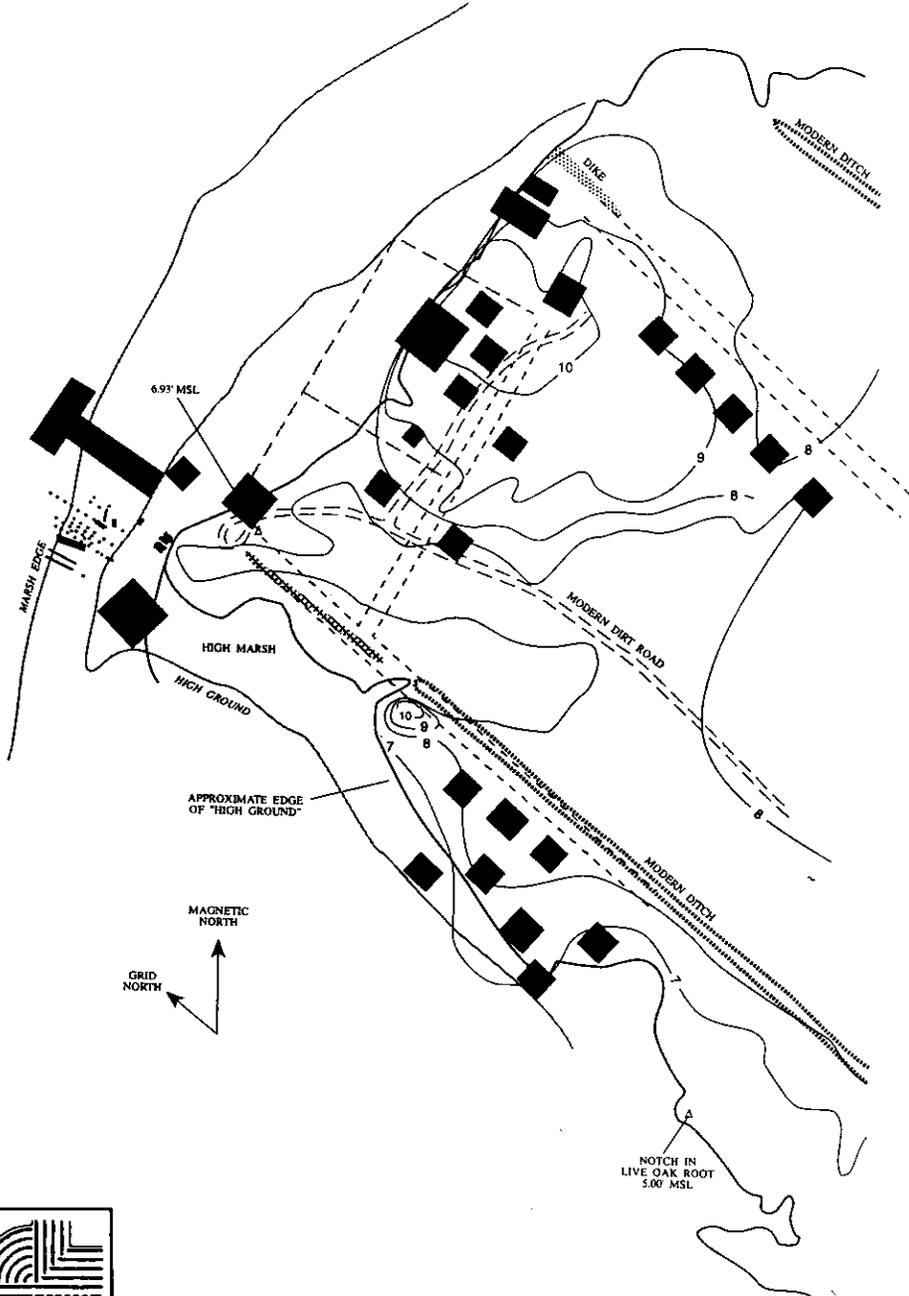


THE PLANTATION LANDSCAPE: SLAVES AND FREEDMEN AT SEABROOK PLANTATION, HILTON HEAD ISLAND, S.C.



**THE PLANTATION LANDSCAPE:
SLAVES AND FREEDMEN AT SEABROOK PLANTATION,
HILTON HEAD ISLAND, S.C.**

Research Series 34

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September 1998

Library of Congress Cataloging-in-Publications Data

Campo, Rachel, 1970-

The plantation landscape : slaves and freedmen at Seabrook
Planation, Hilton Head Island, S.C. / Rachel Campo. Michael
Trinkley, Debi Hacker ; with contributions by Gina Baylon ... [et
al.].

p. cm. -- (Research series / Chicora Foundation ; 34)

"September 1998."

Includes bibliographical references (p.).

ISBN 1-58317-003-0

1. Seabrook Plantation (S.C.) 2. Hilton Head Island (S.C.)-
-Antiquities. 3. Excavations (Archaeology)--South Carolina--Hilton
Head Island. 4. Afro-Americans--South Carolina--Hilton Head Island-
-History. 5. Plantation life--South Carolina--Hilton Head Island.

I. Trinkley, Michael. II. Hacker, Debi. III. Baylon, Gina.

IV. Title. V. Series: Research series (Chicora Foundation) ; 34.

F279.S38C36 1998

975.7'99--dc21

98-39805

CIP

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ISBN 1-58317-003-0

ISSN 0882-2041

The paper in this book meets the guidelines for permanence and durability
of the Committee on Production Guidelines for Book Longevity of the
Council on Library Resources. ∞

The South has a way of closing down over its own
like the jars in which we once captured fireflies
out on the veranda.

---Sharon McKern

ABSTRACT

Seabrook Plantation was situated on Skull Creek at the northern end of Hilton Head Island, Beaufort County, South Carolina. The plantation appears to have been constructed sometime before 1833 and was situated between Cotton Hope Plantation and Myrtle Bank Plantation. William Seabrook purchased the plantation in 1833 and it was passed down through his family until Hilton Head fell to the Union in November of 1861. At this time, the plantation main house was used as the military headquarters of various military regiments stationed there to guard Skull Creek against Confederate intrusion.

Seabrook Plantation was also home to a number of African-American slaves prior to 1861, who were considered "contraband of war" by the federal government. Many of these African-Americans chose to stay at Seabrook rather than live in federal encampments in the area. Archaeological evidence presented in these investigations indicates that these people lived at one of the slave row areas located near the marsh edge adjacent to Skull Creek.

The plantation was used by the American Missionary Association as a school from 1866 to 1869, as part of the Port Royal Experiment. After this time, the plantation passed through various hands during the end of the nineteenth century, but was never operated again by the Seabrook family. During the early twentieth century, the plantation continued to exchange hands until it came to be developed in the last few years

Archaeological excavations were conducted at Seabrook Plantation from August to October 1994 and focused on three main areas at the plantation, including the Main House Complex and two slave rows. Much of the plantation main house had eroded into Skull Creek at the time of excavations, although artifact densities in the area of the main house were examined. Other

excavations included those at the prehistoric shell midden, site 38BU821, which had been heavily plowed by the time excavations were conducted.

Excavations at the Main House Complex concentrated on a utilitarian building and a well. Excavations at the slave rows revealed the remains of two structures in the Southern Slave Row, which was occupied during the second half of the nineteenth century, and one structure in the Northern Slave Row, used during the first half of the nineteenth century.

These investigations reveal differences in the landscape architecture and material culture at the two slave settlements, highlighting the changing lifestyle between slaves and freedmen at the time of the Civil War. Investigations have focused on comparisons of Miller's ceramic indices, artifact groups, and architecture at the two slave areas. In addition, ethnobotanical, faunal, pollen, and phytolith investigations were also undertaken.

As a result of these investigations, we have begun to better understand the changing lifestyles of slaves as they quickly became freedmen at Seabrook Plantation, and at other nineteenth century sites at Hilton Head Island.

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ACKNOWLEDGEMENTS

This project was sponsored by the Seabrook Landing Partnership which is developing the Seabrook Plantation tract. Although, like many other projects, this was necessitated by federal and state development permits, the Partnership and those with whom we dealt were all fully supportive of the project and interested in better understanding, and documenting for future generations, the heritage of Hilton Head Island.

In particular, we would like to thank Mr. Pete Coquillette, local project manager, for his interest, good humor, and constant support throughout this project. In addition, Ann and Tom Schau were equally attentive to our needs and were constantly to help assist the project. Although Mr. Duncan J. Horn, the manager of the project, resided in England he expressed his interest in the project in many ways, the not the least of which was always wanting to do the right thing.

Others involved in the project who were constantly sources of assistance include Mr. Bill White, an engineer with Thomas and Hutton Engineering Company in Savannah, Georgia, who helped with information concerning the mapping of the site and the well excavation; Ms. Jill Foster, Long Range Planner with the Town of Hilton Head Island, who assisted us obtain the necessary archaeological permit; Mr. Michael Taylor, who visited the site and offered us his knowledge of the area; and Mr. Keith Derting, with the South Carolina Institute of Archaeology and Anthropology, who assisted us in updating the site files. A number of individuals at the Hilton Head Museum, including Ms. Barbara Lothrop and Ms. Chris Pendelton assisted us in the eventual curation of the collections at this institution.

Project review at the State Historic Preservation Office was provided by Ms. Mary Edmonds, Deputy State Historic Preservation Officer and Mr. Lee Tippet, Staff Archaeologist. We thank them for their timeliness and constant

attention to detail.

The field crew for this project included Ms. Natalie Adams, who served as the field director, Ms. Missy Trushel, Mr. Ryan Boera, Mr. Spencer Mullens, and Ms. Nichole Lantz. We appreciate their humor, good spirits, and especially fine work.

Supplementing their efforts were a number of volunteers from the Hilton Head Island Chapter of the Archaeological Society of South Carolina. These volunteers were admirably coordinated by Mr. Tom Griffin, who has been one of the most faithful and hardworking of any volunteers we have ever had the pleasure of working with. Also participating were Ms. Cynthia Montgomery, Mr. Dick Johnson, Ms. Joyce Albretch, Ms. Kathie Kropschot, Mr. Jerry Darnell, Mr. Gary Thompson, Mr. Bob Dena, Ms. Gretchen Ward, and Ms. Anne McCuen.

Historical research, originally developed by Trinkley, was supplemented by Ms. Gina Baylon after the conclusion of the field studies. Also involved in the analysis were Dr. David Lawrence, with the University of South Carolina, who conducted the shellfish analyses; Dr. Homes Hogue, at the Cobb Institute in Mississippi, who conducted the faunal studies; Dr. Art Cohen, at the University of South Carolina, who oversaw the pollen studies; and Dr. Irwin Rovner, who conducted phytolith studies of several proveniences. We appreciate their attention to detail, including the detail of timely report submissions. The study benefited from their interaction and we hope that the readers will find their observations and conclusions useful.

INTRODUCTION

Development of the Project

Seabrook Plantation is situated on the northern end of Hilton Head Island in Beaufort County, South Carolina (Figure 1). Fronting Skull Creek to the northwest, it is one of the last undeveloped deep water tracts on Hilton Head Plantation and one of only a hand-full along Skull Creek itself. As will be discussed in greater detail in a following section, the tract has retained at least some of its appearance from the 1930s, prior to the island's rapid commercial and residential development. In fact, traces of old plantation-era roads and property boundaries were still visible at the time of the study. Even the remains of antebellum and postbellum docks for the cotton ships and steamboats which ran between Savannah and Charleston, and stopped at "Seabrook Landing," were visible at low tide. But just as the rest of the island has changed over the past 20 years, so too is Seabrook changing.

The initial archaeological and historical survey of Seabrook Plantation was conducted by Chicora Foundation in early May of 1988 (Trinkley 1988) for the firm of P. Carlton Knoll Interests, Inc. Archaeological interest in the tract, however, goes back even further to Jim Michie's shoreline survey of much of the Port Royal area during the summer of 1979 (Michie 1980). At that time he identified sites 38BU323 and 38BU337, representing the core of what would eventually be recognized as Seabrook Plantation. Michie, however, had relatively little to say about either site. At 38BU323, he noted only:

A light scatter of historic and prehistoric artifacts were recovered from the beach. These items probably eroded from a former matrix and were subsequently scattered across the beach (Michie 1980:56).

At nearby 38BU337 he remarked:

This site, located adjacent to a small tidal creek and situated on the sandy bluff, is eroding and falling into the marsh creek. Large fragments of tabby and several brick fragments lay in the creek bed, the sandy beach, and on the bluff. The creek has obviously destroyed a large portion of the structure, but portions may remain in the thick vegetation on the bluff. Other than the tabby and brick, no cultural materials were discovered (Michie 1980:56-57).

About the same time the Lowcountry Council of Governments (1979) was assigning archaeological site numbers to historic sites — designating Seabrook Plantation 38BU1149 but failing to complete a site form or provide any substantive locational information.

Two additional site numbers were assigned during the December 1986 reconnaissance level survey along portions of the Skull Creek shoreline conducted by Chicora Foundation (Trinkley 1987). Sites 38BU821 and 38BU822 were both identified on the basis of eroding shell midden. While both were recommended as potentially eligible, little additional information was available at the time.

This proliferation of site numbers, generated by a number of reconnaissance level investigations, was finally dealt with during the intensive survey in 1988. At that time the tract was found to contain essentially four sites:

- Seabrook Plantation, designated by the numbers 38BU323,

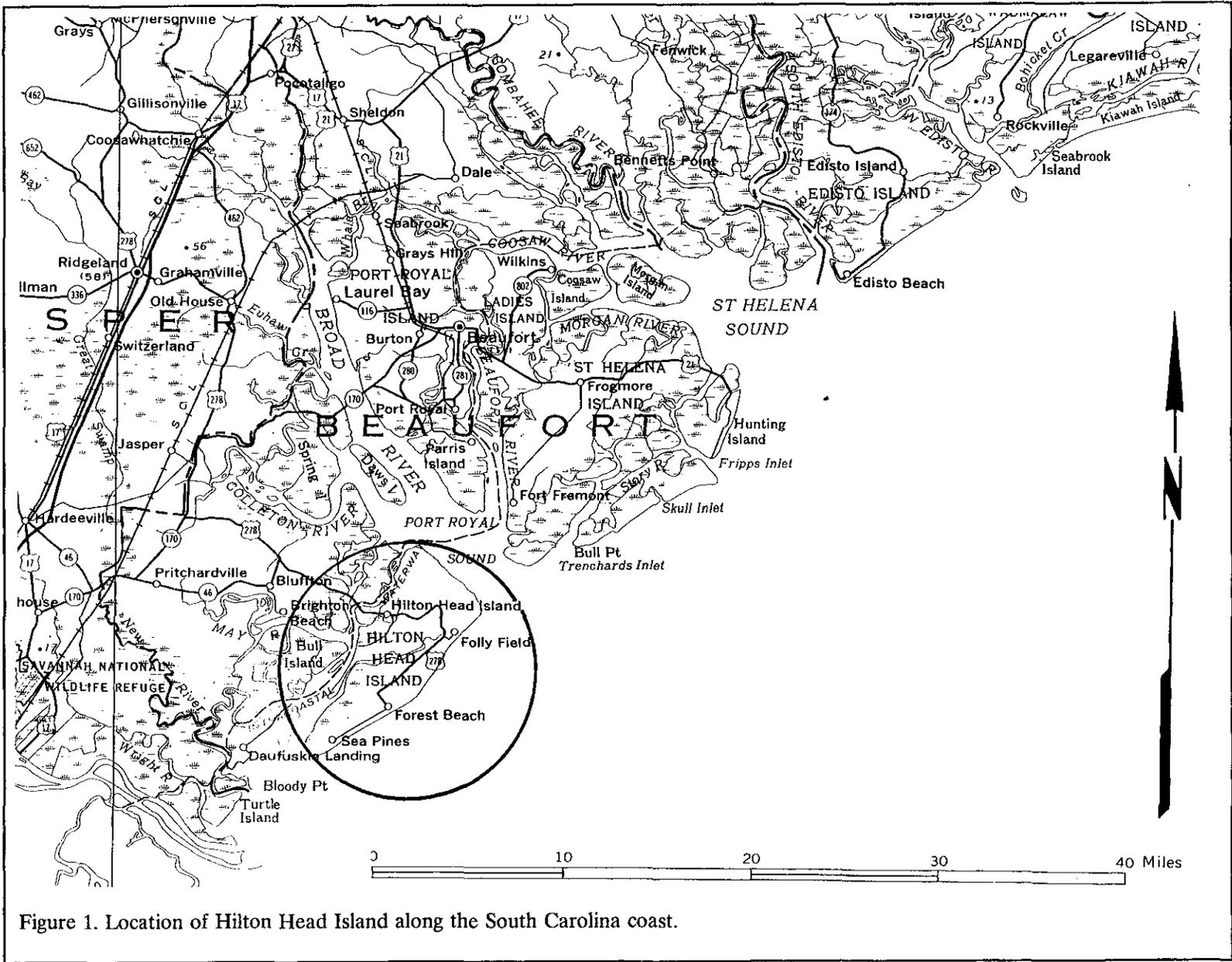


Figure 1. Location of Hilton Head Island along the South Carolina coast.

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38BU337¹, and 38BU1149;

- A large prehistoric midden with seemingly good context, designated 38BU821;
- A small prehistoric midden with minimal context, designated 38BU822; and
- A very small prehistoric midden with minimal context, designated 38BU939.

The first two sites were recommended as eligible for inclusion on the National Register, while the latter two sites were recommended as not eligible because of their limited research potential. These recommendations were accepted by the South Carolina State Historic Preservation Officer (S.C. SHPO) and a Memorandum of Agreement (MOA) between P. Carlton Knoll Interests, Inc. and the S.C. SHPO covering the two eligible sites (38BU323/337/1149 and 38BU821) was signed October 16, 1989.

Even before the MOA was signed, Chicora was requested to submit a proposal for data recovery at the sites. Initially dated July 10, 1989 the proposal was reviewed and approved by the S.C. SHPO. At the prehistoric shell midden, 38BU821, which measured about 150 feet in diameter and upwards of 1.5 feet in depth, work was specified to further explore both midden and

non-midden areas (Figure 2). During the initial survey the Seabrook Plantation site (38BU323/337/1149) a number of discrete areas were identified based on shovel tests at 50 foot intervals.²

Midden 1, situated on a small slough, was thought to represent a Civil War deposit, perhaps connected with the nearby landing. This interpretation was based on the presence of coal and miscellaneous iron items, thought to represent debris from the military's shipyard. Excavation would eventually reveal that this area was actually the plantation landing road which had been repaired using coal and other debris, likely from the nearby military facilities.

Middens 2 and 3, although both damaged by the construction of a modern (i.e., twentieth century) drainage ditch, were thought to be midden areas associated with a nearby slave settlement. During the survey these areas were identified primarily on the basis of shell eroding from the ditch bank, as well as through a scatter of artifacts in shovel tests.³ Subsequent excavation in these areas revealed that the material eroding from the ditch was likely yard deposits, although it is also likely the ditch and/or spoil piles destroyed many nearby slave structures.

Midden 4, situated at the southern edge of the property adjacent to the marsh, was identified as a relatively small deposit of shell. It was interpreted to represent a brief military

¹ At the time of the 1988 survey, nearly a decade after its recordation by Michie, the beach was literally covered by tabby remains and brick. Although in a very poor state of preservation, this suggests that the structural remains had largely been eroded from their primary context and were being damaged by exposure. By the time these investigations were undertaken, a decade and a half after Michie's initial reconnaissance, the tabby and brick had largely disappeared from the beach and virtually no intact remains could be identified in the bluff or on the beach. That this particular structure or site area had been totally destroyed in only a decade and a half offers striking evidence of the fragility of archaeological resources, as well as the losses inflicted by the erosion of Skull Creek.

² At the time of this survey in 1988, 50 foot intervals were considered to be more than adequate for site definition. As work continues at plantation sites, we are realizing that testing at even 20 foot intervals combined with metal detecting (used at the Freeport Plantation, 38BU584, on Daufuskie Island) is not necessarily adequate for structural detection. Consequently, the areas defined by the initial survey of Seabrook Landing are only gross approximations of the site's eventually realized organization.

³ Shovel tests, however, were inconclusive in these areas, not so much because of their interval but because spoil covered the area southwest of and parallel to the ditch.

THE PLANTATION LANDSCAPE

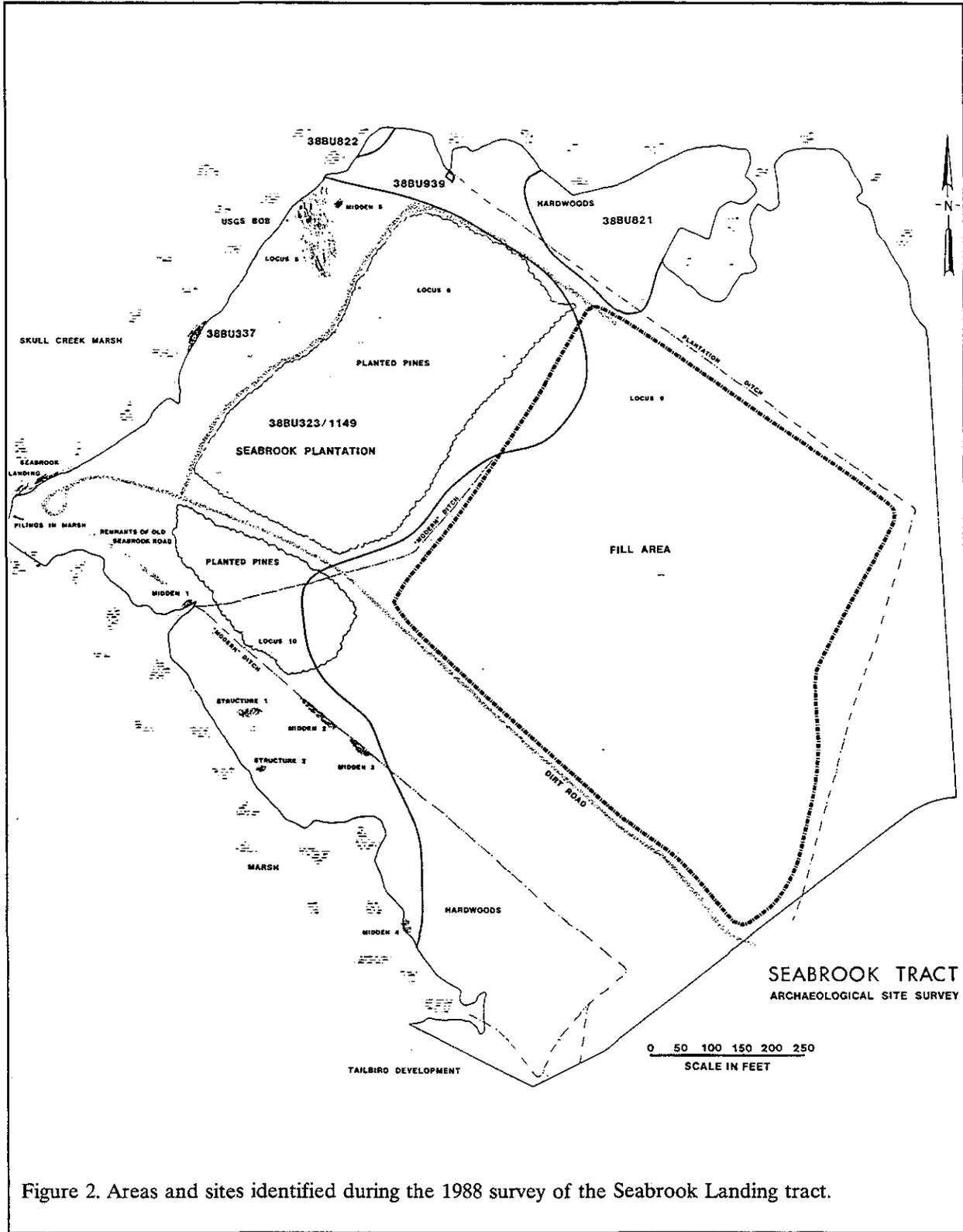


Figure 2. Areas and sites identified during the 1988 survey of the Seabrook Landing tract.

INTRODUCTION

encampment, perhaps a sentry or picket post based on the seemingly limited artifactual material (shell and glass). We were also swayed by the presence of some looting, suggesting that a collector had found "something" (usually meaning military items) worth their effort. Excavation in this area eventually demonstrated that the midden was likely associated with a postbellum freedman structure, which was not located by the study.

Midden 5 was found on the northeast edge of the plantation settlement and was evidenced by a small shell pile associated with badly disarticulated tabby remains. This area produced limited remains during the intensive, close interval testing of the plantation. While it may have been a structural area, further work here was eliminated in order to explore other areas of the plantation.

Area 5, also situated on the northeastern edge of the plantation, was a poorly defined concentration of prehistoric remains within the plantation boundary. While most of the prehistoric investigations were to be conducted at 38BU821, some limited effort at this area was proposed to collect comparative material. Eventually this work was eliminated in lieu of the more intensive, close interval auger testing conducted over the entire plantation.

Area 8, comprising a relatively large central area within the plantation boundaries, was thought to represent the main plantation complex, although definition of individual structures was not possible. This area was eventually found to contain the remains of the main house, several outbuildings, a well, and other plantation landscape features.

Area 10, situated on the western edge of the site, represented one of the site's two slave rows. During the initial survey two standing tabby fireboxes were identified in this area. While it is almost certain that additional structures existed, data recovery efforts were to concentrate on these two since they were associated with above grade remains. Excavations were conducted at both structures sufficient to identify and recover architectural features and in associated yard areas.

Area 9, thought to represent the second

slave row, was never identified during the survey. Based on our scaling of historic maps, the row appeared to be under the extensive fill associated with the more inland portions of the site. We therefore concluded, after failed efforts to find some evidence of the settlement, that it had been destroyed by the fill operations. During the close interval auger testing we identified what we believe to be the northwestern edge of this settlement and excavated in one area, recovering some evidence of structural remains and yard trash. An abundant producer of artifacts in this particular spot was an agricultural ditch, filled with early plantation trash.

It would be over four years, however, before these field investigations were actually begun (with the proposal being revised in 1992 and again in 1993). During this period P. Carlton Knoll Interests, Inc. divested itself of the property, with ownership being granted to Seabrook Landing Partnership (Mr. Duncan J. Horn, Manager and Mr. Peter D. Coquillette, Project Manager). This new organization, being the legal successor to P. Carlton Knoll Interests, accepted the MOA and began preparations for data recovery. An agreement to conduct the necessary work was approved by the new partnership on February 2, 1994, although the field investigations were not scheduled to begin until the middle of August 1994. The data recovery plan was also submitted to the Town of Hilton Head Island, in compliance with Hilton Head Island Ordinance 90-10B (Municipal Code of the Town of Hilton Head Island § 17-2-112) and Approval #94-7 was issued on August 5, 1994.

The field investigations began on August 15, 1994 and continued for ten weeks, through October 21, 1994. During the course of that work several minor modifications of the data recovery plan (discussed in greater detail in a following section of this study) were requested and approved by the S.C. SHPO based on field findings. The first, involving reallocation of time among the various site areas, was requested on September 19 and approved the following week. The second requested modification was more substantive, and involved reallocating one of the two weeks proposed for the prehistoric midden at 38BU821 to the excavation of a well identified at the plantation

(38BU323/337/1149). This modification, requested on October 10, 1994, was approved October 18.

Once the excavation was completed, the final report languished for an additional four years. Now published, there are certainly sections of this research which appear dated. Nevertheless, other portions offer exceptional insight into the operation and landscape of the Seabrook Plantation.

Goals and Research Objectives of the Project

The primary goal of this project, of course, was to assist Seabrook Landing Partnership comply with their legal responsibilities to the cultural resources. The MOA for this project was initiated because the development, within the coastal zone, was found to affect National Register eligible sites which are defined under the Coastal Zone Management Program as Geographic Areas of Particular Concern (GAPCs). Projects which impact of GAPCs require permits from the South Carolina Coastal Council (now the Office of Ocean and Coastal Resource Management, under the umbrella of the South Carolina Department of Health and Environmental Control). The MOA established how P. Carlton Knoll Interests, Inc. (and later Seabrook Landing Partnership) would deal with the potential impact to these GAPCs. Subsequently, Seabrook Landing Partnership also applied for an Army Corps permit to build a pier and floating dock in Skull Creek (P/N 94-1E-381-P), which would have invoked cultural resource protection.

All cultural resource protection, however, is predicated upon the legal mandate that recordation and documentation (if not actual preservation) of historic and prehistoric sites is in the public interest — that these sites represent our heritage and are part of a public trust which should not be destroyed through federal activities without some consideration. The public's trust, more often than not, is concerned with what the objects at sites such as Seabrook Plantation can tell us about the past.

The story such sites can tell about the past, however, is not self-evident. A handful of ceramics,

buttons, and nails will not *automatically* help us to better understand how master and slave lived at Seabrook, or how the freed slaves came to farm small tracts, or how blacks were eventually forced off much of the land. For the artifacts present at a site such as Seabrook Landing to have meaning, there must also be a formal program of research — a formal, scientific approach to the inquiry. Questions must be asked, answered, and the results made available, if the public's trust is to be protected. Consequently, a second goal (intimately related to the first) was to develop research questions appropriate to the tract and the sites. Without this research orientation it would be impossible to achieve the first goal — that of compliance with federal historic preservation law (see Townsend et al. [1993] for example).

The research objectives of the project involved several broad research interests. At the historic site (38BU323/337/1149), these included:

- Exploration of the plantation landscape, a topic which has received considerable attention in the past five years. Using the broadest possible definition for "landscape," this might include how the buildings within the settlement were organized, how this organization reflected power and alienation on the plantation, how this organization may have been impacted by the isolated location of the plantation or the plantation's economic base, and even how the settlement related to the broader view of fields and roads which united all of the plantations on Hilton Head.

- Exploration of the lifeways of planter and slave, especially recognizing that there may be differences between the slaves themselves. At Seabrook the cartographic research seems to suggest the presence of two slave settlements — one classic in

appearance with a double row of neatly arranged structures, the other nucleated but certainly not uniformly arranged. This same situation has been observed at Cotton Hope Plantation, just to the south of Seabrook and was interpreted to represent a distinction between field slaves (at the classic settlement) and artisans or craftsmen (at the less strictly organized settlement) (Trinkley 1990).

■ Exploration of the lifeways of the freedmen, known to have dominated the plantation from about 1863 through perhaps 1880. The change from slavery to freedom was in one sense quick, coming for Hilton Head's slaves immediately after the November 1861 invasion of the island by Union troops. Yet in another sense, the change in lifeways was slow and accompanied the gradual movement of African Americans away from working for others on cotton plantation to either wage labor or to planting subsistence crops for themselves (see Powell 1980). Investigations at Mitchelville (Trinkley 1986) have helped to explain some of these changes, especially the affects of wage labor. Much, however, remains to be documented about the "Port Royal Experiment" (see Rose 1964) and blacks on Hilton Head.

Even methodological issues — such as the ability of close interval testing, combined with metal detecting, to identify specific structural areas — were incorporated in our range of issues and questions to be explored at Seabrook Landing. These and other issues will be discussed in detail in a following section of this study.

At the prehistoric site (38BU821) our research orientation changed dramatically over time. When the initial National Register eligibility was recommended in 1988, relatively few shell middens had been investigated on Hilton Head and a variety of primarily methodological and typological research questions were proposed (i.e., would the use of 1/8-inch mesh significantly improve recovery or could the various cord marked wares be typologically identified). Since that time our understanding of prehistoric shell middens has changed. While there is certainly no consensus in the discipline (compare, for example, Espenshade et al. 1994 and Trinkley and Adams 1994), there a range of new questions being asked and new techniques being used.

We believed that many of these techniques were unsuitable for use at 38BU821 since much of the site had been plowed. In other words, exploration of specific midden areas, examination of intra-site settlement patterns, and investigation of midden stratigraphy would likely not be appropriate at a site which had been plowed. On the other hand, we also believed that the site warranted some level of investigation prior to its destruction, and though that methodological explorations might be the best approach at this particular plowed site. Although it was not possible (because of tree cover and development plans) to strip the site for identification of features, it was possible to implement very close interval auger testing for the creation of density mapping which subsequent block excavation. These and other research questions will be discussed in greater detail in the introduction to this particular site.

The Natural Setting of Seabrook Plantation

Hilton Head Island is a sea island situated between Port Royal Sound to the north and Daufuskie Island to south, at the southern tip of South Carolina (Figure 1). 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 Island and the mainland are several smaller islands, including Pinckney and Jenkins islands (Figures 3 and 4). Hilton Head measures about 11.5 miles in length and has a maximum width of 6.8 miles, yielding

THE PLANTATION LANDSCAPE

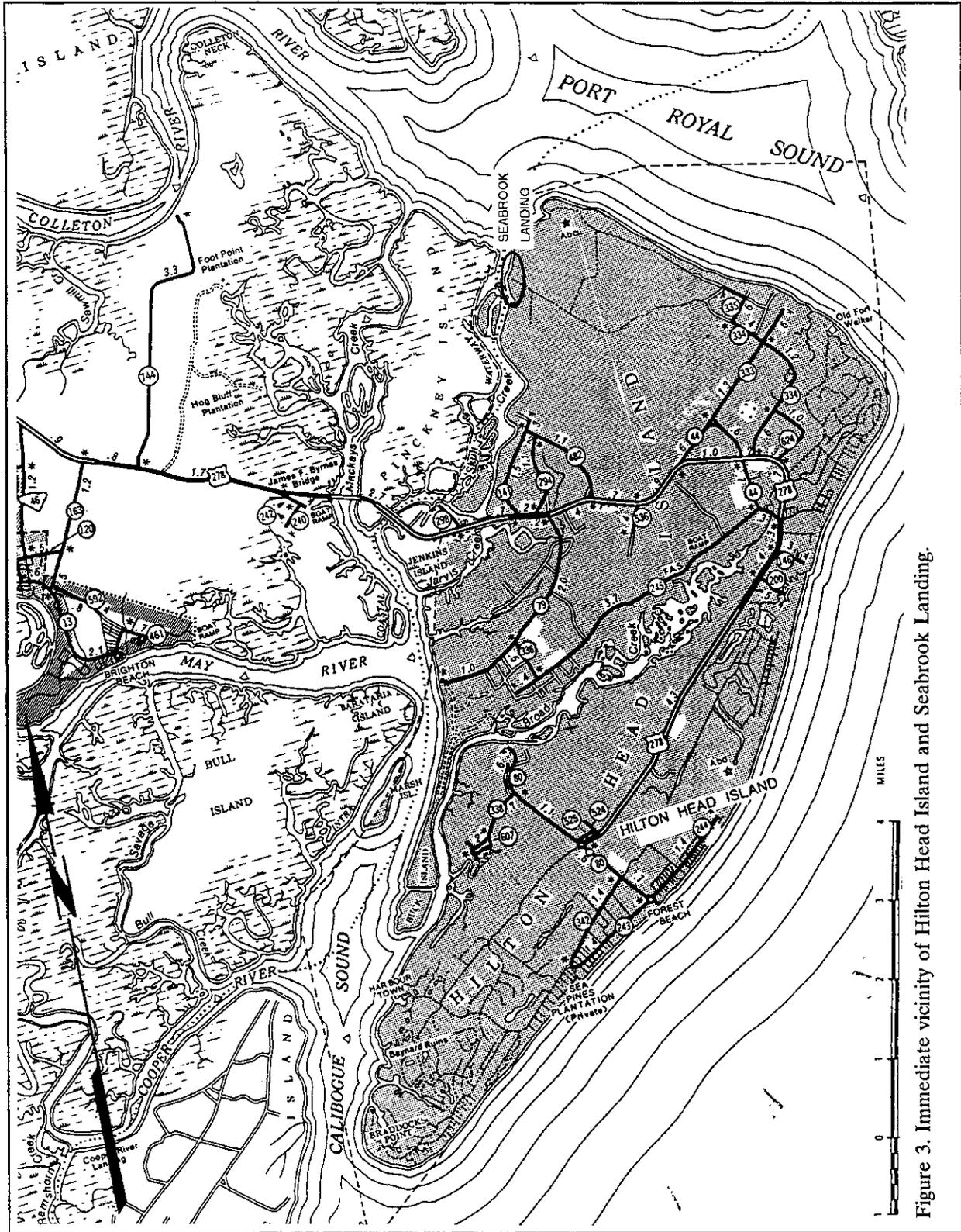


Figure 3. Immediate vicinity of Hilton Head Island and Seabrook Landing.

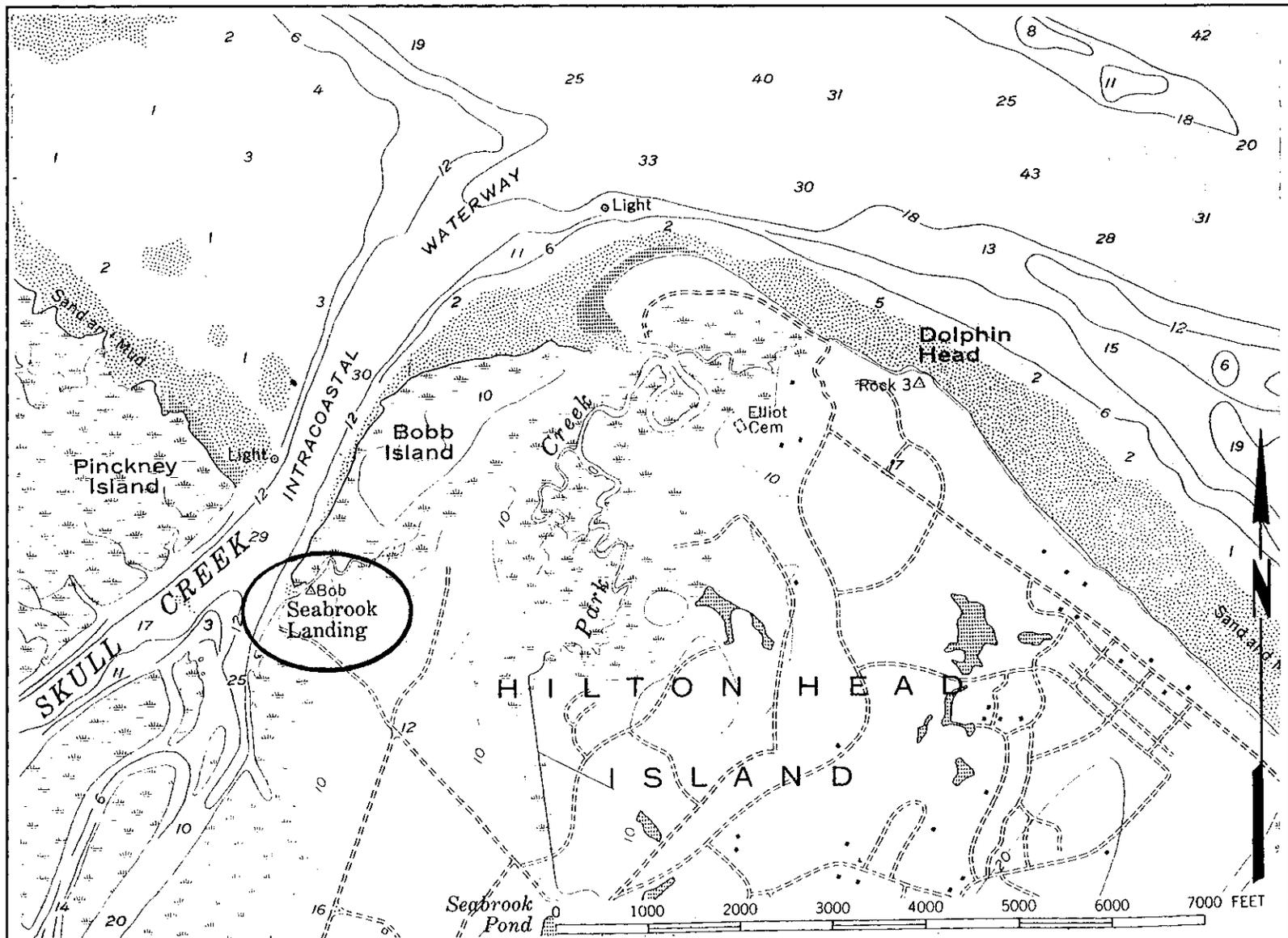


Figure 4. Seabrook Landing (basemap is the Parris Island USGS 7.5' topographic sheet).

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THE PLANTATION LANDSCAPE

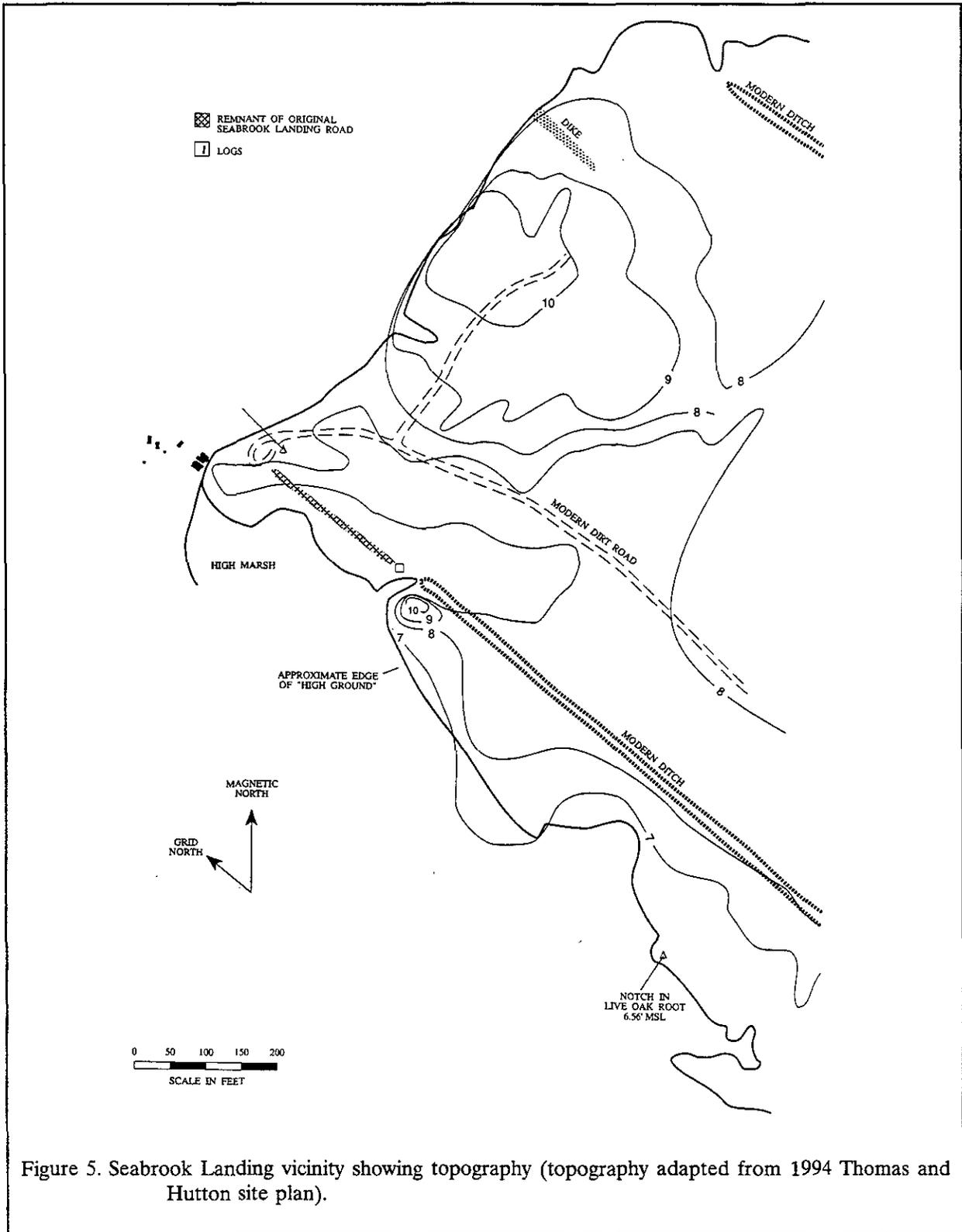


Figure 5. Seabrook Landing vicinity showing topography (topography adapted from 1994 Thomas and Hutton site plan).

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just under 20,000 acres of highland and 2400 acres of marsh.

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 the State (Cooke 1936:1-3). Elevations range from just above sea level on the coast and up to 21 feet at the top of the highest beach ridges on the island, to about 600 feet above mean sea level (AMSL) 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 Island, 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. Elevations on Hilton Head range from sea level to around 20 feet AMSL. In the Seabrook Landing vicinity the topography, while appearing to be relatively flat, is actually more complex (Figure 5). Elevations inland range between 7 and 8 feet AMSL and slope up to around 10 feet AMSL at a small "knoll" adjacent to Skull Creek. A small remnant tidal slough is clearly evident at the western edge of the site. Although there are a number spoil mounds paralleling the southwestern edge of the modern ditch, the small "mound" just south of the slough at the western edge of the site appears to be natural and may represent the remnant of a small beach ridge.

From Bull Bay southward, the South Carolina coast 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.

Kana (1984) discusses the coastal processes which result in the formation of barrier islands, noting that the barrier island system includes tidal inlets at each end of the barrier with the central part of the island tending to be arcuate in shape while the ends of the island 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) reaffirms considerable shoreline reorientation.

There is ample evidence that Hilton Head's erosion is not restricted to the beach or ocean front. Skull Creek exhibits an aggressive tidal current which has caused the loss of perhaps 300 feet in the landing area over the past 125 years (Cooperative Shoreline Movement Study, maps on file, South Carolina Department of Archives and History). It seems likely that this erosion occurs in cycles, since the mid to late-twentieth century data (at a time when increased traffic on Skull Creek would reasonably be expected to increase wash from wakes) suggests an annual erosion rate of less than 0.4 foot per year.

Hilton Head Island 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 fully the significance of this situation, it is important to realize that 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, and poorly defined ridges and swales. Maximum elevations typically range from 5 to 35 feet AMSL. Typical barrier islands include Pawleys, Kiawah, and Hunting islands. There are, in addition, marsh islands, such as Morris and St. Phillips islands, composed of

isolated or widely spaced Holocene sand ridges surrounded by Holocene salt marsh (Mathews et al. 1980).

Some islands, such as Hilton Head, Daufuskie, and St. Catherines, however, 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.

Geology and Soils

The coastal region is covered with sands, and clays 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 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. Portions of the island represent a recent terrace, formed during the past 10,000 years. 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 above the present level.

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).

Both the Seabrook Plantation site (38BU323/337/1149) and the prehistoric midden (38BU821) are situated on the well to moderately well drained Seabrook and Bertie series soils (Stuck 1980:Map 93). The Seabrook soils are rapidly permeable and are composed of thick sandy coastal plain sediments found in upland areas. They are moderately well drained with a water table within 2 to 4 feet (0.6 to 1.2 meters) of the surface for about four months of the year. The Bertie soils, while moderately well drained, have a

water table with 2.5 feet of the surface during the winter and fall. Like many of the other plantations along Skull Creek, most of the well drained soils were in fairly close proximity to Skull Creek, while further inland the soils, dominated by the Capers, Ridgeland, and Williman series, were typically poorly to very poorly drained and allowed to remain as forest or pine lands.⁴

Biophysical Environment

Hilton Head Island today exhibits four major ecosystems: the coastal marine ecosystem where land has unobstructed access to 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).

The coastal marine ecosystem consists of that area from the dunes extending seaward to the level of extreme low spring tide so that there are both intertidal and subtidal components. Salinity consistently exceeds 30 ppt (parts per thousand). This ecosystem shelters a number of food resources, such as sea turtles, resident and migrational species of fish, marine and pelagic birds, and several sea mammals, including dolphins, whales, and the manatee. While many of these resources are occasionally found in the archaeological record, there is little indication that the beach strand was a significant ecosystem during the prehistoric period. Even during the nineteenth century this zone provided relatively little to

interest the inhabitants of the region. William Elliott, a planter of the Port Royal area, describes the "thrill" of both devil-fish and whale fishing (Elliott 1994 [1846]) which took place in the sounds, creeks, and bays adjacent to these beaches. As Rosengarten (in Elliott 1994 [1846]), however, observes, neither was eaten and the acts were conducted without ceremony or concern for trophy. McKee (1903:166), in his history of the 144th Regiment, also describes the "capture" of a 200 pound turtle which brought \$5.00 on the Hilton Head market.

Mathews et al. (1980:155) note that the most significant ecosystem on Hilton Head Island 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 hardwoods, also known as "oak-hickory forests" (Braun 1950). These forests contain significant quantities of mockernut hickory as well as pignut hickory, both economically significant to the aboriginal inhabitants. Other areas are more likely to be classified as Braun's

⁴ Edmund Ruffin, one of the few individuals interested in agricultural production and soils during the antebellum, had little to say about Hilton Head Island (Mathew 1992:127). Although visited, the topography and soils were lumped into discussions of nearby St. Helena and Lady's Island. Ruffin noted that these islands, while also used to grow the same long staple cotton as Edisto and James, "lie higher & are lighter . . . & are in the general, less productive though there is much good land. The effect of high winds on the light sandy soil is a great & general evil" (Mathew 1992:126). He found no exposed deposits of marl and commented that even the shell from the abundant prehistoric sites was not often used.

(1950:284-289) pine or pine-oak forest communities. 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 plan 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, states:

[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 1972:377 [1826]).⁵

He also cautions, however, "[s]ome parts of the district are beginning already to experience a want of timber, even for common purposes" (Mills 1972:383 [1826]) and suggests that at least 25% of a plantation's acreage should be reserved for woods.

A mid-nineteenth century map shows areas of the island as "cultivated," "old fields," "swamp ground," "thick woods Pine tree and live oak," "pines, live oaks and few other kind," and "very thick woods" (National Archives RG77, Map I52), giving a clear impression of the diversity caused by over a century of intensive agriculture. The "swamp ground" forest is clearly indicative of the bottomland forests to be discussed with the palustrine ecosystem. Other trees mentioned on the map show the mingling of needle evergreen and broadleaf evergreen species. Pine was apparently a common species. A description of the island, based on a visit from March through May

1863, states:

[t]he characteristic trees are the live oak . . . Besides these, are the pine, the red and white oak, the cedar, the bay, the gum, the maple, and the ash. The soil is luxuriant with an undergrowth of impenetrable vines (Anonymous 1863:294-295).

This and other accounts (Eldridge 1893:69) suggest that the vegetation on Hilton Head was already intensively affected by farming and logging as early as the nineteenth century.

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 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, mammals, birds, fish (over 107 species), shellfish, crabs, and shrimp.

The last environment to be briefly discussed is the freshwater palustrine ecosystem, which includes all wetland systems, such as swamps, bays, savannahs, pocusins 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. Also found are wading birds and reptiles.

Climate

Depending upon whose authority may be

⁵Edmund Ruffin (Mathew 1992:127) noted the presence of orange and pomegranate, probably both at Pope's Cotton Hope Plantation just to south of Seabrook.

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trusted, the nineteenth century Beaufort climate was "one of the healthiest" (Mills 1972:377 [1826]), or it had "malaria arising from the Southern swamps" (Copp 1911:94). Linehan felt that "[m]alaria was the greatest curse of the sea coast, as all know who served there and who feel its evil affects to this day" (Linehan 1895:211). 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 at present" (Forten 1864:588).

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°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. Distance from the ocean is also significant because of the sea breeze phenomenon, which normally begins before noon and continues until late afternoon (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. The average winter water temperature is 53°F. 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 has approximately 285

frost free days (Janiskee and Bell 1980:1; Landers 1970).

While the temperatures on the Sea Islands are not extreme, the relative humidity is frequently high enough to produce muggy conditions in the summer and dank conditions in the winter. Relative humidity ranges from about 63-89% in the summer to 58-83% in the winter. The highest relative humidity occurs in the morning and as the temperature increases, the humidity tends to decline (Landers 1970:11; Mathews et al. 1980:46).

Along the Sea Islands severe weather usually means tropical storms and hurricanes; tornados are infrequent and waterspouts tend to remain over the ocean. The tropical storm season is in late summer and early fall, although they may occur as early as May or as late as October. The coastal area is a moderately high risk zone for tropical storms, with 169 hurricanes being documented from 1686 to 1972 (averaging about one every other year) (Mathews et al.1980:56).

Curation

Updated archaeological site forms for Seabrook Plantation (38BU323/337/1149) and the associated prehistoric site (38BU821) have been filed with the South Carolina Institute of Archaeology and Anthropology and the Hilton Head Museum, although both sites have already been significantly impacted by the development activities.

The field notes, photographic materials, and artifacts resulting from Chicora Foundation's investigations at these two sites have been curated at the Hilton Head Museum under accession number 1995.1 and catalog numbers ARCH 3476 through ARCH 3528 have been assigned to 38BU821 and ARCH 3529 through ARCH 3698 have been assigned to 38BU323/337/1149 (using a lot provenience system). The collections have been cleaned and/or conserved as necessary. Further information on conservation practices may be found in a following section. 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 standards.

HISTORICAL SYNOPSIS OF SEABROOK PLANTATION

Michael Trinkley and Gina Baylon

When the initial archaeological survey of Seabrook Plantation was conducted in 1988 (Trinkley 1988), it was noted that, "a detailed understanding of Seabrook Plantation is not yet available and this work has been hampered by the destruction of most early Beaufort land records during the Civil War and an 1884 fire which destroyed many of the early postbellum records" (Trinkley 1988:33). Today, a decade later, our study could begin with the same statement. Seabrook is one of those plantations on Hilton Head whose origin will likely always be shrouded in mystery and enigma. Although it is entirely possible that family records or archives exist which could shed light on the chain of title, they have not been identified during either the earlier investigation or during this re-evaluation.

This study incorporated the previous historical research (in which several corrections were made), and then moved on to explore a range of historical sources available at the South Carolina Historical Society, the Charleston County Register of Mesne Conveyances, and the South Carolina Library. We found, and wrestled with, the same problems encountered during the original study. Briefly, Holmgren (1959:132) indicates that William Seabrook (Sr.) consolidated the 1600 acre plantation from smaller, Colonial period plantations sometime in the early antebellum. Specifically she mentions the Fylers, Currels, Talbirds or Talbots, and Wallises or Wallaces. The Lowcountry Council of Governments (1979:84), apparently using Peeples unpublished research, indicates that the 1600 acre plantation was purchased by William Seabrook from Mrs. Thomas Henry Barksdale in 1832. Finally, Peeples (1970:9) provides a more detailed account, suggesting that Thomas Henry Barksdale owned a 2600 acre Scull (Skull) Creek Plantation. After Barksdale's death, his widow was forced to auction off this plantation to settle legal claims by other

heirs against the estate. It was at this time, according to Peeples (1970; personal communication 1988), that William Seabrook purchased 1600 acres. The remainder became the 1000 acre Cotton Hope Plantation. Peeples indicates that proof of this transaction is contained in the Alexander J. Lawton papers at the South Carolina Library.

None of these accounts appear to be entirely plausible, although none can be totally discounted since much of the interpretation is left to one's interpretation of ambiguous, poorly cited accounts.

The False Trail of Thomas Henry Barksdale

For example, the Lawton Family papers do make reference to the Scull Creek Plantation. In fact, Lawton, as Administrator for Thomas Henry Barksdale's estate, on February 24, 1839, paid \$20 to "George Edwards for hire of his servant one month to guard Scull Creek Plantation." This same payment is elsewhere referenced as the "Hire of Hector to take charge of Scull Creek Plantation" (South Carolina Library, Alexander J. Lawton Estate Accounts, 1821-1864). Lawton entered into at least two agreements with Peter Broughton, in April 1835 and December 1835, to "take charge of the plantation of said Estate [Estate of Thomas H. Barksdale] at Scull Creek" through 1836 (South Carolina Library, Lawton Family Papers).

Barksdale's will can not be located in either Charleston or Beaufort, although two legal cases involving the Barksdale estate provide some information. The first case, *George Edwards et al. v. Martha S. Barksdale (Thomas Henry's widow) et al.* 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 fail "to have issue," the estate would go to George Edwards. George Barksdale'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. 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 appears to be correct. Finally, the collection contains "A List of property of Est. 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" (South Caroliniana Library, Lawton Family Papers). Significantly, the 600 acre figure is again used for this plantation. It seems clear that where ever this plantation was located, it remained in the Barksdale family through 1836 and perhaps as late as 1839. Since William Seabrook died in 1836, it was not possible for him to have purchased his plantation from Barksdale widow, Martha, in

1832. It seems that the Scull Creek Plantation of Barksdale may have no significance in understanding the Seabrook tract.

Colonial Activity on Hilton Head Island

Because of the Spanish treat, which destroyed Stuart's Town on Port Royal Island in 1684, and the inept policies of the Proprietors which did more to stifle settlement than promote it, the Beaufort area was slow to develop (Clowse 1971:158-159; Wallace 1951:41). It wasn't until August 16, 1698 that Hilton Head was deeded as part of a 48,000 acre barony granted to John Bayley (Smith 1988:110-112). The town of Beaufort, however, would not be founded for an additional 13 years, and structures wouldn't appear for another six. Even as late as 1720 Beaufort could boast relatively few occupants (John Milner Associates 1979:1).

Smith notes that the original John Bayley (also spelled Bayly, Bailey, and Baily) apparently never came to Carolina to take possession of his 14,000 acre Hilton Head Island barony. At his death the title, and the lands, passed to his son, also named John. The son, perhaps desiring to see at least some of the wealth inherent in the barony, executed a power of attorney with Alexander Trench of Charles Town in 1722, empowering him to dispose of the lands (Smith 1988:110-111). Holmgren (1959:46-47) notes that Trench began to acquire title or use much of Bailey's property and several eighteenth century maps refer to Hilton Head as "Trench's Island" (see the 1729 Francis Swaine "Port Royal" map and the 1777 J.F.W. Des Berres "Port Royal in South Carolina" map; see also Figure 6). Of course, the power of attorney signed by John Bailey did allow Trench to "take possession" of the lands in order to sell them (Smith 1988:111).

How much of Hilton Head Trench was able to sell is unclear. Smith (1988:112) reports that Trench died about 1731. The first quarter of the eighteenth century, however, was unsettling and this may account for the relatively limited interest in Hilton Head Island. Although peace was present at the regional level, 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 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 1729" (Clowse 1971:241). The economy of South Carolina improved steadily from the 1730s with indigo assuming a major role in the agriculture of the region.

The earliest reliable map of the island is that prepared (in several different versions) by Captain John Gascoigne in 1776. These maps, while illustrating the settlements of Eden, Mahrabuoy, and Mount Pleasant (obviously plantation, not owner, names), fails to show any development in the vicinity of Seabrook. What is indicated, however, is that this particular area was "a steep place for careening" or was known as "Careening Point" (Figure 6).¹

The Revolutionary War brought considerable economic hardship to the Beaufort planters. During the war the British occupied Charleston for over two and a half years (1780-1782) and a post was established in Beaufort to coordinate forays into the inland waterways (Federal Writer's Project 1938:7). Holmgren (1959:55-59) notes that on Hilton Head only skirmishes between the island Whigs and Tories from neighboring Daufuskie took place. These, however, were both violet and clearly revealed that at least in some areas the Revolution came very close to a civil war.

The Bayley property on the island was seized by the State after the Revolutionary War

and sold at an auction in Jacksonburgh on August 15, 1782 (South Carolina Department of Archives and History, Comptroller General, Commissioners of Forfeited Estates 1782-1783, Account Book). About this same time a plat of the lands on Hilton Head was prepared to show the various lots set out (Figure 7; South Carolina Department of Archives and History, MCS-9). This plat suggests that Bailey's ownership may have dwindled to just under 15,000 acres confined to the southern end of the island.²

A map prepared in 1782 (Figure 8) reveals that a greater portion of the island had been settled. Along Skull Creek where the Gascoigne map showed Eden, Mahrabuoy, and Mount Pleasant, there are still settlements, one of which is identified as Green. A settlement is also shown on Jenkins Island (called John's Island on Gascoigne's map). At the northern end of Hilton Head, in the general area of Seabrook Landing, the Wallis settlement is shown, suggesting that the tract may have been purchased as early as about 1780.

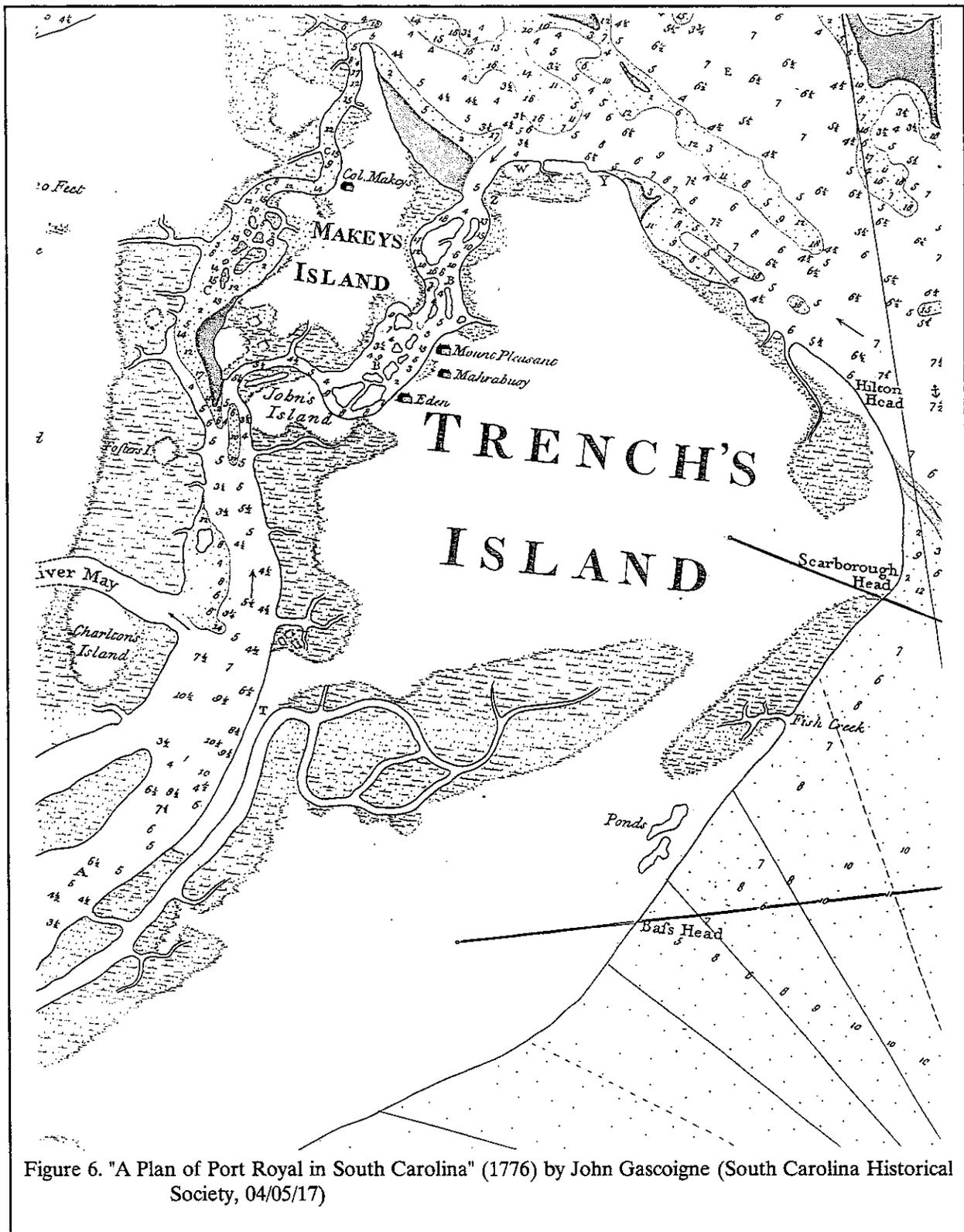
Antebellum Ownership by the Seabrook Family

A deed, dated May 23, 1833, has been located in Charleston documenting the sale of 590 acres to William Seabrook by Joseph Wallace for \$8000 — this is likely the same "Wallis" shown on the 1782 map of the Port Royal area. The description indicates that the property was "on the island of Hilton Head . . . bounded on the north by Scull Creek on the west by lands of Henry Talbird on the east by lands of Mrs. Phoebe Elliott and the south by lands of William Pope" (Charleston RMC DB Q10, p. 74). Phoebe (or Phebe) Elliott was the wife of William Elliott and the land referenced was Myrtle Bank Plantation. William Pope was "Squire Pope" and the land to the south of Seabrook's purchase would have been Cotton Hope. This deed indicates that Seabrook's initial (and perhaps only) purchase on Hilton

¹ A "careening point" was a steep location where sailing ships could be maneuvered onto one side for cleaning, caulking or repair. It is, in a sense, an area suitable for use as a temporary dry dock. The wide sandy beach, relatively steep bank, and wide channel apparently made Seabrook landing an excellent location for these activities.

² Since Hilton Head contains only about 22,000 acres, and the Bailey tract is confined to about half of the island, it is possible that the plat overstates many of the lot sizes.

THE PLANTATION LANDSCAPE



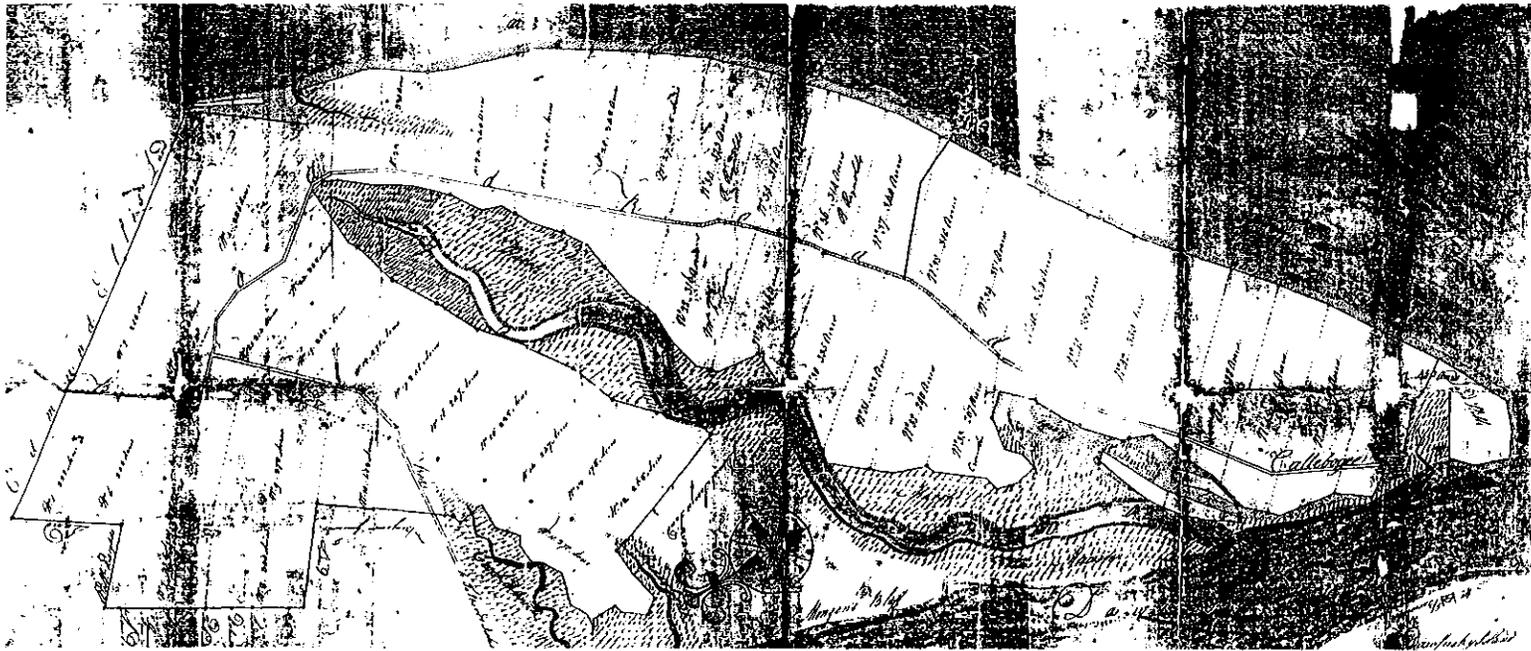


Figure 7. Bayley lots established on Hilton Head Island (South Carolina Department of Archives and History, MC 5-9).



Figure 8. A portion of a 1782 map showing settlement on Hilton Head Island (Scavenius Collection, Dartmouth College Library).

Head, while relatively minor, was situated between Cotton Hope and Myrtle Bank. It also indicates that at the time Seabrook made his purchase, Pope had already acquired Cotton Hope.

While it is possible that Seabrook acquired additional lands bordering his 590 acre plantation from Fyler, Currel, or Talbird, no record of any such transactions could be located in either Beaufort or Charleston. Likewise, it has been impossible to identify any deed revealing how Wallace acquired his 590 acre plantation. The 1756-1800 Charleston records are listed only in a direct index (grantor to grantee). The list was scanned for any Wallace in the appropriate portion of South Carolina as a grantee, but without success. Consequently, it is not possible to trace the chain of title back further than the last quarter of the eighteenth century. This is not uncommon for the Beaufort area — the effects of the Civil War and an later fire have made research considerable less productive here than in other nearby counties.

At William Seabrook's death in 1836, his will, proved November 23, 1836, specifies:

Item I give devise and bequeath unto my Dear Wife Elizabeth Emma Seabrook, her heirs and afsigns forever my plantation on Hilton Head purchased by me of the Revd. Mr. Wallace (Charleston Probate Court, Will Bk. 41, p. 536).

The will also includes the rather standard phrase dealing with "all the lands of which I am now possessed not specifically devised by this will." Consequently, it is possible (although certainly not proven) that William Seabrook may have been in possession of additional tracts on Hilton Head in addition to the one purchased from Wallace.

In addition, Seabrook provided that his wife should have the use of his "Mansion House and Residence" on Edisto (based on the reference to the surveyor, John Wilson). Ultimately, we know that Elizabeth Emma resided primarily on a Johns Island plantation and not on either the Edisto or

Hilton Head tract.

Although William Seabrook was an extraordinarily wealthy man for his time, with a personal estate worth \$376,916, the inventory fails to even mention the Hilton Head property (Charleston County Probate Court, Inventory Bk. H, p. 237). Its absence may be related to the property's location in Beaufort, rather than Charleston District, although normally the inventories include all personal property owned by an individual at the time of one's death. The inventories do not, however, list real estate. This suggests that the Hilton Head plantation was considered a very minor tract and may have been unoccupied at Seabrook's death. It is clear from his estate papers that his main residence was on John's Island (Seabrook is listed in the 1830 census in St. Johns Parish), although his Edisto Island plantation was a significant economic factor. The Hilton Head tract seems to have been little more than an investment. This form of diversification (or speculation) was not uncommon — it provided a buffer against bad economic times and it helped ensure that there was sufficient real estate for children.

Seabrook's wife, Elizabeth Emma, is shown in the St. John's Parish Census reports of 1840 and 1850. In 1840 she was shown with herself and five children in the family, as well as 36 slaves. In addition, the Estate of William Seabrook is also listed with one free person of color and 230 slaves (National Archives 1967). By 1850, Emma is listed, along with her son, Robert (Chisolm), who is listed as a "planter" (National Archives 1964). It seems that Emma continued to live on the Johns Island plantation, perhaps with her son managing her affairs as she grew older. There is no record of her ownership or operation of the Hilton Head plantation. Nor is there any record of the sale of this plantation.

By the 1850 Census, James B. Seabrook (second cousin to William) is shown as a planter in St. Luke's Parish of Beaufort with \$8000 of real estate (National Archives 1964). Prior to this time James was listed in St. Johns Colleton with 95 slaves (National Archives 1967). This suggests that he acquired the plantation from Emma Seabrook

sometime between 1840 and 1850. The 1850 Agricultural Schedules show James B. Seabrook with two plantations in St. Luke's Parish. One is listed as 1950 acres, valued at \$20,000, while the other is listed as having only 210 acres (probably more since no figure is shown under the category of "unimproved land" and the property is valued at \$8,000) (S.C. Department of Archives Microcopy 2, Roll 1, pp. 309-310). It is impossible from these records to determine which of the two tracts is "Seabrooks Plantation" on Hilton Head. The one not on Hilton Head was apparently in the Bluffton area.

It is, however, clear that while James B. Seabrook was operating the Hilton Head tract, he was not yet the legal owner. On July 20, 1847 and again on December 19, 1850, Elizabeth Emma Seabrook mortgaged the property, offering it as collateral toward loans from Thomas N. Gadsden (Charleston County RMC, DB U11, p. 63, DB L12, p. 277). In the earlier mortgage the tract is described as 598½ acres and in the later one it is described as 590 acres (originally purchased as two tracts).³ In both cases the mortgages were satisfied. It is likely that James B. Seabrook acquired the Hilton Head tract only after his mother, who held a life interest in the property, died in 1856.

The 1860 Census lists only one plantation for James B. Seabrook in St. Luke's Parish (S.C. Department of Archives Microcopy 2, Roll 3, pp. 281-282). The tract, consisting of 600 acres improved lands and 560 acres of unimproved lands, is valued at \$15,000 and contained \$1,300 worth of plantation implements. The property, in terms of output and general size is more similar to the larger 1850 plantation. It is shown as having

³ This itself is curious, since the single 1833 deed from Wallace is for 590 acres. We have not been able to reconcile the statement that the 590 acre plantation was obtained through two purchases. One possible conclusion is that the mortgage was defective and that the reference to "two tracts" is correct, although the acreage itself refers to only one (likely the earlier) tract. This would help reconcile the mortgage with the census documents which reveal that Seabrook's property was much larger than 590 acres.

\$5,300 of livestock, including 15 horses, five asses or mules, 40 milk cows, 14 oxen, 13 cattle, 32 sheep, and 15 swine. The plantation produced 1800 pounds of corn, 500 pounds of rice (which was one of the largest quantities for the area), 52 bales of cotton, 120 pounds of wool, 500 pounds of peas and beans, 15 bushels of Irish potatoes, 2000 bushels sweet potatoes, 500 pounds of butter, 20 tons of hay, 60 pounds of beeswax, and 400 pounds of honey. The plantation slaughtered \$600 worth of animals the previous year. In addition, Seabrook lists orchard products valued at \$100.

If the larger plantation from the 1850 census is the same tract of land as tabulated in the 1860 census (which would support our belief that either Emma or James Seabrook purchased considerable additional lands), then it is useful to examine the ten year trend. The milk cow herd declines from the 1850 level of 80 to 40, the 120 head of cattle in 1850 is down to 13 head in 1860, the sheep herd is reduced from 60 to 32, and the 102 swine reported in 1850 is down to only 15 in 1860. The decline in livestock numbers, however, is not reflected in the value placed on the animals. In 1850 the livestock value was \$3,740, while it increased to \$5,300 in 1860. The value of animals slaughtered remained constant at \$600. Curiously, wool production remains constant and butter production increase from 100 pounds in 1850 to 500 pounds in 1860. While the emphasis on livestock declined from 1850 to 1860, the cotton production increased from 32 bales to 52 bales and rice cultivation was reported in 1860. The most obvious conclusion is that Seabrook, once on his own, began moving away from livestock toward cash cropping based primarily on cotton.⁴ While at first glance the slave population seems to have fallen from 118 in 1850 to 107 in 1860, the 1850 figure presumably reports on two plantations, while the 1860 figure reports on only one. Consequently, with the move to cash monoculture, James Seabrook may also have increased the number of

⁴ Although rice is present, the 500 pounds reported in 1860 is just over a barrel (typically about 450 pounds) and it is usually thought that about 5 to 6 barrels could be harvested per acre of swamp rice field (see, for example, Carman 1939).

slaves held on his plantation (National Archives 1967).

James B. Seabrook's occupation of the Hilton Head plantation is further supported by the Joseph Baynard Seabrook Bible in the Charleston Museum collections (specimen 34.43). Pasted inside the front cover of the Bible is a handwritten note, signed by E.B. Seabrook and dated November 22, 1872:

This book was the family Bible of my grandfather, Joseph Baynard Seabrook, of Edisto Island, whose name is printed on the cover. After the death of my grandfather, it passed into the hands of his youngest son, James B. Seabrook, who subsequently removed to Hilton Island - During the recent war, after the fall of Fort Walker on Broad River, the book was found by the Federal Soldiers on my uncle's parlor table (transcription in SC Historical Society Collection, File 30-04).

