"With Credit and Honour:" Archaeological Investigations at the Plantation of John Whitesides, A Small Planter of Christ Church Parish, Charleston County, South Carolina
"WITH CREDIT AND HONOUR:"
ARCHAEOLOGICAL INVESTIGATIONS AT THE
PLANTATION OF JOHN WHITESIDES, A SMALL PLANTER
OF CHRIST CHURCH PARISH, CHARLESTON COUNTY,
SOUTH CAROLINA

Research Series 48

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A Description of Charles Town in 1769

Black and white all mix'd together,
Inconstant, strange, unhealthful weather
Burning heat and chilling cold
Dangerous both to young and old
Boisterous winds and heavy rains
Fevers and rheumatic pains
Agues plenty without doubt
Sores, boils, the prickling heat and gout
Musquitoes on skin make blotches
Centipedes and large cock-roaches
Frightful creatures in the waters
Porpoises, sharks and alligators
Houses built on barren land
No lamps or lights, but streets of sand
Pleasant walks, if you can find 'em
Scandalous tongues, if any mind 'em
The markets dear and little money
Large potatoes, sweet as honey
Water bad, past all drinking
Men and women without thinking
Every thing at a high price
But rum, hominy and rice
Many a widow not unwilling
Many a beau not worth a shilling
Many a bargain, if you strike it,
This is Charles-town, how do you like it.

-- Capt. Martin, captain of a Man of War
South Caroliniana Library
ABSTRACT

Christ Church Parish was situated just northeast of Charleston, South Carolina. This area was characterized by infertile soils, large areas of sloughs with poor drainage, and marsh frontage. Although close to Charleston, and consequently settled early, the soils of Christ Church were generally not well suited to plantation agriculture and holdings were small. In the late eighteenth century, for example, Christ Church had the lowest value of estates of all the parishes and tied with Prince Frederick’s Parish for the lowest average number of slaves held. Christ Church was an enclave of small planters — yeoman farmers by no means, but still far removed from the grand planters of St. George, St. James Goose Creek, and Prince William’s parishes.

This study describes the historical and archaeological examination of one of these small plantations in Christ Church, owned early by Thomas Whitesides and, in 1762, willed to his son, John Whitesides. John Whitesides apparently held the tract into the mid-antebellum, although there is relatively little historical evidence of his activities at the tract.

The rise of gentility and the refinement of the planter class which began in the early eighteenth century ran along a continuum. Just as ceramics range along a smooth-rough continuum from the finest porcelain to the crude earthenwares and colono wares, so too did genteel culture and those practicing it. The Whitesides were not yeoman farmers, with estates of only a few hundred dollars, although their wealth was limited. In the early antebellum John owned around 237 acres and only 15 slaves, while his brother, Moses, owned 309 acres, 30 slaves, and a lot in town.

Although only the main house was examined in this study, the range of artifacts, including ceramics and personal items, provides an exceptional view of a small planter’s life. An assemblage dominated by kitchen items, a simple house, and a diet of pork and fish seem to characterize the Whitesides. The ceramic assemblage includes primarily plain or simply decorated vessels, most of which were bowls.

Also examined in some detail is the small collection of Colonos present in the main settlement. Almost all of these best fit the description of River Burnished pottery, suggesting that they may have been produced by Native Americans, rather than the African American slaves. While the current study does not attempt to demonstrate the origin of the pottery, it does provide additional information concerning the development of a Colonos ware typology.

An examination of both pollen and phytolith data reveal the importance of these techniques to a complete understanding of the ecology and agricultural development of plantation society.

This study focuses attention on the large number of small planters who made up the majority of free land holders in the eighteenth century. It reveals that our understanding of plantations and planters has been based on the wealthy elite of the eighteenth century and urges exploration of the more common planter.
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INTRODUCTION

Development of the Project

In late 1992 Chicora Foundation, Inc. conducted an intensive archaeological survey of what was then known as Seaside Farms (Adams and Trinkley 1993). Situated south of U.S. 17 and Rifle Range Road, just northeast of City of Charleston and the Town of Mount Pleasant, the project area incorporated about 400 acres (Figure 1). The property was being considered for development as single family home sites by The Beach Company and the investigations were conducted to satisfy the requirements of the South Carolina Coastal Council (now the Office of Ocean and Coastal Resource Management within the South Carolina Department of Health and Environmental Control).

The study found two prehistoric sites (38CH1466 and 38CH1474) and three historic sites (38CH1471, 38CH1473, and 38CH1477) eligible for inclusion on the National Register of Historic Places and one prehistoric site (38CH1475) potentially eligible for inclusion on the National Register. The historic sites included the main settlement for John Whitesides (38CH1471), the slave settlement for John Whitesides (38CH1473) and the slave settlement for Moses Whitesides (38CH1477).

This survey produced relatively few remains from the main settlement at 38CH1471, likely the result of the dense vegetation which precluded a great deal of close interval testing. Twenty-eight shovel tests were excavated, with four yielding cultural remains, which defined the site size as about 250 feet in diameter. In addition, a 4-foot square unit was also excavated, which produced small quantities of Notingham and white salt glazed stoneware, creamware, pearlware, burnt earthenwares, Colono wares, “black” bottle glass, clear bottle glass, window glass, wrought nails, a gunflint, kaolin pipe stems bowl fragments, and animal bone. The mean ceramic date of the collection was found to be 1788.7. The soils were found to be Scranton loamy fine sands, with about 0.9 foot of dark brown (10YR3/3) sand overlying a brown (10YR4/3) sandy subsoil.

Fifteen shovel tests at 25 and 50 foot intervals were excavated at 38CH1473, with 10 producing cultural materials. A 4-foot square test unit was excavated at this site as well. A total of 132 artifacts were collected, including white salt glazed stoneware, yellow combed slipware, creamware, pearlware, lead glazed redware, burnt earthenwares, Colono wares, “black” bottle glass, light green bottle glass, window glass, wrought nails, a gunflint, kaolin pipe stems bowl fragments, and animal bone. The mean ceramic date of the collection was found to be 1752.3, somewhat earlier than the main settlement. The soils were classified as Rutledge loamy fine sands and the excavation unit produced a foot of dark brown (10YR3/3) sandy loam overlying a brown (10YR4/3) sandy subsoil. This site was estimated to cover an area about 300 feet north-south by 250 feet east-west (Adams and Trinkley 1993:64).

The main settlement for Moses Whitesides, John’s brother, was heavily damaged during the construction of the Isle of Palms Connector and no longer exhibited sufficient integrity to warrant its recommendation as eligible (Adams and Trinkley 1993:77) (Figure 2). These assessments were concurred with by the South Carolina State Historic Preservation Office (SHPO) and the planning for the development continued.

Eventually a portion of the property containing one of the historic sites, 38CH1473 (the John Whitesides slave settlement), was subdivided off and sold to the Lutheran Homes of South Carolina. Consequently, this site was not covered in a Memorandum of Agreement between the SHPO, the Coastal Council, and The Beach Company. Meanwhile the first phase of the
Figure 1. Seaside Plantation in the Christ Church area, shown in relationship to Charleston.
Figure 2. Location of archaeological sites associated with the Whitesides occupation in the study area.
development was initiated and The Beach Company requested that Chicora Foundation conduct archaeological data recovery excavations at the John Whitesides main settlement, 38CH1471. A proposal was approved by The Beach Company on September 29, 1994 and a copy was submitted to the SHPO for comment. None were received and field investigations were begun on January 23, 1995.

Since the project area was densely wooded at the time of the survey, several years earlier, the first task was to relocate 38CH1471 using ground features, distances and bearings, and limited shovel testing. During this effort, conducted within the first several days of the project, it was discovered that site 38CH1473 was being impacted by construction associated with the Lutheran Homes of South Carolina. It was determined that the site originally incorporated about 0.29 acres, of which only about 0.24 acres physically remained after construction damage was discovered. The northwest edge of the site, accounting for the 0.05 acre, was destroyed by the construction activities, primarily through the excavation a large canal, about 40 feet in width and upwards of 5 feet in depth. From the canal southeastward for about 50 feet the site area had been cleared, grubbed, and graded to about 0.8 foot below the pre-existing grade, resulting in the effective loss of another 0.14 acre of the site. In this portion of 38CH1473, on average only 0.1 foot of A or Ap horizon was left intact. Consequently, only about 34.5% of the site was left intact at the time our field crew made the discovery. The remainder of the site either had been completely destroyed or else was so damaged to be able to contribute only feature data through stripping. All of the overlying artifacts, necessary for dating and cultural context, were removed. The nature of this impact is shown in Figures 3 and 4.

At the same time the damage to 38CH1473 was identified, a new site was also found, also on the Lutheran Homes property. This new site, recorded as 38CH1563, had its boundaries established through a series of four transects with 23 shovel tests excavated at 25 foot intervals (Figure 5). The artifacts were found to be consistent in age with those from 38CH1471 and 38CH1473. A mean ceramic date of 1753.1 was obtained (Table 1). In terms of status, they most closely resembled those from the slave settlement, 38CH1471. The site was found to be about 0.54 acres in size, although about 0.3 acres had been disturbed by clearing with grubbing damage to 0.3 foot. In addition, about 0.11 acre of the site had approximately 0.8 foot of soil removed, with only patches of the original A or Ap horizon left intact. Given the damage to the site, the area with greatest disturbance (on the eastern edge of the site, measuring about 0.11 acre) was stripped to the subsoil to determine the presence of features. With this rather minimal exercise, four posts were found and plotted (Figure 6). Although no patterns, or large features, were identified, this area is on the edge of the site and relatively little time was spent carefully cleaning the stripped area (the goal being simply to determine whether features might be present).

In spite of the damage to the two sites, it was our opinion that they were too significant to dismiss. In order to explore the possibility that information concerning slave lifeways might still be present, we recommended that 38CH1473 be subjected to combined block excavations and stripping and that 38CH1563 be subjected to close interval testing, metal detecting, block excavations, and stripping. We cautioned that both sites likely had a low density of artifacts, probably since they

<table>
<thead>
<tr>
<th>Ceramic</th>
<th>Mean Date</th>
<th>fi</th>
<th>x_i</th>
<th>fi x_i</th>
</tr>
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<tbody>
<tr>
<td>Overglazed porcelain</td>
<td>1730</td>
<td>1</td>
<td>1730</td>
<td></td>
</tr>
<tr>
<td>Underglazed porcelain</td>
<td>1730</td>
<td>5</td>
<td>8650</td>
<td></td>
</tr>
<tr>
<td>Westerwald</td>
<td>1738</td>
<td>6</td>
<td>10428</td>
<td></td>
</tr>
<tr>
<td>White SG SW</td>
<td>1758</td>
<td>2</td>
<td>3516</td>
<td></td>
</tr>
<tr>
<td>Lead glazed slipware</td>
<td>1733</td>
<td>4</td>
<td>6932</td>
<td></td>
</tr>
<tr>
<td>Jackfield</td>
<td>1760</td>
<td>1</td>
<td>1760</td>
<td></td>
</tr>
<tr>
<td>Decorated delft</td>
<td>1750</td>
<td>3</td>
<td>5250</td>
<td></td>
</tr>
<tr>
<td>Plain delft</td>
<td>1720</td>
<td>2</td>
<td>3440</td>
<td></td>
</tr>
<tr>
<td>Creamware, undec.</td>
<td>1791</td>
<td>7</td>
<td>12537</td>
<td></td>
</tr>
<tr>
<td>Pearlware, edged</td>
<td>1805</td>
<td>1</td>
<td>1805</td>
<td></td>
</tr>
<tr>
<td>undecorated</td>
<td>1805</td>
<td>1</td>
<td>1805</td>
<td></td>
</tr>
</tbody>
</table>

Mean Date = 57853 / 33 = 1753.1
Figure 3. Plan view of 38CH1473 after impacted by construction.

Figure 4. View of damage to 38CH1473 discovered in January 1995.
Figure 5. Plan view of 38CH1563, discovered during efforts to re-identify 38CH1471.

Figure 6. Site 38CH1563 showing damage when found in late January 1995.
reflected low status slave sites. Our concern was that artifact quantity might be mistakenly equated with significance. In both cases, we believed that significance was based on the reasonable hope that architectural features will be present, in conjunction with the known artifact assemblage. In other words, a combined approach of block excavation and mechanical stripping was necessary to recover the significant data from the sites. These recommendations were concurred with by the SHPO.

The Lutheran Homes eventually contracted with a colleague, Brockington and Associates, for the data recovery of at least one of these sites. A management summary of work at 38CH1563 (Anonymous 1995) was provided by Brockington and Associates. This document reveals that considerable additional construction related damage occurred after the site was identified and flagged in the field (on January 31, 1995) and before the field work (which began on February 23, 1995). This, unfortunately, prevented the use of the grid which we established during the initial survey of the site. The Brockington and Associates study included the excavation of 73 50-em. units, six 1-m squares, and one 1 by 2 meter square (several of which were not screened). In addition, four site areas were mechanically stripped, representing about 20% of the site. Features recovered from the site included two probable structures, a well, a post hole, and two small pits. We have no additional information concerning 38CH1563 and no information concerning 38CH1473.

