers of individuals (MNI = 7). Wild mammals present include deer, raccoon, opossum, and squirrel. Raccoon and opossum are common scavengers that are drawn to crops, trash deposits, hen houses and the like that are found around human settlements. Squirrels are usually present only in forested areas. Deer, while usually found in forests and along forest edges, also are drawn to certain crops grown by people. With the exception of the deer, all these wild animals could have been obtained through the use of traps. The deer remains appear to have been part of a ration of deer meat given to the slave population at one point in time. This will be discussed in greater detail in the discussion below on bone element distribution.

Reptiles represent the fourth ranked category according to biomass (0.5846 kg), although they have a MNI of only four. The Carolina diamondback terrapin, mud turtle, and box turtle are the three species identified for this category. Carolina diamondback

terrapin are found in the estuarine/marsh areas adjacent to the site. Diamondback terrapin apparently comprised a good portion of the slave diet in coastal areas long before the nineteenth century (Quitmyer 1985:20). During the late nineteenth and early twentieth centuries the diamondback terrapin became a gourmet item, as well as continuing as a part of the diet of more "common" folk (Obst 1986:183). Although they are occasionally found in estuaries, mud turtles are usually found in freshwater areas. Mud turtles are diurnal, that is they are most active during the day, they enjoy basking the sun, and they tend to sleep in mud bottoms (Obst 1986). Box turtles are aquatic turtles that are equally at home on land, being found in open woods and near standing water. The turtles could be caught by handlines, traps, or by hand.

Of great surprise, no wild bird species are present in the bone sample. Previous research on faunal collections from Hilton Head Island (Wilson and Wilson 1986:301) and neighboring Daufuskie Island (Wilson 1989:183) have disclosed the presence of ducks (Anus spp.), terns (Sterna spp.), rock doves (Columba livia), mourning doves (Zenaida macroura), and bobwhite quail (Colinus virginianus) in faunal samples recovered using techniques similar to those used to obtain the 38BU96 sample. Certainly, it would appear that wild birds were not part of the faunal resource procurement system of the human inhabitants of the site, a finding that was noted in less certain terms for the freed black community of Mitchelville on Hilton Head Island (Wilson and Wilson 1986:301).

The true commensal species include only the dog (Canis familiaris) and the Hispid cotton rat (Sigmodon hispidus). These two species were not utilized as a food resource by the occupants at the site. The dog would have been useful as a pet, in hunting, in providing person protection, and in helping to control vermin. The various houses and structures found at 38BU96 would have served as good habitation sites for the Hispid cotton rat.

Although crabs are not a vertebrate fauna, they are present in the faunal sample from 38BU96 and the collection is reported to consist of all specimens found during excavation. A total of 15 claw fragments that weigh 13.3 grams were noted in the collection. This would yield an estimated 0.2831 kg of biomass. Crabs are found on mud, shell and sand bottoms in the salt and brackish waters, especially in the estuaries and the mouths of tidal creeks around sea grass. Crabs are usually taken between March and November (Freeman and Walford 1976). Most of the crabs are probably blue crab (Callinectes sapidus) (see Turner and Johnson 1972:182).

Table 26 summaries the 10 most prominent fauna species/taxa with respect to their contribution to the total biomass and by MNI for the site. Two domestic species rank one-two, cow and pig, although cow ranks only eighth (along with 12 other species) when MNI are considered as compared to pig's second place for MNI. Another domestic species, chicken, ranks tenth on the biomass list

and fourth (along with four other species) when MNI are examined. Fish species take the third (drum) and fifth (shark), positions in the biomass rankings. Drum ranks first on the MNI list. The Carolina diamondback terrapin, an aquatic reptile found in the marsh, is the sixth ranked species based on biomass, and the fourth ranked according to MNI. Three wild mammals, deer (fourth), opossum (seventh), and raccoon (ninth) are the other three species that place in the top ten according to biomass, and are tied for fourth with three other species when MNI are considered.

Table 26.
Rank of the Ten Most Prominent Potential Food Faunal Species by Biomass and MNI for the Collection.

Species	Biomass Rank	MNI Rank
Cow, Bos taurus	1	8
Pig, Sus scrofa	2	2
Drum, Sciaenidae	3	1
White-tailed Deer, Odocoileus virginianus	4	8
Shark, Chondrichthyes	5	8
Diamondback Terrapin, Malaclemys terrapin	6	4
Opossum, Didelphis virginiana	7	4
Sheep/Goat, Caprine	8	8
Raccoon, Procyon lotor	9	2
Chicken, Gallus gallus	10	4
Catfish, Ictalurus spp.	-	4
Eastern Gray Squirrel, Sciurus carolinensis	-	8
Turkey, Meleagris gallopavo	-	8
Canada Geese, Branta canadensis	-	8
Box Turtle, Terrapene carolina	-	8
Mud Turtle, Kinosternon spp.	-	8
Gar, Lepisosteus spp.	-	8
Sucker, Catostomid	-	8
Flounder, Paralichthys spp.	-	8

Diversity and equitability indices were calculated for the total biomass and MNI present in the collection (Table 27). The diversity measure for the biomass is low (1.8928) and the equitability is above 0.50 (0.6217), which is toward the high end (1.0) of the scale. For MNI, the diversity (2.2503) is in the midrange of the scale (which goes to 4.9), and the equitability (0.7391) is toward the high end of the scale. This is interpreted to indicate that a more normal pattern of species exploitation is present, where a few abundant species (drum), a moderate number of common species (pig, raccoon, opossum, chicken, Carolina diamondback terrapin), and many rare species (the other 13 identified potential food resources) are used. The most important faunal categories are the domestic mammals, fish, wild mammals, and reptiles.

Table 27.
Diversity and Equitability of the MNI and Biomass for the Identified Faunal Species.

	Diversity	Equitability	N	MNI
MNI	2.2503	0.7391	21	52

	Diversity	Equitability	N	Biomass
Biomass	1.8928	0.6217	21	16.0558

The Shannon-Weaver formula for determining the diversity of a sample is:

$$H = -\Sigma p_i \ln p_i$$

where H is the measure of diversity, and p_i is, in this case, either the MNI or the Biomass of each species "i" divided by the total MNI or total Biomass for the sample. Thus, for each identified species that has a MNI count, p_i is calculated by dividing the MNI for that species by the total number of MNI from the sample. The diversity measure H is the sum of all the p_i multiplied by the natural log (ln) of each p_i. A similar procedure is used to calculate the Diversity index for the Biomass, substituting the Biomass figures for MNI in the above explanation.