In spite of this, the 1860 census, which lists individuals by smaller enumeration districts than previously, does not list Seabrook among the 11 whites who were found on the island. Of the 11, only one male was listed as a planter, while three others were listed as overseers. It may be that Seabrook was simply off the island, perhaps in a healthier climate at the time of the census. Alternatively, he may have had multiple land holdings which required his attention. Regardless, it seems clear that Hilton Head was Seabrook's full-time residence — a finding consistent with what we know about planter behavior.

Seabrook Plantation During the Civil War

The property was described by several Union soldiers shortly after Hilton Head fell in November 1861:

[w]e mistook the whitewashed huts of the negroes for tents . . .

that night we spent in Mr. Seabrook's store, after using the portion of the afternoon that remained to us after our arrival in endeavors to secure some of the cattle, pigs, and poultry (Nichols 1886:66)

[t]he groves of orange trees at Seabrook's plantation were very fragrant, and the ripe fruit was quickly disposed of as contraband of war (Cadwell 1875:29)

they [the Union forces] reached Seabrooks Landing on Mackey's [actually Skull] Creek at about 2 PM. At this point the retreating force had embarked in steamers for Charleston. Here we found fifteen loads of quartermaster's and commissary's supplies and a few small arms. The negroes were jubilant and anxious to sell sweet potatoes and other eatables which had cost them nothing (Walkley 1905:29; see also Eldrige 1893:67 who describes a similar scene at Seabrooks Landing).

This plantation became a significant focal point of activities on Hilton Head. The main house was used as the military headquarters of various regiments stationed to guard the Skull Creek "frontier" against Confederate intrusion (Culp 1885:97) and eventually Fort Mitchell (38BU1167) was built just to the south of the plantation "to guard against the ravages anticipated from the ram Atlanta" (Bedel 1880:525).

The 1862 draft Coast and Geodetic Survey map (Figure 9) clearly shows Seabrook Plantation, revealing the road to the dock, the configuration of the dock, four nearby structures (possibly industrial or storage related), the main house, nine associated structures (possibly house servant quarters, kitchen, smoke house, and so forth), a slave row of five structures (possibly of double pen construction), and eight additional structures (possibly representing a second slave row) along

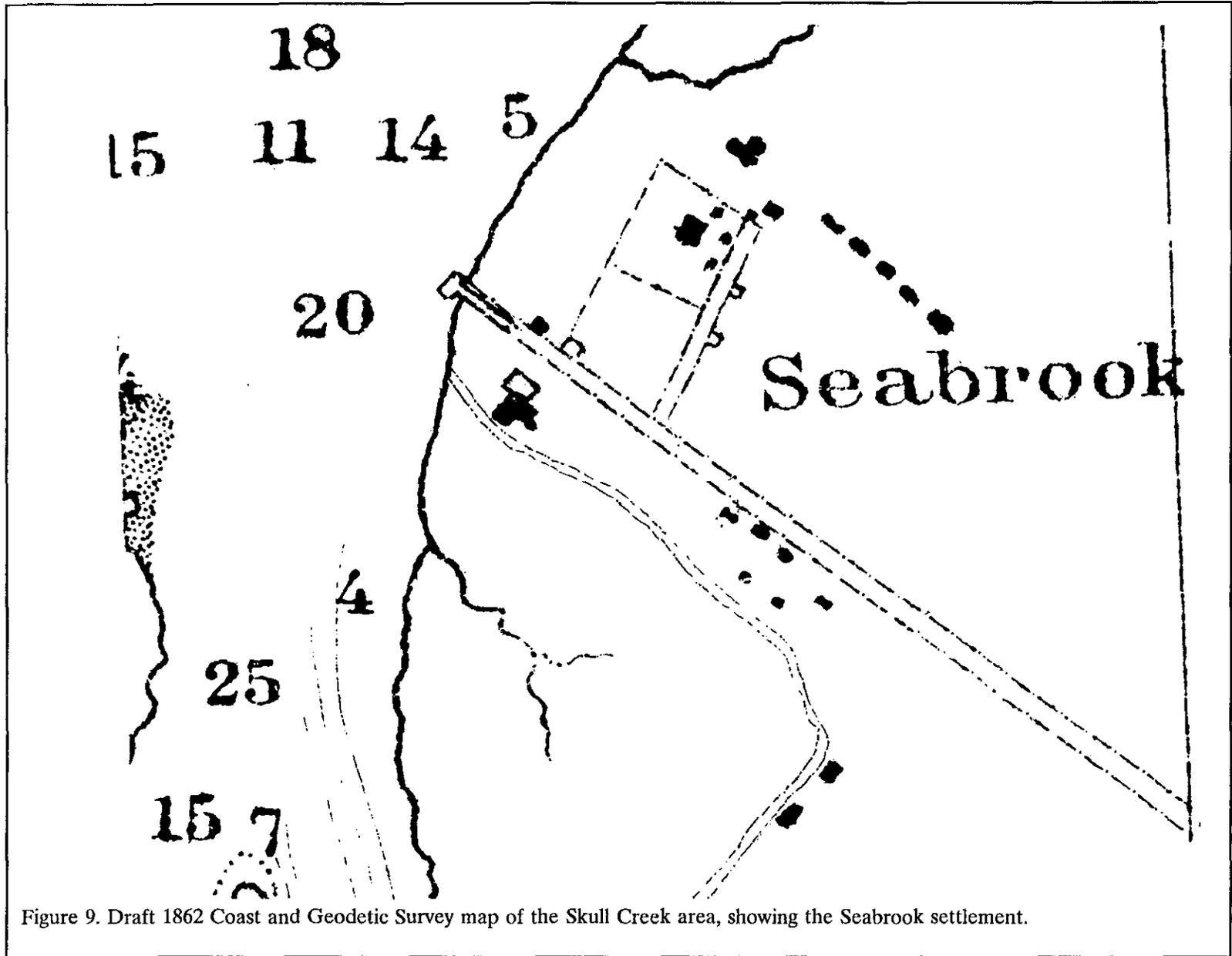




Figure 10. A portion of National Ocean Survey, Chart T803, *Sea Coast of South Carolina from Savannah River to May River*, showing the Seabrook Plantation.

the edge of the marsh. The published version of this map (South Carolina Sea Coast: From Port Royal to the Mouth of May River, Ocean Survey Map T-809) is shown as Figure 10 and appears nearly identical.⁵

In addition to these maps the January 25, 1862 edition of *Frank Leslie's Illustrated Newspaper* published an engraving of Seabrook Plantation (Figure 11). The early date suggests that the artist's engraving should, if accurate, closely resemble the Coast and Geodetic Map. Comparison of the two show agreements in a number of key points. Both illustrate a "T" shaped dock with two barns to the south of the "landing road." To the north of the "landing road" is the main house complex, with an enclosing fence which runs south to the road, shown on both the map and the engraving. The slave row, shown on the 1862 map as located east of the main house complex, is (correctly) not visible in the engraving. This suggests that the artist refrained from illustrating concepts (such as slave housing) that were not actually visible from his perspective.

In order to place these maps over a modern topographic map of the site area, it is necessary to identify several key points to control skew and determine scaling. Unfortunately, there are relatively few points suitable to this purpose. The most obvious, of course, is the road to Seabrook Landing. It is shown on all of the maps and can still be traced on the ground for at least a portion of its original length. It helps orient all of

the maps since there is no evidence that the road changed in orientation or location since the nineteenth century. The shoreline itself provides only generalized information. We found that the dike, a very clear topographic feature present on the ground, correlates with the eastern edge of a dirt road oriented almost due north-south. This feature was also used to control for the skew of the overlay. The produced overlay shown as Figure 12 must be interpreted carefully. While we believe it is correct, we acknowledge that its placement could be adjusted in almost any direction by as much as 50 feet. It does, however, provide us with a generalized view of the antebellum plantation and may be particularly significant when compared to either the artifact density maps or the actual excavation blocks. The overlay also suggests that there has been substantial erosion — both along Skull Creek and along the marsh to the west. This tends to confirm the findings of the Cooperative Shoreline Movement Study (maps on file, South Carolina Department of Archives and History), which suggest that upwards of 200 to 300 feet between 1859 and 1983 (even this is considerably less than the 1100 feet of erosion at Dolphin Head to the northeast of Seabrook Landing).

Like other property owners in the rebellious states, Seabrook failed to pay federal taxes on his Hilton Head property and the plantation was confiscated by the United States Government. The property was eventually purchased by the Government at auction. Isabel DeSaussure compiled an "Abstract of Property in the State of South Carolina lost by the Citizens thereof from the War," apparently from claims made to the Confederate government during the Civil War. This volume lists Seabrook's claims for a "Dwelling House & Lot, Furniture" valued at \$3000 which probably represents a house in Bluffton, 1600 acres of land with no assigned value, 89 slaves, 80 head of cattle, 75 hogs, 15 horses and mules, 90 bales of Sea Island cotton, one "10-oard boat," one "6-oard boat," 34 oars, one flat, two wagons, six carts, and one carriage (South Carolina Historical Society, File 34/309/1-2). Compared to the 1860 agricultural schedule, it appears that the plantation was not only increasing its production of cotton, but was also increasing its stocks of cattle and hogs.

⁵ These maps were produced using plane table surveying techniques and although it seems reasonable that the National Archives or some other government agency might retain the original survey sheets and associated notebooks, we have found that apparently the only notes made were those margin notes on the actual plane table sheets. As soon as the final copper engraving plates were produced, the field maps were destroyed. It wasn't until the 1930s that field notes began, even in a sporadic manner, to be retained. Consequently, there is no additional information available relating to this map. We have also discovered that the original copper plates for these maps were destroyed, so that only paper copies, of various quality, remain (Kenneth Wellman, Sharon Thomelson, personal communication 1994).

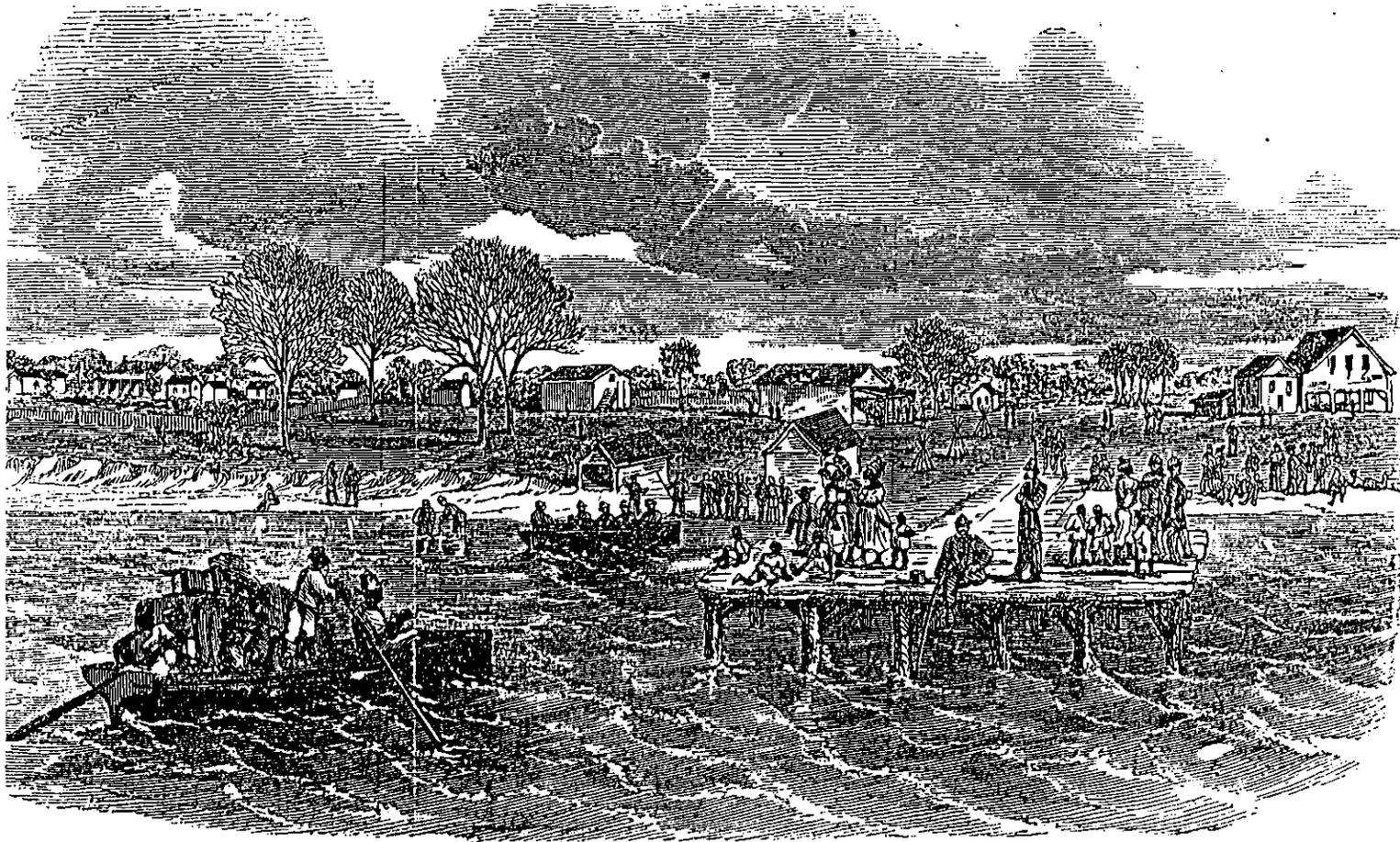


Figure 11. Engraving of Seabrook Plantation in 1862 (from *Frank Leslie's Illustrated Newspaper*, January 25, 1862).

THE PLANTATION LANDSCAPE

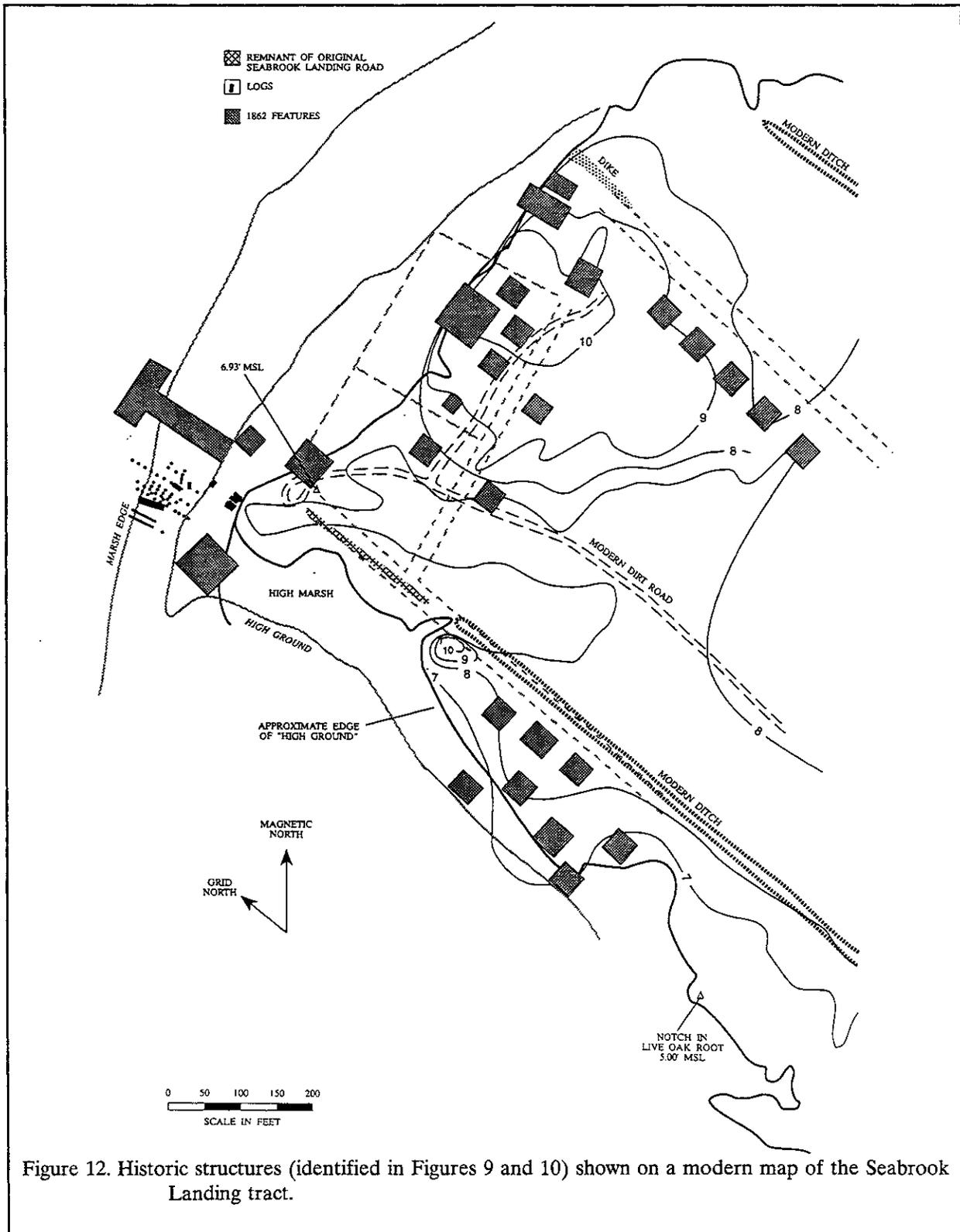


Figure 12. Historic structures (identified in Figures 9 and 10) shown on a modern map of the Seabrook Landing tract.

By 1863 the plantation was the location of machine shops and a shipyard used by the Quartermaster's Corps. A period newspaper account revealed:

that there are comparatively few persons in the Department who are aware that on the banks of Skull creek, near Seabrook's Landing, are machine shops, and ship and boat-yards, already second in importance to none south of the Potomac, all the recent growth of a few months. They have sprung up as it were in a single night, under the experienced and vigorous administration of Mr. John H. Mors, Superintending Engineer of the Quarter's Department, under Lt. Col. J.J. Elwell. . . . The necessity has long been held for a properly organized and effective machine shop and ship yard, wherein the repairs to the engines and hulls of the large fleet of transports in government service in the quarter could be expeditiously and thoroughly accomplished The present location was selected as a proper one for the new machine shop and ship yard, as affording the best facilities for the kind of service just at present demanded The machine shop is a building put up for temporary purposes about forty feet square, on the edge of the Creek's bank, and is already supplied with all the more important and requisite machinery necessary for the present wants of the service. It has a small steam engine, which supplies the motive power for the entire establishment Adjoining the machine shop is the Blacksmith's shop, with its forges and blasts, and near it is the Boilermaker's yard where new

boilers may be constructed or old ones repaired Near the machine shop is the shipyard, where ordinary repairs to the hulls of vessels can be made (*New South*, October 24, 1863, p. 3).

Although the Seabrook machine shops were reported to "exhibit all the energy and vigor of older establishments" and were "as full of promise for the future as the most sanguine could desire" (*New South*, October 24, 1863, p. 3), by November 1865 a letter was sent to the War Department in Washington requesting information on the deposition of the machinery and materials at the "government machine shops on Hilton Head." The remnants of the Seabrook machine shops were directed to be sold at a local public auction barely two years after their construction (National Archives, Quartermaster's Consolidated File, RG 92, Box 402).

Early Use of Seabrook by the Freedmen

By February 6, 1862 General T.W. Sherman, in General Order 9, requested help for the contraband⁶ from the "highly favored and philanthropic people of the north. Coincidental with this plea, the federal government slowly began to recognize the needs and promises of the region. As early as November 27, 1861 Sherman had been ordered by Washington "to seize all cotton and other property which may be used to our prejudice" and that "the services of negroes will be used in picking, collecting, and packing the cotton (Scott 1882:1:4:192). Secretary of the Treasury Solomon Chase appointed Colonel William H. Reynolds to collect contraband cotton and goods, although no policy had yet been devised concerning the "contraband negroes." By December 20, Reynolds was in Beaufort and on January 1, 1862 he wrote to Chase that, "the negroes seem very well disposed and quite well pleased with the new order of things here, most of them preferring

⁶ This term was used to describe the African American slaves, not yet officially freed, as "contraband of war" and therefore falling under the oversight of the military.

to remain on the Plantations where they were raised, if they can receive something for their labor" (National Archives, RG 336, Port Royal Correspondence 1861-1862). Going about his business, Reynolds shipped 92 bales (30,479 pounds) of cotton north to Hiram Barney, a cotton agent in New York city, between January 18 and May 1, 1862 (National Archives, RG 366, Port Royal Correspondence 1861-1862). Unfortunately, Reynolds kept neither good records nor cotton seed for next year's crop. Likewise, lots of Sea Island furniture, livestock, and plantation tools were gathered up and either sent north or sold, leaving nothing behind for further operation of the tracts (National Archives, RG 366, Abandoned Property; RG 366, Fifth Special Agency Papers Box 299).

Chase, a strong abolitionist, also recognized the plea for humanitarian aid and sent Edward L. Pierce to Port Royal to look into the contraband negro situation (Rose 1964:21-23). Pierce's first report to Chase, made on February 3, 1862, reported that there were 16 plantations on Hilton Head and that there were 600 blacks actually in the federal encampments. Of these 600, 472 were "registered," engaged in wage labor, and receiving federal assistance, although only 77 were from Hilton Head originally. It seems that the bulk of the contraband, as reported by Reynolds, were staying on their home plantations.

Rose points out the immediate problems which arose between Reynolds and Pierce (Rose 1964:24-26) and how into this situation were introduced the "humanitarians," such as the Reverend and Mrs. Mansfield French of the American Missionary Association, a driving force in the spiritual and worldly education of the contraband. While apparently an honest individual with high ideals, no one was safe from criticism as the area was eventually transformed and by 1866 French was described as "Father French the Tycoon of all robbers" (Truman 1866; see also Rose 1964:394). Quickly Pierce and French devised a plan for the education, welfare, and employment of the blacks. A number of philanthropic individuals in the north responded to the call and this is largely the "Port Royal Experiment of Rose's (1964) excellent study. The government

contribution to this effort was originally under the direction of the Treasury Department, but was transferred to the War Department by the Summer of 1862 when General Rufus Saxton was placed in charge (Rose 19654:152).

One of the earliest accounts of the plantation is its rental in 1865 to John Stoney, "in trust for himself and other laborers residing on the said plantation who pay their proportionate share of the rent," which totaled \$565 (National Archives, RG 217, Entry 888, vol. 1, page 68).

The following year the plantation was rented in two parts. April Brown rented Seabrook, "subject to occupation by the military authorities" and excepting "the dock and the Government Buildings on the premises and Servant Houses in the yard of the mansion" for only \$350. That same year the firm of Vail and Whitworth rented, "the dock and the Government buildings and Servant Houses in the yard of the Mansion House" for \$50 (National Archives, RG 217, Entry 888, vol. 1, pages 86, 107).

In 1867 April Brown again rented Seabrook, paying \$127 for "one hundred and twenty-seven acres of land . . . reserving the dock and the Government Buildings on the premises — and the Mansion House and yard and the servant houses connected with the mansion house" (National Archives, RG 217, Entry 888, vol. 1, page 130). F.R. Whitwell, in trust for William R. Kermison, rented the dock, government buildings, servants houses, "and the mansion house and yard and garden attached to the same" for only \$96. Unfortunately, there is no indication of how these buildings and grounds were used (National Archives, RG 217, Entry 888, vol. 1, page 142). These rentals continued through the next year (National Archives, RG 217, Entry 888, vol. 1, pages 146 and 233), after which no additional information could be found.

While much of the teaching during the war years was conducted by Quartermaster employees, there were a number of missionaries in the Port Royal area (see Rose 1964). The most active group was the American Missionary Association (AMA), a group which obtained its funds from the

Wesleyan Methodists, Free Presbyterians, and the Free Will Baptists (Johnson n.d.). Many schools in the Port Royal area after 1866 were actually Tax Commissioner's Schools, supported by "the proceeds of lands which in 1863 fell into possession of the general government at tax sales." On Hilton Head, however, the AMA actually owned buildings and contributed heavily toward the upkeep of the schools and their teachers.

In 1866 Hilton Head was divided into five school districts — Mitchelville (situated just south of Drayton's Fish Hall plantation, see Trinkley 1986), Marshland (at the north tip of Broad Creek), Stoney (at Fairfield Plantation on Skull Creek northeast of Jenkins Island), Lawton (also known as Calibogue Plantation, at the south end of the island between Long Island and the Atlantic Ocean), and Seabrook (AMA, H-6268). Correspondence of December 31, 1866 between AMA administrators indicate plans for the AMA to lease some of the plantation lands and buildings on Hilton Head for use as Freedmen's schools, including property at Seabrook Plantation. This same letter mentions "two commissary buildings near the Mansion [at Seabrook Plantation] . . . suitable for school-houses" (AMA, H-6309). Within a month of this letter, Seabrook Plantation was indeed put to use by the AMA, although details are scarce (see AMA, H-6312, H-6371, H-6372).

Both Charlotte M. Keith and Annie R. Wilkens taught at the school and lived in the plantation house at least in 1866 and 1867. One letter from Annie Wilkens comments on arriving at the "dirty" Seabrook house on January 19, 1867 (AMA, H-6354), while E. Wright in February 1867 remarks that repairs at Seabrook had been made for the "comfort of the teachers" (AMA, H-6404). Around this time there were, apparently, two schools operating at Seabrook. One, called the Smith School, covered the primary grades, while the other, called the Wright School, included the intermediate grades. Both, however, consisted of a single structure with only a small room (AMA, H-6391, H-6392). By April 1867 these two schools were combined and called the Smith School (AMA, H-6580, H-6933).

Captain A.P. Ketchum indicates that the

machine shops were functional by March 1867, at which time the plantation consisted of "Mansion, Barns & Quarters, Machine Shop." The 1050 acre plantation consisted on 350 acres of cultivated land, 400 acres of woodland, and 300 acres of cleared lands (Monthly Report of Lands, South Carolina, March 1867, SCDAH). The population of Seabrook was listed as 374 individuals in July 1867 (Monthly Report of Lands, South Carolina, July 1867, SCDAH). This population estimate seems very high and suggests that somewhere between 10 and 75 houses existed on the tract — certainly more than suggested by any of the available mapping. Regardless, it seems safe to say that Seabrook, both because of the AMA school and also because of its access to the steamboat dock, was important to the Freedmen of Hilton Head Island.

In April 1868, the American Missionary Association files reveal that the teachers were still staying at Seabrook Plantation (AMA, H-7042). A letter from December 1868 reveals that a major storm had hit Hilton Head, causing extensive damage to a variety of the AMA properties. While there is no specific mention of the Seabrook House, it seems likely that its location adjacent to Skull Creek would have put it at considerable risk. In January 1869 the AMA spent \$80 to repair the damage at Seabrook (AMA, H-7262).

Portions of the tightly nucleated Seabrook Plantation complex are shown on a South Carolina District Tax Map for Hilton Head Island, dated 1869 (Figure 13). While the exact placement of the structures is frequently different on this map when compared to the 1862 Coastal Survey map (Figures 9 and 10), the structural arrangements are clearly very similar (e.g., a series of four structures south of the "landing road," two additional structures closer to the marsh on the south side of the "landing road," the rows of structures east of the main house area, and the probable main house complex area). The 1869 map also appears to show the 40-foot square machine shop constructed adjacent to the creek at the landing. This suggests that while the machine shops may no longer have been active, at least some of the buildings were still present.

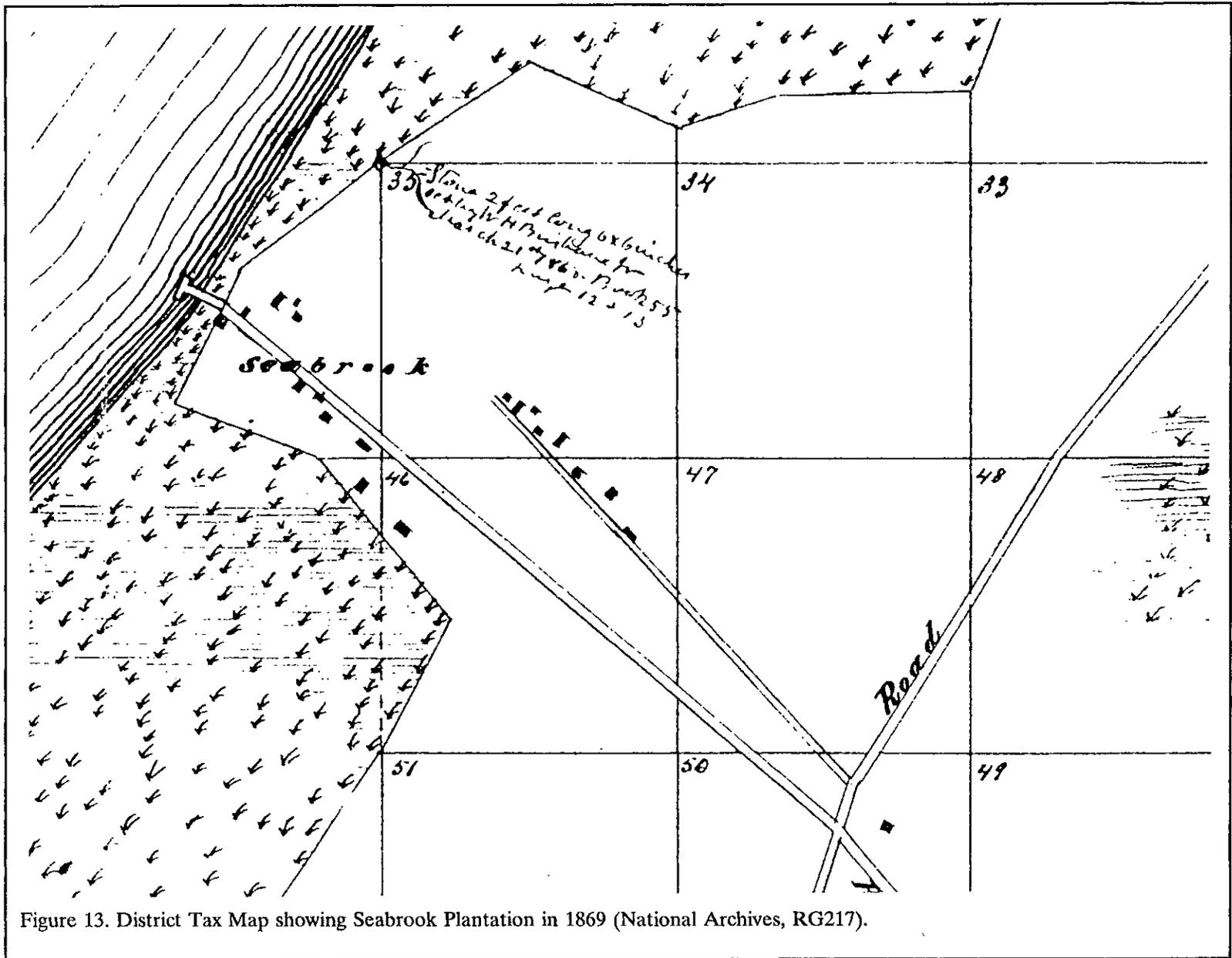


Figure 13. District Tax Map showing Seabrook Plantation in 1869 (National Archives, RG217).

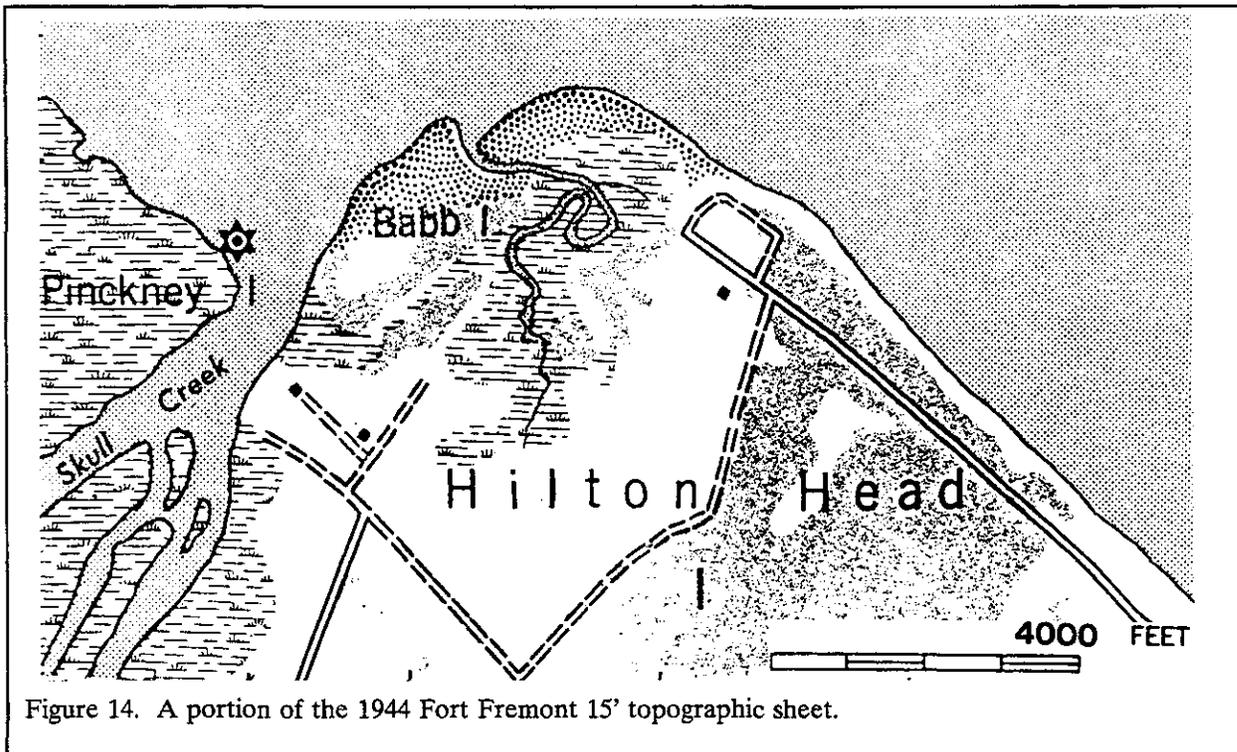


Figure 14. A portion of the 1944 Fort Fremont 15' topographic sheet.

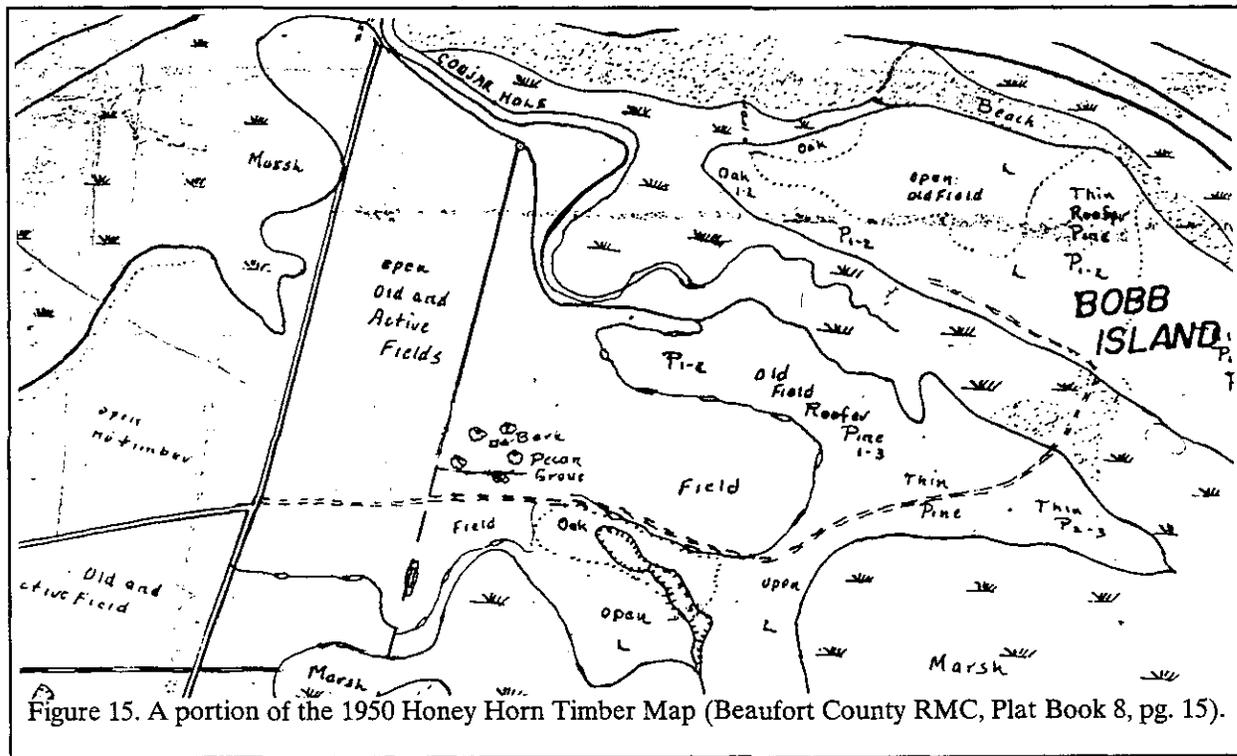


Figure 15. A portion of the 1950 Honey Horn Timber Map (Beaufort County RMC, Plat Book 8, pg. 15).

In November 1869 Seabrook Plantation the AMA mentioned that Seabrook Plantation had been rented to a "Mr. Henderson," who was apparently staying in the "big house." As a result, the teachers, arriving to re-establish the Freedmen's school, were relegated to a secondary house found to be in total disrepair (a condition which seems to become more common about this time at all Hilton Head plantations). The letter, pointing this out, notes that at least one of houses at Seabrook had broken doors and that the windows had all been "taken away" (AMA, H-7588). Conditions were deteriorating so fast, that it seems the dock was in such poor condition that while Seabrook was "the only place on Hilton Head where the boat stops," it "cannot get near the dock here" (AMA, H-7588).

Although the 1860, 1870, and 1880 census records for St. Luke's were examined, an E.P. Henderson was found only in the 1870 records. At that time he was listed as a white male, 20 years old, born in South Carolina, and was listed as a planter. He is shown as residing with a wife and three children. The value of his plantation is listed as \$950. Renting of federal properties, to both whites and freedmen, was not unusual, and was apparently an effort by the government to see a viable return on its investment.

James B. Seabrook lacked the necessary money to redeem the plantation after the Civil War, but the tract was purchased in 1872 for Seabrook by his attorney Robert C. McIntire, apparently with the understanding that it would be paid for over time (Beaufort RMC DB 7, p. 433). In 1873 James Seabrook, still unable to raise the necessary funds, deeded the plantation to McIntire (Beaufort RMC DB 7, p. 448). It may be that Seabrook, like many other Southerners who regained their lands, was simply not able to make the adjustment to the new system. Some sold out willingly, with the motivation "to get away from the free negro" (quoted in Powell 1980:41). Others — between the need for wage labor and the economic decline caused by the Panic of 1873 — were simply unable to finance their operations. Powell, however, observes:

Cynicism about the freemen went beyond economics. The desertion of faithful retainers and the unexpected growth of independence among the fieldhands struck directly at the ex-slaveholder's image of himself as a kind patriarch who enjoyed the affection of his black family. Some old planters found it too painful to have anything more to do with such faithless, inscrutable people (Powell 1980:42).

Such may have been the case with Seabrook.

Late Nineteenth Through Twentieth Century Life at Seabrook Plantation

Regardless, McIntire chose not to divide and sell the property in small plots for Blacks and Seabrook was passed down largely intact to the twentieth century. McIntire is not listed in the 1880 agricultural census and while no detailed research has been conducted on the property in the late nineteenth or early twentieth centuries, Holmgren (1959:118, 132) reports that McIntire served a term as the island's postmaster and held the plantation until his death in 1895. At that time the property was acquired by William P. Clyde, a northern investor who eventually acquired nearly 9000 acres of Hilton Head, maintaining it largely as a hunting preserve (Holmgren 1959:119). From Clyde, the tract (along the other properties) were sold in Roy A. Rainey in 1917 (Beaufort County RMC, DB 17, p. 61). Rainey, in turn, sold the same parcel (including Seabrook Plantation) to Landon K. Thorne and Alfred C. Loomis on May 21, 1931 (Beaufort County RMC, 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 their accumulated 9174 acres of highland on Hilton Head (including Seabrook Plantation) to the corporation (Beaufort County RMC, DB 72, p. 495).

During this period of land acquisition and speculation several plats of the island were made.

HISTORICAL SYNOPSIS

The first, produced for Thorne and Loomis and based on an unidentified 1930 A.O. Christensen survey, shows all of the Seabrook area, although no landmarks, buildings, or topographic information is provided (Beaufort County RMC, PB 8, p. 15). In 1931 the Coast and Geodetic Survey established the horizontal control point "Bob" at Seabrook Plantation "at the NW corner of a cultivated field in the edge of a thicket of hackberry, chinaberry, and water oak" (National Ocean Survey, Horizontal Control Data, Station Bob 1023). The 1944 Fort Fremont 15' topographic map (based on a field survey conducted in 1912 and checked using 1939 aerial photographs) shows the tract with two structures, neither of which appear to be in the correct location for the main house (Figure 14). One structure, at the intersection of the Seabrook Road and another road, likely represents a barn (also shown on Figure 15), while the structure at the end of Seabrook cannot be explained.

A 1950 plat of Honey Horn Plantation shows identical boundaries, but provides considerably more detail (Figure 15). Taken from a variety of old maps and plats (which strangely seem no longer to exist), the timber map shows the boundary between Seabrook and Cotton Hope to the southwest, and Myrtle Bank to the northeast. This boundary is situated at the eastern edge of the archaeological site and, as will be discussed in more detail in a following section, appears to correspond with the still intact earthwork feature. The entire site area is noted as "open old and active fields." There is a major road leading to the point, with a dock 50 to 100 feet to the west. The small tidal creek which exists between the high ground and Skull Creek is called "Coujar Hole." No buildings are shown.

By 1955, when the control station "Bob" was examined, at least six feet of the bank had eroded (about ¼-foot per year), destroying the original station and Reference Point 2. Reference Mark 1, however, was found intact, "about 650 feet NE of twin piers, in a clump of palm trees in a thicket on the edge of a cleared field, 28.0 ft. E of the bank of a small creek, and 3.0 ft. W of the tallest palm tree" (National Ocean Survey, Horizontal Control Data, Station Bob 1023). Today this control point is 15 feet from the edge of the

bank, evidencing a continued to slightly increasing erosion rate of about 0.3 foot per year. The accounts also document the long-term cultivation of much of the Seabrook Plantation tract, at least in the twentieth century. Oral informant accounts mention that Seabrook was a favorite picnicking and swimming spot for island visitors in the mid-twentieth century (Benny Jones, personal communication 1995).

By the late 1980s Seabrook Plantation is largely contained within the western half of the tract of land known as BB North (Tax Map 1A, Parcel 49). This site has been recorded as 38BU323/1149, with associated sites 38BU822 and 38BU337. In addition, site 38BU823, situated on property shown by Tax Map 1A, Parcel 35, probably represents the two structures adjacent to the marsh south of the plantation complex.

THE PLANTATION LANDSCAPE

EXCAVATIONS AT 38BU323 AND 38BU821

Strategy and Methods

As previously discussed, Seabrook Plantation (38BU323) was initially identified by Jim Michie (1980) during a shoreline survey of the Port Royal area. The site was revisited in 1986 by Chicora Foundation as a part of a reconnaissance survey for the Town of Hilton Head (Trinkley 1987). The initial historical and intensive archaeological survey was conducted by Chicora Foundation in May of 1988 (Trinkley 1988). This initial work, as outlined in the **Introduction** consisted of 50 foot interval shovel testing. Site boundaries were defined both on the basis of artifact dispersion and above ground remains.

Identified during the intensive archaeological survey were a number of areas of interest including:

- Midden 1, which appeared to represent a Civil War deposit during the survey, perhaps associated with the Landing;
- Midden 2 and 3 which appeared to be associated with the adjacent southern slave row of Seabrook Plantation;
- Midden 4 which was a small deposit thought to represent a brief military encampment;
- Midden 5 which was a small shell pile associated with badly disarticulated tabby remains;
- Area 5 which was a poorly defined concentration of prehistoric remains within the plantation boundary;

- Area 8 which represented the main plantation and a possible kitchen; and

- Area 10 which represented the southern tabby slave row. During the initial survey two tabby chimney bases were identified.

At Middens 1 through 4, units were oriented with magnetic north and were tied into a tree and topographic map provided by the developer. At the adjacent Area 10, units were oriented with extant structural remains, which was N44°W. Again units were tied into the tree and topographic map.

Excavations at the other areas of the site were tied into a 20 foot interval auger test grid, oriented N47°W.

38BU821 was originally identified during Chicora's 1986 reconnaissance survey of the island. The site was surveyed in 1988 by Chicora and a total of 18 shovel tests were excavated revealing the presence of a shell midden up to 1.2 feet in depth. In addition, an adjacent plantation ditch had exposed a shell pit feature. The artifacts at the site revealed Early through Late Woodland occupation.

Excavations were conducted using gross natural stratigraphic zones. Zone 1, level 1 consisted of a dark brown loamy sand with varying densities of shell, brick, and tabby rubble, varying in depth from 0.7 to 1.2 feet. Zone 1, level 2 consists of a brown loamy sand with small quantities of shell, varying in depth from 0.2 to 0.8 feet. Zone 1a soils consist of intact shell midden, varying in depth from 1.1 to 2.0 feet. This Zone 1a was generally divided into two one foot levels (Zone 1a, level 1 and Zone 1a, level 2). There was only one instance of Zone 2 soils which consisted

of a layer of oyster shell used to fill in the floor of a structure situated at about one foot below grade.

Flotation samples (typically 5 gallons in size) were collected from areas which exhibited a high potential for the recovery of ethnobotanical remains. A 5% sample of shell midden was gathered from each midden feature for information on species diversity, midden density, and shellfish analysis. The remaining shell was weighed, and discarded in the field. In addition, pollen samples were taken from areas of the site which appeared to be protected and undisturbed.

All fill was screened minimally through ¼-inch mesh, with samples of shell midden soils screened through ⅛-inch mesh. Chicora Foundation also obtained a column sample (2.25 feet square) of all shell midden for detailed analysis, including shell midden density, shellfish analysis, and identification of very small faunal remains.

Features were minimally bisected to provide profiles for photographs and drawings, and feature fill was screened through ⅛-inch mesh and samples were taken for water flotation.

Chicora also used pH neutral, alkaline-buffered paper for field notes. Photographic materials were processed to archival permanence. Standard forms, such as daily reports, level forms, photographic forms, and feature forms were used to maintain site information.

Before and during the excavations the site was bush hogged with equipment provided by the client to facilitate laying in the site grid. Excavations were backfilled at the conclusion of the project through the use of heavy equipment provided by the client. During the project, excavation units were covered with plastic.

As previously mentioned, a 20 foot auger grid was placed over the portion of the site which included the main house complex, the small prehistoric component, and the northern slave row. The auger tests provided relatively good detail concerning concentrations of brick, shell, and

artifacts. However, subsequent hand excavation suggests that once these concentrations were identified, closer intervals of perhaps 10 feet should be used in these areas of concentrations to better located architectural features. In addition to the 20 foot interval auger testing, a metal detector survey was used at the artifact concentrations and at areas where there was suspected heavy industrial use for evidence of structural remains.

In addition to these exploratory methods, mechanized stripping was used to determine the boundaries of a suspected shell paved road.

Auger Testing

At 38BU323 an auger grid was established with points marked at 20 foot intervals. This grid was oriented N47°W with the shoreline since previous research has indicated that generally buildings will be aligned with the shore. The grid was tied into a Southeastern Survey marker located in the vicinity of the old dock remains. The marker is at an elevation of 6.93 feet above mean sea level (AMSL). At 38BU821 the auger test grid was oriented with magnetic north and points were placed at 10 foot intervals.

The tests were 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 ¼-inch mesh and all artifacts were collected. Brick, mortar, and shell was quantified in the field and discarded. Measured profile drawings of all auger tests were collected and the tests were then backfilled.

The materials from these tests were quantified in the field laboratory, and field density maps were created for brick and mortar, shell, and artifacts.

Metal Detection

After artifact concentrations were identified, a metal detector survey was performed at 38BU323. The metal detector was a Tesoro Bandito II with a 10 inch coil. The primary purposed of the metal detector survey was to locate nail scatters instead of the collection of

diagnostic metal artifacts. As a result, the majority of metal detection was performed on the all metals mode which would detect both ferrous and cuprous metals. Metal detection in the area of the dock and suspected industrial complex was performed on both the all metals mode and the discrimination mode. The discrimination mode, which locates cuprous remains, was thought to be useful since it is likely that a boilermaker would have left behind lengths of copper tubing as well as other cuprous items. Unfortunately, since the area has long been used as a swimming hole by locals well into the 1960s, a large quantity of beer and soda cans as well as other modern garbage, precluded the ability to clearly identify areas of mid nineteenth century use.

Block Excavations

At 38BU323, the auger test grid, oriented at N47°W, served as the basis for the general site grid at the main house complex and eastern slave row. Excavations at the southern slave row was oriented with structural remains (N44°W) while adjacent yard middens were oriented with magnetic north. At 38BU821 the auger test grid was oriented with magnetic north.

Excavation units were designated by a number (e.g., EU12). We did not use a modified Chicago grid system because there were three different grid orientations at the site, making its use impossible. However, since units were tied into the tree and topo map which was, in turn, tied into the survey marker, horizontal control was still maintained across the site.

Vertical control was maintained through the use of several elevation datums established in the site area either by Southeastern Surveying or Chicora Foundation. Elevations were expressed as feet above mean sea level (AMSL) as determined by the Southeastern Survey marker.

Soils from the block excavations were screened through ¼-inch mesh using mechanical sifters. Units were troweled at the top of subsoil, photographed in black/white and color film, and plotted. Excavation was by natural soil zones and soil samples were routinely collected. Features

were minimally bisected, with flotation samples (5 gallons) collected. Features were excavated by natural soil zones and were separately photographed, plotted, and profiles drawn during their removal. Feature fill was generally dry screened through ⅛-inch mesh to improve the recovery of small faunal remains. An exception was a well feature which was water screened on site.

38BU323

Archaeological investigations were begun at 38BU323 by a crew of five on August 15, 1994 through October 15, 1994. A total of 1509 person hours were spent at the site resulting in the excavation of 3425 square feet or 3444 cubic feet. As a result 14,506 pounds of shell and 1,069 pounds of brick, tabby, and mortar were recovered. An additional 75.5 person hours were spent in the field laboratory processing artifacts.

Auger Testing and Metal Detection

The entire plantation complex west of the modern dirt road at Seabrook was subjected to 20 foot interval auger testing (Figure 16). Density maps for artifacts, shell, and rubble are provided in Figures 17, 18, and 19. These tests revealed at least seven concentrations of artifactual remains located south of an earthen berm which is thought to have served as a property boundary marker. Artifacts north of the berm were very sparse. The auger testing also revealed evidence of an oyster shell paved road running parallel to the shore.

The seven artifact concentrations were further examined with a Tesoro Bandito II metal detector with a 10 inch coil to help determine which of these contained structural remains and which may be trash middens. Of the seven concentrations, two were located in the area believed to contain the industrial complex which contained a boilermaker's shop, a blacksmith's shop, a machine shop, and a shipyard. The metal detector was used on both the all metals and the discrimination mode which revealed a diffuse scatter of remains (including modern garbage) across the whole area. The five remaining concentrations were located in the area of the plantation complex. Of those five

THE PLANTATION LANDSCAPE

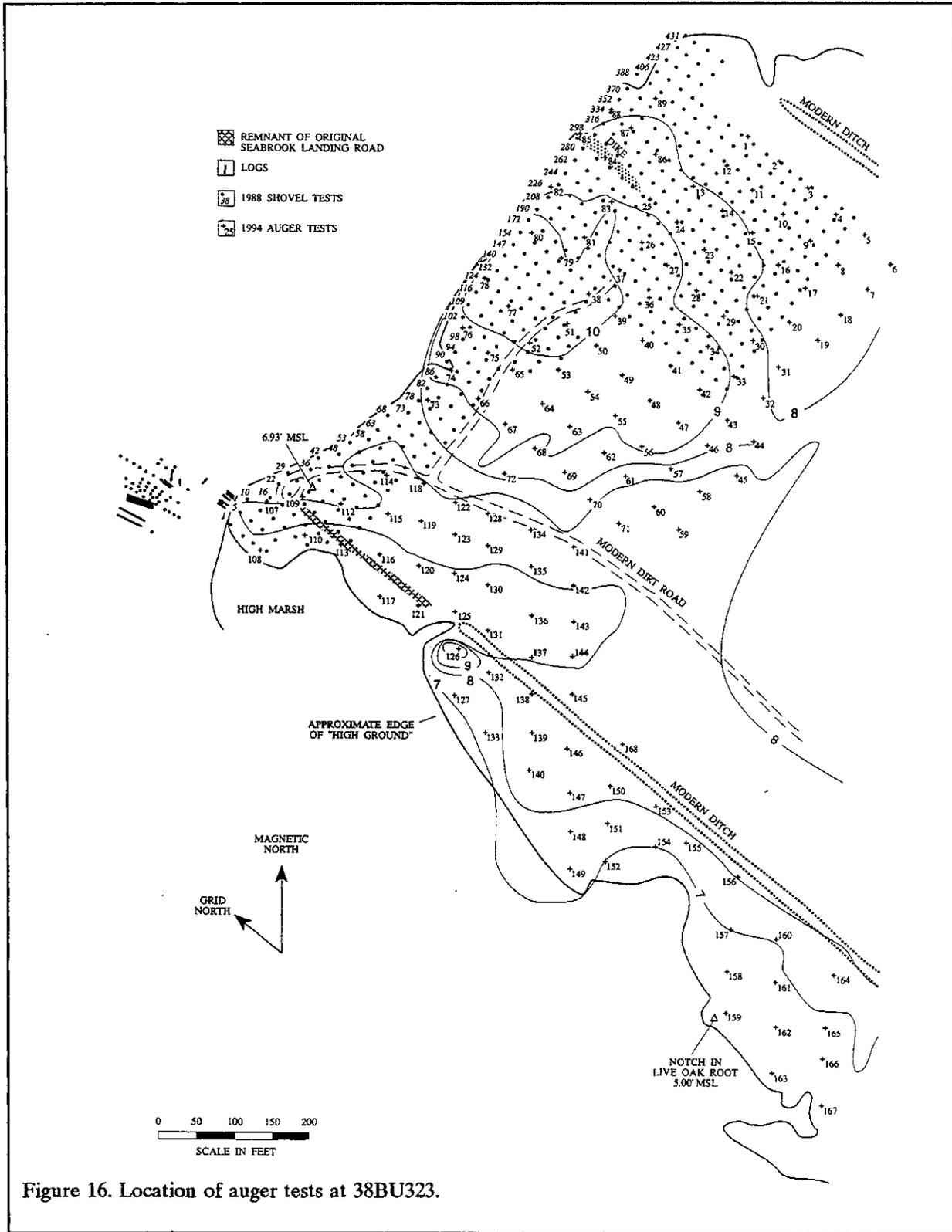
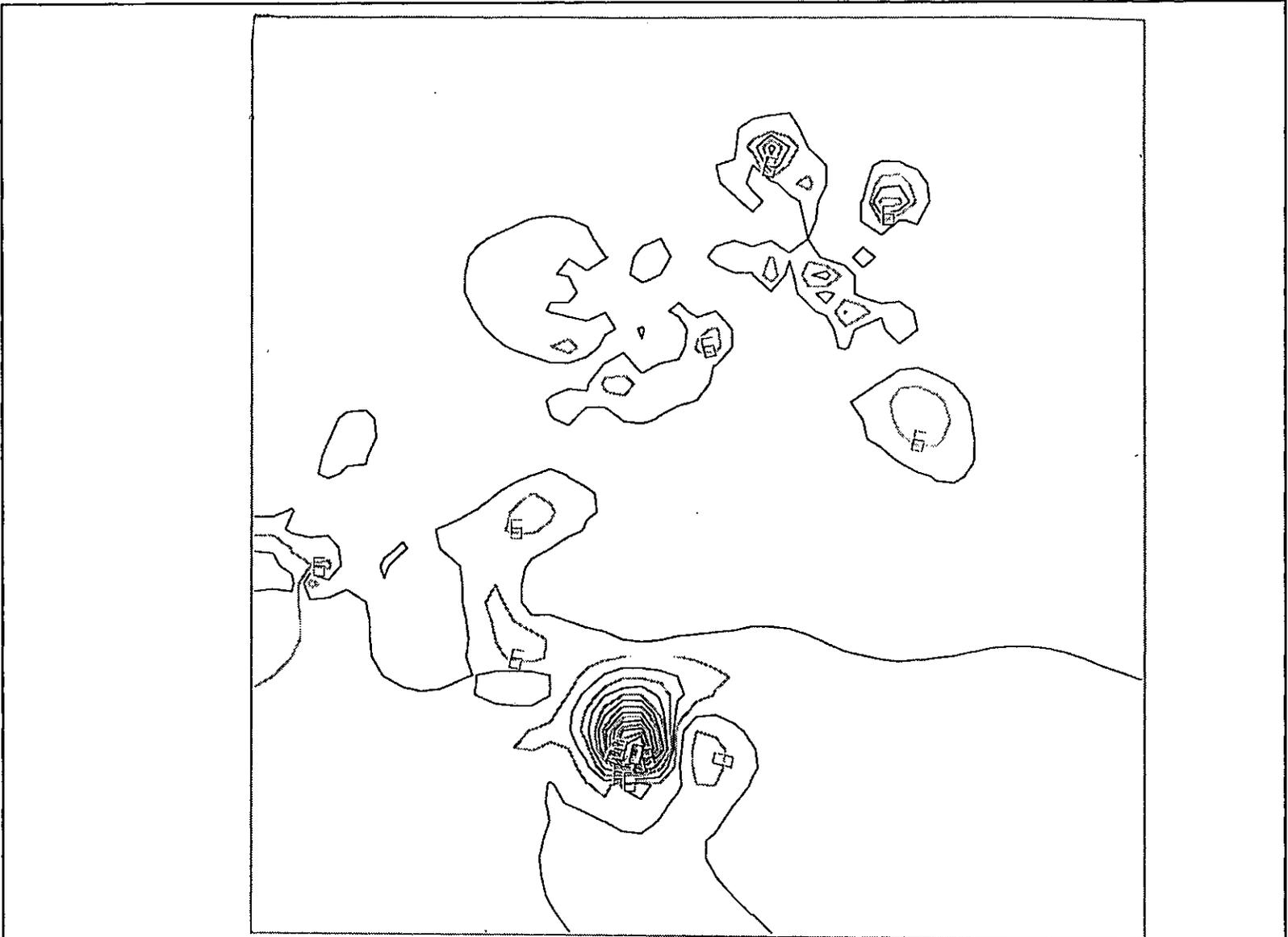
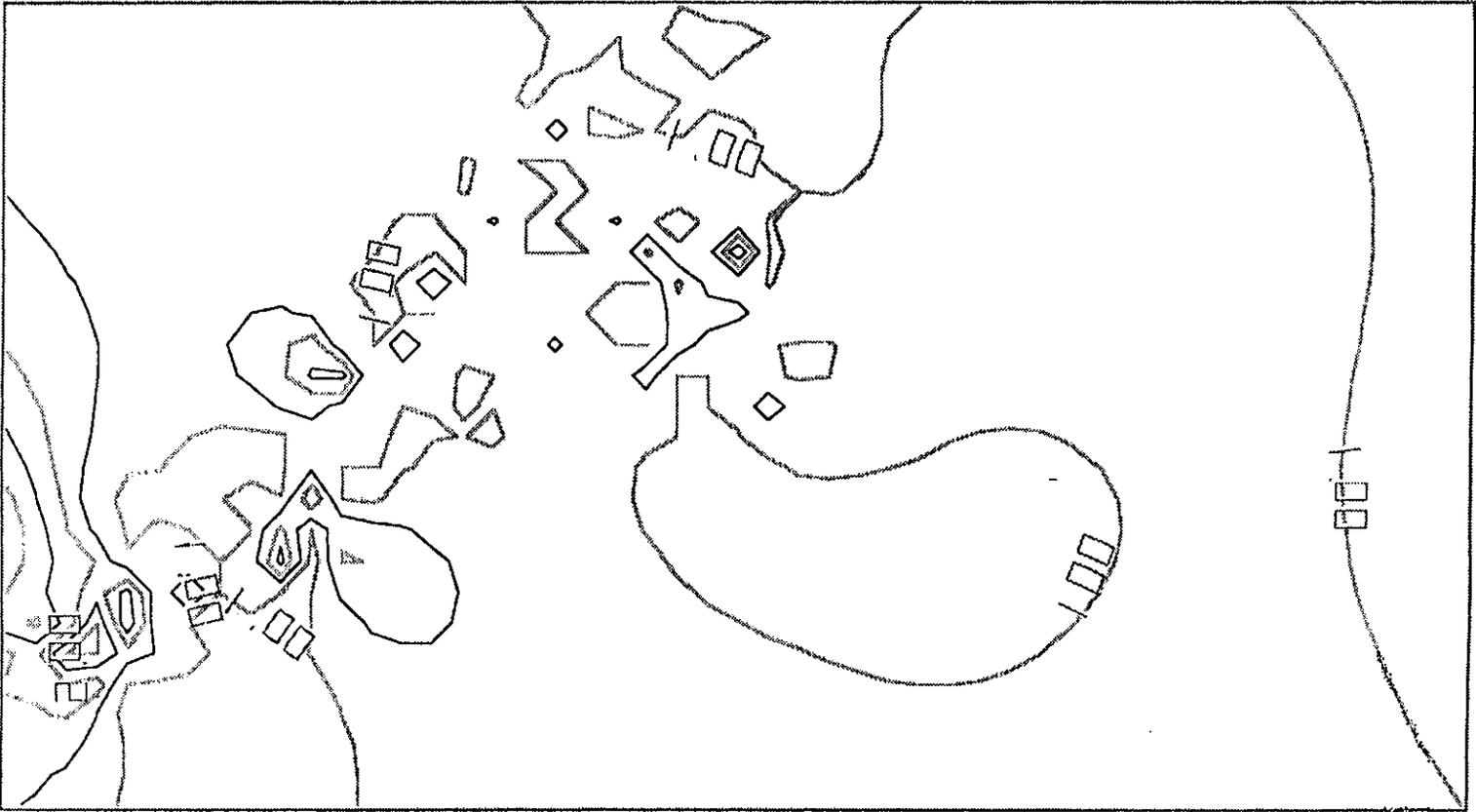


Figure 16. Location of auger tests at 38BU323.



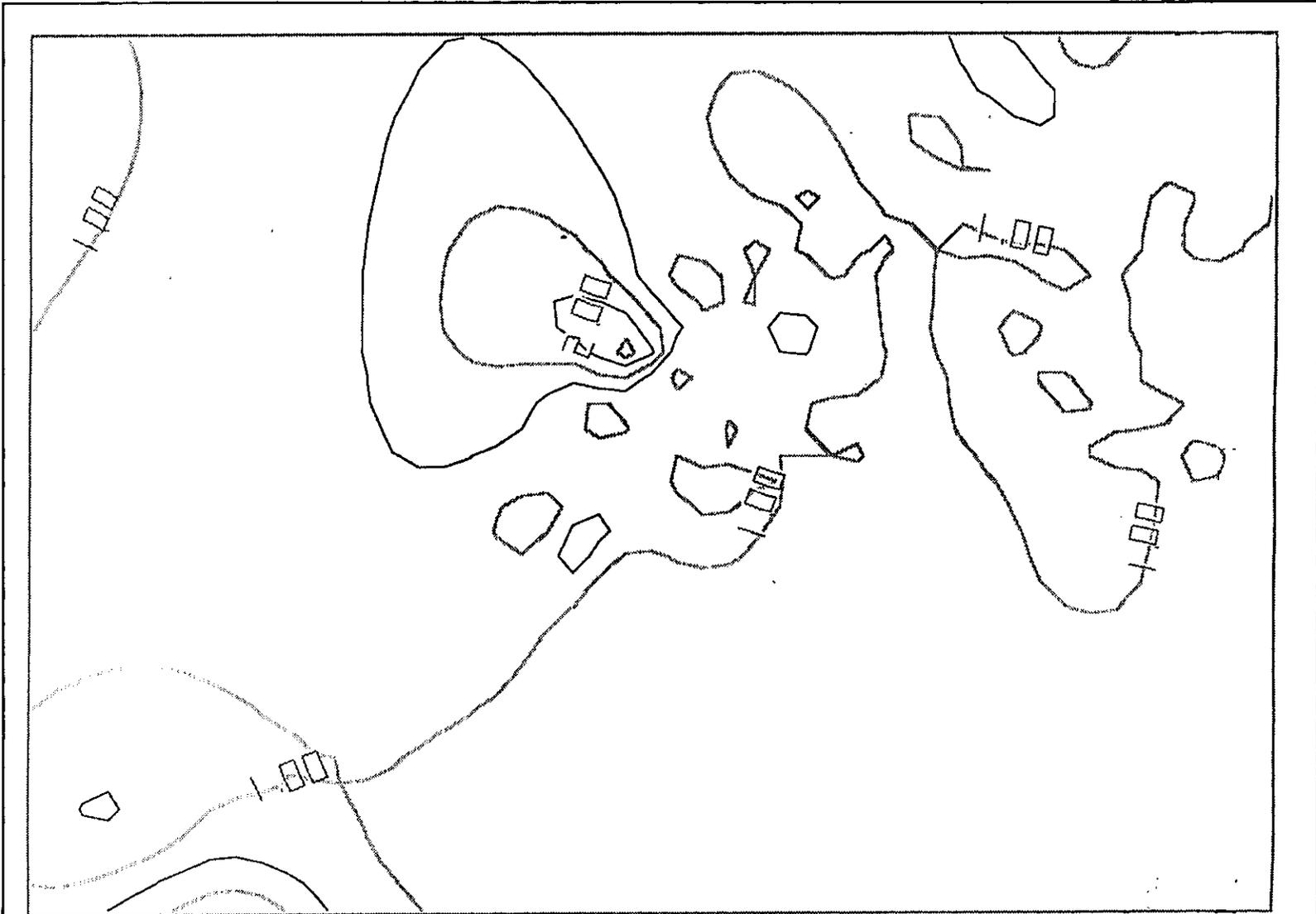
Contour Interval 3

Figure 17. Artifact densities at 38BU323.



Contour Interval .5

Figure 18. Shell densities at 38BU323.



Contour Interval .5

Figure 19. Brick and mortar densities at 38BU323.

concentrations, the metal detector (using the all metals mode) revealed that three had fairly tight concentrations of metallic remains. One of the three was identified on the surface as an early to mid twentieth century trash dump, although there were also a number of bottle fragments which appeared to date to the postbellum period. The other two concentrations were investigated with block excavations, while two other areas were examined with a single ten foot square. In addition, a ten foot square was placed on the old Seabrook Landing road and another unit was placed on top of the earthen berm to investigate the possibility of a fence along its crest.

Before excavations were begun in these areas, the 20 foot interval auger test grid which was placed over the main house complex was expanded to the northern slave row which is situated in an area of planted pines. These tests revealed two concentrations of artifactual remains and the possible remnant of a shell road, although its presence was never verified through excavation. The metal detector was used on the all metals mode to examine the two concentrations. Only one of these yielded a significant number of readings, although they appeared to be dispersed (probably through plowing) over a relatively large area (approximately 50 by 50 feet). Based on the general location of metallic remains in the one artifact concentration and in the location of the largest quantity of artifactual remains a block excavation was opened.

Block Excavations

We had originally proposed to concentrate on the site areas listed above as well as an area originally defined as 38BU337 (a disarticulated tabby wall eroding into Skull Creek).

Midden 1 was to be investigated by the excavation of several 10 foot units and we anticipated spending a period of up to two days in this area. Middens 2 and 3 would be investigated for a period of one week, placing units outside the impacted area in order to obtain a sample of the midden deposits. Work at Midden 4 was to involve the excavation of up to two 10 foot squares over a two day period. Midden 5 was to involve the

excavation of up to two 10 foot squares over two days. At Area 5 two days of excavation was planned. Two weeks were to be used to investigate Area 8. Excavations were to be coupled with an intensive auger survey at 25 foot intervals in order to pin point areas of interest. In addition, the area originally defined as 38BU337, containing the disarticulated remains of a tabby structure eroding into Skull Creek, was to be investigated over a period of five days. Work at Area 10 would focus on the two structures with above ground tabby remains. Investigations in this area were to involve up to two weeks of excavation.

The implemented excavations at Seabrook Plantation differed somewhat from those originally planned due to discoveries during auger testing and initial investigations. This work is summarized below.

Work at Midden 1 resulted in the excavation of one 10 foot unit (100 square feet or 70 cubic feet) although we initially proposed excavating several 10 foot units. However, upon clearing of the surrounding landscape and excavation of the one unit, we found that this midden, in actuality, represented the remnant of Seabrook Landing Road. The change in methodology at this "midden" was reviewed and approved by the State Historic Preservation Office on September 19, 1994. This excavation resulted in 799 pounds of shell and coal.

At Middens 2 and 3 the work implemented did not deviate from the work initially proposed. A total of six 10 foot units (600 square feet or 580 cubic feet) were excavated. A total of 1525 pounds of shell and 35 pounds of brick were recovered.

Upon initial clearing of Midden 4, we found that approximately 20% of this midden had been potted or vandalized since the 1988 survey. As a result, the work was reduced here to the excavation of one 5 by 10 foot unit (50 square feet or 80 cubic feet). We had initially proposed the excavation of up to 200 square feet. As at Midden 1, this change was discussed with and approved by the State Historic Preservation Office. A total of 868 pounds of shell and 48 pounds of brick, tabby,

and mortar were recovered.

After clearing and close interval (20 foot) auger testing at Midden 5, we found that the midden was actually a small push pile with very little shell or tabby. Very few historic artifacts were recovered from the auger tests in this area. As a result no additional investigation of this area was performed, although we had initially proposed to excavate up to two 10 foot units.

Area 5 was originally identified as a poorly defined prehistoric concentration. Subsequent auger testing at 20 foot interval yielded no evidence of midden layers and the artifacts were sparsely scattered. As a result, we decided to use the time originally allotted here (two days) for additional time at the main house complex and additional auger testing in other areas.

At Area 8 (the main house complex) we originally proposed auger testing at 25 foot intervals. Given that we had extra time from areas where work was reduced, we excavated the auger tests at 20 foot intervals and expanded it to include the suspected area of the northern slave row (Area 9), where some isolated in situ deposits were identified during the survey. As a result 434 auger tests were excavated across the site. A field density map was created and a metal detector was used to help identify which concentration likely contained structures. Based on these findings, three block excavations were excavated. In addition, three isolated units were used to either investigate other density or to investigate landscape features. Three back hoe trenches were also used to examine landscape features.

The three block excavations included:

- 475 square feet or 462.5 cubic feet in the vicinity of structural remains identified through auger testing and metal detection (resulting in 3089 pounds of shell and 166 pounds of brick and mortar rubble);
- 500 square feet or 760 cubic

feet in the area of what was discovered to be a well feature identified through auger testing and metal detection (resulting in 4243 pounds of shell and 543 pounds of brick, tabby and mortar rubble); and

- 425 square feet or 384 cubic feet in the area of a suspected slave house in the northern slave row identified through auger testing and metal detection (resulting in 1048 pounds of shell and 20 pounds of brick and mortar rubble).

The isolated units consisted of three 10 foot squares used to investigate minor concentrations or landscape features. This resulted in the excavation of 300 square feet or 290 cubic feet and the recovery of 347 pounds of shell and 182 pounds of brick.

As a result, a total of 1,700 square feet or 1896.5 cubic feet were excavated at Area 8. This resulted in the overall recovery of 8,727 pounds of shell and 911 pounds of brick. A total of five weeks were spent investigating this site with excavation units and auger tests.

An additional week was obtained to investigate the well feature after consultation with the South Carolina State Historic Preservation Office (letter from Mr. Lee Tippett to Dr. Michael Trinkley, October 12, 1994). This did not add a week's worth of work to the overall project schedule, but was transferred from the two weeks allotted to the investigation of a small Woodland shell midden site (38BU821-see this report) adjacent to 38BU323. After consultation with the client, this arrangement was believed to be the most agreeable of the alternatives (which included either green spacing the well or funding of additional excavations).

Work at Area 10 resulted in the excavation of 550 square feet (or 457.5 cubic feet) at Structure 1 and 500 square feet (or 450 cubic feet) at Structure 2. This resulted in the recovery of 3058

pounds of shell and 74 pounds of brick and mortar rubble at Structure 1, and 994 pounds of shell and 36 pounds of brick and mortar rubble. As originally proposed, two weeks were used to investigate these two structures. Figure 20 shows the location of units and landscape features.

All modifications to the data recovery plan as listed above were provided to the State Historic Preservation Office in a letter dated September 19, 1994.

Main House Complex (Area 8)

Historically, the area defined as the "main house complex" contained the main house complex as well as industrial buildings associated with the use of the site by military forces during the Civil War. As previously mentioned, the entire complex west of the modern dirt road was subject to 20 foot interval auger testing. Density maps for artifacts, shell, and brick are provided in Figures 17, 18, and 19. These tests revealed at least seven concentrations for artifactual remains located south of an earthen berm which is believed to have marked the property boundary. Artifacts north of the berm were very sparse, further suggesting that the berm was a property boundary.

The first block excavation (**Block Excavation 1**) revealed the remains of a 16 by 16 foot continuous brick foundation (Figure 21). The metal detector's readings were concentrated in an 18 by 18 foot area which indicates that it is an excellent tool for pin pointing structural remains. Although artifact density was low during auger testing, brick rubble remains were dense. These dense remains, coupled with the metal detection, lead us to excavate in this area. The lack of a chimney and the sparseness of artifacts did not suggest a domestic function. The presence of a relatively large quantity of strap metal suggests that the structure may have served as a storage building. Through bulldozer cuts and hand probing, the structure was found to be situated approximately 20 feet north of the end of a possible shell paved road. This further suggests its utilitarian nature. A letter dated December 31, 1866 between administrators of the American Missionary Association (AMA) mentions "two

commissary buildings near the Mansion [at Seabrook Plantation] . . . suitable for school-houses" (AMA, H-6309). It is possible that this structure is one of the commissaries mentioned.

Inside of the structure a thick layer of oyster shell was encountered. A 5 by 10 foot unit was placed in this layer and approximately 0.9 to 1.2 feet of shell was excavated. At the base of the shell was a relatively thin mortar floor measuring a little less than 0.1 foot thick. The floor was laid directly on top of natural yellow sand and both surfaces were irregular. The mortar floor is situated about 1.1 feet below the level of the surrounding subsoil indicating that one had to step down into the building.

The brick foundation appears to have supported a fairly simple wooden superstructure, since very little rubble (166 pounds) was encountered. Although brick has been robbed from the structure, if it were entirely brick there would have been a large quantity of mortar rubble and brick fragments. Based on the type of artifacts present (or absent) in the shell layer (military buttons, strap metal, whiteware, sparsity of nails, etc.), it appears that the building was dismantled and portions of the upper brick foundation were robbed out, perhaps by the military. At some point, either when the military robbed the bricks, when the plantation was being cleaned up for the teachers, or later in the postbellum, the interior of the structure was filled in with shell to bring it up to grade. If this is the case, then clearly the structure could not have been used as a school house by the AMA. If the structure was dismantled in the postbellum, then it is not clear who might have filled it in and for what purpose.