Data recovery excavations continued at 38CH1471, the John Whitesides main settlement, from January 23 to February 8, 1995. A total of 509 person hours were devoted to the work, which included the primary excavation of 1,062.5 cubic feet of Zone 1 soils, opening a total of 925 square feet. A management summary of these investigations was produced in February 1995 and forwarded to the SHPO in fulfillment of the Coastal Council MOA on February 22, 1995. No comments were received. This final report on the excavations at 38CH1471 fulfills the requirements of The Beach Company to this particular archaeological site.

Research Strategy and Questions

Site 38CH1471 was recommended eligible for inclusion on the National Register for its potential contribution to our understanding of small planters in Christ Church Parish. Much of the historical, and archaeological, research has focused on the wealthy planters. In general, historical research has explored the gentility or planter elite — those who estates of over (and frequently well over) £1000.

Perhaps the most notable example of this historiography is A New World Gentry: The Making of a Merchant and Planter Class in South Carolina, 1670-1770 by Richard Waterhouse (1989), while Peter Coclanis’ (1989) The Shadow of a Dream: Economic Life and Death in the South Carolina Low Country, 1670-1920 explores how illusionary much of this wealth actually was. Kevin Sweeney explores the complex inter-relationships which formed the gentile lifeways of the elite:

Their houses became embodiments of power, and goods that had once been exotic and unavailable became essential parts of genteel lifestyles and reinforced the claims of social status and political leadership of the colonies’ essentially bourgeois upper classes (Sweeney 1994:2).

Only recently have the yeoman farmers of the low country been examined in any detail. Stephanie McCurry (1995) begins this process with Masters of Small Worlds, which explores the ties which bound both gentry and yeomanry together. But, in general, these small farmers are very hard to see historically — they left little record of their existence. Nearly three decades ago Aubrey Land (1989) remarked:

By any standards their lives were drab. Their houses more nearly resembled shacks than the mansion of tradition, and almost all of them have disappeared. Their stocks of worldly goods
comprised the bare essentials of daily living. The drama of marketplace and political forum passed them by (Land 1989:3).

Between these two worlds, however, lies that of the small planter. Land suggests the most obvious distinction might be the value of property with these small planters having estates ranging from perhaps £100 to £1,000. Neither poor nor rich, he notes they were, "families of substance—a description that carried definite meaning to the eighteenth century mind" (Land 1989:3). At the same time he warns us not to think of these three broadly defined groups as "classes," since indeed they were not. Richard Bushman (1992) insists that this new gentility most often was adopted as bits and pieces. He notes that, "gentility flecked lives without coloring them." Perhaps even more to the point is Sweeny's observation that competitive consumption and the rise of consumer goods in the late eighteenth century "could blur rather than strengthen class distinctions" as previously expensive, rare, and specialized goods became more readily available to all classes (Sweeny 1994:29).

Both Sweeny and Bushman agree that by the end of the eighteenth century and beginning of the nineteenth, the genteel life had spread dramatically to what might be considered the middle class—including the modest (or small) planters, as well as merchants and professionals. Bushman, for example, observes that:

by the middle of the nineteenth century, vernacular gentility had become the possession of the American middle class. All who aspired to simple respectability had to embody the marks of the genteel style in their persons and their houses (Bushman 1992:xiii).

Far earlier, into the late seventeenth and early eighteenth centuries, the importance of the small planter was recognized by such promoters of the Carolina Colony as Thomas Nairne and John Norris. While clearly encouraging those with £1,000 to invest, sufficient to purchase 1,000 acres and 30 slaves, and resulting in an annual return of at least £300 (Greene 1989:25-26), they did not ignore those of more modest means. Nairne, for example, promised that for only an initial investment of £100, a newcomer could live in "Comfort and Decency." With even this small sum a small planter could purchase at least 200 acres of land, two black slaves, a range of stock, and tools and supplies. Such individuals could clear and plant enough land the first year to be self-sufficient. In short order such an individual could "get a competent Estate, and live very handsomely" (Nairne, quoted in Greene 1980:11). Norris described a similar situation, explaining that such an individual could acquire "great quantities of Land as well as Stock" and many slaves who would in turn plant rice and make naval stores to the "great Profit and Advantage" of their owners. These small farmers, "in Time, [would] thereby become able to build fine Brick Houses" and otherwise maintain their families "with Credit and Honour" (quoted in Greene 1989:11).

Small planters, therefore, were expected to aspire to greater heights and should be able to achieve the genteel life in Carolina. As Norris put it, to "live...Plentiful, and get Riches withal to Admiration" (quoted in Green 1989:14).

As both Waterhouse (1989:196) and Coclanis (1989:56-59) discovered:

the dominant impulse in South Carolina was a material one, involving the ruthless exploitation of natural resources, native inhabitants, and imported slaves (Waterhouse 1989:196).

Yet, the road to wealth and gentility was more open in some parishes than others. The most wealthy (and most genteel) planters became socially and politically entrenched in St. Andrew's, St. John's Berkeley, St. James' Goose Creek, St. Thomas and St. Dennis, St. George's, and St. Stephen's parishes.

Waterhouse uses data concerning colonial
assemblymen (Table 2) to reveal the stark differences between the various parishes. St. George's and St. John's Berkeley elected assemblymen with estates valued at £8691 to £6737 sterling, and average slave holdings of 137 and 107, respectively. In contrast, Christ Church Parish elected assemblymen with an average wealth of only £2009 and owning only 37 slaves.

These economic differences can be seen in the politics of the parishes, even as late as the 1832 nullification vote. While nullifiers easily won in parishes such as St. Bartholomew's, St. Paul's, St. Andrew's, St. John's Berkeley, and St. Stephen's, Christ Church voted overwhelmingly for the Union (60.9% to 39.1%) (McCurry 1995:273).

As Waterhouse (1989:176) observes, Christ Church was never a political stronghold for the planter elite. He attributes this to the "inferior soil and general poverty" of the area. Indeed there is support for such an observation (South Carolina Department of Archives and History, B.P.R.O. Transcripts of Records Relating to South Carolina, vol. ix, pp. 22-23).

Even into the 1850s and 1860s Christ Church exhibited stunted economic growth, never fully participating in either rice or cotton cultivation. Instead, as Michael Scardaville observes (Brockington et al. 1985:35) Christ Church Parish created its own niche by supplying nearby Charleston with beef, vegetables, and orchard products — an early effort at truck farming.

The planters in Christ Church were therefore different — politically, economically, and socially. They were masters of smaller acreage, owners of fewer slaves, and less focused on the cash crops of monoculture. As a result, they were less wealthy and participated less aggressively in both colonial and antebellum politics. Nevertheless, they were still bound together by the web of social interaction and marriage. The resulting small planter society — its people, its goods, and its way of life — is reflected in Christ Church.

A considerable amount of plantation archaeology has focused on the nineteenth century or antebellum plantations, especially on the African-American slaves, helping to give a voice to their muted existence. Less common are archaeological investigations of eighteenth century slave life. Most notable are those of Yaughan and Curriboo (Wheaton et al. 1983), Lesesne Plantation (Zierden et al. 1986), Wappoo Plantation (Gardner and Poplin 1992), Stanyarne Plantation (Adams 1994), and the Wando River Lexington Plantation (Wayne and Dickinson 1990).

Of these, only the last, focuses on the particular situation of slaves to Christ Church masters and even here the plantation offers a somewhat unusual situation, since it was focused not only on growing cotton (in the uplands) and rice (along the Wando), but also on brick production using clays native to this area of the
When archaeological research has focused on the plantation owners, it again seems to concentrate on the elite. Examples include the examinations of the Broom Hall and Crow field plantations in St. James' Goose Creek (Trinkley et al. 1992 and Trinkley 1995). Other studies of high status plantations include Archdale (Zierden et al. 1985), Drayton Hall (Lewis 1978; Wheaton 1989), and Green Grove (Carrillo 1980).

Examinations of small planters in the eighteenth century, while typically not explicitly articulated as such, might include the examination of the Elfe Plantation on Daniels Island (Trinkley 1985). This work revealed relatively low status ceramics with no clear evidence of structural remains. At least some characteristics of this assemblage may be explained by Elfe's Charleston lifestyle and primary occupation as a craftsman. The plantation was primarily used by his widow after his death.

Martha Zierden and her colleagues also explored portions of the eighteenth century Fairbanks Plantation on Daniels Island, revealing that the planter and slaves apparently lived in close proximity, at least early during the site's history (Zierden et al. 1986). While additional yard and trash features were encountered, the work was able to provide relatively little information on the lifeways of the site's early owner.

Early remains from a small planter were also reported by Kennedy and Roberts (1993) from excavations at 38BU1289 in Prince William's Parish and somewhat later remains are reported from another Prince William's plantation (Adams et al. 1995).

Table 3.
Comparison of the Artifact Patterns from the Elfe Plantation with the Baxter Settlement (adapted from Wayne and Dickinson 1990:11-15)

<table>
<thead>
<tr>
<th>Artifact Group</th>
<th>Elfe</th>
<th>Baxter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kitchen</td>
<td>85.2</td>
<td>88.8</td>
</tr>
<tr>
<td>Architecture</td>
<td>8.6</td>
<td>8.6</td>
</tr>
<tr>
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<tr>
<td>Activities</td>
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One of the very few accounts of a Christ Church owner's site in the eighteenth century is provided by Lucy Wayne and Martin F. Dickinson (1990:11-1 — 11-15). Mean ceramic dates range from 1737 to 1755. Although Wayne and Dickinson note that Baxter may have practiced subsistence farming, he was hardly a planter, relying on his preaching to meet his worldly needs. Curiously, the artifact pattern identified at the site is very similar to that identified from the Elfe Plantation (Table 3).

While the small planters and yeomanry made up the vast majority of the eighteenth and nineteenth century population, they are rarely represented in the archaeological literature. This may be at least partially the result of biases inherent in the discovery and evaluation of archaeological resources — small sites are less easily observed and may be more often evaluated as not worthy of additional research. It may also be a function of where the vast majority of archaeological research has taken place — on large sea islands opened for development which historically supported the largest cotton and rice planters. Regardless, there has been no examination of Christ Church planters — the "South Carolina Establishment" referred to by Anne King Gregorie (1961).

Based on this overview of the historical and archaeological resources available, five specific research questions were proposed at the conclusion of the survey:

- The nature of Euro-American architecture
INTRODUCTION

at small plantations during the early to mid-eighteenth century. Previous research has documented the changing styles of architecture from the eighteenth into the nineteenth century (see, for example, Adams 1990 and Brooker 1990). Many of the changes observed by Colin Brooker, and earlier authorities such as Samuel Gaillard Stoney (1989), are likely efforts to adopt to the Carolina setting, while still other changes represent immediate needs.

Stoney, for example, offers one of the best sources of information about plantation main houses, commenting:

In general there are several seemingly notable things about the Low Country plantation houses, among them their planning. Before the Revolution, most particularly for the length of the territory we cover, and from the opening years of the eighteenth century almost to its ending, one plan was used over and over again with only a slight variation. In point of time we find it first at Mulberry, where, if you will imagine away the towers, you have the scheme that is repeated at Hanover, Brick House, Fenwick Hall, Crowfield, Limerick, and Lewisfield; at Fairbanks and Hampton in their final condition; and after the Revolution at Eutaw. With its unequal division of the front of a house, and the central stair hall, it is also the plan of the upper story of the Charleston Double Houses — the scheme of most of the finer houses of the 1750's and '60's not found in the city (Stoney 1989:44).

Stoney, however, fails to distinguish between the high status brick houses of the elite planters and the lower status homes of the small planter — probably because so few of the latter existed.

Carson et al (1988) suggest that in the Chesapeake region the plantation main house development consisted of "hovel, house, home," attempting to suggest a continuum from the initial modest simple home through large, expensive brick mansion. Unfortunately, little more is known about the early stages of plantation architecture today than when Stoney was writing in the 1930s.

The investigation of 38CH1471 was thought to offer an opportunity to explore the architecture of a small plantation. Not only was the plantation probably engaged in a different form of economic activity than the cash crop plantations which focused on rice and cotton, but the archaeological remains are early, offering a glimpse of what a small planter might find fitting.

- The effects of the economic base of cattle ranching on owner lifeways. One question which reappears throughout our study of Christ Church is how did the lives of owners engaged in different economic pursuits differ? Just as the architecture was likely affected by the plantation economics, so too would have been the lifeways of the owners and their families.