The Sheldon formula for determining the equitability of a sample is:

$$H' = H/\ln N$$

where H' is the measure of equitability, H is the Diversity measure calculated for the sample, and N is total number of cases, observations, or, in this case, species for which MNI or Biomass were calculated in a sample. Equitability is simply the Diversity measure divided by the natural log (ln) of N, the number of species for which MNI were calculated or the number of species for which Biomass calculations were made.

The bone modifications exhibited by the pig and cow bones in the faunal collection were examined for evidence of sawing, cutting, chopping, and burning. Only one scapula blade fragment form a pig possessed any of these modifications. This would indicate that little of the pig and cow bone present in the collection was from rations purchased and then issued to the slaves for their consumption. It would appear that most of the pig and cow was locally grown for consumption. The absence of burned bones would indicate that little roasting of either meat was being done.

The distribution of identified bone elements by body segment for the cow, pig, Caprine, and deer remains from 38BU96 is shown in Table 28. The cow distribution is somewhat misleading as 12 of the 14 head elements are miscellaneous teeth fragments, and four of the five vertebra, sternum and ribs category are ribs. With this in

Table 28.
Bone Element Distribution for the Cow, Pig, Caprine, and Deer Remains.

	Cow		Pig		Caprine		Deer	
Bone Element Group	#	%	#	%	#	%	#	%
Skull, 1st and 2nd cervical vertebra	14	45.16	41	69.49	-	-	1	25.00
Vertebra, Sternum, and Ribs	5	16.13	3	5.08	-	-	-	-
Forelimbs	6	19.35	5	8.47	-	-	-	-
Forefeet	-	-	1	1.69	2	40.00	1	25.00
Hindlimbs	1	3.23	4	6.78	1	20.00	2	50.00
Hindfeet	-	-	3	5.08	1	20.00	-	-
Feet	5	16.13	2	3.39	1	20.00	-	-
TOTAL	31	100.00	59	100.00	5	100.00	4	100.00

mind, it is apparent that the beef remains are comprised by jaw/jowl cuts, a few sides of beef incorporating ribs, shoulder cuts of meat, and feet.

For the pig bones, 37 or the 41 head bone elements are miscellaneous teeth, and two of the three vertebra, sternum and ribs elements are ribs. A few of the bone elements for the pig are distributed among a small number of sides of pork that possess ribs and/or vertebra. The bulk of the bone elements, however, are found in cranial segments, forelimbs and hindlimbs, and in the feet. This would appear to indicate that the pig meat available consisted primarily of jaw/jowl cuts, shoulder cuts, and lower limb segments, with only a small number of rib cuts being present. The distribution patterns exhibited by the beef and pork bone elements is taken to support the earlier supposition that beef and pork was probably homegrown.

The Caprine bone elements are from limbs that are associated with the lower legs and feet of the animal, not from the shoulder or rump areas of the sheep/goat. The one deer skull element is a molar, and the other three bone elements are from the lower legs and feet of the animal. It would appear that portions of both Caprine and deer were made available to the slave inhabitants, but the cuts were from the less meaty/desirable sections of the animal. This general pattern is reinforced by the preponderance of less desirable cuts from the jaw/jowl, limb and feet of the cow and pig that were also given to the slave population.

Comparison of the Faunal Assemblage with other Faunal Samples

Given that the archaeological remains at 38BU96 are from a plantation (here used to include planter, overseer, and slave

habitations), it is probable that the faunal collection will more closely *resemble* faunal samples from the slave components of other plantations and from identified Afro-American sites in rural settings, rather than patterns from urban sites or white habitations at a plantation. Reitz (1984:14-15, 1987) proposed a number of hypotheses about the vertebrate faunal composition of the diet of Carolina urban and rural sites that date from the late eighteenth into the middle of the nineteenth century. In general urban residents apparently utilized more domestic species, especially domesticated birds. As a consequence, wild animals were utilized to a lesser extent at urban sites and fewer wild species were exploited. Table 29 shows the MNI percentages determined for each of the seven general faunal categories (Domestic Mammal, Domestic Bird, Wild Mammals, Wild Birds, Reptiles, Fish, and Commensals) at 38BU96 with composite percentages computed by Reitz (1984:24, 1988) for Urban, Rural, and Slave contexts in the southern Atlantic Coastal Plain, for a slave row (38BU634) located on nearby Daufuskie Island, and from Mitchelville, a late nineteenth century freed black community on Hilton Head Island. The absence of any wild birds in the 38BU96 collection immediately sets that site apart from the other defined patterns, although the low number of wild birds present in the Rural and Slave patterns are in congruence with this absence. However, the pattern for the nearby slave site on Daufuskie Island (38BU634) has a significant wild bird presence. The large number of fish present at 38BU96 is again similar to, although of a greater magnitude than, that noted for the Rural and Slave patterns. However, the low numbers for the domestic mammals at 38BU96 are only half what the Rural and Slave patterns show. In general, the pattern for MNI from 38BU96 shows some similarity to the trend illustrated in the patterns noted for 38BU634, and the Rural and Slave patterns. This trend is for the importance of fish, wild mammals, and domestic mammals to be emphasized. In other ways, including the importance of reptiles and wild birds, the 38BU96 pattern differs from the other three.

Comparison of the freedmen Mitchelville faunal category MNI pattern with that for 38BU96 shows few congruences. The percentage of fish found in the Mitchelville pattern is not of the same magnitude as the fish percentage present in the 38BU96 pattern. Domestic mammal, domestic bird, and reptile percentages are all less in the Mitchelville pattern when compared with the 38BU96 pattern, and the wild mammal percentages are greater in the latter than in the former. Certainly, the 38BU96 pattern bears no resemblance to the Urban pattern.

In summary, the composition of the antebellum faunal assemblage from the Cotton Hope Plantation slave area does not conform to any of the faunal assemblage patterns noted for other urban, rural, or slave sites of the south Atlantic coast. This is primarily due to the large number of fish present in the 38BU96 assemblage. This assemblage is comprised of both freshwater/brackish water and marine species. In this regard, the

Table 29.
Comparison of the Cotton Hope Faunal Categories by MNI Percentages with Various other Faunal Category Patterns.