On the interior walls of the structure there was a mortar and plaster coat which appears to have been put on after the floor was poured. Bricks used in the foundation were all almost entirely fragments, suggesting that they were robbed from elsewhere. Brick fragments were commonly used in below grade foundations of little consequence (i.e., which carried only a limited load and which were associated with utilitarian structures). During excavation we realized that the bricks were quite soft and much care was need so

EXCAVATIONS AT 38BU323 AND 38BU821

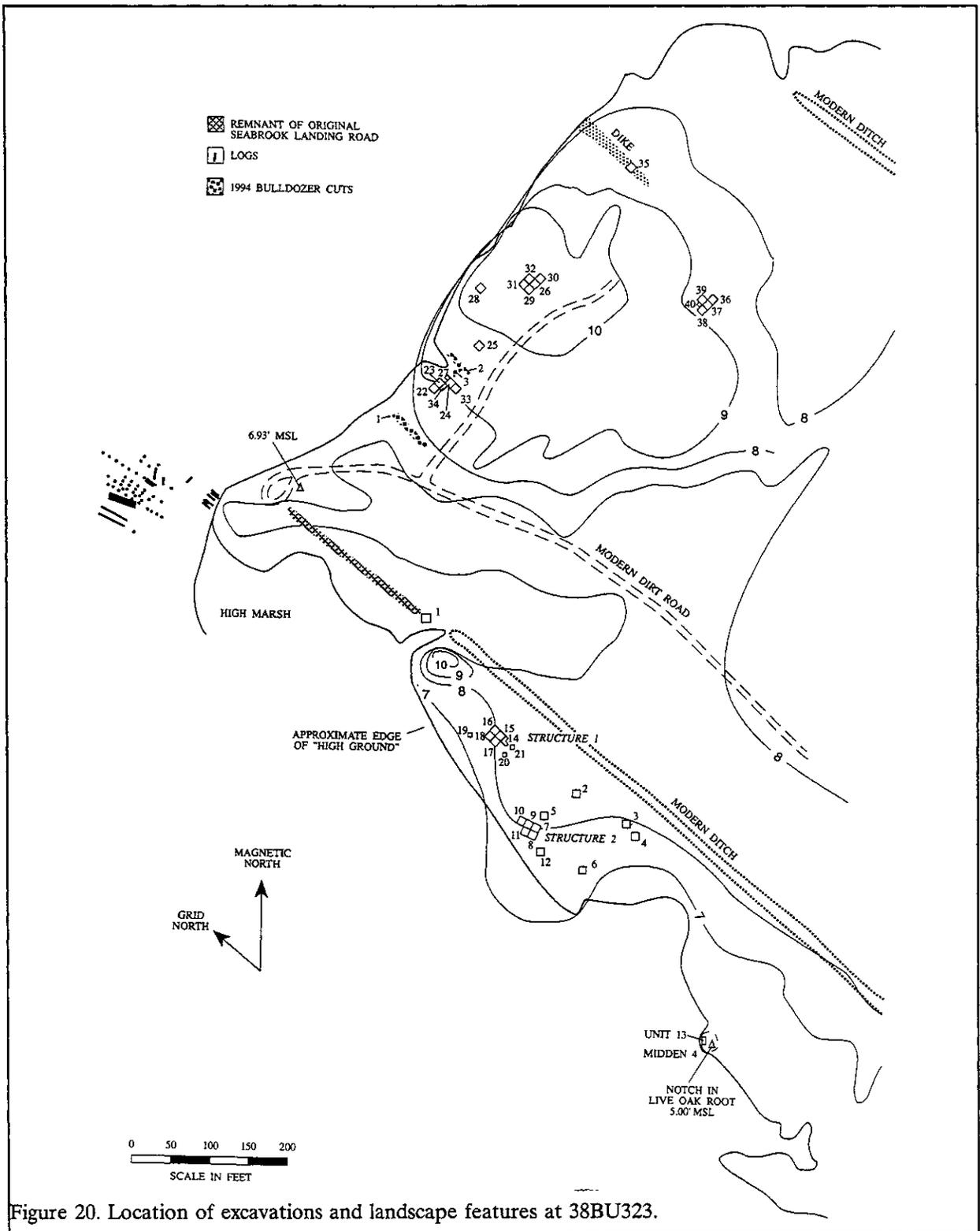


Figure 20. Location of excavations and landscape features at 38BU323.

THE PLANTATION LANDSCAPE

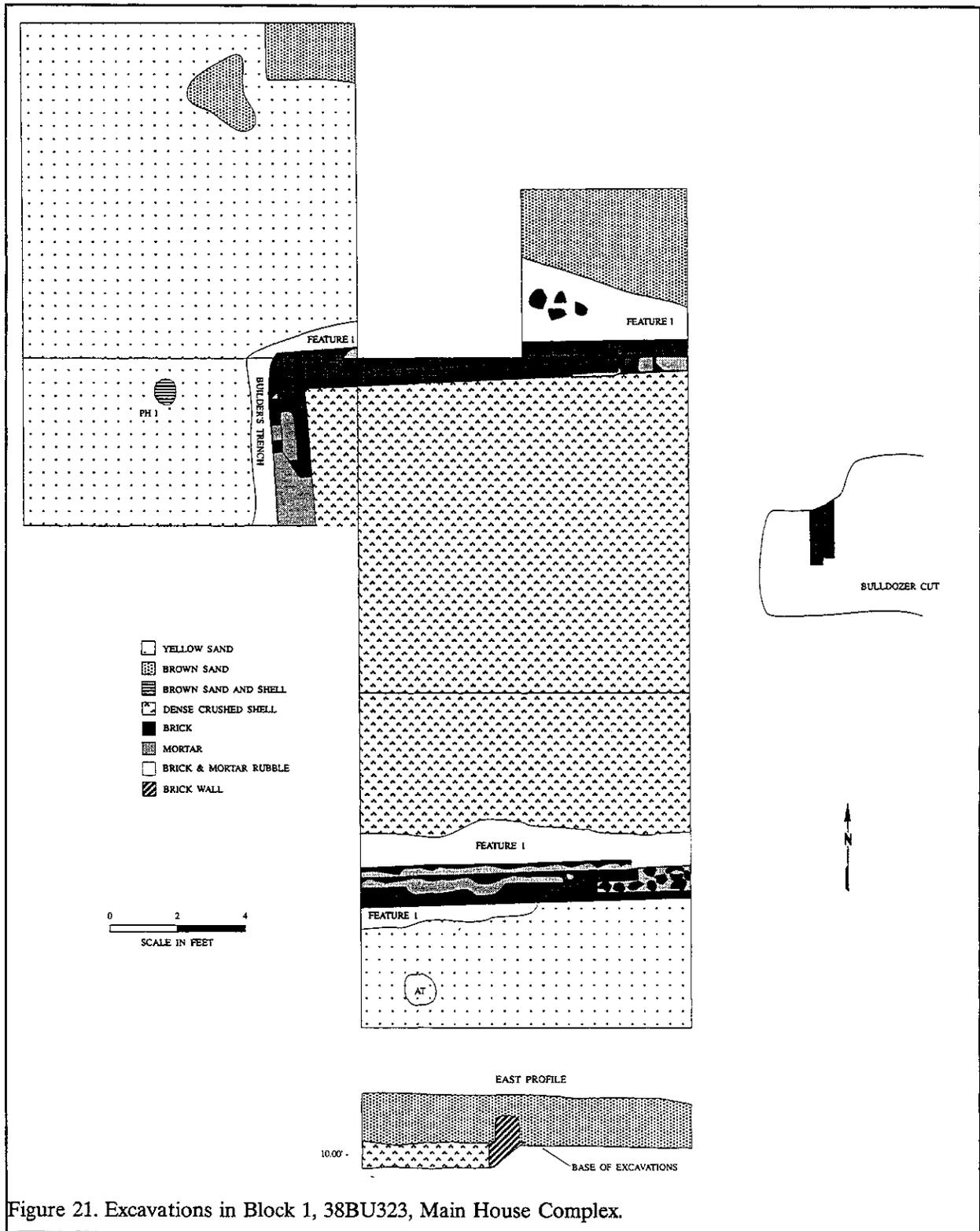


Figure 21. Excavations in Block 1, 38BU323, Main House Complex.

as not to further damage them.

The only features encountered were the builder's trench (Feature 1) and a single post hole. Artifacts from the builder's trench (e.g. pearlware) suggest a construction date no earlier than about 1820. Excavation of the builder's trench indicated that the brickwork extended an additional four courses below the top of subsoil. The post hole is relatively small (0.6 feet in diameter) and may have functioned to support a shed overhang roof.

At **Block Excavation 2** a well feature (Feature 2) was identified (Figure 22 and Figure 23). This feature was characterized by a shaft measuring approximately five feet in diameter (at the top) surrounded by a clay filled construction pit estimated to measure about 20 feet in diameter (Figure 24 and Figure 25).

In addition to the well feature, a tabby pier was located. No additional piers were located either during excavation, auger testing, or by hand probing. It is possible that the remaining tabby piers were robbed by the military for use elsewhere (a situation suspected at the Stoney/Baynard Plantation on Hilton Head Island [see Adams and Trinkley 1991]).

Artifacts included a large quantity of nails that are not believed to be associated with a building in that area since the quantity was too great to account for one building. More likely, the area contained a pile of structural debris which rotted in place. Perhaps when the settlement was abandoned, the structures were dismantled, hardware of value was robbed, and structural garbage was either thrown down the well or piled beside of the well to rot.

The clay fill surrounding the well shaft was bisected and the east half was excavated. Excavation of the clay fill surrounding the well shaft yielded very few artifacts. As a result, a sample of the artifacts was obtained from the upper 0.7 feet of the fill area, while the remaining portion was discarded. In addition, the entire clay fill area was not excavated primarily because of the level of the water table and the sparsity of artifacts.

The well shaft was bisected into east and west halves and removed in one foot layers until the water table was reached (at about 4.5 feet below ground surface). After the profile was photographed and drawn (see Figure 25), the western half was removed in the same manner. A mud hog was then used to pump out water and surrounding mud to allow further excavations into the shaft. At that point to the base, the contents were taken out as one. The base of the well (determined by the presence of "clean" mud) was reached at about 6.5 feet below ground surface.

Below the water table several pieces of planking were recovered. In addition, four posts were identified (see Figure 24). These posts apparently served to support planks placed between them and the backfilled clay wall. According to a local, many old wells were lined this way with gaps between the horizontal planks to allow for seepage. No evidence for a lining was found above the water table, probably because conditions for preservation were much poorer. It is possible that the upper portions of the well was lined with a wooden barrel.

Two types of barrels were manufactured for the storage of goods -- "wet" and "dry" barrels. A "wet" barrel was held together with iron hoops and usually made of oak. These barrels were made for wine, whiskey, ale, sauces, and jam. "Dry" barrels were often bound with wicker bands, although iron bands were sometimes used. The wood was usually cheap, soft, and second hand. These barrels contained products such as butter, soap, syrup, and gunpowder (Kilby 1971:70). At a Civil War encampment on Folly Island (Legg and Smith 1989), historical sources mention barrelled goods such as flour, sugar, apples, eggs, pork, pigs feet, ale, wine, and cider (Jackson and O'Donnell 1965:107, 117; Marple 1863: 20, 23, 26). It should be noted here that barrels were often reused for shipping bottled items (e.g., wine, ale, and whiskey) as well as other bulk items such as ceramics. Only a few fragments of strap iron were found in the excavations, suggesting that perhaps a wicker banded barrel (or "dry" barrel) was used. However, since the well shaft is (at its narrowest point) about 4.7 feet in diameter the barrel would have to have

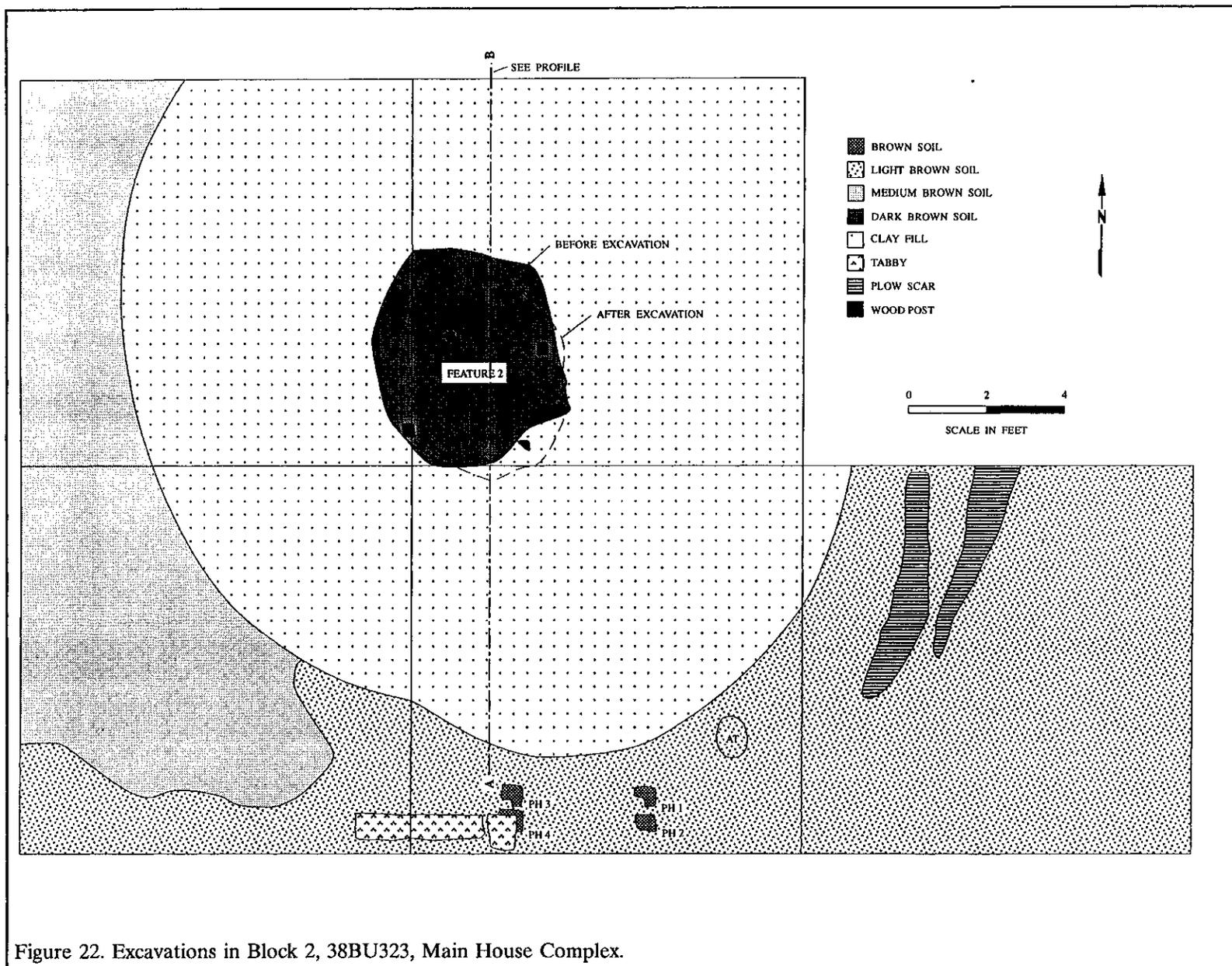


Figure 22. Excavations in Block 2, 38BU323, Main House Complex.

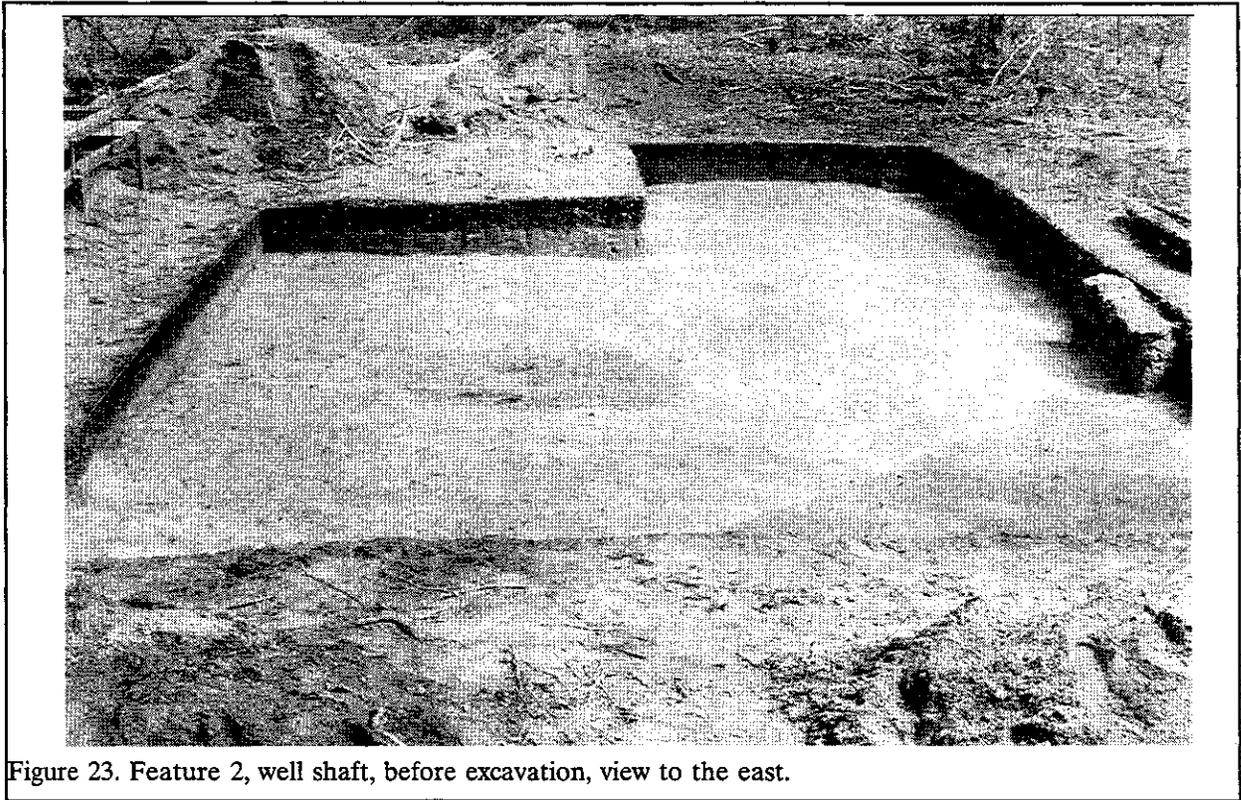


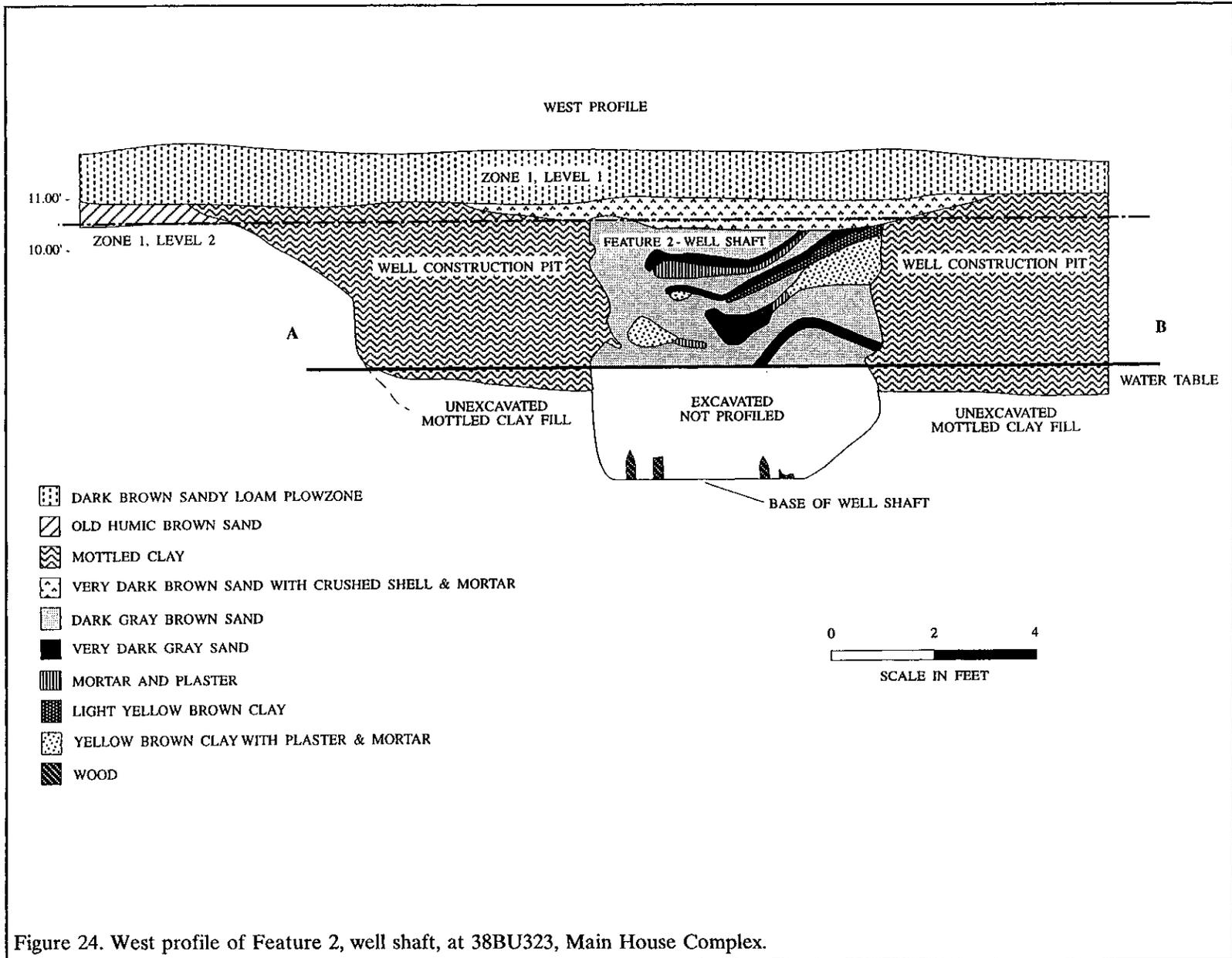
Figure 23. Feature 2, well shaft, before excavation, view to the east.

been a "wet" barrel. According to Kilby (1971:50-64) the largest "dry" barrel available measured 28½ inches (or 2.3 feet) at the pitch. However, "wet" barrels were available in sizes up to 70 inches (or 5.7 feet). Civil War encampments often contained large numbers of empty barrels which were recycled not only as containers, but were also adaptively reused. Many Civil War photographs show barrels being used for chimneys and wells (Legg and Smith 1989:128). Given the heavy concentration of military troops at Seabrook Landing, the choice of a barrel lining would have been quite logical, particularly if the well was built during the military occupation.

Stewart (1923:362-363) recommends that shallow wells "should be located on land higher than the barn and outbuildings, and as far from them as practicable, to prevent water after heavy rains from flowing either over the surface or through the soil toward the well. It should, if possible, be lined on the inside down to the water strata with a water-tight wall". This he

recommends to prevent contamination through seepage from privies, barnyards, or other buildings. The use of a wet barrel could have provided the necessary barrier. Thomas B. Chaplin of St. Helena Island seems to have been well aware of contamination problem since he mentions that he dug a well "between the corn house & the poultry house, on a little knoll or hill" (Rosengarten 1987:510). He goes on further to note that "[t]he ground was as dry as ashes for 5 or six feet down, then found some moisture, and at about 9 feet a little water commenced to spring in a bed of iron ore. I fear the water will be enjoined by it -- will, however, get it as deep as possible, & into a bed of white sand" (Rosengarten 1987:510). Later on he mentions serious problems with the quality of the water and was determined to try digging another well "on the hill near the old tabby" (Rosengarten 1987:519).

Stewart (1923:360) also recommends that if a wood lining is used, "it is desirable that the lagging be placed vertically for the top 8 feet. The



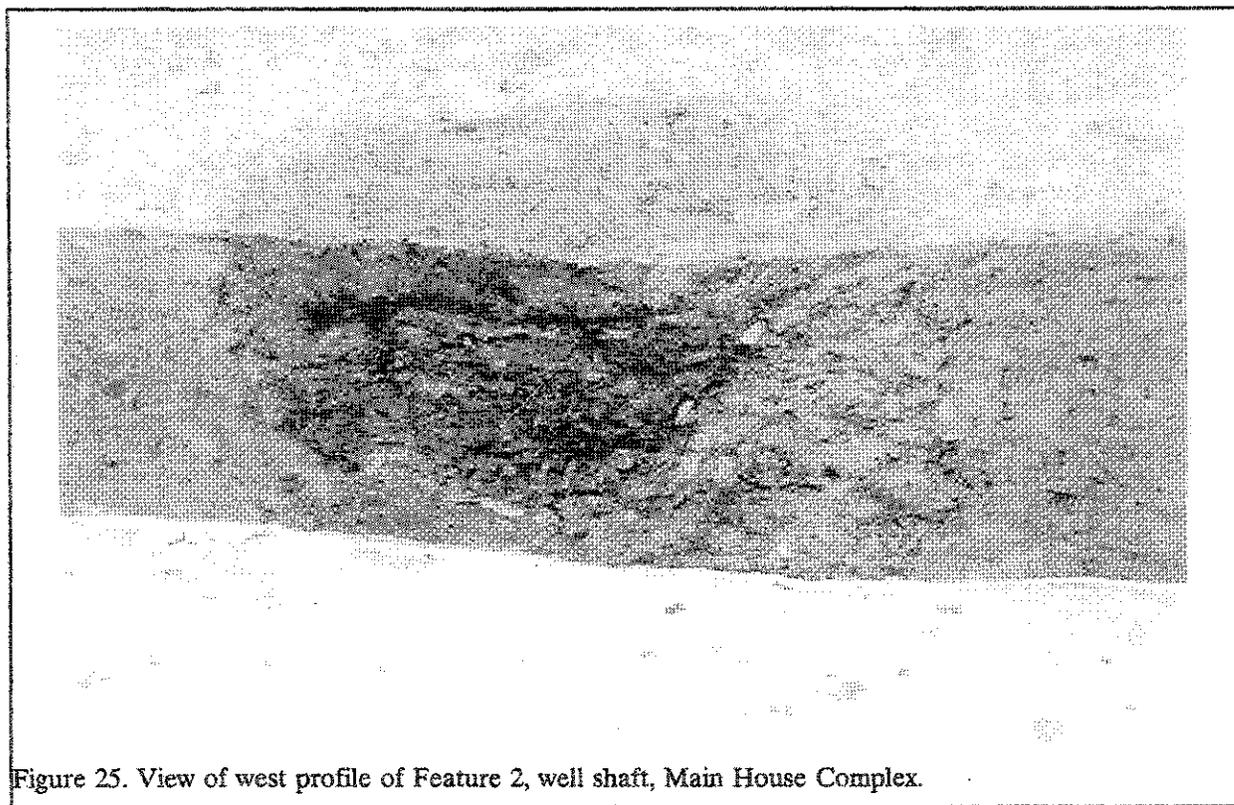


Figure 25. View of west profile of Feature 2, well shaft, Main House Complex.

decay of the lagging is most rapid where there is an opportunity for drying out of the wood, to be followed by subsequent wetting and drying. If these members are placed vertically, they may be removed, piece by piece, and replaced without difficulty." This provides an alternative lining method that may have been used at Seabrook and would allow the well a large diameter of 5 feet which most well barrels could not provide. It seems likely that this method of lining would be preferred if the well was meant for long term use, since it could more easily have been repaired.

Four 10 foot squares were excavated in other areas of interest in the main house complex. The first unit (TP25) was placed in an area of relatively high artifacts concentration although the metal detector did not reveal any concentrations of metallic artifacts. This area revealed a thin zone of earlier historic artifacts and prehistoric sherds. Three post holes were encountered in no configuration.

The second unit (EU28) was placed in an area of low artifact density and high rubble density. The metal detector did not reveal any concentration of metallic artifacts in this area. This unit was in the vicinity of the eroding disarticulated tabby wall which Michie defined as 38BU337. A large quantity of plaster was encountered in the auger tests which made us suspect that this may be all that remained of the plantation main house. Five post holes were encountered, four of which were quite shallow. The remaining post hole (PH4) was quite substantial. No clear in situ remains of the house were identified, so coupled with the lack of readings with the metal detector and the sparsity of artifacts, it appears that the main house is completely eroded into the marsh of Skull Creek with possibly all remaining being the concentration of mortar and plaster as well as the disarticulated tabby wall fragment.

The third unit (TP35) was placed on top of the earthen berm to determine if there was a fence line along its crest as well as to determine

construction methods. Excavations revealed no post holes. However, a length of barbed wire was recovered from the ground surface. A five foot square was placed in the northeast corner and excavated down to what appeared to be the old humus layer. This was done to examine the berm profile for evidence of possible basket loading of dirt such as was found in the berms at Crowfield Plantation gardens in Goose Creek (Trinkley et al. 1992) (Figure 26).

A fourth unit (EU1) was placed in an area which originally was believed to be an industrial deposit (Midden 1) However, after bush hogging the area and excavation, it was discovered that the deposit (consisting primarily of coal and shell) was part of the old Seabrook Landing road bed (Figure 27).

Northern Slave Row

Before excavations were begun, the 20 foot interval auger test grid oriented N47°W which was

placed over the main house complex was expanded to the northern slave row (Area 9) which is situated in an area of planted pines. Initially, this area was not to be examined because the original survey suggested that the remains were sparse and perhaps highly disturbed through plowing. However, the decision was made to further explore this area to see if there was any potential for gathering data to compare against the southern slave row. These tests revealed two concentrations of artifactual remains and the possible remnant of a shell road. A metal detector was used on the all metals mode to examine the two concentrations. Only one of these yielded a significant number of readings, although they appeared to be dispersed over a relatively large area (approximately 50 by 50 feet). It is likely that the remains have been dispersed over the years through plowing.

Based on the general location of metallic remains in the one artifact concentration and the location of the largest quantity of artifacts in this concentration, a block excavation consisting of 425

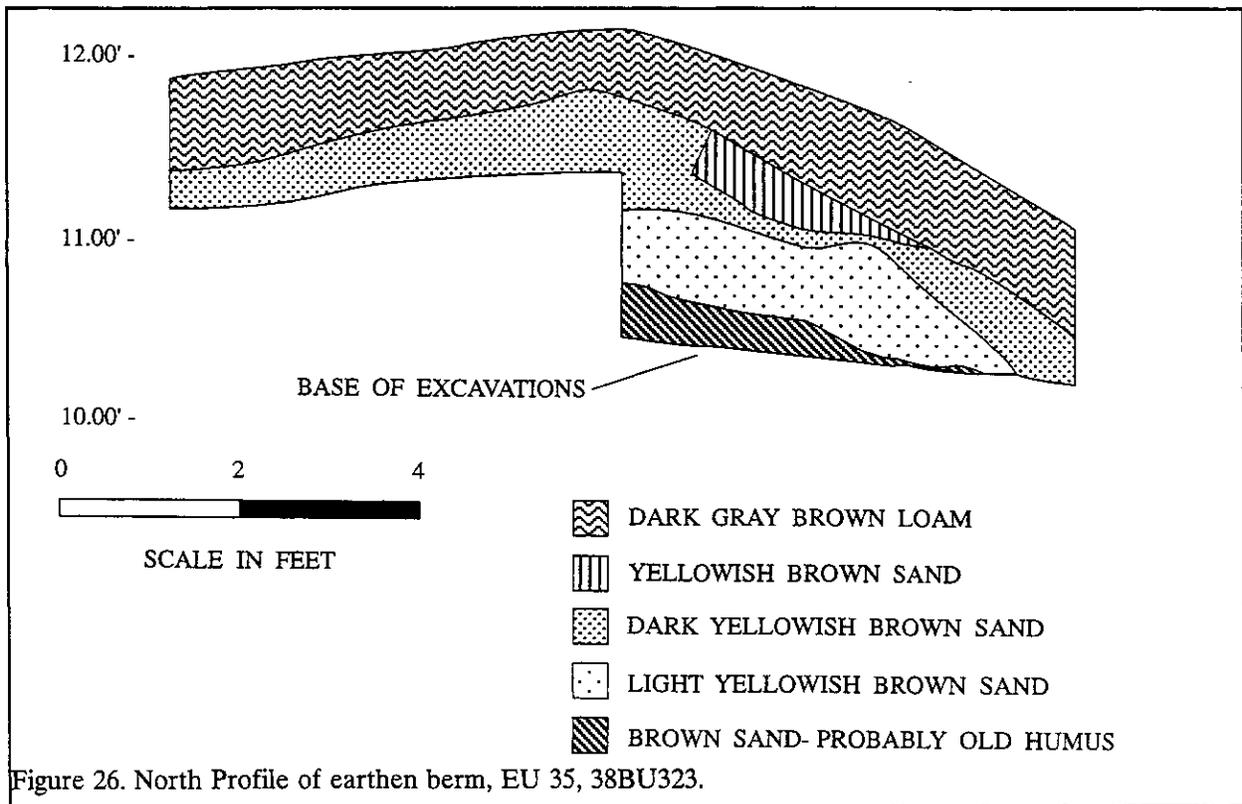


Figure 26. North Profile of earthen berm, EU 35, 38BU323.

EXCAVATIONS AT 38BU323 AND 38BU821

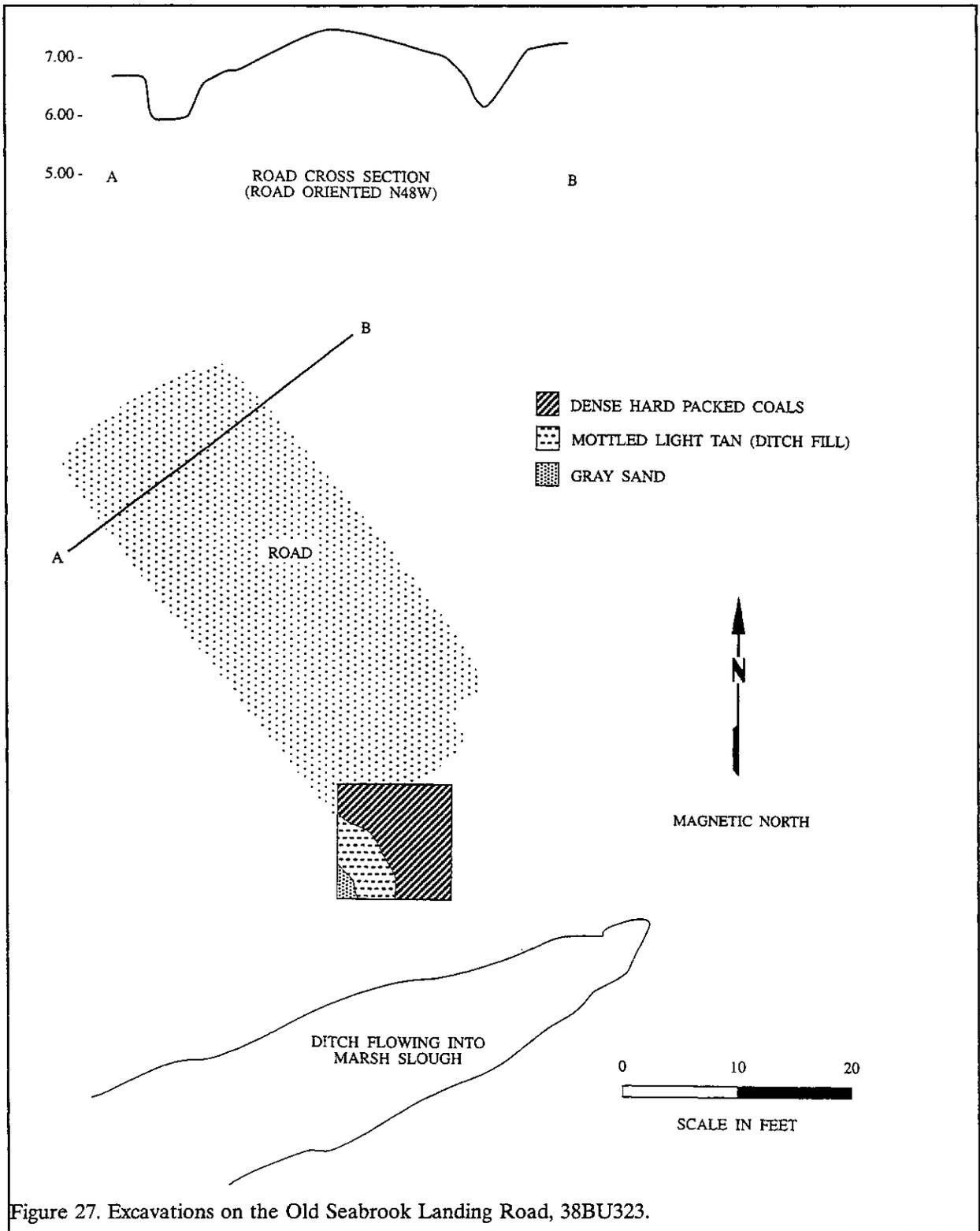
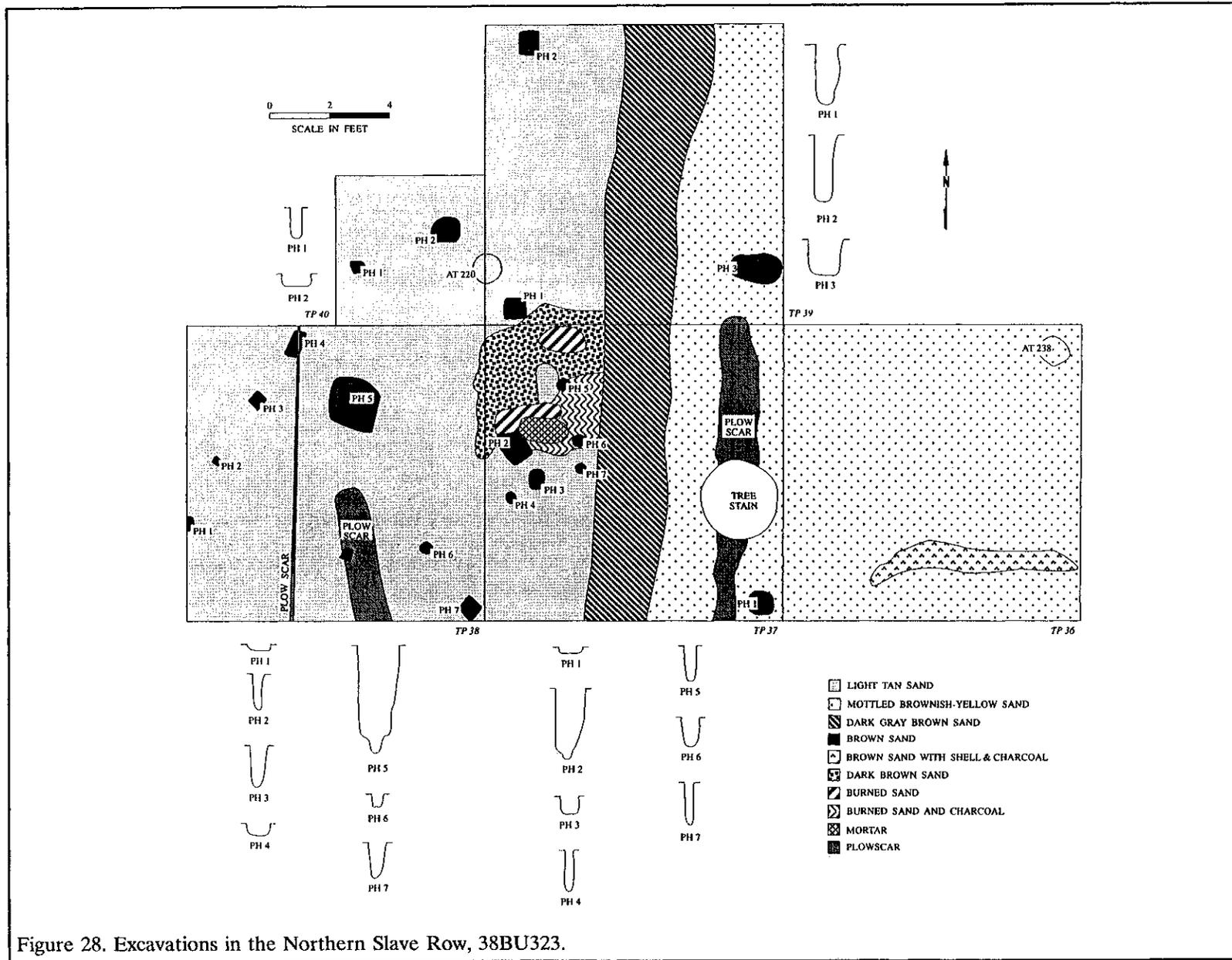


Figure 27. Excavations on the Old Seabrook Landing Road, 38BU323.



square feet was excavated (Figure 28). These excavations revealed two features including a drainage ditch and the remnants of a tabby hearth. In addition, a possible fenced area was uncovered as well as evidence for a structure possibly post dating the hearth feature.

The ditch feature (Feature 3) runs roughly grid north-south across two 10 foot units and measures about 3.4 feet wide and was about 1.0 foot deep (Figure 29). The feature contained large artifacts, suggesting that the ditch existed when the trash was deposited (as opposed to being deposited secondarily). However, the ditch appears to intrude into the hearth feature (Feature 4) which indicates that these structural remains are earlier. However, it is possible that the ditch was located immediately adjacent to the house, and erosion may have slightly undercut the chimney. Analysis of the artifacts from Features 3 and 4 will aid in determining sequence of events.

The hearth (Feature 4) was evidenced by

the presence of burnt sand and charcoal surrounding two remnant patches of tabby mortar. Charcoal remains and the surrounding matrix were collected for flotation. Several posts appeared to intrude into the feature including one containing both a post hole and a post mold. This post is in line with two similar posts. The small size of the post molds suggest that the structures were not substantial. However, two similar posts flanking the hearth feature stain suggests the possibility that the chimney could have been stick and clay. The third post in line with the other two is probably related since its configuration is nearly identical. There is also a large post in the front of the hearth, the function of which is unknown. Corner supports (perhaps made of tabby or wooden logs) for the house may have been set at grade. Subsequent clearing could have easily obliterated any evidence of them, leaving only the base of a tabby chimney after the area had been plowed. Excavation of one of the plowscars revealed no additional post holes and it was determined that the feature was, indeed, a plowscar.

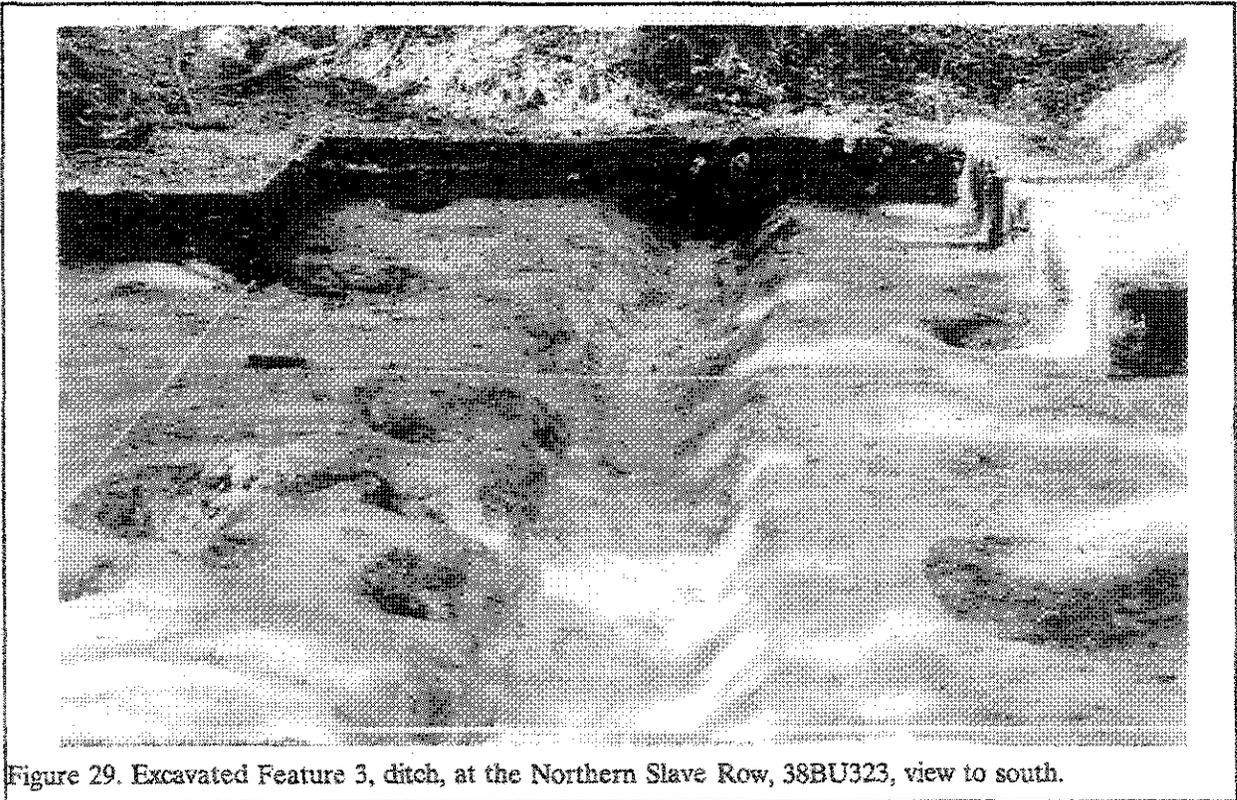


Figure 29. Excavated Feature 3, ditch, at the Northern Slave Row, 38BU323, view to south.

A possible fenced area was found west of the hearth area and consisted of small square, relatively shallow post stains. None of the additional posts were clearly associated with the hearth feature and probably all postdate the house since at least two of these small posts intrude into the hearth. One of the plowscars was excavated to determine if a post and trench foundation was present.

Artifacts in these investigations dated primarily to the mid nineteenth century. Based on these artifacts, it appears that this settlement was abandoned sometime in the bellum or early postbellum period, before the southern settlement was abandoned.

Southern Slave Row

Excavations at the Southern Slave Row included the areas originally defined during the survey as Middens 2, 3, and 4, and Area 10. Work consisted of shell midden, yard, and structural

excavations. Discussions will be divided into Structure 1 excavations, Structure 2 excavations, and other yard excavations.

At Structure 1, 475 square feet were used to examine structural features, while an additional 75 square feet were used to examine yard and midden areas associated with the house. Artifacts dated primarily to the mid-nineteenth century.

Excavations uncovered a structure raised up on posts measuring about 13 by 19 feet with the tabby chimney on the south gabled end (Figure 30 and 31). The chimney measured 5.8 feet wide by 3.9 feet deep, with the firebox opening measuring 4.1 feet wide by 2 feet deep. Subsoil inside of the structure was higher suggesting that the yard was swept. Just behind the chimney, yard excavations examined a very dense shell midden with few artifacts. This is unusual for a slave house, since middens at other slave settlements have evidenced large quantities of kitchen related artifacts and animal bone. Other yard excavations revealed that

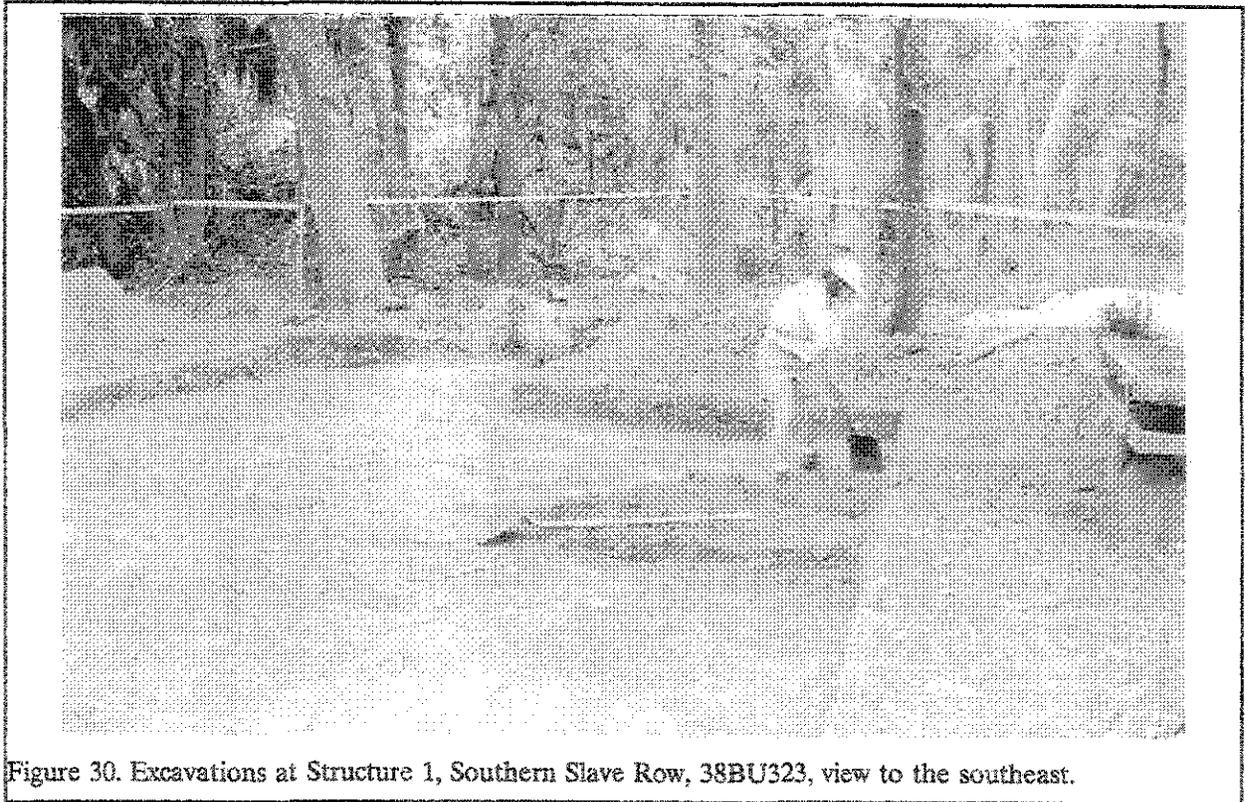


Figure 30. Excavations at Structure 1, Southern Slave Row, 38BU323, view to the southeast.

EXCAVATIONS AT 38BU323 AND 38BU821

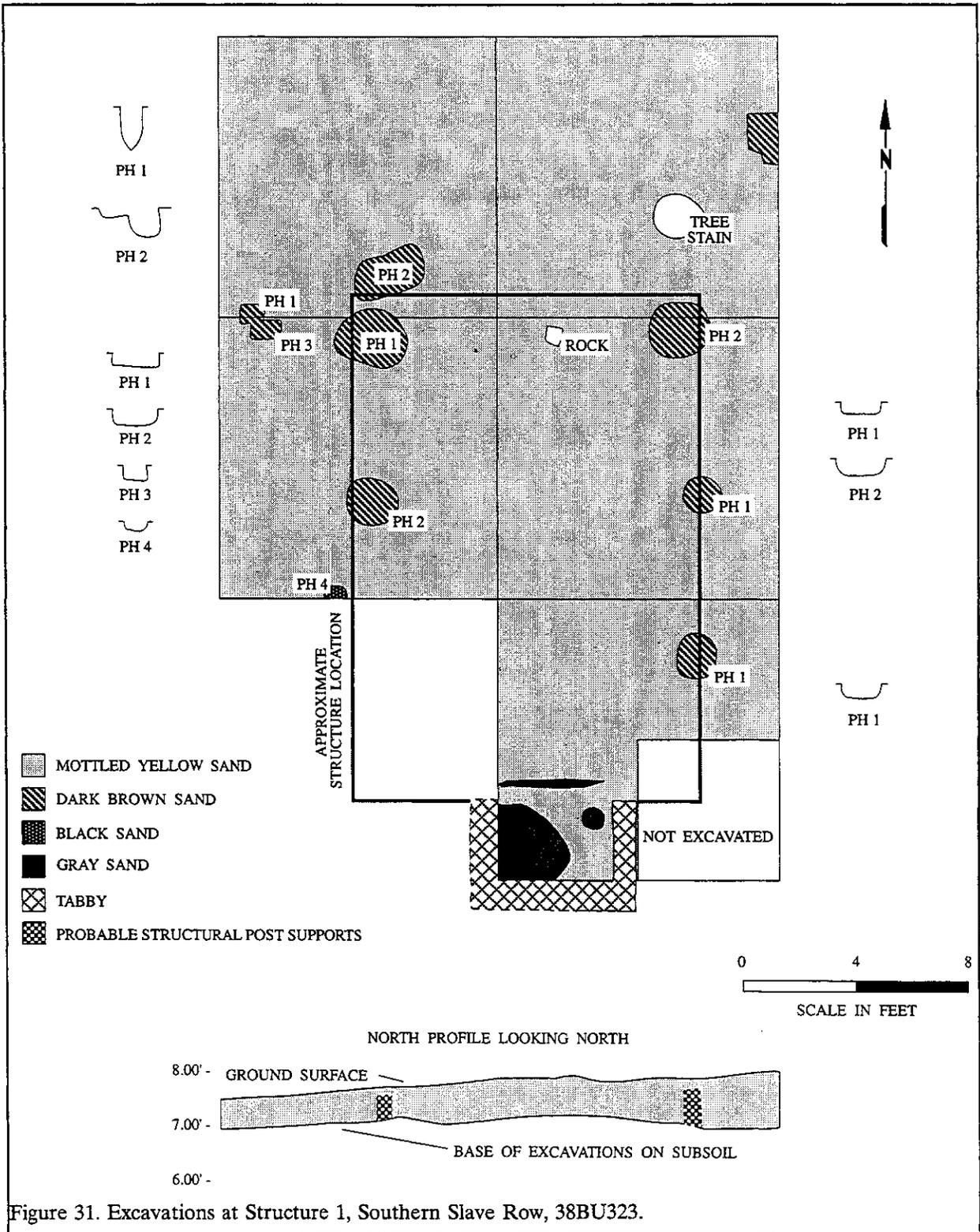


Figure 31. Excavations at Structure 1, Southern Slave Row, 38BU323.

artifact densities dropped off significantly further away from the structure.

At **Structure 2** 500 square feet were used to examine structural features, while an additional 200 square feet were used to examine yard areas associated with the house. Like Structure 1, artifacts dated primarily to the mid-nineteenth century although artifacts (such as manganese glass) suggest an occupation up to as late as the 1890s. An unusually large quantity of pencil leads were found at this structure, pointing out how strongly the Port Royal experiment may have affected the archaeological record.

These excavations uncovered a structure raised up on posts measuring 10 by 15 feet with the tabby chimney on the south gabled end (Figure 32). The chimney base (which had a large live oak tree growing out of its center) was six feet wide by 4.5 feet deep. No firebox dimensions were determinable. Excavations also found evidence of a small two foot wide porch or a fence line on the east side of the house. Fences were commonly used to set off slave settlements from the main house settlement as well as to enclose personal gardens and keep out animals.

Yard excavations (EU12) examined a shell midden near the structure. This midden was much like the one at Structure 1 which contained few artifacts. Other yard excavations near the structure (EU5) revealed five post holes which may be associated with some sort of outbuilding (Figure 33).

Other yard excavations consisted of 450 square feet excavated in various areas. One 5 by 10 foot unit (EU13) was placed in the vicinity of a looted midden (Midden 4) which was originally believed to have been deposited by military troops (Figure 34). Excavations retrieved few military related artifacts. In fact, artifacts date primarily to the postbellum period. It is likely that this midden belongs to a nearby house not identified in the survey.

Four other ten foot units were placed north and east of Structure 2 (EUs 2, 3, 4, and 6). However, they were far enough away that they are

quite likely to be associated with either other structures or represent a mixing of artifacts from two or more structures. Artifacts in these units dated primarily to the mid nineteenth century. All of these units contained extensive plow scarring as well as isolated post holes and artifact density was relatively low.

Summary

The excavations implemented at 38BU323 changed somewhat from those originally proposed. These changes were due primarily to the close interval auger testing which allowed us to get a better grasp on the features that were visible to us during the survey as well as to identify new areas of interest. As a result, these changes were not detrimental to the project, but rather allowed us to maximize our time and our interpretive ability.

These excavations focussed on three areas: the main house complex, the southern slave row, and the northern slave row. Auger testing and metal detection at the main house complex allowed us to determine the location of structural remains and features. Two block excavations were opened which examined a utilitarian building and a bellum/postbellum well. The utilitarian structure contained a continuous brick foundation with a probable wooden superstructure. A mortar floor was found approximately 1.0 foot below the level of the surrounding subsoil. Artifacts at the structure did not reflect a domestic occupation, but rather reflected a storage function (perhaps a commissary).

The second block excavation uncovered a well which was lined below the water table with planks associated with wooden posts. This method would allow water to seep in from the sides. Evidence for lining above the water table is lacking, but it is possible that a wooden barrel was used which totally deteriorated over time. Alternatively, the well may have been lined with vertical planks which could be easily replaced when they rotted. Artifacts in the well were primarily structural, suggesting that when buildings were dismantled, structural refuse was thrown down the well. The artifacts date to the bellum/postbellum period.

EXCAVATIONS AT 38BU323 AND 38BU821

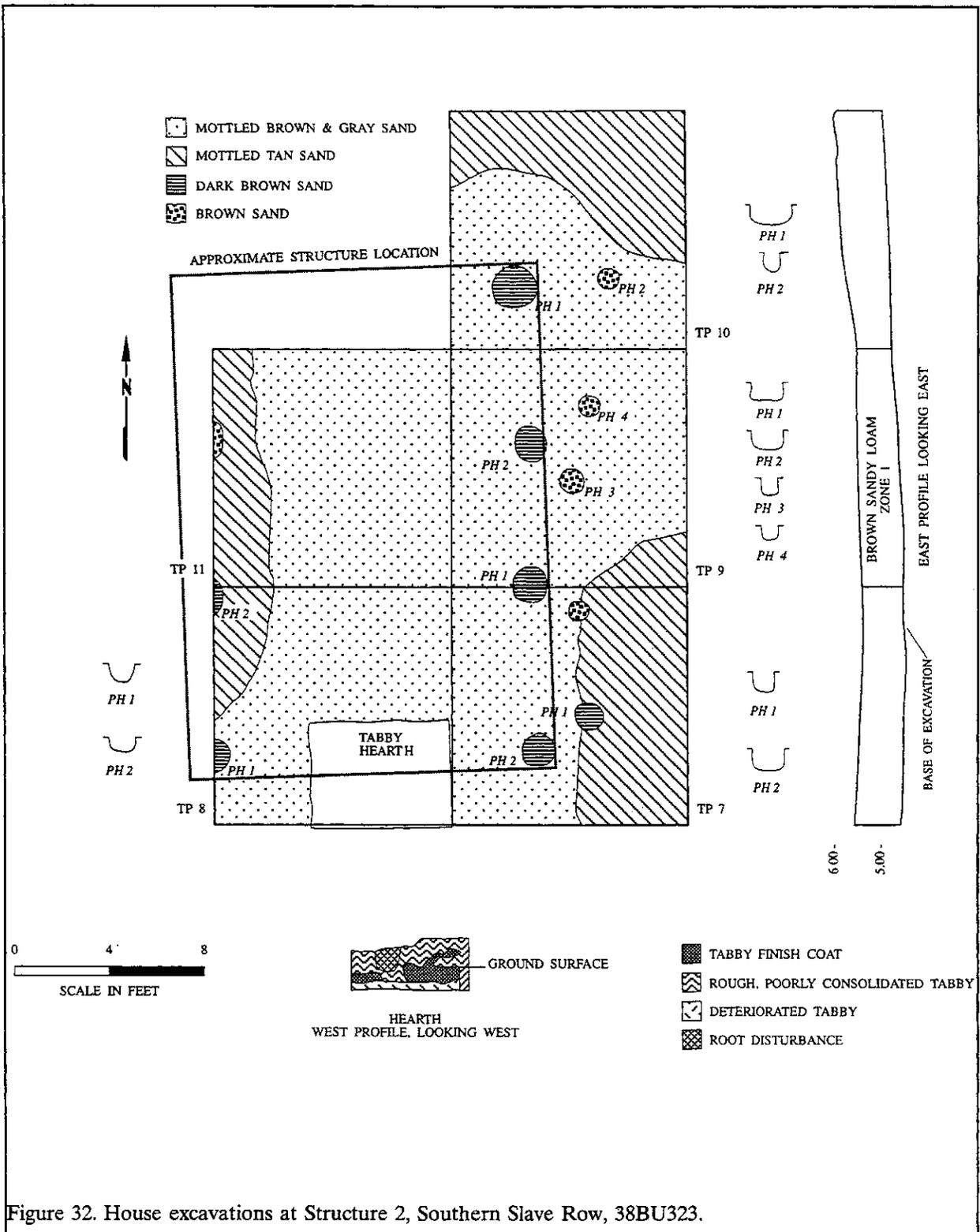


Figure 32. House excavations at Structure 2, Southern Slave Row, 38BU323.

THE PLANTATION LANDSCAPE

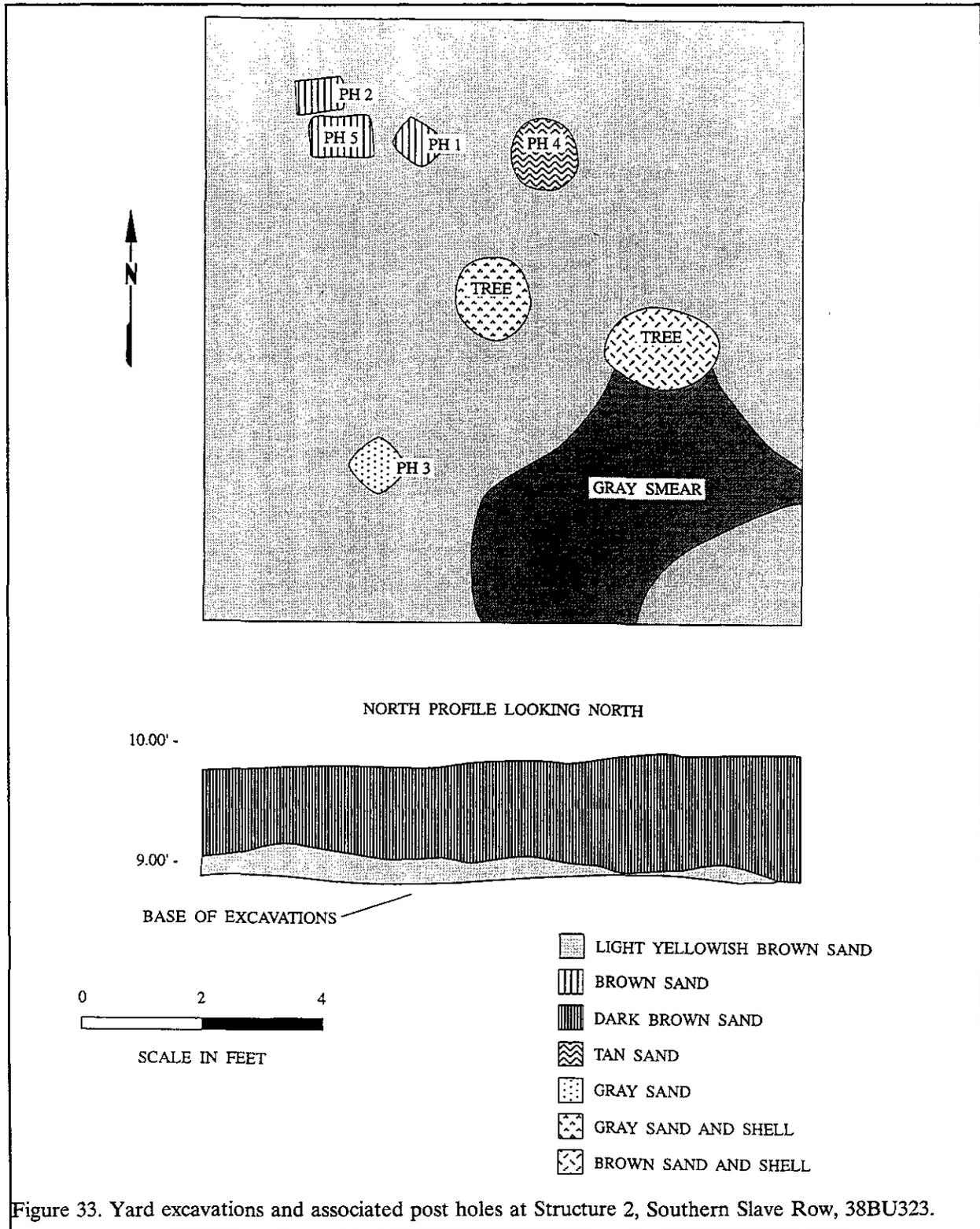


Figure 33. Yard excavations and associated post holes at Structure 2, Southern Slave Row, 38BU323.

EXCAVATIONS AT 38BU323 AND 38BU821

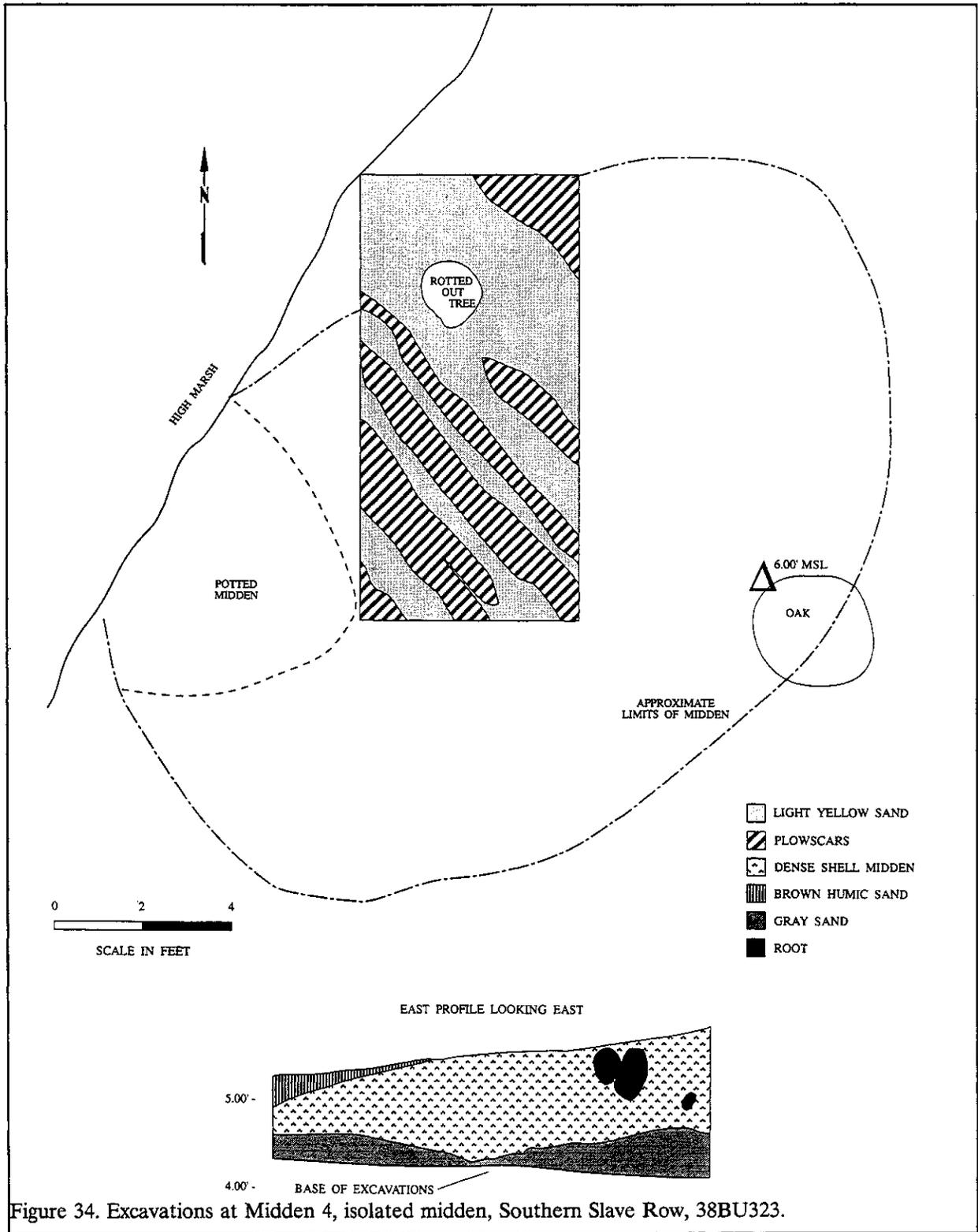


Figure 34. Excavations at Midden 4, isolated midden, Southern Slave Row, 38BU323.

THE PLANTATION LANDSCAPE

Other excavations in the main house complex focussed on landscape features, the disarticulated eroding tabby wall fragment, and an artifact concentration.

At the southern slave row, two structures were examined. Both had gabled end tabby chimneys and were supported on wooden posts. The structures measured 10 by 15 feet and 13 by 19 feet in size. Adjacent shell middens were examined which contained few kitchen related artifacts such as ceramics, bottle glass, and animal bone. This is unusual for slave middens which normally contain abundant kitchen related garbage. Artifacts dated to the mid-nineteenth century, with some dating perhaps to the end of the nineteenth century.

Excavations in the northern slave row, revealed intensive use of the area. The basal remnants of a tabby hearth were uncovered associated with a structure which appears to have been abandoned some time in the third quarter of the nineteenth century. Evidence of a fenced area such as an animal pen was also found in the western portion of the excavations. This pen appears to post date the house. No foundation posts associated with the hearth feature were identified, which suggest that they were set at grade.

38BU821

Archaeological investigations were begun at 38BU821 by a crew of five on October 17, 1994 through October 21, 1994. A total of 142.4 person hours were spent at the site resulting in the excavation of 275 square feet or 215 cubic feet. As a result 1122 pounds of shell were recovered. An additional 25 person hours were spent in the field laboratory processing artifacts.

Auger Testing

The entire site was subjected to 10 foot interval auger testing (Figure 35). Density maps for artifacts and shell are provided in Figures 36 and 37 which revealed that the shell was diffused, perhaps by plowing. In addition, artifacts were sparse and isolated. As a result, one concentration

in a clearly non-midden area was selected for excavation.

Block Excavations

Two contiguous ten foot squares were placed in this area revealing only a few posts with no clear indication of a structure (Figure 38). Artifacts were very sparse in these units, suggesting that if this area represented a "concentration" of artifacts that very few remains would be found throughout the site. As a result, a ten foot unit was placed intuitively north of these excavations adjacent to the tidal creek (Figure 39).

Here, shell was somewhat denser, (see Table 1) but artifact quantities remained low. At the base of excavations, a "pot bust" was encountered along and into the south profile. Some of the sherds were quite large, suggesting that this area of the site was undisturbed. The pot bust consisted of a St. Catherine's Cord Marked vessel. Beneath the "pot bust" was a post hole.

Unit	Weight in lbs.
EU1	299
EU2	342
EU3	481
Total	1122

Summary

The investigations at 38BU821 indicated a disturbed mixed context site with a broad scatter of shell and few artifacts. No structural remains (beyond isolated post holes) were encountered and no shell pits or steaming pits were located (although a shell pit was examined in the ditch profile during the survey). This suggests that the primary function of the site was a staging ground for shellfishing and processing.

The auger testing at 10 foot intervals provided little assistance towards the placement of units at the site. However, if the site had been undisturbed it is likely that individual middens and artifact concentrations could have been recognized.

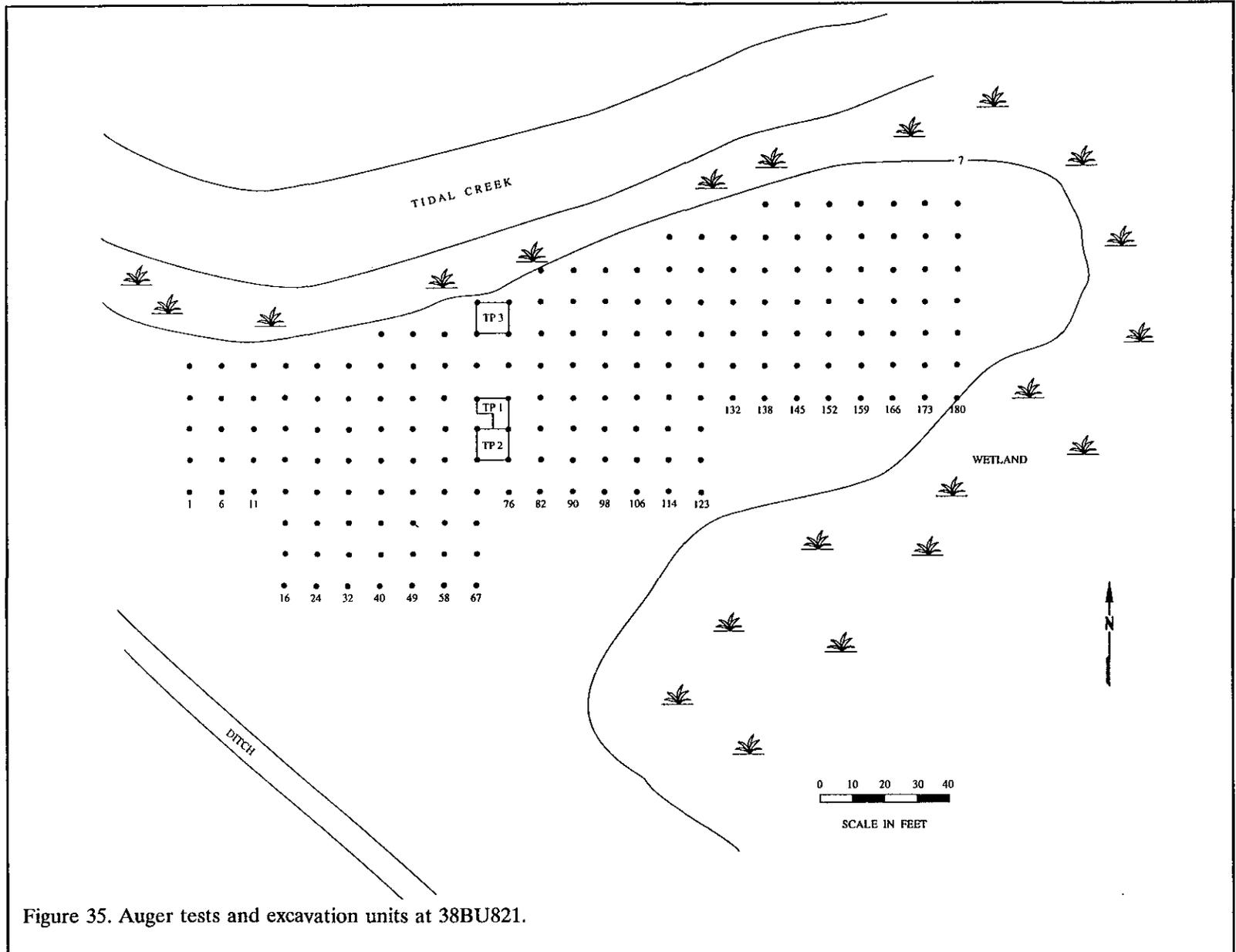


Figure 35. Auger tests and excavation units at 38BU821.