Many of the early settlers and would-be planters engaged in cattle ranching, allowing cattle to free range, foraging for food. Hewatt remarked that:

cattle increased in an amazing manner, and thrived exceedingly well in their forest. Having little winter, the woods furnished them with both shelter and provisions all the year; neither houses nor attendants were provided for them, but each planter's cattle, distinguished by his mark, every where grazed with freedom (Hewatt 1971:1:95 [1779]).

Edmund Ruffin was less gentle, remarking that often the cattle "cannot find enough food in the pine woods & bays or swamps to keep them alive" (Mathew 1992:210). In July or August they would be gathered up and driven into Charleston to be sold. In spite of the problems, Ruffin
suggests that at least some managed to obtain a 15% return on their investment, largely he explains, since the land being used was so worthless that it sold for almost nothing. It is likely that this return, on so little capital investment, encouraged many small planters throughout the eighteenth century, to become ranchers.

Contrary to Ruffin, Rebecca Starr has attempted to demonstrate the economic motive encouraging the transition from ranching to indigo (and, we would guess, rice). She suggests that indigo production on a typical (ca. 625 acre plantation with perhaps 30 acres in indigo) might result in the gross return of £3150 about 1750. In comparison, she suggests an annual return of perhaps £500 for cattle production (Starr 1984). It is this difference she contends, that spurred cattle ranchers to quickly shift into indigo. Of course, this scenario makes several assumptions — for example, Starr has not factored in the differences in costs, instead she offers only gross, not net, returns. It also seems that she ignores the likelihood that almost all successful planters incorporated a range of pursuits, when they were able. Coelannis (1989:58), too, suggests that ranching, as an early land-intensive activity similar to extraction and plunder, gradually gave way to economic activities which required greater inputs of labor and capital. For the Christ Church planters, constrained by small holdings and poor soils, but in close proximity to Charleston, there may have been relatively few options. This shift may never have occurred.

Most archaeological research has examined these later developments of rice and cotton. The research at 38CH1471 was thought to allow an opportunity to explore an even earlier aspect of the plantation’s Marxian accumulation.

- **Euro-American foodways during the colonial period.** The extensive research of Elizabeth Reitz (1987) has begun to offer a distinction between the foodways of rural and urban settings. In general, she suggests that urban residents used more domestic species, especially domesticated birds. As a consequence, wild animals are found to a lesser extent at urban sites and fewer wild species are recovered.

Research at 38CH1471 might help place the site into the continuum from rural to urban. We anticipated that exploration of small plantations, in close proximity to Charleston, but still independent of its social and economic sphere, would likely provide different reconstructions.

- **The relationship of such small plantation settlements to the close urban setting of Charleston.** Small plantation owners, focused on ranching in the early eighteenth century, may have had relatively little contact with Charleston. It may be that the urban-rural dichotomy is especially strong at such plantations, both because of their early period of occupation and also because of their setting. On the other hand, the very (posited) function of the plantation as a cattle ranch assumes very close ties with the urban Charleston market, which may actually increase opportunities for economic and social interaction. This is a very broad topic and we recognized that we might only begin to explore the issue. Very much to the point are the comments offered by Zierden et al. (1986:7-98) noting that archaeologists are only beginning to discern subtle differences between rural and urban settings. The full extent of these differences will not be known, much less understood, until a variety of sites are explored.

- **The nature of landscape altering activities on the plantation.** Archaeologists are increasingly aware that the activities on the plantation affected the broader landscape. Roads were built, fences were maintained, fields were subdivided, clusters of structures with functional if not aesthetic meaning were developed — all affecting, organizing, and seeking to control the landscape. Often the small buildings, such as the kitchen, dairy, or office, may tell us as much about the plantation owner as the main house. Taken together, the plantation complex can help us better understand not only how this owner lived, but also how others like him attempted to control the landscape in order to present a particular world view.
INTRODUCTION

The Natural Setting

Physiography

Charleston County is located in the lower Atlantic Coastal Plain of South Carolina and is bounded to the east by the Atlantic Ocean and a series of marsh, barrier, and sea islands (Mathews et al. 1980:133). Elevations in the County range from sea level to about 70 feet above mean sea level (AMSL). The mainland topography, which consists of subtle ridge and bay undulations, is characteristic of beach ridge plains.

Seven major drainages are found in Charleston County. Four of these, the Wando, Ashley, Stono, and North Edisto, are dominated by tidal flows and are saline. The Wando forms a portion of the County's the interior boundary northeast of Charleston, while the Ashley flows west of the peninsular city of Charleston. The three with significant freshwater flow are the Santee, which forms the northern boundary of the County; the South Edisto, which forms the southern boundary; and the Cooper, which bisects the County.

Because of the low topography, many broad, low gradient interior drains are present as either extensions of the tidal rivers or as flooded bays and swales. Extensions include Hobcaw, Rathall, Foster, Horlbeck, Boone Hall, Wagner, Toomer, and Allston creeks which flow west, north, or northeast into the Wando (see Figure 1). Flooded bays and swales are equally common in the project area, typically being shown on historic plats as "galls" or "swamps." While these area often exhibit productive soil, they must be drained and the drains kept open — both were laborious and unhealthy tasks assigned to African American slaves.

The project area is situated just 8 miles from Charleston in what historically was known as Christ Church Parish. It is protected from the Atlantic Ocean by Dewees Island, the Isle of Palms, as well as a host of small marsh islands and large bays. Behind this marsh fringe is what historically has been called the "Sea Shore" — an area of mud and sand beaches which gradually rise to relatively poorly drained interior "high lands."

Elevations in the project area range from about 5 to 15 feet AMSL, with most of the property falling at or below 10 feet AMSL. There is a gradual slope toward the marsh on the southern edge of the property, while elsewhere the tract is nearly flat with numerous wetlands and low, swampy areas. During the survey of the Seaside Farms tract numerous ditches were encountered and many were likely antebellum in origin — evidence of efforts to drain and make productive the otherwise low, unhealthy "sea shore" lands.

Flooding, however, was not limited to ground water and rain water on the interior portions of the plantation. Coastal flooding was also a serious concern. A berm or dike found along the marsh front dates from at least the late eighteenth century, based on its presence on early plats, and was almost certainly designed to protect the fields and buildings from excessively high tides and the occasional northeastern storm.

Geology and Soils

Coastal Plain geological formations are unconsolidated sedimentary deposits of very recent age, primarily Pleistocene and Holocene. They are found lying unconformably on more ancient crystalline rocks which are rarely exposed by nature (Cooke 1936; Miller 1971:74).

The soils formed from these Holocene and Pleistocene soils were typically deposited in various stages of coastal submergence. Soil formation is affected by the parent material (primarily sands and clays), the temperate climate (discussed later), the various soil organisms, the flat topography of the area, and time.

Mainland soils are primarily Pleistocene in age and tend to have more distinct horizons and greater diversity than the younger soils found ion the sea and barrier islands. Sandy to loamy soils predominate in the level to gently sloping mainland areas. The adjacent tidal marsh soils are Holocene in age and consist of fine sands, clay, and organic
matter deposited over older Pleistocene sands. These soils are frequently covered by up to 2 feet of saltwater during high tides. Historically marsh soils have been used as compost or fertilizer for a variety of crops, including cotton (Hammond 1884:510) and Allston mentions that the sandy soil of the coastal region, "bears well the admixture of salt and marsh mud with the compost" (Allston 1854:13).

As the colony was being settled and promoted, the soils were described simply. John Norris told his readers in 1712:

the Soil is generally Sandy, but of differing Colours, under which, Two or Three Foot Deep, is Clay of which good Bricks are made (Greene 1989:89).

In the last quarter of the eighteenth century, William DeBrahm's Report provides little more information, stating only that, "the Land near the Sea Coast is in general of a very sandy Soil" and noting that this soil "along the Coast has as yet not been able to invite the industrious to reap Benefit of its Capacity" (DeVorsey 1971:72).

By the nineteenth century, Robert Mills in his Statistics of South Carolina provides slightly more information concerning the current understanding of the soils:

Lands here [in Charleston District] may be viewed under six divisions in respect to quality; 1st, Tide swamp; 2d, Inland swamp; 3d, High river swamp (or low ground, commonly called second low grounds); 4th, Salt Marsh; 5th, Oak and hickory high lands; and 6th, Pine barren. The tide and inland swamps are peculiarly adapted to the culture of rice and hemp; they are very valuable, and will frequently sell for $100 an acre; in some instances for more. The high river swamps are well calculated for raising hemp, indigo, corn, and cotton; and where secured from freshets, are equally valuable with the tide lands. The oak and hickory highlands are well suited for corn and provisions, also for indigo and cotton. The value of these may be stated at from ten to twenty dollars per acre. The pine barrens are not worth more than one dollar an acre (Mills 1972:442-443 [1826]).

Even the detail of this account, however, fails to provide a very clear picture of the soils in Christ Church where the sands were low and commonly interspersed with galls or small inland swamps. Here the property, even the supposedly good hickory and oak lands, were poorly drained.

A number of period accounts discuss the importance of soil drainage. Seabrook, for example, explained in 1848:

subsoil so close as to be impervious to water; so that the excess of the rains of winter cannot sink. Nor can it flow off, because of the level surface . . . . The land thereby is kept thoroughly water-soaked until late in the spring. The long continued wetness is favorable only to growth of coarse and sour grasses and broom sedge . . . acid and antiseptic qualities of the soil . . . sponge-like power to absorb and retain water . . . is barren, (for useful crops) from two causes — excessive wetness and great acidity. The remedies required are also two; and neither alone will be of the least useful effect, with the other also. Draining must remove the wetness — calcareous manures the acidity (Seabrook 1848:37).

A somewhat similar account was still be provided by Hammond in the postbellum:
INTRODUCTION

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

The number of drainages still found on the Seaside Farms tract in the late twentieth century offers mute testimony to the problems planters encountered on these soils and their efforts to make the land productive. These problems have also been briefly mentioned by Hilliard, who comments that soils in the region were, "seldom well enough drained for most crops" (Hilliard 1984:11).

If the soils from the John and Moses Whitesides tracts are examined (see Figure 2), only four series are encountered: Rutlege, Scranton, Chipley, and tidal marsh. Of these, only the Chipley soils, which account for only 8.9% of the two tracts, are moderately well drained. The remainder of the soils range from wet or very poorly drained to somewhat poorly drained.

These Chipley soils, depending on their slope and location may actually range from moderately well drained to somewhat poorly drained. They are sandy throughout, having a very dark gray loamy fine sand surface layer overlying a yellowish-brown loamy fine sand which gets lighter with depth. The inherent fertility of these soils is low and permeability may be impeded by the a water table which may range from 2 to 5 feet below the surface (Miller 1971:10-11, 54).

The Rutlege soils account for about 7.7% of the two tracts and are found in nearly level to depressional areas. They are poorly drained to very poorly drained and the seasonal high water table is frequently within a foot of the surface. The typical profile reveals a black to very dark brown loamy fine sand to about 1.8 feet, providing clear evidence of chemical reduction. Surface runoff is very slow and water is frequently ponded on these soils (Miller 1971:24, 56). Historically they were associated with the galls or sloughs which ran through the tract and were used for the cultivation of interior swamp rice.

The tidal marsh soils, which account for 4.4% of the two plantations, represent a tidal flat which extend into the area. These broad, level flats are typically covered by 0.4 to 2 feet of salt water at high tide (Miller 1971:28). Today a portion of this area has been impounded to create a small lake.

The most common soils, accounting for 79.0% of the Whitesides' plantations are Scranton soils. These consist of somewhat poorly drained soils which are sandy throughout. The typical profile reveals about 0.8 foot of black loamy fine sand overlying a dark grayish-brown loamy fine sand to a depth of about 2 feet. Like the Rutledge soils, the Scranton Series may have a seasonal high water table within 1 to 2 feet of the surface, although they are not as prone to flooding and poor drainage is most notable during heavy rains. Regardless, the inherent fertility is low and the soils must be drained for productive agriculture (Miller 1971:26, 56).

If the plats of the Whitesides plantations are examined (see the following section), numerous references will be found to bushy or open ponds and galls. Trees were noted as pines, water oaks, gum, bay, and red cedar. Only occasional references are made to trees found on drier soils, such as live oak or magnolia. Tracts or sub-parcels on the plantations are noted as "mixed flat land," "flat land in places low, mixed timber," and "pine land."