Faunal Category	38BU96	38BU634	Urban	Mitchelville	Rural	Slave
Domestic Mammals	9.6	14.1	28.9	19.1	17.2	20.5
Domestic Birds	7.7	6.3	19.7	12.8	4.1	3.0
Wild Mammals	13.5	29.7	8.1	10.6	19.2	24.7
Wild Birds	0.0	9.4	7.6	8.5	3.0	2.1
Reptiles	7.7	4.7	5.4	12.8	13.7	10.4
Fish	57.7	25.0	19.7	25.5	38.4	36.6
Commensals	3.8	10.9	10.6	10.6	4.3	2.8
TOTAL	100	100	100	100	100	100

Data for the Slave Pattern are derived from Reitz (1984:Table 7).

Percentages for the Urban and Rural patterns are from Reitz (1988) and are for materials from late eighteenth and early nineteenth century coastal contexts.

The Mitchelville pattern percentages are from Wilson and Wilson (1986:Table 39).

The 38BU634 pattern percentages are from Wilson (1989:Table 31).

38BU96 faunal sample resembles the combined collection from 38BU634 and Mitchelville, where freshwater/brackish species predominated at the former (Wilson 1989:190) and marine species predominated in the latter (Wilson and Wilson 1989:300). It would appear that the 38BU96 faunal assemblage lies somewhere between the patterns illustrated by 38BU634, a low status slave row, and Mitchelville, a relatively higher status freed black community. Indications are that fishing was a very important food source for the 38BU96 slave population.

The number of wild species present in the 38BU96 collection is similar to what is found at 38BU634 (see Wilson 1989:191). The raccoon (MNI = 3), opossum (MNI = 2), and squirrel (MNI = 1) could all have been taken in traps. This technique of capture would not have interfered with the normal work-day of the slaves. Certainly, gathering the two nocturnal wild mammals -- raccoon and opossum -- would not have interfered with a slave's workday. Likewise, the cuts of meat from the cow, pig, Caprine, and deer that are present tend to represent the poorer cuts of meat from those animals. A similar pattern was found at 38BU634 (Wilson 1989:191). This is in keeping with what appears to have been a general pattern of providing to the slaves the less desirable meat from the locally available faunal resource supply. The better cuts of meat and the more highly prized wild meat resources would have tended to go to other segments of the plantation's population.

Given that it is postulated that the 38BU96 portion of Cotton Hope Plantation dates between 1780 and 1860, it is possible that the pattern exhibited by the faunal collection reflects temporal variables. It may be that the faunal material deposited at 38BU96 dates to before 1800, when the activities at the locale changes from those associated with the slave row habitation to other activities involved with the plantation economy. If this is true, then the pattern exhibited by 38BU96 would indicate that fish and wild mammals were very important food resources and wild bird resources of little importance during this early period. As time passed, domestic mammals, and domestic and wild birds grew in importance as food resources, and fish and wild mammals declined somewhat. For now this has to remain a hypothesis to be tested using additional data from other eighteenth and nineteenth century sites for comparison. Alternatively, the differences noted reflect differences in the status of the inhabitants at 38BU96 vis-a-vis other inhabitants at the sites and at the neighboring sites of Mitchelville and 38BU634.

Conclusions

In general, faunal samples that do not contain at least 200 individuals or 1400 bones are usually deemed too small for reliable interpretations (Grayson 1979; Wing and Brown 1979). Although the number of individuals present the in the Cotton Hope sample does not number at least 200, the collection does possess 52 individuals and 1662 bone elements and fragments, of which 689 could be identified to species. While not eliminating all doubt about the interpretations set forth for this faunal collection, there is probably a good basis for accepting the findings derived from the analysis of this material at the very least as something more than a preliminary assessment.

Although it was originally expected that the 38BU96 faunal collection would exhibit a MNI pattern similar to that found at other slave faunal assemblages of the southern Atlantic coast, a pattern that differed from the generalized Slave faunal patterns and the specific MNI faunal pattern from nearly 38BU634 was defined. Likewise, the 38BU96 pattern differs from the generalized Urban and Rural MNI patterns, and the MNI pattern from the freed black community at Mitchelville on Hilton Head Island. It can be suggested that the differences noted are due to the emphasis on fishing that the 38BU96 collection evidences, or that the faunal assemblage is from a segment of the plantation's population that was closely associated with fishing activities, perhaps for the plantation as a whole. An alternate explanation is that the faunal material from 38BU96 is from an eighteenth century slave population and that other eighteenth century faunal collections in the area would exhibit similar MNI and biomass patterns. Either explanation suggests that there will be a great deal of divergence among MNI and other faunal category patterns defined for individual plantations and for the various segments of a plantations within a

region. Even among similar population segments of a plantation, such as slaves, there are probably differences that are due to differing status/work associations. The implication for future research is that plantations and the populations that inhabit them cannot be considered as homogeneous groups. Instead, status, work responsibilities, plantation economies, human idiosyncracies, historical factors, and environment will all contribute to differentiate the people and the places.

OYSTER REMAINS

David R. Lawrence

This is a report upon archaeological oysters [Crassostrea virginica (Gmelin)] from Cotton Hope Plantation (38BU96) supplied to the author by Chicora Foundation, Inc., Columbia, South Carolina. Samples of the shellfish were submitted in bulk and boxed, with a request for information concerning their cultural significances and contexts.

As discussed in this monograph, site 38BU96 is an eighteenth and nineteenth slave settlement which may have also served as a technical nucleus for light industrial or other such activities at the Plantation. The two midden samples came from the southwest corner of square 950R110 and the northeast corner of 960R110, and both represent 2.25 foot squares screened through 1/8 inch mesh. Artifacts suggest that these middens date between 1830 and 1860. The midden in 950R110 contained abundant food bone while the midden in 960R110 appeared disturbed, with less dense shell than the other provenience.

Oysters from each provenience were picked at random and sorted by valve and size until at least 50 larger left valves (height equal to or greater than 7.5 cm, the minimum marketable size for oysters in South Carolina) were obtained. These valve counts are reported in Table 30. All of the larger valves were carefully inspected for evidence of their total histories, and the larger left valves were washed for detailed examination. Once the valve discolorations in square 960R110 (described below) were recognized, smaller fragments from both proveniences were also washed on screens, to search for additional clues as to the differences between these two samples of oysters.

Reconstructions given here follow the arguments and criteria developed in Lawrence (1988a) as modified to incorporate the complementary work of Kent (1988). These modified criteria may be found in Lawrence (1988b). The interpretations are in part tentative because I have not seen these materials in their original archaeological contexts.