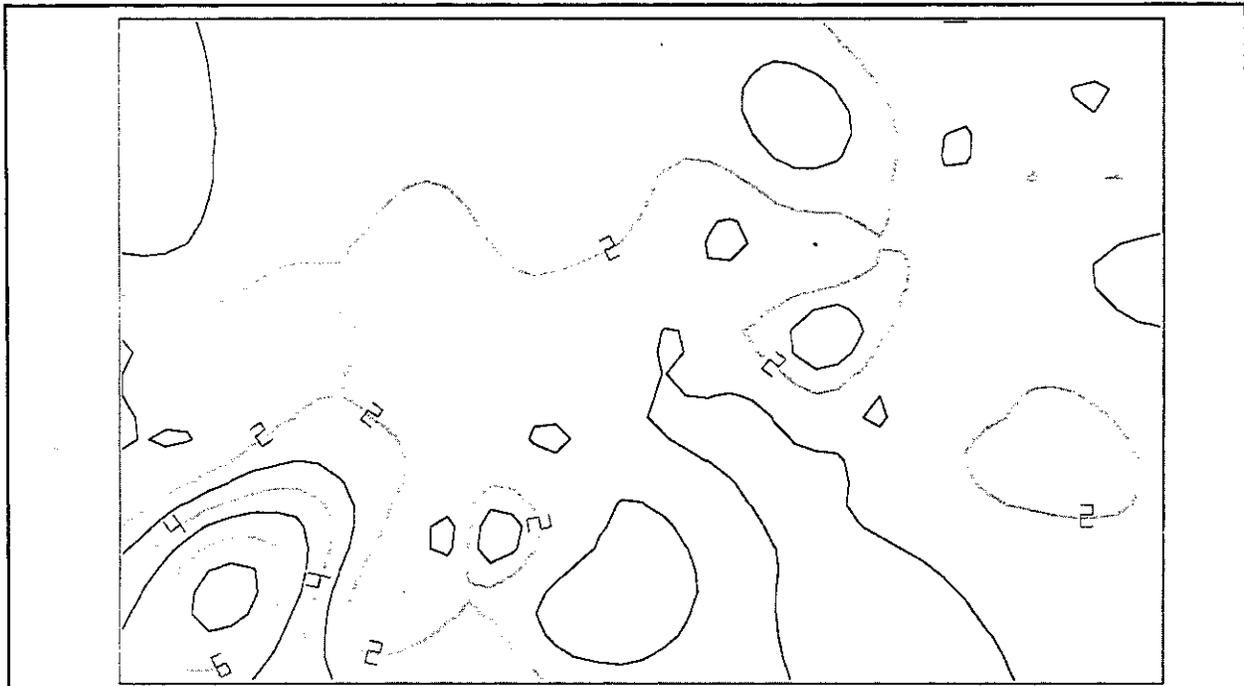


Figure 36. Prehistoric artifact density from auger testing at 38BU821.

Contour Interval 1

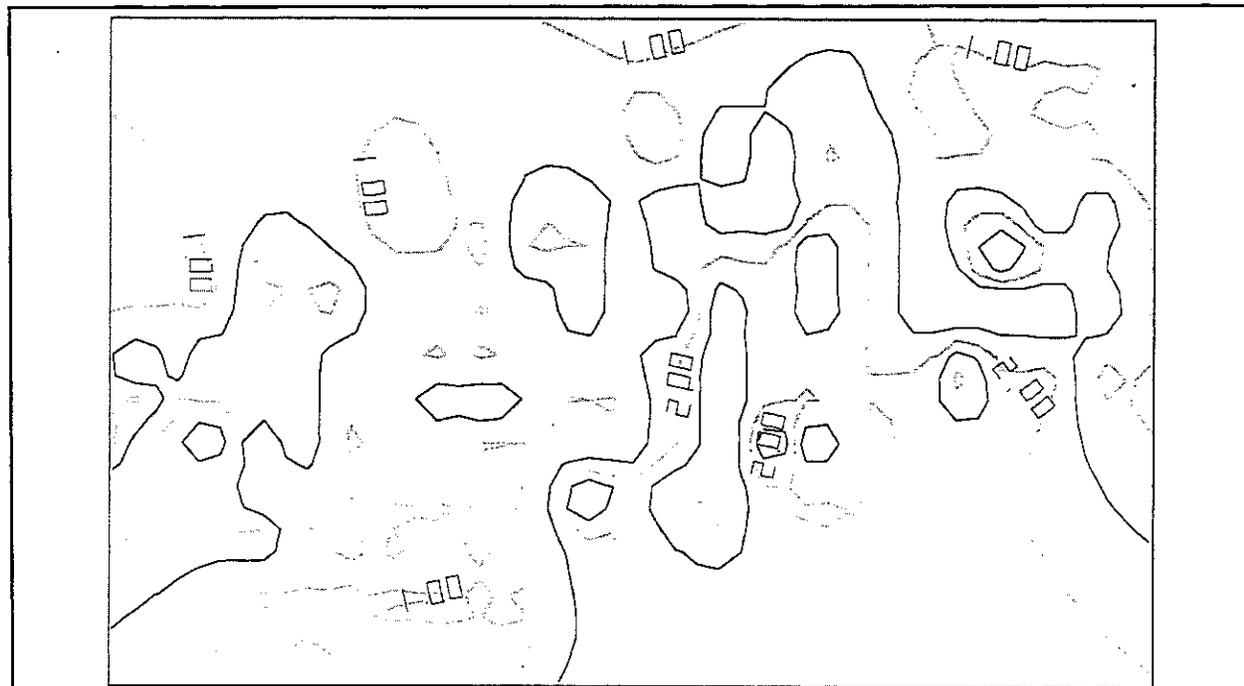


Figure 37. Shell density from auger testing at 38BU821.

Contour Interval .5

EXCAVATIONS AT 38BU323 AND 38BU821

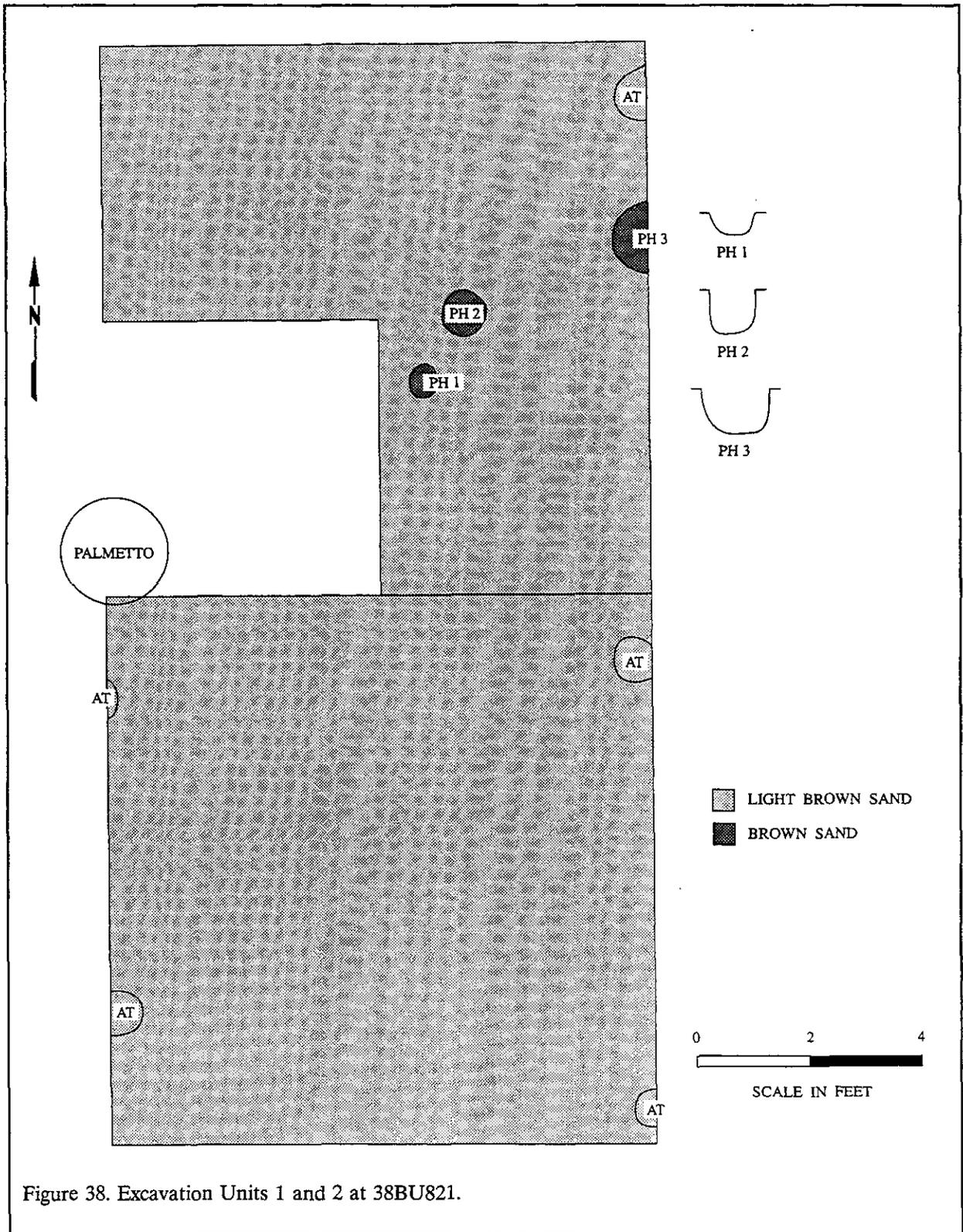


Figure 38. Excavation Units 1 and 2 at 38BU821.

THE PLANTATION LANDSCAPE

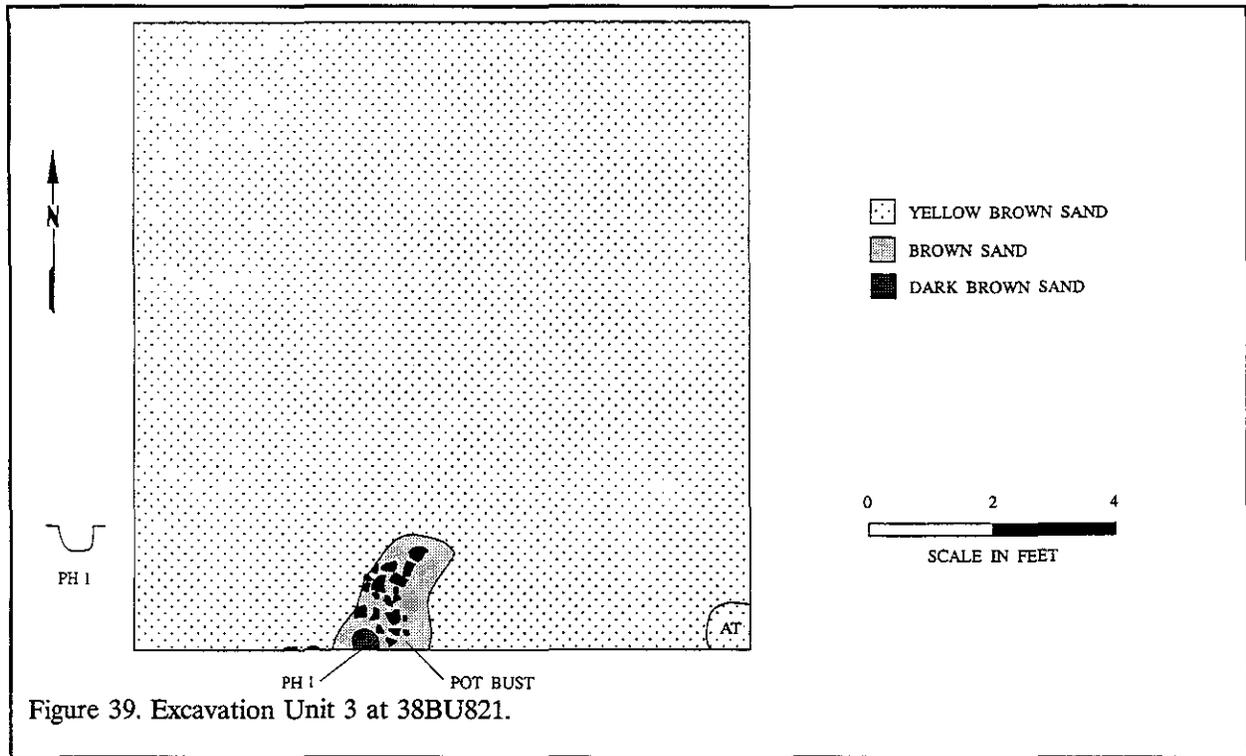


Figure 39. Excavation Unit 3 at 38BU821.

ARTIFACT ANALYSES FOR SEABROOK PLANTATION

Rachel Campo

Introduction

This section is intended to provide an overview of the material culture present at Seabrook Plantation. Because the excavations were conducted in blocks at specific areas of the plantation, such as Main House area and slave rows, these artifact discussions will also be arranged in this way. A general overview of the recovered artifacts, mean ceramic dating, artifact pattern analysis, exploration of status indicators, and the artifacts' contribution to understandings of architectural and feature reconstruction will be discussed for each block excavation. A summary at the conclusion of this section will draw together the different areas at Seabrook Plantation and offer more generalized observations about lifestyles and occupation at Seabrook. The excavations at Seabrook Plantation (38BU323) have produced 25,952 historic period artifacts. All of these remains are attributable to those living at Seabrook Plantation or to the Civil War and Reconstruction era occupation of the area.

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 below in a discussion of landscape features.

Laboratory Processing, Conservation, and Analysis

The cleaning of artifacts was conducted on rain days during excavations and in the Chicora office in Columbia after the conclusion of the excavations. Cataloging of the specimens was conducted from late 1994 to early 1995. The analysis of the specimens was conducted as part of the current project, during early 1995. Conservation treatments have been conducted by

Chicora personnel at the Columbia laboratory intermittently from 1995 through 1998.

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 were 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% w/v) and tannic (20% w/v) 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 1995.1 using that institution's accessioning practices (ARCH 3476 through ARCH 3698). Specimens were packed in plastic bags and boxed. All material will be delivered to the curatorial facility at the completion of the conservation treatments.

Analysis of the collections followed professionally accepted standards with a level of intensity suitable to the quantity and quality of the remains. Prehistoric pottery was so uncommon at the excavations for Seabrook Plantation that it is not included in this study.

Historic artifacts recovered from the 38BU323 excavations will be discussed using South's (1977) artifact groups (e.g., kitchen, architecture, etc.) since such an approach allows for the quantification, discussion, and comparison of artifacts in a broad functional framework. Although this system has been criticized for problems in sample comparability (see, for example, Joseph 1989), this approach is appropriate for the Seabrook Plantation collection as it allows for comparisons between both different areas of Seabrook, and other Hilton Head Island plantations.

Several modifications of South's original classificatory scheme, will be used in this analysis. First, following the lead of Garrow (1982b:57-66), the very small amount of recovered Colono wares will be discussed with (and tabulated in) the Kitchen Artifact Group. In addition, because of the documented Civil War occupation of 38BU323, we have decided to include military buttons, percussion caps, and minie balls in the activities category. Although it is possible that other artifacts (such as ale bottle glass and some ceramics) were associated with the military occupation, these can not be clearly attributed to the Civil War occupation. It is also likely that military artifacts excavated from slave areas of the plantation represent the appropriation of military artifacts by slaves for use in their homes after they were discarded, lost, or left behind by the military. However, these artifacts have been set aside in the military category to highlight the occupation of

Seabrook by military personnel and the use of military items by non-military persons.

In addition to using South's pattern analysis, this study also utilizes the minimum vessel count as a prerequisite for the application of Miller's cost indices. In order to calculate the number of minimum vessels, all ceramics from a particular analytic unit are grouped by ware, type, and variety, and all possible mends are made. After this point, body sherds are considered residual and are not further considered. Rim sherds that fail to provide mends are examined for matches in design, rim form, colors, and other attributes that would indicate matches with other previously defined vessels. Rim sherds that fail to provide matches to either mended vessels or other rims are counted as additional vessels. The minimum number of vessel count provides a relatively conservative count of vessels from a site.

Glass artifacts were also examined to provide a minimum number of vessels based on the number of vessel bases in an assemblage. Vessel bases were also examined for possible mends and matches. Those glass artifacts that exhibited different colors and/or forms from counted bases were designated as separate vessels or containers.

Two methods were used to determine the occupation span of the various excavation areas at Seabrook Plantation. The first method is South's (1977) bracketing technique in which a time line is created based on the manufacturing span of the various ceramics. Brackets are placed on the left and right side of the timeline, denoting the span of occupation. The left bracket is placed by determining where at least half of the ceramic manufacture dates occur at the same time period. As an alteration to South's technique, the left bar is placed at the earliest ending manufacture date of a ceramic if this ceramic type does not coincide or overlap with the other ceramic manufacture dates. The right bar is placed far enough to the right to at least touch the beginning date of the latest ceramic.

Since South's method only uses ceramic types to determine approximate period of occupation, Slawwen and Bridges (1977) argue that

ceramic types which have high counts are poorly represented in the ceramic assemblage. Due to the validity of this complaint, a second method was also used to determine occupation spans. This second method is a ceramic probability contribution chart. Albert Barovics (1981) advocates the calculation of probability distributions for ceramic types within an assemblage. Using this technique, an approximation of the probability of a ceramic type contribution to the site's occupation is derived. The formula is expressed:

$$P_j/\text{yr.} = f_j/F \times D_j \text{ where}$$

P_j = partial probability contribution
 f_j = number of sherds in type j
 F = number of sherds in sample
 D_j = duration in range of years

The reader will also note that both metric and English units of measurement have been used in the analysis. We recognize that this departure from consistency may be troubling, and may require some conversion back and forth. We have, however, tried to ensure an internal consistency. Where the artifact was likely described by its maker or used in English measurements, these have been retained. The only exception to this is when there has been extensive research on the artifact class which uses metric measures. When the maker or user of the object probably had no reason to refer to a specific measurement (such as the length or diameter of a pencil), we have used metric units.

In the following discussions, the first time a particular artifact type, or class, is encountered it will be discussed in greater detail than when it is found in subsequent contexts. While this may cause some difficulty for those interested in only one particular area of the site, it will reduce the sheer volume of text and repetition of information, and will make these discussions flow in a more readable fashion.

Landscape Features as Artifacts

Landscape features include the location of structures, yard areas, distribution of yard trash, and the location of walkways. One of the

documents pertaining to the landscape of Seabrook Plantation is the 1862 Geodetic Map which shows the plantation buildings and Seabrook Landing. Another document which demonstrates the landscape of Seabrook Plantation is an engraving of the plantation in an 1862 edition of *Frank Leslie's Illustrated Newspaper*.

The 1862 map shows (Figure 9 in **Historical Synopsis of Seabrook Plantation**) what appears to be fences running along the front of the Main House Complex enclosing five buildings, including the Main House itself, while two more buildings, one of which was probably associated with the landing, appear to be enclosed in a fenced area adjacent to the Main House and closer to the dock. The 1862 engraving also shows the Main House and approximately five structures enclosed in a fence. However, in the engraving, the second fenced area does not appear to enclose any buildings visible from this vantage point and at least three buildings are situated outside of the fenced area. The 1862 map shows at least three buildings in the vicinity of the dock.

On the 1862 map, what appears to be a road ran east of the Main House (to the rear of the house) and connected to the Old Seabrook Landing Road that ran to the dock. Two other buildings occur to the east of the road running behind (to the east of) the Main House. An additional three buildings are located north of the Main House Complex, seemingly outside of the fence, according to the map.

What are assumed to be two slave rows, one adjacent to the Main House and north of the old Seabrook Landing Road, and one to the south of the old Seabrook Landing Road, adjacent to the marsh are also shown on the 1862 map. The slave row adjacent to the Main House, referred to here as the Northern Slave Row, contained five structures in 1862 and was approximately 200 feet from the Main House. A manmade berm/earthworks passed to the north of this row and perhaps functioned as a boundary marker. The configuration of this slave row is a straight row parallel to the berm and perpendicular to the Main House Complex.

The second slave row, referred to as the Southern Slave Row, was situated near the marsh, approximately 400 feet from the Main House and 500 feet from the dock, in a seemingly isolated position. Unlike the Northern Slave Row, the Southern Slave Row, as seen in the 1862 map, was not aligned in an straight row, but instead was a loosely arranged group of eight houses or structures. These houses sat to the south of the old Seabrook Landing Road.

Maps and plats of many plantations in the South Carolina low country, and in other parts of the country, exhibit the placement of slave housing in single or double, parallel rows (Hacker and Trinkley 1992). At Beaufort County plantations, the number of structures in a row ranges from as few as three structures to as many as 11 (Hacker and Trinkley 1992).

At nearby Cotton Hope Plantation, located "next-door" to Seabrook Plantation, a double parallel row of 11 slave structures, oriented north-south, was situated east of the Main House, shown on an 1862 map (Trinkley 1990b:29). An additional single slave row (38BU96) dating to the late eighteenth century was identified through testing and excavation (Trinkley 1990b:56). This slave row, situated north of the Main House area at Cotton Hope Plantation, was oriented north-south and sat adjacent to Skull Creek.

The Northern Slave Row at Seabrook and the double slave row that appears on the Cotton Hope 1862 geodetic map (Trinkley 1990b:29) show similarities in orientation and placement on the plantation landscape. Both of these slave rows run north-south and both are situated to the east of the main houses, far from Skull Creek, while both main houses sit closer to Skull Creek. This placement is different from both the Southern Slave Row at Seabrook and the partially excavated single slave row (38BU96) at Cotton Hope in that both of these rows are situated adjacent to Skull Creek.

Other plantations in Beaufort County dating to the nineteenth century show slave housing placed in various locations on the plantation landscape. Only a few of the

plantations in Beaufort County are mentioned here for comparative purposes.

At Stoney/Baynard Plantation, located in the southwest area of Hilton Head Island, a double parallel slave row of 17 structures was situated to the northeast of the main house and is oriented to the nearby marsh frontage, as is shown on an 1859-1860 map, but does not sit close to the marsh (Adams et al. 1995:20-22).

On the east side of Spring Island, located between the Colleton and Chechessee Rivers, Edwards Plantation show evidence of two slave rows, one placed near the Main House, and one situated away from Main House (Trinkley 1990a:70). The slave row closest to the house contains 10 structures in a double parallel row, and sat to the northeast of the Main House (Trinkley 1990a:70). A second slave row sat to the southeast of the Main House, adjacent to the marsh in a curvilinear pattern that followed the contour of the marsh and consisted of eight structures (Trinkley 1990a:70).

At Fish Hall Plantation on Hilton Head Island, an 1861 map and an 1862 photograph show a double parallel slave row, with a total of 13 slave houses, situated on an entrance road to the Main House (Trinkley 1989b:17-23).

On Daufuskie Island, an 1838 map shows Haig Point Plantation with a Main House and a single slave row of nine structures situated north of the Main House (Trinkley 1989a:50). This row follows the curve of the landscape, and sat adjacent to the marsh. An 1859-1860 map of the same plantation, purchased by this time by another owner, shows six slave structures, rather than nine, in the same location (Trinkley 1989a:50-52).

Of this small sample of plantation landscapes, we can see that each plantation differed somewhat in the arrangement of slave rows. Two of these plantations had rows that were adapted to the curving of the marsh, as did Seabrook's Southern Slave Row. Perhaps these curved, somewhat isolated rows represent groups of artisan slaves, rather than field or house slaves.

In this small sample, double rows of slave housing were more common than single rows, although Hacker and Trinkley's cartographic research (1992) demonstrates that out of 26 rows of structures, 15 are single rows. This suggests that in Beaufort County, single slave rows were more common than double slave rows.

Seabrook Landing, as mentioned in the **Historical Synopsis of Seabrook Plantation**, was also an important water route and docking area at Hilton Head Island in the antebellum and postbellum. Available documentary sources show the dock in a "T" shape configuration. The old Seabrook Landing Road appears to have run straight to the dock, past the Southern Slave Row.

Both historical documents, as discussed in the **Historical Synopsis of Seabrook Plantation**, and archaeological remnants contribute to an understanding of the landscape of Seabrook Plantation. The specific architectural remnants of the plantation buildings have been discussed in great detail in **Excavations at 38BU323 and 38BU821**, and are only briefly reviewed here.

Much of the area at Seabrook Plantation has eroded into the marsh and Skull Creek, as evidenced by the amount of brick and tabby material found on the beach during archaeological surveys. The surveys by Trinkley and Michie note that 20-50 feet of the plantation area has eroded, and as historical documents demonstrate, many of the buildings, especially in the vicinity of the Main House Complex, would now be in the marsh adjacent to Skull Creek.

Excavations at the area of the Main House Complex, which would have included those buildings enclosed in the fenced areas and those immediately outside of it, revealed the presence of a number of architectural features and remnants.

First, Block 1 excavations revealed a continuous brick foundation, which probably represents a utilitarian building with a simple wooden superstructure. This block also revealed Feature 1, a builder's trench, and a posthole.

Second, Block 2 excavations revealed the

presence of a well and well construction pit, in addition to a portion of an intact tabby foundation, and various postholes. Third, Units 25 and 28 were placed in areas presumed to be in the vicinity of the Main House. Unit 25 revealed three postholes that do not appear to have any specific configuration. Unit 28 had a high rubble density and four postholes, one of which was quite substantial in size. And fourth, Unit 35 was placed on top of the berm that may have served as a boundary marker in the antebellum and postbellum. This area appears to have been built up by hand. A unit was also placed in the old Seabrook Landing Road bed, which helped determine the road's location.

Excavation units were placed in the areas of two slave rows, revealing the presence of structures at both the Northern Slave Row and the Southern Slave Row.

The Northern Slave Row, closest to the Main House, revealed a number of features, such as a number of postholes, but no standing architectural remnants. Archaeologists frequently find miscellaneous postholes on historic sites that do not occur in a regular manner, and do not appear to represent structures.

A few tentative interpretations can be made regarding the numerous postholes at the Northern Slave Row excavations. Four postholes, similar in size and shape and larger than other postholes, may represent the remains of a structure (see Figure 28). The other various postholes may represent adaptations of a building over time, and re-use of the space after the occupants moved out, perhaps by the Union army. Possibly, the slave structures were dismantled by Union soldiers during their occupation of Seabrook, and other temporary structures were put up in this space. Artifacts recovered from these excavations include a high percentage of domestic artifacts, suggesting that a structure was located in this area. Alternatively, these postholes may represent outbuildings that were common on plantations, but often leave little or no evidence of their existence, such as animal pens, fences, chicken houses, dovecotes, and toolsheds.

In the Southern Slave Row, located south of the Main House and Seabrook Landing, two structures, a yard midden associated with Structure 1, an isolated midden (Midden 4), and a yard area were excavated.

Both structures were raised on posts and had tabby chimneys on the southern gabled ends of the structures. Structure 1 measured 13 by 19 feet, providing 247 square feet of living floor space, while Structure 2 measured 10 by 15 feet, providing 150 square feet of living floor space.

The floor space in the Southern Slave Row structures is comparable to floor space of many excavated eighteenth century slave houses (Ferguson 1992:73). The average room size mentioned by Ferguson (1992:73), from a sample of 20 slave houses, is 209 square feet, which Ferguson notes is close to the 10 by 10 foot size house considered to be the West African norm for housing.

Research by Hamer and Trinkley (1989) demonstrates that sea island slave structures, visible in photographs taken after 1861, were small wood-framed structures that ranged from 277 to 320 square feet. At the freedmen village at Mitchelville, the mean floor area is 216 square feet (Hamer and Trinkley 1989:15). As noted by Hamer and Trinkley (1989:15), the Mitchelville structures are considerably smaller than other nineteenth century slave houses reported by Wheaton et al. (1983:205-206).

The remains of the Southern Slave Row structures show a considerable difference in square footage. Structure 1, with 247 square feet, had noticeably more space than Structure 2, with 150 square feet. However, when compared to other slave and freedmen housing in the Beaufort area, both Structure 1 and Structure 2 fall in the range of sizes for slave and freedmen structures (Table 2). The mean square footage of the slave/freedmen houses in Table 2 is 207.7 square

Table 2.
Average width/length ratios of African-American Houses

Structure	w/l Ratio	Source
Euro-American	1.00	Deetz 1977:149-150; Kniffen 1965:565
Freed Slave, comparative lit.	0.96	Wheaton et al. 1983:209
Slave, comparative lit.	0.76	Wheaton et al. 1983:209
Slave, mean Vaughan/Curriboo	0.72	Wheaton et al. 1983:209
Cotton Hope, slave	0.87	Trinkley 1990:51
Mitchelville Freedmen	0.66	Hamer and Trinkley 1989:17
Seabrook, Structure 1	0.68	
Seabrook, Structure 2	0.66	

feet, similar to Ferguson's average and Hamer and Trinkley's average for Mitchelville housing.

The appearance of nineteenth century slave structures and freedmen structures is also addressed by Hamer and Trinkley (1989:8-9; 1997:12-16, 23-25). Photographs show that houses were both square and rectangular, and most had one or two windows, usually covered with shutters, and glass was uncommon. Wooden shingles and boards were used as roofing and chimneys were made of brick or tabby. Similarly, Morgan's research (cited by Hamer and Trinkley 1997:13) of newspaper ads and plats in South Carolina demonstrates that slave structures were described as "framed" or "boarded."

At Mitchelville, houses constructed by the freedmen also varied between rectangular and square shapes, with the shotgun style house appears clearly in photographs (Hamer and Trinkley 1989:11; 1997:23). Shotgun houses are usually two to three rooms long and one room wide. Mitchelville houses had window panes, and tar paper, shingled, or boarded roofs. Iron stovepipe chimneys are also noted in the photographs.

Hamer and Trinkley have suggested that comparing the width to length ratios of structures, rather than shapes of structures, "may provide better cultural insight since the shape of the structure is largely dependent on the builder's mental template" (1989:15). This approach was also used by Wheaton et al. (1983: 209), and discussed for Euro-American housing by Deetz (1977:149-150) and Kniffen (1965). Table 2

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compares the mean of width to length ratios of slave and freedmen structures with those from the Southern Slave Row, as adapted from Hamer and Trinkley 1989:17). Similar to the houses at Mitchelville, Seabrook's Southern Row structures are more rectangular than other slave dwellings. Hamer and Trinkley (1989:16) suggest that the freedmen at Mitchelville chose to build rectangular rather than square houses. The width/length ratios of Seabrook's Southern Row structures may indicate that these slaves may have built their own houses.

Researchers have suggested that most slaves undertook a variety of tasks outdoors, near their homes, rather than inside (Ferguson 1992:69-71; Joyner 1984:118-119) Photographs confirm this suggestion, as Hamer and Trinkley (1989:9) note residents working in yards, washing clothes, and cooking. The yards in these photographs are hard packed, with very little vegetation and some had vertical board or stick fences (Hamer and Trinkley 1989:9). Evidence from the Southern Slave Row structures suggests that these yards were also kept swept. Based on comparisons with other slave dwellings, it is likely that both Structure 1 and 2 were used by single families, rather than double penned houses.

Other landscape features important to the plantation landscape were investigated during excavations at Seabrook, such as the old Seabrook Landing Road, mentioned above. At the time of excavations, remnants of Seabrook Landing were

still visible in the water.

The berm to the north of the Northern Slave Row probably represents what was once a property boundary marker. Frequently, berms are shown on plats and maps as boundary markers, and in the case of Seabrook, (Figure 13 in **Historical Synopsis of Seabrook Plantation**), a property boundary line on the plat runs in the same area as the berm.

Artifact densities at Seabrook Plantation, as revealed from excavations, vary across the site (Table 3). The highest density of artifacts comes from the isolated midden (Midden 4) near the Southern Slave Row, which was used as a dump for a structure probably located nearby. The well also had a high artifact density, as is common for well that have been filled in. The buildings in the Main House Complex have low artifact densities, probably related to the erosion of this area of the site. Likewise, the Northern Slave Row has a lower artifact density than the Southern Row structures, related to the extensive plowing of this area. Structure 1 has a higher density than Structure 2, while both structures have a higher density than the yard, as would be expected.

The Main House Complex

The Main House Complex includes a utilitarian building, a well shaft and well construction pit, areas near the Main House and Main House yard, and the Seabrook Landing Road bed, as revealed by excavations in these areas.

The Utilitarian Building

The Utilitarian building of the Main House Complex was defined based on the presence of a 16 by 16 foot continuous brick foundation laid in what is an indiscernible bond, due to the use of brick fragments in the foundation, rather than whole bricks. A total of 1265 artifacts (including those from Feature 1) from 475 square feet, yielding an artifact density of 2.7 artifacts per square foot or 2.8 artifacts per cubic foot.

Area	Artifacts/ft ²	Artifacts/ft ³
Utilitarian Building	2.7	2.8
Main House Area and yard	2.9	4.5
Well and Well Area	13.8	15.9
Seabrook Landing Road	3.1	3.9
Northern Slave Row	4.1	4.3
Berm	1.4	1.0
Southern Row, Structure 1	5.8	6.5
Southern Row, Structure 2	4.5	4.6
Southern Row, Yard	3.4	4.7
Southern Row, Midden 4	21.1	21.1

Kitchen Group Artifacts

A total of 631 (or 49.9% of the total artifacts) Kitchen group artifacts were recovered, the majority of which (622 or 98.6%) belong to the glass and ceramics category. A wide range of eighteenth and nineteenth ceramics were recovered from these excavations, including white salt glazed stonewares, lead glazed slipwares, creamwares, pearlwares, and whitewares.

The major types of datable pottery are shown in Table 4, revealing that tablewares, such as pearlwares, creamwares, and whitewares, account for most of the total ceramics. The most common nineteenth century ceramics in this assemblage are whiteware, representing 34% or 75 specimens, and pearlware, representing 67 specimens or 30.5%.

Pearlware, perfected by Josiah Wedgwood in 1779, is characterized by a cream colored paste and a blue to white glaze that appears as a bluish color where the glaze is thickly puddled (Noel Hume 1970:128; Price 1979; South 1977:212). Unlike pearlware, whitewares, manufactured after 1820, show no discoloration in the glaze where thickly puddled.

The ceramic assemblage produced a total

Porcelain	6	2.7%
Stoneware	30	13.6%
Brown	20	
Blue/Gray	6	
White	3	
Other	1	
Earthenware	184	83.6%
Slipware	11	
Refined	4	
Coarse	6	
Delft	1	
Creamware	18	
Pearlware	67	
Whiteware	75	
Yellowware	2	

minimum vessel count of 22, including a total of eight plates, seven bowls, three cups, two saucers, and three utilitarian vessels.

Pearlware contributed an undecorated plate, two blue edged plates, a green edged plate, a blue transfer printed plate, an annular bowl, and a poly handpainted cup. The whitewares contributed a blue edged plate, a green edged plate, two undecorated bowls, an annular bowl, a blue transfer printed bowl, an undecorated cup and an undecorated saucer. In addition, a single creamware bowl, a tortoiseshell bowl, a white salt glazed stoneware saucer, a white porcelain plate, a lead glazed slipware milk pan, a coarse red earthenware milk pan with a clear lead glaze, and a ginger beer bottle were also recovered.

The mean ceramic date for the utilitarian building at the Main House Complex is shown in Table 5. This table also provides information concerning manufacturing date ranges for the various ceramics. The terminus post quem (or TPQ) date is that date after which the zone or area was deposited. It is based on the latest dated artifact present in the assemblage. The ceramic assemblage provides a TPQ date for the construction of the utilitarian building of 1780 based on the presence of pearlware excavated from the builder's trench (Feature 1) of this building. This date tells us the building was probably constructed after this date. The deposits within the utilitarian building give a TPQ of around 1820, based on the presence of whiteware.

Container glass accounts for 401 fragments, or 63.5% of the Kitchen Group artifacts. The most common type of glass at the utilitarian building is "black" glass, which is actually dark green in transmitted light. "Black" glass fragments are typical of wine or ale bottles. Bottle fragments with thinner walls, gentle lines, and kick ups are considered champagne, wine, or brandy containers. Those with thicker walls, pronounced shoulders, and flat bases are characteristic of stout or ale containers. However, as research by Jones (1986) has shown, these bottles were also used for a variety of other products, such as cider, distilled liquors, vinegar, and mineral water. People may have also used or re-used these containers for

Table 5.
Mean Ceramic Dates for the Main House Complex

Ceramic	Mean Date		Auger Tests		Old Road		Commissary		Main House Area		Main House Yard		Well Area		Feature 2 Well Area	
	(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	
Underglazed porcelain	1730	1	1730					2	3460			13	22490	7	12110	
Nottingham stoneware	1755			1	1755											
White salt glazed stoneware	1758					3	5274			1	1758	7	12306	1	1758	
Ginger beer bottles	1860	3	5580													
Lead Glazed Slipware	1733					11	19063	2	3466			12	20796	8	13864	
Jackfield	1760											7	12320			
Clouded wares	1755	1	1755			2	3510					10	17550	17	29835	
Astbury	1738											1	1738			
Agate ware	1758							3	5274							
Plain delft	1720					1	1720					3	5160	1	1720	
Decorated delft	1750									3	5250	9	15750			
North Devon	1713											1	1713			
Creamware, annular	1798											21	37758	4	7192	
hand painted	1805									1	1805	1	1805			
transfer printed	1790															
undecorated	1791	3	1791			18	32238	18	32238	15	26865	115	205965	40	71640	
Pearlware, mocha	1843											1	1843			
poly hand paint	1805					6	10830	2	3610	15	27075	26	46930	21	37905	
blue hand paint	1800	2	3600					2	3600	5	9000	8	14400	8	14400	
blue trans print	1818	4	7272			13	23634	6	10908	14	25452	143	259974	77	139986	
edged	1805	7	12635			3	5415	3	5415	7	12635	73	131765	36	64980	
annular/cable	1805	4	7220			5	9025	2	3610	4	7220	38	68590	14	25270	
molded	1805															
undecorated	1805	6	10830			39	70395	11	19855	22	39710	160	288800	80	144400	
Whiteware, green edged	1828	1	1828									1	1828			
blue edged	1853			1	1853	3	5559					23	42619	6	11118	
poly hand paint	1848	1	1848									6	11088	6	11088	
blue trans print	1848	5	9240	3	5544	6	11088	1	1848	1	1848	28	51744	16	29568	
non-blue trans	1851	1	1851	2	3702	1	1851			1	1851	10	18510	1	1851	
flow blue	1848	4	7392													
annular	1866	2	3732	1	1866	8	14928	2	3732	1	1866	32	59712	23	42918	
mocha	1866															
undecorated	1860	17	31620	1	29760	55	102300	15	27900	33	61578	230	427800	183	340380	
Yellow ware	1853					2	3706	11	20383			13	24089	25	46325	
Total		64	117286	24	44480	178	324192	80	145299	123	223913	992	1805043	575	1048308	
MCD			1832.6		1853.3		1821.3		1816.2		1820.4		1819.5		1823.1	

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decanting, storing, and serving beverages either bought in barrels or made at home.

At the utilitarian building, six round black blown base bottles were recovered. One of these had a high kick up, common for wine containers. Three round black blown-in-mold bottles were also recovered from these excavations.

Other container glass vessels found at the utilitarian building include a small, clear round bottle, a brown round bottle, an emerald bottle, and an aqua bottle. Only two of these bottles had marks, but these did not provide any further information as to the uses of the bottles.

Only eight tableware artifacts were recovered from this building. These eight artifacts represent a clear glass molded tumbler, two clear glass tumblers, one iron spoon, and one iron 3-tine fork. A single kitchenware artifact, a kettle fragment, was also recovered from this area.

Architecture Group Artifacts

A total of 560 architectural fragments (excluding brick and tabby) were recovered from the utilitarian building, representing about 44.3% of the total artifacts. Excavations revealed that the building had a brick foundation that would have supported a simple wooden superstructure. The interior walls also appeared to have had a mortar and plaster coat.

The largest category of architectural artifacts are nails, with the 527 nail and nail fragments accounting for 94.1% of the architecture group. However, most of these nails (n=439) could not be identified as to type or size. Seventy machine cut nails were present at this structure. Machine cut nails, first produced beginning around 1790, were cut by machine from a sheet of iron and early on, heads were shaped by hammering each individual nail (Noel Hume 1970:253). These nails became common in the South beginning in the first quarter of the nineteenth century, when the head of the nails was also made by machine. Generally, machine cut nails have uniform heads and shanks with burrs on the edges and were first manufactured in the late 1830's (Nelson 1968:7;

Priess 1971:33-34).

Different size nails also serve different functions and the sizes of nails can help determine how nails were used. Originally, nails were sized according to their penny weight, which compared the weight of a nail to that of a silver penny. Over time, the term came to designate length rather than weight. However, it was not until the 1890s that penny weights were completely standardized (Orser et al. 1982:675).

Table 6.
Nails Recovered from Utilitarian Building,
Main House Complex

Function and Penny Wt	#	%
Small timber shingles	11	16.9%
3d	1	
4d	2	
5d	8	
Sheathing and Siding	18	27.7%
6d	5	
7d	3	
8d	10	
Framing	24	36.9%
9d	1	
10d	14	
12d	9	
Heavy Framing	12	18.5%
16d	7	
20d	2	
30d	1	
40d	1	
60d	1	

While the use of certain nails sizes was not standard and nail function was flexible depending on the carpenter and availability of materials, specific size nails can be identified as useful for specific tasks. For example, 2d to 4d nails were commonly used to fasten small timbers and shingles; 6d to 8d nails were used for sheathing or siding; 9d to 12 d nails were used for framing; and 16d to 50 d nails were used for heavy framing. As Table 6 shows, this building yielded a small number of identifiable nails, the majority of which were framing nails. The presence of these type of

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Figure 40. Kitchen Group Artifacts from the Main House Area (C and G), the well shaft (A and F), the Northern Slave Row (D), Structure 1 in the Southern Slave Row (B and E), and Structure 2 in the Southern Slave Row (H). A, green transfer printed whiteware plate; B, green transfer printed whiteware teapot lid knob; C, polychrome hand painted pearlware; D, whiteware rim with border; E, blue transfer printed whiteware cup; F, blue transfer printed pearlware maker's mark; G, brown transfer printed pearlware rim; H, blue transfer printed and polychrome hand painted whiteware rim.

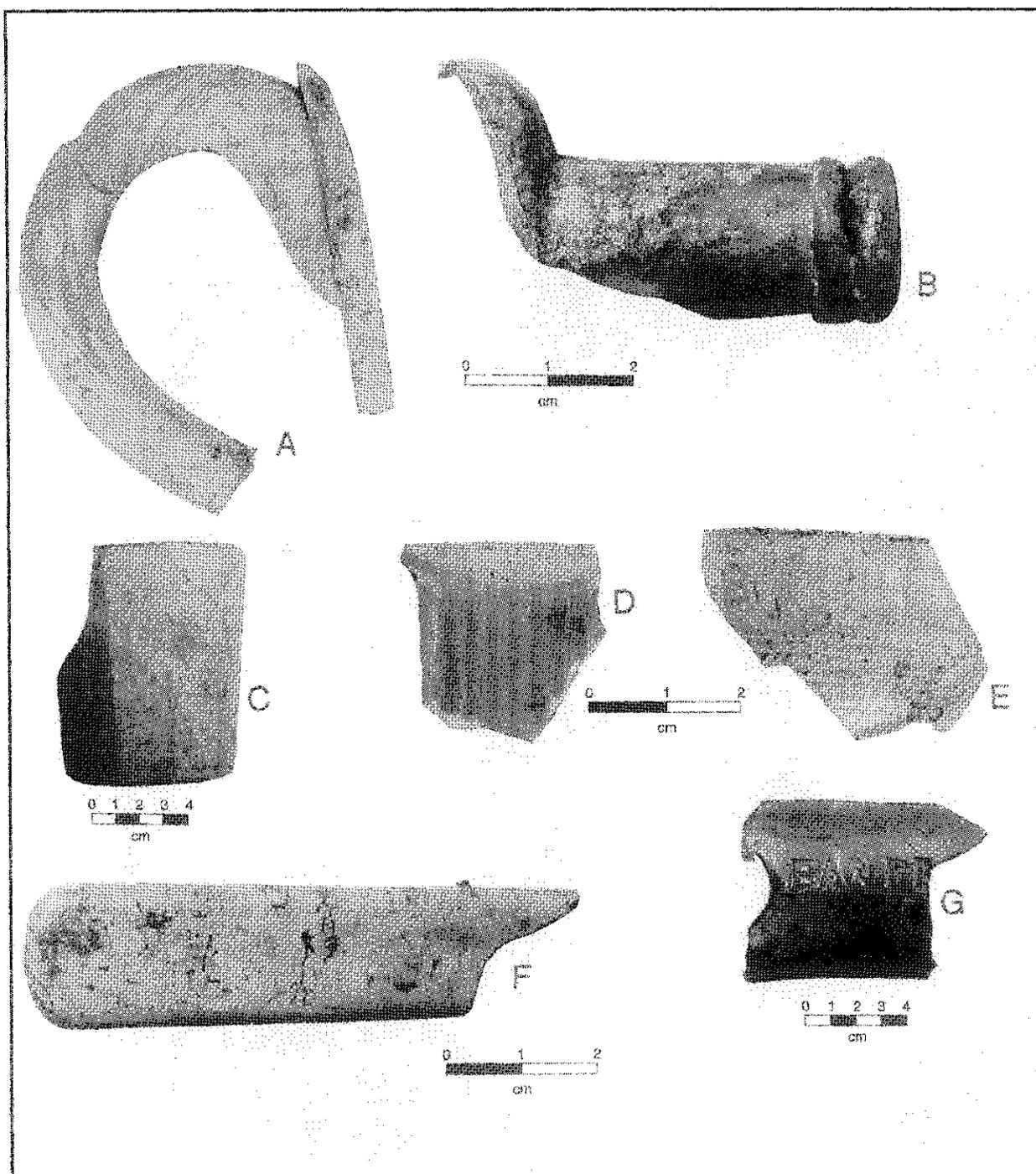


Figure 41. Kitchen Group Artifacts from the Main House area (D), the well shaft (A and C), the berm (F), Structure 1 in the Southern Slave Row (E), and the Isolated Midden in the Southern Slave Row (B and G). A, clear glass pitcher handle; B, aqua glass bottle neck; C, panelled glass tumbler; D, clear glass tumbler rim; E, manganese glass rim; F, bone utensil handle; G, Lea and Perrins bottle fragment.

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nails supports the idea that this building had a wooden superstructure.

The other types of architectural artifacts help further explain the construction of the utilitarian building. For example, 27 fragments of window glass strongly suggest that this building had glass pane windows. Tar paper roofing material, a pintle fragment (measuring 2 3/4-inches by 2 1/2-inches) and two strap hinge fragments were also recovered.

Tar paper, also known as roofing felt, is a thick coarse paper or felt covered with tar, asphalt, or a similar substance (Bucher 1996:391), which was used as weather protection. Tar paper has been used since colonial times as a roofing for "built-up" flat roofs, which has been a standard technique since the mid-nineteenth century (McAlester and McAlester 1984:47-48). The purpose of the strap hinges was to both enable the door to swing and to hold it true (Streeter 1974:15-16). The strap hinge fit onto the pintle, shaped like an "L" with a spike or screw in the horizontal position, by means of an eye that fit over the vertical pin of the pintle (Jackson and Day 1992:92). The spike or screw of the pintle was driven into the doorpost, working much like modern door hinges (Jackson and Day 1992:92).

Furniture Group Artifacts

No examples of furniture group artifacts were recovered from this building. The absence of such artifacts supports the idea that this building served a utilitarian function, rather than as a domestic building.

Arms Group Artifacts

As was discussed in the introduction, both minie balls and percussion caps will be discussed under the military category of the activities group. Only

a lead shot measuring 8.1 mm in diameter was recovered from the utilitarian building. This size shot is normally used for hunting deer (Hamilton 1980:317).

Tobacco Group Artifacts

At the utilitarian building, 19 tobacco artifacts (1.6% of the total artifacts) were recovered. These included a plain pipe bowl, four 4/64-inch stems, and 14 5/64-inch stems. One of the stems did have a foot with a portion of a vertical ribbed bowl attached. Unfortunately, these markings do not help identify the makers of this particular type of pipe.

Clothing Group Artifacts

Only 11 clothing group artifacts were recovered from the utilitarian building, further supporting the idea that this building did not serve a domestic function. Of these, ten were non-military buttons (military buttons will be discussed in the military category of the activities group) and one was a brass D-shaped buckle.

The button types (classified using South's 1964 system), shown in Table 7, include a variety of materials such as bone, iron, porcelain, glass, and brass. Three buttons do not fall into South's classification. These include a badly corroded iron button, a black glass button in a dome shape with an eye underneath, and a brass button with a glass insert that reads *PH*PARIS on the reverse.

Nineteenth century buttons, known as

Type	Description	#	Other (measurements in mm)
20	4-hole bone	2	14.2, 15.7
21	4-hole two piece iron	1	16.9
23	4-hole white porcelain	2	11.0, 11.2
23	4-hole blue porcelain	1	10.6
32	4-hole stamped brass with sunken panel	1	17.1 (reverse=*IMPROVED*FOUR HOLE*)
--	iron	1	13.7, badly corroded
--	domed black glass	1	12.0, 8.8 mm in height
--	brass with white glass insert	1	14.2 (reverse=*PH*PARIS)

"Paris Backs" generally are two piece metal buttons with any number of designs that read Paris on the back and range from 3/8-inch to over 1 1/4-inches in size (Luscomb 1967:144-145). The *PH* refers to the Parent & Hamet company (Peacock 1972:98). Only one other button had markings, which read "*IMPROVED*FOUR HOLE." Luscomb (1967:79) notes that back-mark designations such as these were simply advertising slogans used by many manufacturers and provide little, if any, information as to the specific manufacturer of these buttons.

Personal Group Artifacts

Only two artifacts from the utilitarian building could be identified as Personal Group items, representing 0.2% of the total assemblage. These artifacts include an umbrella strut fragment and a coin. The coin, a USA penny, dates to 1860, and provides a TPQ for the inside of the building. Because the builder's trench for this particular building has a TPQ of 1790, the 1860 TPQ for the inside of the structure suggests that while the building may have been built anytime after 1790, it was certainly in use by 1860.

Activities Group Artifacts

This artifact group includes a number of categories that are represented at the utilitarian building, including storage items, miscellaneous hardware, and military items. These artifacts account for a small percentage (3.3%) of the total artifacts recovered from this building.

The storage items include 16 strap iron pieces, which were probably used as barrel hoop fragments. Miscellaneous hardware items include three iron staples, an eye bolt, a bolt, a flathead screw, and a brass nail. The "other" category includes pieces of melted lead, a thin iron rod measuring 14" in length, an unidentified brass item, and a wire fragment. The only toy artifact recovered was a white porcelain toy tea cup.

The military group included nine minie balls (three .54 caliber, two .56 caliber, two .58 caliber, and a .69 caliber), and two military buttons. The .54 caliber minie balls were used in

rifles or rifled muskets and .58 caliber minie balls were used in rifled muskets by both armies in the Civil War (Thomas 1993). The .56 caliber minie balls were used in Sharps rifles and the .69 caliber minie balls were used for either rifled muskets or smoothbore muskets, also in both armies (Thomas 1993). Most federal troops were armed with .577 or .58 caliber muskets, such as the 1861 and 1863 Springfields or the 1853 Enfield (Davis 1991:19-20).

The buttons, both categorized as a Type 27 with a domed machine embossed design, measured 15.3 and 22.6 mm in diameter. Both of these buttons were embossed with "RHODE ISLAND/HOPE" and the Rhode Island state seal. The manufacturer of these buttons could not be determined and they can only be dated as a Post Revolutionary War button, as they were in use since 1647 (Albert 1969:233).

The Main House Area

Remnants of the Main House area and yard were defined on the basis of the location of the excavations compared to 1862 maps and large amounts of plaster present in excavation units. Both Units 25 and 28 have been grouped together for this analysis. Much of the Main House has probably eroded into Skull Creek, which would explain the low density of artifacts in an area that would be expected to have a much higher density under conditions of better preservation. These excavations produced 872 artifacts from 300 square feet, yielding an artifact density of 2.9 artifacts per square foot or 4.5 artifacts per cubic foot.

Kitchen Group Artifacts

A total of 408 Kitchen Group artifacts was recovered, most (403 or 98.8%) of which fall into the ceramics or glass categories. The majority of the ceramics are nineteenth century examples, although there are some eighteenth century ceramics in this assemblage. Table 8 shows that the majority of datable pottery excavated from the Main House Area is dominated by earthenwares, especially pearlwares, whitewares, and creamwares. A small number of yellow ware ceramics were also recovered.

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Table 8.
Major Types of Datable Pottery
from the Main House Area

Porcelain	2	0.9%
Stoneware	12	5.5%
Brown	8	
Blue/Gray	3	
White	1	
Earthenware	206	93.6%
Slipware	2	
Refined	3	
Coarse	1	
Delft	3	
Creamware	34	
Pearlware	93	
Whiteware	54	
Yellowware	11	
Burnt	5	

Creamware is recognized by an off-white (cream-colored) paste and a distinctive yellowish lead glaze that exhibits a greenish color where thickly puddled (Brown 1982:15-16). Yellow ware has a yellow paste and usually a clear alkaline glaze on the exterior and interior of the vessels to accentuate the yellow color (Ketchem 1983:20).

This relatively small amount of ceramics produced 15 vessels, including a yellow ware bowl, a flow blue pearlware bowl, a whiteware annular bowl, a pearlware annular bowl, two undecorated creamware plates, a green edged pearlware plate, a blue edged pearlware plate, three undecorated whiteware plates, a transfer printed and polychrome handpainted pearlware cup, a polychrome handpainted pearlware cup, an undecorated whiteware saucer, and a ginger beer bottle. Flatwares, rather than teawares or utilitarian wares, dominate this assemblage.

The mean ceramic date for the Main House is shown in Table 5. Fragments of undecorated whiteware provide a TPQ of around 1820. Other methods of dating will provide a more approximate date range for the occupation of the Main House.

Container glass accounts for 44.9%

of the kitchen group ceramics. Black glass, or wine glass, is the most common type of glass present in this assemblage, accounting for 44.2% of the glass assemblage. These fragments represent two black bottles, measuring 4½-inches and 4-inches in diameter. Two brown bottles with 3-inch diameters were also recovered from the Main House area.

Other bottles recovered from this area include an aqua bottle and a clear 1-inch pharmaceutical bottle. The aqua bottle was embossed with "CHARLE(STON)" on the side and may represent a water or soda bottle manufactured in Charleston. Pharmaceutical bottles contained medicinal and herbal remedies, usually high in alcohol content, used for relieving many different types of ailments.

The Main House Area produced only three tableware artifacts, including two clear glass tumblers and one ribbed clear glass tumbler. Two stove parts contributed to the kitchenware category from these excavations.

Architecture Group Artifacts

Main House Area excavations produced a total of 423 architectural artifacts. The majority of these were nail and nail fragments (n=200),

Table 9.
Function and Weight of Nails from
the Main House Area

Function	Wrought	Cut	#	%
Small timber, shingles			1	5.6%
5d		1		
Sheathing and siding			11	61.1%
6d	1	3		
7d		1		
8d	2	4		
Framing			5	27.7%
9d		1		
10d	1	2		
12d		1		
Heavy Framing			1	5.6%
30d		1		

accounting for 47.3% of the total Architecture Group artifacts. Of these nails and nail fragments, only 18, listed in Table 9, could be identified according to type, weight, or size. Due to the low density of nails recovered from this area, it is difficult to draw any conclusions about building construction.

This area also included 223 fragments of window glass, suggesting that the Main House did have paned glass windows. This means that approximately 0.74 window glass artifacts per square foot were recovered from Main House Area excavations. This amount of window glass seems especially high when compared to the Utilitarian building, where only 27 fragments, or 0.06 window glass fragments per square foot were recovered. The difference between the two buildings suggests that the Main House had many more paned windows than the Utilitarian building, as would be expected. A utilitarian building would need few windows, while a main house would most likely have glass windows to both provide light and protect the interior from the weather. Window glass was probably also considered a "high" status house treatment.

Furniture Group Artifacts

The only furniture artifact recovered from the Main House area was a brass knob, measuring 18.5 mm in diameter and 12.4 mm in height. Brass furniture hardware is commonly attributed to areas of relatively high status.

Arms Group Artifacts

A single lead shot, measuring 5.3 mm in diameter, was recovered from the Main House Area.

Tobacco Group Artifacts

Tobacco artifacts were relatively rare at these excavations, producing only 16 items, including 14 stems and two pipe bowls. The most common stem size was 5/64-inch (N=9). The pipe bowls were plain, revealing no further information about manufacturers or dates.

Clothing Group Artifacts

Seven artifacts have been assigned to the Clothing Group from the Main House Area, including six buttons and one brass grommet. The buttons, summarized in Table 10, are porcelain, iron, and brass types common in the nineteenth century.

Personal Group Artifacts

Three artifacts were recovered from the Main House Area that have been categorized as personal items. These include a square graphite pencil, a slate pencil and an umbrella strut. Graphite pencils became more common after 1851, when Keswick in Cumberland, England was "established as the center of the pencil trade" (Whalley 1975:117).

Type	Description	#	Other (measurements in mm)
7	cast brass	2	12.1, 12.9
21	4-hole 2-piece iron	1	13.3
23	4-hole porcelain	3	10.0, 10.1, 10.8

Activities Group Artifacts

This last artifact group includes 13 items representing storage, miscellaneous hardware, military and "other" categories. Three fragments of strap iron are categorized as storage artifacts. The miscellaneous hardware section includes two screws, a brass washer, a brass nail, and a brass nail fragment. Brass wire, a brass spring, and a brass strip make up the "other" category.

Military items include a .577/.58 caliber lead minie ball, and a brass military button. The button is a Type 26, domed and embossed brass, with a "spread eagle with shield" emblem. The reverse reads "SCOVILL MFG CO/WATERBURY." This button was used by general service enlisted men from 1854 through 1902 (Albert 1969:40).

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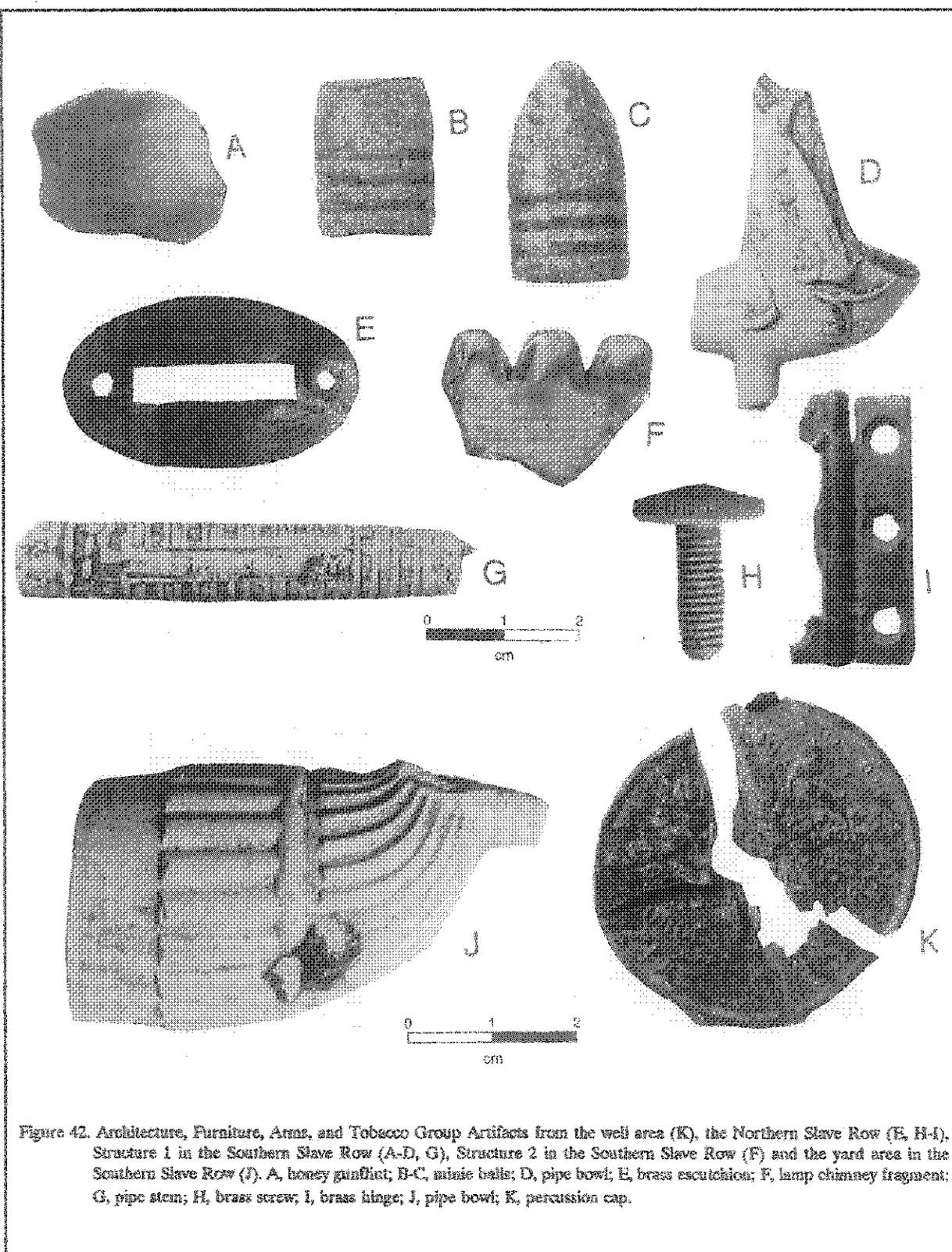


Figure 42. Architecture, Furniture, Arms, and Tobacco Group Artifacts from the well area (K), the Northern Slave Row (E, H-I), Structure 1 in the Southern Slave Row (A-D, G), Structure 2 in the Southern Slave Row (F) and the yard area in the Southern Slave Row (J). A, honey gunflint; B-C, minie balls; D, pipe bowl; E, brass escutcheon; F, lamp chimney fragment; G, pipe stem; H, brass screw; I, brass hinge; J, pipe bowl; K, percussion cap.

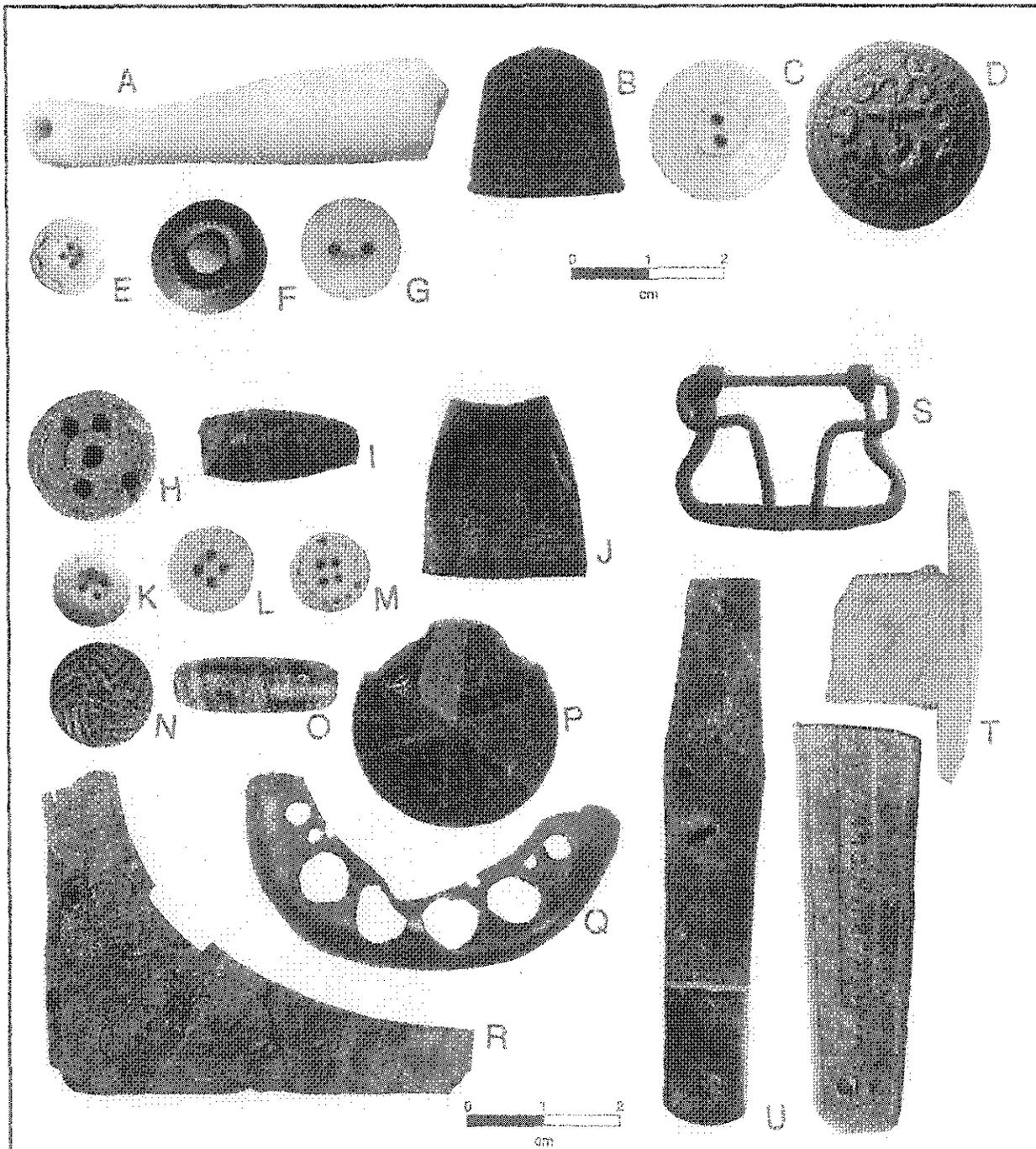


Figure 43. Clothing, Personal, and Activities Group Artifacts from the Utilitarian Building (D and F); the well shaft (A, E, K, R, T-U), the Northern Slave Row (S), Structure 1 in the Southern Slave Row (B-C, G, L-M, O-Q), Structure 2 in the Southern Slave Row (H, J, N), and the yard area in the Southern Slave Row (I). A, porcelain doll arm; B, thimble; C, shell button; D, Rhode Island button; E, porcelain button, F, glass button; G, two-hole porcelain button; H, five-hole wooden button; I, glass bead; J, brass pen part; K-M, porcelain buttons; N, glass button; O, glass bead; P, glass button; Q, brass heel plate; R, brass photo surround; S, buckle; T, bone comb; U, pocket knife fragments.

Well and Well Area, Main House Complex

Excavations at the well area of the Main House Complex, included the area designated as the construction area of the well and the deposits overlying both the well shaft and the construction area. Feature 2 (Well Shaft) will be discussed in the section immediately following this one. The well and well area excavations produced 13.8 artifacts per square foot or 15.9 artifacts per cubic foot.

Kitchen Group Artifacts

Excavations at the well area produced a total of 2327 Kitchen Group artifacts, or 34.6% of the total artifact assemblage. Of these artifacts, ceramics and glass make up 98.5% of the Kitchen Group. Four tableware artifacts and 30 kitchenware artifacts were also recovered.

The most common ceramics excavated from the well area are nineteenth century examples, in particular, pearlwares and whitewares, as is demonstrated in Table 11. Creamwares and stonewares also make up a large portion of the ceramics from this area. The assemblage is clearly dominated by tablewares, such as the pearlwares, creamwares and whitewares. The total minimum vessel count included 60 plates, 34 bowls, five cups,

three saucers, and five utilitarian vessels.

Creamware fragments produced four undecorated plates, an undecorated bowl, an undecorated cup, a feather edged plate, a plate with a molded rim, and an annular bowl.

Undecorated pearlware accounts for a single plate, and a molded Royal design plate. Green edged pearlwares included eight plates, while sixteen blue edged pearlware plates were recovered. Annular pearlwares included seven bowls, six of which measured 6-inches in diameter and one measuring 7-inches in diameter. A blue handpainted bowl and five poly hand painted bowls were also recovered. Blue Transfer printed pearlwares had the most diverse type of forms, including five plates, six bowls, a cup, and two saucers.

Whitewares fragments produced 17 undecorated vessels, including 11 plates, five bowls, and one saucer. Green edged whitewares account for one 8-inch plate, while blue edged whiteware accounts for seven plates. Annular whitewares include five bowl forms. Two plates and one bowl account for the blue transfer printed whitewares. The remainder of whiteware forms included a black transfer printed plate and a green transfer printed plate.

Other ceramic forms include a tortoise shell bowl, a jackfield teapot, a white salt glazed stoneware cup, a white porcelain cup, a white porcelain handpainted overglaze cup, and a delft bowl. A single ginger beer bottle, a lead glazed slipware milk pan, and a brown salt glazed stoneware crock with an Albany slip interior were also recovered.

The well area consists of two layers in Zone 1: Level 1 includes a layer of soil accumulation deposited after construction of the well and filling of the construction pit and Level 2 includes the fill from the well construction. Level 1 accumulation produced a mean ceramic date of 1823.4 (Table 5) and ceramics produced a TPQ of 1820, based on the presence of whiteware fragments. Level 2, which corresponds to the well construction pit, produced a mean ceramic date of

Porcelain	21	1.6%
Stoneware	165	12.86%
Brown	106	
Blue/Gray	43	
White	6	
Other	10	
Earthenware	1097	85.5%
Slipware	12	
Refined	21	
Coarse	15	
Delft	12	
Creamware	137	
Pearlware	449	
Whiteware	330	
Yellowware	11	
Burnt	110	

1808.4 (Table 5) and a TPQ of 1820, again based on the presence of whiteware fragments. Therefore, it seems likely that the well was excavated sometime in the first quarter of the nineteenth century.

A number of ceramic maker's marks provide further information on the dating of the well area. One of these excavated from Level 1, demonstrates that an undecorated fragment of whiteware which read "JOHN MADDO_BURSLE(M)" was produced between 1855-1896 (Godden 1964:406), providing a TPQ of 1855. Another undecorated whiteware maker's mark read "ADAMS" and was produced between 1842-1883 (Kovel 1986:238), providing a TPQ of 1842.

Both Level 1 and Level 2 contained examples of eighteenth century ceramics such as lead glazed slipware, delft, and Jackfield. The dating of this area and the well feature will be discussed in more detail in the dating section.

Container glass at the well area accounted for 43.4% (n=1010) of the total Kitchen Group Artifacts. Black glass accounted for the majority of glass fragments (N=493) and represented five round bottles. Brown glass fragments numbered 68, and occurred as two round bottles. Aqua glass fragments (n=225) contributed a two round bottles, three small round bottles with 2" diameters, a panel bottle and a square case bottle. Fragments from an emerald case bottle were also recovered from this area. Case bottles were first designed to hold gin that could be easily and safely packed into wooden crates for shipment (Spillman 1983:68). The fourteen pieces of emerald container glass also represented a round bottle.

Clear glass fragments, numbering 82, contributed a pharmaceutical bottle and an oval bottle. The oval bottles probably represents a flask. Glass flasks, popular from the mid-1820s through the 1870s, were sold as promotional novelties by rum, gin, and whiskey distributors and retailers (Spillman 1983:36). Standard flask size were half-pint and pint and most flasks were probably closed with corks (Spillman 1983:36). The paneled and pharmaceutical bottles first

contained proprietary or "patent" medicine. While these medicines often contained a high amount of alcohol, it would be a mistake to assume that these medicines were consumed primarily for their alcohol content. According to Wilson (1981:39), nineteenth century conditions were such that people suffered from a "plethora of fevers and aches" for which these medicines were ingested.

Fragments of manganese, dark aqua, and blue glass was also recovered, although these did not provide a minimum vessel count.

The tableware artifact count was relatively small, accounting for only four total items. A clear glass molded, paneled tumbler with a base of 2 ½-inches was recovered. Paneled designs are generally flat but give the vessel the appearance of having six or eight sides (Jones and Sullivan 1985:58). A molded clear glass decanter with a starburst design and a 3 ½-inch base was also recovered. The starburst pattern appears as rays radiating from a common center (Jones and Sullivan 1985:58). In addition to these two glass tableware items, a plain bone utensil handle and an iron utensil handle were also recovered.

Kitchenware artifacts contributed 30 specimens, including 25 kettle fragments, 3 stove parts, a stove lifter handle and an iron pot or pan handle. The kettle pieces all represent body pieces, probably representing a bulbous pot form, intended to be suspended over an open fire for cooking foods by boiling and simmering (Woodhead 1981:6).

Architecture Group Artifacts

A total of 4,023 architectural artifacts were recovered, accounting for 59.84% of the total artifact assemblage at the well area.

Of these artifacts, the most numerous were nails and nail fragments (n=3,716), accounting for 92.4% of the architecture artifacts. Of these, 2,456 were unidentifiable as to size or type. The remainder of the nails were identified as machine cut and hand wrought. Machine cut nails make up the majority of all identifiable nails at the well

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area, accounting for 97.7% of identifiable nails. Hand wrought nails, most popular during the eighteenth century, date from the seventeenth through the nineteenth centuries (Nelson 1968). The shanks of these nails are rectangular in cross-section and have either round "rose heads" or "T heads." Although these two types of head patterns were designed to serve different functions, it is likely that at Seabrook they were used interchangeably, given the sparsity of manufacturing items on the sea islands.

As Table 12 shows, sheathing and siding nails (n=235) make up 52.8% of all identifiable nails. This area overlaying and surrounding the well shaft produced a large quantity of nails that are probably associated with an episode of dumping structural garbage down the well, or piling up building debris next to the well, and are most likely not related to the remains of a structure built in over or around the well.

The second most abundant architectural artifact is window glass, comprising 7.3% (n=295)

of the total architectural artifacts. Other architectural artifacts included six spikes, a strap hinge fragment, a pintle, a hook (door/gate/shutter), a fragment of an interior mechanism of an unidentified lock box, a fragment of an iron cross bolt, and a "knob shaft follower." A cross bolt belonged to part of a key-operated lock that pushed two bolts in opposite directions, and was commonly used on bookcase doors (Bucher 1996:128). A "knob shaft follower" is an interior mechanism of a lock used for doors (Streeter 1973:21).

These architectural artifacts present near the well also suggest that refuse from a dismantled structure was thrown into or piled around the well. Only 109 (out of a total of 4,023) architectural artifacts were recovered from Level 2 of the well area. Therefore, the majority of these artifacts were recovered from Level 1, the level associated with the accumulation of materials and not necessarily the construction of the well.

Furniture Group Artifacts

Only two furniture group artifacts, representing 0.03% of the total artifacts were recovered from the well area. These include a brass knob and a brass tack, both recovered from the Level 1 and not associated with the construction of the well.

Arms Group Artifacts

A total of eight arms artifacts, representing 0.1% of the total assemblage, were recovered from the well area. These artifacts include an iron gun worm fragment, a burnt gun flint, a dark gray flint, a dark brown flint, a shotgun shell base that read "WINCHESTER/NO 12/RANGER," and three 32 caliber rim fired shell casings. The Winchester company began producing shotguns after 1866 (Peterson 1964:354). The shell itself was probably encased in paper, as has been the case until at least the mid-twentieth century.

Table 12.
Nails Recovered from the Well Area,
Main House Complex

Function and Penny Wt.	Wrought	Cut	#	%
Small timber shingles			66	14.8%
2d		3		
3d		8		
4d		30		
5d	2	23		
Sheathing and siding			235	52.8%
6d	2	66		
7d	4	26		
8d	7	130		
Framing			105	23.6%
9d	4	27		
10d		46		
12d		28		
Heavy Framing			39	8.8%
16d		22		
20d		3		
30d	1	5		
40d		4		
50d		3		
60d		1		

THE PLANTATION LANDSCAPE

Tobacco Group Artifacts

The well area produced a total of 127 artifacts, or 1.9% of the total artifact assemblage, including 108 pipe stem fragments, 17 pipe bowl fragments and two red clay pipe bowls.

Fifteen of the pipe bowls were plain and two were decorated with ribbing and with a grape bunch motif. Without names, initials or numbers, these decorated bowls offer little information pertaining to their manufacturers and dates, because as Wilson (1971:14-15) notes, over 700 varieties of pipes were manufactured in one factory alone.

Table 13.
Pipe stems recovered from the Well Area,
Main House Complex

Decoration	4/64	5/64	6/64
Glasgow/McDougall	1	1	
McDougall/Glasgow	2		
White/Glasgow		1	
M79		1	
78		1	
brown tip		1	
orange tip	2		
orange glaze tip		1	
yellow glaze tip		1	
leaves			1
leaves and ribs		1	
ribs and decorations		2	

The most common diameter pipe stem from the well assemblage is 5/64-inch, accounting for 68.5% of the collection (n=74), followed by 4/64-inch at 23.1% (n=25). Table 13 shows the types of decorations and maker's marks present on these pipe stems. Several of these pipes were manufactured by the D. McDougall Company of Glasgow. This company, opened in 1846, was the "largest export manufacturer" of clay pipes in the nineteenth century (Humphrey 1969:17-18). The

other decorations did not provide enough information in order to determine the makers or manufacturers.