Taken together, the current information and the historical documentation reveal low, poorly drained soils with only limited agricultural productivity. The impact of this on the agriculture and wealth of the Whitesides will be discussed in greater detail in the following section.
Climate

The weather was all important in Colonial society, affecting the crops which in turn affected trade and wealth. Just as importantly, the Carolina climate affected, usually for the worse, the planter’s health. Greene notes that:

the prospects of obtaining wealth with ease... meant little in a menacing environment, and both Nairne and Norris took pains to minimize the unpleasant and dangerous features that already had combined to give South Carolina an ambiguous reputation. They had to admit that throughout the summer temperatures were "indeed troublesome to Strangers." But they contended that settlers had quickly found satisfactory remedies in the form of "open airy Rooms, Arbours and Summer-houses" constructed in shady groves and frequent cool baths and insisted the discomfitures of the summers were more than offset by the agreeableness of the rest of the seasons. [They also suggested] that ill-health was largely limited to newcomers before they were seasoned to the climate, to people who insisted in living in low marshy ground, and to those who were excessive and careless in their eating, drinking, and personal habits. "If temperate," they asserted, those who lived on "dry healthy Land," were "generally very healthful" (Greene 1989:16).

While making for good public relations, the reality was far different. Roy Merrens and George Terry (1989) found that in Christ Church Parish, 86% of all those whose births and deaths are recorded in the parish register, died before the age of twenty. Equally frightening statistics have been compiled by John Duffy (1952), who found that the average European could expect to live to the age of about 30 in South Carolina during the first quarter of the eighteenth century. Yellow fever, smallpox, diphtheria, scarlet fever, malaria, dysentery all were at home in Carolina. Using the Society for the Propagation of the Gospel (SPG) records, Duffy found that from 1700 to 1750, 38% of the missionaries either died or were compelled to resign because of serious illness within the first five years of their arrival. Within 10 years of their arrival, 52% had died or resigned because of their health. After 15 years in the colony, the combined death toll and resignations from sickness reached 68% — two out of every three missionaries.

African Americans fared no better. Frank Klingberg (1941:154), using SPG records found that in a single four month period over 400 slaves died of "distemper." William Dusinberre, exploring rice plantations along the Carolina coast, entitled one of his chapters "The Charnel House" — a reference to the extraordinary morbidity of African Americans on rice plantations. He reports that on some plantations the child mortality rate (to age sixteen) was a horrific 90% (Dusinberre 1996:51), while the probable average for rice plantations was around 60% (Dusinberre 1996:239). Cotton plantations were healthier, but even there fully a third of all slave children did not live to see their sixteenth birthday.

Beginning in the last third of the eighteenth century the life expectancy began to increase. Merrens and Terry suggest that this was the result of the occupants beginning to understand the cause of malaria:

During the middle of the eighteenth century South Carolinian's perception of the wholesome environment of the lowcountry swamps began to change. People no longer preferred these areas on the score of health as a place of summer residence. Instead, residents began to view the lowcountry as fostering both mosquitoes and
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death (Merrens and Terry 1989:547).

The Charleston climate, with its moderate winters and long, hot summers, affected not only the health of the population and the crops grown, it also influenced the politics of Carolina. The summer climate of Carolina, while causing the Barbadian immigrants to feel that they had resettled in the tropics, also convinced most that slavery was inevitable. Not only was slavery the accepted order to the planters from Barbados, Jamaica, Antique, and St. Kitts, it seemed impossible for white Englishmen to work in the torrid heat — making African American slaves that much more essential (Donnan 1928). Even in Christ Church parish, which in 1720 had a very low settlement compared to other parishes (Table 4), slaves comprised 85.6% of the population.

Vegetation

Just as the early explorers described the climate as healthful, the Carolina vegetation was usually described as bountiful and fruitful. Catesby described the swamp lands, typical of many areas in Christ Church, in the first decade of the eighteenth century:

before they are prepared for rice, are thick, over-grown with underwood and lofty trees of mighty bulk, which by excluding the sun's beams, and preventing the exhalation of these stagnating waters, occasions the lands to be always wet, but by cutting down the wood is partly evaporated, and the earth better adapted to the culture of rice (Catesby, quoted in Merrens 1977:93).

He also mentions that these swamps, filled with "a profusion of flagrant and beautiful plants give a most pleasing entertainment to the senses, therein excelling other parts of the country, and by their closeness and warmth in winder are a recess to many of the wading and water-fowls" (Catesby, quoted in Merrens 1977:93).

The Whitesides' plantations on the "sea shore" of Christ Church, while being low and generally unfavorable to agriculture, incorporated a number of distinctly different ecotones, many of which are actually very productive. Along the southern edge of the property, for example, would have been the salt marsh and its border zonation. The upper marsh would have been dominated by marsh elder, sea myrtle or groundsel, and marshhay cordgrass. Slightly lower marsh areas might be dominated by glasswort, smooth cordgrass, and sea oxeye. Regardless, these communities are almost entirely dependent on the duration of flooding and the salinity of the water.

Just behind the marsh, and only slightly further inland, would be the maritime forest, where the salt spray is enough to influence the development of the climax vegetation (Barry 1980:178). Here live oaks, palmettoes, and slash pines are most frequently found. Other species might include the loblolly pine, turkey oak, red bay, and wax myrtle. Principal lianas, the curse of coastal archaeological surveys even today, might include yellow jessamine, greenbrier, Virginia creeper, and poison ivy.

Further inland there would likely be a mixture of different communities, many influenced by the action of humans — earlier by the Native Americans and

<table>
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<th>Black Slaves</th>
<th>% Slaves</th>
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<td>942</td>
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Table 4. White and Slave Population of South Carolina in 1720 (Adapted from B.P.R.O. Transcripts, vol. 9, page 23)
later by the English planters. Areas of mesic mixed hardwood and pine might be found on the better drained soils. The dominant species would be white oak, often in combination with loblolly pine. Found as occasional overstory trees would be sweetgum, beech, southern red oak, post oak, maple, and hickory. Understory plants would include dogwood, redbud, and holly.

While classic cypress-tupelo swamps are found in some areas along the coast, the study tract does not exhibit areas of alluvial soil with an open circulation of water. Instead, what are called upland swamps are present. While still having acid conditions and wet soils, the vegetation is often very different. The upland swamps are dominated by pond cypress, pond pine, and slash pine (Barry 1980:150-151).

Also present would be old growth pine communities, created by disturbances such as fire or clear cutting the hardwoods. In these areas longleaf pine culminates in a closed canopy with a very sparsely populated understory. Hardwood introductions are exceedingly uncommon, but where present may include sweetgum, persimmon, and hickory (Barry 1980:172-173). These areas presented the pine flat woods shown on many plats and mentioned by many early accounts as being unproductive (even along the coast being called "pine barrens"). These are closely related, biologically, to the pine savannahs which might best be described as longleaf pine pyric climax forests.

While Christ Church has historically presented a challenge to planters, it is clear from even this general account of its vegetation, that there is tremendous diversity. Unfortunately, it was that diversity, engendered by the soils and climate, which made the area seem so unproductive. Although planters could fathom draining huge acreages of river swamps for rice, there was little interest in draining the seemingly infertile pine barrens which dominated Christ Church. Consequently, the unique combination of physiography, soils, climate, and vegetation dramatically affected the development of the area.

Curation

An updated archaeological site form for 38CH1471 has been filed with the South Carolina Institute of Archaeology and Anthropology (SCIAA). The field notes, photographic materials, and artifacts resulting from these investigations have been curated at that institution under site number 38CH1471. In addition, small collections from the testing of 38CH1473 and 38CH1563 are also curated at SCIAA. The collections have been cleaned and/or conserved as necessary. Further information on conservation treatments 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.
As previously mentioned, most planters lived their lives in historical obscurity, leaving behind relatively little evidence of their accomplishments or hopes. As a lot, the small planters were literate, without being lettered. What we see of them through historic documentation may be little more than deeds, occasional court actions (typically over debts), census accounts, and perhaps wills. Taken together, this is hardly the stuff forming intimate views. Nevertheless, careful scrutiny, combined with a fair amount of intuitive logic, can sometimes provide a fair insight.

In the case of Seaside's early owners, a fair understanding can be pieced together even though we have no plantation diaries, account books, or family papers. Certainly enough is present to help us interpret the archaeological record and address some of the questions posed for this work.

**English Settlement**

The English established the first permanent settlement in what is today South Carolina in 1670 on the west bank of the Ashley River. Like other European powers, the English were lured to the New World for reasons other than the acquisition of land and promotion of agriculture. The Lord Proprietors, who owned the colony until 1719-1720, intended to discover a staple crop whose marketing would provide great wealth through the mercantile system.

By 1680 the settlers of Albemarle Point had moved their village across the bay to the tip of the peninsula formed by the Ashley and Cooper rivers. This new settlement at Oyster Point would become modern-day Charleston. The move provided not only a more healthful climate and an area of better defense, but:

> the situation of this Town is so convenient for public Commerce that it rather seems to be the design of some skillful Artist than the accidental position of nature (Mathews 1954:153).

As early settlers came from the English West Indies, other mainland colonies, England, and the European continent. It has been argued that those from the English West Indies were the most critical to the future of the colony, as they brought with them a strong agrarian concept, involving both staple crops and, especially, slave labor (Sirmans 1966).

Early agriculture experiments which involved olives, grapes, silkworms, and oranges were less than successful. Ironically, it was often the climate which precluded successful results. While the Indian trade was profitable to many of the Carolina colonists, it did not provide the proprietors with the wealth they were expecting from the new colony. While ranching offered quick, and relatively easy, cash, the proprietors resisted such efforts, realizing that the profits they would reap were far smaller than possible from the mercantile system. Consequently, the cultivation of cotton, rice, tobacco, and flax were stressed as these were staple crops whose marketing the proprietors could easily monopolize.

**Economic Development**

Although introduced at least by the 1690s, rice did not become a significant staple crop until the early eighteenth century. At that time it not only provided the proprietors with an economic base the mercantile system required, but it was also to form the basis of South Carolina's plantation system (Carpenter 1973). Over production soon followed, with a severe decline in prices during the 1740s. This economic down swing encouraged at least some planters to diversify and indigo was introduced (Honeycutt 1949:33). Indigo complemented rice production since they were grown in mutually exclusive areas. Both, however,
were labor intensive and encouraged the large scale introduction of slaves.

Although four counties, Berkeley, Craven, Colleton, and Granville, were created by the Proprietors between 1682 and 1685, the Anglican parishes, established in 1706, became the local unit of political administration. Christ Church, situated immediately east of Charleston and confined by the sea shore on one side and the Wando River on the other, was closely aligned with Charleston throughout its history. While Charleston County was created toward the end of the colonial period in 1768, the division of Christ Church remained a significant social, as well as political, unit into the late nineteenth century (see Gregorie 1961 for further information on the social and religious influence of the parish).

South Carolina's economic development during the pre-Revolutionary War period involved a complex web of interactions between slaves, planters, and merchants. By 1710 slaves outnumbered free people in South Carolina. While Christ Church Parish was sparsely populated, it, too, was dominated by African American slaves. By the 1730s slaves were beginning to be concentrated on a few, large slave-holding plantations. At the close of the eighteenth century some South Carolina plantations had a ratio of slaves to whites that was 27:1 (Morgan 1977). While over half of eastern South Carolina's white population held slaves, although few held very large numbers. The Charleston area had a slave population greater than 50% of the total population by 1790. This imbalance between the races, particularly on remote plantations, may have lead to greater "freedom" and mobility (Friedlander in Wheaton et al. 1983:34). By the antebellum period this trend was less extreme.

The early history of the study tract is still poorly understood, although it is clear that in the mid-eighteenth century the property was owned by Thomas Whitesides. Virtually nothing could be discerned about his public or private life. He does not appear in the Combined Alphabetic Index at the S.C. Department of Archives and History. There is no entry for him in the genealogical files of the South Carolina Historical Society. His only mention in Anne King Gregorie's history of Christ Church was that he was a Vestryman in 1755 (Gregorie 1961:46). It appears that only in death did Thomas Whitesides leave a clear historical legacy.

Thomas Whitesides' will, although not dated, was proved on August 15, 1762 which suggests that he died only a week or two earlier. In the will, Thomas left his wife Sarah a life estate in his plantation as long as she maintained his children, "without charge" and under his name. At her death or remarriage it appears that the plantation lands would be evenly divided among his five sons, Thomas, John, William, Edward, and Moses, while his three daughters would each be given a lump sum of £200, to be paid by all his sons except Moses (Charleston County WPA Wills, volume 9, p. 305).

Christ Church was the scene of relatively little economic development during the late colonial period. Zierden and Calhoun note that:

Charleston was the economic, institutional and social center of the surrounding region. The necessity of transacting business in Charleston drew planters eager to transform their crops into cash or goods . . . it [was] virtually imperative for a planter interested in society to reside in Charleston at least occasionally (Zierden and Calhoun 1984:36).

They argue that Charleston provided an opportunity for conspicuous consumption, a mechanism which allowed the display of wealth accumulated from the plantation system (with this mechanism continuing through the antebellum period). Scardaville (in Brockington et al. 1985:45) notes that the plantation system which brought prosperity through the export of staple crops also "made the colony . . . highly vulnerable to outside market and political forces."