Sample 950R110

The bulk material includes a considerable amount of fragmented adult oysters and juvenile oysters. Although left valves are more numerous in the larger individuals (Table 30) this valve excess is most likely due to the greater fragility of right valves and not to any conscious valve sorting by the site occupants. Numerous

Table 30.
Number of Larger Oyster Valves Inspected from 38BU96.

Provenience	Left	Right	Sum
950R110, Zone 2	52	35	87
960R110, Zone 2	52	16	68

Larger valves are those whose height is equal to or greater than 7.5 centimeters.

fragmented right valves support this interpretation.

Three more ovate forms are among the 52 larger left valves inspected. The rest of the left valves are elongate and display moderate to extensive attachment areas, with attachment to other oysters when decipherable. Individuals range to a rather large size for the species (maximum left valve height 152 mm; right valve height 137 mm). Evidence of oyster associates is not common. The galleries and perforations of clionid sponges occur on five left valves and several smaller left valve fragments, and but a single polydorid bristleworm tube was observed in the materials examined. All in all, the valves display the classic characters of intertidal, clustered oysters and probably came from nearby creek banks rather than from tidal flats.

Evidence clearly indicates that the oysters were shucked for use as food. Right valve cracking is most common and occurs on 16 of the 35 larger individuals. Left valve "stabbing" notches, including multiple notches on a single valve, are most evident. Several ribbed left valves display multiple notches in positions between ribs (that is, in the position of the right valve ribs), suggesting that shucking took place with the left valve in the palm of the hand, and an instrument inserted at the topographic highs of the right valve margin. These observations are consistent with the use of a bladed object or implement to open the valves, with the blade rotated after entry for prying, and with the fragile ventral edge of the right valves broken as a result of this process. The possibility exists that these oysters were heated during food preparation but evidence is not conclusive. Valve interiors are somewhat pearly or iridescent but blocky or sucrose valve surfaces are not evident and slight discolorations (toward brown) occur on only two of the larger left valves.

Ligament growth fabrics do not conform well to the model of Lawrence (1988a) and there are various readings of them, with regard to season of collecting. What is certain, however, is that the material from 950R110 includes at least some individuals gathered during the late fall to early winter periods of time.

In summary, the oysters from 950R110 were largely gathered from nearby intertidal creek bank settings, with Skull Creek itself a very likely possibility as a source. The oysters were gathered in bulk, possibly as intact clusters, with the unwanted or unused juveniles sorted and discarded at the site. Gathering times included the coldest months of the year. The oysters were shucked and used as food, and may or may not have been heated during food preparation. The high percentage of fragmented oyster debris, in the sample as submitted, needs explanation. Possibilities include heavy underfoot trampling or perhaps a more conscious shell breakage by the original nineteenth century inhabitants of this site.

Sample 960R110

The sample as submitted includes many juveniles and a quite considerable amount of fragmented oyster debris. Plant rootlets are obvious in many left valve interiors. Of the larger individuals left valves far outnumber right valves (Table 30) but, again, the lesser resistance of right valves to fragmentation probably best explains this disparity, since numerous right valve fragments are present in the material.

There are no truly massive and ovate larger left valves in the collection examined, but ovate and thick-shelled fragments of left valves are present. Left valves range up to 141 mm in height, are predominantly elongate, have moderate to extensive attachment areas, and were attached to other oysters. Except for one ovate and thick-walled individual, right valves mirror this geometry but do not exceed 100 mm in height, thus adding support to the argument that they were more easily broken or fragmented during use by the site inhabitants. The borings and internal galleries of clionid sponges occur on four, and the tubes of polydorid bristleworms on three, of the larger left valves. Very likely, source areas for these oysters were the same as for those from square 950R110.

Left valve interiors appear lustrous and at least some of these oysters were shucked for use as food. Ribbed left valves display up to six stabbing notches, in the positions between the riblets, and the arguments developed above, for sample 950R110, with regard to the mechanics of shucking can be applied to these individuals. However, the evidence of forceful separation of the two valves is not as striking as in the 950R110 sample. When washed all but three of the larger left valves retain a light brown discoloration due, at least in part, to clay sized soils cemented to granular surfaces of the valves. Three valves show gray discolorations which are most prominent around the hingement area, and distinctly grayed small oyster fragments occur in the material submitted. Ligament areas are particularly granular making growth fabrics, and season of collecting, difficult or impossible to unravel in the individual oysters. One large left valve is interpreted to have been over five years old when collected, with

gathering in the late fall or early winter time interval, and other oysters were possibly collected during this same season of the year.

In summary, the oysters from 960R110 were largely gathered from nearby intertidal habitats and were brought to the site in bulk, very likely as discrete clusters. The oysters were separated and at least some of them were subsequently used as food. Shell textures and valve discolorations suggest that the oysters were heated -- some to rather high temperatures -- at one time in their past. Roasting is one possible explanation for this (Kent, 1988; Lawrence, 1990), but the "disturbed" appearance of this midden deposit, with its very high volume of fragmented shell, needs to be considered as well before final interpretations are made.

ETHNOBOTANICAL REMAINS

Michael Trinkley

These ethnobotanical samples were collected in April 1990 by the author during data recovery at Cotton Hope, 38BU96. While it is important to consult the remainder of the data recovery report for details concerning the site, a brief overview will be presented, with emphasis on the site context as it may affect the botanical record.

Site 38BU96 is a late eighteenth and early nineteenth century settlement associated with the Cotton Hope Plantation. Analysis of the collection has suggested there were three episodes of plantation construction and rearrangement at the site. The first, in the late eighteenth century involved the construction of a slave settlement and perhaps an overseer's house. The second involved removal of the slave settlement and construction of both domestic and utilitarian buildings in the early nineteenth century. The third phase occurred in the late antebellum period, although both domestic and utilitarian buildings are again present.

The site is situated at the edge of Skull Creek, in an area today dominated by a live oak forest with an understory of palmetto. While there is no historic documentation, it is likely that the area immediately surrounding this site consisted of cleared land, with a number of commensal or weedy species pioneering in the disturbed habitat. Somewhat more remote from the site would have been fields used for the cultivation of indigo during the eighteenth century and cotton during the nineteenth century, fields cultivated in provision crops, old fields in varying stages of second growth vegetation, pine lands, and hardwoods (such as the common oak-pine maritime forest; see Mathews et al. 1980 and Sharitz 1975).