Clothing Group Artifacts

A total of 28 clothing group artifacts, accounting for 0.4% of the total artifacts, were recovered from the well area. These include 21 non-military buttons and seven other types of clothing artifacts. The buttons, summarized in Table 14 are mainly 4-hole porcelain buttons. These porcelain buttons, known as "small chinas" by collectors, were common throughout the nineteenth century and ranged between 3/8 and 3/4 inch in size (Luscomb 1967:183). Although white is the most common color, the buttons were manufactured in many colors and almost 600 patterns are known (Lupscomb 1967:183). The largest manufacturer of porcelain buttons, Charles Cartledge and Company of New York, operated from 1848 to 1856, producing about 100 patterns (Luscomb 1967:31). The well area collections has a single molded "pie crust" rim which resembles the edge of a pie crust (Lipscomb 1967:152).

The inscriptions "TREBLE GILT" and "BEST" with a wreath symbol occur on the backs of two of the stamped brass (Type 18) buttons. Gilt is a term that refers to the number of times a button was dipped in a gilding mixture or the number of grams of gold used in the mixture (Peacock 1972:20), although the appearance of this wording on the back of buttons was often simply an advertising slogan. Gilt buttons, made between

Table 14.
Buttons Recovered from the Well area,
Main House Complex

Type	Description	#	Other (measurements in mm)
18	stamped brass	2	19.2 (reverse="BEST" and wreath) 21.1 (reverse="TREBLE GILT")
19	5-hole bone	1	17.4
21	4-hole iron	2	14.2, 17.0
22	4-hole shell	1	8.3
23	4-hole white porcelain	11	9.8, 10.2, 2-10.4, 10.5, 10.6, 2-10.7, 11.1, 2-11.2 (1-piecrust rim)
23	4-hole blue porcelain	1	10.2
23	4-hole green porcelain	1	10.7
--	domed white glass	2	10.0, 10.3

1800-1865, were first manufactured as small buttons for men's coats and later were used for women's dresses.

Buttons that did not fit South's classification included two small white glass buttons in a dome shape with an eye on the underside. Other clothing items include two scissor fragments, two brass buckles (measuring 1¼-inches by 1⅜-inches, and 1¼-inches by ¾-inch) and three iron buckle fragments (measuring 1½-inches by 1¼-inches, 1½-inches by 1-inch, and 1½-inches in width fragment). One of the brass buckles (1¼-inches by 1⅜-inches) had a single hook and was probably used as a shoe buckle, based on its shape, while the other buckles were probably used as belt buckles.

Personal Group Artifacts

A total of 10 personal group artifacts contributed to the total artifact assemblage at the well area, accounting for 0.2% of the total artifacts. These include four beads, an umbrella strut fragment, a brass pen fragment, an iron key, a USA 1860 penny, a USA 1851 penny, and a brown rubber comb fragment.

The pennies provide a TPQ for Level 1 of 1860. The beads include a black glass opaque tube bead (Type 11a), a transparent blue faceted glass tube bead (Type 1f), and two transparent ultramarine blue faceted glass tube beads (Type 1f).

Activities Group Artifacts

The Activities Group artifacts contributed to the tools, fishing gear, storage items, miscellaneous hardware, and military categories.

Tool artifacts included a hoe, a 4-tined iron garden fork fragment, and a triangular file fragment. A single lead fishing weight was also recovered from this area. The storage category contained a lead seal with an unidentified mark, a brass padlock escutcheon and cover, an iron padlock hasp, and 36 strap iron fragments.

A curry comb fragment was also recovered from this area in Level 2. It is an 8 bar closed back comb, also known as an army style curry comb (Russell & Irwin Catalogue 1980:271).

A number of miscellaneous hardware and "other" category artifacts contributed to the Activities Group. The miscellaneous hardware artifacts include 51 brass nail fragments, 19 brass nails, a brass rivet and rove, 14 flat head wood screws, four flat head screw fragments, an iron staple, a bolt, three bolt fragments, a nut and bolt fragment, an iron strap hook and a twisted iron link of chain. Cooper and brass nails and rivets were commonly used in ship building during the nineteenth century (Alan Albright 1986 personal communication, cited in Trinkley 1986:259), and may have been brought from the landing area. In addition to the hardware, 30 unidentified pieces of iron, seven unidentified pieces of brass, two lead puddles, a lead fragment, three brass strips, a twisted brass wire, and a honey colored flint fragment were also recovered.

Military group artifacts included minie balls, percussion caps, military buttons, and a knapsack strap fragment with a "J" hook. All of these artifacts were recovered from Level 1 of the excavations. These artifacts were probably not used by slaves or freedmen as is often the case with military items found on plantations, but represent use by military personnel during the Union occupation of Seabrook Plantation. Two lead minie balls (a .44 caliber and a .56 caliber), three percussion caps, and a brass lid to a percussion cap package were recovered. The percussion caps are "top hat" and were commonly used for military arms (Moore 1963:77). One of the lead minie balls was fired from a .44 caliber Colt revolver, the most widely used handgun during the Civil War (Coates and Thomas 1990:54-57). The percussion cap package lid was inscribed with "PATENT LONDON"/"ELEYS"/"DOUBLE PROOF"/"PERCUSSION CAPS" and a royal seal, but no further information could be found on this item.

In addition to the arms that can be associated with the military occupation of Seabrook Plantation, two military Type 27 buttons

(domed, and machine embossed brass, measuring 14.9 and 19.6 mm) were recovered from the Level 1 section of well area excavations. Both have a "spread eagle and shield" insignia and one reads "EXTRA*QUALITY*" on the back. These buttons are considered general service buttons, and were used by all enlisted men, between 1854 and 1902 (Albert 1969:39-40).

Feature 2, Well Shaft, Main House Complex

The well shaft, Feature 2, was probably constructed by first excavating a large pit and then placing wood supports in the well and lining the well with planks. Artifacts in the well shaft probably represent an episode of building debris being dumping down the well, as suggested by the presence of mortar and plaster in the well shaft fill. Phytolith analyses also suggests that the well was filled quickly (see **Phytolith Analysis of Well and Shell Midden**). Artifacts will therefore represent the time period when dumping occurred, rather than when the well was constructed. As was mentioned previously, the well was built in the first quarter of the nineteenth century. Subsequent filling seems to have occurred around the time of the Civil War or the postbellum period. This well shaft was excavated as one level.

Kitchen Group Artifacts

Excavations in the well shaft produced a total of 1,629 kitchen group artifacts, or 25.9% of the total assemblage. The majority of the kitchen group artifacts were ceramics (n=655), accounting for 40.2% of the kitchen artifacts, and glass (n=906), accounting for 55.6% of the kitchen artifacts. In addition, 55 tableware artifacts and 13 kitchenware artifacts were recovered. The ceramics include mainly nineteenth century examples, although there are a small number of eighteenth century specimens, such as clouded wares and lead glazed slipware. The TPQ for the well shaft is 1820, based on the presence of whiteware (35.9% of the total ceramics). The mean ceramic date is shown in Table 5.

The major types of datable ceramics (Table 15) are pearlwares and whitewares. Tablewares dominate the ceramic assemblage,

Porcelain	12	1.8%
Stoneware	40	6.1%
Brown	20	
Blue/Gra	8	
White	1	
Other	11	
Earthenware	603	92.1%
Slipware	8	
Refined	20	
Coarse	4	
Delft	1	
Creamware	44	
Pearlware	236	
Whiteware	235	
Yellowware	25	
Burnt	30	

including white salt glazed stoneware, porcelain, refined earthenwares, pearlwares, whitewares, creamwares, yellowwares, delft, and slipwares, accounts for 85.0% of the total ceramics. Utilitarian wares, such as brown stonewares and coarse earthenwares, account for only 3.7% of the datable ceramics.

Pearlwares account for 36.0% of the total ceramic assemblage. These fragments contributed 31 vessels, including an undecorated plate and bowl, nine green edged plates, 11 blue edged plates, a poly handpainted bowl, a blue hand painted cup, four annular cups, a blue transfer printed, saucer and a blue transfer printed pitcher.

Whitewares included 235 specimens (35.9% of the total ceramic assemblage), and yielded a minimum vessel count of eight undecorated plates, three undecorated bowls, four undecorated cups, two undecorated saucers, four blue edged plates, two poly hand painted cups, one annular bowl, one blue transfer printed platter, and a green transfer printed plate.

Creamwares accounted for only 44 specimens, or 6.7% of the total ceramic assemblage. Forty undecorated creamware specimens produced three plates and one bowl, and the remaining fragments contributed a royal

plate. Other vessels include a tortoise shell plate, a refined red earthenware teapot, three yellowware plates, a Chinese porcelain saucer, a brown salt glazed stoneware crock or jar and a ginger beer bottle.

A total of 71 minimum vessels were recovered, illustrated in Table 16. Tablewares dominate the assemblage of vessels accounting for 74.6%, while teawares account for 22.5%. This appears to be a relatively high status assemblage of ceramics. Hollowares account for 15.5% of the ceramics, while flatwares account for 56.3% of the assemblage, also suggesting that this is a high status assemblage.

Two maker's marks help determine the time period when the artifacts were deposited in

Form	#	%
Tableware	53	74.6%
Plates	40	
Bowls	11	
Serving	2	
Tea and Coffeware	16	22.6%
Utilitarian	2	2.8%

the well. The first occurred on an undecorated whiteware fragment, and the second occurred on an undecorated pearlware fragment. The first read "RIDGWAY BATES + CO/CAULDON_EA_E" and was produced by the John Ridgway Bates and Company from 1856-1858 (Godden 1964:535). The second maker's mark indicated that the vessels was produced by the potter Ralph Stevenson who operated a firm from 1810-1835 (Coyosh and Henrywood 1982:349).

Container glass accounts for 55.6% of the kitchen group assemblage (n=906). "Black" glass comprise the majority of the glass collection at 44.6%. Four round bottles, two bottles and three pharmaceutical bottles make up the black glass container collection.

One of the black bottle bases was labeled "H.HEYE/BREMEN," produced by the H. Heye Glasfabrik in Bremen, Germany beginning in 1880 (Toulouse 1971:238-239). This company produced bottles the for E. & J. Burke Company, which bottled and exported Guinness Stout and Bass Ale after 1878 (Toulouse 1971:177).

Brown glass accounts for 147 fragments including one round bottle, a bottle with an indefinite shape, and a bottle with a molded base.

Aqua glass accounts for 223 specimens and a total of nine bottles. These nine bottles included an oval bottle, probably a flask bottle, a panel bottle, a square gothic bottle, a round bottle, three bottles, and two molded bottles. Aqua cylindrical or round bottles may have contained mineral water, ale, beer, porter and soda (Spillman 1983:56-58). The square aqua gothic bottles are examples of pickle bottles or jars, produced from 1840-1880 (Switzer 1974:51-55). These bottles have a gothic arch design with either six or eight sides.

Dark aqua glass fragments, numbering 18 specimens, account for a square or case bottle, and a blown in mold bottle. Only a single piece of blue glass was recovered from the well shaft. Clear glass accounts for 38 fragments and represents three bottles. These included a 12-sided perfume bottle and two small molded round bottles, one with horizontal ribs and one with vertical ribs.

Green glass fragments numbered 53 specimens and included a green paneled bottle that bore the inscription "SCHN_" and "_HIEDAM". This type of bottle, produced beginning in 1848, contained a medicinal gin tonic known as "UDOPHO WOLFE'S// AROMATIC/SCHNAPPS//SCHIEDAM" (Fike 1987:187). It was advertised as a medicine to help relieve ailments such as gravel, gout, rheumatism, and problems with the kidneys and bladder (Schluz et al. 1980:30). The remaining glass specimens included 22 melted fragments.

Tableware artifacts included six glass tumblers, accounting for 55 fragments, and two forks. Both forks were iron and one had a three

tines and a wood or bone handle. The other was a 2-tine fork. The glass tumblers include three 8-sided clear glass tumblers, two clear glass 9-sided tumblers, and a clear glass tumbler with a 2½-inch diameter and no design.

Kitchenware artifacts included an iron kettle fragment with a 9-inch diameter, an iron footed skillet fragment, two thin iron container lids, a thin iron handle probably belonging to a cup, two stove fragments, a rectangular sardine-like can, two round cans, and two round can lids. The can and lid fragments did not provide any diagnostic attributes to help determine the dates of manufacture. However, Rock (1984) suggests that the presence of can fragments provides a TPQ of 1820.

Architecture Group Artifacts

A total of 4,155 architectural specimens were recovered from the well shaft. As has been mentioned, the high number of architectural artifacts present in the well suggests that an episode of building dismantling and dumping into the well occurred at some time after well construction. The architectural artifacts are dominated by nails and nail fragments, which account for 96.6% of the Architecture Group artifacts. Of the 4,014 nails, only 1,470 could be identified according to type, while only 535 could be identified according to size. A total of 20 hand wrought nails and nail fragments were identified from this collection. Machine cut nails and nail fragments accounted for 1,454 specimens. Table 17 lists the nails

by penny weights, according to the assumed function of the nails, showing that sheathing and siding nails and framing nails are the most common.

Window glass accounts for the next most common architectural group artifact, numbering 134 specimens. Other artifacts in the architecture group include six spikes and a strap hinge fragment.

Furniture Group Artifacts

A total of five furniture hardware artifacts were recovered from the well shaft. These include an iron wardrobe hook, three lead decorative knobs, and a brass escutcheon.

Arms Group Artifacts

Three arms artifacts make up this group. These include two .32 caliber shell casings and a lead shot measuring 0.35 in diameter, a size commonly used to hunt deer.

Tobacco Group Artifacts

A total of 81 tobacco artifacts are included in this group. Sixty-five of these artifacts are kaolin pipe stems, including 18 at 4/64-inch, 37 at 5/64-inch, and 10 at 6/64-inch. Table 18 lists the types of decoration and information present on the stems. Of the 14 kaolin pipe bowls, nine were plain and five had decorations, including broad vertical panels, vertical ribs, "TD," and a rouletted rim. The "TD" pipes have been discussed by Hopkins (1937), Humphrey (1969), Walker (1966),

Table 17.
Wrought and Cut Nails Recovered from
the Well Shaft

Function and Penny Wt.	Wrought	Cut	#	%
Small timber shingles			63	11.8%
2d		1		
3d	1	13		
4d	1	31		
5d	2	14		
Sheathing and siding			212	39.6%
6d	3	82		
7d	4	30		
8d	1	92		
Framing			173	32.3%
9d		33		
10d		79		
12d	1	60		
Heavy Framing			87	16.3%
16d		58		
20d		13		
30d	1	2		
40d		6		
50d		4		
60d	2	1		

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Table 18.
Pipe Stems Recovered from the Well Shaft, Main House Complex

Decoration	4/64	5/64
Bowstead/SI Mungo		1
McDougall/Glasgow		3
W.White		1
brown glaze tip	2	3
yellow glaze tip	1	
leaves and ribs		1

and Wilson (1971). While the origin of the "T.D" mark remains unclear, by the nineteenth century, pipe manufacturers were using "TD" as a style and by at least 1875 the D. McDougall and Co. of Glasgow were advertising them as such.

Two red clay tobacco artifacts were also recovered, including a red clay pipe stem, measuring 4/64-inch, and a plain red clay pipe bowl.

Clothing Group Artifacts

The clothing artifacts accounted for 0.7% of the total artifact assemblage. The majority of the clothing artifacts are buttons, numbering 29 (76.3% of clothing artifacts). Table 19 outlines the buttons by type. Most of these buttons recovered from the well shaft are Type 23 4-hole porcelain buttons in a range of colors, in addition to bone, shell, and brass specimens. Only one button, a white glass domed button with an eye on the back, did not fit into South's classification. The machine stamped brass button with a plaid design read "GILT" on the reverse. Most of the buttons recovered from the excavations were mass produced and inexpensive, although the different buttons probably served different functions. Porcelain buttons were commonly used on shirts and undergarments, while the metal and bone buttons were used for pants and other work clothes.

In addition to the buttons, a tailor's thimble, a suspender clip fragment, an iron buckle (1¼-inches by 1-inch), a brass aglet, a leather heel fragment, a brass buckle (approximately 1-inch by 1-inch), and three brass gromets were also recovered.

Personal Group Artifacts

A total of 18 Personal Group artifacts, or 0.3% of the total artifact assemblage was recovered from the well shaft. One of these artifacts, a USA nickel, gives a TPQ of 1867. Three slate pencils recovered from this area indicate that at least one of the occupants at Seabrook Plantation was

Table 19.
Buttons Recovered from the Well Shaft, Main House Complex

Type	Description	#	Other (measurements in mm)
19	5-hole bone	8	13.6, 16.8, 17.9, 19.2, 2-19.4, 20.0, 20.1
21	4-hole iron	3	14.2, 17.2, 18.5
22	4-hole shell	4	8.1, 9.4, 9.8 (carved design), 11.5
23	4-hole white porc.	3	8.9, 10.9, 15.9
23	4-hole striped porc.	1	10.2
23	4-hole black porc.	1	9.6
23	4-hole brown porc.	1	10.4
23	4-hole dk. green porc.	1	10.6
23	4-hole green porc.	1	11.1
23	4-hole blue porc.	1	10.9
23	4-hole red porc.	1	10.6
28	machine stamped brass w/ plaid design	1	19.1 (reverse=GILT)
32	4-hole stamped brass	2	13.8, 13.9
--	domed white glass	1	10.2

literate. In addition to these artifacts, two bone comb fragments, a black hard rubber comb fragment, two pocket knife fragments, a brass necklace catch and two brass photo surrounds were also recovered. A patent for the production of rubber goods was given to Thomas Hancock of London in 1820 (Robertson 1974:159). Many of the first rubber products manufactured included parts of clothing, such as garters, braces, and gloves (Robertson 1974:159).

Four beads were also excavated from the well shaft area. These include a round white clay bead, measuring 12.1 mm in diameter, a Type W1b round black glass opaque bead (8.6 mm in

diameter), and two Type W1b round translucent blue beads (8.9 and 9.9 mm in diameter).

Activities Group Artifacts

A total of 350 Activities Group artifacts, or 5.6% of the total artifact assemblage, were recovered from the well shaft area, contributing to the tools, fishing gear, storage items, miscellaneous hardware, "other", toys, and military categories.

A triangular file fragment, two iron fishing hooks, and two lead fishing weights, one made from a crushed minie ball, were recovered from the well shaft. One of the fishing weights measured 5-inches in length. Faunal research (**Vertebrae Faunal Remains from Seabrook Plantation**) indicates that bowfin, catfish, drum, and an unidentified species were recovered from the plantation, and were probably caught using fishing weights similar to these recovered from the well shaft.

A number of storage item artifacts also contributed to the activities group artifacts, including 41 strap fragments.

Two hundred and forty-five miscellaneous hardware artifacts were also recovered from the well shaft. These include 42 brass nails, 171 brass nail fragments, 10 flathead wood screws, one roundhead wood screw, a push pin, three iron staples, eight bolts, a bolt fragment, two washers, one nut, two bolt fragments with nuts, and three bolt fragments with washers. "Other" category artifacts included a brown flint fragment, 15 unidentified iron pieces, an unidentified lead fragment, five pieces of melted lead, five flat brass fragments, three brass strips, one decorative stamped brass piece, two brass wires, six iron wires, five iron rods, and one railroad spike.

Two toy artifacts were recovered, suggesting that children were occupants at Seabrook Plantation at some time. These include a toy cart or wagon fragment, and an unusual porcelain doll arm. The specimen is a right hand and arm with a hole through the clenched hand. The hand of the doll probably held an accessory and this type of doll may have been a Grodnertal

doll, made in the nineteenth century (King 1977:44-45). Toy wagons, carts, locomotives, and buses became popular in the mid-nineteenth century (McClinton 1970:265-266).

The last category of Activities Group artifacts is the military category, numbering 12 specimens. These artifacts probably relate to the military occupation of Seabrook Plantation. Three "top hat" percussion caps and a .52 caliber minie ball were recovered from the well shaft. In addition, eight military Type 27 domed, machine embossed brass buttons were also recovered, seven of which had a "spread eagle" design on the front. The eighth button had a "spread eagle and shield" design, used by Navy enlisted men from 1854 through 1902 (Albert 1969:103). Four of the buttons had embossed lettering on the reverse side, including two with "EXTRA QUALITY," one with "SCOVILL MFG CO/WATERBURY," and another with "W.B. MFG. CO." The Scovill Manufacturing company has been in business making buttons since the 1850s (Luscomb 1967:174), and began producing this particular button at the same time (Tice 1997:32). "W.B." stands for the Waterbury Button Company, which began producing buttons in 1849 and produced this button beginning in the 1850s (Tice 1997:49).

Old Seabrook Landing Road Unit

The old Seabrook Landing Road bed ran to Seabrook Landing on Skull Creek. This road would have been an important part of the Landing, bringing people to Hilton Head Island from the Landing, and accommodating people leaving through the landing. Both Confederate and Union troops also used this road. A total of 311 artifacts were recovered in 100 square feet of excavations, amounting to 3.1 artifacts per square foot or 3.9 artifacts per cubic foot.

Kitchen Group Artifacts

The unit in the Old Seabrook Landing Road produced 270 Kitchen Group artifacts, representing 86.8% of the total assemblage. The most common artifacts in this group are glass, accounting for 239 specimens, or 88.5% of the kitchen artifacts. Ceramics are the second most

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common, representing 11.1% of the kitchen artifacts, or 30 specimens. Only one tableware artifact was recovered from this excavation unit.

Whiteware accounted for 23 ceramic specimens, including blue edged, blue transfer printed, purple transfer printed, annular and undecorated wares, and produced a TPQ of 1820. These whiteware ceramics produced a minimum vessel count of four vessels, including an undecorated plate, a molded bowl, a purple transfer printed plate, and a blue edged plate. Other ceramic wares contributed a minimum vessel count of two, including a gray salt glazed stoneware shallow bowl and a ginger beer bottle. These ceramics produced a mean ceramic date of 1853.3.

The glass category produced a number of specimens and a minimum vessel count of seven bottles. "Black" glass specimens, numbering 75, produced two bottles. Eighty-five aqua glass specimens yielded a round bottle and a panel bottle. The side of the aqua panel bottle read "ACKARD & NEW". Unfortunately, no further information could be found on this bottle's manufacturer or contents. Nine light green glass fragments included a 3-inch diameter bottle, and 12 manganese fragments produced an oval bottle. Other glass artifacts included five brown fragments, 27 emerald fragments, two blue fragments, and 25 clear fragments.

The single tableware artifact was a bone utensil handle.

Architecture Group Artifacts

Thirty architectural artifacts, accounting for 9.65% of the total artifacts, were recovered from this unit excavation, including eight fragments of window glass and 22 unidentified nails.

Arms Group Artifacts

Only one arms artifact, a .44 caliber shell casing, was recovered from this unit.

Tobacco Group Artifacts

A total of five tobacco artifacts, or 1.6% of the total assemblage, were recovered from the Old Seabrook Landing Road bed. These included two kaolin pipe stems measuring 5/64-inch, and three pipe bowls, including two plain bowls and one "TD" decorated bowl.

Clothing Group Artifacts

Only two clothing artifacts were recovered from this excavation unit, accounting for 0.6% of the total assemblage. These included two Type 23 4-hole white porcelain buttons, measuring 11.1 mm and 11.3 mm in diameter.

Activities Group Artifacts

The Activities Group produced three "other" category artifacts, including two unidentified pieces of iron and an unidentified fragment of brass.

Northern Slave Row

The Northern Slave Row was situated east of the Main House Complex and north of the Old Seabrook Landing Road. an 1862 map shows five structures in this vicinity, but extensive plowing and erosion has affected the preservation of these structures. There may have also been a manmade berm to the north of this row that acted as a property boundary. A total of 1,742 artifacts were found, equaling 4.1 artifacts per square foot or 4.3 artifacts per cubic foot.

Northern Slave Row Structure

Excavations in the Northern Slave Row revealed what may have been a structure in the antebellum period, represented by the presence of postholes of similar size and shape (see Figure 28). The block excavation at this area also revealed the presence of three features, including an agricultural ditch (Feature 3), the remnants of what may have been a hearth (Feature 5), and a possible large posthole (Feature 4), in addition to a number of other various postholes that may represent different occupations of the area. The drainage

ditch (Feature 3) appears to cut into Feature 5, which may have been an outside hearth feature. These features will be discussed in the following section.

Kitchen Group Artifacts

A total of 909 kitchen artifacts, or 59.3% of the total assemblage, was recovered from the Northern Slave Row structure. Ceramics (n=499) account for 54.9% of the kitchen artifacts and glass (n=398) accounts for 43.8% of the kitchen artifacts. Seven tableware and five kitchenware artifacts were also recovered.

Porcelain	9	1.8%
Stoneware	49	9.8%
Brown	25	
Blue/Gray	12	
White	4	
Other	8	
Earthenware	441	88.4%
Slipware	7	
Coarse	17	
Creamware	104	
Pearlware	172	
Whiteware	134	
Yellowware	6	
Burnt	1	

The ceramics recovered from the Northern Slave Row structure are mainly nineteenth century specimens, although there are a few examples of eighteenth century ceramics. Table 20 shows the major types of datable pottery, revealing that tablewares, such as pearlwares, creamwares, and whitewares account for the majority of the ceramics at 82.2%. The mean ceramic date for this structure is shown in Table 21. The presence of 83 specimens of undecorated whiteware provides a TPQ of 1820.

Two early ceramics, white salt glazed stoneware and lead glazed slipware, contributed four and seven specimens, respectively, to the

ceramic category. In addition, 25 brown and 12 gray salt glazed stoneware fragments were recovered. The salt glazed stonewares are typically industrial, wheel thrown pottery with a range of textures, including a very fine salt texture with a thin glaze, a well-developed "orange-peel" texture, and an extremely heavy salt texture with runs and agglutinations. The colors, such as grey, beige and brown, reflect impurities in the clay. In the late nineteenth century, pottery manufacturers began to produce stoneware with an opaque white slip, on factory molded pieces made in the Midwest and Southeast (Ketchem 1983:19). The white salt glazed stoneware contributed a 7-inch diameter bowl to the minimum vessel count, as did a brown salt glazed jar or crock, a ginger beer bottle, and a lead glazed slipware milk pan.

The pearlwares contributed a total of 172 fragments to the ceramics category, representing 21 minimum vessels. These included an undecorated bowl, three green edged plates, seven blue edged plates, a blue handpainted bowl, a blue handpainted teapot, two poly handpainted bowls, an annular bowl, four blue transfer printed plates, and a blue transfer printed platter.

Creamware specimens included a total of 104 fragments, the majority of which were undecorated. The minimum vessel count for creamwares included five undecorated plates, two undecorated bowls, two Royal rim plates, and a poly handpainted bowl.

Whiteware fragments numbered 134 and produced a total of 26 minimum vessels. These include four undecorated plates, three undecorated bowls, two undecorated saucers, an undecorated teapot, an undecorated pitcher, six blue edged plates, six annular plates, a sponge decorated plates, a blue transfer printed plate, a blue transfer printed platter and three flow blue plates. Other ceramic vessels included two plain yellowware bowls, a yellowware annular mug, and two white porcelain plates.

Table 22 shows the distribution of vessels according to their function and shape. Surprisingly, plates account for the majority of forms (55.1%), while bowls account for only 29.0%

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Table 21.
Mean Ceramic Dates Northern Slave Row

Ceramics	Mean Date (xi)	Auger Tests		General Excavations		Feature 3 Ditch	
		fi	fi x xi	fi	fi x xi	fi	fi x xi
White saltglazed stoneware	1758			4	7032		
Lead glazed slipware	1733			7	12131		
Creamware, handpainted	1805			2	3610		
undecorated	1791	5	8955	102	182682	19	34029
Pearlware, mocha	1843	1	1843				
poly handpainted	1805	1	1805	10	18050		
blue handpainted	1800			6	10800	1	1800
blue transfer printed	1818	1	1818	43	78174	4	7272
edged	1805	1	1805	23	41515	2	3610
annular/cable	1805			7	12635	5	9025
undecorated	1805	5	9025	83	149815	8	14440
Whiteware, blue edged	1853			6	11118	1	1853
poly handpainted	1848			1	1848	14	25872
blue transfer printed	1848	2	3696	18	33264	1	1848
non-blue transfer printed	1851			1	1851		
annular	1866	1	1866	21	39186	2	3732
sponge	1853			4	7412		
undecorated	1860	4	7440	83	154380	11	30460
Yellow ware	1853			6	11118		
Total		21	38253	427	776621	68	123941
MCD			1821.5		1818.7		1822.6

of the forms.

Container glass accounts for 398 specimens, or 43.8% of the kitchen artifacts. "Black" glass is the most prevalent type, comprising 59.0% of the glass category and contributing ten round bottles to the minimum vessel count. Eighty-three specimens of aqua glass produced seven round bottles, probably representing mineral water or soda bottles. Brown glass included 24 specimens and produced four round bottles. Clear glass contributed 15 fragments and produced three

round bottles and a square bottle, probably a case bottle. Other glass specimens included 13 fragments of dark aqua glass, three fragments of pale blue glass, and three fragments of manganese glass.

The tableware artifacts included an iron utensil handle, a knife fragment that would have had a bone or wooden handle and two tumbler fragments. The tumblers were made of clear glass and had 8-sided, paneled bodies. The kitchenware artifacts included four kettle fragments and one can fragment, giving a TPQ date of 1820.

Architecture Group Artifacts

A total of 476 architectural artifacts, or 31.0% of the total assemblage, were recovered from the Northern Slave Row Structure.

Nails and nail fragments account for the largest group of architectural artifacts, numbering 339 or 71.2%. Of these nails, only 39 could be identified according to size and shape, while an

Form	#	%
Tableware	61	88.4%
Plates	38	
Bowls	20	
Serving	3	
Tea and Coffeware	4	5.8%
Utilitarian	4	5.8%

Table 23.
Nails Recovered from the Northern
Slave Row Structure

Function and Penny Wt.	Wrought	Cut	#	%
Small timber shingles			3	7.7%
4d		1		
5d	1	1		
Sheathing and siding			14	35.9%
6d		3		
8d	1	10		
Framing			16	41.0%
9d		4		
10d	1	5		
12d		6		
Heavy Framing			6	15.4%
16d		3		
20d		1		
30d		1		
40d	1			

additional 92 were determined to be either cut or hand wrought. Hand wrought nails are represented by only five nails in the assemblage, while cut nails account for 126 specimens. Table 23 shows the size and probable function of those nails that could be analyzed. Although the sample size is small, the remaining nails indicate that this structure had a frame construction with wood cladding and possibly planks rather than shingles. It is likely that the house was not plastered, due to the small number of small nails.

Only one fragment of window glass was excavated from the structure, suggesting that the structure did not have paned glass windows. A strap hinge fragment and four spike fragments were also recovered.

Furniture Group Artifacts

A total of two furniture artifacts were recovered from this excavation, accounting for 0.1% of the total artifact assemblage. These include a brass escutcheon that may have belonged to a cupboard or small chest, and a small brass hinge. These furniture items are generally considered high status artifacts and suggest that slaves were given the Main House occupants' cast-

offs, or that the slaves raided the abandoned Main House at the beginning of the Civil War.

Arms Group Artifacts

The artifacts recovered from the Northern Slave Row that are related to arms have been categorized as military artifacts and will be discussed in the Activities Group section. However, it should be noted that it is possible that these artifacts may have been used by slaves at the Northern Slave Row.

Tobacco Group Artifacts

A total of 101 tobacco artifacts, or 6.6% of the total assemblage were recovered from the Northern Slave Row structure. These artifacts included 98 kaolin clay pipe stem fragments and three kaolin pipe bowls.

Of the three bowls, one was plain and two had vertical ribs. The most common pipe stem diameter is 5/64-inch, accounting for 68.4% of the total pipe stems (n=67). Twenty-two stems had bores measuring 4/64-inch and nine had bores measuring 6/64-inch. Table 24 shows the various maker's names and decorations present on 10 of the pipe stems.

Two of the pipe stems were made by the White manufacturers in Glasgow. W. White and Sons was the largest manufacturer of pipes during the middle to late nineteenth century, but they were not exported in large quantities (Humphrey 1969:18). The number "78" often appears on

Table 24.
Pipe Stem Decorations from the
Northern Slave Row

Decoration	4/64	5/64	6/64
Glasgow/McDougall		1	
Gouda/J.Sparn_w/ ribs		1	
McDougall/Glasgow	1	2	
W.White/Glasgow	1		
White/Glasgow	1		
_mbier/_aris/_oM			1
78		2	
leaves and ribs		1	

White pipes, usually molded in relief on the left side of the stem preceding the name of the manufacturer. This number probably identifies a style of tobacco pipe. Three of these pipes were made by the McDougall Company of Glasgow, discussed previously. No specific information was found on the "GOUDA" pipestem, although these pipes were likely manufactured at the Gouda municipality in the Netherlands, which had a large number of members in the Gouda Pipemakers Guild by 1750 (Walker 1977:264-266).

Clothing Group Artifacts

A total of five clothing artifacts were recovered from the Northern Slave Row excavations, accounting for 0.3% of the total artifact assemblage. These artifacts included two non-military buttons, a brass decorated buckle, and two iron buckles. The iron buckles may have been used with belts.

The specimens include a Type 23 white 4-hole porcelain button, and a 2-hole rubber button which read "GOODYEAR'S PAT 1851/CO" on the reverse. Nelson Goodyear was an American inventor that secured a patent for the improvement of India rubber in 1851, although this date does not indicate the exact date of manufacture for the button (Lipscomb 1967:91), but rather provides a TPQ of 1851.

Personal Group Artifacts

The Personal Group Artifacts included a single pocket knife fragment, accounting for 0.1% of the total artifact assemblage.

Activities Group Artifacts

A total of 40 activity artifacts were recovered, accounting for 2.6% of the total artifact assemblage. These included artifacts in the tools, fishing gear, storage items, miscellaneous hardware, "other," toys, and military categories.

The toys category included one clay marble. It is likely that this artifact was actually used as a gaming piece by adults. A triangular file fragment, a lead fishing weight, and six fragments

of strap iron were also recovered.

The miscellaneous hardware category included six brass nails, two flathead wood screws, three brass nail fragments, a brass screw, an iron staple, and two links of chain. The "other" category included an unidentified brass piece, a brass strip, an iron rod, a piece of melted lead, an unidentified lead object, and five unidentified lead fragments.

The military category is separated to highlight the military artifacts recovered from Seabrook Plantation that were first used by the military during their occupation at Seabrook, and may have later been appropriated by the slaves occupying the Northern Slave Row. The military artifacts include three minie balls, a .32 caliber percussion cap, and three buttons. These buttons, similar to others found at the Main House Complex, are all machine stamped, domed brass buttons (Type 27) that have spread eagle and shield motif. As has been noted, these buttons were used by the general services men after 1854 and are known as #GI-94 buttons by Albert (1969). Two of the buttons read "EXTRA QUALITY" on the reverse and another read "SCOVILL MFG CO/WATERBURY." As previously discussed, this company began manufacturing buttons with this mark after 1851. Soldiers did not begin using this type of button until post-1854, therefore it is likely that these buttons were not manufactured until at least this date, providing a TPQ of 1854.

Feature 3 (Ditch)

Feature 3 is a drainage ditch that appears to be intrusive on Feature 5. Most of the artifacts recovered from this area were whole, suggesting that they were deposited in the ditch, rather than being mixed up when the ditch was dug out. This feature yielded a total of 193 artifacts.

Kitchen Group Artifacts

A total of 134 kitchen artifacts were recovered from Feature 3, or 68.7% of the total assemblage. The most prevalent group of artifacts were ceramics (n=71) and glass (n=61),

accounting for 53.0% and 45.5% of the kitchen group artifacts.

Ceramics included 71 specimens, including one blue/gray stoneware fragment, two coarse earthenware fragments, 19 creamware fragments, 20 pearlware fragments, and 29 whiteware fragments. These fragments produced the following minimum vessel count: an undecorated creamware Royal molded plate, a green edged pearlware plate, a blue edged pearlware plate, two annular pearlware bowls, an undecorated whiteware pitcher, a blue edged whiteware plate, an annular whiteware bowl, and a poly hand painted white ware saucer.

The presence of whiteware gives a TPQ of 1820. The mean ceramic date for this feature is shown in Table 21. The whiteware saucer had an impressed maker's mark which read "ADAMS" on the underside of the vessel. This mark was used by the William Adams & Sons potters who operated from 1769 until the late 1800s (Kovel 1986:102, 158). This particular mark was used from 1804-1864 (Macdonald-Taylor 1962:178).

In addition to the Euro-American ceramics, two fragments of Colono ware were also recovered from Feature 3. Colono ware is a low-fired earthenware commonly interpreted as a ware produced¹ by African American slaves for their own use. Compared to other Hilton Head Island plantations, such as Stoney Baynard, Seabrook has a very small number of Colono ware sherds. Lees and Kimery-Lees (1979:9) note that the use of Colono ware decreased through time at Limerick Plantation, which has also been noted at other plantation sites and may also be true for Seabrook Plantation.

"Black" glass is the most prevalent glass found in Feature 3, accounting for 60 fragments. Only one other fragment of clear glass was recovered. A minimum number of vessels was not possible.

¹ See Anthony 1986, Ferguson 1989, Garrow and Wheaton 1989, Trinkley et al. 1995, Trinkley and Hacker 1996, and Wheaton et al. 1983 for studies of colonoware.

Architecture Group Artifacts

A total of 52 architectural artifacts were recovered from Feature 3, accounting for 26.7% of the total assemblage. Forty-seven of these artifacts were nails fragments, in addition to two 7d cut nails and two 8d cut nails. A plumbing pipe was also excavated.

Tobacco Group Artifacts

A total of three tobacco artifacts, accounting for 1.5% of the total assemblage, was excavated from Feature 3. These include two 4/64-inch pipe stems and one 5/64-inch pipe stem.

Clothing Group Artifacts

Only two buttons were recovered from Feature 3, accounting for 1.0% of the total assemblage. Both Type 7 buttons, one was made of white metal, measuring 21.6 mm, and the other was made of brass, measuring 17.0 mm.

Activities Group Artifacts

A total of four Activity Group artifacts were recovered from Feature 3, accounting for 2.1% of the total assemblage. These artifacts include a hoe fragment, two strap iron fragments, and an iron ring.

Features 4 and 5

Feature 4 was originally thought to have been a large posthole, but upon further investigation was determined to be the remnants of a tree. Ten artifacts were recovered from this feature, including three ceramics and a fragment of glass.

Feature 5, as previously discussed, appeared as an area of burnt, red sand and may have been a outdoor hearth or single episode of burning, although this is a very tenuous interpretation based on the available evidence. This feature contained only three artifacts, including a lead glazed slipware ceramic, a black glass fragment, and an aqua glass fragment. The

lead glazed slipware fragment gives a TPQ of 1670, and was manufactured from 1670-1795. Ethnobotanical evidence, discussed in this volume, may shed more light on the use of this area as a possible hearth.

The Berm

An excavation unit was placed on an area of a manmade feature recognizable as a berm, located to the north of the Main House Complex and the Northern Slave Row. This area may have been a property boundary and may have had a fence placed on top of it. This excavation produced a total of 73 artifacts (1.4 artifacts per square foot, or 1.0 artifacts per cubic foot). All of the artifacts, except for an unidentified piece of metal, were recovered from Zone 1, and probably pertain to the construction of berm.

Kitchen Group Artifacts

A total of 61 kitchen artifacts, or 83.6% of the total assemblage, was recovered from the excavation unit on top of the berm. Fifteen ceramic fragments and 46 glass fragments make up the total assemblage. The ceramics include two clouded wares, a blue edged pearlware, an undecorated pearlware, a blue transfer printed whiteware, two undecorated whitewares, five yellowwares, a brown stoneware, and two alkaline glazed stonewares. These fragments produced a minimum vessel count of three, including a blue edged pearlware plate, a molded feather edged pearlware plate, and a tortoise shell bowl. The mean ceramic date for this unit was 1829.4. The TPQ for this unit is 1820 based on the presence of three pieces of whiteware.

The glass artifacts consist of 37 fragments of "black" glass, two fragments of aqua glass, and seven fragments of dark aqua glass, which produced a minimum vessel count of four black bottles. None of these bottles provided any further information on the manufacturers, contents, or dates of manufacture.

Architecture Group Artifacts

A total of 11 architectural artifacts were

recovered from the berm, accounting for 15.1% of the total assemblage. These artifacts included three cut nails (two 10d and one 12d), a cut nail fragment, six unidentified nail fragments, and a fragment of window glass.

Activities Group Artifacts

A single brass scabbard tip was the remaining artifact found in this excavation. It measured 4 1/8-inches and belonged to a U.S. bayonet, of standard type with a sheet brass body and a solid brass tip (Legg et al. 1991:121-122).

Southern Slave Row

The Southern Slave Row was located south of the Old Seabrook Landing Road, and the Main House Complex, approximately 500 feet away from the Main House, according to the 1862 Geodetic Map. The 1862 map also shows a cluster of eight structures in this row, not aligned in a straight pattern as was the case for the Northern Slave Row. The alignment of the structures suggests that the Southern Slave Row may have been a freedmen area, a later slave row, or artisan slaves rather than field slaves. In this area, two of the eight structures shown on the map were discovered and excavated, along with areas within the yards and an isolated midden that may have been associated with an unidentified structure in this area.

Structure 1

Excavations at Structure 1 revealed that the structure, raised on posts, measured 13 by 19 feet and had a tabby chimney at the south end of the house, which measured 5.8 feet wide by 3.9 feet deep. A dense shell midden was situated behind the house. Excavations also suggested that the yard around the houses was swept. A total of 3,422 artifacts were recovered from these excavations, yielding 5.8 artifacts per square foot, or 6.5 artifacts per cubic foot.

Postholes at Structure 1 excavations reveal TPQs of the possible construction of the building based on the presence of ceramic wares within the postholes. Five postholes reveal the presumed

Table 25.
Major Types of Datable
Pottery from Structure 1,
Southern Slave Row

Porcelain	34	3.9%
Stoneware	62	7.1%
Brown	39	
Blue/Gray	19	
Other	4	
Earthenware	778	89.0%
Slipware	1	
Coarse	7	
Delft	1	
Creamware	40	
Pearlware	226	
Whiteware	489	
Yellowware	12	
Burnt	2	

dimensions of the building, and three others show that a porch or fence may also have been constructed near the structure. The structure's individual postholes have TPQs of 1820, based on the presence of whiteware, and 1826, based on the presence of yellowware, suggesting that the building was constructed after 1826. The other postholes also have a TPQ of 1820, based on the presence of whiteware.

Kitchen Artifacts

A total of 1,740 kitchen group artifacts, accounting for 50.9% of the total assemblage at Structure 1, were recovered. Ceramics (n=874) and glass (n=823) account for the majority of the kitchen artifacts, 97.5%. In addition, ten tableware artifacts and 33 kitchenware artifacts were also recovered from this Structure.

The major types of datable ceramics, shown in Table 25, reveal that whiteware is the most prevalent ceramic type, although creamware and pearlware also occur in large numbers. The majority of the ceramics are nineteenth century, with only a few examples of eighteenth century wares present in the assemblage. The TPQ for Structure 1 is 1820 based on the large presence of whiteware. The mean ceramic date is shown in Table 27.

Creamware is represented by a total of 40 fragments and produced two Royal scalloped edge plates, and an undecorated bowl. Pearlware, numbering 226 fragments, produced a total of 26 vessels. These include an undecorated plate and saucer, nine blue edged plates, two green edged plates, a blue handpainted bowl, a poly handpainted plate, nine annular bowls, a blue transfer printed plate and a blue transfer printed saucer.

The whiteware fragments numbered 489 and produced a total of 52 vessels, including eight undecorated plates, three undecorated bowls, two undecorated cups, an undecorated saucer, 16 blue edged plates, four green edged plates, a poly hand painted bowl, a poly hand painted cup, a sponge decorated cup, a sponge decorated bowl, ten annular bowls, two blue transfer printed plates, a blue transfer printed bowl, and a blue transfer printed cup.

A number of other ceramic type fragments produced a minimum number of vessels. Porcelain accounted for 34 specimens and produced a bisque ointment jar, a plate with gilt strips, a cup, and a saucer. Yellowware, numbering 12 fragments, produced a bowl. Six bases of gray salt glazed stoneware were recovered that belonged to a crock or a jug. A brown salt glazed stoneware bottle or jug contributed to the minimum vessel count, as did a crock or jug base. Fragments to a ginger beer bottle were also recovered.

A ceramic maker's mark from this structure helps date the occupation. Impressed on the interior of a gray alkaline glazed stoneware, this vessel was produced June 21, 1850, possibly by Edward Walley of the Villa Pottery (Kovel 1986:238).

The entire collection for Structure 1 included 47 plates, 27 bowls, six cups, five saucers, and five utilitarian jugs, crocks, or bottles. As Table 27 shows, tablewares account for 82.2% of the ceramic assemblage, while utilitarian wares account for only 5.6% of the assemblage. No serving forms were recovered from Structure 1. Teaware accounts for 12.2% of the assemblage.

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Table 26.
Mean Ceramic Dates Southern Slave Row

Ceramics	Mean Date	Structure 1		Structure 2		Yard Area		Isolated Midden	
	(xi)	fi	fi x xi	fi	fi x xi	fi	fi x xi	fi	fi x xi
Underglazed porcelain	1730			1	1730				
Westerwald	1738			1	1738				
Lead glazed slipware	1733	1	1733	2	3466	1	1733		
Clouded wares	1755							2	3510
Plain delft	1720	1	1720						
Creamware, undecorated	1791	40	71640						
Pearlware, mocha	1843	3	5529	2	3686				
poly hand painte	1805	1	1805			1	1805		
blue hand painted	1800	5	9000	9	16200				
blue transfer print	1818	42	76356	9	16362	4	7272		
edged	1805	19	34295	10	18050				
annular/cable	1805	49	88,445	41	74005	9	16245	5	9025
undecorated	1805	107	193135	53	95665	9	16245	2	3610
Whiteware, green edged	1828	8	14624						
blue edged	1853	39	72267	7	12971	6	11118		
poly hand painted	1848	18	33264	19	35112	4	7392		
blue transfer print	1848	46	85008	16	29568	7	12936	1	1848
non-blue trans print	1851	8	14808	3	5553	2	3702		
annular	1866	46	85836	34	63444	18	33588	5	9330
sponge	1853	10	18530	7	12921				
undecorated	1860	314	584040	202	375720	108	200830	78	145080
Yellow ware	1853	12	22236	5	9265	12	22236	4	7412
Total		769	1414271	421	775506	181	335152	97	179815
MCD		1839.1		1842.0		1851.6		1853.7	

A large amount of glass artifacts were also recovered from Structure 1. The most prevalent glass artifacts are fragments of "black" glass, which produced a total of three round bottles, all with diameters of 3-inches. One of the bases bore the inscription "PHILA/DYOTTVILLE GLASSWORKS." Bottles bearing this particular inscription were produced between 1833-1923 at the Dyottsville Glass Works in Philadelphia (Toulouse 1971:171). Thomas W. Dyott began work as a druggist and sales agent for the Kensington Glass Works and by 1833 had purchased the glassworks and changed the name. (Toulouse 1971:503). He was registered as a producer of window glass, vials, and bottles (Toulouse 1971:504).

Aqua glass fragments (n=213) represented a total of six bottles. These included a panel bottle, and five round bottles, all measuring between 2 and 2 1/2-inches in diameter. The panel

bottle read "J. T. SCHUP_ / DRUGGIS_ / SAVANNAH" on the body of the bottle. No further information about this bottle was found. Brown glass fragments, numbering 103, produced a single round bottle measuring 3-inches in diameter. Eighty clear glass fragments produced a total of three bottles, including a round bottle measuring 3 1/2-inches in diameter, a round pharmaceutical bottle measuring 1 1/8-inches in diameter, and a perfume bottle that read "WA + C O " on the base and "_OTT/(PER)FUMER/(SAV)ANNAH" on the panel.

Other bottles included a round blue pharmaceutical bottle measuring 1 1/2-inches in diameter and two light green round bottles, measuring 2 1/2-inches and 3-inches in diameter. Other glass artifacts included 13 fragments of green glass, 22 fragments of emerald glass, one

Table 27.
Form and Function of Ceramic
Vessels from Structure 1,
Southern Slave Row

Form	#	%
Tableware	74	82.2%
Plates	47	
Bowls	27	
Serving	0	
Tea and Coffeware	11	12.2%
Utilitarian	5	5.6%

fragment of opaque sky blue glass, a fragment of dark purple glass, 27 fragments of manganese glass, and five fragments of melted glass.

Tableware artifacts include a clear glass goblet base, a clear glass molded stem and body from a goblet, a clear glass tumbler rim, a clear glass stopper, five fragments from a molded green glass bowl or lid, and a 3½-inches in diameter manganese molded glass bowl. Kitchenware artifacts include 19 kettle fragments and 14 can fragments. The can fragments give a TPQ of 1820.

Architecture Group Artifacts

A total of 1,357 architectural artifacts, accounting for 39.7% of the total assemblage, were recovered from Structure 1.

Nails and nail fragments are the largest group of architectural artifacts, with the 1,311 specimens accounting for 96.6% of the architecture group. Of this amount, 1,269, or 96.8%, could not be identified as to size. The remaining 42 nails and nail fragments included 21 cut nails, 10 cut nail fragments, and 11 wire nails. Wire nails were produced beginning in 1850, but regular size nails were not produced in large quantities until the last quarter of the nineteenth century (Bucher 1996:534; Noel Hume 1970:254). In fact, as late as 1886, at least 90% of the nails manufactured in the United States were still cut nails. And by as late as 1892 about 50% of the nails being used were still cut (Howard 1989:55). This suggests that while the house was built by slaves, it was being refurbished by freedmen.

Smaller nails sizes, 2d-5d, accounted for three cut nails. Nails used for sheathing and siding, 6d-8d, accounted for 13 cut nails and four wire nails. Framing nails, 9d-12d, accounted for four cut nails and two wire nails. Heavy framing nails, 16d and higher, accounted for one cut nails and five wire nails.

This evidence, along with architectural remains, suggests that the house was a wood framed structure. The presence of sheathing nails suggests that the house had wood cladding, while the sparsity of smaller nails suggests that the building did not have a plaster interior, or shingles, but rather probably had wooden planks for roofing.

Other architectural artifacts include 39 fragments of window glass, three roofing nails, two pintle fragments, a lock box corner, and an agate ware door knob fragment. The presence of window glass suggests that this structure did have paned windows of glass, rather than just shutters, which is in contrast to the lack of glass at the Northern Slave Row structure.

Arms Group Artifacts

A total of seven arms artifacts were recovered from Structure 1. These include four .22 caliber rimfire shell casings, a lead shot, and two gunflints, one honey colored and one dark brown. Rimfire cartridges were used in rifles and handguns beginning in the mid-eighteenth century, and reached popularity in the late eighteenth century (Barnes 1993:365). The earliest made .22 caliber rimfire cartridge, made first in 1845, was a Bulleted Breech Cap for a Flobert indoor target rifle (Barnes 1993:367) These artifacts suggest that the occupants at this structure had access to fire arms and may have supplemented their diet with wild game. According to Joyner (1984:100-101) game meats were popular among slaves and they also shot predators as part of their work on the plantation. Faunal research (see **Vertebrate Faunal Remains from Seabrook Plantation**) reveals that deer, turkey, and opossum remains were present at the Southern Slave Row and represent wild animals that were possibly hunted by the occupants of the row.

Tobacco Group Artifacts

A total of 155 tobacco artifacts, accounting for 4.5% of the total assemblage was recovered from Structure 1. These artifacts included a total of 117 kaolin pipe stems and 38 kaolin pipe bowls. The most common diameter pipe stems is 5/64-inch, accounting for 85 fragments, followed by 4/64-inch diameter stem, numbering 24. Table 28 shows the decorations and makers' marks found on the pipe stems. Both "Gouda" and "W.WHITE" stems have been discussed above. Unfortunately, no information was found on the "Coigent" stems.

Of the 38 pipe bowls, 19 were plain. Other pipe bowls with designs included seven with vertical ribs, four with leaves, three with vertical

Decoration	4/64	5/64	6/64
Coigent		1	
_(G)ouda//A.Spar _ w/ ribs		1	
INC__A/SPARNA_Y			1
78 W.White/Glasgow	1	1	
leaves and ribs			1
ribs		1	
ribs and dots		1	
spirals		1	
vertical ribs		1	

ribs and leaves, one with a strip of ribbing at the rim, one with an unidentified design, one with a "TD," one with a complex design, and one with fancy curlicues. As has been mentioned, it is not possible to date pipe designs or discover makers from the designs.

Clothing Group Artifacts

A total of 89 clothing artifacts were recovered from Structure 1, accounting for 2.6% of the total assemblage. These artifacts included 77 non-military buttons and 8 leather fragments, a porcelain collar button, a brass thimble, a brass clasp for a strap, and a brass shoe heel cap.

Of the 77 buttons, 49 were 4-hole

porcelains, shown in Table 29. Four of the stamped brass buttons had information stamped on the back, such as "BEST/COLOUR," "DOUBLE GILT," and "JAS. D + CO./GILT." No further information on these buttons could be obtained. Thirteen of the buttons could not be categorized according to South's classification scheme. These include 2-hole shell buttons, a 3-hole white porcelain button, four 2-hole white porcelain buttons, two white domed glass buttons, a triangular domed white glass button, and a faceted purple glass button. The glass buttons were common during the nineteenth century.

Personal Group Artifacts

A total of 17 personal artifacts, or 2.6% of the total assemblage, were recovered from Structure 1. These artifacts include five beads, an iron key, eight slate fragments, two slate pencils, and a green stone with worn facets that was probably a ring setting. The slate pencils suggest that an occupant of Structure 1 was literate, and demonstrates the effects of the Port Royal Experiment and the presence of AMA teachers at Seabrook Plantation. The Montgomery Ward & Company Catalog shows that slate pencils sold for 7¢ per dozen in 1895, and small writing slates sold for 4¢ each.

Beads are an important artifact related to the presence of African Americans on plantation sites. The recovered beads, all glass, include a clear, faceted tube bead with a white interior and a diameter of 9.38 mm (Type IIIf), two wire wound translucent blue beads with diameters of 7.0 and 8.6 mm (Type W1c and W1b), a wire wound white opaque bead with a diameter of 10.5 mm (W1b), and an opaque white round tube bead with a diameter of 8.3 mm (IIa). Otto (1984:174-175) has suggested that the presence of beads at sites may be indicators of occupation at these areas by African American women. Researchers have also suggested that beads present at African American slave sites represent evidence for cultural continuities between West African culture and African American culture (for example, see Russell 1997). Singleton (1996:148) has suggested that blue beads in particular, which are normally the most common color found at slave sites, may have

Table 29.
Buttons Recovered from Structure 1, Southern Slave Row

Type	Description	#	Other (measurements in mm)
7	spun white metal/brass w/ eye cast in place	2	21.6, 21.8
15	1-hole bone disc	1	18.7
18	stamped brass	7	14.7, 18.3 (reverse=BEST COLOUR), 18.4 (reverse=BEST/COLOUR), 18.8, 19.2, 19.8 (reverse=JAS. D + CO./GILT), 23.3 (reverse=DOUBLE GILT)
20	4-hole bone disc	2	17.0, fragment
22	4-hole shell, sunken panel, flat back	1	9.3
23	4-hole white porc.	44	8.0, 9.4, 2-9.5, 2-9.7, 10.0, 10.2, 3-10.3, 10.4, 4-10.5, 10.6, 2-10.7, 4-10.8, 2-10.9, 2-11.0, 11.1, 2-11.2, 12.8, 13.0, 14.1, 14.2, 15.9, 16.6, 16.9, 17.4, 17.5
23	4-hole red porc.	2	2-10.9
23	4-hole white porc. with concave spots	1	10.2
23	4-hole white porc., hobnail design	2	9.5, 10.9
24	fabric covered iron front and back	1	14.4
25	machine stamped brass face, iron back	1	24.1 (front=2 birds)
--	iron-bad corrosion	2	18.3, fragment
--	leather front, brass and leather back	1	13.7 (height=4.4)
--	2-hole shell	2	15.4, 17.1
--	3-hole white porc.	1	7.9
--	2-hole white porc.	3	12.9, 15.1, 15.6
--	domed white glass	2	10.2 (height=6.2), 11.3, (height=6.9)
--	triangular white glass	1	13.3 (height=8.3)
--	faceted and domed purple-brown glass	1	25.5

The military items found at Structure 1 were most likely first used by military personnel, but were then used by African Americans. The military artifacts include four minie balls and two military buttons. The minie balls include two .56 calibers, and two .577/.58 calibers. As has been mentioned, slaves were often responsible for keeping predators away from plantation areas and also supplemented their diet with game meats, accounting for the presence of arms artifacts at this area.

The military buttons, both Type 27 domed and machine embossed brass buttons, had "eagle with shield" and "eagle with I shield" designs. The reverse of one read "EXTRA/QUALITY," most likely an advertising slogan, and the other read "STEELE + JOHNSON"

functioned as a protective charm.

Activities Group Artifacts

A total of 57 artifacts, or 1.7% of the total assemblage, were recovered from Structure 1 in the Activities Group, representing categories such as tools, fishing gear, storage items, stable and barn items, miscellaneous hardware, "other," toys, and military items.

The military items have been separated here to highlight the military occupation at Seabrook Plantation, which serves as a temporal indicator, and to indicate that military items were often appropriated by African American slaves.

on the reverse. The "eagle with shield" button was used by infantry soldiers after 1854 (Albert 1969:40). The "eagle with I shield" button, produced between 1858-1920 by the Steele and Johnson company (Luscomb 1967:188), was used by officers in the infantry after 1851 (Albert 1969:37-38). The first button gives a TPQ of 1854, and the second gives a TPQ of 1858.

Two artifacts recovered from Structure 1 belong to the toys category, including a porcelain doll leg or arm, and an undecorated clay marble measuring 20.1 mm in diameter. While the doll arm suggests that a child lived at Structure 1, the marble was probably used by an adult as a gaming piece.

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A round file fragment and two lead fishing weights were also recovered, contributing to the tools and fishing gear categories. Storage artifacts included a brass padlock keyhole cover and four pieces of strap iron.

Only a single artifact, a whiffletree hook, belonged to the stable and barn category. A whiffletree hook was a wagon fixture comprised of a short wooden bar with iron hooks at either end that attached to the traces of the harness and an iron ring or clip in the middle of the wooden bar that attached to the splinter bar or cross bar shafts (Museums at Stony Brook 1986:125).

Miscellaneous hardware artifacts include a screw fragment, two brass rivets, a brass washer, four brass nails, seven brass nail fragments, a nut and three links of chain. "Other" category artifacts include 10 unidentified pieces of iron, an unidentified fragment of lead, three pieces of melted lead, two pieces of unidentified brass, four brass strips and a double strand brass wire.

Structure 2

The second structure at the Southern Slave Row was a structure raised up on posts with a tabby chimney on the south end of the house, and a porch or fence line to the east of the house. The remains of this structure were approximately 100 feet southwest of Structure 1. In addition to the excavations concentrated near structural remains, two excavation units were also placed in areas presumed to be "yard" areas, including a shell midden. A total of 3,123 artifacts were recovered from these excavations, yielding 4.5 artifacts per square foot, or 4.6 artifacts per cubic foot. The majority of these artifacts were concentrated in the structure excavations (Table 30).

A number of postholes were revealed, determining the size of the structure, and a possible porch or fence line on the east side. Artifacts present in the postholes related to the structure itself gave TPQs of 1836 based on sponge decorated whiteware and 1854 based on a military button. The line of postholes on the east side of the structure gave a TPQ of 1831 based on the presence of annular decorated whiteware.

Table 30.
Artifact Densities for Structure 2
and Yard Excavations

Area	Total Artifacts	Area Sq. Ft.	Artifacts/Sq. Ft.
Struc.	2,422	500	4.50
Yard	372	100	3.72
Midden	329	100	3.29

Postholes representing a possible outbuilding in the yard did not provide any diagnostic artifacts.

Kitchen Artifact Group

A total of 1,182 kitchen artifacts, or 37.8% of the total assemblage, were recovered from Structure 2. Glass and ceramics artifacts are most prevalent in this category, accounting for 97.5% of the Kitchen Group Artifacts. Seven tableware and 23 kitchenware artifacts also contributed to this group.

Structure 2 produced a total of 517 ceramic artifacts, representing 43.7% of the Kitchen Group. These ceramics are mainly nineteenth century wares, with a few eighteenth century examples. Eighteenth century wares include a fragment of underglaze blue porcelain, a fragment of Westerwald, and two fragments of lead glazed slipware.

Table 31.
Major Types of Datable
Pottery in Structure 2,
Southern Slave Row

Porcelain	11	2.1%
Stoneware	64	12.4%
Brown	21	
Blue/Gray	20	
Other	23	
Earthenware	442	85.5%
Slipware	2	
Refined	4	
Coarse	1	
Pearlware	102	
Whiteware	310	
Yellowware	5	
Burnt	18	

As Table 31 shows, tablewares, such as pearlwares and whitewares, account for the majority of the ceramics. The mean ceramic date for Structure 2 is shown in Table 26 and is later than that for Structure 1.

Pearlwares, accounting for 102 fragments, produced a total of 11 vessels. These include five blue edged plates, four annular bowls, a blue hand painted cup and a blue hand painted saucer. Whitewares, represented by 310 fragments, produced a total of 38 vessels. These included nine undecorated plates, seven undecorated bowls, three undecorated cups, six blue edged plates, four annular bowls, a poly hand painted plate, two poly hand painted saucers, a sponge decorated saucer, four blue transfer printed plates, and a blue transfer printed bowl.

Table 32.
Forms and Functions of Ceramic
Vessels from Structure 2,
Southern Slave Row

Form	#	%
Tableware	25	73.2%
Plates	25	
Bowls	16	
Serving	1	
Tea and Coffeware	8	14.3%
Utilitarian	6	10.7%

Other less numerous ceramics also produced minimum vessel counts, including a white porcelain jar, a Westerwald wide-mouthed storage jar, a lead glazed slipware baking dish, a ginger beer bottle, a salt glazed stoneware jar with an Albany slipped interior and a pouring lid, a gray salt glazed stoneware jar with an Albany slipped interior, and a brown salt glazed stoneware bottle. The stoneware bottle was probably first contained ale, beer, or stout, (Switzer 1974:9-15) and may have later been used for other liquid or food storage.

Tableware vessels, especially flatwares which account for 75% of the forms, were most common at Structure 2, as shown in Table 32. Teawares account for 14.3% of the ceramic forms,

while utilitarian wares account for 10.7%.

Glassware is the most common Kitchen Group artifact at Structure 2, numbering 635, or 53.7% of the kitchen group. "Black" glass is the most common artifact, accounting for 220 specimens and producing six round bottles. Aqua glass fragments numbered 212, and represented three panel bottles, a case bottle, and a round bottle. All three panel bottles had lettering on the sides: "_G.M._/SAVAN(NAH)," "(DURK)EE & CO," and "(DURK)EE & CO./(NEW Y)ORK." The Dürkee bottles were produced from 1855-1880s, and contained essence of mustard or vermifuge (Fike 1987:58). Information on the Savannah bottle could not be located.

Brown glass accounted for 60 specimens and produced two round bottles. Fifty-five specimens of manganese glass were recovered from Structure 2 excavations and represented a case bottle, a panel bottle, and a round bottle with horizontal ribs on the body. Jones and Sullivan (1985:58) describe the ribbed pattern as a repeating pattern of convex areas parallel to each other. The panel bottle had a few markings, but dates of manufacture, manufacturers, or contents could not be determined.

Two fragments of light green glass also produced a small round bottle with a 2-inch diameter. Two fragments of green glass were also recovered, but a minimum vessel count could not be determined from these few fragments. Emerald glass accounted for thirty specimens and represented a small round bottle with a 2-inch diameter. Although 46 fragments of clear glass were recovered, no minimum vessel count was possible since all of the specimens were non-diagnostic body sherds. Blue glass contributed five fragments, but no vessel count was possible.

Tableware artifacts contributed seven artifacts, including a white metal knife bolster with fragments of a bone handle, a manganese glass tumbler rim, a manganese glass tumbler body fragment with panels, a manganese glass tumbler rim and body fragment with panels, a manganese glass tumbler body fragment with an etched floral design, a handle from a small pitcher or creamer

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of clear glass, and a clear glass tumbler rim. The manganese tumblers suggest a date from the last quarter of the nineteenth century (Jones and Sullivan 1985:13). Kitchenware artifacts included six thin iron can fragments, giving a TPQ of 1820, and 17 kettle fragments.

Architecture Group Artifacts

A total of 1,597 architectural artifacts were recovered from Structure 2, accounting for 51.1% of the total assemblage. The most common architectural artifacts were nails and nail fragments, accounting for 71.3% of the Architecture Group artifacts. Window glass was also prevalent, accounting for 28.5% of the architectural artifacts. Other artifacts in this group include a lock box fragment, an agateware door knob fragment, and two spikes. No construction hardware was recovered from Structure 2.

Of the 1,597 nails and nail fragments, only 11 could be identified according to type and size, and an additional 29 were identified as cut nails. Unlike in Structure 1, Structure 2 does not have any wire nails. This small amount of identifiable nails does not provide enough information to discuss the construction of the structure based solely on this category of artifacts. However, four cut nails and one hand wrought nail occur in the sheathing and siding category, three cut nails and one hand wrought nail belong to the framing category and two cut nails occur in the heavy framing category. Excavations in this area have shown that the structure was raised up on posts and had a tabby chimney at the south gabled end. A possible fence or porch post hole line was also discovered on the east side of the house. The large amount of window glass (n=455) suggests that this structure did have paned windows.

Furniture Group Artifacts

A total of five furniture artifacts were recovered from Structure 2, accounting for only 0.2% of the total assemblage. These artifacts include a brass tack head, a brass escutcheon fragment, a brass escutcheon or decorative piece, and two manganese glass fragments from a lamp chimney.

Arms Group Artifacts

The arms artifacts included a total of 13 artifacts, representing 0.4% of the total assemblage. As has been mentioned, minie balls and percussion caps are included in the military category of the Activities Group, although it is likely that items used by the military were later appropriated by slaves. Ten lead buck shot, one .32 caliber brass cartridge, a .22 caliber shell case, and a black gunflint were recovered from Structure 2.

Tobacco Group Artifacts

A total of 116 tobacco artifacts (3.7% of the total assemblage) including three red clay pipe bowls, were recovered from Structure 2. These included two with narrow ribs and one bowl with an extended rim.

The most prevalent kaolin pipe stem size is 5/64-inch accounting for 47.4% of the total stems. The next most common size are the 4/64-inch stems, accounting for 32.0% of the total stems. Table 33 shows the maker's marks and decoration on the pipe stems.

A total of 16 kaolin pipe bowls were recovered from Structure 2. these included ten plain bowls, a cross-hatched bowl, two "TD" bowls, two bowls with narrow ribs, and a bowl with narrow ribs and leaves. One of the pipe stems is an example of a Davidson pipe, which probably was produced after 1862, when Davidson bought the Murray company (Walker in Humphrey 1969:15).

Table 33.
Pipe Stems Recovered from Structure 2,
Southern Slave Row

Decoration	4/64	5/64
CLOH		1
(DA)VIDSON/GLASGO(W)		1
_WHITE/GLASGOW	1	
McDO(GAL)/(GLAS)GOW		1
ribs		1
yellow glazed tip		1

Clothing Group Artifacts

A total of 59 clothing artifacts were recovered from Structure 2, including 57 buttons, a brass buckle cover and a brass shoe heel plate. The buttons, shown in Table 34, are dominated by 4-hole porcelains. While most of these have a white body, other colors were manufactured and recovered from Structure 2, such as dark blue, black, khaki, green and gray. Some of the white porcelain buttons also had circles, dots, and ray designs.

At this structure, two black glass buttons that did not fit South's classification were also recovered. During the nineteenth century, black buttons were far more common than colored glass buttons, and the proliferation of designs on the black glass makes it difficult to date these buttons exactly, as many of the designs continued into the twentieth century (Luscomb 1967:80).

Another button that did not fit in to South's classification was a 2-hole brown rubber button that read "GOODYEAR" on the reverse, which according to Luscomb (1967:91), was produced beginning in 1849.

Personal Group Artifacts

Like the Clothing Group, a large number of artifacts contributed to the Personal Group. A total of 86 artifacts, including four beads, accounted for 2.8% of the total assemblage. The artifacts included 58 pieces of slate, 12 slate pencils, a brass ring for a pen barrel, a silver-plated brass pen barrel, a brown plastic pen barrel part, an iron key fragment, a brown plastic comb fragment, a black glass jewelry inset with an anchor design, three mirror fragments, an 1852 penny, an 1861 dime, and an 1875 dime.

Plastic was first manufactured in 1866 by the Parkesine Company of London, and later in the United States, was patented by John Wesley Hyatt in 1869 (Robertson 1974:131). The incredibly high number of writing utensils suggests that at least one occupant at Structure 2 was literate, again as in Structure 1, most likely relating to the Port Royal Experiment and the presence of AMA teachers at Seabrook Plantation.

The glass beads at Structure 2 included a black opaque wire bead (Type W1b), a blue translucent wire bead (Type W1b), a clear translucent wire bead (Type W1b), and a white opaque tube bead (Type IIa). Otto(1984:73) suggests that slaves often wore beads to enhance work clothes, however, these beads may have been

Table 34.
Buttons Recovered from Structure 2, Southern Slave Row

Type	Description	#	Other (measurements in mm)
8	cast pewter with eye in place, mold seam	1	fragment
18	stamped brass	1	26.6
19	4-hole bone w/ centering hole	2	17.0, 23.3
22	4-hole shell	1	14.6
23	4-hole white porc.	34	9.0, 10.2, 2-10.3, 4-10.5, 3-10.6, 2-10.7, 10.8, 3-11.0, 2-11.1, 2-11.2, 11.3, 11.6, 12.2, 12.8, 13.0, 13.7, 14.4, 17.0
23	4-hole black porc.	1	16.7
23	4-hole dk. blue porc.	1	10.6
23	4-hole khaki porc.	1	10.9
23	4-hole white porc. with dots	1	9.3
23	4-hole white porc. with rays	3	9.67, 10.3, 10.8
23	4-hole white porc. with circles	1	10.6
25	machine stamped brass w/ iron face and back	1	13.2
32	stamped brass with sunken panel	1	17.2 (reverse=QUALITY)
--	iron	1	14.4, badly corroded
--	2-hole bone	1	15.0
--	domed white porc.	1	10.1
--	2 piece white porc.	1	15.6
--	2-hole gray porc.	1	16.8
--	2-hole brown rubber	1	14.8 (reverse=GOODYEAR)
--	black glass, star design	1	13.4
--	black glass, geometric desing	1	13.6

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status markers for the occupants of the Southern Slave Row.

The coins provide TPQ dates of 1852, 1861, and 1875 for this structure, with the 1875 coin suggesting that the structure was occupied as late as 1875.

Activities Group Artifacts

A total of 70 artifacts contributed to the Activities Group, accounting for 2.2% of the total assemblage. These artifacts contributed to categories such as fishing gear, storage items, miscellaneous hardware, "other," toys, and military.

The military items have been set apart to highlight their probable use first by military personnel occupying Seabrook Plantation, and then by African American occupants at Seabrook. The military artifacts include a .58 caliber minie ball, a .44 caliber minie ball, a .577/.58 caliber minie ball, and five military buttons. The military buttons were all Type 27, domed and machine embossed brass, with the "spread eagle with raised, lined shield" design. Known as the GI-98 by Albert (1969:40), it was used by General Service troops from 1854-1902. One read "WATERBURY BUTTON CO." on the reverse. The Waterbury Button Company began producing buttons with this mark in 1849.

Three toy artifacts were also recovered from Structure 2, suggesting that a female child was an occupant of this structure. The toys include two white porcelain doll's head fragments, and a harmonica reed fragment. The reed most likely belonged to a harmonica used by an adult

Fishing gear artifacts include three lead weights, two of which were probably made from lead shot. Storage artifacts include two strap iron pieces, a fragment of a padlock hasp, and a padlock.

Miscellaneous hardware artifacts, numbering 13 specimens, include a flathead screw fragment, a bolt fragment, three nuts, a brass washer, a brass rivet, three brass nail fragments, and three brass nails. The "other" category

artifacts include 26 unidentified pieces of iron, 10 lead fragments, a brass strip, an iron wire, and a brown plastic fragment.

Yard Area

The yard area includes four excavation units placed north and east of Structure 2, representing either areas represented with other structures or an area shared by more than one structure. A few isolated post holes and a low artifact density characterize this area of the Southern Slave Row. Other excavations in the area north and east of Structure 2 revealed isolated post holes and low artifact densities, in addition to plow scars. A total of 1,363 artifacts were recovered from these excavations, yielding 3.4 artifacts per square foot, or 4.7 artifacts per cubic foot.

Kitchen Group Artifacts

A total of 610 kitchen artifacts were recovered from the yard area, representing 44.8% of the total assemblage.

Ceramics account for 204, or 33.4% of the kitchen artifacts. As Table 35 demonstrates, the most common ware in the yard area is whiteware, accounting for 71.1% of the ceramic assemblage and giving a TPQ of 1820. The mean ceramic date for the yard area is shown in Table 26.

As in Structure 2, creamwares are absent

Table 35.
Major Types of Datable
Pottery from the Yard
Area, Southern Slave Row

Porcelain	0	0.0%
Stoneware	16	7.8%
Brown	10	
Blue/Gray	6	
Earthenware	188	92.2%
Slipware	1	
Refined	1	
Pearlware	23	
Whiteware	145	
Yellowware	12	
Burnt	6	

from the yard area, and examples of pearlwares are significantly less here than in other areas of the site. A total minimum vessel count of 25 was obtained from the yard area. These vessels include a Portobelo ware cup, an annular pearlware bowl, a blue transfer printed bowl, six undecorated whiteware plates, an undecorated whiteware jar, three undecorated whiteware bowls, a molded whiteware plate, three blue edged whiteware plates, three annular whiteware bowls, a blue transfer printed whiteware plate, a poly handpainted whiteware plate, two mocha yellow ware bowls, and a ginger beer bottle.

Like the other areas of this slave row, tablewares, especially flatwares dominate this assemblage, accounting for 88% of the vessels. Only one teaware vessel and two utilitarian vessels were recovered.

Glass artifacts represented the most common artifact in the Kitchen Group, numbering 400 specimens and accounting for 65.6% of the kitchen assemblage. Of these fragments, a minimum vessel count of two was produced. One of these was an aqua Durkee bottle, also found in Structure 2, that first contained essence of mustard or vermifuge and was manufactured between 1855-1880s. The other bottle was a 3-inch diameter black bottle that read "_EMEN_" on the side.

Other glass specimens included 191 black fragments, 27 brown fragments, 97 aqua fragments, 15 light green fragments, nine green fragments, five blue fragments, 24 clear glass fragments, 31 manganese fragments, and one melted fragment.

Tableware artifacts included a clear glass goblet foot fragment, a silver plated brass bolster utensil handle, a brass bolster utensil handle, a clear glass tumbler rim, and a clear glass mug or small pitcher handle. The only kitchenware artifact was a tin can lid fragment.

Architecture Group Artifacts

A total of 577 architectural artifacts, or 42.3% of the total assemblage. The most common group of artifacts in this group are unidentified nail fragments, accounting for 93.4% of the total

architectural artifacts. Only eight cut nails could be identified according to size, which included a 4d nail, two 7d nails, two 8d nails, two 10d nails, and a 12d nail. Twenty-seven fragments of window glass were also recovered from the yard excavations, suggesting that a nearby structure may have had paned glass windows. In addition to these architectural artifacts, three spike fragments were also recovered.

Furniture Group Artifacts

A total of two furniture artifacts, accounting for 0.1% of the total assemblage, were recovered from the yard excavations. These include two fragments of brass escutcheons.