The most obvious example of this is the economic hardship brought on by the American Revolution. Not only was the Charleston area the
scene of many military actions, but Charleston itself was occupied by the British for over 2 ½ years between 1780 and 1782. The loss of royal bounties on rice, indigo, and naval stores caused considerable economic chaos with the eventual "restructuring of the state's agricultural and commercial base" (Brockington et al. 1985:34).

**Antebellum Charleston, Cotton Production, and the Civil War**

One means of "restructuring" was the emergence of cotton as the principal cash crop. Although "upland" cotton was available as early as 1733, its ascendancy was ensured by the industrial revolution, the invention of the cotton gin in 1794, and the availability of slave labor. While "Sea Island" cotton was already being efficiently cleaned, the spread of cotton was primarily in the South Carolina interior. Consequently, Charleston benefitted primarily through its role as a commercial center.

The 1790 census lists the estate of Thomas Whitesides in Christ Church, noting that there were two males under the age of 16, two females (one of whom was certainly Sarah), one other free white. While the census doesn't enumerate the estate's land, it does reveal the presence of 19 African American slaves. By 1790 it appears that Moses Whitesides had struck out for himself, establishing his own household with his wife and nine slaves. Sarah Whitesides is still listed as the head of the household in the 1800 census, although Moses is not listed.

In spite of these curious census results, a May 1798 survey by Purcell (found in Charles Parker's papers and copied in 1861) shows the division of a portion of Thomas Whitesides lands between his sons Moses and John (McCrady Plat 5966) (Figure 7). The apparent original, from which this copy was produced, is also present in the McCrady collection, cataloged as Plat 2357. A careful examination of the two reveals no substantive differences. The notes on the plat reveal that:

Tract A found to contain 210 acres 93 hundreds exclusive Sands and Marsh belonging to Mr. Moses Whitesides

B found to contain 220 acres 51 H. exclusive of Sands and Marsh belonging to Mr. John Whitesides

NB The Tract A is the tract N4 in a partition plat of a body of Lands and Marsh belonging to the Estate of Mr. Whitesides decd. divided amongst his Sons, Said N4 being allotted to Mr. Moses Whitesides for 225 acres.

The Tract B is the lot No3 allotted to Mr. John Whitesides now held by his son John also said to contain 225 acres (McCrady Plat 5966).

The partition plat or at least a working copy, while undated, is also found in the McCrady collection. It shows the division of the plantation into four tracts, for Edward, Thomas, John, and Moses Whitesides (McCrady Plats 5590). William, who died only two years after his father, in 1764, is not included on the plat.

Returning to the plat showing the division between Moses (to the northeast) and John (to the southwest), there is considerable detail revealed. Previous mention has been made that the plat documents the physiography and drainage of the area. The boundary trees, for example, include primarily mesic or wet species, such as gum, water oak, pines, laurel oak, and holly. The several live oaks are found primarily in the maritime forest adjacent to the "sea shore." The plat also shows three large galls running northeast-southwest through the northeast end of both tracts. Open or busy ponds are found scattered through the tracts. The property is described as "Flat Land in places low in woods mixed Timber," or as "Mixed Flat Land," or simply as "pine land."

The Moses Whitesides tract, encompassing 210 acres, included one "old field" of about 7.2...
Figure 7. Plat of the John and Moses Whitesides tracts in 1798 (McCready Plat 5966).
acres and one "Field Flat Land" of about 38.9 acres. This large field, however, is also shown to include the main settlement, consisting of a main house and fenced area of about 0.4 acre. Two additional buildings are found to the east and north of the main house and access is by a road which runs parallel to the long dimension of the tract but northeast of the main settlement. There is, in other words, no direct avenue or allée to this settlement. There does, however, appear to be an avenue running directly from the main house to the "sea shore." Such a landscape feature would not only permit a view of the marshes, but would also encourage a breeze, making the settlement more healthy.

West north-west of the main settlement are the "negro houses," a double row of three structures for a total of six. When compared to the 1790 census which listed only nine slaves, this suggests that either several cabins were empty or that Moses Whitesides had substantially increased in his slave holdings.

Situated in the same field as the main house, this settlement likely took up an additional 1.0 acre. Consequently, Moses Whitesides was cultivating approximately 37.5 acres of "high ground" (or 17.9% of the total) and may have been growing rice in the sloughs or galls which were found on the tract.

To the southwest of Moses was his brother, John Whitesides, with 220 acres. Situated almost dead center on the parcel was the main settlement and the slave row, taking a form very similar to that seen on Moses' property (Figure 8). The main house was accessed by an avenue coming off the "Road to Christ Church." This was not the Charleston-Georgetown Highway (which developed into U.S. 17), but rather a precursor to modern Rifle Range Road. Immediately before John Whitesides house the road forks and lead over to the access road for his brother's property, suggesting that relations between the two were good. Also suggesting some degree of mutual aid is the location of a "well," situated at the "sea shore" end of the tract, between the two brother's property.

The main settlement consisted of the main house within a fenced area and four structures, all bounding this fenced area, but outside. Three are on corners and one is centered on the southwest line. South of the main house was a structure labeled "barn" and even further, at the southwestern edge of the tract, were the "Negro Houses," comprising a single row of four structures.

John Whitesides property include three fields. One, encompassing 3.9 acres along the access road is labeled only "Cleared Land." Around the main and slave settlements are "Clear Land," totaling 34.7 acres (with the main house encompassing about 0.8 acre). Finally, at the "sea shore" end of the tract, there is a field of "rice and corn" covering 25 acres. In the eastern corner of this field there is a single structure. In all, John apparently had 62.8 acres (28.5% of the plantation) open for cultivation.

Apparently both Moses and John Whitesides were involved in planting rice in the upland swamps shown as galls on the plats. In addition, John was planting corn and rice on a tract near the sea shore. Its likely that the remainder of the land in plantations was devoted
to subsistence crops or fodder since there is no mention of another cash crop.

Between the last decade of the eighteenth century and the first quarter of nineteenth century our understanding of the ownership of the land is confused. The title search reveals that the study tract can be traced back to three lines, one of which covers only a few years. The lines can be only tentatively tied into the will of Thomas Whitesides or the plats shown as Figure 7.

In 1804 Jacint Laval, Sheriff, sold what was thought to be 200 acres (but upon survey discovered to be 100 acres) to William Mathews. This property was part of the estate of Thomas Whitesides and the sale was the result of legal action brought by James Bollough (Charleston County RMC, DB M-8, p. 447). The lands sold were bounded to the northeast by lands of Charles Whitesides, to the southwest by lands of Nicholas Venning, and to the south by the "Sea Shore," or the marshes of what was then called Copahee Sound. Curiously, this deed was not witnessed until 1816, suggesting that it may have served to clear the title at that time. Regardless, Mathews sold the tract, described as containing 166 acres, to Eliza Barksdale the following year (Charleston County RMC, DB U-7, p. 81). At that time a plat was also recorded showing the tract (South Carolina Historical Society 33-62-28; Figure 9) and revealing it to be the western edge of the Thomas Whitesides estate shown in Figure 7. The plat specifies that the tract contained 223 acres divided into five parts. Part A contained 166 acres, B contained 32 acres, C and D contained 25 acres each, and E contained 33 acres. Based on the original partition plat the bulk of this tract would have been that allotted to Edward Whitesides. Parcels C and D, however, would have been struck off from the lands allotted to Thomas Whitesides.

An undated working copy of this plat (McCrady Plats 6206) shows the same general divisions, but includes more detailed side notes:

N.B. This is a sketch of an unfinished Plan of two plant in Christ Church Parish, viz. No.1 Contg 166 & 32 detach makes 198 acres belg to the heirs of Thos. Whitesides deceased. No. 2 — 167 & 33 — makes 290 belong to Charles Whitesides provided the Division line is to remain as here referenced. But there is yet 25 acres to be taken from the N.W. end of No. 2 & amount to No. 1 then will be — No. 1 198 + 25 = 223. No. 2 290 - 25 = 265. Exclusive of a large Body of Sands & Marsh Bounds uncertain. J.D. (McCrady Plat 6206).

This suggests that at the turn of the century there were additional divisions of the Whitesides estate and, for some reason, Edward Whitesides failed to take possession of his share and it passed to Charles Whitesides.

The two plats also reveal what was almost certainly the original Thomas Whitesides settlement, shown as three structures on the completed plat and as several structures in a damaged fold of the undated plat. Also present is another settlement on the edge of the "sea shore" toward the southeastern boundary of the plantation (shown on the undated sketch, but not included on the dated 1804 plat). The plats also show a landing and lime kiln on a branch of what is today Inlet Creek.

After Eliza Barksdale's purchase in 1805, this tract disappears for about 30 years. The confusion regarding this small piece of the Thomas Whitesides property is revealed in a twentieth century reconstruction of plantations which shows part of the Seaside tract extending west into Myrtle Grove (Figure 10).

Myrtle Grove was a major plantation of Nicholas Venning, the patriarch of the Charleston Venning family. The Venning and Whitesides families are connected through the marriage of Moses Whitesides (1763?-1810, son of Thomas Whitesides, Sr.) to Mary Venning. Unfortunately, no early plat of Myrtle Grove could be identified, although an undated plat (ca. 1793) does show the location of Venning’s settlement and other
Figure 9. 1804 plat of the western portion of the Thomas Whitesides estate, originally partitioned to Thomas and Edward Whitesides (South Carolina Historical Society, 33-62-28).
Figure 10. Charleston County property map, compiled 1932-1934, showing the project area.
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plantations just outside Mount Pleasant (South Carolina Historical Society 33-62-28). The central portion of Myrtle Grove was platted in 1899 (Charleston County PB A, p. 22) and a notation on the plat indicates the main house was in ruins, having burned in 1886. Nicholas Venning, in his 1835 will, established "a Burial place for me and my descendants forever," to be 105 feet square on the "road leading from the Sea Shore to the public Road" (Charleston WPA Wills, volume 40, p. 259). A twentieth century plat was made of the Venning Burial Ground, showing the actual dimensions to be 122 feet by 103 feet surrounded by a ditch and bank (Charleston County PB H, p. 17). In the center of the cemetery was a 40 inch oak, mute testimony to the antiquity of the cemetery. The cemetery is still shown on the USGS map of the area.

Although there is considerable confusion surrounding the land transfers and partition of this tract, it is situated at the southwestern end of our study area.

A seemingly second line was identified in the sale of 234 acres of high land ("exclusive of a body of sands and marsh") to Elizabeth Pickens by John Walker and Daniel Joy in 1816 (the same year that the Mathews deed was witnessed)(Charleston County RMC DB X-8, p. 287). The recital reveals that the deed involved the lands of Charles Whitesides who died without issue. This suggests that the tract may be the same as shown on the 1804 John Diamond plat at the southwestern edge of the Whitesides holdings. Regardless, the land apparently went to his widow (Rebecca Whitesides, later Rebecca Dieckert, later Rebecca McKintosh) and his brothers and sisters of half blood (Daniel Joy, William Joy, and Charlotte Joy, later Charlotte Severance).

Elizabeth Pickens, in 1834, sold 500 acres to William Merree (Charleston County RMC DB G-10, p. 113). The recital reveals the property was bounded to the west by Nicholas Venning, to the east by John Whitesides, to the south by the "Sea Shore," and to the north by William Mathews. The deed also reveals that the 500 acres includes the property previously obtained from Walker and Joy, as well as from William Mathews, perhaps reflecting the first line from Laval to Mathews to Eliza Barksdale. Also included was a 33 acre tract obtained from John Johnson in 1822 (Charleston County RMC, DB K-9, p. 159).

In 1845 the executors of William Merree (Merree), John and Thomas Merree, sold the 500 acre parcel to Mrs. Ann Venning (Charleston County RMC, DB Q-11, p. 154). This deed reveals that the acreage included "the sands, marsh and Islands on the Sea Shore in from of the settlement of said plantation." This also reveals that the original Thomas Whitesides plantation house was likely still present, perhaps with those of his two sons, Moses and John. The boundaries are the same as the earlier deed from Pickens to Merree.

During this same period the third line of the property, representing the eastern portion of the parcel, was being passed through the Whitesides family. In 1838 Moses Whitesides deeded a 225 acre parcel as a gift to James Daniel Jeffords Whitesides, his son (Charleston County RMC, DB T-10, p. 226). The deed indicates that the tract was purchased by Moses Whitesides from Jack Whitesides. In spite of extensive research, no Jack Whitesides has been identified in the Charleston area, so this may represent an error in the deed preparation (see South Caroliniana Library, 2266). Regardless, the description of the parcel, bounded to the east by Moses Whitesides, to the west by Thomas Merree, to the south by marsh lands, and to the north by William Mathews, reveals that it was situated at the east edge of the study tract. Apparently Moses Whitesides property extended even further to the east.