Research at the site included excavations in eight areas, with the discovery of at least nine structures. Excavation of two units, 950-960R110, yielded evidence of two shell middens. Flotation samples were collected from each of these middens, as well as from features which suggested a relatively high organic content. Each soil sample collected for flotation was 5 gallons in volume and was gently prescreened through 1/4-inch mesh to remove large artifacts and shell. This step, while perhaps damaging to fragile ethnobotanical remains, was deemed necessary to ensure obtaining sufficiently large soil sample volumes while reducing the bulk of the samples. The samples were processed by water flotation at Chicora's laboratories in Columbia.

An observation made across the site was that there were very few deposits which evidenced accumulation of carbonized material. This was supported by the very small size of the samples obtained after flotation. Table 31 lists the proviences sampled for flotation and the weight of the resulting light fraction.

Table 31.
Proveniences sampled for flotation with light fraction weights

Provenience	Context	Flotation Sample Size (volume)	Light Fraction Weight (gms.)
950R110, Zone 2	shell midden	5 gallons	82.35 (clean)
960R110, Zone 2	shell midden, disturbed?	5 gallons	11.65 (dirty)
Feature 1	Structure 6, tabby fireplace	5 gallons	12.39 (dirty)
Feature 1c	Structure 6, fireplace trench	5 gallons	4.10 (dirty)
Feature 2	Rubble around Feature 1	5 gallons	8.90 (dirty)
Feature 4	Shell pit	2.5 gallons[1]	6.55 (dirty)
Feature 9	Trash pit	5 gallons	92.36 (dirty)
Feature 10	Structure 7, trench	5 gallons	0.87 (dirty)
Feature 11	Structure 3, dripline	5 gallons	46.86 (clean)
Feature 12	Structure 4, trench	5 gallons	2.51 (dirty)
Feature 14	Structure 4, hearth area	2.5 gallons[1]	2.06 (dirty)

[1] features were too small to yield 5 gallon samples
"dirty" indicates that the sample is largely composed of noncarbonized organic rootlets and other debris.
"clean" indicates that the sample is largely composed of carbonized remains with only a small quantity of noncarbonized debris

Four of these samples (950R110, Features 1, 11, and 12) were selected for detailed analyses, based on their size, context, and degree of cleanliness. The flotation from 950R110 was sufficiently large to require subsampling. This was done because samples over 10 to 20 grams frequently result in redundancy and the analysis of large samples is very time consuming. The 5 gallon sample from 950R110 produced a flotation sample weighing 82.35 grams, of which a subsample of 17.89 grams was examined (representing a 21.7% sample).

Consequently, one sample (950R110) represents a midden accumulation from the early nineteenth century, one sample (Feature 12) is from an eighteenth century structure, and two samples are from early nineteenth century construction episodes. In addition to the flotation samples, a series of four handpicked charcoal samples were also examined for wood species identifications. These samples were randomly collected from both 1/4 and 1/8 inch screenings during excavations.

Procedures and Results

The four flotation samples were prepared in a manner similar to that described by Yarnell (1974:113-114) and were examined under low magnification (7 to 30x) to identify carbonized plant foods and food remains. Remains were identified on the basis of gross morphological features and seed identification relied on Martin and Barkley (1961), and Montgomery (1977). All flotation samples, as previously discussed, consisted of 5 gallons of soil, although one sample produced a sample sufficiently large to require subsampling, while another produced a very small sample in spite of the large volume of soil. The results of the analyses are provided in Table 32.

Table 32.
Analysis of flotation samples from 38BU96

	Wood Charcoal		Uncarb. Organic		Shell		Seeds		
Provience	wt.	%	wt.	%	wt.	%	wt.	%	Total
950R110, Zone 2	16.47	92.1	1.42	7.9					17.89
Feature 1	3.44	27.8	8.61	69.5	0.34	2.7			12.39
Feature 11	30.32	67.4	16.53	35.3			0.01	<0.1	46.86
Feature 12	0.87	34.7	1.36	54.2	0.27	10.8	0.01	<0.1	2.51

Recovered Seeds:
Feature 11 - one unidentifiable seed coat fragment
Feature 12 - one seed fragment, possibly Gramineae
one seed fragment, possibly Boehmeria cylindrica

The weight of the examined samples ranged from a low of 2.51 grams to a high of 46.86 grams. In two samples the uncarbonized material accounted for over half of the sample weight. Consequently, confidence is high for only two (950R110 and Feature 11) of the four samples examined; that is, only two of the four samples appear sufficient to provide reliable indications of plant foods and food remains, within the parameters of historic period food preparation and disposal practices. Of the remaining two samples one is too small to be considered reliable and the other contained an exceedingly high percentage of noncarbonized debris.

Although three seed fragments were identified in the collection, only one could be tentatively identified (Boehmeria cylindrica, false nettle). One appears to be a grass seed (Gramineae), while the other was too fragmentary for identification. None of these remains are representative of plant foods or food remains.

The four hand picked samples include charcoal from the 950R110 midden, Feature 5 (the tabby fire box associated with Structure 1), a post hole associated with Structure 3, and a post hole associated

with Structure 1. All of these samples were exclusively pine (Pinus sp.).

Discussion

Zierden and Trinkley (1984) and Trinkley et al. (1985) have previously discussed the significance of ethnobotanical research at historic period sites, as well as the biases in the archaeological record which result from food preparation and refuse disposal activities at these sites. Basically, many plant foods were prepared or cooked in ways which will not provide an opportunity for their preservation in the archaeological record. While ethnobotanical analyses from colonial and antebellum plantation sites in the South Carolina Coastal Plain are uncommon, the few available comparative studies document the relatively low incidence of carbonized plant foods.

Previous work by Trinkley (1983) at the Campfield slave settlement, a rice producing antebellum plantation in Georgetown County, South Carolina, yielded black walnut (Juglans nigra) and hickory (Carya sp.) nutshells, squash (Cucurbita spp.), china-berry seeds (Melia azedarach), and a variety of weedy seeds. While the nuts and squash represent probable food sources, the china-berry seeds are most likely medicinal, being used as a vermifuge. The weedy plant seeds from the Brassicaceae (Cruciferae), Polygonaceae, and Fabaceae families are indicative of a disturbed habitat.

At the late eighteenth century Yaughan-Curriboo slave rows in Berkeley County, Gardner (1983) identified a small quantity of cultigens, including corn (Zea mays), rice (Oryza sativa), and peach (Prunus persica). Other native fleshy fruit species were also identified, such as hawthorn (Crataegus sp.), blackberry (Rubus sp.), sumac (Rhus sp.), and legume seeds. Again, "weedy" plant seeds were documented from the collection.