Arms Group Artifacts

A total of one honey colored gunflint contributed to the Arms Group. This group does not include minie balls, which are discussed in the Activity Group.

Tobacco Group Artifacts

A total of 80 tobacco artifacts were recovered from the yard excavations, accounting for 5.9% of the total assemblage. These artifacts included kaolin pipe stems, kaolin pipe bowls, and a red clay plain pipe bowl.

The most prevalent size pipe stems were 5/64-inch, accounting for 30 specimens. Fourteen 4/64-inch stems, six 6/64-inch stems, and two stem fragments were also recovered. Three of the pipe stems had makers' marks or decorations, including "W. WHITE/GLASGOW," "7B W. WHITE/GLASGOW," and one with rouletting.

The kaolin pipe bowls included 15 plain specimens, seven ribbed bowls, one cross hatched bowl, one with a grooved rim, one with a harp decoration, a "TD" bowl, and a bowl with diamond decorations.

Clothing Group Artifacts

A total of 34 clothing artifacts, representing 2.5% of the total assemblage, were

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recovered from the yard area. An iron buckle, three brass shoe gromets, a brass hook, and 29 non-military buttons contributed to these group.

The buttons are outlined in Table 36. Only two buttons, a 2-hole brown porcelain and a 2-hole shell, cannot be typed according to South's classification.

Personal Group Artifacts

A total of 15 personal artifacts, representing 1.1% of the total assemblage, were recovered from the yard area. These artifacts included a bone comb fragment, a slate pencil, nine writing slate fragments, an 1851 USA 3¢ coin, and three beads. Like other areas in this slave

Table 36.
Buttons Recoverd from the Yard Area, Southern Slave Row

Type	Description	#	Other (measurements in mm)
21	4-hole, two piece iron	1	17.9
23	4-hole white porc.	15	8.6, 9.6, 10.5, 2-10.7, 4-10.9, 11.1, 2-11.2, 11.5, 13.2, 15.7
23	4-hole gray porc.	1	10.4
23	4-hole green porc.	1	10.3
24	fabric covered iron	1	20.1
26	machine stamped brass face and back	1	18.2 (back only)
--	2-hole shell	1	11.8
--	2-hole brown porc.	1	15.2

row, the yard area also contains evidence of an occupant's literacy.

The three glass beads include a large white opaque tube bead (Type Ia5), a round wire green bead (Type W1b), and an oval, wire, very large, translucent ultramarine blue bead (Type W1c).

Activities Group Artifacts

A total of 42 Activities Group artifacts representing 3.1% of the total assemblage was recovered from the yard area excavations. Categories such as toys, fishing gear, storage items, stable and barn items, miscellaneous hardware, "other" items, and military items were represented in the assemblage.

Toy artifacts include a white stone marble with a red stripe and an undecorated white stone marble. These marbles may have been used by either children, or adults for gaming pieces.

The military items have been set aside to highlight their use first by military personnel and then most likely my occupants of the Southern Slave Row. This category includes a .56 caliber minie ball, a .58 caliber crushed minie ball, and four military buttons.

The buttons include a machine stamped brass face and back button (Type 26) with an eagle and shield insignia, two domed, machine embossed brass buttons with an eagle and shield insignia, and a domed, machine embossed brass button with an eagle and anchor insignia. The latter button, embossed with an eagle perched on an anchor, was used prior to 1850 by enlisted Navy personnel, although Albert (1969:103) notes that the pattern was in use until 1941.

Fishing gear artifacts include three round lead fishing weights, a triangular lead fishing weight and an oval lead fishing weight made from a minie ball. Storage artifacts include two iron padlock hasp fragments.

The miscellaneous hardware category includes a nut and bolt fragment, two iron washers, a brass screw fragment, two brass nail fragments, four brass nails, a brass rivet, and a large brass grommet. "Other" artifacts include seven unidentified pieces of iron, two lead fragments, two flint fragments, one folded lead piece (a possible flint wrap), two lead puddles, a lead strip, a brass strip which read "___ETES/FRANCE/ ANGLETERRE/BELGIQUE," and an unidentified brass object with a threaded opening.

Isolated Midden 4, Southern Slave Row

Midden 4 was a looted area of the site which dates primarily to the postbellum period. It is likely that this midden belonged to a structure in

the Southern Slave Row not identified in the survey. A total of 1,054 artifacts were recovered, yielding 21.1 artifacts per square foot, and 21.1 artifacts per cubic foot.

Kitchen Group Artifacts

A total of 900 Kitchen Group artifacts were recovered from Midden 4, accounting for 85.4% of the total assemblage. The majority of the artifacts belong to the glass category, representing 743 specimens, while the ceramics category contributes 106 artifacts. A total of 51 tableware artifacts were also recovered.

Ceramic types, shown in Table 37, include two examples of clouded wares, a brown stoneware

Porcelain	0	0.0%
Stoneware	9	8.5%
Brown	1	
Other	8	
Earthenware	97	91.5%
Refined	2	
Pearlware	7	
Whiteware	84	
Yellowware	4	

fragment, two tortoiseshell fragments, four alkaline glazed stonewares, four Albany slipped stonewares, pearlwares, whitewares, and yellow wares. The mean ceramic date for the midden is shown in Table 26.

Whiteware accounts for the largest number of specimens (n=84) and represents 79.2% of the ceramic assemblage. These fragments produced a minimum vessel count of 12 and includes three annular bowls, a large undecorated bowl, an undecorated cup, two undecorated saucers, and five undecorated plates.

Pearlwares account for only seven specimens and represent an annular bowl. Yellow ware, represented by four specimens, contributed

an annular bowl. In addition to these vessels, a tortoise shell teapot rim and a ginger beer bottle neck were also recovered from this midden.

Glass artifacts include 139 black fragments, 86 brown fragments, 138 aqua fragments, 50 light green fragments, 37 green fragments, 11 blue fragments, 20 manganese fragments, 260 clear fragments, and two melted fragments.

A minimum vessel count of 16 glass bottles was obtained from this midden. These include three black round bottles, a round brown bottle, a brown panel bottle, two small aqua panel bottles, three medium aqua panel bottles, an aqua flask bottle, a round aqua bottle, two small round aqua bottles, a light green round bottle, a "Lea and Perrins" light green bottle, and a clear liquor bottle. The light green bottle labeled "LEA & PE(RRINS)" on the body of the bottle and "A/B/C/CO" on the base was produced prior to 1880 and contained worchestire sauce, which was introduced into the United States from Worcester, England in the late 1830s or 1840s (Switzer 1974:79).

Tableware artifacts include a manganese glass lid to a jar, a clear glass lid to a bowl, a clear glass vase with a ribbed interior, a clear glass tumbler with molded and raised diamonds, three plain clear glass tumblers, and two manganese glass tumblers.

Architectural Group Artifacts

A total of 137 architectural artifacts, representing 13% of the total assemblage, were recovered from Midden 4. These artifacts include 55 fragments of window glass, an agateware doorknob, and 81 unidentified nails.

Furniture Group Artifacts

Four glass chimney lamp fragments contributed to the Furniture Group, accounting for 0.4% of the total assemblage. Three of the fragments were manganese colored and one was clear glass.

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Arms Group Artifacts

A single .22 caliber shell casing contributed to the arms artifacts, accounting for 0.1% of the total assemblage.

Clothing Group Artifacts

Four buttons represent the Clothing Group, accounting for 0.4% of the total assemblage. All of these buttons are 4-hole porcelain buttons (Type 23), one of which had green paint, with the remainder being white.

Personal Group Artifacts

A single slate fragment contributed to the Personal Group, accounting for 0.1% of the total assemblage.

Activities Group Artifacts

A total of seven artifacts, or 0.7% of the total assemblage, contributed to the Activities Group. These artifacts include an axe head, a screw, a brass nail, and four unidentified pieces of iron.

Dating Synthesis

The historical evidence for Seabrook Plantation is not as complete as we would wish. The ownership of the plantation itself is not completely certain from the historical documents. However, by comparing the archaeological evidence with the historical evidence for the occupation of the Seabrook Plantation, we can attempt to provide accurate occupation dates for the different areas of the plantation.

The historical documents suggest that Seabrook Plantation was purchased in 1833 by William Seabrook, and at his death in 1836, a plantation on Hilton Head was inherited by his wife. Historical research indicates that Seabrook Plantation was not a primary residence for the Seabrook family. By 1860, the census showed that the plantation was operated by James B. Seabrook, but does not count him as one of the white males present on the island at the time.

Seabrook Plantation and Landing was a point of departure for Confederate troops abandoning the island in 1861, and an area of considerable Union activity after November 1861. During this time, the Main House was used as military headquarters for a number of years. In 1863, machine shops and a shipyard were located on the plantation. Documents also demonstrate that a large number of ex-slaves were residing on Hilton Head, most of which chose to remain on their "home" plantations.

Seabrook Plantation was one of five school districts on Hilton Head after 1866, where American Missionary Association teachers lived and taught between 1866 and 1868. In 1869, documents show that the plantation was rented to a planter and his family. At this time, it was noted by AMA teachers that Seabrook Plantation and Seabrook Landing was in a state of disrepair. The plantation passed over several hands over the next century.

Table 38 shows the mean ceramic dates for all excavated areas of Seabrook Plantation. The

Main House Complex	
Utilitarian Building	1821.3
Main House Area	1816.2
Main House Yard	1820.4
Well Area, Level 1	1823.4
Well Area, Constr.	1808.4
Feature 2, Well Shaft	1823.1
Old Road Bed	1853.3
Northern Slave Row	
Block Excavation	1818.7
Feature 3, Ditch	1822.6
Berm	1829.4
Southern Slave Row	
Structure 1	1839.1
Structure 2	1842.0
Yard Area	1851.6
Midden 4, Isolated	1853.7

Main House Complex ranges in mean dates from about 1808.4 to 1823.4. The Old Seabrook Landing Road provides a mean date of 1853.3.

This dating indicates that the Main House Complex assemblage was contemporaneous with the Northern Slave Row assemblage and earlier than the Southern Slave Row assemblage. Although the mean ceramic dates provide a good approximation of when the area was occupied, other more telling methods of dating the occupations are Bartovic's method and South's bracketing method.

Bartovic's method, explained at the beginning of this chapter, provides an interesting pattern of dating for the Main House Complex (Figure 44). The utilitarian building shows a peak in use between 1780 and 1840, while a coin provides a TPQ of 1860. South's bracketing method shows use of the structure between 1795 and 1835, complementing Bartovic's approach. The builder's trench gave a TPQ of 1790 based on the presence of pearlware. These methods suggest that this building may have been one of the buildings used before Seabrook Plantation passed ownership to William Seabrook, or it may have been built when William Seabrook bought the plantation.

The Main House area and yard have mean ceramic dates of 1816.2 and 1820.4, and when added together, give a mean ceramic date of 1817.8. TPQ dates for these excavations are even earlier than those for the utilitarian building, 1640 in the Main House area and 1740 in the yard area. The Bartovic's method demonstrates a peak in use of the Main House Area excavations between 1762 and 1840.

The bracketing technique shows use of the area between 1795 and around 1831. Both techniques give compatible dates, suggesting that the Main House area was occupied between these date ranges. These dates would correspond to those for the utilitarian building, again suggesting that these building were in existence and being actively used by the time William Seabrook purchased the plantation 1833.

The Main House yard excavations showed a peak of use between 1780 and 1830, with a small decline between 1815 and 1820. Bracketing dates also correspond to the Bartovic's dates, showing use between 1795 and 1831, also reflecting use of the time prior to the purchase of the plantation by Seabrook. These dates suggest that the plantation was more heavily used prior to its purchase by Seabrook, supporting the fact that this was a secondary plantation for Seabrook

The well area presents a unique opportunity to determine dates for both the construction and the final deposition of the well. The construction of the well (Level 2) has a mean ceramic date of 1808.4, a Bartovic's range from 1760 to 1830, and a bracketing dates from 1790 to 1830. Once again, the construction date for the well corresponds to those dates for the Main House areas and the utilitarian building, suggesting that the well was constructed by the owner prior to William Seabrook.

The well shaft (Feature 2) has a mean ceramic date of 1823.1. The well was probably completely filled in with debris in one episode, and the latest TPQ (1867, provided by a nickel) should correspond to this time period. The range of dates, using Bartovic's method, for the well shaft are 1780-1880. South's bracketing technique provides a smaller range of dates, 1790-1830. These dates suggest that filling of the well began around the time of Seabrook's purchase of the plantation, but continued after the abandonment of the plantation during the Civil War.

The excavation level (Level 1) deposited above the well and well construction pit also has a mean ceramic date of 1823.4. The Bartovic's date range is 1780-1890, while South's technique provides a date range of 1790 to 1830. Because the latest TPQ for this area is 1860 (provided by a USA penny), it is likely that this level was deposited after this date.

As is the case with most historical documents, the lives of the slaves and freedmen who occupied Seabrook Plantation is unknown. The documents do not provide any evidence as to when the slaves left the Northern Slave Row, or if

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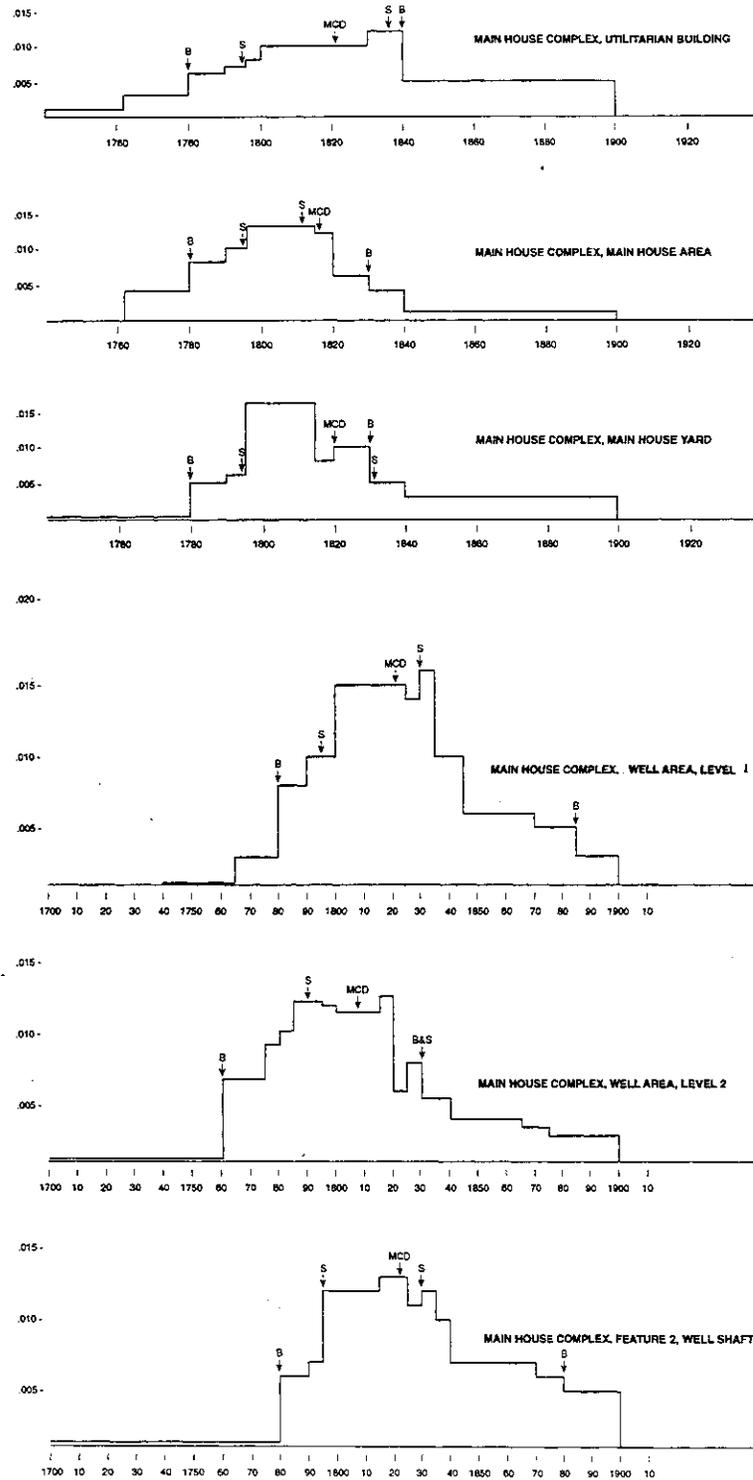


Figure 44. Comparison of dating techniques for the Main House Area.

THE PLANTATION LANDSCAPE

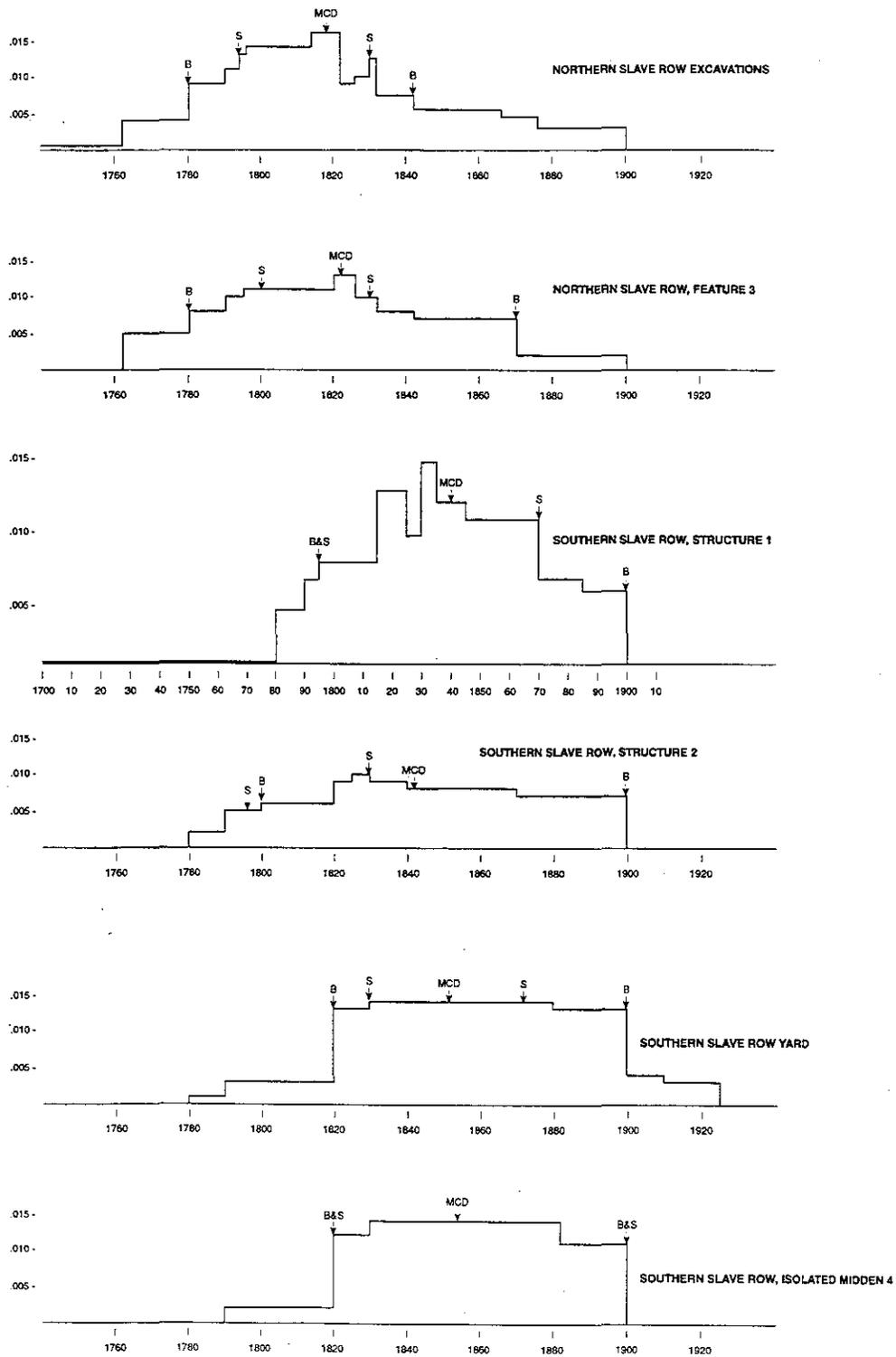


Figure 45. Comparison of dating techniques for the Slave Structure Areas.

they relocated to another part of Hilton Head or Seabrook Plantation. The mean ceramic date for the general excavations at the Northern Slave Row is 1818.7. The other dating techniques provide a range of dates of 1780-1840 (Bartovic's), and 1795-1830 (South's) for the general excavations at the Northern Slave Row. These dates are compatible with those for the Main House area, yard and well construction dates, suggesting that the Northern Slave Row was being used at the same time as these other areas, prior to and immediately after the purchase of the property by Seabrook (Figure 45).

The ditch, Feature 3, located in association with the Northern Slave Row excavations, has a mean ceramic date of 1822.6, a few years after the mean ceramic date for the general excavations. The date ranges, using Bartovic's method, are 1780-1870 and 1800-1830, using South's method. The Bartovic's range is quite long, and suggests an accumulation of materials that were in use for a long period of time. However, it is important to note that slaves often were given "cast-offs" by planters or overseers and these may not actually represent the actual time period in which these artifacts were used. The ditch area does have a TPQ of 1820, based on the presence of white ware, suggesting that the artifacts were not deposited until after 1820.

The Southern Slave Row provides a range of mean ceramic dates from 1839.1 to 1853.7. These dates are later than those at the other areas of the plantation, except for the Old Seabrook Landing Road (mean ceramic date 1853.3). Structure 1 provides a mean ceramic date of 1839.1, the earliest in this area, and other dating techniques give ranges of 1795-1885 (Bartovic's) and 1795-1865 (South's). Ceramics have a long period of use by slaves in particular, and the length of these dates probably reflects the continued use of older ceramics over time. The TPQ for Structure 1 is after 1850, based on the presence of a maker's mark, and two buttons, the latest button dating to 1858. A posthole at this area also gave a TPQ of 1820, suggesting that the structure was built after 1820. In addition, Structure 1 has very few early ceramics.

Structure 2 in the Southern Slave Row has a mean ceramic date of 1842.0, a few years later than Structure 1. The dates for Structure 2 range from 1800-1870 (Bartovic's) and 1795-1830 (South's). The TPQ from this structure was after 1850, based on the presence of a bottle, and three coins, the latest TPQ occurring at 1875. A posthole for this structure also gave a TPQ of 1836, suggesting that the structure was built after 1836.

The yard area in the Southern Slave Row had a mean ceramic date of 1851.6 and dates ranging from 1820-1900 (Bartovic's) and 1830-1870 (South's). The yard had a TPQ of after 1855, based on the presence of a bottle.

Midden 4, the isolated midden near the Southern Slave Row, has a mean ceramic date of 1853.7, and date ranges from 1820-1880 (Bartovic's and South's). The only TPQ evidence for this excavation is after 1820, based on the presence of whiteware.

The Southern Slave Row seems to have a later date of occupation (post 1850s) than the other areas of the plantation. It is likely that the Southern Slave Row was constructed after the Northern Slave Row and used at a later date than the Northern Slave Row, as is suggested by the artifact assemblage. Unlike the Northern Slave Row, the dates suggest that the Southern Slave Row was used in the postbellum period.

Pattern Analysis

The various artifact patterns for the different areas of the site are shown in Table 39. A range of previously defined artifact patterns are provided in Table 40 for comparative purposes. Seabrook resembles the Revised Carolina Artifact Pattern more than any other pattern, but also has areas, such as the Southern Slave Row, that do not easily fit into the prescribed patterns. It should be noted that the patterns being used for comparative purposes were not compiled from nineteenth century data and as Adams and Trinkley note (1993:210), artifact patterns for nineteenth century slave settlements often fail to fit in to any one available pattern.

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Table 39.
Artifact Patterns at Seabrook Plantation (numbers in percent)

Group	Util	MH Area	MH Yard	North Slave Row		South Slave Row			
				Struct	Ditch	Struc. 1	Struc. 2	Yard	Midden 4
Kitchen	50.5	32.2	67.2	59.3	68.7	50.9	37.8	44.8	85.4
Architecture	43.5	63.0	28.2	31.0	26.7	39.7	51.0	42.3	13.0
Furniture	0.0	0.0	0.3	0.1	0.0	0.0	0.2	0.1	0.4
Arms	0.1	0.4	0.0	0.0	0.0	0.2	0.4	0.1	0.1
Tobacco	1.6	1.8	1.9	6.6	1.5	4.5	3.7	6.0	0.0
Clothing	0.9	1.0	0.8	0.3	1.0	2.6	1.9	2.5	0.4
Personal	0.2	0.6	0.0	0.1	0.0	0.5	2.8	1.1	0.1
Activites	3.2	1.0	1.6	2.6	2.1	1.6	2.2	3.1	0.6

at Archdale Plantation (Figure 46).

The Main House Area was most likely occupied by "high status" occupants both during antebellum and postbellum

The utilitarian building in the Main House Complex does not fit comfortably into any of the patterns, most likely because it did not function as a domestic building. The high percentage of Activity Group artifacts, mainly consisting of artifacts related to storage and hardware, suggest this building may have been used by the Union soldiers during their stay at Seabrook.

The Main House Area has a low percentage of kitchen artifacts and a high percentage of architecture artifacts. The yard area consist of a low percentage of architecture artifacts, as would be expected for a yard area, and a high percentage of kitchen artifacts. Although this area has been greatly affected by erosion, the pattern for the Main House Area does correspond to a similar pattern for a 19th century rice planter

historic documents suggest. It is likely that the Southern Slave Row was occupied before Union soldiers arrived at Hilton Head by slaves, and in the postbellum, by freedmen. However, the Northern Slave Row appears to have been occupied many years before the arrival of Union soldiers, at least before and perhaps after William Seabrook's death in 1836, but not in the postbellum period. However, the nature of both of the slave rows is unclear, and pattern analysis helps shed some light on the material differences between these areas and the possible status of the occupants who lived in these areas.

There are some notable differences between the Northern and Southern Slave Row patterns. The Northern Slave Row excavations conform to the Revised Carolina Artifact Pattern,

Table 40.
Previously Published Artifact Patterns

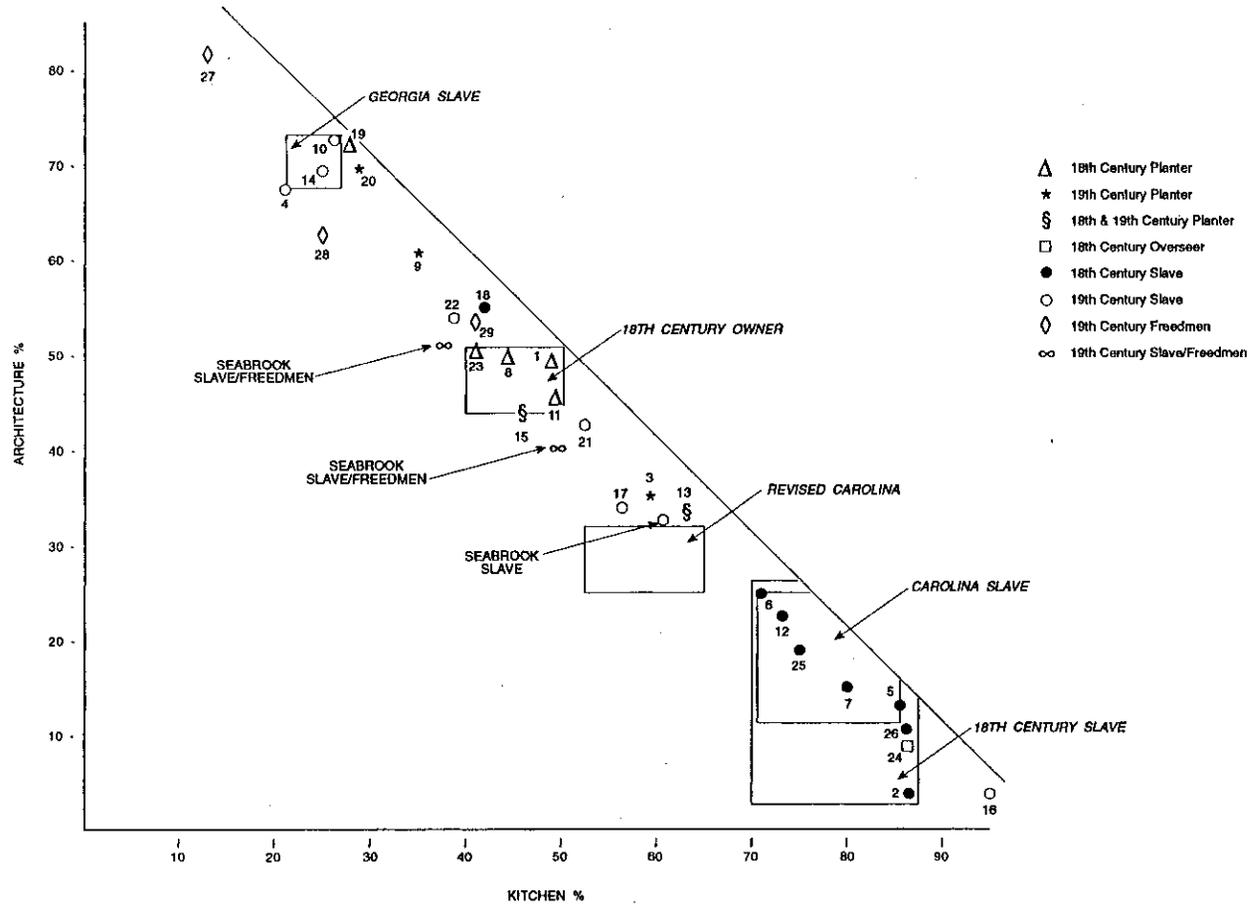
Artifact Group	Revised Carolina Artifact Pattern*	Revised Frontier Artifact Pattern*	Carolina Slave Artifact Pattern*	Georgia Slave Artifact Pattern**	Piedmont Tenant Yeoman Artifact Pattern***
Kitchen	51.8 - 65.0%	35.5 - 43.8%	70.9 - 84.2%	20.0 - 25.0%	45.6% (40.0 - 61.2%)
Architectural	25.2 - 31.4%	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:

* Garrow 1992

** Singleton 1980

*** Drucker et al. 1984:5-47 (no range was provided, but partially reconstructed for the Kitchen and Architecture Groups)



- | | | | |
|------------------------------------|--|---------------------------------------|---------------------------------------|
| 1 18th Century Green Grove Planter | 9 19th Century Archdale Planter | 17 19th Century Turkey Hill Slave | 25 18th Century Willbrook Slave |
| 2 18th Century Green Grove Slave | 10 19th Century Campfield Slave | 18 18th Century Midway Slave | 26 18th Century Willbrook Slave |
| 3 19th Century Limrick Planter | 11 18th Century Willbrook Planter | 19 18th Century Richmond Hill Planter | 27 19th Century Mitchelville Freedmen |
| 4 19th Century Butler Island Slave | 12 18th Century Willbrook Slave | 20 19th Century Oatland Planter | 28 19th Century Mitchelville Freedmen |
| 5 18th Century Yaughan Slave | 13 18th & 19th Century Oatland Planter | 21 19th Century Oatland Slave | 29 19th Century Mitchelville Freedmen |
| 6 18th Century Yaughan Slave | 14 19th Century Oatland Slave | 22 19th Century Turkey Hill Slave | |
| 7 18th Century Curriboo Slave | 15 18th & 19th Century Turkey Hill Planter | 23 18th Century Willbrook Planter | |
| 8 18th Century Archdale Planter | 16 19th Century Turkey Hill Slave | 24 18th Century Willbrook Overseer | |

Figure 46. Comparison of eighteenth and nineteenth century rice and cotton plantation artifact patterns.

in terms of the Kitchen and Architecture Group, while the Southern Slave Row structures have patterns similar to other nineteenth century rice plantation slave areas (Figure 46), such as Turkey Hill and Midway Plantations (Trinkley 1991). In comparison, freedmen structures at Mitchelville also fall into a range of artifact patterns. As Trinkley notes, one of the excavated structures falls near the Georgia Slave Pattern, two structures (excavated in one block) fall near the Piedmont Tenant/Yeoman farmer Pattern, and the other structure is isolated and anomalous (Trinkley 1986:266-267). Structure 2 and one of the freedmen structures have similar patterns, close to that of a nineteenth century Turkey Hill slave site. The various freedmen patterns suggest that nineteenth century freedmen sites do not necessarily produce a specific pattern, but rather exhibit patterns that vary from site to site, and in the case of Mitchelville, from structure to structure. This may be due to differences in access to goods, access to military jobs that provided cash, or the dates the site was occupied. However, the Southern Row structures and one of the Mitchelville structures do cluster near the pattern for eighteenth century planters.

Examination of the other artifact groups in the pattern highlights noticeable differences in the clothing, personal, arms, and activities categories. The Northern Slave Row has a higher percentage of tobacco artifacts than the Southern Slave Row, by 2.1%, but a much lower percentage of clothing and personal artifacts. The activities artifacts are high in the Northern Slave Row excavations and for Structure 2, but drop for Structure 1. There is also an absence of non-military arms artifacts in the Northern Slave Row, while both structures in the Southern Slave Row do possess such artifacts.

The Activities Group artifacts in the Northern Slave Row include military artifacts, which contribute a total of seven artifacts to the group, but the miscellaneous hardware and "other" categories account for most of this group. The Southern Row structures Activities Group also has low numbers of military artifacts, with most of the artifacts concentrated in the miscellaneous hardware and "other" categories. Therefore, the

inclusion of obvious military artifacts (buttons, percussion caps and minie balls) in the Activities Group does not actually alter the pattern for the slave rows.

Padlocks and padlock fragments are another type of Activities Group artifact that are curiously absent from Northern Slave Row excavations, but found at the well area at the Main House Complex and at the Southern Slave Row. The Southern Slave Row produced a total of five padlocks and padlock fragments, while two padlock fragments were recovered from the well area. The padlock artifacts in the Southern Slave Row were associated with Structure 1, Structure 2, and the yard excavations.

The contrast between the presence of padlock artifacts at the Southern Slave Row and the absence of these artifacts at the Northern Slave Row indicates that the occupants of the Southern Slave Row had ownership of their property and belongings and protected these things through the use of locks. The absence of locks at the Northern Slave Row suggests that occupants of this row did not have "ownership" of their belongings. At nearby Cotton Hope Plantation, no padlock artifacts were recovered from the excavations. This is also true for the freedmen site at Mitchelville (Trinkley 1986:259). Perhaps the proximity of Seabrook Landing Road, which enabled people to travel to and from Hilton Head Island via Seabrook Landing, compelled the occupants of the Southern Slave Row to use locks in order to protect their belongings.

The absence of non-military arms artifacts at the Northern Slave area (both at general excavations and in ditch excavations) may suggest that these slaves, who occupied the area earlier than those at the Southern Row, did not have access to guns, or were not allowed to possess guns, and perhaps relied on other methods of obtaining supplemental food and protecting the area from animal predators. Alternatively, the lack of archaeological remains of guns from the antebellum period may only indicate that arms, during slavery, were sufficiently scarce that they were well cared for, with little evidence of their existence entering the archaeological record.

Both the Clothing and Personal Groups are important indicators of status, especially for African American sites, as was suggested in the artifact descriptions. Wilkie (1994) has suggested that personal and clothing artifacts reflect an "African-American personal aesthetic tradition," in which slaves continued an African tradition of personal adornment through an accepted outlet, by using beads, buttons, hair combs, and jewelry as adornment. Singleton (1996:142) notes that African American slaves functioned in a system of "value culture" and "reality culture," in which "value culture" refers to customs, beliefs and values influenced by African heritage, and "reality culture" refers to aspects of slave life controlled and influenced by external forces, such as planters and overseers. Therefore, the number of personal and clothing artifacts present at slave areas may be an indication of the amount of control overseers and planters exerted over slave row occupants.

Other researchers, such as Zierden and her colleagues (Zierden and Grimes 1989; Zierden et al. 1985; Zierden et al. 1986; Zierden et al. 1987), have used clothing, personal, and furniture artifacts as an indicator of status, suggesting that at high status sites, these three artifact groups have a percentage over 1.1%, and at low status areas, a percentage less than 0.9%. Using Zierden's approach, we find that at the Northern Slave Row, the combined percentage for these groups is 0.5%, a low status area. The Southern Slave Row structures produce combined percentages of 3.1% (Structure 1) and 4.9% (Structure 2), both clearly well above the suggested high status percentage.

The differences between the two rows can be explained perhaps in the freedmen's access to these goods, as opposed to the slaves access. During slavery, clothing was provided to slaves by the planters. While field hands received a basic clothing allowance twice a year, house slaves were often granted the privilege of good cloth with which to make additional clothes (Dusinberre 1996:183).

Additionally, slaves who held special status jobs, such as drivers, carpenters, bricklayers, and housekeepers, were given special attire, such as long winter coats for drivers, and special cloth and

shoes that differed from that given to field hands (Dusinberre 1996:191). In the eighteenth century, slaves often dressed according to their occupations, as historic documents refer to slaves identified by the clothing associated with their jobs, such as "such clothes as Watermen generally wear" (Morgan 1998:131). These slaves' clothing was in contrast to field slaves' clothing, often consisting of coarse material and poorly fitted shoes (Morgan 1998:126-127). Owners also insured a division between slaves, based on the clothing given to slaves who merited rewards, such as those slaves who opposed slave riots at Stono in South Carolina in 1739 (Morgan 1998:470). These slaves received blue stroud suits with red trim and brass buttons.

While the availability of clothing and personal goods for field slaves seems bleak, Morgan (1998:607) notes that advertisements for runaway slaves in the eighteenth century Low country, there is considerable mention of the jewelry worn by runaway slaves. Morgan (1998:374) also notes that "slaves aspired to own property other than livestock. Clothing or pieces of fine linen were attractive items for many slaves." It is possible then that freedmen aspired to adopt traits associated with whites as a means of expressing their new status as freed persons, and used clothing and personal goods in this way (Trinkley 1986:268).

Compared with Cotton Hope Plantation and Mitchelville assemblages, Seabrook's Southern Row seems indicative of nineteenth century or freedmen assemblages that can be considered "high status" (Table 41). The presence of these artifacts would seem to indicate that nineteenth century slaves and freedmen had access to and used more clothing, personal and furniture goods than earlier slaves.

The Clothing and Personal (and Furniture) Artifact Groups then have the possibility of providing information on the relative status of the slave row occupants, and the degree to which they were able to (or chose to) practice personal adornment. The Northern Slave Row would then appear to be of a much lower status and the occupants subjected to a higher degree of control than those occupants at the Southern Slave

Table 41.
Percentages of Clothing, Furniture, and Personal
Artifact Groups at Seabrook, Cotton Hope,
and Mitchelville

Area	Clothing	Personal	Furniture	Total
Seabrook				
Struc. 1	2.6	0.5	0.0	3.1
Struc. 2	1.9	2.8	0.2	4.9
N. Slave	0.3	0.1	0.1	0.5
Cotton Hope				
Locus 2	0.5	0.1	0.2	0.8
Locus 4	1.3	0.3	0.2	1.8
Locus 5	0.3	0.0	0.3	0.6
Locus 6	1.1	0.3	0.2	1.6
Locus 7	1.3	0.0	0.3	1.6
Mitchelville				
Block 39-40-47-48	1.2	0.4	0.0	1.8
Block 110-123	2.2	0.5	1.1	3.8
Block 161-162	1.0	0.1	0.6	1.7

Row. The differences between the slave rows could simply be a case of the Northern Slave Row occupants having less access to goods than the Southern Slave Row occupants. The comparison with contemporaneous, nearby sites suggests that the presence of these artifacts at freedmen and late nineteenth century slave areas was an indication of the conditions on the sea islands during this time, and probably does reflect an increase in the availability of goods to late nineteenth century slaves and freedmen.

In addition to the apparent difference in status between the Northern and Southern Slave Rows, there is also a marked difference between Structure 1 and Structure 2 in terms of artifact groups. The Kitchen and Architecture Group percentages are basically reversed for the two structures, with Structure 1 having 50.9% in the Kitchen Group and 31.0% in the Architecture Group, and Structure 2 having 37.8% in the Kitchen Group and 51.0% in the Architecture Group. Both structures appear to have been constructed in similar fashions and had similar dimensions. Turning again to the Personal and Clothing Groups, we see that Structure 1 has a higher percentage of clothing artifacts and a lower percentage of personal artifacts than Structure 2.

Structure 1 had 20 more buttons than

Structure 2, while Structure 2 had a total of 82 personal items, compared to 12 personal items at Structure 1. The higher number of buttons at Structure 1 can not be explained, however, at Structure 2, 58 slate fragments and 12 slate pencils contribute to the personal artifacts. At Structure 1, a total of two slate pencils and eight slate fragments were recovered. The presence of this large number of writing utensils indicates that occupants of Structure 2 were quite practiced at literacy, and had more access to writing utensils than those occupants of Structure 1.

The Southern Row button assemblage is most similar to the button assemblage from Mitchelville, rather than the assemblage at Cotton Hope. At Mitchelville, buttons were recovered from all of the structures, though in differing numbers, as at the Southern Row. At Mitchelville only eight buttons were recovered from one structure (39-40-47-48 Block), while other structure excavations produced 72 buttons (110-123 Block) and 125 buttons (161-162 Block, which represents two structures) (Trinkley 1986:264). Cotton Hope excavations at late eighteenth and nineteenth century slave structures, presumably artisan slaves, produced lower numbers of buttons, ranging from five to 24 buttons at the structures (Trinkley 1990:91).

Writing utensils, fairly common at Mitchelville structures, are only found at one structure at Cotton Hope, where only six slate pencils were recovered (Trinkley 1990:82). At Mitchelville, eight slate pencils and sixteen slate tablet fragments were recovered from structure excavations. This seems to indicate that the number of pencils found at Structure 2 at the Southern Row is high even in comparison to other freedmen structures, suggesting that perhaps occupants of Structure 2 acquired cases of pencils in order to sell or give these to other Southern Row occupants. The presence and amount of writing utensils at these three sites provides us with a range that perhaps can be expected at nineteenth century slave and freedmen sites in this area. At Seabrook, an average for pencils is 7 per structure, while the average at nineteenth century Cotton Hope structures and Mitchelville structures is 2 per structure. The presence of five AMA

school districts on Hilton Head and documented numbers students at the Mitchelville schools suggests that at least one occupant of the excavated structures could be expected to have had some instruction in writing.

Ceramics and Status

One of the ways in which archaeologists are able to measure status is through George Miller's CC Indices (Miller 1980, 1991). These indices provide a rough approximation of the economic position of an assemblage from the last part of the eighteenth century through the mid-nineteenth century. The indices are based on the cream colored wares of the assemblage. Although Miller's approach has been critiqued, it does provide a useful means of examining status through ceramics at various areas on Seabrook Plantation.

Tables 42 through 48 provides the ceramic index values for most of the excavated areas of the plantation. The ceramics from the Main House Area and Yard have an extremely low value, which is unexpected for a Main House. In contrast, the utilitarian building, and the Northern Slave Row excavations both produced higher index values than the Main House. The high index value for the Northern Slave Row may possibly be attributed to the contribution of artifacts from the ditch feature. Both Structures in the Southern Slave Row have index values lower than the value for the Northern Slave Row, but higher than the value for the Main House Area.

Compared with other plantations (Figure 47), the ceramic index for Seabrook's Main House, presumably occupied by someone of a higher status than slaves, ranks with the slave assemblage for Willbrook Plantation, although the owner of Willbrook Plantation has an index only slightly higher than the slave index. In contrast, the Stoney/Baynard Main House has a ceramic index value of over 2.0. There are no other examples (Figure 47) in which a Main House Area has a lower ceramic index value than the slave rows associated with the plantation. However, a similar index value for both the Main House and the slave assemblage occurs at Stoney/Baynard Plantation.

It is possible that the Main House Area at Seabrook either did not have a high status assemblage to begin with, or the Main House may have been looted during the postbellum period, and all useable goods were taken from the house, although ceramics would still have been discarded and incorporated into the assemblage. It is also possible that the slaves in the Northern Slave Row were given ceramics bought in bulk. The structures in the Southern Slave Row, probably occupied by freedmen, have index values slightly less than values for other freedmen areas, such as Mitchelville and Black Lucy, but similar to the index value for the Mt. Tabbs tenant farmer. Perhaps the isolated location of Seabrook limited the Southern Slave Row occupants' access to goods during the postbellum period, when they would not have received goods from a planter or overseer. The Seabrook occupants may have also lacked the ability to perform wage labor for the military, which would have enabled them to purchase more goods.

There are at least two status or economic trends for freedmen occupations in coastal Georgia noted in Singleton's (1985) research. First, Singleton (1985:296) has noted that postbellum and antebellum assemblages were almost indistinguishable from one another at Le Conte and Cannon's Point Plantations in coastal Georgia. Second, at the Colonel's Island site in coastal Georgia, Singleton (1985) found that the postbellum freedmen area of the site was characterized by the use of salvaged materials, makeshift structures, and poor construction of features, such as chimneys. The freedmen at Seabrook obviously lived much better than the freedmen at Colonel's Island, perhaps due to the proximity of the Union military and the resources available to freedmen at Hilton Head through the military. In addition, the assemblage is distinguishable from the supposed antebellum Northern Slave Row assemblage, at least in terms of ceramic indices. It would seem that occupants of the Southern Slave Row had access to more personal and clothing goods than the Northern Slave Row occupants, but lower ceramic index values than the Northern Slave Row. At Mitchelville, freedmen ceramic assemblages also are "low status" (Trinkley 1986:271-272), again

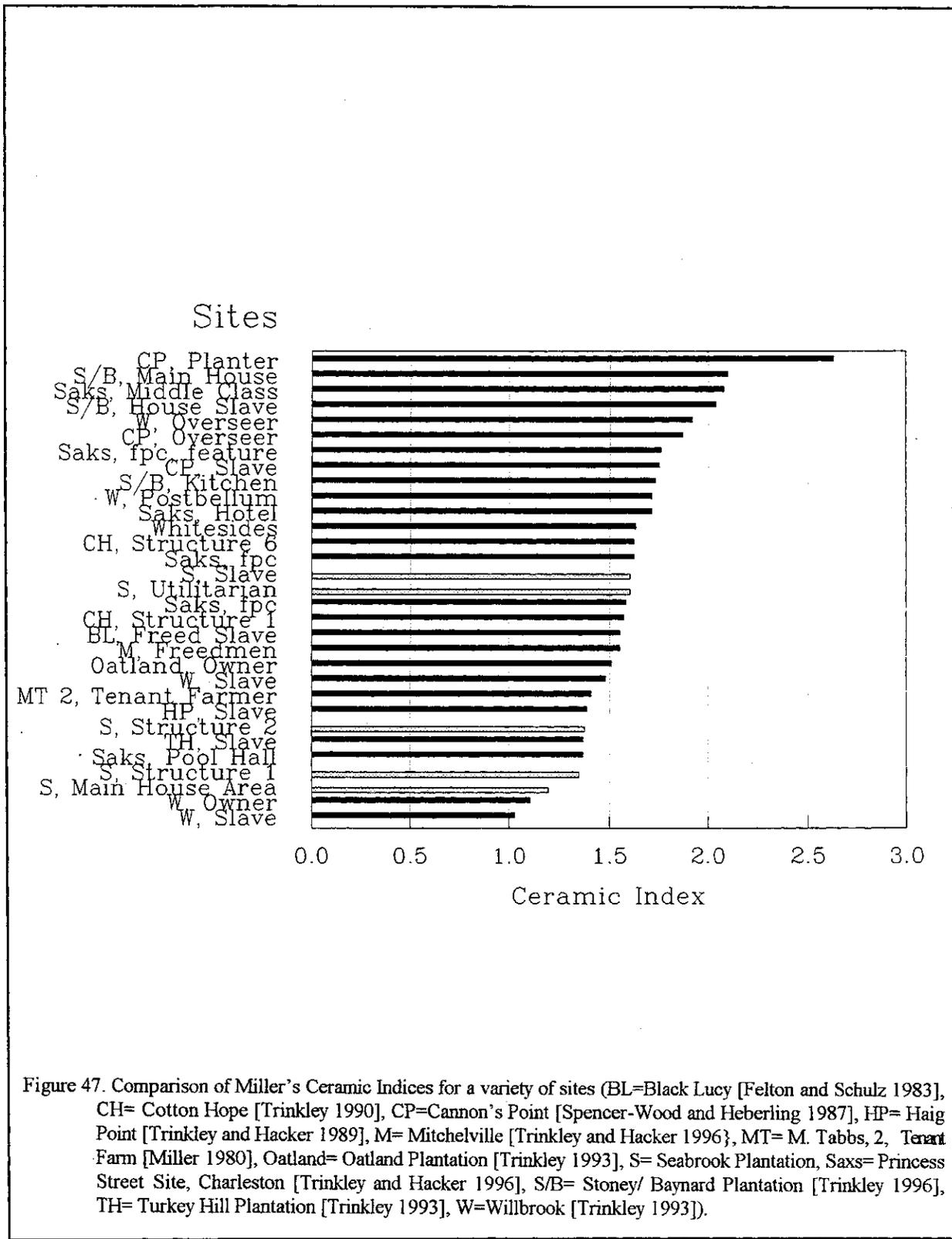


Figure 47. Comparison of Miller's Ceramic Indices for a variety of sites (BL=Black Lucy [Felton and Schulz 1983], CH= Cotton Hope [Trinkley 1990], CP=Cannon's Point [Spencer-Wood and Heberling 1987], HP= Haig Point [Trinkley and Hacker 1989], M= Mitchelville [Trinkley and Hacker 1996], MT= M. Tabbs, 2, Tenant Farm [Miller 1980], Oatland= Oatland Plantation [Trinkley 1993], S= Seabrook Plantation, Saks= Princess Street Site, Charleston [Trinkley and Hacker 1996], S/B= Stoney/ Baynard Plantation [Trinkley 1996], TH= Turkey Hill Plantation [Trinkley 1993], W=Willbrook [Trinkley 1993]).

ARTIFACT ANALYSES

Table 42.
Miller's Index Values for Block 1 of the Main House Area.

Plates	Creamware/Pearlware			Whiteware		
	Index Value Assigned (date)	Number	Product	Index Value Assigned (date)	Number	Product
Undecorated	1.00 (1805)	1	1.00	1.57 (1853)	2	3.14
Edged	1.25 (1804)	3	3.75			
Transfer Printed	5.25 (1796)	1	5.25			
TOTAL		5	10.00		2	3.14
Average Value			2.00			1.57

Bowls	Creamware/Pearlware			Whiteware		
	Index Value Assigned (date)	Number	Product	Index Value Assigned (date)	Number	Product
Undecorated	1.00 (1805)	1	1.00	1.00 (1852)	2	2.00
Annular	1.60 (1799)	1	1.60	1.14 (1854)	1	1.14
Transfer Printed				2.91 (1853)	1	2.91
TOTAL		2	2.60		4	6.05
Average Value			1.30			1.51

Cups/Saucers	Creamware/Pearlware			Whiteware		
	Index Value Assigned (date)	Number	Product	Index Value Assigned (date)	Number	Product
Undecorated				1.00 (1852)	2	2.00
Handpainted	1.71 (1804)	1	1.71			
TOTAL		1	1.71		2	2.00
Average Value			1.71			1.00

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Table 43.
Miller's Index Values for Block 2 of the Main House Complex

Plates	Creamware/Pearlware			Whiteware		
	Index Value Assigned (date)	Number	Product	Index Value Assigned (date)	Number	Product
Undecorated	1.00 (1805)	5	5.00	1.00 (1852)	11	11.00
Edged	1.25 (1804)	25	31.25	1.57 (1853)	8	12.56
Transfer Printed	5.25 (1796)	5	26.25	2.46 (1854)	4	9.84
TOTAL		37	62.50		23	33.40
Average Value			1.69			1.45

Bowls	Creamware/Pearlware			Whiteware		
	Index Value Assigned (date)	Number	Product	Index Value Assigned (date)	Number	Product
Undecorated	1.00 (1805)	1	1.00	1.00 (1852)	5	5.00
Annular	1.60 (1799)	8	12.80	1.14 (1854)	5	5.70
Hand Painted	2.00 (1804)	6	12.00			
Transfer Printed	3.14 (1804)	6	18.84	2.91 (1853)	1	2.91
TOTAL		21	44.64		11	13.61
Average Value			2.13			1.24

Cups/Saucers	Creamware/Pearlware			Whiteware		
	Index Value Assigned (date)	Number	Product	Index Value Assigned (date)	Number	Product
Undecorated	1.00 (1805)	1	1.00	1.00 (1852)	1	1.00
Hand Painted	1.71 (1804)	1	1.71			
Transfer Printed	5.36 (1799)	3	16.08			
TOTAL		4	18.79		1	1.00
Average Value			4.70			1.00

ARTIFACT ANALYSES

Table 44.
Miller's Index Values for the Main House Area and Yard

Plates	Creamware/Pearlware			Whiteware		
	Index Value Assigned (date)	Number	Product	Index Value Assigned (date)	Number	Product
Undecorated	1.00 (1805)	2	2.00	1.00 (1852)	3	3.00
Edged	1.25 (1804)	5	6.25			
TOTAL		7	8.25		3	3.00
Ave. Value			1.18			1.00

Bowls	Creamware/Pearlware			Whiteware		
	Index Value Assigned (date)	Number	Product	Index Value Assigned (date)	Number	Product
Annular	1.60 (1799)	1	1.60	1.14 (1854)	1	1.14
TOTAL		1	1.60		1	1.14
Ave. Value			1.60			1.14

Cups/Saucers	Creamware/Pearlware			Whiteware		
	Index Value Assigned (date)	Number	Product	Index Value Assigned (date)	Number	Product
Undecorated				1.00 (1852)	2	2.00
Handpainted	1.71 (1804)	2	3.42			
TOTAL		2	3.42		2	2.00
Ave. Value			1.71			1.00

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Table 45.
Miller's Index Values for the Northern Slave Row

Creamware/Pearlware				Whiteware		
Plates	Index Value Assigned (date)	Number	Product	Index Value Assigned (date)	Number	Product
Undecorated	1.00 (1805)	5	5.00	1.00 (1852)	4	4.00
Edged	1.25 (1804)	10	12.50	1.57 (1853)	6	9.42
Flow blue				2.40 (1855)	3	7.20
Sponge decorated				1.20 (1855)	1	1.20
Transfer Printed	5.25 (1796)	4	21.00	2.46 (1854)	1	2.46
TOTAL		20	38.50		15	24.28
Average Value			1.93			1.62

Creamware/Pearlware				Whiteware		
Bowls	Index Value Assigned (date)	Number	Product	Index Value Assigned (date)	Number	Product
Undecorated	1.00 (1805)	3	3.00	1.00 (1852)	3	3.00
Annular	1.60 (1799)	1	1.60	1.14 (1854)	6	6.84
Hand Painted	2.00 (1804)	4	8.00			
TOTAL		8	12.60		9	9.84
Average Value			1.58			1.09

Creamware/Pearlware				Whiteware		
Cups/Saucers	Index Value Assigned (date)	Number	Product	Index Value Assigned (date)	Number	Product
Undecorated				1.00 (1852)	2	2.00
TOTAL					2	2.00
Average Value						1.00

ARTIFACT ANALYSES

Table 46.
Miller's Index Values for Structure 1 of the Southern Slave Row

Plates	Creamware/Pearlware			Whiteware		
	Index Value Assigned (date)	Number	Product	Index Value Assigned (date)	Number	Product
Undecorated	1.00 (1805)	3	3.00	1.00 (1852)	8	8.00
Edged	1.25 (1804)	11	13.75	1.57 (1853)	20	31.40
Handpainted	1.50 (1787)	1	1.50			
Transfer Printed	5.25 (1796)	1	5.25	2.46 (1854)	2	4.92
TOTAL		16	23.50		30	44.32
Average Value			1.47			1.48

Bowls	Creamware/Pearlware			Whiteware		
	Index Value Assigned (date)	Number	Product	Index Value Assigned (date)	Number	Product
Undecorated	1.00 (1805)	1	1.00	1.00 (1852)	3	3.00
Annular	1.60 (1799)	9	14.40	1.14 (1854)	10	11.40
Hand Painted	2.00 (1804)	1	2.00	1.80 (1836)	1	1.80
Transfer Printed				2.91 (1853)	1	2.91
TOTAL		11	17.40		15	19.11
Average Value			1.58			1.27

Cups/Saucers	Creamware/Pearlware			Whiteware		
	Index Value Assigned (date)	Number	Product	Index Value Assigned (date)	Number	Product
Undecorated	1.00 (1805)	1	1.00	1.00 (1852)	3	3.00
Handpainted				1.23 (1853)	1	1.23
Sponge decorated				1.50 (1858)	2	3.00
Transfer Printed	5.36 (1799)	1	5.36	3.00 (1833)	1	3.00
TOTAL		2	6.36		7	10.23
Average Value			3.18			1.46

THE PLANTATION LANDSCAPE

Table 47.
Miller's Index Values for Structure 2 in the Southern Slave Row.

Plates	Creamware/Pearlware			Whiteware		
	Index Value Assigned (date)	Number	Product	Index Value Assigned (date)	Number	Product
Undecorated				1.00 (1852)	9	9.00
Edged	1.25 (1804)	5	6.25	1.57 (1853)	6	9.42
Handpainted				1.68 (1853)	1	1.68
Transfer Printed				2.46 (1854)	4	9.84
TOTAL		5	6.25		20	29.94
Average Value			1.25			1.50

Bowls	Creamware/Pearlware			Whiteware		
	Index Value Assigned (date)	Number	Product	Index Value Assigned (date)	Number	Product
Undecorated				1.00 (1852)	7	7.00
Annular	1.60 (1799)	4	6.40	1.14 (1854)	4	4.56
Transfer Printed				2.91 (1853)	1	2.91
TOTAL		4	6.40		12	14.47
Average Value			1.25			1.21

Cups/Saucers	Creamware/Pearlware			Whiteware		
	Index Value Assigned (date)	Number	Product	Index Value Assigned (date)	Number	Product
Undecorated				1.00 (1852)	3	3.00
Handpainted	1.71 (1804)	2	3.42	1.23 (1853)	2	2.46
Sponge decorated				1.50 (1858)	1	1.50
TOTAL		2	3.42		6	6.96

ARTIFACT ANALYSES

Table 48.
Miller's Index Values for the Yard Area of the Southern Slave Row.

Creamware/Pearlware				Whiteware		
Plates	Index Value Assigned (date)	Number	Product	Index Value Assigned (date)	Number	Product
Undecorated				1.00 (1852)	6	6.00
Edged				1.57 (1853)	3	4.71
Handpainted				1.68 (1853)	1	1.68
Transfer Printed				2.46 (1854)	1	2.46
TOTAL					12	14.85
Average Value						1.24

Creamware/Pearlware				Whiteware		
Bowls	Index Value Assigned (date)	Number	Product	Index Value Assigned (date)	Number	Product
Undecorated				1.00 (1852)	3	3.00
Annular	1.60 (1799)	1	1.60	1.14 (1854)	3	3.42
Transfer Printed	3.14 (1804)	1	3.14			
TOTAL		2	4.74		6	6.42
Average Value			2.37			1.07

suggesting that ceramic status does not necessarily indicate freedmen status within this context.

Another telling status indicator discernable from ceramic assemblages is the differences between flatwares and hollowwares present at different areas of the site. Table 49 shows the percentages of hollow wares and flat wares at Seabrook Plantation. In general, flatwares account for at least half of the assemblages at all areas, with the exception of the utilitarian building and Structure 2, although Structure 2 does have a majority of flatwares. The Main House area has a lower percentage of hollowwares (13%) than the slave areas and utilitarian building.

This difference indicates that the owners of Seabrook did not make use of as many hollowwares as the slaves and freedmen did, possibly reflecting a difference in the types of foods consumed by these two groups. The Main House area also has less utilitarian wares than the

three slave and freedmen structures. Within the Southern Slave Row, Structure 2 has a higher percentage of utilitarian wares than Structure 1. The utilitarian building also has a percentage of utilitarian wares comparable to Structure 1. The differences between slave and slave/freedmen assemblages is slight, suggesting that ceramics do not necessarily indicate status for freedmen sites.

Summary

Artifact assemblages from Seabrook Plantation have provided more information on the time periods of occupation at the different areas at the plantation than was available through the historical documents. However, the exact occupations of slave and freedmen areas could only be defined as probably beginning in the early 1800s and ending sometime before 1850 at the Northern Slave Row, and beginning after 1850 and continuing in the postbellum at the Southern Slave

Table 49.
Flat ware and Hollow ware Percentages from
Areas at Seabrook Plantation

	Util.	Main House	Well Area	Well Shaft	Northern Slave Row	Southern Slave Row Struc. 1	Slave Row Struc. 2
Flatware	34.8%	52.6%	56.1%	56.3%	55.1%	52.2%	44.6%
Hollowware	30.4%	13.0%	31.8%	15.5%	29.0%	30.0%	28.6%
Utilitarian	13.0%	4.4%	3.7%	2.8%	5.8%	5.6%	10.7%

freedmen who occupied the Southern Slave Row had access to less expensive ceramics than may have been supplied to the Northern Slave occupants.

Row. Historical documents show that the plantation was bought by William Seabrook in 1833, and upon his death in 1836, may have been managed by his son. However, the documents do not indicate who lived at the plantation Main House until after the Civil War when AMA teachers occupied the plantation and then rented it to a young planter and his family.

The patterning of the artifact assemblage at Seabrook shows that most of the excavated areas do not fit into any of the available artifact patterns, as is the case for most nineteenth century plantations. Only the Northern Slave Row assemblage matches the Revised Carolina Artifact Pattern. The Main House area assemblage falls between planter assemblages at Archdale and Oatland Plantations. The Southern Slave Row structures have assemblages that are similar to Turkey Hill , and Midway slave assemblages.

Indicators of status, such as clothing and personal artifacts, are found in much higher quantities at the Southern Slave Row than at the Northern Slave Row. Differences are also noted between the two structures in the Southern Row, where Structure 2 has a high amount of writing utensils when compared to Structure 1.

Ceramic index values provide a different picture of status at the plantation than the clothing and personal artifacts. The Main House area has an usually low ceramic index value for a planer or overseer's house, with all other areas of the plantation producing a higher ceramic index value. In addition , the Northern Slave Row excavations produced a higher ceramic value index than both structures at the Southern Slave Row. These differences in status ceramics may indicate that the

EXAMINATION OF PREHISTORIC MATERIALS AT 38BU821

Michael Trinkley

Introduction

As previously discussed, the investigations at 38BU821 began with auger testing at 10-foot intervals (Figure 35) in an effort to identify intact shell midden areas, as well as off-midden areas characterized by dense artifacts. This work revealed that the shell was fairly evenly dispersed over the site (Figure 37) and that artifacts, too, showed no noticeable concentrations (Figure 36). There were, at best, very localized concentrations. These data strongly suggested that the site had been much more heavily plowed than originally anticipated, based on the survey data.

Consequently, the 275 square feet of excavation were placed in a central portion of the site, with one 10-foot unit (EU 3) at the marsh edge and the remaining 175 square feet placed slightly further inland — the goal still being to see if there were any observable differences between the marsh edge area, where middens are frequently dense, and the interior area, where some researchers have suggested that occupation might be more commonly found. Post holes were found in both areas, although artifacts were clearly concentrated at the marsh edge (Table 50).

The analysis of the prehistoric pottery concentrated on what Orton et al. (1993) term *f a b r i c* (what Americanists call paste) analysis, coupled with a relatively detailed surface treatment analysis (i.e., the textile fabric itself), and form (i.e., the shape of the

vessel). Each of these areas has been shown by a host of other researchers to be of particular importance in understanding pottery wares. We have chosen to emphasize visual analysis, over petrological and compositional analysis for two reasons. The first, and fundamental, is cost. For more advanced approaches to yield meaningful data would require studies beyond the funding level of this project. Related to the issue of cost is our second reason: the quality of materials recovered from this site are not sufficient to warrant a more detailed examination.

The visual paste studies have concentrated on a relatively few areas:

- *Temper size*, based on the U.S.D.A. standard sizes for sand grains and are defined as:

- very fine - up to 0.1 mm
- fine - 0.1 to 0.25 mm
- medium - 0.25 to 0.5 mm
- coarse - 0.5 to 1.0 mm
- very coarse - 1.0 to 2.0 mm
- granule - 2.0 to 4.0 mm

with the dominant size range given and the ranges shown in brackets. This was calculated for any sand inclusions and also for the grog itself.

- *Temper Shape*, also known as "rounding," with the inclusions defined as:

- angular — convex shape, sharp corners

- sub-angular —

Table 50.
Prehistoric Artifacts recovered from 38BU821

Provenance	pottery		flakes	bone
	≥1-inch	<1-inch		
EU-1, Lv. 1	14	118	3	4
EU-1, trow	3	7		
EU-2, Lv. 1	23	118		14
EU-2, trow	3	4		
EU-3, Lv. 1	79	75		4
EU-3, trow	5			
EU-3, ph 1	36			

convex shape, rounded-off corners, and

rounded — convex shape, no corners.

- *Frequency of Inclusions*, using a three point scale of abundant, moderate, or sparse. These can be estimated by reference to percentage inclusion estimation charts (see Mathew et al. 1991), with 30% or more being abundant, ranges of 10 to 20% being moderate, and 5% being sparse.

- *Core Cross-Sections*, consisting of a visual observation of a freshly broken edge. There can be at least five different cross-sections for coarse tempered pottery: (1) oxidized with no core (organics may or may not have originally be present), (2) oxidized with diffuse core margins (organics originally present), (3) reduced with black or gray extending through the sherd, leaving little or no lighter colored core (organics not originally present), (4) reduced, being dark throughout with no core (organics may or may not have been present originally), and (5) reduced then cooled rapidly in air leaving very sharp margins on the interior dark core (see Rye 1981:Figure 104; Figure 48).

Other vessel studies, such as form, function, and decorative motif examinations will concentrate on a smaller constellation of essential features:

- *Interior Treatment*, using the definitions developed by Blanton et al. (1986:183) for interior coastal plain pottery: (1) tool marks present, (2) no tool marks, no visible temper, (3) no tool marks, some temper visible but not protruding, and (4) no tool marks, temper protruding.

- *Exterior Smoothing*, was rated as either absent (when the exterior stamping was clean and sharp or plain sherds had a rough, non-compacted surface), moderate (when exterior stamping was slightly blurred and plain sherds had a regular, but not glossy surface), or high (when exterior stamping was almost totally obliterated and plain sherds had a semi-glossy finish).

- *Overstamping*, classified as either present or

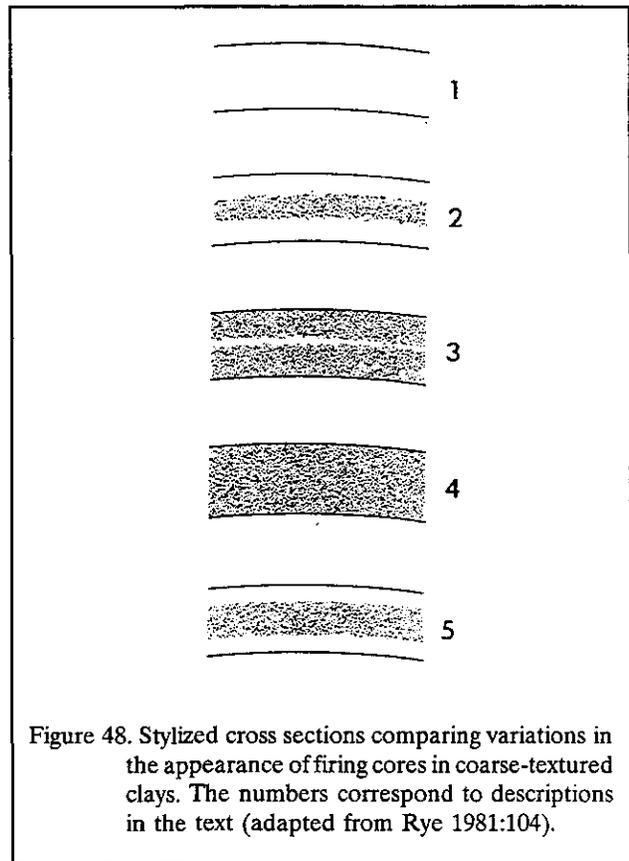


Figure 48. Stylized cross sections comparing variations in the appearance of firing cores in coarse-textured clays. The numbers correspond to descriptions in the text (adapted from Rye 1981:104).

absent with no effort to quantify degree or nature.

- *Rim Diameter*, measured in centimeters when a reliable arc was present.

- *Thickness*, measured in millimeters and taken 3 cm below the lip of the rim. When this portion of the vessel was not present no thickness measurement was taken. Clearly, much of the diversity in thickness found in the literature is likely from measurements taken on body sherds, which may represent virtually any part of the vessel.

- *Shoulder Form*, defined as (1) slightly flaring, (2) slightly restrictive at the rim, (3) straight sided, (4) hemispherical, and (5) flaring on straight-sided bodies.

- *Cordage Diameter*, measured as mm and including both warp and weft as appropriate.

▪ *Angle of Twist*, designated as loose (not exceeding 10°), medium (11° to 25°) and tight (usually 26° to 45°).

▪ *Twists per Centimeter*, also measured as twists per 0.5 cm and extrapolated when necessary.

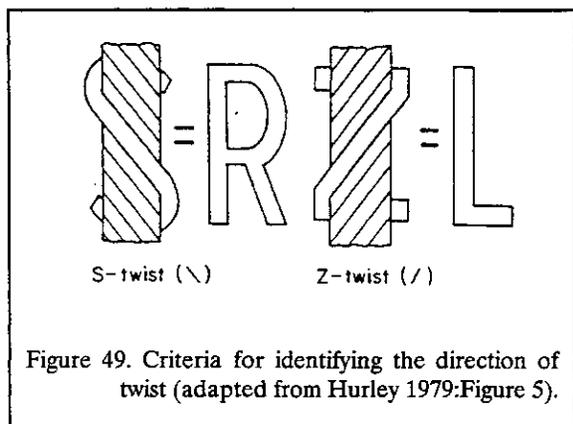


Figure 49. Criteria for identifying the direction of twist (adapted from Hurley 1979:Figure 5).

▪ *Direction of Twist*, which is a description of the slant of the segments, either sloping from the upper right to the lower left (Z twist) or from the upper left to lower right (S twist) (Figure 19). This is uniformly recorded not from the sherd, but from an impression of the sherd (i.e., it is based on the plasticine impression or positive image).

Pottery

A total of 485 sherds were recovered from the excavations at 38BU821. Of these 163, or 33.6%, were over 1-inch in diameter and were considered of adequate size for further analysis. Of these, only the sherds from EU 1-3, and PH 1 (from EU 3) were used. Sherds from troweling were not examined.

Those under 1-inch in diameter take considerable effort to process and identify. Further, Orton et al. remark that "in most quantification methods [these sherds] will make little difference to the overall statistics of an assemblage (Orton et al. 1993:47). Although there are a large number of highly

fragmented sherds, and this is suggestive of the extensive plowing, there seems to be considerable diversity in the proportion of large sherds at coastal shell middens and this may be a feature worthy of additional research.

For example, at Old House (38BU861), a Deptford-St. Catherines midden on Hilton Head Island, only 17.3% of the sherds were over 1-inch in diameter (Trinkley and Adams 1994:54), while at 38BU833, a primarily St. Catherines shell midden, also on Hilton Head, 58.6% of the pottery was over an inch in diameter (Trinkley et al. 1992:25). Although much of the difference will no doubt be explained by site-specific factors, it seems that the diversity is far too great for this to be the sole factor.

In contrast, there appears to be some general uniformity in the density of pottery at coastal shell middens (see Trinkley and Adams 1994:54). Several sites are compared in Table 51, which reveals that most sites produce between about one and three sherds per square foot. Again, some of this variation is likely the result of site area (and relative proportion of different site areas) actually sampled in the excavations.

The analysis identified sherds belonging to only two series: Deptford, accounting for 90.1% (n=137), and St. Catherines, accounting for the remaining 9.9% of the assemblage (n=15).

Deptford

The 137 Deptford sherds are dominated by cord marked motifs, which comprise 89.8% of the assemblage (n=123). Check stamping accounts for

Site	Sherds/ft ²	Source
Seabrook, 38BU821	1.8	
Old House, 38BU861	1.2	Trinkley and Adams 1994:54
38BU1270	0.1-5.1	Kennedy and Espenshade 1992:56
Callawassie middens	0.6-3.0	Trinkley et al. 1991
38BU833	0.5	Trinkley et al. 1992:25

an additional 8.7% (n=12), while only 1.5% of the collection was plain (n=2). This assemblage is similar to that associated with the Deptford II phase, dating about A.D. 300 to A.D. 500 along the Georgia coast (DePratter 1989:11), although no complicated stamping was found at this site.

In some respects the Deptford wares, regardless of surface treatment, are quite similar. For example, all exhibit moderate quantities of inclusions and all of the inclusions were sub-angular quartz sand.

On the other hand, there is considerable diversity in the size of the inclusions. Although 86.8% of the sherds exhibit coarse sand as the dominant inclusion, the remaining sherds exhibited inclusions ranging from very fine to medium, with a slight preference for very fine to fine (9.5%).

These findings may suggest that several different clay sources were being used by the Deptford potters, with slightly different ranges in inclusions, although clearly the most commonly used clays had moderate amounts of sub-angular coarse quartz sand.

The pottery at this site appears to be somewhat more uniform than that recovered from the Old House middens. There coarse sand was still most common, although there were greater numbers of sherds with fine to very coarse inclusions. In addition, there was also more variation in the temper shape. The variation at Old House was likely the result of sampling several different middens — with the differences in paste perhaps reflecting individual kin-group clay collection differences. At Seabrook, where a much smaller area was sampled, it seems that we may be looking at only one pottery technique or the preference of a small number of potters — hence the relative uniformity of the paste.

Turning to the firing technique, as evidenced by core cross sections, there is considerable diversity, although 47.1% of the assemblage evidences reduced cores that are dark throughout. An additional 41.2% exhibit reduced

cores with a narrow margin of exterior oxidation. These vessels, too had reduced cores, but were cooled rapidly in air, leaving very sharp margins and an oxidized layer on the outer surface of the pottery. The absence of an inner oxidized surface suggests the vessels cooled mouth down. Alternatively, these vessels may have had thoroughly reduced cores with the exterior becoming more oxidized through use on hot cooking fires. Regardless, together the reduced cores account for 88.3% of the sherds — suggesting a relatively uniform firing process.

Only 7.8% of the sherds exhibit oxidized cross-sections. The remainder of the sherds exhibited both interior dark cores or reduced cores with a thin layer of oxidization on the interior of the vessel (probably from cooling mouth up).

Comparing these results to those at Old House, we again see that the Seabrook collection exhibits much less variation. This adds further support to our contention that the units, excavated in only one small area of the site, probably sampled the pottery from only one midden, reflecting only one kin-group of potters. Therefore, there is less variation than at sites such as Old House, where multiple middens, reflective of multiple potters, were included in the study.

Looking at the interior of the Deptford vessels, over a third (36.6%) exhibited no smoothing and had temper particles protruding. An equal amount (36.6%) exhibited no tool marks, but also had no temper exposed. About 24.3% of the sherds exhibits no tool marks, but some temper was visible, although not protruding. And only 12.5% of the sherds exhibited tool marks — in all cases appearing to be brush marks.

Trying to synthesize these observations, almost two-thirds of the sherds had been smoothed in some manner on the interior, although the vast majority of this work left no visible marks. The remaining 36.6% of the sherds exhibit protruding temper — evidence that no effort was made to finish the vessel interiors.

The exterior of the sherds evidenced no

smooth or smearing the surface treatment on 50% of the examples. Moderate smoothing was found on 31.2% of the collection, and a high degree of smoothing, almost totally obliterating the surface treatment, on about 18.2% of the collection. This seems to be a Deptford-wide phenomena as very similar results were obtained from Old House (Trinkley and Adams 1994:55).