An 1841 plat showing the lands of William Mathews on both sides of the Charleston-Georgetown Highway (McCrady Plat 5564). It is most useful since it carefully delineates the surrounding property owners. To the south of this holding are the lands of Moses Whitesides, John Whitesides, Thomas Whitesides, and Nicholas Venning — exactly as laid out in the earlier plats (Figure 11). This suggests that while some portions of the Whitesides estate were being conveyed, the tracts of Moses and John remained distinct at least through the early and mid-antebellum.
Figure 11. Portion of the 1841 William Mathews plat showing the arrangement of bordering Whitesides tracts on its southern boundary (McCrary Plat 5564).
James Daniel Jefford Whitesides apparently died without heirs in 1852 and the property returned to his father, Moses Whitesides, as well as his sisters, Anne Meree and Elizabeth M.E. Houston (Charleston County RMC, DB X-12, p. 343). Moses sold his portion of the property to T.D. Wagner in 1853, as did Thomas H. Meree and his wife Anne, and William H. Houston and his wife, Eliza M.E. (Charleston County RMC, DB X-12, p. 341, p. 345). In each case the property is described as 224 acres of high land, bordered to the north by lands of William Mathews, now McCants, to the south by marsh, to the east by lands late of Moses Whitesides, deceased, and to the west by lands of Thomas Meree, deceased. In 1853 Ann Venning also sold her 500 acres of land acquired from the estate of William Meree to Theodore D. Wagner (Charleston County RMC, DB A-13, p. 487).

The census records provide some idea of activities during this period, as well. In 1810, for example, John is listed with his wife, two children, and 12 slaves. This is the first record of his slave holdings and suggests that each of his four slave houses held a family of four.

Sometime in the first decade of the nineteenth century Sarah Whitesides apparently died, since Robert Dorrill, in his 1807 action against John Whitesides and James Hibben, is listed as the administrator of Sarah Whitesides (S.C. Department of Archives and History, B1AE 002 1807 0972A 00). Another summary judgement that same year found that John and Moses Whitesides had been bound to their mother, Sarah, for the sum of £40 (S.C. Department of Archives and History, B1AE 002 1808 0002A 00). In another case, John Whitesides was sued by James Ballough for $24.94 on an open, unpaid account (S.C. Department of Archives and History, B1AE 019 1812 0198A 00).

Taken together, these suggest that John Whitesides may have been struggling to "make ends meet." An 1821 letter by the Rev. Albert Arney Muller, rector of Christ Church, to William Hort, would seem to support this. Muller complains that:

Miserable and poor indeed is the state of a dependent clergyman. . . . I am disposed to attach all the blame to [John] Whitesides, who is a miserable creature, and more fit for a tavern keeper, than Warden to a respectable body of men. I hope the vestry will make a more judicious choice hereafter in appointing such a man as one of a Committee (Gregorie 1961:80).

Before rushing to judgement, however, it is only fair to also point out that Muller disliked residing in the parish, apparently being far happier in downtown Charleston. He was always pleading for more money and eventually left the parish in 1823, for a time even leaving his family destitute (Gregorie 1961). It may be that John Whitesides financial troubles gave him less patience with a constantly complaining minister.

The 1825 tax returns for John and Moses Whitesides provide another view of their two operations. Moses filed his return for 309 acres and 30 slaves, paying a bill of $27.59%. Two hundred and ten acres were assessed at a value of $4/acre, while 99 acres were assessed at only 20¢ an acre, suggesting they were essentially waste lands. The slaves were taxed at the standard 75¢ a head. In addition, Moses declared a town lot, valued at $500 (S.C. Department of Archives and History, 0014 052 1824 00236).

In contrast, John Whitesides possessed 238 acres, all appraised at $4/acre, and 15 slaves. This represents only a very most increase from the 12 reported a decade and a half earlier. John also reports no town property and paid a bill of $14.80% (S.C. Department of Archives and History, 0014 052 1824 00234).

The 1830 census reports that John again slightly increased his slave holdings to 17. At the time of the census the only members of his family were two younger males. Perhaps his wife, Hannah, was elsewhere.
John Whitesides is not shown in the 1840 census (his brother, Moses, is still listed), but his wife, Hannah, is shown as the head of household on the 1850 census. This suggests that sometime between 1830 and 1840 John Whitesides died, although his plantation continued to be operated by his widow. The most likely will for John Whitesides is one proved on December 22, 1834 (Charleston WPA Wills, volume 40, p. 148). It states simply that his real and personal property was to be divided equally between his two sons, John Hugh and Thomas J. Whitesides, and his daughter, Sarah A. Holmes. Curiously his wife is not mentioned.

Regardless, the 1850 agricultural schedule for Christ Church provides data on the operations of both Moses Whitesides and Hannah Whitesides. Hannah was operating a farm with 20 acres of improved land and 130 acres of unimproved land, representing a total value of $1,000. This may suggest that she was operating only a portion of the previous holding, but given the errors in the agricultural census records relatively little should be made of this discrepancy. The plantation included three houses, two milk cows, 30 head of cattle, and 15 swine, for a total value of $275. Production included only 200 bushels of corn and 250 bushels of sweet potatoes. The value of animals slaughtered was a very modest $75.

In contrast, Moses Whitesides claimed 40 acres of improved land and 640 acres of unimproved property, worth $3,000. The plantation included 10 horses, four mules, one milk cow, 100 head of cattle, and 10 swine, for a value of $850. But like Hannah, Moses produced only corn (210 bushels) and sweet potatoes (500 bushels).

These figures suggest that the Whitesides plantations, in the 1850s, were little more than small subsistence farms, perhaps focusing on cattle, even this late in time. No cash crops are reported and the quantities of crops and livestock are very modest. This impression is made even stronger when the two tracts are compared to the rest of Christ Church (Table 5). In many respects the plantation of Moses Whitesides comes close to the "average" or "typical" 1850 Christ Church plantation. The differences in some areas, such as orchard products and rice are of no concern since these were commodities produced on a relatively few Christ Church plantations. In terms of acres improved, cash value of the farm, value of livestock, and value of slaughtered livestock, Moses Whitesides fits the mean. Hannah Whitesides, on the other hand, operated a very modest farm, even in the context of Christ Church.

Regardless, it is clear that the John Whitesides plantation, along with the other small tracts subdivided at the death of Thomas Whitesides in the late eighteenth century, were all recombined by Theodore D. Wagner in one 1158 acre tract. Relatively little is known about Wagner, although it is clear that he was a prominent Charleston merchant. He was a partner in the factor house of John Fraser & Company, with G.A. and E.L. Trenholm, for a number of years.

<table>
<thead>
<tr>
<th>Category</th>
<th>Christ Church mean</th>
<th>Hannah Whitesides</th>
<th>Moses Whitesides</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acres improved</td>
<td>6,765</td>
<td>60</td>
<td>20</td>
</tr>
<tr>
<td>Value of farms</td>
<td>$302,200</td>
<td>$2,698</td>
<td>$1,000</td>
</tr>
<tr>
<td>Value of farm implements</td>
<td>$11,000</td>
<td>$98</td>
<td>$0</td>
</tr>
<tr>
<td>Value of livestock</td>
<td>$38,762</td>
<td>$346</td>
<td>$275</td>
</tr>
<tr>
<td>Value of animals slaughtered</td>
<td>$8,670</td>
<td>$77</td>
<td>$75</td>
</tr>
<tr>
<td>Value of orchard products</td>
<td>$730</td>
<td>$7</td>
<td>$0</td>
</tr>
<tr>
<td>Value of market produce</td>
<td>$4,900</td>
<td>$44</td>
<td>$0</td>
</tr>
<tr>
<td>Indian corn (bu)</td>
<td>26,565</td>
<td>237</td>
<td>200</td>
</tr>
<tr>
<td>Oats (bu)</td>
<td>5,330</td>
<td>48</td>
<td>0</td>
</tr>
<tr>
<td>Rice (lbs)</td>
<td>964,800</td>
<td>8,614</td>
<td>0</td>
</tr>
<tr>
<td>Ginned cotton (400 lb bales)</td>
<td>111</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Wool (lbs)</td>
<td>1,541</td>
<td>14</td>
<td>0</td>
</tr>
<tr>
<td>Peas and beans (bu)</td>
<td>4,450</td>
<td>40</td>
<td>0</td>
</tr>
<tr>
<td>Swine potatoes (bu)</td>
<td>2,280</td>
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</tr>
<tr>
<td>Sweet potatoes (bu)</td>
<td>60,686</td>
<td>542</td>
<td>250</td>
</tr>
<tr>
<td>Butter (lbs)</td>
<td>7,450</td>
<td>67</td>
<td>0</td>
</tr>
</tbody>
</table>
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Table 6.
1860 Agricultural Production in Christ Church and on the Bonneau Plantation

<table>
<thead>
<tr>
<th>Category</th>
<th>Christ Church</th>
<th>parish mean</th>
<th>Bonneau</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acres improved</td>
<td>12,821</td>
<td>217</td>
<td>250</td>
</tr>
<tr>
<td>Value of farms</td>
<td>$431,900</td>
<td>$7,200</td>
<td>$12,000</td>
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<tr>
<td>Value of farm implements</td>
<td>$28,165</td>
<td>$477</td>
<td>$300</td>
</tr>
<tr>
<td>Value of livestock</td>
<td>$78,176</td>
<td>$1,525</td>
<td>$3,000</td>
</tr>
<tr>
<td>Value of animals slaughtered</td>
<td>$5,270</td>
<td>$89</td>
<td>$100</td>
</tr>
<tr>
<td>Value of orchard products</td>
<td>$1,035</td>
<td>$18</td>
<td>$0</td>
</tr>
<tr>
<td>Value of market produce</td>
<td>$4,006</td>
<td>$68</td>
<td>$0</td>
</tr>
<tr>
<td>Indian corn (bu)</td>
<td>37,115</td>
<td>629</td>
<td>1,000</td>
</tr>
<tr>
<td>Oats (bu)</td>
<td>2,825</td>
<td>48</td>
<td>0</td>
</tr>
<tr>
<td>Rice (lbs)</td>
<td>180,000</td>
<td>3,051</td>
<td>0</td>
</tr>
<tr>
<td>Ginned cotton (400 lb bales)</td>
<td>460</td>
<td>8</td>
<td>30</td>
</tr>
<tr>
<td>Wool (lbs)</td>
<td>3,484</td>
<td>59</td>
<td>300</td>
</tr>
<tr>
<td>Peas and beans (bu)</td>
<td>5,870</td>
<td>100</td>
<td>150</td>
</tr>
<tr>
<td>Irish potatoes (bu)</td>
<td>915</td>
<td>16</td>
<td>0</td>
</tr>
<tr>
<td>Sweet potatoes (bu)</td>
<td>42,300</td>
<td>717</td>
<td>2,000</td>
</tr>
<tr>
<td>Hay (tons)</td>
<td>464</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td>Butter (lbs)</td>
<td>3,240</td>
<td>55</td>
<td>100</td>
</tr>
</tbody>
</table>

Wagner held the property for less than four years, selling the 1158 acre (more or less) tract to B.J. Johnson in 1857 (Charleston County RMC, DB T-13, p. 198). The mortgage on the property, held by Wagner, was satisfied two years later, on August 1, 1859, although Johnson sold the property on April 8, 1859 to Peter P. Bonneau. At this time the tract was described in terms of the 1856 Wagner plat and the acreage continues to be described as 1158 acres. Bonneau continued to be shown as the owner on the 1863 "Map of Charleston and Its Defenses" (Figure 13). In 1859 Bonneau mortgaged the property to William L. Venning, perhaps to guarantee a loan for the purchase (Charleston County RMC, DB H-14, p. 169). Regardless, the mortgage was satisfied in 1863, just before Bonneau sold the tract to Theodore Stoney (Charleston County RMC, DB T-14 #2, p. 78).

Bonneau is another of those relatively unknown characters in history. Nothing relevant could be found in the S.C. Department of Archives and History's Combined Alphabetic Index. He does not appear in the files of the South Carolina
Figure 12. 1856 Thomas D. Wagner plat of the re-assembled Whitesides tracts (McCready Plats 6204).
Figure 13. A portion of the 1863 "Map of Charleston and Its Defences" showing the Bonneau settlement and the Confederate earthwork from the sea shore to the headwaters of the Wando River.
Historical Society. He is not even listed in either the 1850 or 1860 federal census for South Carolina. No Bonneau appears in the Charleston Museum’s survey of retailers, craftsmen or others advertising in the *South Carolina Gazette* (Calhoun and Zierden 1984).