Gardner (1986) has examined the flotation collections from the late eighteenth and early nineteenth century Lesesne and Fairbank plantations in Berkeley County on the Wando River. These remains, however, were collected from both "high" and "low" status areas within the plantation. Recovered were examples of corn, rice, peach, watermelon (Citrullus vulgaris), peanuts (Arachis hypogaea), and cotton (Gossypium sp.) (the latter three species being identified from a waterlogged well deposit). Seeds of native fleshy fruits, such as blackberry, grape (Vitis sp.), blueberry (Vaccinium sp.), hackberry (Celtis sp.), persimmon (Diospyros virginiana), and maypops (Passiflora incarnata), were also recovered. In addition, this site produced quantities of ruderal or "weedy" seeds.

Newsom (1988) examined a collection of ethnobotanical materials recovered from a slave row (38BU153) at Haig Point on Daufuskie Island. This site, however, also evidences postbellum occupation. Identified cultigens include corn and peach; wild plant

foods include hickory, pecan, acorn, grape, hackberry, peppervine (Ampelopsis arborea), and cabbage palm (Sabel palmetto). Medicinal plants include china-berry and wax myrtle (Myrica spp.), while several weedy species were again noted. Most of these seeds, however, are uncarbonized and their association with either the antebellum or postbellum occupation must be questioned since no "unusual" preservation conditions, such as waterlogged strata, were encountered. Additional work at Haig Point (Trinkley 1989) identified chenopod (Chenopodium spp.) and grape, as well as the usual complement of "weedy" plants.

Recent work at the Edwards Plantation on Spring Island in Beaufort County revealed a large quantity of carbonized material associated with a burnt structure probably representing housing for domestic slaves. Identified material was predominately rice, although 10-row corn and peas were also recovered (Trinkley 1990).

The literature is replete with both primary and secondary sources discussing low country foodways (see Trinkley et al. 1985). Generally, cultigens were processed (yielding bread, hominy, corn meal, and so forth), which provides relatively few opportunities for incorporation into the ethnobotanical record. Wild plant foods, while not processed in the traditional sense, rarely were exposed to fire (except perhaps as a trash disposal technique). The best ethnobotanical data from plantation sites appears to come from "unique" deposits such as waterlogged wells or burnt buildings. Features such as builders' trenches, post holes, drip lines and the like, rarely produce significant quantities of food remains.

The low incidence of food remains at Cotton Hope probably can be attributed to the contexts sampled, the food preparation techniques, and the disposal techniques. Rice and corn were dietary staples of most slaves during the antebellum period. However, corn was commonly dispensed as a milled product (Hilliard 1972:48, 157) and rice was commonly used only on rice producing plantations where the damaged grains were given to the slaves as foodstuff (Hilliard 1972:169). Hence, the absence of corn may indicate grinding off-site and the absence of rice is not unexpected since the Hilton Head area produced very little rice.

The only plant remains present include "weedy" species. The false nettle is found on moist or wet soils and fruits from September through October (Radford et al. 1968:394). The possible Gramineae seed recovered also represents a "weedy" species.

The Cotton Hope wood charcoal samples document the exclusive use of pine for both firewood and construction purposes. While some hardwoods, such as hickory, produce a hotter fire than pine, the difference is not great (hickory produces about 24 million BTUs per cord, while a cord of pine yields about 20 million BTUs). Apparently, the abundance, availability, and easy ignition of pine more than made up for its slightly less efficient heating. In spite

of the minor difference in BTU output between hard and softwoods, Reese states that "the heavy and dense woods give the greatest heat, burn the longest, and have the densest charcoal" (Reese 1847:116), perhaps establishing an association between wood type and "status." If so, it is unlikely that slaves would have had access to relatively scarce fuelwoods favored by the plantation owner.

Construction frequently used pine, not only because of its strength and availability, but also because of the rot resistance of heartwood pine (Fitchen 1986; Scheffer and Cowling 1966). Pine, in addition, grows tall and straight, making it ideal for larger timbers (Fitchen 1986:134). Kembel mentions that virtually all of the main plantation house furniture on Butler Island, Georgia was made from pine, "planned as smooth as marble" (Kembel 1984:63).

Summary

The ethnobotanical samples from 38BU96 unfortunately provides no information on the plant foods of the inhabitants and relatively little information on the use or presence of other plants. The failure to recover cultigens may be the result of preparation and disposal techniques. However, since wild plant foods are occasionally found at plantation sites, it may be that their absence at Cotton Hope indicates that they were unavailable or were not desired.

The commensal or "weedy" plant seeds found in the collection suggest that the slave settlement received minimal attention. Given the number of "weedy" species usually identified at slave sites, this situation does not appear unusual. It is probably the result of both the adjacent cleared areas and also the use of dried grasses for bedding and kindling.

The charcoal identified from the site includes only pine. This wood was probably used both as a fuel and as a building material. The absence of other wood species may be the result of unidentified biases in the collection or the result of intentional selection.

The work at 38BU96 clearly indicates the problem of achieving adequate sample sizes for detailed ethnobotanical studies. Many of the features available for sampling, such as builders' trenches and driplines, are not likely to produce useful samples. Other types of features, such as midden deposits or wells, were scarce or unavailable at the site.

SUMMARY AND SYNTHESIS

Michael Trinkley

Site 38BU96, rather than representing a simple slave settlement dating from the late antebellum period, as originally perceived, has revealed considerable temporal and functional complexity. Occupation began in 1780s and continued until the site's abandonment in the early 1860s. During these 90 years the orientation/function of the site changed from that of a small slave settlement with a possible overseer's dwelling at the periphery during the late eighteenth century, to a more specialized settlement during the nineteenth century. These changes in site use and function resulted in the commingling of the artifacts and the superimposition of construction features. To make the interpretation of the site more difficult, there is no comparative data available from either the main plantation settlement or the known nineteenth century slave row. Finally, the historical documentation for Cotton Hope Plantation is sparse and difficult to interpret, while no data for this specific portion of the site has been identified. Yet, 38BU96 offers a view of low country plantations not available at any other documented site -- a view which graphically portrays the changing use of a small settlement area and the presence of a population which does not immediately fit into the preconceived tripartite categories of owner-overseer-slave.

Eighteenth Century Settlement

The first evidence of occupation at 38BU96 (then known as Scull Creek Plantation) is related to the tract's ownership by George Barksdale, who died about 1798. There is relatively little information on Barksdale's status or wealth as a planter, although his inventory (conducted almost 40 years after his death) indicates that the 600 acre plantation had a dwelling house and was valued at £10,200. This suggests wealth far in excess of what Land (1969) would classify as a "lesser planter," although less wealth than would characterize a "planter-capitalist."