Also like at Old House, only one sherd exhibited any evidence of use. That specimen, a Deptford Check Stamped sherd from EU 1, revealed carbonized deposits on the interior of the vessel. Based on the Old House data, it was suggested that a variety of the Deptford wares may have been used for storage, rather than cooking (Trinkley and Adams 1994:55). A similar conclusion is appropriate for this collection, although the wear they may have received in their plowzone context, makes any definitive statement problematical.

The vessel wall thickness ranges from 6 mm to 18 mm, with a peak at 7 mm. Unfortunately, only a very small number of rim sherds were large enough to permit measurements at the specified point below the rim. Both straight and slightly outflaring shoulder forms were identified, but again the sample was very small. Vessel diameters of 10, 13, and 20-cm were identified — the first two seeming to be very small. Even the 20-inch vessel is hardly the huge cooking vessels often associated with coastal shell middens. At Old House, for example, the bulk of the vessels appeared to be between 35 and 45-cm in diameter (Trinkley and Adams 1994:55).

Rim forms are typically rounded, although the vessel represented in the "pot bust" at EU 3, PH 1 is crudely folded down on the exterior. Evidence of scraping is present on both the interior and exterior, perhaps as an effort to finish the lip. The cord marking was applied over this lip, so it was folded and scraped prior to the surface finish.

Turning to the cordage itself, the vast majority of the pottery (81.1%) exhibits a left, or Z-twist, using cord ranging in diameter from 1 to 5 mm. The most common cordage is 4 mm in

diameter, accounting for 57.5% of the assemblage. Most of the cordage (again 57.5%) exhibited 3 twists per cm, although it ranges from 2 to 8 twists per cm. The bulk of the measurable cordage exhibited a moderately tight twist.

When this cordage is compared to Old House a number of differences are immediately apparent. The direction of twist is different (at Old House the majority of the cordage was a right, or S-twist), the cordage was much thinner (mean of about 2.5 mm), and the number of twists was much greater (commonly 6 twists per cm).

The "pot bust" or concentration of matching sherds in EU 3, provides a good opportunity to explore the range of variation that should be expected on *one vessel*. Features which exhibit considerable range on a single vessel are possibly not good typological indicators. Those which seem consistent on all the sherds from a single vessel may be more characteristic of the ware.

In terms of the paste, there is virtually no variation — all of the sherds have coarse sub-angular quartz inclusions and they are, in the case of every sherd, moderate in frequency. Likewise, the cross-section exhibits little variation — but since this only reflects firing, we would expect to see little, if any, variation. More significantly, interior treatment is nearly identical on every sherd, as is exterior smoothing.

Curiously, the thickness varied from 7 to 15 mm, suggesting that potters may have been relatively inattentive to the wall thickness. If so, this attribute may be significant in only the most general terms.

Only one direction of twist was found on the vessel, indicating the use of only one paddle wrapped with similar cordage. That cordage, however, varied from 1 to 4 mm in diameter and had 3 to 5 twists per cm, suggesting some variation either in how the cordage was used, or the use of several different pieces on one paddle. Nevertheless, the cordage evidenced by this one vessel does exhibit less variation than that found

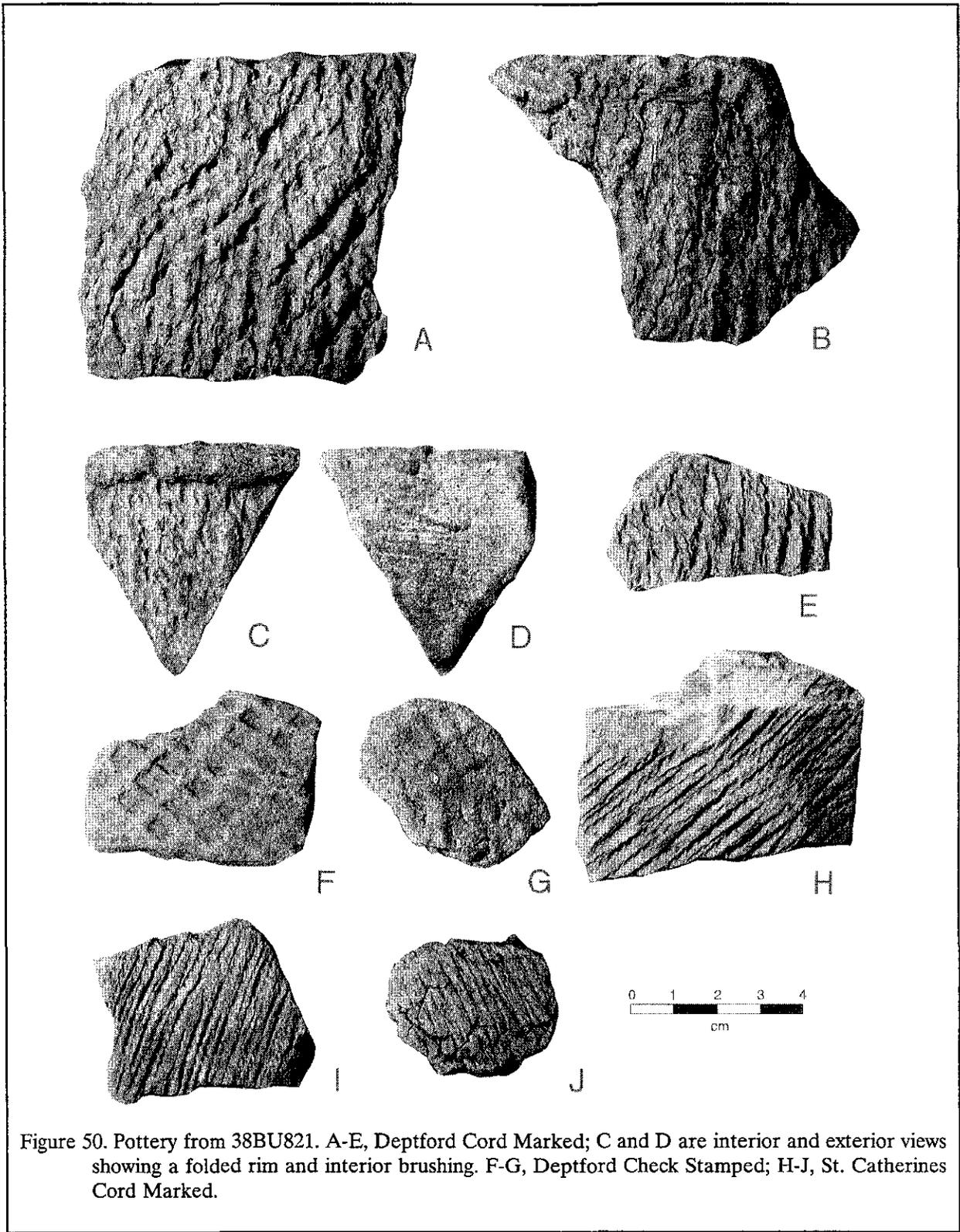


Figure 50. Pottery from 38BU821. A-E, Deptford Cord Marked; C and D are interior and exterior views showing a folded rim and interior brushing. F-G, Deptford Check Stamped; H-J, St. Catherines Cord Marked.

on the site as a whole — suggesting that several paddles were being used, perhaps by several different potters.

We are tempted to suggest that the paste attributes are most indicative of the type or series, while the cordage attributes are most indicative of potter kin-groups. This may help explain some the tremendous variation seen in the cordage of Deptford, Wilmington, and St. Catherines vessels.

St. Catherines

Of the 15 St. Catherines sherds identified in the collection, 13 or 86.8% are cord marked. There are single examples of both plain and fabric impressed wares.

Although the collection is very small, there is considerable uniformity in the paste. Although grog inclusions ranging from 1 to 8 mm in size are found, there is a strong clustering between 2 and 4 mm., with occasional finer and coarse particles. Likewise, 87% of the sherds exhibited moderate amounts of grog inclusions, with only individual examples of sherds having either abundant or sparse inclusions.

Firing techniques are also very similar, with almost two-thirds of the sherds (63.6%) exhibiting reduced cross-sections. The remainder (36.4%) exhibit reduced interiors except for a band of oxidized paste on the vessel exterior. This suggests that firing methods and also post-firing use for the collection was largely identical among all of the vessels represented.

Interior smoothing was found on 90.9% of the sherds, indicating that this was the preferred method of manufacturing. One sherd also exhibited what appears to be a red film on the interior. Exterior surface treatment consisting of moderate smoothing was found on about 75% of the sherds, with the remainder evenly divided between no smoothing and extensive smoothing.

Like the Deptford wares, the St. Catherines cordage was all left, or Z-twisted. Unlike the Deptford cordage, however, that on the St. Catherines pottery was fairly thin, ranging from

1 to 3 mm. Twists per centimeter ranged from 3 to 6.

Curiously, the St. Catherines ware appears to exhibit considerably less variation than found in the Deptford, both at 38BU821 and also at previously investigated sites. For example, at 38BU833 there was a strong preference for Z-twisted cordage and all was between 1 and 2 mm in diameter (Trinkley et al 1992:27). At Old House Z-twisted cordage again dominates the assemblage and again it is thin — being under about 4.5 mm in diameter and ranging down to about 1.3 mm. (Trinkley and Adams 1994:60-61).

While there appears to be some kin-group differences in the Deptford cordage, that used by the St. Catherines potters seems to have been very uniform, at least based on the available evidence.

Other Prehistoric Artifacts

The only lithics recovered from the excavations are three coastal plain chert interior (defined as having no cortex) flakes. All came from Level 1 of EU 1. In addition, a fragment of a baked clay object was identified from EU 3, Level 1. The clay from this object is identical to that of the Deptford wares — which are also the dominant assemblage in the unit.

All of the animal bone recovered from the excavations was highly fragments and heavily eroded, but it appears to be mammalian. The remains, however, are insufficient to offer any substantive data concerning diet or subsistence strategies used by the site occupants.

Historic Artifacts

Given the proximity of 38BU821 to Seabrook Plantation it isn't surprising that some historic remains were encountered during the excavations. What is perhaps unusual is the range of materials present.

From the excavations 4 brass grommets, one glass fragment, one nail fragment, and one iron buckle were recovered. When the auger tests

are also considered, an additional three glass fragments and one nail fragment are added, as well as three ceramics, a fragment of brick, and a portion of a scissor handle. In other words, the materials represent the kitchen, architectural, clothing, and activity artifact groups.

All of the items appear to be antebellum and some, perhaps most, may simply represent scatter from the main settlement. A few, alternatively, may represent items intentionally taken into the field by the slaves. The diffuse scatter, so far away from the main settlement, would be easily ignored at a survey level, yet recognizing their presence furthers our understanding of the plantation landscape. The area "used" by slaves and master alike may have been much larger than we often recognize archaeologically. And there may be evidence of a range of activities in the archaeological record for which we have little explanation — or understanding.

Summary

The investigations at 38BU821 provide less information than initially hoped. The extent and thoroughness of the plowing has dispersed artifacts and middens alike. Nevertheless, the study does provide additional data on Deptford and St. Catherines pottery, furthering our understanding of these wares in the Lowcountry.

In particular, the research at this site supports the idea previously discussed by Trinkley and Adams (1994) that some aspects of the Deptford ceramic assemblage provide kin-specific indicators. In particular the cordage appears to be related to potters associated with either specific site areas or middens, while paste attributes appear to be most indicative of the ware or type.

In contrast, the St. Catherines assemblage points to greater uniformity of both paste and cordage, suggesting that there were no longer different kin-based ceramic traditions. Perhaps this greater uniformity has to do with the wider acceptance of cord marking. Regardless, any interpretation must be tempered by the fact that we have considerably less data from this ware than

is available for the preceding Deptford series.

The research at 38BU821 furthers the data base on which to evaluate Deptford pottery in the Beaufort area and helps again to focus attention on the need for consistent analyses that are disseminated and made available to other researchers.

ETHNOBOTANICAL REMAINS FROM SEABROOK PLANTATION

Michael Trinkley

Introduction

Ethnobotanical remains were recovered from five excavation proveniences associated with the historic assemblages at the plantation, including Feature 1, the builder's trench around the utility building in the main settlement; Feature 2, the well shaft in the main settlement; Feature 3, the ditch found associated with the Northern Slave Row; Feature 4, a pit or post hole, also associated with the Northern Slave Row; and Feature 5, the hearth area associated with the Northern Slave Row.

The flotation from each feature consisted of a 5 gallon volume of soil collected in the field, but floated at the Chicora labs after the completion of the field investigations.

Flotation samples, offering the best potential to recover very small seeds and other food remains, are expected to provide the most reliable and sensitive subsistence information. Samples of 10 to 20 grams are usually considered adequate, if no bias was introduced in the field. This quantity was obtained from all of the samples except for Feature 1, which was not included in this study. The quantity of carbonized material was so small that it was not deemed suitable for further examination.

Popper (1988) explores the "cumulative stages" of patterning, or potential bias, in ethnobotanical data. She notes that the first potential source of bias includes the world view and patterned behavior of the site occupants -- how were the plants used, processed, and discarded, for example. Added to this are the preservation potentials of both the plant itself and the site's depositional history. Of the materials used and actually preserved, additional potential biases are introduced in the collection and

processing of the samples. For example, there may be differences between deposits sampled and not samples, between the materials recovered through flotation and those lost or broken, and even between those which are considered identifiable and those which are not.

Procedures and Results

The four flotation sample from Features 2 – 5, 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 Schopmeyer (1974), United States Department of Agriculture (1971), Martin and Barkley (1961), and Montgomery (1977). The results of the study are shown in Table 52.

Feature 2, debris found in the well fill context, consists almost entirely wood charcoal, with very small quantities of fish scale. Both are indicative of the fill episode and the charcoal, in association with the quantity of nails and other building materials found in the excavation, suggests considerable trash was being used to fill the shaft -- including, it appears, partially burned wood. A number of large charcoal pieces were found in the sample and, without exception, all were identified as pine (*Pinus* sp.).

Also present in the well fill, however, is a small assemblage of food remains, consisting of a single peach pit (*Prunus persica*) and several small fragments of corn (*Zea mays*) cupule along with one partially intact corn kernel, all of which are carbonized.

The peach is a common fruit on protohistoric and historic sites in the Carolinas.

Table 52.
Analysis of Flotation Samples, weight in grams

Provenience	charcoal		organics		bone		seeds		
	wt	%	wt	%	wt	%	wt	%	
Feature 2	45.10	76.8	11.91	20.3	0.01	t	1.73	2.9	1-peach, 14-china-berry, 9-corn
Feature 3	12.45	90.8	1.17	8.5	0.02	0.2	0.07	0.5	1-china-berry, 1-corn
Feature 4	26.48	92.1	2.27	7.9	0.01	t	0.00	-	
Feature 5	14.97	81.9	3.26	17.8	0.03	0.2	0.01	0.1	2-chenopods

Though they prefer relatively warm areas, they also require a resting period of winter cold for at least two months, during which time they gather strength for producing leaves

Sam Hilliard observes that:

The peach was the favorite fruit in most of the South and was prized as food either fresh, dried, or preserved.¹ If sufficient quantities were produced, the surplus was fermented to wine and distilled into brandy. Many farmers fed them to hogs, as they were considered very nutritious and often were encouraged to plant orchards to serve specifically for animal feed (Hilliard 1972:180-181).

Ann Leighton (1976:237) also notes the popularity of peaches. In 1629 there were 21 named peaches. By 1768 there were at least 31. And by 1850 over 250 named peach varieties were published. Regardless, all belonged to one of two groups, generally described as freestones or melting-peaches in which the pulp or flesh separates easily from the stone and the clingstone in which the flesh clings or adheres to the stone.

The peach fruits, in the lower coastal plain, from April through June. But, it is likely that peaches, a fruit of the temperate zone, were on the edge of their natural range in Beaufort area.

¹ One source also documents that peach pits themselves were roasted, salted, and eaten in rural black areas, such as John's Island and in Berkeley County (Morton 1974:118). That the pit recovered from Feature 2 is carbonized may be an indication of similar practices on Hilton Head Island, or it may simply be an accident that the pit was carbonized before disposal.

and flowers in the spring.

The corn cupules were far too fragmentary to allow any measurements, although the presence of the carbonized kernel did provide the opportunity to examine the corn for evidence of denting.

In some (but not all) races of corn, denting occurs when, as the kernel dried, its starchy endosperm shrinks downward toward the cob, drawing with it the outer material of the grain, such that a dent forms at the apex. The single specimen did not evidence denting, rather it showed the exosperm completely enclosing the starchy endosperm, a characteristic of flint corn.

This suggests that the Seabrook Plantation corn may have been a Southeastern Flint, which was characterized by short cobs, ears of 12 to 14 rows, and an ear that was slightly compressed at the base and gently tapered to the tip. Brown and Goodman (1977:77) note that this race is limited to the historic period.

Of course plantation accounts are replete with accounts of corn — often planted for animal fodder or for grinding into corn meal for the use of the slaves. The remains of corn in the well, therefore, are entirely consistent with what might be expected at a major Lowcountry plantation.

The recovery of china-berry (*Melia azedarach*) stones and seeds is a little more unusual. The china-berry is a deciduous tree currently considered an ornamental, although it occurs wild as an escapee from cultivation. The fruits, which occur in September and October, are round to oval, the pulp is juicy, and the hard

stones contain five seeds. Called "Pride of China," the tree was introduced by the seventeenth century from Asia and Thomas Jefferson mentions planting them from seed as early as 1778 (Baron 1987:73).

The seeds have been found in several plantation contexts, first observed at the slave settlement of Campfield Plantation in Georgetown County (Trinkley 1983:64).

The plant has medicinal uses which were recognized by Porcher (1869), but he was by no means the earliest reference to its use. Griffith's *Universal Formulary* (Griffith 1850:124) explains the use of bark of the root, the berries, and the leaves as an emetic, noting that it is also cathartic and "an efficient anthelmintic." Even into the end of the century, it was being advised as a vermifuge, being "considered nearly as efficient as spigelia"² (Johnson 1881:79).

Although considered poisonous, it has a long history as a vermifuge used to expel worms, especially roundworms (Morton 1974:95-96), a common complaint of Carolina slaves (Duncan 1971:258). It may also be taken as a diuretic and infusions of the leaves or fruits are given to relieve fever or applied topically to treat eczema and dermatitis. The fruits may also be used to keep insects from drying fruits, grains, and vegetables (Morton 1974:96), while the plant may be used to drive out household insects, especially flies. In spite of these medicinal uses Morton reports that there is great variation in the quality, taste, and toxicity of the fruits and that "people in the Low Country claim that the fruits are 'sweet' and frequently eat them" (Morton 1974:96).

Its presence in multiple slave or plantation contexts suggests that we may be seeing it because it was a common medicinal plant — perhaps found almost as frequently on the plantation landscape as peach.

Feature 3, representing the ditch cutting

² *Spigelia marilandica*, also known as Indian Pink or Pink Root. It is an erect, perennial herb, found wild in rich woods throughout South Carolina.

through the northern slave row, produced an assemblage very similar to that of the well. Although wood charcoal was the most common item in the sample, both china-berry and corn were also recovered from this provenience.

Feature 4, a post hole in the Northern Slave Row, produced only wood charcoal, a small quantity of fish scale, uncarbonized organic trash. These remains are consistent with a post hole.

Feature 5, a hearth or burned area in the Northern Slave Row, produced primarily charcoal, although two chenopod (*Chenopodium* sp.) seeds were also recovered in the sample.

Chenopod is also called pigweed or lamb's-quarters and is an erect annual or weakly perennial herb. In South Carolina it flowers about May and seeds are produced until the plant is killed by the first frost.

Chenopod seeds are commonly found in archaeological assemblages and the plant, while surviving independently of human influence, occurs most abundantly where human activity created a disturbed habitat. The plant is valued primarily for its greens, although the seeds are also nutritious and collection of greens in the later stages of maturation could easily result in the ancillary collection of large numbers of seeds.

Although Hilliard mentions greens being a common Southern food and even that they occurred in slave gardens (Hilliard 1972: 173 and 182), there is relatively little mention of chenopod in eighteenth or early nineteenth century literature — it was likely considered more of a weed, than greens, by sophisticated gardeners. In fact, the only mention of chenopod (as *C. botrys*) in Leighton's "Appendix of the Plants Most Frequently Cultivated in Eighteenth-Century American Gardens," is that it was grown, "for dosing young slaves" (Leighton 1976:406).

This is a reference to the use of the plant, especially *C. ambrosioides*, as a vermifuge. Morton (1974:44) notes that the oil has a wide reputation for expelling worms, but that chenopod does not

kill the worms, only paralyzes them. Consequently, a purgative as also required.

While these seeds may represent weeds growing in the disturbed area around slave dwellings, their recovery carbonized from a hearth area makes this unlikely. It is more likely that chenopod was either being harvested by the slaves as greens, or that it was being used — like the china-berry — as a medicinal herb.

Summary

The ethnobotanical remains from Seabrook Plantation are perhaps most interesting for their documentation of both the china-berry and chenopod. Although the chenopod may be either a medicinal herb or a food plant, the china-berry almost certainly documents the use of the plant in slave medicine. Found at a number of African-American sites, the china-berry may be in ethnobotany what blue beads are in material culture studies — an indicator of slavery.

Although the presence of corn is no surprise — it is commonly documented in historical sources — its archaeological recovery did allow a tentative identification of the race of corn being planted at Seabrook. As additional identifications of historic corn become available, it will be interesting to see how widespread Southeastern Flint is on Low Country plantations.

It is also not surprising that pine dominates the wood charcoal. Pine was ubiquitous on the Southern coastal plain and maps of Hilton Head refer to "Pine Barrens." Easily obtained and easily worked, it found use in many architectural settings. Pine was also a satisfactory firewood, being considerably easier to cut than available hardwoods such as hickory and oak.

The research at Seabrook also reveals that while plantation proveniences often provide rather barren ethnobotanical remains, continued sampling will eventually provide important data. By focusing efforts on features that are most likely to contribute charred materials, the efforts of collection, flotation, and analysis can be somewhat

ameliorated. In this case, the one negative feature — a builder's trench — was an unlikely candidate for the recovery of charred materials. The process of excavating a footing, trampling on the soils during construction, then backfilling at the end of the construction efforts, is not likely to either incorporate carbonized material or preserve it if it happened to be present. Moreover, the feature was a light brown in color, giving no evidence of any quantity of organic material. By carefully evaluating feature fill and the probable formation process, it may be possible to focus on features in the plantation landscape which are most likely producers of plant food remains.

PHYTOLITH ANALYSES AT SEABROOK PLANTATION

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Introduction

Phytolith analysis was conducted on five soil samples collected at the Seabrook Plantation Site (38BU323), South Carolina. Three samples were taken during vertical excavation of a well feature and the remaining two from two shell midden features, respectively. All features appear to date to the early to middle 19th century. This analysis was selected for archaeobotanic and paleoecological interpretation of the site based on significant part on the well known superior durability and preservation of phytoliths. Phytolith assemblages at all levels fulfilled this expectation. However, the absence of a phytolith reference data base coupled with the lack of previous phytolith studies at other sites in the region, restricts this pioneering effort to unfortunately limited goals. Basic questions and issues had to be addressed first to determine the feasibility of phytolith analysis in the context - i.e., were phytoliths present in this context; were they well preserved; were significant taxonomic groups present; did phytolith assemblages show qualitative and/or quantitative differences indicative of significant paleoecological and/or cultural modulation of the environment, etc. Even with positive answers to all these questions, assessments and interpretation of the paleoecology and ethnobotanical patterns are often precluded and tentative at best in any case.

Methods

Analyses conducted included phytolith extraction from soil samples, microscope scanning of extracted phytolith assemblages for identification, recording and image storing on videotape, and compilation and interpretation of data. Videotape images were made by mounting a television camera in the photo ocular to record significant, characteristic and/or interesting phytoliths observed. This also provides a convenient record to review in conjunction with

development of a phytolith reference database for the region in the future.

Phase 1: Phytolith Extraction from the Soil

Conventional soil extraction procedures for all soil samples were initially used with modifications employed as required by the nature of specific samples. Standard procedures generally followed that found in Rovner (1971; 1983). The soil was initially "cleaned" to promote disaggregation of all particles - inorganic, organic and biogenic - as follows:

1. About 20 ml volume of soil placed into clean beaker.
2. Distilled water added, stirred, and either placed in a centrifuge at moderate speed for 20 to 30 minutes, or let settle for a minimum of 4 hours. Piperno (1988) suggests one hour is sufficient for tropical soils. The additional time provided here was an arbitrary caution procedure given possible factors of soil differences. Only small to very small amounts of macrobotanical fragments, fibers or particles were observed.
3. The aliquot with suspended fine particles and very light material, e.g. floating rootlets, fibers, charcoal, etc., was decanted and discarded.
4. To oxidize and eliminate (sticky) organic residues, the soil was treated with 5.25% sodium hypochlorite solution (i.e. commercial household bleach). This precludes the use of concentrated hydrogen peroxide

or nitric acid solutions which are more difficult to handle and far less environmentally benign.

5. Following oxidation, soil samples were rinsed 2-3 times with distilled water, stirred, settled or centrifuged and decanted.

6. Dilute HCL (20 ml) was added to each sample to remove carbonates. Samples were allowed to settle, the aliquot decanted and discarded.

7. Each sample was rinsed 3 times with distilled water.

8. The soil was re-suspended in distilled water to which a deflocculant (i.e. Calgon) was added to suspend very fine silt particles. After centrifuging or settling overnight, the aliquots with suspended fine particles were decanted and discarded. Step 8 was repeated as necessary until aliquot was clean.

9. Soil was placed in a drying oven set at 90° C until dry.

10. Heavy liquid for flotation separation was prepared by dissolving zinc bromide powder in slightly acidified distilled water until a specific gravity between 2.3 and 2.4 was achieved. This was easily determined using a commercially-made calibrated hydrometer.

11. A 5ml, approximately, volume of dry soil was added to heavy liquid in a bent clear tygon tube which was squeezed gently to "wet" the soil. The bent tube was inserted into a (lightly greased) centrifuge shell and centrifuged at

moderate speed for 30 minutes to float phytoliths.

12. After centrifugation, clamps were placed on both vertical arms of the bent tube just below the floatant surface in the tube. A wash bottle stream of water was used to rinse the floatant from the tygon tube into a 50 ml centrifuge tube.

13. Distilled water was added to the centrifuge tube to about 40 ml level. Centrifugation precipitated the phytoliths. The aliquot was decanted. This step was then repeated.

14. Phytoliths were then decanted to a shell vial and placed in a drying oven to remove excess liquid.

Phase 2: Microscope Scanning

The phytolith extracts were quick-mounted in distilled water and viewed in an optical microscope at 400x. Mounts were prepared by pressing a slide over the mouth of an open vial which was then inverted. The extract was allowed to settle on the slide and the reverted to it's original orientation, the slide quickly removed retaining a drop of fluid with a portion of extract included.

Whole slides were scanned at 100x to find clusters of particles which were then scanned at 400x to determine the character of individual particles. Particles of interest, especially those of morphological and taxonomic significance, were recorded in videotape using a high-resolution CCD television mini-camera mounted on the microscope. While Canada Balsam is used to mask inorganic silica while viewing, past experience indicated that this also has the negative effect of decreasing the contrast between particle and background. For purposes of contrast with background, distilled water mounts appeared superior.

Representative and especially taxonomically significant phytoliths and other biosilica bodies (e.g. diatoms and sponge spicules) in each slide mount were noted and recorded on videotape. This makes assemblages of particles used in the current study available for re-study when local taxonomic reference work is conducted.

Phase 3: Compilation and Interpretation of Data

No phytolith reference database developed from phytolith extracts of living plants in the site's region was available or specifically prepared for this study. This severely limits taxonomic specificity in interpreting phytoliths present and, predictably, leaves a substantial number or morphologically distinctive (and sometimes frequent) phytolith types in the category of "unknown". However, recent publications, especially Rapp and Mulholland (1992), provide substantial verification for both general and specific taxonomic assignments of phytoliths.

In the absence of a regional phytolith database, published typological information was employed for classification of phytolith types. For grasses, the three tribe classification of Twist et al. (1996) into festucoid (wet, cool habitat), panicoid (wet, warm habitat), and chloridoid (dry, warm habitat) phytolith classes is the conventional standard, along with elaborations by Brown (1984).

For angiosperms (e.g., deciduous trees and shrubs) and conifers, Rovner (1971), Geis (1973), Klein and Geis (1978) provide some guidance for eastern woodland flora content. The most elaborate work to date in these taxa has been done by Japanese experts (Kondo 1974, 1976, 1977; Kondo and Peason 1981; Kondo and Sase 1986; Kondo et al. 1987) primarily on Asian flora. However, considerable similarity of illustrated phytolith forms at the genus level between American and Japanese plants provide confident guidance in the taxonomic assignment of distinctive phytoliths in these categories.

Most recently studies by Cummings (1992) and Bozarth (1992) have confirmed and refined the typology and taxonomy of phytoliths in

dicotyledonous taxa. Distinctive material can now be attributed specifically to Asteraceae (Compositae) — a dicotyledonous group well represented and ethnobotanically significant in the eastern United States. While soil phytolith studies in the general region of the mid-Appalachians and Atlantic seaboard are few in number, general comparisons can be drawn from studies at such eastern historic period sites as Monticello, VA (Rovner, 1988b); Hampton, VA (Rovner, 1989); Harpers Ferry, WV (Rovner 1994); Jordan Site (31NH256), NC (Rovner, 1984); and 31MK683, NC (Rovner 1995).

Results

Well Samples

Extracts of the three well samples were meager, especially the upper two. This carried through to the slide mounts. Although the mounts were not dense, recognizable and well preserved phytoliths and aquatic bioliths were observed. In sharp contrast, both shell midden sample extracts were larger and slide mounts were extremely dense with abundant biosilica of many recognizable categories as well as some morphologically distinctive individual "unknowns," which were videotaped for future reference. This was particularly gratifying given that high pH soils (9 and above) causes rapid disintegration of plant opal phytoliths. Whatever the pH of the shell midden soils, it was clearly not a problem in this case.

A frequency count of arbitrarily selected phytolith type categories was conducted on each slide. This was a test to determine if the well samples and shell midden samples were quantitatively as well as qualitatively different, both in general and with regard to specific important phytolith categories. All selected phytoliths present in one mount (in the well samples) to a maximum of 200 phytoliths (shell midden samples) were tabulated. Diatoms, including fragments, and sponge spicules were tabulated as separate counts. When 200 phytoliths were reached, the aquatic particle counts were arbitrarily ended as well providing a frequency relative to the phytolith population.

Results are provided in Table 53. This is intended to provide some relative comparisons and should not be taken literally, i.e. as accurate quantifications. While each sample was processed and mounted in similar fashion, no specific attempts were made to control or equalize soil weight or volume processed, to measure the volume or weight of phytoliths extracted, to controls the density of each slide mount, etc.

All sample populations had a majority of amorphous cellular globules, plates, aggregate clusters and intercellular silica bodies which largely occur in trees, shrubs, and dicotyledonous weeds and herbs. Further taxonomic assignment is tenuous at best in this category. Given the absence of a reference taxonomy for phytoliths of regional flora to determine which, if any, categories are significant (I believe many will prove to be), no counts were made in this group.

Small spheres, in the 5 to 20 micron diameter range, with numerous conical projects were common. These typically derive from palm and are considered taxonomically significant. Given the absence of tropical palms native to South Carolina (and the assumption that no historic importation as plants or palm products could have produced such a dominant assemblage of this particle type at the site), palmetto is

suggested as the source - subject to verification. I have observed this particle in prehistoric site soils of the Venezuelan tropical forest - where it is expected. I have not previously observed it in any soils of several sites in historic (and prehistoric) periods in the eastern United States - with one qualification. All such sites est of the Appalachian Mountains I have studied to date are from North Carolina, Virginia and more northerly states outside the palmetto range.

Grass phytoliths were a common and important part of each assemblage. Large grass cells, e.g. elongates (a.k.a. rods, fundamental elements), squares, rectangles, bulliforms (fan-shaped water storage cells which are often square to rectangular if oriented on a side), trichomes (a.k.a. hook-bases, prickle cells) were counted. These have high potential for taxonomic significance but no relevant study of these for this region now exists. They are used a s a general marker for the presence of grass with no taxonomic subdivision. Grass short cells, on the other hand, have more precise taxonomic and ecological significance. The division here follows the standard Twiss, et al. (1969) three part tribal distinction of panicoid (lobate forms), chloridoid (saddle-shaped forms) and festucoid (trapezoids, cones, hates, sinuous-sided oblongs). Panicoid grasses favor (and tend to dominate) under warm,

Table 53.
Frequency counts of selected phytolith types.

	n=	Palm	Panicoid	Chloridoid	Festucoid	Elongate	Square	Bulliform	Trichome	Rectangle	Diatom	Sponge
Upper Well	15	4	2	4	1	1	0	1	1	1	4	7
Middle Well	21	1	0	0	0	5	8	5	2	0	6	5
Lower Well	87	8	3	3	3	19	24	18	6	3	6	21
Structure 1	200	116	19	12	9	11	10	15	5	2	12	26
Structure 2	200	70	8	28	3	47	7	21	3	13	68	40

*Diatoms and sponges were not included in the phytolith population counts.

moist conditions. Ethnobotanically significant maize produces panicoid phytoliths as does rice and millet. Festucoid grasses favor cooler, moist conditions, i.e. northerly latitudes and higher elevations. Wheat, barley, oats, rye, etc. and Old World animal fodder grasses fall in to the festucoid phytolith group. Chloridoid grasses tend to dominate in warm, dry conditions such as in short grass prairies and deserts. They also occur in disturbed "barrens" and in any soil which rapidly drains such as on sand dunes or in coastal ecologies. I know of no obvious ethnobotanic significance for chloridoid grasses (i.e. no cereal cultigens) in this region.

Panicoid and chloridoid short cells were commonly observed in these samples. This is to be expected ecologically. Panicoids should dominate in the general climate of South Carolina while chloridoid frequency should reflect high drainage loss in coastal sandy soil, especially during hot, dry summer periods favoring seasonal "desert grass" growth.

Upper Well Sample

The extract was small and slide mounts were sparse. Essentially all of the common phytolith categories were present, some barely so, e.g. one particle. The soil does not have the phytolith assemblage expected if it were botanically active surface soil.

Middle Well Sample

The extract was likewise small and similar to the upper well sample. There is some shift in frequencies, with large cells more abundant here as opposed to more short cells in the upper well samples (See Table 53). However, this is probably more a case of small population statistics than any real difference.

Second mounts were made of each and scanned quickly. While no counts were taken to maintain a consistent l-slide count, all the common phytolith selected were present in both cases. I am confident that with more intensive counting, the two populations would tend to converge.

Lower Well Sample

The extract was relatively larger than those from the two upper well samples and the slide mount likewise denser and richer. However, the profile of phytolith types - and aquatic bioliths - is fundamentally similar.

Discussion

The sparse nature of the phytolith extracts, especially when compared with the shell midden extracts, discussed below, may itself be significant. There is little to suggest that the sedimentation of the well occurred slowly allowing incorporation of plant debris, accidentally or through deliberate disposal. This suggests that the well, when abandoned was filled quickly preventing the buildup of phytolith-producing debris. A similar phytolith-impooverished condition occurred in a study of a well-fill profile from the colonial period of Hampton, Va. (Rovner 1989).

The higher density of phytolith residue populations in the lowest sample may be explained in one of the two ways (or some of both). The bottom layer could include the buildup of plant residues at the bottom of the well accumulated during its active use. The well, when abandoned, was filled rapidly. However, the active period accumulation layer and the bottom of the fill are both incorporated into the phytolith sample taken during excavation. Alternatively, given a rapid filling of the well, soil taken from a borrow pit elsewhere would result in reversed stratigraphy. The upper, botanically active layer with a higher density of phytoliths of the soil donor area would be removed first. Phytoliths tend to have their highest concentration at the bottom of the A and top of the B soil horizons (Rovner 1986). This soil would become the bottom layer of the well. This interpretation is consistent with the well fill coming from a single location, such as, the excavation for the foundation of a structure or a root cell or a pit/ditch, etc. It is not consistent with the removal of surface soil from several locations which should produce phytolith-rich fill throughout.

Shell Midden Samples

Both sample extracts were relatively large and slide mounts were dense and rich. Two hundred phytolith counts were obtained well prior to complete scanning of each slide. Both samples were clearly dominated by small ornamented palm (palmetto?) spheres. All common grass large cell and short cell categories were well represented as were diatoms and sponge spicules (see Table 53). However, the two samples exhibit frequency differences in both overt and subtle ways which may reflect microecological distinctions and cultural practices.

Both samples have a high potential for further taxonomic categorization of phytoliths. Numerous plates, perforated bodies, and exotic "unknown" were observed. Many are obviously derived from unexplored or underexplored taxa, especially dicotyledonous plants. Many probably come from trees - branched intercellular elongates reported from oaks, for example, were observed. Arc shaped bodies and particle with large concave indentations - possibly derived from conifers were common. However, utilization of these forms require exploitation of the phytolith content of regional flora - which has yet to be undertaken systematically.

Southern Slave Row, Structure 1

Palm (palmetto) spheres provide the single largest category of phytoliths counted. Grass short cells were not frequent in the chloridoid class with panicoids present and festucoid phytoliths rare. This is consistent qualitatively with the well fill profile and may represent the background or "natural" grass configuration of the area, i.e. warm grasses clearly dominate. By itself, the Structure 1 profile does not suggest a pattern of cereal grain agriculture. It is only in the subtle comparison to clearer indications of this in the Structure 2 profile that the presence of such cultigens are possible in this assemblage.

The high chloridoid frequency may represent strong seasonal (summer?) dryness. Paradoxically, the frequencies of aquatic bioliths, especially diatoms, suggesting wetness is also high.

In fact, diatoms were undercounted since so many small fragments were observed that only larger sized fragments and whole diatoms were counted. This suggests particularly wet conditions, if not substantial inundation - which contrasts with the dryness indicated by the dominance of chloridoid grass phytoliths. Conceivably, this could occur through high seasonal contrasts - a swamp during the rainy season and a dry sand dune during the dry season. Otherwise, such factors as cultural activities must be called upon to explain the difference.

Opaque irregular plates were common in this sample, suggesting the presence of ash in this deposit. Several perforated sheet phytoliths, attributed to Asteraceae (a.k.a. Compositae), a family of ubiquitous flowers and flowery weeds, by Bozarth (1992) were also noted.

Southern Slave Row, Structure 2

Palm (palmetto?) spheres constitute more than half of the 200 phytoliths counted. Aquatic bioliths are present but at substantial lower level compared to the Structure 1 samples, suggesting a microenvironment that was "higher and drier." Chloridoid phytoliths are common, but are surpassed by panicoid short cells and an unexpectedly high presence of festucoid cells. The high level of festucoid phytoliths may be incompatible with the natural ecology of the locale. If so, introduction of European festucoids, either as fodder grasses, as at Monticello (Rovner 1988a, 1988b), or as cereal cultigens such as wheat, may be indicated. The panicoid short cell assemblage is dominated by squat lobates with thick shanks along with four nearly-square, quadrilaterally symmetrical forms often termed "crossbodies." American corn, *Zea mays* L., is a producer of these phytolith lobate forms (Piperno 1988; Russ and Rovner 1989). Crossbodies were not observed in the Structure 1 assemblage. Although these lobates are not as reliable a taxonomic indicator of maize (Doolittle and Frederick 1991; Rovner 1995c) as Piperno (1988) has avidly proposed, Native American maize agricultural activities combining European cereal grains and/or fodder grasses is a likely assessment for the mixed panicoid-festucoid (chloridoid) assemblage at

Structure 2.

Opaque ash particles were rare and perforated sheet phytoliths were not observed.

Discussion

The first significant aspect of these two samples is the abundance of palm (palmetto?) spheres. In addition to verifying the parent plant for this phytolith type, it is important to determine the production rate of these particles per unit volume of plant tissue. The level of occurrence may indicate a dominance of the parent plant in the environment or, I suspect, a huge number of these small particles per unit of tissue. Thus a few plants may produce a disproportionate number of particles - a condition already known in trees versus grass. A small biomass of grass will produce many more discrete phytoliths than will a larger biomass of trees. In this case, context and taphonomy might also be considered. Cultural factors may introduce a concentration of these particles into the specific context samples. Something like the use of palmetto fronds in association with pit-steaming of shellfish must be considered. While caution must be exercised in offering visions of Hawaiian luaus, it seems more reasonable than the presence of impenetrable jungles of palmettos on a historic period plantation. On the other hand, ash is present at Structure 1 which has a lower frequency of palmetto particles rather than at Structure 2. This is inconsistent with the steaming pit model. (Of course, it is always a convenient rationalization to preserve the theory by claiming sampling error when dealing with only two samples.)

The short cell grass profiles of the two structures are decidedly different. If agriculture is the contributing factor, then Structure 2 is much more strongly associated with production and/or processing of cereal grains than is Structure 1. No particles of the squash sphere type or the bean hooked hair cell (Bozarth 1987, 1990) were observed in either sample diminishing the confidence of agricultural residues. On the other hand, the wealth of dicotyledon phytoliths and unknowns could contain particles from other cultigens. If microecology is the contributing

factor, then the higher chloridoid presence at Structure 1 suggests drier conditions - which is not consistent with a significantly higher level of aquatic bioliths. Agricultural practices are an inherent part of the typical southern plantation, providing a parsimonious explanation for the phytolith profiles in these two samples.

The contrasts between the well samples and the shell midden samples are profound. Surely this expresses a combination of micro-ecological factors with cultural behaviors and taphonomy. A more intensive sampling strategy and a regional phytolith reference data base are obvious avenues to enhance the application of phytolith analysis and interpretation of phytolith data.

Conclusions

The fundamental test of the feasibility of phytolith analysis at 38BU323 was successful. Phytoliths were present in all samples, were well preserved and represented a variety of important taxonomic groups. Most importantly, the relative frequencies of distinctive morphological categories varied substantially and significantly between the respective samples. Both environmental and cultural modulations of the ecology were evident.

Clearly continued and enhanced use of phytolith analysis is warranted for sites like Seabrook Plantation. It is impossible to predict how much more information, interpretation and analysis could be derived if a systematic classification of phytoliths for this region were available to aid in this study. This study is completely blind to the assessment of changes in the dicotyledons taxa which may have occurred in response to climatic change, ecological alterations and ethnobotanical practices. Without question, such basic background work would be invaluable to archaeobotanic and paleoenvironment research.

Most importantly, this study demonstrates that the phytolith should be employed as a full partner in archaeobotanic research in contexts like Seabrook Plantation. Phytolith analysis is far more than a last resort attempt used only after pollen and flotation studies have failed to yield significant information. Rather, as demonstrated in this

preliminary study, it can serve as a full and productive partner in such research - not merely for its superior taphonomic reliability, but for its unique sensitivity in detecting both climatic and cultural modulations in the archaeological record.

POLLEN ANALYSES AT SEABROOK PLANTATION

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Introduction

Five soil samples were provided for analysis, including samples from different levels of the well at the Main House Complex, a sample from the midden at Structure 1 of the Southern Slave Row, and a sample from the midden at Structure 2 of the Southern Slave Row. Three samples were submitted from the well, one each from the 0-1' level, the 1-2' level and the 2-3' level. A single sample was submitted from both middens at Structures 1 and 2 of the Southern Slave Row.

All slides were prepared using standard palynological procedures as described in detail by Traverse (1988). This included treatment with potassium hydroxide, hydrochloric acid, zinc chloride (flotation), and hydrofluoric acid followed by bleaching, staining, and mounting (first on coverslips and then on slides with Clearcol and Elvacite, respectively).

Because of the scarcity of palynomorphs in these samples, 10 mounts of each of the five samples were prepared (two on each of five slides). In addition to the time required to prepare the samples, considerable time was required to scan all 10 mounts under 400x magnification. Palynomorphs described (if present) would include not only pollen and spores, but also algae, fungal remains, and plant tissue fragments.

Results

Well (0-1')

Samples were macerated for pollen and ten slides were scanned to identify pollen types and percentages. The organic debris present in the preparation consisted of abundant gymnospermous

wood fragments with some charcoal and abundant fungal remains, indicating significant oxidation. Not enough pollen were found to construct a valid pollen diagram nor to reconstruct the paleoecologic setting. All pollen found were also highly degraded. However, the types identified are shown in Table 54.

Table 54.
Pollen Types Identified at the Well (0-1")

Types Identified	Number of Grains/10 Slides
Arboreal	
<i>Pinus</i> (pines)	6
Nonarboreal	
<i>Sphagnum</i> (swampy moss)	1
<i>Osmunda</i> -type fern	1
Chenopodiaceae (various pigweed or goosefoot weeds of cultivated fields)	3

Well (1-2')

The residue in the sample was the same as noted for the Well (0-1') sample, but were more fragmented and degraded. No palynomorphs (i.e., no pollen, spores, fungi, algae, phytoliths, etc.) were found.

Well (2-3')

The residue was the same as noted for the Well (0-1') sample, but with even less organic matter present. In fact, almost no organic matter was present and that which was present was very fine grained and degraded. Only two highly

corroded pollen were found on the ten slides and these were of the genus *Pinus*.

Midden, Structure 1, Southern Slave Row

Samples were prepared for slides in the same manner as noted in the Well (0-1'0 sample). The organic matter present in the maceration consisted primarily of fine grained debris although some gymnospermous wood fragments were present. Some of these larger fragments were charcoal. Within the fine grained debris were abundant fungal remains (spores and hyphae) and some insect parts (probably mites). All of these characteristics indicate significant oxidation and reworking. Not enough pollen were found to construct a valid pollen diagram. However, a significant variety of types were present, some of

Table 55.
Pollen Types Identified at the Midden,
Structure 1, Southern Slave Row

Types Identified	Number of Grains/10 Slides
Arboreal	
<i>Pinus</i> (pines)	15
<i>Quercus</i> (oaks)	5
<i>Ilex</i> (holly)	1
<i>Prunus</i> sp.(cherry or plum)	1
Nonarboreal	
Cyperaceae (sedges)	1
Gramineae (grasses)	2
Compositae (flowering plants)	1
Chenopodiaceae (various pigweed or goosefoot weeds of cultivated fields)	3

which could possibly be cultigens (cherry, composites, Chenopodiaceae). The types identified are shown in Table 55.

Midden, Structure 2, Southern Slave Row

These samples were also treated in the same manner as those for the Well (0-1'). The organic matter present in the maceration consisted primarily of fine grained debris, although some wood fragments and leaf cuticles were present. Some of the larger fragments were charcoal. Within the fine grained debris were abundant

Table 56.
Pollen Types Identified at the Midden,
Structure 2, Southern Slave Row

Types Identified	Number of Grains/10 Slides
Arboreal	
<i>Pinus</i> (pines)	10
<i>Quercus</i> (oaks)	17
<i>Myrica</i> (wax myrtle)	2
<i>Carya</i> (hickory)	2
Nonarboreal	
Cyperaceae (sedges)	1
Compositae (flowering plants)	4
<i>Daucus</i> sp. (parsley/carrot) or <i>Apium</i> sp. (celery)*	3
<i>Asparagus</i> or <i>Allium</i> (onion)**	2

*Uncertain 3-col porate type
**Uncertain Monocolpate type

fungal remains (spores and hyphae). All of these characteristics indicate significant oxidation and reworking. Not enough pollen were found to construct a valid pollen diagram. However, a significant variety of types were present, some of which were probably cultigens. The identified types are shown in Table 56.

VERTEBRATE FAUNAL REMAINS FROM SEABROOK PLANTATION

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Introduction

The vertebrate faunal collections recovered from Seabrook Plantation, 38BU323, were analyzed for this study. Seabrook Plantation is a historic site located on Hilton Head Island, SC on an elevated area with nearby access to deep water. This location facilitated the docking and loading of ships used during the antebellum cotton trade and later served as a wharf for steamships passing through the area (Adams 1994:2).

Faunal remains were recovered from both slave and freedman contexts at the site. Remnants of the slave settlement were discovered in Units 36, 37, 38, 39, and 40 (Northern Slave Row). The freedman occupation was represented by Structures 1 and 2 in the Southern Slave Row (Trinkley 1995:personal communication). These collections provide an important opportunity to compare subsistence patterns associated with different socio-economic conditions. The investigations presented in this research will hopefully produce models useful in the further understanding of slave and freedmen lifeways.

The faunal assemblage was recovered from test pits and feature context, with all dirt minimally screened through 1/4 inch mesh. When natural stratigraphic layers could be discerned, the recovered materials were kept separate according to the correct deposition and labeled accordingly (Trinkley 1995: personal communication).

Materials and Methods

The vertebrate faunal remains recovered from Seabrook Plantation were studied using standard zooarchaeological procedures. The

comparative collection housed at Cobb Institute of Archaeology, Mississippi State University, was used to aid in the analysis. The faunal material was sorted to class, suborder, and/or species with individual bone elements identified by side whenever preservation permitted. In addition, the bones were weighed (weight in grams) to assess the relative abundance of each species (class or suborder) represented in the sample. Attempts were made to record age (immature/mature) and bone modifications such as burning, butchering, and rodent gnaw marks.

The minimum number of individuals (MNI) (Grayson 1973) for each animal category was calculated using paired bone elements and age (immature or mature) as criteria. Determination of MNI is a standard zooarchaeological procedure, but unfortunately this method usually provides a conservative estimate of the species represented at a given site (Hogue et al. 1995; Reitz and Weinand 1995). In addition, using MNI to understand a faunal assemblage has several other problems. First, small animals are emphasized over larger ones but their overall contribution to the diet may be considerably less. One pig or cow, for example, would have provided more meat yield than 10 mice. Another related problem concerns the resource use of animals at the site. Representation of an animal does not presume its use in entirety at the site (Reitz and Weinand 1995). Certain cuts may have been sold or traded elsewhere (Scott 1981; Thomas 1971; Welch 1991) affecting the representation of certain bone elements at the site.

Because of the problems connected with MNI determination, the biomass weight for each animal was calculated to approximate the meat

yield. This model is based on the allometric principle that ratios of body mass, skeletal mass, and skeletal measurements change when size increases (Reitz and Weinand 1995). Biomass is determined using the least squares analysis of logarithmic data. The basic premise of this method is that bone weight can be used to calculate the amount of soft tissue being supported by the skeleton (Casteel 1978; Reitz 1982, 1985; Reitz and Cordier 1983; Reitz and Scarry 1985; Reitz and Weinand 1995; Reitz et al 1987; Wing and Brown 1979). The relationship between body weight and skeletal weight is expressed by the equation $Y + aX^b$, which can also be depicted as $Y = \log a + b (\log x)$ (Simpson et al. 1960:397).

In the first formula, Y represents 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 b is the constant of allometry, or the slope of the line defined by the least squares regression and the best fit line (Casteel 1978; Reitz and Cordier 1983; Reitz and Weinand 1995; Reitz et al. 1987; Wing and Brown 1979). Allometric values used in this study to determine biomass are summarized in Reitz 1985 and Hogue et al. 1995.

Sample size can restrict the use of biomass and MNI in the analysis of faunal materials. Several studies have proposed using a sample size of at least 200 individuals or 1400 bones for reliable use of these methods (Casteel 1978; Grayson 1979; Wing and Brown 1979). According to Reitz and Weinand (1995) small faunal samples tend to be biased towards one species over another. In addition to the affects of excavation procedures and potential spacial differences in bone presence, differential preservation of certain bone elements, as well as different species, could lead to incongruent representation. Unfortunately, archaeological excavations do not normally yield the ideal sample size for faunal analysis and little can be done to correct for the biases inherent in the small faunal assemblages.

Identified Fauna

A discussion of the general use and

habitat preference for each species identified at Seabrook Plantation will be presented before discussing the results of the zooarchaeological study of the faunal assemblage. A total of 1,120 bones were present in the Seabrook faunal materials representing 18 species and 27 minimum number of individuals (MNI). Table 57 lists the various species identified at 38BU323 including MNI and biomass calculations for the entire collection. Later discussion will address the analysis of the collection as two separate samples, slave and freedmen.

Domestic Mammals

Four domestic mammals cow (*Bos taurus*), pig (*Sus scrofa*), sheep (*Ovis aries*), and dog (*Canis familiaris*) were identified at the site. Domestic mammals used as food resources (cow, pig, and sheep), contributed to 91.1 percent of biomass for taxa for which MNI could be calculated. The principle domestic mammal was cow which represented 11 percent of the total MNI and 67.7 percent of the total biomass. Cattle have been an important meat source in the Southern United States but they are less efficient to raise than other domestic mammals such as the pig (Hilliard 1972; Rouse 1973; Towne and Wentworth 1950, 1955). Since cattle are large herbivores, they require large quantities of grain and grasses to keep weight on. Furthermore, beef does not preserve as well as other meats such as pork. Clearly, greater food and labor resources are required to make cattle production profitable (Tomhave 1925). Despite their cost, cattle supply other important resources such as milk products and hides, providing additional economic incentives for keeping herds (Hilliard 1972; Rouse 1973; Towne and Wentworth 1955).

Pigs represent a greater percentage of the total MNI than cow (14.5%) but less of the total biomass (14.5%). Pigs are one of the most important domestic animals used for food in the Southeast (Hilliard 1972) In general, pigs require little care and can roam freely scavenging naturally available food resources such as seeds, roots, fruits, eggs, and small mammals. Cattle store only 11%

Table 57. Seabrook Plantation, Minimum Number of Individuals, Number of Bones, Weight and Estimated Meat Yield.

SPECIES	MNI #	MNI %	Number of Bones	Weight gm	Biomass kg	Biomass %	Biomass 2 kg	Biomass 2 %
MAMMAL								
Cow, <i>Bos taurus</i>	3	11	174	2784.57	33.1282	67.7	33.1282	52.8
Pig, <i>Sus scrofa</i>	4	14.5	162	790.17	10.6626	21.8	10.6626	17
Sheep, <i>Ovis aries</i>	2	7.3	10	44.82	0.8058	1.6	0.8058	1.3
Deer, <i>Odocoileus virginianus</i>	2	7.3	8	99.79	1.6561	3.3	1.6561	2.6
Raccoon, <i>Procyon lotor</i>	1	3.7	3	4.75	0.1069	0.2	0.1069	0.17
Opposum, <i>Didelphis virginianus</i>	1	3.7	2	3.65	0.0843	0.17	0.0843	0.13
Dog, <i>Canis familiaris</i>	1	3.7	1	2.12	0.0517	0.1	0.0517	0.08
Rice Rat, <i>Oryzomys palustris</i>	1	3.7	2	0.64	0.0176	0.03	0.0176	0.03
Unidentified Mammal	-	-	512	1108.17	-	-	13.16	20.9
Total Mammal	15	54.9	874	4838.68	46.5132	94.9	59.6732	95.01
AVES								
Chicken, <i>Gallus gallus</i>	2	7.3	12	11.89	0.1943	0.4	0.1943	0.31
Turkey, <i>Meleagris gallopavo</i>	1	3.7	4	10.44	0.1726	0.35	0.1726	0.27
Unidentified Aves	-	-	10	5.23	-	-	0.092	0.15
Total Aves	3	11	26	27.56	0.1726	0.75	0.4589	0.73
REPTILES								
Cooter, <i>Pseudemys florida</i>	1	3.7	7	12.87	0.1751	0.35	0.1751	0.28
Diamondback Terrapin, <i>Malaclemys terrapin centrata</i>	1	3.7	34	45.36	0.4073	0.8	0.4073	0.65
Box Turtle, <i>Terrapin carolina</i>	1	3.7	32	37.26	0.3571	0.7	0.3571	0.57
Unidentified Turtle	-	-	11	16.78	-	-	0.2092	0.33
Snake, <i>Crotalid sp.</i>	1	3.7	5	1.29	0.0178	0.03	0.0178	0.03
Total Reptile	4	14.8	89	113.56	0.9573	1.88	1.1665	1.86
PISCES								
Bowfin, <i>Amia calva</i>	1	3.7	5	2.91	0.07	0.14	0.07	0.11
Catfish, <i>Ictalurus sp.</i>	1	3.7	3	3.02	0.0722	0.14	0.0722	0.11
Drum, <i>Sciaenidae</i>	2	7.3	62	65.06	0.8948	1.8	0.8948	1.4
Pylodictus sp.	1	3.7	3	0.95	0.028	0.05	0.028	0.04
Unidentified Fish	-	-	23	26.87	-	-	0.4333	0.69
Total Pisces	5	18.4	96	98.81	1.065	2.13	1.4983	2.35
Unidentified Miscellaneous	-	-	53	46.64	-	-	-	-
Total	27	100	1120	5125.25	48.9024	99.66	62.7969	99.95

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of the calories they consume while pigs store 35% therefore making pigs more economically feasible to raise for meat yield. Unlike beef, pork preserves very well and because of its high fat content, is very appetizing. Additionally, pork is a very good source of thiamine (Towne and Wentworth 1950), a nutritional source important for the prevention of beri-beri (Wing and Brown 1979:38-39).

The third domestic mammal that probably served as a food resource was sheep. Sheep played a minor role as a subsistence resource in the Southeast (Hilliard 1972). This pattern is reflected in its representation in the identified fauna from Seabrook Plantation where the MNI of sheep was 2. Sheep constituted 7.3 percent of the total MNI and 1.6 percent of the total biomass.

One explanation for the unpopularity of sheep as a food resource was the early acquired taste for venison by European inhabitants (Carson 1985:2). In addition to mutton, sheep were a source of wool that had numerous uses to their owners (Hilliard 1972:141-142).

Wild Mammals

Several wild mammals presumably used for food were identified in the Seabrook faunal collection. These include deer (*Odocoileus virginianus*), racoon (*Procyon lotor*), and opossum (*Didelphis virginianus*). White-tailed deer is the largest of the wild mammals and possibly contributed more to the Seabrook diet than sheep at 3.3 percent of the total biomass. Racoon and opossum were both represented by one individual.

The low representation of racoon and opossum, (.2 percent and .17 percent of the total biomass respectively), indicates that these animals contributed minimally to the overall diet. A similar pattern was noted at site 38BK985, (Broom Hall Plantation), a posited plantation slave community that dates from the mid-eighteenth to early nineteenth centuries (Hogue et al. 1995).

Domestic Birds

The only domestic bird species identified

in the Seabrook faunal remains was the chicken (*Gallus gallus*). Chicken are relatively easy to keep. Like pigs, they can feed themselves by scavenging for available foods or they can be kept in pens and cared for by humans. Chicken was a popular food resource for both slave and plantation owners in the eighteenth and nineteenth centuries. In addition to meat, they provided eggs for food and cooking ingredients (Hilliard 1972:46-47) and possibly feathers which would have been useful for bedding.

In the Seabrook faunal collection, chicken was not well represented with only two individuals identified. The percentage of the total biomass represented by chicken was .40 percent, reflecting a slight rank increase in popularity above racoon and opossum as a food resource.

Wild Birds

Turkey (*Meleagris gallopavo*) was the only wild bird identified in the Seabrook collection. The turkey MNI for the entire faunal assemblage is one, constituting .35 percent of the total biomass. Turkey was a valued food item for antebellum whites and blacks (Hilliard 1972:80-81). Because slaves probably did not have access to firearms, hunting turkey was most likely accomplished through trapping, another common method for their capture (Hilliard 1972:80). Since turkeys tend to avoid habitation areas, hunting them may have been limited more to whites and freedmen than slaves (Hogue et al. 1995). Therefore, the low percentage of turkey in the faunal assemblage from Seabrook is not surprising.

Reptiles

Three reptile species were classified as turtle in the collection. These species were river cooter (*Pseudemys florida*), diamondback terrapin, (*Malaclemys terrapin centrata*), and box turtle (*Terrapin carolina*). The river cooter is found primarily in and around bodies of fresh water such as ponds, swamps, rivers, canals, and on occasion brackish waters (Obst 1986:109). These turtles can be seen on land sunning themselves or looking for areas to nest. According to Hilliard (1972:89), the river cooter was used as a food resource in the

South during the eighteenth and nineteenth centuries.

Like the river cooter, the diamondback terrapin was also used for food (Hilliard 1972:89). Areas where this species is most likely to be located are estuarine settings or in brackish lakes and marshes along the Atlantic coast (Obst 1986:113). During the nineteenth and twentieth centuries, this reptile became an accepted food delicacy in the United States (Orst 1986:113, 183).

The third turtle species identified was the box turtle. This turtle is widespread throughout the southeast, and can be seen both in terrestrial (open or mixed forests where the climate is hot and dry in the summer and winters are mild) and permanent water environments (lakes, streams, etc.) (Obst 1986:106). It like the other species was also used as a food resource during the nineteenth century in the south (Hilliard 1972:89).

All three of the turtle species identified were represented by one MNI each for the entire site. Although their representation is minimal, two species, the diamondback terrapin and the box turtle compose .8 and .7 percent respectively of the total biomass for the site, indicating that they may have been more available or a more popular food item than the cooter. The percent of the total biomass for the river cooter is about half that for the other species.

Pisces

Fish appear to play a rather small role in the Seabrook diet. Only four species of fish were identified in the faunal collection. Both identified and unidentified fish made up only 1.065 percent of the total biomass from the site. The three species identified include bowfin (*Amia calva*, MNI = 1), catfish (*Ictalurus sp.*, MNI = 1), and drum (*Sciaenidae sp.*, MNI = 2). Bowfin and catfish both represent fresh water species. The bowfin is commonly found in sluggish clear waters of the Carolina Coastal Plain and average between 45 and 87 centimeters in length. (Lee et al. 1987:53). Catfish prefer sluggish waters as well, usually in areas of dense vegetation (Lee et al. 1987:442). Drum represents the only fish that prefers a

marine habitat. They are commonly found in bays and estuarine environments. (Boschung et al. 1983)

Commensal Species

Commensal species include animals found near or around human habitations but are not generally consumed by humans. These animals include pets, pest, vermin and animals that feed on them. Dogs, snakes, amphibians, rats and mice are common examples of commensal species. Dog (*Canis familiaris*), rat (*Oryzomys palustris*), and snake (*Crotalid ssp.*) represent commensal species identified in the Seabrook faunal collection. The domestic dog probably represents a pet or hunting animal used for pest and food resources such as deer. Rice rats have been identified as crop pests that prefers marshy or wet areas but are commonly found in association with food resources such as human habitation sites.

Results

As mentioned in the introduction of this study, faunal remains recovered from areas designated as slave (Units 36-40, Northern Slave Row) and freedmen (Structures 1 and 2, Southern Slave Row) were treated as separate assemblages for the purpose of better understanding subsistence and/or economic differences between the two populations. Three levels of inquiry are used in this investigation. The first involves an inventory of the animal remains associated with each of the areas and the determination of there representation in the diet. Second, the number and weight of bone elements representing different cuts of meat in the large domestic mammals (cow, pig, and sheep), are compared to provide information on which cuts were consumed and which cuts were more likely to be unavailable or sold elsewhere. Finally, modifications of the bone elements, such as cut marks and rodent gnawing, are consider in hopes of providing insights into butchering techniques. The results of this study should be viewed as preliminary at best. The goal of this research endeavor is to uncover patterns which hopefully will serve as working hypothesis for future studies.

Faunal Representation at
Slave and Freedmen Areas

Table 58 presents the computation of biomass for fauna recovered from the slave and freedmen areas at Seabrook. Fish and turtle were not listed as separate species but were grouped into categories as their presence in both samples was small. The first estimation of the percentage of biomass represented by each animal included all of the faunal remains associated with the respective slave and freedmen features. Biomass was then computed using only those species that could be identified more precisely (shown as Biomass 2 in Table 58). This procedure was used to eliminate possible bias in the sample created by the unidentified mammal and aves categories.

Questions raised here concern the number of species available for exploitation by the respective populations. Did freedmen have a greater home range to exploit naturally available food resources than their slave counterparts? If so, more wild species may be present in the faunal sample associated with this population. In contrast, slaves by virtue of their possible confinement to an area, may have been more dependent on domestic species identified with the plantation environment.

As expected the freedmen faunal sample contained more species than the slave. Deer and chicken were not identified in the slave faunal sample. Also, animals found near or in water, fish and turtles, represented a greater percentage of the total biomass in the freedman collection (6.8%) than in the slave faunal sample (4.09%). When comparing the differences in domestic animal (cow, pig, sheep, chicken) use for the two samples, there appears to be a greater reliance on these food resources by the slave population. 94.2% of the total biomass of the slave sample is composed of domestic animals and 87.2% for the freedmen. When individual domestic species are considered, cows and sheep have greater biomass value in the slave assemblage than the freedman, although cow is an important dietary component for both populations. In contrast, pig and chicken are more popular in the freedman sample when compared with the faunal remains recovered from

the slave quarters.

Several explanations are presented at this time to address the patterns observed above. The importance of pigs and chickens at the freedman area could reflect the ease of raising them. Both pigs and chickens can be relatively self sufficient needing little human care in feeding (Hilliard 1972).

Freedmen may not have had the resources to support beef cattle in the same way plantation owners would. The high percentage of beef and sheep in the slave faunal component may reflect their greater access to the plantation resources, or perhaps the slave area was used as the location for discarded garbage. Differential preservation may also explain the dissimilar frequency of animal species. The location of the slave area was 400-500 feet north of the freedmen area. Both were situated near a high marsh area but the former was situated on higher ground, which may have contributed to better preservation (Adams 1994:Figure 6).

Cuts of Meat

The mammalian elements identified with the slave and freedmen proveniences are presented in Table 59. None of the animals were skeletally complete although the cow skeleton is more complete in the slave assemblage, lacking only foot elements. Figures 51 through 53 summarize the percentage of body elements identified for cow, pig, and sheep, for the free and slave areas at Seabrook and percentages calculated for the Nathaniel Russell House (Andrus Component) in Charleston, S.C. (Reitz and Weinand 1995:Table 20). The Nathaneil Russell House component dates from 1820-1870 and represents an urban faunal assemblage (Reitz and Weinand 1995:156-157). Although the samples are too small to compare for significant differences, several observations can be made at this time. None of the patterns for the three collections are similar. The slave and freedmen samples are considered first. It has been argued that affluent households slaughtered some if not all of the meat they consumed on their own property (Reitz and Zierden 1991). This argument is supported by the

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Table 58.
Comparisons of Faunal Samples Recovered from Slave and Freedmen Areas.

SLAVE					
	# Frag.	Weight in gm	Biomass kg	Biomass %	Biomass 2 %
Cow	46	537.19	7.5	60.01	73.94
Pig	17	72.22	1.232	9.88	12.15
Sheep	8	46.11	0.823	6.6	8.11
Opossum	1	2.84	0.067	0.54	0.66
Unidentified Mammal	110	146.2	2.325	18.65	
Turkey	1	6.16	0.106	0.85	1.04
Unidentified Aves	0	0	0	0	
Turtle	1	1.84	0.048	0.38	0.47
Fish	11	22.01	0.368	2.95	3.62
	195	834.57	12.469	100	100
FREEDMEN					
	#	Weight in gm	Biomass kg	Biomass %	Biomass 2 %
Cow	19	310.29	4.576	41.68	60.15
Pig	27	116.85	1.9	17.31	24.9
Sheep	4	5.96	0.131	1.19	1.72
Deer	2	18.92	0.369	3.36	4.8
Opossum	1	0.81	0.022	0.2	0.29
Unidentified Mammal	120	219.52	3.352	30.53	
Turkey	2	2.8	0.052	0.47	0.68
Chicken	1	1.97	0.038	0.35	0.5
Unidentified Aves	2	0.99	0.02	0.18	
Turtle	6	6.63	0.112	1.02	1.47
Fish	32	24.87	0.407	3.7	5.35
	216	709.61	10.979	100	100

Table 59.
Percentages of Identified Bone Elements by Weight.*

	Head	Vert/Rib	Fore ¼	Forefoot	Foot	Hind ¼	Hindfoot
Cow							
Freedmen	19(4)	43(7)	25(4)	3(1)	9(2)	0	0
Slave	43(14)	17(8)	2(1)	7(2)	0	18(4)	11(3)
Pig							
Freedmen	36(6)	7(2)	36(3)	0	4(1)	17(2)	0
Slave	42(3)	29(3)	7(1)	14(7)	0	7(2)	0
Sheep							
Freedmen	33(8)	0	66(2)	0	0	0	0
Slave	0	6(1)	69(2)	0	0	17(1)	9(1)
Deer							
Freedmen	0	0	0	0	0	72(1)	28(1)
Slave	0	0	0	0	0	0	0
Opposum							
Freedmen	0	0	0	0	0	100(1)	0
Slave	0	0	0	0	0	0	0

*Numbers in parenthesis are the number of bone elements identified.

observation that elements from the entire carcass are found in the faunal assemblages from prestigious settlements. On site butchering is also distinguished by the low percentage of sawed bones. In contrast, an assemblage representing purchase of meat from a butcher shop has two different characteristics. First, there is a high percentage of bones from the body, specifically the ribs, vertebrae, and legs. Second, the bones should exhibit a high percentage of sawed bones (Reitz and Weinand 1995:158). In general the cow (Figure 51), pig (Figure 52), and sheep (Figure 53) elements are better represented in the collection designated as slave areas. This pattern may reflect the high-status environment in which they served, providing them possibly with more access to these food resources. Among the freedmen population, both cows and pigs may have served as the primary domestic mammals consumed, as many skeleton elements were represented. In contrast, many sheep bone elements are absent from the sample. The freed and slave faunal assemblages are similar in the frequency of pig head elements and sheep fore quarters. This may indicate that

butchering of pigs was important at both areas. The high frequency of sheep fore quarter remains at the two sites suggests the importance of this animal for food.

In order to better understand the role of beef in the slave and freedmen diet, the percentages of head, body, and foot bone elements are compared with patterns observed from standard cow and beef market samples (Reitz and Weinand 1995:Table 25). These values, presented in Figure 54, illustrate similar patterns of bone elements for the slave and beef market. Both assemblages have greater percentages of head elements followed in frequency by body and foot bones. The pattern observed here would be expected if the animal were butchered for the purpose of selling the better cuts of meat. The slave area may have

served as the area for slaughter and butchering of the cattle, with elements from the body and feet being used elsewhere, presumably by the plantation owners for consumption or sale. In contrast to the slave sample, the freedmen cow assemblage exhibited a high percentage of body elements with much lower representation of head and foot bones. Such a pattern would support the theory that the meat was brought in from elsewhere, indicating relatively high economic status for this sector of the population. However, in their investigation of the Nathaniel Russell House, Reitz and Weinand (1995:159) propose that high-status households may be more typically characterized by a higher frequency of foot bones relative to body elements. This finding calls to question the economic status of the freedmen population at Seabrook. Further investigations on faunal assemblages as economic indicators are necessary before the patterns observed at Seabrook can be better understood.

Bone Modifications

Each animal bone recovered from the

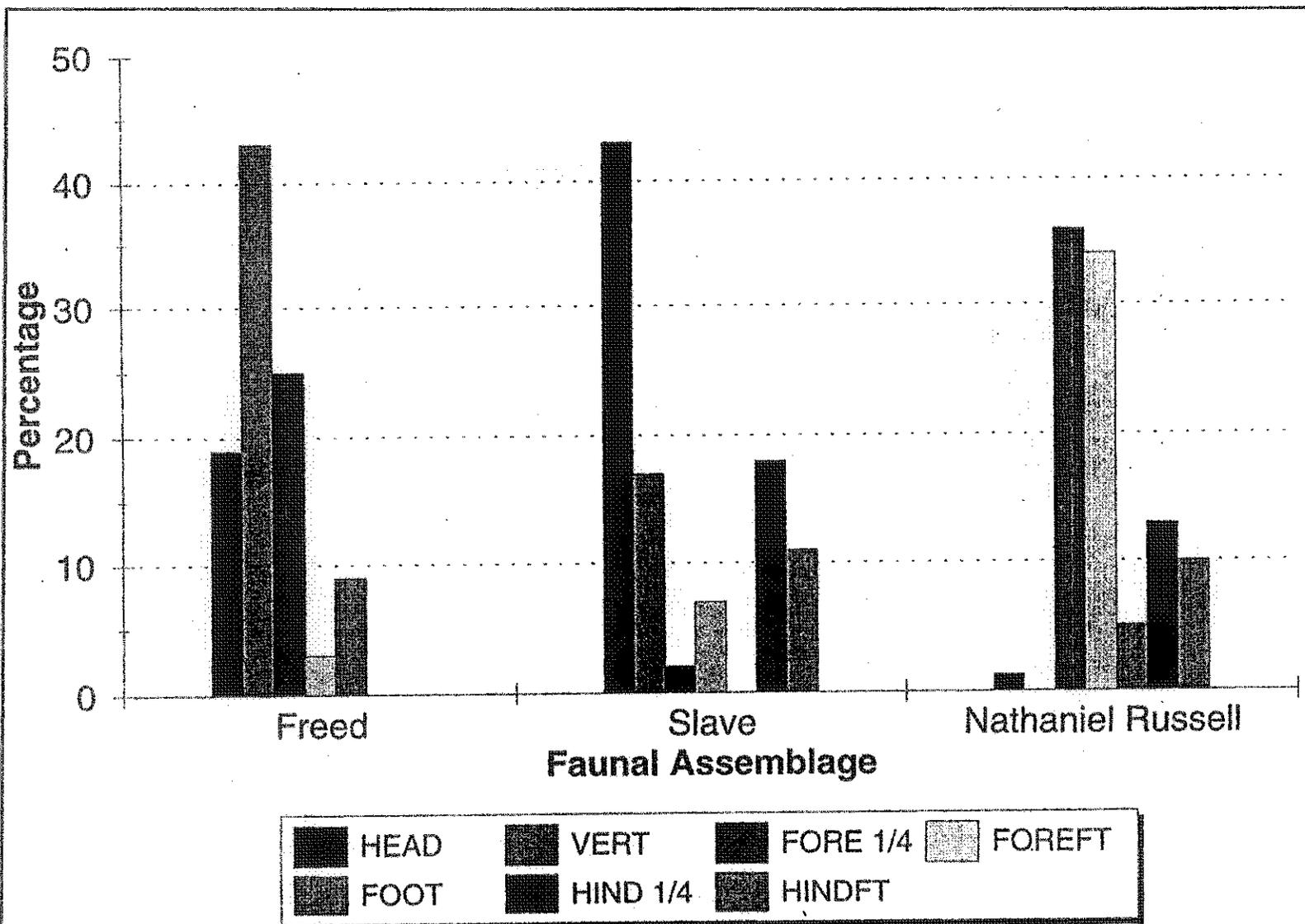


Figure 51. Percentage of cattle bone elements from Slave and Freedmen Assemblages, Seabrook Plantation, and the Nathaniel Russell House.