Bonneau is, however, listed on the 1860 agricultural schedule as owning a tract in Christ Church Parish (Table 6). It is enumerated as containing 250 acres of improved land, surprising close that estimated from the Wagner plat. Only 350 acres of unimproved land are listed, suggesting either an error or possibly that unimproved as used by some owners or enumerators as meaning other than woodland. The plantation’s value, $12,000, suggests the acreage may have been under-reported. Bonneau reported $500 in machinery. Livestock included 17 horses, three mules, 50 milk cows, four working oxen, 25 head of cattle, 40 sheep, and 60 pigs, with a total value of $3,000. The plantation produced 1,000 bushels of corn, 30 bales of cotton, 300 pounds of wool, 150 pounds of beans and peas, 2,000 bushels of sweet potatoes, 100 pounds of butter, and 6 tons of hay. The animals slaughtered on the plantation were valued at $100.

The operation of the plantation had clearly changed dramatically from even 10 years earlier. Certainly this is partially the result of the operation’s scale having been dramatically increased. It also appears that Bonneau sought to create a more conventional “plantation,” moving away from ranching and subsistence farming toward a diversified farm focused on cotton.

The Bonneau plantation stands in contrast to many of the other plantations in Christ Church. Although containing about the average number of improved acres and having about the average of plantation implements, the Bonneau plantation produced substantially larger quantities of corn, wool, butter, sweet potatoes, and especially, cotton.

Cotton provided about 20 years of economic success for South Carolina. During this period South Carolina monopolized cotton production with a number of planters growing wealthy (Mason 1976). The price of cotton fell in 1819 and remained low through the 1820s, primarily because of competition from planters in Alabama and Mississippi. Friedlander, in Wheaton et al. (1983:28–29) notes that cotton production in the inland coastal parishes fell by 25% in the years from 1821 to 1839, although national production increase by 123%. Production improved dramatically in the 1840s in spite of depressed prices and in the 1850s the price of cotton rose.

The Charleston area did not participate directly in the agricultural activity of the state. Scardaville (in Brockington et al. 1985:35) notes that “the Charleston area, as a result of a large urban market and a far-reaching trade and commercial network, had carved out its own niche in the state’s economic system.” Zierden and Calhoun remark that:

> [c]ountry merchants, planters, and strangers "on a visit of pleasure" flocked to Charleston. Planters continued to establish residences in Charleston throughout the antebellum era and "great" planters began to spend increasing amount of time in Charleston (Zierden and Calhoun 1984:44).

In spite of this appearance of grandeur, Charleston’s dependence on cotton and ties to an international market created an economy vulnerable to fluctuation over which the merchants and planters had no control.

While the wealthiest farms were those on the sea islands producing cotton (such as Edisto Island where the value of the average plantation was over $44,000), plantations in Christ Church (as well as other inland, non-cotton producing areas) had an average value of around $7,300. Christ Church Parish grew only 1.7% of the district’s cotton, although it formed 10.1% of the improved acreage. An examination of the agricultural schedules for the Charleston area in 1850 and 1860 provides evidence for this economic slump. Scardaville (in Brockington et al. 1985:39–40) notes that produce, farm, and livestock values for Christ Church Parish were below what would be expected.
and outputs of many crops had decreased over time. But most significantly, rice was no longer an economically significant crop, production dropping by over 81% from 1850 to 1860.

The Christ Church Parish response to the reduction in rice was a shift to ranching and livestock production as a substitute. Between 1850 and 1860 the value of livestock increased by 120%, corn increased by 44%, and wool production increased by 126% (Scardaville in Brockington et al. 1985:41). It seems clear that Christ Church was engaged in a gradual shift from monocropping to truck farming. Its unique location at the doorstep of Mount Pleasant and Charleston allowed Christ Church to focus its agricultural pursuits on the needs of an expanding urban market.

An appropriate summary is provided by Zierden and Calhoun:

[t]he economic decline of Charleston occurred as the city was growing increasingly defensive of its "peculiar institution." The city sullenly withdrew into itself, eschewing the present and glorifying its past. The great fire of 1861 devastated much of downtown Charleston. The War between the States . . . set the seal on a social and economic era (Zierden and Calhoun 1984:54).

While the fortifications and numerous battles fought around John's, James, and Folly islands during the Civil War are well known, the other defenses of Charleston are perhaps less understood. One author has suggested that, "it is doubtful if any city in the Confederacy had more or stronger defenses than those around Charleston" (Burton 1970:132). In Christ Church parish, about five miles north of Mount Pleasant, the Confederate forces built a line running from the headwaters of the Wando River to the Atlantic Ocean marshes. This line is situated about 0.5 mile northeast of the study tract. It was terminated at the "sea shore" end with a major fortification.

It wasn't until 1865, at the very end of the war, that this line was "tested." A Union assault on Bull's Bay was begun on February 13, although weather, poor planning, and shallow water prevented a landing until February 17, when the troops were put ashore at Graham's Creek near Buck Hall Plantation, several miles northeast of the line. It was that same day that Confederate forces retreated from Charleston and the assault on Bull's Bay accomplished little other than preventing the Confederate troops from marching north to Georgetown (Burton 1970:316).

Postbellum Period

After the Civil War Charleston and the surrounding countryside lay in waste. Plantation houses were destroyed, the city was in near ruins, the agricultural base of slavery was destroyed, and the economic system was in chaos. Rebuilding after the war involved two primary tasks: forging a new relationship between white land owners and black freedmen, and creating a new economic order through credit merchants. General sources discussing the changes in South Carolina include Williamson (1975) and Goldenwieser and Truesdell (1924). Scardaville (Brockington et al. 1985:43-48), however, provides information on the changing labor patterns specifically in the study area.

Theodore Stoney, postbellum owner of the Seashore tract, is one of those tragic figures of the late Civil War — early postbellum who is known primarily through a string of bankruptcies, forced sales, and related legal problems (see Charleston RMC, DB G-15, p. 189; DB K-16, p. 202; DB G-15, p. 733; DB C-16, p. 210; DB E-16, p. 317). Throughout most of this period he was a partner of the Stoney, Lowndes & Co., Brokers, with Henry D. Lowndes and T.S. Snowden. He is listed in the 1870 population census as residing in Ward 2 of downtown Charleston.

In April 1868 Stoney provided Arthur Hammond a large mortgage and by December of that year the U.S. District Court for South Carolina (with a parallel claim in Circuit Court) found him bankrupt. In April 1869 Stoney managed to reclaim his Sea Shore tract from the Court, although his other plantations, including the 1602 acre Laurel Hill and the 133 acre Elm Grove
plantsations, both in Christ Church Parish, were sold in 1872.

Stoney again mortgaged the Sea Shore tract in October 1873, only to again be found bankrupt in December 1873. In 1876 the Sea Shore tract was sold to B.H. Rutledge, Receiver of the Estate of Otis Mills (Charleston County RMC, DB X-16, p. 432).

It is likely that Stoney continued to operate the plantation using one of several common forms of tenancy (see Scardaville in Brockington et al. 1985:46). While tenancy was increasing throughout South Carolina during this period, it was increasing at a far greater rate in Christ Church. The number of farm units increased from 810 in 1860 to nearly 2,500 in 1870, an increase of over 207%, more than double the statewide rate. While only about 20% of the farms in South Carolina were under 10 acres, almost half of the farms in Charleston County were that size. In Christ Church Parish over 70% of the farms were under 10 acres in size. Scardaville suggests that, "a larger black population (86.3% in rural Charleston County and only 58.9% statewide) and henceforth more intensive demand for land area might explain the greater division of the land in Charleston" (Brockington et al. 1985:47-48). It has also been suggested that the Christ Church plantation owners were more amenable to renting land to blacks.

The disposition of the property by Rutledge is not clear, but in 1881 Stoney purchased Seaside Plantation from Rosa Bryan, then owner (Charleston County RMC, DB K-18, p. 108). The property is described as bounded to the north by lands of William McCants, to the east by lands of Mr. Corbett, to the west by lands of Mr. Venning, and to the south by the "sound." The property is still described as containing 1158 acres and reference is made to a plat by Robert K. Payne.

Beginning shortly after this purchase, Stoney began to sell small tracts to local blacks, perhaps supporting the idea that Christ Church planters were more willing to integrate the freedmen into the postbellum economy. In 1882 he sold 8½ acres to Samuel Frazer (Charleston County RMC, DB A-31, p. 90). Additional parcels ranging from 1 to 15 acres were sold through 1896 (Charleston County RMC, DB A-31, p. 143, 160, 229; A-36, p. 70). Stoney, however, divested the bulk of the property in two separate sales to H.F.W. Breuer. The first sale, in 1885, was for 372.25 acres of high land and 407 acres of marsh (Charleston County RMC, DB A-31, p. 147). The second, for a total of 236¾ acres, was in 1886 (Charleston County RMC, DB A-31, p. 259). This second sale was shown on a plat recorded in Berkeley County (Berkeley County RMC, PB A, p. 18). This second transfer was of interior lands, bordered to the south on lands of Breuer.

In spite of his problems, Stoney was apparently an active member in the Christ Church Agricultural Society, organized in 1882. The Society's membership, like that of other organizations of the period, consisting of the remnants of the Southern planting aristocracy. The organizations, founded to encourage and promote the return of the "agrarian south," were concerned with a vast range of issues, including planting practices, the prices offered for various crops, the transportation of crops at reasonable prices on the new railroads, and resolving what were considered constant labor problems.

For example, as late as 1909 the members of the Christ Church Agricultural Society agreed to a list of labor rules, including:

- no laborer shall be taken who is in debt, without payment of such debt.

- no laborer who has been discharged for insubordination shall be taken during the current year or within six months.

- that all tenants shall agree to give there [sic] spare time to their land-lords when called on (South Carolina Historical Society, Christ Church Agricultural Society Minute Book, 34-197)
The society’s constant interest in agricultural prices and conditions is shown by a 1902 report:

unusually fine corn crops planted in the parish, and also find the acreage a large one, which gives promise of a large yield. Peas and potatoes have not been neglected and, on the whole, the crops generally are up to the standard. The committee found the asparagus crops in good condition and some of the crops of young asparagus above the average. No complaints were made of rust . . . . Labor is abundant, but getting more and more inefficient each year . . . . Until we cease employing labor that has been discharged for cause, inefficiency, etc. . . . so long will we make the labor more and more worthless. We pay from 40 to 50 cents per day for our labor and I doubt if, under the best management, we receive 20 to 25 cents value for it . . . . The prices obtained for truck, during the past year have not been remunerative, more stuff being shipped and less money realized; in some instances the falling off amounting to 30 percent (South Carolina Historical Society, Christ Church Agricultural Society Minute Book, 34-197).

As Scardaville notes (Brockington et al. 1985:52), it is very difficult to use the agricultural schedules for economic analyses after 1870. The 1880 schedule seriously under-represents Charleston District, the 1890 schedules were destroyed by fire, all subsequent schedules are provided only on a county level (the individual parish and farm level information being destroyed under authority of Congress), and vital information is missing from the 1900 census. At a county-wide level, however, it is clear that between 1870 and 1910 Charleston’s agricultural production gradually increased, the labor system stabilized, and prosperity returned.

In terms of relative importance, cotton and livestock were the two most important agricultural activities in Charleston County, followed by truck farming and grain production. During the early postbellum period there is also evidence of some land consolidation -- the four tracts in excess of 1,000 acres in 1870 had increased to 151 tracts by 1880. Probably caused by high property taxes, foreclosures, and low selling prices this trend continued only for a decade (Scardaville in Brockington et al. 1985:57). During the late postbellum tenancy increased dramatically throughout South Carolina, except for several coastal areas where Scardaville suggests black farmers were able to purchase small tracts. Where tenancy did exist, it was largely cash rental, not sharecropping, and Scardaville argues that this formed the vital link allowing black ownership (Scardaville in Brockington et al. 1985:62).

The Twentieth Century

Breuer sold a portion of the Sea Side tract in 1903 to J.E. Williams and T.H. Williams, Jr. (Charleston County RMC, DB N-24, p. 74). Breuer strictly established the disposition of the tract, noting that it would be held by J.E. and T.H. Williams as a life estate, then to go to their oldest son, Arthur Middleton Williams. Only Arthur would have complete right and title to the tract. In 1913 J.E., T.H. and Arthur M. Williams sold the tract to The Palms Estate, Inc. (Charleston County RMC, DB N-26, p. 71). Apparently unable to satisfy the mortgage held by Arthur Williams, the property was sold at a Master’s sale three and a half years later on May 30, 1916 (Charleston County RMC, DB 1-28, p. 18). The purchaser, Arthur Williams, fared little better, being sued in turn by the Southern Home Insurance Company, which purchased the tract at a Master’s sale on December 22, 1917 (Charleston County RMC, DB S-24, p. 346).

Just two days after their purchase, the Southern Home Insurance Company sold the 779.25 acre Sea Side Plantation to John T. Leonard (Charleston County RMC, DB O-25, p. 351). The deed again refers to the F.J. Smith plat
of 1885, although Leonard had a new plat made, dated January 1917 (McCraday Plat 2843). The plat shows only three structures, labeled "residence," in the same location as the 1858 Payne plat.