While a wealthy individual, it is difficult to know Barksdale's position in society (see Baugher and Venables 1987:37). It seems likely, however, that he enjoyed the position of a successful planter, emphasizing indigo as a cash crop planted on the moist, rich soils found in the Cotton Hope area (see Land 1969:91). Planters felt that a single slave could work upwards of 2.5 acres of indigo (with each acre producing at least 30 pounds and perhaps as many as 80 pounds), with time left over for provision crops. While it is not known how many slaves Barksdale had at Scull Creek, it seems unlikely that many would be required

for indigo.

By the last quarter of the eighteenth century, however, indigo was declining in importance (see Huneycutt 1949) and it is likely that Barksdale participated in the final days of indigo cultivation in South Carolina. The economic events in South Carolina, coupled with the court action involving Barksdale's estate, perhaps explain the seeming inactivity at Scull Creek during the last decade of the eighteenth century and first several decades of the nineteenth century. As indigo became less able to compete with foreign products, cotton was slowly emerging as the next cash crop. In 1794 only 159,000 pounds were exported from Charleston; by 1800, 6,425,863 pounds were exported (Huneycutt 1949:47).

Although the area was made safe from the Yemassee Indians as early as 1718, Hilton Head had only 25 families as late as 1766. The Revolutionary War and constant pressure from Daufuskie and the British occupation of Beaufort, kept the island in a state of turmoil during the war years. The financial instability created by the war continued for some time afterwards (Wallace 1951:332-339). Taylor (1932), from a study of wholesale commodity prices at Charleston during the late eighteenth and early nineteenth century, observed that exports were bringing low prices, but imports were expensive. He notes,

> [p]rior to the period with which the study begins [1798], Charleston had suffered from seriously declining prices, especially for the years following 1787. This was particularly true of prices for local products which, having reached a high point in October, 1786, had fallen over 45 percent by December, 1791. Imported commodities, on the other hand, had reached their low point in 1789 and had shown considerable recovery by the end of 1791 (Taylor 1932:851).

Wallace describes Beaufort in 1796 as "a pleasant village of about two hundred inhabitants" (Wallace 1951:353). In the late eighteenth century it is likely that Hilton Head was still very much a frontier. This is not to imply that the residents (especially the wealthy planters) were isolated from the goods necessary for comfortable life (see Baugher and Venables 1987:33-36), but only that the area was clearly not participating in the mainstream of economic or political life. Its relative isolation also probably made consumer goods more expensive.

Barksdale's slaves lived in what appear to be very rustic accommodations. The structure most fully investigated measured about 14 by 16 feet (224 square feet of living area), was built of logs plastered over with mortar, and had a poured mortar floor. The chimney was of lathe construction, also plastered with mortar. There is no evidence of windows, or even of the architectural hardware typically associated with shutters or doors (although

these items may have been salvaged before the settlement was abandoned). The structures were oriented in a single row roughly perpendicular to Skull Creek.

Adams' (1990) recent investigation of slave architecture suggests that the transition from small (averaging as little as 143 square feet), clay walled houses in an irregular arrangement to the more "typical," larger frame structures raised off the ground occurred as early as last quarter of the eighteenth century. Certainly, there are some indications of this transition at Scull Creek, where Barksdale's slaves lived in rather "large" structures arranged in a clearly defined row.

In other ways, however, the Scull Creek settlement appears poorly constructed and poorly ventilated, at least to our sensibilities. The mortar floors would have quickly fragmented from traffic and use. Even when new they would have served to wick the ground moisture into the living area. The plastered over log construction, while providing a relatively weather-tight structure at first, would have been susceptible to major wood rot problems. The hearth area is poorly constructed and so small in size that it seems unlikely the houses could have been adequately heated.

Examination of the material culture remains of the Barksdale slaves suggests a life bereft of anything except bare essentials. The ceramics present are the least expensive eighteenth century types, such as lead glazed slipwares and redwares. Expensive wares (such as porcelain) are either absent, or (in the case of case of white salt-glazed stoneware) probably discarded from the main house. Vessel forms are primarily bowls, evidencing the preparation of stews, broths, pilafs, and other "one-pot" meals. Other evidence and artifacts of slave lifeways are uncommon and attest to the poverty of their condition.

Near this slave row was one other structure, evidenced primarily by the presence of a well constructed tabby hearth. Little is known of this structure or its occupants since the same site was used for a more massive early nineteenth century dwelling. What can be inferred, however, suggests a better constructed structure and a slightly less impoverished lifestyle. At a slightly different orientation, it seems likely that this structure was built at a different time than the slave settlement, although it was intended to fit into the total settlement pattern. The absence of any trench features suggests that the structure was raised off the ground. While there are a number of wrought nails associated with this structure, they are largely of a size suitable for shingles and finishing details, with very few suitable for heavy framing. This suggests a frame structure, largely of pegged construction, with a single end chimney.

Material culture remains are indicative of a higher status occupation. More container glass is found at this structure than

the slave settlement, as are a number of kettle fragments. There are several furniture hardware items and personal items such as jewelry. In addition, six slate pencils were found at the site. It seems likely that this structure represents an overseer's dwelling dating from Barksdale's occupation.

Nineteenth Century

As previously mentioned, by the early nineteenth century South Carolina had shifted its economic basis away from indigo to cotton. Prices averaged about 45¢ a pound between 1800 and 1806 (Kovacik and Mason 1985:83), although by 1816 the price had fallen to 30¢ a pound and by 1827 they fell to a low of 9¢ a pound. A depression overshadowed South Carolina's economy during the late 1820s until 1832 (Wallace 1951:385, 402). It was during this period of economic fluctuation that the legal battle for the Scull Creek plantation was taking place.

There is both historical and archaeological evidence that the plantation continued to operate during this period. Rather than stagnating while the legal battles wore on, Scull Creek Plantation seems to have thrived. The historical evidence suggests that the plantation activities were overseen by a Black slave, probably a driver, although the archaeological evidence also suggests the presence of a white overseer.

It seems likely that Scull Creek Plantation, during this period of high cotton values between 1800 and 1816, was making a profit. This may be reflected in the first episode of plantation reorganization. During the first quarter of the nineteenth century, the original eighteenth century slave row was abandoned. At least one utility structure or barn was constructed adjacent to the creek bank, a structure was built at the south end of the site, and the overseer's house was demolished and a new structure built over it. It seems likely that this shift in site function away from slave settlement to a more specialized activity locus is related not only to new economic expansion, but also the specific demands of cotton.