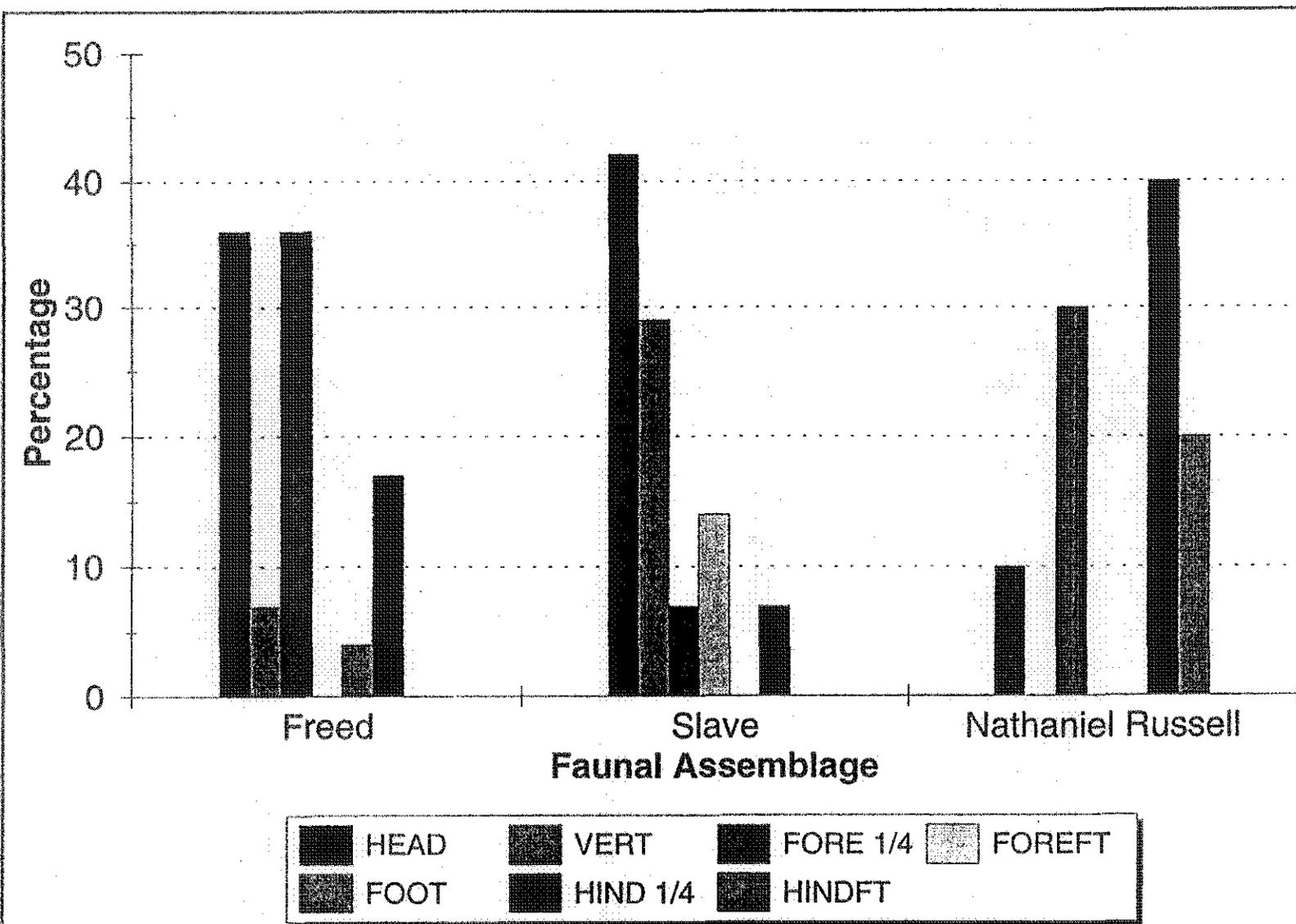


Figure 52. Percentage of pig bone elements from the Slave and Freedmen assemblages, Seabrook Plantation, and the Nathaniel Russell House.

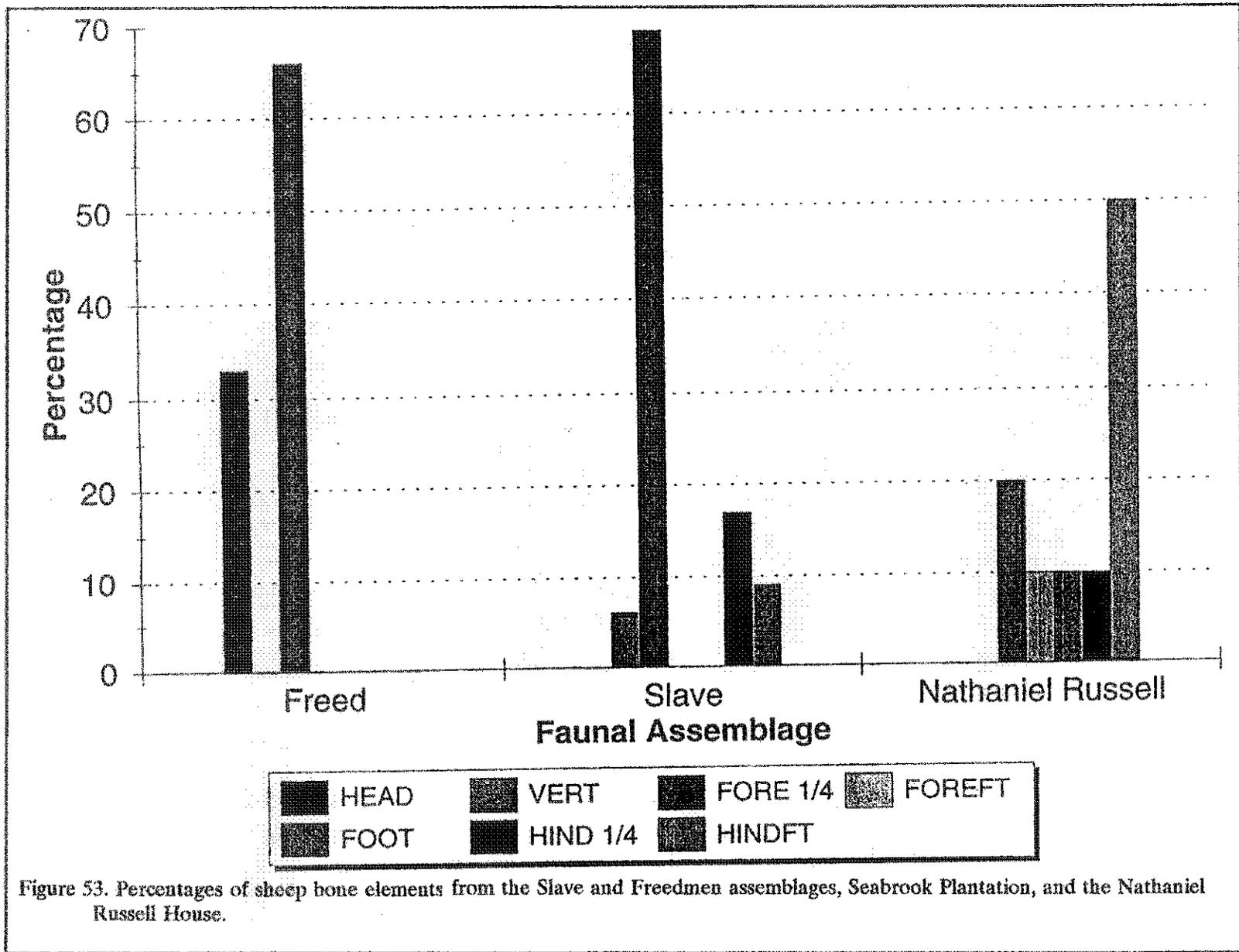
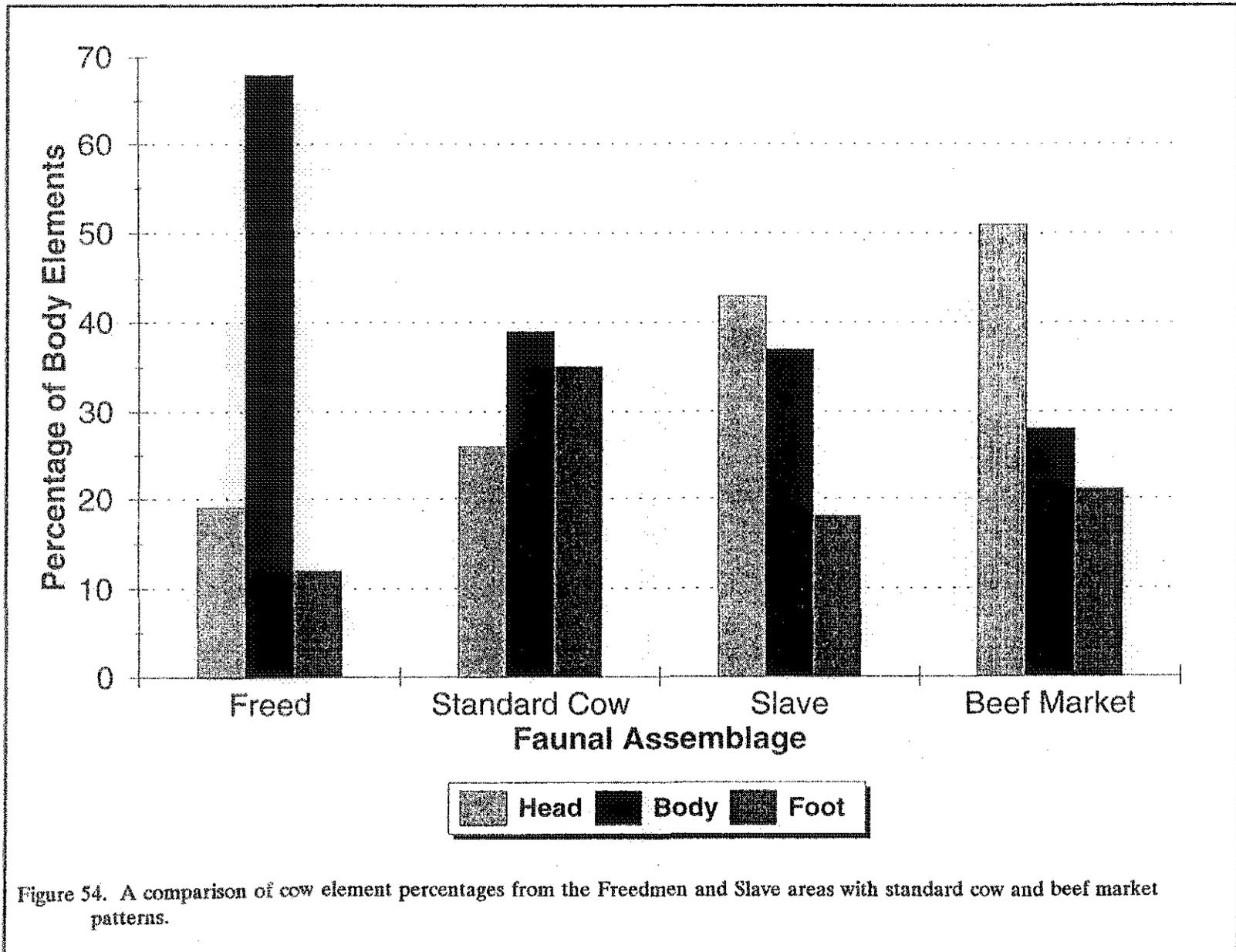


Figure 53. Percentages of sheep bone elements from the Slave and Freedmen assemblages, Seabrook Plantation, and the Nathaniel Russell House.



FAUNAL REMAINS

Seabrook excavations was examined for the presence of bone modifications. Alterations were classified into one of the following categories: sawed, clean cut, burned, hacked/chopped, worked, and rodent gnawed.

Most of the bones with modifications had been burned (56%), followed by sawing (27%). For all bones with modifications, most were associated with unidentified mammal bones (52%) too fragmented for accurate identification. Cow bones had the greatest frequency of alterations (36%) followed by pig (9%), sheep (1%), aves (1%), and turtle (1%). Very few bones from the freedmen area (n=6) showed evidence of modification. One cow bone had been sawed and one unidentified aves bone had been burned. The remaining four were unidentified burned mammal bones.

As discussed earlier, a high percentage of sawed cow bones would be expected if the beef were being brought in for consumption. This pattern does not appear to apply to the freedman settlement. Ten bones associated with the slave area had been modified and of these, 80% were identified as cow (40% sawed and 40% burned). This pattern could be interpreted to support the aforementioned proposal that the slave area was used for butchering cow for sale or consumption by the plantation habitants. For now, the explanation of bone modification patterns presented here are at best preliminary and are open to additional interpretations.

Conclusions

The faunal collection from Seabrook Plantation, 38BU323, is dominated by domestic species, specifically cow, pig, sheep, and chicken. These domestic fauna were supplemented by

wild animal species that were either commensal to habitation at the site and/or exploited from the surrounding environs. A variety of ecosystems were readily exploited including, forest, estuarine, and marine, providing deer, racoon, turkey, turtles and fish resources.

Comparative analysis of slave and freedmen faunal assemblages recovered from Seabrook lead to some interesting finds. Freedmen populations appear to have exploited a wider range of resources available in the vicinity. This in part could be due to their greater access to more areas by virtue of their freed status. In contrast, the faunal assemblage associated with the slave provenience, indicates more reliability on domestic species. Of specific concern is the domestic faunal assemblage recovered from slave context, which reflects a pattern similar to one observed for a beef market. This area may have been used for the butchering of beef for sale or consumption, probably in connection with the plantation economy. The samples from both contexts are too small to address butchering patterns, such as cutting and sawing, in order to better understand the differences between the areas.

To further understand the patterns found, several hypothesis explaining the differences in faunal representation between urban and rural areas in the Carolinas during the eighteenth and nineteenth centuries are considered (Reitz 1984:14-15). One conclusion made by Reitz (1984) is that urban residents use more domestic species, thus wild animal species are found less frequently in the

Table 60.
Comparison of the Seabrook Plantation Faunal Categories with Various Patterns by MNI Percentages

	Seabrook Plantation	Broom Hall Plan.	Slave	Nathanial Russell House	Kitchen	Atlanta Urban	Coastal Rural	Plain
Domestic Mammals	32.8	29.3	50.0	43.8	69.4	28.9	17.2	20.5
Domestic Birds	7.3	3.3	20.0	6.3	11.1	19.7	4.1	3.0
Wild Mammals	14.8	13.8	10.0	3.1	2.8	8.1	19.2	24.7
Wild Birds	3.7	6.5	-	9.4	8.3	7.6	3.0	2.1
Reptiles	11.1	26.0	20.0	3.1	2.8	19.7	38.4	36.6
Fish	18.4	18.6	-	18.8	2.8	19.7	38.4	36.6
Commensals	11.1	2.5	-	15.6	2.8	10.6	4.3	2.8

urban faunal assemblages when compared with rural sites. Table 60 shows the MNI for the entire Seabrook faunal assemblage, determined for each of the seven general faunal categories (domestic mammals, wild mammals, domestic birds, wild birds, reptiles, fish, and commensal species). Due to the small size of the slave and freedman samples, it was necessary to group the MNI for the entire collection together for use in this analysis. The Seabrook MNI percentages are compared with similar faunal collections from Broom Hall Plantation, Nathaniel Russell House, and for Urban, Rural, and Slave contexts in the southern Atlanta Coastal Plain.

The Seabrook plantation faunal assemblage best resembles the pattern associated with the Broom Hall plantation context, with domestic mammals, wild mammals, and fish making up the largest categories. The assemblage at Seabrook might be expected to closely resemble the Rural Pattern proposed by Reitz (1988). However the pattern observed at Seabrook closely resembles the Urban Pattern with similar percentages in the domestic mammal (32.8%), fish (18.4%), and commensal species (11.1%). In the frequency of wild birds (3.7%), and wild mammals (14.8) Seabrook assumes a more rural pattern.

For now, no settlement pattern seems to provide a "perfect fit" for the Seabrook faunal collection. Unfortunately, the small sample size of the faunal material recovered from the slave and freedmen occupations restricted comparisons to the entire collection. For now, the best explanation for the pattern observed at Seabrook may be that the faunal assemblage reflects a dependence on both domestic and wild animals in this area.

SUMMARY AND SYNTHESIS

The goal of this summary is to draw together the information presented in the preceding chapters. It is hoped that these last few pages will present the reader with a synthesis of what we have learned from these investigations.

Excavations at Seabrook Plantation (38BU323) and the small prehistoric shell midden located near the plantation (38BU821) were originally undertaken in order to investigate a number of areas that, through auger testing and metal detection, proved to be deficient in archaeological remains. The data recovery plan was modified in order to address three main areas at Seabrook Plantation, including the Main House Complex, the Northern and Southern Slave Rows, and to a lesser extent, the prehistoric site, which proved to be damaged through plowing and revealed few artifacts or features.

The investigations involved in this project aimed to fulfill three research objectives focused on the occupation of Seabrook Plantation. These objectives included exploration of the plantation landscape, exploration of the lifeways of the planter and slave, and exploration of the lifeways of the freedmen. A number of studies were undertaken in order to aid in accomplishing these research objectives, including artifact, phytolith, pollen, ethnobotanical, and faunal analyses.

As part of the exploration of lifeways of slaves and freedmen, particular attention was given to the differences between the Northern and Southern Slave Rows. While the research objectives were not all given equal consideration, we have learned a great deal about Seabrook Plantation.

The Plantation Landscape

Seabrook Plantation was a unique sea island plantation in that it fulfilled functions during its history that other sea island plantations did not.

For this reason, Seabrook's history is important to the plantation landscape.

Life on the sea island plantations has been depicted as isolated and harsh, with all manner of goods, from construction supplies to clothing in short supply and high demand. Seabrook Plantation must also have suffered a routine shortage of goods, but perhaps had greater access to needed supplies due to the proximity of Seabrook Landing, which served as an important docking area along the Skull Creek water route. It is perhaps due to Seabrook Landing that the plantation endured a number of functions other than the primarily agricultural function of a plantation in the eighteenth and nineteenth century. Beginning as a small plantation, Seabrook was also used as military headquarters for various regiments of the Union army, rented to various people in the late 1860s, used as a Freedmen's school and housed missionary teachers during the late 1860s. During this time, the plantation had many overlapping functions, and most likely continued to be used for crop production and the care of animals. With this recurring influx of people arriving and using Seabrook for various purposes, the African Americans that lived at Seabrook, first as slaves and then as freedmen, were probably the one constant in the changing demography and landscape of Seabrook plantation.

Our knowledge of the area that would eventually contain Seabrook Plantation begins with a 1782 map that shows the "Wallis" settlement in the area of Seabrook Plantation. Although this map shows only one building, it is possible that more were associated with this settlement. Ceramics recovered from the Main House Complex and the Northern Slave Row date back to the 1780s, when the area was known as the Wallis settlement. It is possible that the Main House at Seabrook was the same structure shown on the 1782 map at the Wallis settlement.

Excavations in the area of the Main House Complex revealed the remains of a utilitarian building, a well, and artifact concentrations in the area of the Main House and Main House yard. Mean ceramic dates have placed use of the Main House Complex between 1808 and 1821, while bracketing methods give dates from the late 1700s to the first half of the 1800s, with extended occupation shown for the Main House area and the well shaft.

The Main House itself was defined on the basis of historical maps and the presence of large amounts of plaster present in the excavation units. Four shallow postholes, one substantial posthole and an eroding disarticulated tabby wall in the vicinity of the excavations are all that remain of the Main House, which has eroded into Skull Creek. Dating methods place the use of the building and yard area between 1780 and 1830.

During this time, a number of buildings in the Main House Complex were probably added to the settlement, including the utilitarian building and the well, found during excavations in this area.

Artifacts present in the builder's trench for the utilitarian building suggest that it was built after 1780. The utilitarian building had a 16 by 16 foot continuous brick foundation that probably supported a fairly simple wooden superstructure with glass paned windows and tar paper roofing. Dating methods place use of the building between 1790 and 1840. The building was determined to have a utilitarian function based on the fragmentary bricks used in the foundation, the irregular thin mortar floor that was laid directly on top of natural sand, and the absence of artifacts that are normally associated with domestic buildings. The utilitarian building was located approximately 150 feet from excavations determined to be remnants of the Main House.

The well was constructed between 1760 and 1830, and abandoned sometime after 1860. Phytolith research suggests that the well was abandoned and filled in one episode with soil from a single location. The dense concentration of artifacts in the well suggests that it was used as a receptacle for trash from a dismantled building,

probably representing the single episode of filling. A *terminus post quem* date places the filling of the well after 1860, suggesting that the well was used until the Union occupation of the plantation in 1862.

The plantation area is again mentioned in an 1833 deed documenting the sale of 590 acres to William Seabrook by James Wallace. The plantation was inherited by William Seabrook's widow in 1836. Seabrook's main residence was on John's Island at the time of his death, further suggesting that the plantation on Hilton Head was a minor tract and possibly unoccupied at that time.

Although no mention is made of the slave row located near the main house, it probably was built either before Seabrook purchased the property or sometime soon afterwards. Even a rough estimate of the construction date based on artifacts of the Northern Slave Row structures was not possible, due to the low artifact density in this area of excavations. Extensive plowing and dismantling of buildings in this area contributed to the low density of remains in this area.

The Northern Slave Row was situated to the rear of the Main House, about 200 feet away. The row was arranged in a straight line parallel with the berm (which probably acted as a property boundary), and perpendicular to the Main House. In effect, the row was hidden from Skull Creek and Seabrook Landing by the Main House. No structural foundations were encountered in this area of excavations, although a number of postholes relating to a building were excavated. In addition, the possible remains of a hearth and a ditch adjacent to the hearth were found during excavations. The ditch appears to have been used to deposit trash during and after the structure was occupied. The structure appears to have been abandoned, sometime after 1850. The postholes suggest that the building was not very substantial. Artifact analyses place occupation of the building between 1780 and 1850.

The plantation seems to have been acquired by James B. Seabrook from Emma Seabrook sometime before 1850, when he is listed in the census as a planter in St. Luke's Parish. He

is again listed on the 1869 census as a planter, with a considerable increase in acreage for the plantation. Documents describing Seabrook's property reveal that it was certainly a functioning plantation in 1860, producing a number of crops, including rice, cotton, corn, wool, peas, beans, and potatoes, and making use of many animals, such as horses, mules, milk cows, oxen, cattle, sheep and swine. The plantation also produced beeswax, honey, hay and orchard products. From this list, we can assume that many of the buildings shown in the 1862 geodetic map served necessary functions related to these products. We also know from documentary records that at least 107 slaves were living on the plantation in 1860, which is an increase in the number of slaves Seabrook owned in 1850. Perhaps the Southern Slave Row was built to accommodate the increase in slaves sometime after 1850.

The Southern Slave Row was located approximately 400 feet from the Main House and 500 feet from Seabrook Landing, isolated and arranged in a loose cluster around the marsh edge. The structures date to the second half of the nineteenth century, and were built sometime around 1850 and occupied until near the turn of the century.

The placement of this slave row was obviously isolated from the other plantation buildings and begged questions that we have been unable to answer with certainty. For example, did the Southern Slave Row represent the homes of artisan slaves, while the Northern Slave Row structures were homes for field slaves? Unfortunately, the lack of structural remains and extensive plowing in the area of the Northern Slave Row limited comparisons between the two rows that might have shed light on these types of questions.

However, excavations at two of the structures in the Southern Slave Row revealed structure foundations and living areas associated with the structures that included swept yards, shell middens within the yards, and either porches or fences, and small outbuildings. Both of the structures had wood frame construction with wood cladding and paned glass windows. The structures

were raised on posts and had tabby chimneys at the southern gabled ends. The foundations of these buildings permitted us to determine the square footage for each structure and to compare living space among other slave and freedmen structures in the Hilton Head area. Comparisons of the width to length ratios of slave and freedmen structures show that the Seabrook structures were similar to freedmen housing at Mitchelville, but smaller in general than slave housing in the Hilton Head area.

The areas excavated outside of the structures suggest that like other nineteenth century slaves in the area, a number of activities took place outside. The shell middens in the yards did not contain a large number of kitchen related artifacts, which is unusual for middens associated with slave housing. These structures continued to be occupied after the Union army arrived at Hilton Head Island in 1862.

In November of 1862, Seabrook Plantation and Seabrook Landing became an important point in Civil War history when Union soldiers took Hilton Head Island through Seabrook Landing, affecting both the function of the plantation and the lives of the African American slaves living there at the time.

The plantation's existing landscape most likely facilitated the use of Seabrook Plantation by the Union army, as demonstrated in the cartographic and historical investigations. The Main House Complex and several outbuildings, probably associated with the landing, were located in close proximity to Seabrook Landing. The landing was easily reached by Hilton Head inhabitants through the old Seabrook Landing road, located during excavations. Another road, veering off from the old Seabrook Landing road, passed behind the Main House and associated buildings, and in front of the Northern Slave Row. The possible remnants of a shell road were also located near the Northern Slave Row excavations.

Because the Southern Slave Row was situated on the other side of the old Seabrook Landing road, adjacent to the marsh, it may have been less affected by the Union army's use of the

plantation than the Main House Complex and the Northern Slave Row. Historical research tells us that the Union army did make use of the Main House as headquarters for different regiments and by 1863, machine shops and a shipyard at the plantation were being used by the Quartermaster's Corps. In this short time span, the landscape of Seabrook Plantation was being changed to suit the needs of the Union army, while probably still fulfilling the function of a plantation through the production of crops and the care of animals.

In 1865, John Stoney, along with laborers living on the plantation, rented the plantation, presumably to produce crops. The plantation continued to be rented until 1868, with specific buildings and areas rented on the plantation such as the Main House, yard and garden, servant houses connected to the Main House, and the dock and government buildings. The purpose for renting these buildings is unknown, and we can not be sure which functions the plantation was fulfilling at this time.

No mention is made of the Southern Slave Row buildings as property rented at Seabrook, although artifact analyses place the occupation of these houses until the late 1890s, and the above mentioned "laborers" were probably freedmen living on the plantation. The presence of the freedmen's school at Seabrook, one of five school districts on Hilton Head Island, also indicates that people were still living at the row near the marsh at least in the late 1860s. The two excavated structures in the Southern Slave Row both revealed a number of pencils and slate fragments, suggesting that the occupants were taking advantage of the school located at the plantation.

The use of Seabrook as a school also affected the plantation's landscape. The American Missionary Association rented two buildings near the Main House in 1866 to be used as school houses. Teachers also lived at the plantation until at least 1869, although it is unknown which building they occupied.

Documents reveal that in 1869, the Main House was again rented to a planter and his family, who is also listed in the 1870 census.

American Missionary Association documents reveal that the plantation was in a state of disrepair in 1869, with at least one of the houses stripped of its windows. The planter and his family are not listed in the 1880 census, and we can assume that they left the plantation sometime before the 1880 census was taken.

After this time, the plantation passed through different hands, beginning with the purchase of the plantation from the government by James Seabrook's attorney in 1872. Seabrook was not divided up for purchase of small plots of land by African Americans, as often happened at other plantations in the South, and it came into the twentieth century largely intact.

The plantation landscape at Seabrook was subjected to a number of different changes and functions throughout its history. These changes in the various uses of the plantation resulted in the combining of artifacts and features from various occupations of the plantation by different groups.

During this time, many different people made use of the Main House complex, such as the original owners and planters, military personnel, missionary teachers, and renters. Many of the African American occupants remained at Seabrook, during their time as slaves, when they were unable to leave the plantation, until after they became freedmen, and were able to choose to stay on the plantation. In some ways, the lifeways of the African Americans at Seabrook must have been altered and enhanced by their status as freedmen. However, some aspects of life must certainly have remained the same. The affect of freedom on lifeways is noticeable in the archaeological record at Seabrook and comparisons drawn between slave and freedman areas at Seabrook help us understand how lifeways changed and remained the same during this important period in history.

Exploration of Lifeways

The exploration of planter, slave and freedman lifeways was an important research objective of this study. However, due to the erosion of the Main House into Skull Creek, it was difficult to draw many conclusions about planter

lifeways at Seabrook Plantation. In addition, the overlap of the Main House occupation by various groups also makes it difficult to determine which artifacts are related to the Seabrook planters, and which are related to other users of the Main House. For these reasons, we chose to concentrate on the lifeways of the freedmen and slaves at Seabrook Plantation.

Slaves at the Northern Slave Row lived in structures that do not appear to have been very substantial buildings. The buildings were probably made of frame construction with wood cladding and planks for roofing. No evidence for window glass or plastered walls was recovered during excavations, suggesting that slaves in these living conditions of minimal comforts. Very few artifacts helped determine what type of furnishings the slaves had, although two high status brass furniture artifacts suggest that the slaves were given cast-off items from the Main House. A few high status porcelain fragments also suggest that slaves were given cast-offs.

The most common ceramics used by the slaves were pearlwares, creamwares and whitewares. Curiously, one would expect slaves to have a higher number of bowls than plate forms, due to the common practice of eating stews, gruels, and other one-pot meals. However, the slaves at the Northern Slave Row had almost twice as many plates as bowls, suggesting that these were also cast-offs from the planter.

Faunal evidence does suggest that slaves were more dependent on domestic species than wild species, relying most heavily on beef. High numbers of pig and sheep remains indicate that slaves also relied on pork and mutton. Although slave most likely did not have access to guns, as noted by the lack of arms artifacts, turkey and fish remains suggest that the slaves did exploit the environment around them to some degree to supplement their diets.

Faunal remains also suggest that butchering took place at the Northern Slave Row. The pattern of beef remains at the row is similar to patterns observed for beef markets, with most parts of the skeletons represented in the assemblage.

Saw marks on many of these bones also suggest that beef was butchered on site.

While most parts of the skeleton were represented at the Northern Slave Row, faunal studies show that higher percentages of head elements occurred at the area, followed by body and foot bones. Slaves were often given the less substantial cuts of beef, such as the head elements, for consumption. The body and feet elements may have been used elsewhere, perhaps for consumption by the plantation owners or for sale outside of the plantation.

Ethnobotanical samples from features at the Northern Slave Row excavations shed light on a few of the plants that slaves used, either as food or medicines. In the ditch feature, which also contained kitchen artifacts, china-berry and corn remains were found. The hearth feature sample consisted mainly of charcoal, in addition to two chenopod seeds. Although chenopod seeds are nutritious, it is likely that the greens of the plant were used. However, the chenopod seeds and china-berry remains may have been used for medicinal purposes.

Slaves at the Northern Slave Row had relatively high status ceramics, probably given to them by the planter, but few other high-status kitchenware or tableware items. Very few personal or clothing artifacts were recovered from these excavations. Although the area had been extensively plowed, the percentage of clothing and personal artifacts was still very low when compared to other types of artifacts. This suggests that the slaves were not given many personal items by the planter, and they probably did not have the means to acquire them.

The overall picture of material culture remains from the Northern Slave Row suggests that the slaves lived in dismal conditions that were physically uncomfortable, with few personal items of their own. The planter probably supplied the slaves with beef, mutton, and ceramics, while slaves supplemented their diet with a small amount of fish and turkey. In contrast, inhabitants at the Southern Slave Row seem to have lived in slightly better conditions, and exploited a greater range of

the surrounding environment than the occupants of the Northern Slave Row.

Structures 1 and 2 in the Southern Slave Row were raised on posts, with frame construction, wood cladding, paned glass windows, and tabby chimneys at the southern ends of the houses. The walls were probably not plastered. These structures were small by our standards, Structure 1 measuring 13 by 19 feet and Structure 2 measuring 10 by 15 feet. However, people living at the Southern Slave Row took advantage of outside spaces, such as yards and porches, for a variety of tasks. The yards were swept and contained dense shell middens that contained little kitchen refuse. A porch or fence was located on the west side of Structure 1. Similar evidence was found for a two foot wide porch or fence on the east side of Structure 2, in addition to postholes in the yard that may have belonged to a small outbuilding, possibly used to house animals.

Ceramics used by the freedmen at Structures 1 and 2 were mainly whitewares and pearlwares, with only a small percentage of high status porcelain fragments contributing to the assemblage. The ceramic index value for the Southern Slave Row was much lower than the value for the slave area and only slightly lower than other freedmen sites in the area. This coincides with the idea that slaves were given ceramics by the planter, elevating the ceramic value for the slave area, while freedmen had to acquire their own ceramics, therefore reflecting a less expensive ceramic value than planter-purchased ceramics. Freedmen also had many more plates than bowls, some teawares, and only a small percentage utilitarian wares.

Freedmen did make use of a large amount of glass containers, such as pharmaceutical bottles, ale bottles and soda bottles, which were probably used for storing liquids after the original contents had been finished. Tablewares, including tumblers, goblets, and glass bowls, were also used by the occupants at the Southern Slave Row.

The presence of tin can fragments suggests that the freedmen bought canned foods. They also exploited a wide range of resources, including both

domestic and wild species of animals and plants. The freedmen relied most heavily on beef, pork, and fish. Venison, mutton, and turtle also made a significant contribution to their diet. The cuts of beef present at the Southern Slave Row included a high percentage of body elements, with a lower representation of head and foot bones. This indicates that freedmen did not butcher their own beef and most likely bought it from an outside source.

Pollen and phytolith studies have shed some light on the types of plants exploited by inhabitants of the Southern Slave Row. Samples taken from the midden in the Structure 1 yard indicate that the area had pines, oaks, holly, and cherry or plum trees. Remains of sedges, grasses and flowering plants were also located in the midden sample. Cultivated plants used by the freedmen included pigweed or goosefoot weeds and possibly beets or spinach. Structure 2 midden samples also revealed the presence of various trees including pine, oak, wax myrtle, and hickory, in addition to sedges and various flowering plants. Plant remains also suggest the use of parsley, carrots or celery and either asparagus or onions by the freedmen at Structure 2.

The freedmen at the Southern Slave Row also seemed to have greater access to personal and clothing goods than the slaves at the Northern Slave Row. Both structures had a high percentage of both personal and clothing artifacts, especially buttons, jewelry parts, beads, slate pencils, and slate fragments. Structure 2 had an especially large amount of slate pencils, indicating that the inhabitants were literate. Porcelain doll fragments also suggest that children were living, and playing, at the Southern Slave Row.

Other freedmen sites in the Southeast have demonstrated that in some cases, freedmen lived below the level they did as slaves. However, the Southern Slave Row at Seabrook Plantation seems to indicate that the freedmen lived better than slaves had at the plantation and exploited a wider range of food resources. The freedmen also owned more personal goods and clothing, and probably participated in the freedmen's school located at the plantation.

Artifact analyses demonstrate differences in the artifact patterns at the Southern and Northern Slave Rows. Two points make comparisons between the rows difficult. First, it is unclear whether or not these two rows were occupied contemporaneously. Although both are shown on the 1862 geodetic map, dating methods indicate that the excavations in the Northern Slave Row date from 1780 to 1840. Southern Slave Row dates also being in the later part of the eighteenth century, but extend to the last years of the nineteenth century. *Terminus post quem* dates for the Southern Slave Row structures place the construction of Structure 1 after 1820, and the occupation of Structure 2 after 1850. Although these dates do leave room for some overlap, it is not a long enough period to suggest that the two areas were occupied contemporaneously.

Second, it is possible that the presence of more and different types of goods at the Southern Slave Row may have been a function of the increased availability of all goods due to the Union occupation of the sea islands. As has been mentioned, the isolated location of the sea islands generally meant that even necessary supplies were scarce, and other goods, such as personal items, were certainly more scarce and unavailable to the slaves on the sea islands. The availability of goods probably increased with the presence of the military on the sea islands. In addition, the ability for freedmen to participate in wage labor for cash, facilitated the buying of such items.

Despite these concerns, the differences in material goods present at the slave rows are important to note. The main differences between the Northern and Southern Slave Rows are highlighted in the Clothing and Personal artifact groups. Both structures in the Southern Slave Row have higher percentages of clothing and personal artifacts, such as buttons and jewelry, than the Northern Slave Row excavations.

Padlocks and padlock fragments were found in all parts of the plantation excavations, except for the Northern Slave Row excavations. This suggests that the inhabitants of the Northern Slave Row either did not have "ownership" of their goods, were not concerned with the possibility of

theft, or were not allowed to lock up their belongings. On the other hand, Southern Slave Row inhabitants may have perceived of the ownership of their goods and wanted to protect them.

Pattern analysis of the plantation demonstrates that the Main House Area corresponds to patterns for a 19th century rice planter. The utilitarian building, as expected, does not fit into any of the patterns. The Northern Slave Row excavations fit the Revised Carolina Artifact Pattern, while the Southern Slave Row structures have patterns similar to other nineteenth century slave sites, but do not fit into a specific pattern. Patterns for other freedmen sites indicate that there is not a common or shared pattern for freedmen sites.

Summary

Research at Seabrook Plantation has helped us better understand the lifeways of freedmen at the plantation and the differences between slaves and freedmen at Seabrook. This research has demonstrated that nineteenth century slave and freedmen areas may not fall into an overall "pattern," but may be unique to each site.

We have also learned that the plantation was subjected to a number of different uses after the arrival of Union soldiers in 1862, altering the plantation's landscape and affecting the lives of African Americans living on the plantation.

While we have learned a great deal about the freedmen's lifeways at Seabrook, we are still unsure of the plantation's social organization during slavery. It is important that archaeological investigations on the sea islands continue to examine changing lifeways so that we might better understand plantation social organization as it changed from a system based on slavery, to a system incorporating African Americans' status as freedmen.

SOURCES CITED

- Adams, Natalie
 1990 *Early African-American Domestic Archaeology from Berkeley County, South Carolina*. Unpublished master's thesis, Department of Anthropology, University of South Carolina, Columbia.
- 1994a *The Complex Antebellum Landscape at Stoney/Baynard Plantation*. Chicora Research Contribution 138. Chicora Foundation, Inc.
- 1994b *Management Summary of Archaeological Data Recovery Excavation at 38BU323 and 38BU821, Hilton Head Island*. Chicora Research Contribution 158, Columbia, South Carolina.
- 1995 *Management Summary of Archaeological Data Recovery at Freeport Plantation (38BU684), Daufuskie Island, Beaufort County, South Carolina*. Chicora Research Contribution 165. Chicora Foundation, Inc. Columbia, S.C.
- Adams, Natalie and Michael Trinkley
 1991 *Archaeological Testing at Stoney/Baynard Plantation, Hilton Head Island, Beaufort County, South Carolina*. Chicora Foundation Research Series 28. Chicora Foundation, Inc., Columbia, S.C.
- 1993 *Archaeological Survey of the Seaside Farms Tract, Charleston County, South Carolina*. Chicora Foundation Research Series 35.
- Chicora Foundation, Inc., Columbia, S.C.
- Adams, Natalie, Michael Trinkley, and Debi Hacker
 1995 *In the Shadow of the Big House: Domestic Slaves at Stoney/Baynard Plantation, Hilton Head Island*. Chicora Research Series 40. Chicora Foundation, Inc., Columbia, SC.
- Anonymous
 1863 *The Freedmen at Port Royal*. *Atlantic Monthly* 12:291-315.
- Anthony, Ron
 1986 *Colono Wares*. In *Home Upriver: Rural Life on Daniels Island, Berkeley County, South Carolina*, edited by Martha Zierden, Lesley Drucker, and Jeanne Calhoun, pp 7-22-7-50. Carolina Archaeological Services and The Charleston Museum. Submitted to the South Carolina Department of Highways and Public Transportation, Columbia, South Carolina.
- Barnes, Frank C.
 1993 *Cartridges of the World*. DBI Books, Inc., Northbrook, Illinois.
- Bedel, John
 1880 *Historical Sketch of the Third Regiment New Hampshire Volunteers*. *The Granite Monthly* 3:516-534.
- Baron, Robert C., editor
 1987 *The Garden and Farm Books of Thomas Jefferson*. Fulcrum,

- Golden, Colorado.
- Blanton, Dennis B., Christopher T. Espenshade, and Paul E. Brockington, Jr.
 1986 *An Archaeological Study of 38SU83: A Yadkin Phase Site in the Upper Coastal Plain of South Carolina*. Garrow and Associates, Inc., Atlanta.
- Boschung, H.t., J. Williams, D. Goshall, D. Caldwell, and M. Caldwell
 1983 *The Audobon Society Field Guide to North American Fishes, Whales, and Dolphins*. Alfred A. Knopf, New York.
- Bozarth, Stephen R.
 1987 Diagnostic Opal Phytoliths from Rinds of Selected *Cucurbita* species. *American Antiquity* 52 (3): 607-615.
 1990 Diagnostic Opal Phytoliths from Pods of Selected Varieties of Common Beans (*Phaseolus vulgaris*). *American Antiquity* 55(1):98-104.
 1992 Classification of Opal Phytoliths Formed in Selected Dicotyledons. In *Phytolith Systematics: Emerging Issues*, edited by G. Rapp, Jr. and S. C. Mulholland, pp. 193-214. Plenum Press, New York.
- Braun, E.L.
 1950 *Deciduous Forests of Eastern North America*. Blarision, Philadelphia.
- Brooker, Colin
 n.d. *Haig Point House, Daufuskie Island, South Carolina (38BU591)*. Brooker Architectural Design Consultants. Beaufort, South Carolina.
 1989 Architecture of the Haig Point Slave Rows. In *Archaeological Investigations at Haig Point, Webb, and Oak Ridge Tracts, Daufuskie Island, Beaufort County, South Carolina*, edited by Michael Trinkley, pp. 208-242. Chicora Foundation, Inc. Chicora Foundation, Columbia, S.C.
- 1990 Tabby Structures on Spring Island. In *The Second Phase of Archaeological Survey on Spring Island, Beaufort County, South Carolina: Investigation of Prehistoric and Historic Settlement Patterns on an Isolated Sea Island*, pp. 129-151, edited by Michael Trinkley. Chicora Foundation Research Series 20. Chicora Foundation, Inc., Columbia, S.C.
- 1991 Callawassie Sugar Works: A Tabby Building Complex. In *Further Investigations of Prehistoric and Historic Lifeways on Callawassie and Spring Islands, Beaufort County, South Carolina*, pp.110-154, edited by Michael Trinkley. Chicora Foundation Research Series 23. Chicora Foundation, Inc., Columbia, S.C.
- Brooker, Colin and Michael Trinkley
 1991 Plantation Architecture: The Lost Artifact. Paper presented at the Conference on South Carolina Archaeology, Columbia.
- Brown, Dwight A.
 1984 Prospects and Limits of a Phytolith Key for Grasses in the Central United States. *Journal of Archaeological Science* 11(4):345-
- Brown, Paul J.
 1975 *Coastal Morphology of South Carolina*. Unpublished M.S. thesis, Department of Geology, University of South Carolina, Columbia.

SOURCES CITED

- Brown, William L. and Major M. Goodman
 1977 *Races of Corn. In Corn and Corn Improvement*, edited by G.F. Sprague, pp. 49-88. American Society of Agronomy, Madison, Wisconsin.
- Bucher, Ward (Editor)
 1996 *Dictionary of Building Preservation*. Preservation Press, New York.
- Burn, Billie
 1990 *An Island Named Daufuskie*. The Reprint Company, Spartanburg, S.C.
- Caldwell, Charles K.
 1875 *The Old Sixth Regiment, Its War Record, 1861-5*. Tuttle, Morehouse, and Taylor, New Haven.
- Carmon, Harry J., (editor)
 1939 *American Husbandry*. University Press, New York.
- Carson, J.
 1985 *Colonial Virginia Cookery: Procedures, Equipment, and Ingredients in Colonial Cooking*. Colonial Williamsburg Foundation, Williamsburg, Virginia.
- Casteel, R. W.
 1978 Faunal Assemblages and "Wiegemethode" or Weight Method. *Journal of Field Archaeology* 5:72-77.
- Clowse, Converse D.
 1971 *Economic Beginnings in Colonial South Carolina, 1670-1730*. University of South Carolina Press, Columbia.
- Coates, Earl J. and Dean S. Thomas
 1990 *An Introduction to Civil War Small Arms*. Thomas Publications, Gettysburg, Pa.
- Colquhoun, Donald J.
 1969 *Geomorphology of the Lower Coastal Plain of South Carolina*. Division of Geology, S.C. State Development Board, Columbia.
- Cooke, C. Wythe
 1936 *Geology of the Coastal Plain of South Carolina*. Bulletin 867. U.S. Geological Survey, Washington, D.C.
- Copp, Elbridge J.
 1911 *Reminiscences of the War of the Rebellion 1861-1865*. The Telegraph Publishing Company, Nashua, New Hampshire.
- Croker, Thomas C., Jr.
 1979 Longleaf Pine: The Longleaf Pine Story. *Journal of Forest History*, 23:32-43.
- Culp, Edward C.
 1885 *The 25th Ohio Vet. Vol. Infantry in the War for the Union*. George W. Crane, Topeka, Kansas.
- Cummings, Linda S.
 1992 Illustrated Phytoliths from Assorted Food Plants. In *Phytolith Systematics: Emerging Issues*, edited by G. Rapp, Jr. and S. C. Mulholland, pp. 175-192. Plenum Press, New York.
- Davis, William C.
 1991 *Weapons of the Civil War*. Mallard Press, New York.
- Deetz, James
 1977 *In Small Things Forgotten*. Anchor Book, Garden City, New York.
- DePratter, Chester
 1989 Ceramics. In *The Anthropology of St. Catherines Island 2*. The

- Refuge-Deptford Mortuary Complex, edited by David Hurst Thomas and Chark Spencer Larsen, pp. 109-132. *Anthropological Papers of the American Museum of Natural History* 56(1).
- Doolittle, W. E. and C. D. Frederick
1991 Phytoliths as Indicators of Prehisotric maize (*Zea mays* subsp. *mays*, Poaceae) Cultivation. *Plant Systematics and Evolution* 177(3-4):175-119.
- Dusinberre, William
1996 *Them Dark Days: Slavery in the American Rice Swamps*. Oxford University Press, New York.
- Eldridge, Daniel
1893 *The Third New Hampshire and Allut It*. E.B. Stillings, Boston.
- Elliott, William
1994 [1846] *Carolina Sports by Land and Water*. 1994 facsimile ed. University of South Carolina Press, Columbia.
- Espenshade, Christopher, Linda Kennedy, and Bobby Southerlin
1994 *What is a Shell Midden? Data Recovery Excavations of Thom's Creek and Deptford Shell Middens, 38BU2, Spring Island, South Carolina*. Brockington and Associates, Inc., Atlanta, Georgia.
- Eubanks, Elsie, Christopher Espenshade, Marian Roberts and Linda Kennedy
1993 *Data Recovery Investigations of 38BU791, Bonny Shore Slave Row, Spring Island, Beaufort County, South Carolina*. Brockington and Associates, Inc., Atlanta, Georgia.
- Federal Writers Project
1938 *Beaufort and the Sea Islands*. Review Printing, Savannah.
- Ferguson, Leland
1989 *Uncommon Ground: Archaeology and Early African America, 1650-1800*. Smithsonian Institution Press, Washington DC.
- Fischer, David Hackett
1989 *Albion's Seed: Four British Folkways in America*. Oxford University Press, New York.
- Ford, James A.
1937 An Archaeological Report on the Elizafield Ruins. In *Georgia's Disputed Ruins*, edited by E. Merton Coulter, pp. 191-225. University of North Carolina Press, Chapel Hill.
- Forten, Charlotte
1864 Life on the Sea Islands. *Atlantic Monthly* 12:587-596.
- Garrow, Patrick and Thomas Wheaton
1989 *NA in Endnote*
- Geis, James W.
1973 Biogenic Silica in Selected Species of Decidous Angiosperms. *Soil Science* 116(2):175-184.
- Glassie, Henry
1968 *Patterns in Material Folk Culture of the Eastern United States*. University of Pennsylvania Press, Philadelphia.
1975 *Folk Housing in Middle Virginia: A Structure Analysis of Historic Artifacts*. University of Tennessee Press, Knoxville.
- Grayson, D. K.
1973 On the Methodology of Faunal Analysis. *American Antiquity* 38(4):432-439.
1979 On Quantification of Vertebrate Archaeofauna. In *Advances in Archaeological Method and Theory*

SOURCES CITED

- Volume 2, edited by Michael Schiffer, pp. 199-237. Academic Press, New York.
- Griffith, R. Eglesfeld
1850 *A Universal Formulary*. Lea and Blanchard, Philadelphia.
- Hacker, Debi and Michael Trinkley
1992 *Cartographic Survey of Historic Sites in Beaufort County, South Carolina*. Research Contribution 85. Chicora Foundation, Inc., Columbia.
- Hamer, Fritz and Michael Trinkley
1997 *African Architectural Transference to the South Carolina Low Country, 1700-1880*. *Tennessee Anthropologist* 22(1)1-34.
- Hamilton, T. M.
1980 *Colonial Frontier Guns*. The Fur Press, Chadron, Nebraska.
- Hilliard, Sam B.
1972 *Hog Meat and Hoecake: Food Supply in the Old South, 1840-1860*. Southern Illinois University Press, Carbondale.
- Hogue, S. H., J. H. Wilson, and Jodi Jacobson
1995 *Vertebrate Faunal Remains*. In *Broom Hall Plantation: "A Pleasant One and in a Good Neighborhood"*, edited by Michael Trinkley, pp. 261-274. Research Series 44, Chicora Foundation, Columbia.
- Holmgren, Virginia C.
1959 *Hilton Head: A Sea Island Chronicle*. Hilton Head Island Publishing Company, Hilton Head Island, South Carolina.
- Howard, Hugh
1989 *How Old Is This House*. Farrar, Straus and Giroux, New York.
- Hurley, William M.
1979 *Prehistoric Cordage: Identification of Impressions on Pottery*. Taraxacum, Washington, D.C.
- Jackson, Albert and David Day
1992 *The Complete Home Restoration Manual*. Simon and Schuster, New York.
- Jackson, Harry F. and Thomas F. O'Donnell (editors)
1965 *Back Home in Oneida, Hermon Clarke and His Letters*. Syracuse University Press, New York.
- Janiskee, Robert L. and Michael Bell
1980 *Climate*. In *Soil Survey of Beaufort and Jasper Counties, South Carolina*, edited by W.M. Stuck, pp. 1-2. Soil Conservation Service, U.S. Department of Agriculture, Washington, DC.
- John Milner Associates
1979 *The Beaufort Preservation Manual*. John Milner Associates, West Chester, Pennsylvania.
- Johnson, Clifton H.
n.d. Introduction. In *Author and Added Entry Catalog of the American Missionary Association Archives*, 3 vols. edited by the Amsted Research Center. Greenwood, Westport, Connecticut.
- Johnson, Laurence
1881 *A Medical Formulary*. William Wood, New York.
- Joseph, J.W.
1988 *Pattern and Process in the Plantation Archaeology of the Lowcountry of Georgia and South Carolina*. *Historical Archaeology* 23:55-68.
- Kana, Timothy W.
1984 *Coastal Processes and Prospects*.

- In *South Carolina's Migrating Beaches*, edited by Henrietta S. Wilson, pp. 3-13. South Carolina Sea Grant Consortium, Charleston.
- Kana, Timothy W., Mark L. Williams, and Willicam C. Eiser
 1986 *Executive Summary — Erosion Assessment Study for Hilton Head Island*. Coastal Science and Engineering, Columbia.
- Kennedy, Linda and Christopher Espenshade
 1991 *Data Recovery at 38BU1270, Beaufort County, South Carolina*. Brockington and Associates, Inc., Atlanta.
- Kennedy, Linda and Marian Roberts
 1993 *Archaeological Data Recovery at 38BUj1289 Beaufort County, South Carolina:Antebellum Lifeways in Rural Prince William Parish*. Brockington and Associates, Inc. Atlanta, Georgia.
- Klein, Robert L. and James W. Geis
 1978 Biogenic Silica in the Pinaceae. *Soil Science* 126 (3):145-156.
- Kilby, Kenneth
 1971 *The Cooper and His Trade*. J. Baker, London. American edition, Fernhill House, New York.
- Kniffen, Fred
 1965 "Folk Housing: Key to Diffusion." *Annals of the Association of American Geographers* 55:549-577.
- Kondo, Renzo
 1974 Opal Phytoliths- the Relations Between the Morphological Features of Opal Phytoliths and the Taxonomic Groups of Gramineous Plants. *Pedorojisuto* 18:2-10.
 1976 On the Opal Phytoliths of Tree
- Origins. *Pedorojisuto* 20:176-190.
- 1977 Opal Phytoliths, Inorganic, Biogenic Particles in Plants and Soils. *Japan Agricultural Research Quarterly* 11(4):198-203.
- Kondo, Renzo and Tomoko Peason
 1981 Opal Phytoliths in Tree Leaves (Part 2): Opal Phytoliths in Dicotyledonous Angiosperm Tree Leaves. *Research Bulletin of Obihiro University Series 1- 12* (3):217-230.
- Kondo, Renzo and Takahashi Sase
 1986 Opal Phytoliths, Their Nature and Application. *Daiyonki Kenkyu Quarternary Research* 25(1):31-63.
- Kondo, Renzo, Takahashi Sase and Y. Kato
 1987 Opal Phytolith Analysis of Andisols with Regard to Interpretation of Paleovegetation. In *Proceedings of the Ninth International Soil Classification Workshop, Japan*, edited by D.I. Kinloch, et al., pp. 520-534.
- Kondo, Renzo and T. Sumida
 1978 The Study of Opal Phytoliths of Tree Leaves. I. Opal Phytoliths in Gymnosperm and Monocotyledonous Angiosperm Tree Leaves. *Journal of the Science of Soil and Manure, Japan* 49(2):138-144.
- Landers, H.
 1970 *Hilton Head and the Sea Islands of South Carolina*. Climatology of the United States Number 21-383. Environmental Science Services Administration, U.S. Department of Commerce, Washington, DC.
- Lane, Mills
 1984 *Architecture of the Old South: South Carolina*. The Beehive

SOURCES CITED

- Press, Savannah, Georgia.
- Lee, D., C. Gilbert, C. Hocutt, R. Jenkins, D. McAllister, and J. Stauffer, Jr.
 1980 *Atlas of North American Fishes*. North Carolina State Museum of Natural History, North Carolina Biological Survey No. 1980-12, Raleigh.
- Legg, James B. and Steven D. Smith
 1989 *The Best Ever Occupied... "Archaeological Investigations of a Civil War Encampment on Folly Island, South Carolina*. Research Manuscript Series 209. South Carolina Institute of Archaeology and Anthropology, University of South Carolina, Columbia.
- Leighton, Ann
 1976 *American Gardens in the Eighteenth Century, "For Use or Delight."* University of Massachusetts Press, Amherst.
- Lepionka, Larry
 1988 *Haig Point Plantation: Investigations of a Nineteenth Century Plantation, Daufuskie Island, Beaufort County, South Carolina*. Submitted to International Paper Realty Corporation of South Carolina.
- Linehan, John C.
 1985 War Pictures. *The Granite Monthly* 18:343-350; 19:83-88, 143-151, 208-215, 307-314, 356-360, 456-457.
- Livingstone, D. A. and W. D. Clayton
 1980 An Altitudinal cline in Tropical African Grass Floras and Its Paleocological Significance. *Quaternary Research* 13(3):392-402.
- Lowcountry Council of Governments
 1979 *Historic Resources of the Lowcountry: A Regional Survey*. Lowcountry Council of Governments, Yemassee, South Carolina.
- Marple, Captain William
 1863 Unpublished manuscript of letters and journal. In possession of Dr. Stephen Wise, Beaufort, South Carolina.
- Martin, Alexander C. and William D. Barkley
 1961 *Seed Identification Manual*. University of California Press, Berkeley.
- Mathew, A.J., A.J. Woods, and C. Oliver
 1991 Spots Before Your Eyes: New Comparison Charts for Visual Percentage Estimations in Archaeological Materials. In *Recent Developments in Ceramic Petrology*, edited by A.P. Middleton and I.C. Freestone, pp. 211-263. Occasional Paper 81. British Museum, London.
- McAlister, Virginia and Lee McAlister
 1984 *A Field Guide to American Houses*. Alfred A. Knopf, New York.
- McClinton, Katharine Morrison
 1970 *Antiques of American Childhood*. Bramhall House, New York.
- McGuire, Mary Jennie
 1982 *Getting Their Hands on the Land: Black Farmers in St. Helena Parish, 1861-1900*. Unpublished M.A. thesis, Department of History, University of South Carolina, Columbia.
 1985 *Getting Their Hands on the Land: Black Farmers in St. Helena Parish, 1861-1900*. Ph.D. dissertation, University of South Carolina. University Microfilms, Ann Arbor.

- McKee, James H.
 1903 *Back in "War Times"*. Lieut. Harace E. Bailey, New York.
- Mathew, William M., editor
 1992 *Agriculture, Geology, and Society in Antebellum South Carolina: The Private Diary of Edmund Ruffin, 1843*. University of Georgia Press, Athens.
- Mathews, Thomas D., Frank W. Stapor, Jr., Charles R. Richter, John V. Miglarese, Michael D. McKenzie, and Lee R. Barclay
 1980 *Ecological Characterization of the Sea Island Coastal Region of South Carolina and Georgia*, vol. 1. Office of Biological Services, Fish and Wildlife Service, Washington, DC.
- Michie, James
 1980 *An Intensive Shoreline Survey of Archaeological Sites in Port Royal Sound and the Broad River Estuary, Beaufort County, S.C.* Research Manuscript Series 167. South Carolina Institute of Archaeology and Anthropology, University of South Carolina, Columbia.
- Mills, Robert
 1972 [1826] *Statistics of South Carolina*. Hurlert and Lloyd, Charleston. 1972 facsimile ed. The Reprint Company, Spartanburg, South Carolina.
- Montgomery, F.H.
 1977 *Seeds and Fruits of Eastern Canada and Northeastern United States*. University of Toronto Press, Toronto.
- Morgan, Phillip
 1977 *The Development of Slave Culture in Eighteenth Century Plantation America*. Ph. D. Dissertation. University College, London.
- 1998 *Slave Counterpoint: Black Culture in the Eighteenth-Century Chesapeake and Lowcountry*. University of North Carolina Press, Chapel Hill.
- Morton, Julia F.
 1974 *Folk Remedies of the Low Country*. E.A. Seemann, Miami.
- Museum at Stony Brook
 1986 *The Carriage Collection*. The Museums at Stony Brook, Stony Brook, New York.
- National Archives
 1964 *Population Schedules of the Seventh Census of the United States — 1850*. Microcopy 432. National Archives Microfilm Publications, Washington, D.C.
- 1967 *Population Schedules of the Sixth Census of the United States — 1840*. Microcopy 704. National Archives Microfilm Publications, Washington, D.C.
- Nichols, James H.
 1866 *Perry's Saints or the Fighting Parson's Regiment in the War of the Rebellion*. D. Lothrop, Boston.
- Obst, F.J.
 1986 *Turtles, Tortoises and Terrapins*. St. Martin's Press, New York.
- Orton, Clive, Paul Tyers, and Alan Vince
 1993 *Pottery in Archaeology*. Cambridge University Press, Cambridge.
- Parry, D. Wynn and Frank Smithson
 1958 Silification of Bulliform Cells in Grasses. *Nature* 181:1549-1550.
- Peeples, Robert E.H.
 1970 Tales of Antebellum Island Families. Ms. on file, South

SOURCES CITED

- Carolina Historical Society,
Charleston, South Carolina.
- Peterson, Harold L. (Editor)
1964 *Encyclopedia of Firearms*. E.P. Dutton and Company, Inc., New York.
- Piperno, Dolores R.
1988 *Phytolith Analysis: An Archaeological and Geological Perspective*. Academic Press, Inc., San Diego.
- Poplin, Eric and Colin Brooker
1994 *The Historical Development of Dataw Island: Architectural and Archaeological Investigation at the Sams Plantation Complex, vols. 1 and 2*. Brockington and Associates, Inc. Atlanta, Georgia.
- Popper, Virginia S.
1988 *Selecting Quantitative Measurements in Paleoethnobotany*. In *Current Paleoethnobotany: Analytical Methods and Cultural Interpretations of Archaeological Plant Remains*, edited by Christine A. Hastorf and Virginia S. Popper, pp. 53-71. University of Chicago Press, Chicago.
- Porcher, F.P.
1869 *Resources of our Southern Fields and Forests*. Walker, Evans, and Cogswell, Charleston, South Carolina.
- Powell, Lawrence N.
1980 *New Masters: North Planters During the Civil War and Reconstruction*. Yale University Press, New Haven.
- Reitz, E. J.
1982 Application of Allometry to Zooarchaeology. Paper presented at the 39th Annual Meeting of the Southeastern Archaeological Conference, Memphis, Tennessee.
- 1984 Urban/Rural Contrast in Vertebrate Fauna from the Southern Coastal Plain. Paper presented at the 17th Annual Meeting for Historical Archaeology, Williamsburg, Virginia.
- 1988 Comparison of Zooarchaeological Evidence from Annapolis and Charleston. Paper presented at the 21st Annual Meeting of the Society for Historical Archaeology, Reno, Nevada.
- Reitz, E. J. and D. Cordier
1983 Use of Allometry in Zooarchaeological Analysis. In *Animals in Archaeology: 2. Shell Middens, Fishes and Birds*, edited by Grigson and Glutton-Brock, pp. 237-252. BAR International Series 183, London.
- Reitz, E. J. and D. Weinand
1995 Vertebrate Fauna from the Nathaniel Russel House. In *Initial Archaeological Testing: The Nathaniel Russell House*. Archaeological Contributions 24. The Charleston Museum, Charleston, South Carolina.
- Reitz, E.J., I. R. Quimyer, H. S. Hale, S. J. Scudder, and E. S. Wing
1987 Application of Allometry to Zooarchaeology. *American Antiquity* 52:304-317.
- Reitz, E. J. and M. Scarry
1985 *Reconstructing Historic Subsistence with an Example from Sixteenth Century Spanish Florida*. Society for Historical Archaeology Special Publication Series 3, Glassboro, New Jersey.
- Reitz, E. J. and M. A. Zierden

- 1991 Cattle Bones and Status from Charleston, South Carolina. In *Beamers, Bobwhites and Bluepoints: Tributes to the Career of Paul Parmelee*, edited by J. R. Purdue, W. E. Klippel, and B. W. Styles, pp. 395-407. Illinois State Museum, Springfield, Illinois.
- Robertson, Patrick
1974 *The Book of Firsts*. Clarkson N. Potter, Inc., New York.
- Rose, Willie Lee
1964 *Rehearsal for Reconstruction: The Port Royal Experiment*. Oxford University Press, London.
- Rosengarthen, Theodore
1987 *Tombee: Portrait of a Cotton Planter*. McGraw-Hill Book Company, New York.
- Rouse, J. E.
1973 *World Cattle III: Cattle of North America*. University of Oklahoma Press, Norman, Oklahoma.
- Rovner, Irwin
1971 Potential of Opal Phytoliths for Use in Paleoeological Reconstruction. *Quaternary Research* 1:225-266.
- 1983a Preliminary Phytolith Assessment of Four Archaeological Sites in Tishomingo county, Mississippi. Submitted to Environmental Consultants, Inc., Dallas, Texas.
- 1983b Major Advances in Archaeobotany: Archaeological Uses of Opal Phytolith Analysis. In *Advances in Archaeological Method and Theory* 6, edited by Michael Schiffer, pp. 345-359. Academic Press, New York.
- 1984 Assessment of Phytolith Assemblages from Selected Soil Samples of the Jordan Site (31NH256), New Hanover County, NC. Submitted to Archaeological Research Consultants, Inc., Chapel Hill, North Carolina.
- 1986 Vertical Movement of Phytoliths in Stable Soil: A Non-Issue. In *Plant Opal Phytolith Analysis in Archaeology and Paleocology*, edited by Irwin Rovner, pp. 23-30. Proceedings of the 1984 Phytolith Research Workshop, Occasional Papers No. 1 of the Phytolitharien, Raleigh, North Carolina.
- 1988a Micro- and Macro-environmental Reconstruction Using Plant Opal Phytolith Data from Archaeological Sediments. *Geoarchaeology* 3(2):155-165.
- 1988b Quick-scan Phytolith Analysis of Selected Soil Samples from Suggested Fodder Plots at Monticello, Virginia. Submitted to the Monticello Foundation, Charlottesville, Virginia.
- 1989 Quick-scan Phytolith Assessment of Selected Soil Samples from 18th and 19th Century Cultural Deposits in the City of Hampton, Virginia. Submitted to the Archaeology Project Center, The College of William and Mary, Williamsburg.
- 1990 Fine-tuning Floral History with Opal Phytolith Analysis. In *Earth Patterns, Essays in Landscape Archaeology*, edited by W. Kelso and R. Most, pp. 297-308. The University Press of Virginia, Charlottesville, Virginia.
- 1994 Floral History by the Back Door: Phytolith Analysis of Two Residential yards at Harper's Ferry. *Historical Archaeology*

SOURCES CITED

- Ferry. *Historical Archaeology* 28(4):37-48.
- 1995a Phytolith Analysis of Selected Soil Samples from Site 31MK683, North Carolina. Submitted to R. S. Webb and Associates; on file Office of State Archaeologist, North Carolina Division of Archives and History, Raleigh.
- 1995b Phytolith Analysis of Two Additional Soil Samples from Site 31MK683, North Carolina. Submitted to R. S. Webb and Associates; on file Office of State Archaeologist, North Carolina Division of Archives and History, Raleigh.
- 1995c Mien, Mean and Meaning: The Limits of Typology in Phytolith Analysis. Paper presented at the annual meeting of the Society for American Archaeology, Minneapolis, Minnesota.
- Rowland, Lawrence S.
1978 *Eighteenth Century Beaufort: A Study of South Carolina's Southern Parishes to 1800*. Ph.D. dissertation, University of South Carolina. University Microfilms, Ann Arbor.
- Russ, John C. and Irwin Rovner
1989 Stereological Identification of Opal Phytolith Populations from Wild and Cultivated *Zea mays*, *American Antiquity* 54(3):784-792.
- Rye, Owen S.
1981 *Pottery Technology: Principles and Reconstruction*. Taraxacum, Washington, D.C.
- Sams, James Julius
n.d. *Datha*. Ms. on file, South Caroliniana Library, University of South Carolina, Columbia.
- Sandifer, Paul A., John V. Miglarese, Dale R. Calder, John J. Manzi, and Lee A. Barclay
1980 *Ecological Characterization of the Sea Island Coastal Region of South Carolina and Georgia*, vol. 3. Office of Biological Services, Fish and Wildlife Service, Washington, DC.
- Schopmeyer, C.S. (editor)
1974 *Seeds of Woody Plants in the United States*. Agricultural Handbook 450. U.S. Department of Agriculture, Forest Service, Washington, D.C.
- Scott, Robert N., editor
1882 *The War of the Rebellion: A Compilation of the Official Records of the Union and Confederate Armies*. Series I, volume 6. Government Printing Office, Washington, D.C.
- Scott, S. L.
1981 Economic and Organizational Aspects of Deer Procurement in the Late Prehistoric Period. Paper presented at the 38th Annual Southeastern Conference, Asheville, North Carolina.
- Simpson, G. O., A. Roe, and R. Lewontin
1960 *Quantitative Zoology*. Harcourt, Brace and Co., New York.
- Smith, Henry A.M.
1988 *The Historical Writings of Henry A.M. Smith*. vol. 1. The Reprint Company, Spartanburg, South Carolina.
- Smith, Lynwood
1933 *Physiography of South Carolina*. Unpublished M.S. Thesis, Department of Geology, University of South Carolina, Columbia.
- South, Stanley and Michael Hartley

- 1980 *High Ground and Deep Water: Seventeenth Century Low Country Settlement*. Research Manuscript Series 166. S.C. Institute of Archaeology and Anthropology, University of South Carolina, Columbia. 36:366-371.
- Starr, Rebecca K.
1984 *A Place Called Daufuskie: Island Bridge to Georgia, 1520-1830*. Unpublished M.A. Thesis, Department of History, University of South Carolina, Columbia.
- Stewart, John T.
1923 *Engineering on the Farm: A Treatise on the Application of Engineering Principles to Agriculture*. Rand McNally & Company, Chicago.
- Streeter, Donald
1973 Some Signed American Iron Rim Locks. *Association for Preservation Training Bulletin* V (2):9-37.
- Stuck, W. M.
1980 *Soil Survey of Beaufort and Jasper Counties, South Carolina*. Soil Conservation Service, U.S. Department of Agriculture, Washington, D.C.
- Switzer, Ronald R.
1974 *The Bertrand Bottles: A Study of 19th-Century Glass and Ceramic Containers*. National Park Service, Washington D.C.
- Thomas, Dean S.
1993 *Small Arms Ammunition in the Battle of Gettysburg*. Thomas Publications, Gettysburg, Pennsylvania.
- Thomas, D. H.
1971 On Distinguishing Natural from Cultural Bone in Archaeological Sites. *American Antiquity*
- Thompson, Morrow B.
1972 What is an Estuary? In *Port Royal Sound Environmental Study*, edited by the S.C. Water Resources Commission, pp. 7-15. State Printing Company, Columbia.
- Tice, Warren K.
1997 *Uniform Buttons of the United States 1776-1865*. Thomas Publications, Gettysburg, Pennsylvania.
- Tomhave, W. H.
1925 *Meats and Meat Products*. Lippincott, Philadelphia.
- Toulouse, Julian Harrison
1971 *Bottlemakers and Their Marks*. Thomas Nelson, Inc., New York.
- Towne, C. W. and E. N. Wentworth
1950 *Pigs: From Cave to Corbel*. University of Oklahoma Press, Norman, Oklahoma.
1955 *Cattle and Man*. University of Oklahoma Press, Norman, Oklahoma.
- Townsend, Jan, John H. Sprinkle, Jr., and John Knoerl
1993 *Guidelines for Evaluating and Registering Historical Archaeological Sites and Districts*. Bulletin 36. National Park Service, National Register of Historic Places, Washington, D.C.
- Traverse, Alfred
1988 *Paleopalynology*. Unwyn Hyman, Boston.
- Trinkley, Michael
1983 Ethnobotanical Analysis of

SOURCES CITED

- Specimens from Greenfield Plantation, Georgetown County, South Carolina. In *An Archaeological Assessment of the Greenfield Borrow Pit, Georgetown County*, edited by Martha Zierden and Jeanne Calhoun, pp. 58-69. The Charleston Museum, Charleston, South Carolina. 1987
- 1987 *Archaeological Survey of Hilton Head Island, Beaufort County, South Carolina*. Research Series 9. Chicora Foundation, Inc., Columbia.
- 1988 *Archaeological Testing of Six Sites on Hilton Head Island, Beaufort County, South Carolina*. Research Series 13. Chicora Foundation, Inc., Columbia.
- Trinkley, Michael, editor
- 1986 *Indian and Freedmen Occupation at the Fish Haul Site (38BU805), Beaufort County, South Carolina*. Research Series 7. Chicora Foundation, Inc., Columbia.
- 1989a *Haig Point, Webb, and Oak Ridge Tracts, Daufuskie Island, Beaufort County, South Carolina*. Research Series 15. Chicora Foundation, Inc., Columbia, S.C.
- 1989b *An Archaeological Survey of the Barker Field Expansion Project, Hilton Head Island, Beaufort County, South Carolina*. Chicora Foundation Research Series 17. Chicora Foundation, Inc., Columbia, S.C.
- 1990a *The Second Phase of Archaeological Survey on Spring Island, Beaufort County, South Carolina: Investigation of Prehistoric and Historic Settlement Patterns on an Isolated Sea Island*. Chicora Foundation Research Series 20. Chicora Foundation, Inc., Columbia, S.C.
- 1990b *Archaeological Excavation at 38BU96, A Portion of Cotton Hope Plantation, Hilton Head Island, Beaufort County, South Carolina*. Research Series 21. Chicora Foundation, Inc., Columbia.
- 1991 *Further Investigations of Prehistoric and Historic Lifeways on Callawassie and Spring Islands, Beaufort County, South Carolina*. Chicora Foundation Research Series 23. Chicora Foundation, Inc., Columbia, S.C.
- 1993a *The History and Archaeology of Kiawah Island, Charleston County, South Carolina*. Chicora Research Contribution 30. Chicora Foundation, Inc., Columbia, S.C.
- 1993b *Archaeological and Historical Examinations of Three Eighteenth and Nineteenth Century Rice Plantations on the Waccamaw Neck*. Chicora Foundation Research Series 31. Chicora Foundation, Inc. Columbia, S.C.
- 1995 *Under the Shadow of the Big House: Archeological Investigations at Stoney/Baynard Plantation, Hilton Head Island, Beaufort County, South Carolina*. Chicora Foundation Research Series 40. Chicora Foundation, Inc., Columbia, S.C.
- Trinkley, Michael and Natalie Adams
- 1994 *Middle and Late Woodland Life at Old House Creek, Hilton Head Island, South Carolina*. Research Series 42. Chicora Foundation, Inc., Columbia.
- Trinkley, Michael, Natalie Adams, and Debi Hacker
- 1992 *Landscape and Garden*

- Archaeology at Growfield Plantation: A Preliminary Examination.* Chicora Foundation Research Series 32. Chicora Foundation, Inc., Columbia.
- Trinkely, Michael, Debi Hacker, Natalie Adams, and David Lawrence
 1992 *Archaeological Data Recovery at 38BU833, A St. Catherine's and Savannah Shell Midden Site, Hilton Head Island, Beaufort County, South Carolina.* Research Series 27. Chicora Foundation, Inc., Columbia.
- Truman, Ben C.
 1866 Beaufort, As It Is. *The Charleston Daily Courier.* July 26:2.
- Twiss, Page C, Erwin Suess and Robert M. Smith
 1969 Morphological Classification of Grass Phytoliths. *Soil Science Society of American Proceedings* 33(1):109-115.
- U.S. Army Corps of Engineers
 1971 *National Shoreline Study, Regional Inventory Report, South Atlantic-Gulf Region.* Corps of Engineers South Atlantic Division, Atlanta.
- U. S. Department of Agriculture
 1971 *Common Weeds of the United States.* Dover Publications, New York.
- Upton, Dell
 1988 White and Black Landscapes in Eighteenth-Century Virginia. In *Material Life in America, 1600-1868*, edited by Robert Blair St. George, pp. 357-369. Northeastern University Press, Boston.
- Walkley, Stephen
 1905 *History of the Seventh Connecticut Volunteer Infantry.* n.p., Southington.
- Wallace, David D.
 1951 *South Carolina: A Short History.* University of South Carolina Press, Columbia.
- Wayne, Lucy and Martin Dickinson
 1990 *Four Mens' Ramble: Archaeology in the Wando Neck, Charleston County, South Carolina.* Southarc, Inc., Gainesville, Florida.
- Welch, P. D.
 1991 *Moundville's Economy.* University of Alabama Press, Tuscaloosa, Alabama.
- Wenger, Karl F.
 1968 Silvics and Ecology of Loblolly-Shortleaf Pine-Hardwood Forests. In *The Ecology of Southern Forests*, edited by Norwin E. Lonnartz, pp. 91-98. Louisiana State University Press, Baton Rouge.
- Whalley, Joyce Irenee
 1975 *Writing Implements and Accessories.* Gale Research Company, Detroit, Michigan.
- Wing, E. S. and A. B. Brown
 1979 *Paleonutrition: Method and Theory in Prehistoric Foodways.* Academic Press, New York.
- Yarnell, Richard A.
 1974 Plant Food and Cultivation of the Salts Cavers. In *Archaeology of the Mammoth Cave Area*, edited by P. J. Watson, pp. 113-122. Academic Press, New York.
- Ziegler, John M.
 1959 Origin of the Sea Islands of the Southeastern United States. *Geographical Review* 49:222-237.
- Zierden, Martha and Kimberly Grimes
 1989 *Investigating Elite Lifeways Through Archaeology: The John*

SOURCES CITED

Rutledge House. Archaeological Contributions 21. The Charleston Museum, Charleston, South Carolina.

Zeiriden, Martha, Jeanne Calhoun, and Debi Hacker-Norton

1985 *Archdale Hall: Investigations of a Lowcountry Plantation.*

Archaeological Contribution 10.
The Charleston Museum,
Charleston, South Carolina.

Zierden, Martha, Lesley M. Drucker, and Jeanne Calhoun

1986 *Home Upriver: Rural Life on Daniel's Island, Berkeley County, South Carolina.* Carolina Archaeological Services and The Charleston Museum, Columbia. Report submitted to the South Carolina Department of Highways and Public Transportation, Columbia.

Zierden, Martha, Suzanne Buckley, Jeanne Calhoun, and Debi Hacker

1987 *Georgian Opulence: Archaeological Investigations of the Gibbes House.* Archaeological Contributions 12. The Charleston Museum, Charleston, South Carolina.

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Rutledge House. Archaeological Contributions 21. The Charleston Museum, Charleston, South Carolina.

Zeiriden, Martha, Jeanne Calhoun, and Debi Hacker-Norton

1985 *Archdale Hall: Investigations of a Lowcountry Plantation.* Archaeological Contribution 10. The Charleston Museum, Charleston, South Carolina.

Zierden, Martha, Lesley M. Drucker, and Jeanne Calhoun

1986 *Home Upriver: Rural Life on Daniel's Island, Berkeley County, South Carolina.* Carolina Archaeological Services and The Charleston Museum, Columbia. Report submitted to the South Carolina Department of Highways and Public Transportation, Columbia.

Zierden, Martha, Suzanne Buckley, Jeanne Calhoun, and Debi Hacker

1987 *Georgian Opulence: Archaeological Investigations of the Gibbes House.* Archaeological Contributions 12. The Charleston Museum, Charleston, South Carolina.

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