The slave row was shifted from the bluff edge to the interior of the tract, presumably closer to the cotton fields. The area near the water began to be used for the processing or, more likely, the storage of cotton. In addition, the small overseer's house dating from the eighteenth century was systematically demolished and a larger frame structure, still with an end chimney, was constructed in its place. The orientation of this second structure shifted about 90°, perhaps to catch the breezes coming off Skull Creek. There is some evidence of random refuse disposal, not unlike that described by Frances Kemble from the late 1830s at Butler Island, Georgia:

> I nearly as possible fell over a great heap of oyster shells left in the middle of the path. This is a horrid

> nuisance, which results from an indulgence which the people here have and value highly; the waters round the island are prolific in shellfish, oysters, and most magnificent prawns I ever saw. . . . instead of all being carried to some specified place out of the way, these great heaps of oyster shells are allowed to be piled up anywhere and everywhere, forming the most unsightly obstructions in every direction (Kemble 1984:257).

Sometime in the 1830s William Pope sought to make his fortune in Cotton on Hilton Head and purchased Scull Creek Plantation from the heirs of George Barksdale. Changing the tract's name to Cotton Hope, the plantation became Pope's principal seat. Like other planters during the period (Kovacik and Mason 1985:87), Pope appears to have immediately embarked on additional construction.

The overseer's house continued to stand as the central element in the 38BU96 complex. Around it, however, were constructed a number of additional buildings including at least one additional barn and a slave dwelling at the south edge of the site. Both the historic map of the site and the archaeological studies suggest that additional dwellings were also constructed in a loosely nucleated cluster centered around the overseer.

It is these archaeological remains which are, perhaps, most interesting, since they defy our common perception of both a slave settlement and slave artifact pattern. The material remains appear to be of a higher status than typically associated with slaves. The faunal remains, likewise, suggest a different subsistence pattern.

Archaeologists have typically viewed slaves as an amorphous cultural group, with little attention devoted to any social stratification within the group. A major reason for this approach, of course, is that the archaeological record provides only imperfect information on wealth, class, social status, or standing in society. To the extent that archaeologists have dealt with the issue of ranking in slave society, it has tended to be between rural and urban blacks or between field hands and house servants.

Orser observes,

> a plantation ranking based on occupation was not unknown to nineteenth-century plantation observers. In this regard, the comments of Daniel R. Hundley (1860:351-352) are particularly important:
>
> > [the slaves'] chief ambition is to become master's waiting man, or valet; or, in case of a female, lad's maid; next they would prefer to act as housekeeper, chambermaid, steward, dining room servant, or groom, or better still, carriage-driver. This last is

> considered a post of great honor. . . . Even to be a wagoner, to drive the plantation mules and oxen, often becomes a fruitful source of rivalries and ill-feeling. But the chief ambition of a field hand, or plantation slave, is to become a headman.
>
> As Hundley (1860:358) further notes, the failure to work at the level expected by the owner often meant a work demotion . . . . (Orser 1987:125-126).

Frances Kimble also observed that on Butler Island there were both "field hands" and "mechanics or artisans;" the latter "are not only exceedingly expert [at their trades], but exhibit a greater general activity of intellect. . ." (Kemble 1984:63; see also Rosengarten 1987: 162-165).

While it seems likely that stratification existed on plantations, the nature and archaeological implications are far from clear. At Butler Island, Kemble observed that the house servants received no better food allotment or housing than the field servants (Kemble 1984:101, 361). This, however, was probably not the case at all plantations. Just as Orser (1987:127) notes that an increase in the alienation of work would produce a decrease in consumer goods, it seems likely that an increase in work and/or responsibility would produce access to better or more goods.

While not directly applicable to low country cotton plantations, Joseph (1987) discusses the impact of the task system on individual slave wealth. He notes that:

> the slave village offers the best context for assessing task labor within plantation culture; that comparisons between individual slave houses and assemblages might reveal different manners in which wealth was gained, materialized, and employed. Unfortunately, villages have rarely been treated as contexts within plantation archaeology. Too often a single slave structure is excavated an interpreted as characterizing the life of as many as 200 individuals (Joseph 1987:33).

Even at cotton plantations it seems reasonable to expect evidence of economic differences between different slave occupations and even different slaves. As Joseph notes:

> slaves were human beings and individuals, not units of the plantation economy, and . . . their expressions of individuality tell us a great deal about the ways in which slaves saw themselves (Joseph 1987:34).

Site 38BU96 appears to represent a late antebellum settlement of slaves engaging in specialized activities. While the

archaeological record provides few clues to these activities, the collection of cultural remains (such as plate forms and vessel motifs) and the faunal material (which emphasize the use of fish) seem to suggest a higher social status than typically ascribed to slaves. The possibility exists that these slaves, situated adjacent to Skull Creek, were engaged in fishing or boat activities.

The condition of the slaves at 38BU96 cannot be compared to the condition of other slaves on Cotton Hope since the plantation's main slave settlement (38BU1233) has not been investigated. It is, however, possible to compare the quality of life at 38BU96 to that at the Haig Point slave row built by William Pope about 1850 (see Trinkley 1989). The difference in material remains, architecture, and diet, is significant. The conditions on Haig Point have been explained on the basis of Pope not only being an absentee owner, but also being less than successful (by his own admission) at cotton cultivation. Yet, Pope's slaves at 38BU96 appear to have been well housed, relatively well fed, and to have a number of material possessions at the same time the Haig Point slaves were eking out a marginal existence on Daufuskie Island. Pope's activities on Cotton Hope (his major plantation), of course, were probably planned to reflect the social position he desired to present to his peers. Adjacent to Skull Creek, and not far from the main plantation house, the 38BU96 settlement was likely to be seen on a daily basis, not only by Pope, but by those in society it was important to impress. Consequently, the conspicuous display of wealth extended outward from the main house and gardens, incorporating this important ancillary settlement.

The investigations at 38BU96 have revealed that there is still much to be learned about plantation slavery and the complexity of the plantation's social organization. While it seems likely that similar specialized settlements existed on many low country plantations, 38BU96 is the only such settlement clearly documented on period maps of Hilton Head Island. It may be that similar arrangements are incorporated into the main plantation nucleus. Alternatively, these settlements may be so small at many plantations that they were simply not recorded. Regardless, it is important that future archaeological investigations at low country plantations search for, and examine, these specialized occupations as part of the whole plantation complex.

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