A 1919 War Department topographic map of the area provides considerably more information than the modern plat, revealing that a series of houses were already built along what would later become Rifle Range Road (Figure 14).

Breuer also sold a 50 acre tract to William James Robinson in 1895 (Charleston County RMC, DB A-36, p. 94), although the line of title was not researched for this particular parcel. In addition, the eastern portion of the property was sold by Ella Breuer, the executrix of H.F.W. Breuer, in 1912 to Ida Wilson (Charleston County RMC, DB G-26, p. 83). A reference to the R.V. Royall plat of November 1911 is made in the deed, although this particular plat has not been identified. As a result of a 1923 complaint against Ida H. Wilson, the property was sold by F.K. Myers, Sheriff, to John F. Ohlandt and Caroline M. Ohlandt in 1924 (Charleston County RMC, DB U-30, p. 107). In 1925 Caroline M. Ohlandt sold the 241.5 acre tract to James S. Simmons (Charleston County RMC, DB V-32, p. 166). In 1931 the same tract was sold by Burnet R. Maybank to Lester A., Wilson (Charleston County RMC, DB U-35, p. 316). Although the derivation in the deed lists the previous sale to Simmons by Ohlandt, it has not been possible to determine how Maybank acquired the property. Regardless, Lester A. Wilson devised the tract, through his will, to his sons, Lester A. Wilson and Julian M. Wilson. In 1968 the Wilson's sold the tract to J.C. and Alberta Long (Charleston County RMC, DB N-91, p. 311).

John Leonard held the western three-quarters of Sea Side Plantation until his death in 1936. That year Leonard sold the pine timber rights on the tract to J.R. Herrin and it is likely that the pines were logged before the end of the year (Charleston County RMC, DB D-38, p. 481).

There is some evidence that Leonard also operated a canning factory not far from the old Venning estate, near Gennealtie's Casina Farm which was engaged in producing casina (or yaupon

Figure 14. Portion of the 1919 Wando topographic map showing the project area and structures along what would later become Rifle Range Road.
holly) tea (South Carolina Historical Society, William Henry Johnson's Scrapbook). It is likely, however, that the major economic activities of both the Leonard and Wilson tracts was truck farming.

Beginning shortly after the Civil War, truck farming became one of the primary agricultural activities of Christ Church farmers. The combination of soil fertility, climate, and proximity gave truck farming an edge in the effort to supply Charleston with produce. As early as 1873 it was noted:

the cultivation of garden produce for export in the neighborhood of Charleston, was not pursued as an occupation previously to the years 1865 or 1866. [Recently,] there are a large class of farmers & planters in St. Andrew's and Christ Church Parishes . . . who, in connection with a crop of Sea Island cotton, grow vegetables for export (Charleston Chamber of Commerce 1873:32-33).

As a result many blacks were employed as wage laborers. Produce increased from about one-quarter of the county's agricultural production in 1890 to over three-quarters by 1930 (Scardaville in Brockington et al. 1985:74). Much of this prosperity, however, disappeared during the Great Depression, when trucking in Charleston County declined by 75%.

Upon Leonard's death the property was sold by the Master in response to court action by South Carolina National Bank, who purchased the plantation for $15,000 (Charleston County RMC, DB W-33, p. 291). About a year later, in late 1937, the property was sold to Socarnat Bank Corporation of Delaware for $13,587 (Charleston County RMC, DB S-39, p. 579). It is likely that the property, during the height of the Great Depression, was seen only as dead weight and even taking a loss was better than continuing to pay the taxes. It was during this period that a number of South Carolina plantations were purchased by out-of-state investors. A January 1939 plat (Charleston County RMC, PB E, p. 59) shows the Sea Side tract, including the "settlement" in essentially the same location as that shown on the 1804 Diamond plat, the 1858 Payne plat, and the 1917 plat for John T. Leonard. No other structures or features are shown, and even the causeway to the landing is missing from the plat. The entire Sea Side Plantation, at this time, is shown in fields.

Socarnat Bank Corporation held Sea Side for just over a year before selling it on December 31, 1938 to Mary C. Sottile of Charleston (Charleston County RMC, DB E-40, p. 546). In 1945 Sottile exchanged Sea Side for three lots in the Wagner Terrace Subdivision in Charleston, owned by developer J.C. Long (Charleston County RMC, DB C-46, p. 187). Throughout his long career long, involving the buying and selling of much Charleston property, Long held the Sea Side tract, as well as the Wilson tract to the east. In 1952 he devised a portion of the property including 76.5 acres of high ground and 62 acres of marsh to his wife, Alberta S. Long (Charleston County RMC, DB N-55, p. 611). Because of questions regarding the original deed, the property boundaries were clarified in a 1955 deed (Charleston County RMC, DB B-60, p. 177). The tract included basically the western end of Sea Side, including the residence and Sea Side Island. The plat (Charleston County RMC, PB H, p. 14) showing this tract unfortunately provides few details. It fails to show the main settlement, any roads, or the vegetation on the tract. In fact, the only useful feature is the revelation that there is bank paralleling the marsh, keying in to the presence of a bank on the 1858 Payne plat for Wagner.

In 1962 J.C. Long began the process of developing Sea Side Plantation. A plat drawn May 1962 shows the eastern two-thirds of the tract divided into a series of eight 25 acre strips, allowing a buffer between the proposed development lands and the property given to his wife 11 years earlier (Charleston County RMC, PB F, p. 22). A few months later, in August 1962 Long began the process of divesting himself of the Sea Side tract, selling three lots (numbers 1, 2, and 3) to The Beach Company for $97,500. The Wilson tract, of about 74 acres, was also sold to The Beach Company in 1973 (Charleston County RMC,
Alberta C. Long sold 219.15 acres to Dieci, Inc. in 1987 (Charleston County RMC, DB N-171, p. 62). At the time of the initial survey, the study tract consisted of essentially four parcels owned by The Beach Company (139 acres); Dieci, Inc. (486 acres); Longs Seaside Farms (69 acres); and Pastime Amusement Company (45 acres).

Summary

Our primary interest, and hence focus, has been on the mid-eighteenth through mid-nineteenth century. It was during this period that the plantation of Thomas Whitesides was sub-divided (perhaps as early as 1762 and at least by 1798) and his son, John Whitesides began his farming operation. John died in 1834, although his widow apparently continued the operation for perhaps an additional decade. Likely by the time Theodore Wagner obtained the Whitesides property the John Whitesides settlement was no longer used and by the time Payne made his plat in 1856 the settlement was entirely gone.

Consequently, at the outside, we may calculate the mean historic date for the John Whitesides settlement using 1762 as the beginning date and 1856 as the terminal date — yielding a mean of 1809. It seems likely, however, that the bulk of the activity at the plantation occurred between 1762 and 1834 when John died and this would produce a mean historic date of 1798.

Of equal importance, the settlements are small and compact. The main settlement, as previously discussed, consisted of only five buildings on less than a acre of land. Unlike his brother Moses, John located his settlement away from the moderating breezes of the "sea shore," in an area which would have been dominated by mosquitoes and wet ground. While it may be that John wished to have his operations better centered on his plantation, or that he wanted closer access to the main road, or that he desired to be closer to the primary swamp areas producing rice, it may also be a response to the long, linear nature of the parcels. John may have located his settlement inland to distance himself from his brother's dwelling — providing additional privacy. Such an approach would also have distanced the two slave settlements — perhaps not only a sign of power over the lives of the slaves, but also an effort to minimize contact and reduce collusion between the two groups. Examination of the plats reveals that even the fields are separated by woods, further reducing the opportunities for interaction between the slave populations.

Although there is only limited data for this early period, there are a few relatively good indications that John Whitesides attempted to focus his plantation on a diverse mix of fodder for his cattle, corn and probably sweet potatoes for his slaves, and rice as a money crop. As time went on, it is possible (but hardly provable based on the historic documents) that the plantation shifted further away from rice as a cash crop and toward ranching and perhaps subsistence farming. It wasn't probably until the decade before the Civil War, under Wagner's ownership and with the small Whitesides' tracts combined, that the plantation began to focus on cotton.

John Whitesides appears to be a planter of very modest means, eking out a living for himself and his family on a relatively small parcel inherited from his father. He does not seem to have expanded his property holdings and even the number of his slaves remained fairly stable, between about 12 and 17, through time. His dealings with others in the parish occasionally placed him in court, being ordered to pay just debts. His association with Rev. Muller at Christ Church was stormy, to say the least, although it is likely that both contributed to the discord.

In sum, the historic evidence paints a picture, as earlier suggested, of a very modest plantation owner, supporting his family (for the most part) "with credit and honour." John Whitesides, however, was far from what is usually thought of when plantations are discussed.
EXCAVATIONS

Strategy and Methods

As previously discussed in the Introduction, the Whitesides settlement area had been previously examined during the site survey (Adams and Trinkley 1993), but there had been no intensive testing. Further, the site, which was heavily wooded at the time of the survey, became virtually impassible in the intervening years. A series of additional shovel tests were placed in the woods off Rifle Range Road in order to once again locate the site. Although it took about half a day, the site was relocated, and was again noted to be in the immediate area of a large tree fall.

Given the heavy vegetation, the next action was to have the site area hydroaxed, removing virtually all of the undergrowth. This process also allows small trees to be removed to ground level while causing only minimal ground disturbance and virtually no subsurface disturbance (Figure 15). Once completed, it was possible to see that there were no above ground indications of the plantation, such as brick piles or rubble scatters, although they weren't expected given the age of the site. The hydroaxing, however, did allow us to see that clear plow ridges were still visible, indicating that the site area had been cultivated in the past.

Auger Testing and Metal Detecting

With the site open we decided that it was essential to have better information on the exact boundaries of the site, as well as good data on the density and distribution of artifacts. An auger survey was chosen over the more traditional shovel testing for several reasons. Auger testing has been found to be less destructive to the archaeological remains and to also be more efficient than individual shovel tests, especially when there is free movement. We have explored auger testing at 50, 25 or 20, and 10 foot intervals. Fifty-foot intervals provide very little information concerning structure locations or intra-site patterning. As a result, we avoid using such large intervals wherever possible. While there is little doubt that 10-foot intervals provide the very best information on site density and the distribution of artifacts, this approach is very labor intensive. Consequently, 20 or 25-foot intervals are typically selected as the best compromise. They tend to provide fairly reliable information site patterning and provide reasonably good indications of structural remains.

Figure 15. View of the 38CH1471 site area after hydroaxing, looking to the north. The large tree throw in the center of the photograph is the general vicinity of the site core.
A grid was established at the site using the orientation of the John Whitesides settlement (see Figure 8), which also approximates that of Rifle Range Road and the general layout of the development. The site’s grid north was therefore magnetic N50°E. The grid was also tied into nearby development markers for long-term horizontal control, although we recognized that this area was to be developed shortly after the completion of the field work. Pin flags were placed at 20 foot intervals covering an area 120 feet east-west by 120 feet north, encompassing about 0.3 acre. These points were numbered sequentially as shown in Figure 16.

As the testing progressed additional points were established to the north, west, and south of the original grid in order to ensure that the site core had, indeed, been located. At the conclusion of the testing 69 auger tests were conducted, covering an area 180 feet east-west by 140 feet north-south, or about 0.6 acre. While it might be argued that the grid would have been effectively covered the Whitesides settlement had it been longer north-south than east west (thereby taking on the proportions of the settlement fence), we were concerned that at least two sides be picked up in the testing. This could be more cost-effectively assured by attempting to identify the narrow width, rather than the longer length, of the settlement. Based on the historic research, this testing encompassed 55% of the area shown on the 1798 plat.

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 below the current ground surface. All soil was screened through ¼-inch mesh and all remains, including shell, brick, and mortar, were collected.

Materials from these tests were sorted in the field laboratory, with brick, mortar, and shell weighed and discarded. Historic artifacts were counted, although no effort was made to distinguish between different classes for the purpose of the density mapping, primarily because the sample sizes were found to be very small. Brick and mortar weights were equally small and could not be further utilized in density mapping.

Of the 69 auger tests only 16 (21.7%) produced artifacts. These included small quantities of ceramics, glass, and nails. Only one produced any brick. None produced shell. These remains were loosely clustered in the center of the auger test grid (Figure 16). While artifacts extended outward from this concentration the spread was so weak that it seems best attributable to plowing and the natural dispersion of materials. In other words, the auger testing revealed only one structure, situated in the center of the test area. This was interpreted to represent the main house.

In order to explore for any additional, but ephemeral structures, a metal detector survey was combined with the auger survey. The hope was that small buildings which might be unitarian and therefore contain few artifacts except those associated with its construction, would be found through concentrations of nails or other architectural hardware.

This survey was undertaken using a Tesoro Bandido II™ with an 8-inch concentric coil (electromagnetic type operating at 10KHz). The instrument has the capability to operate in either an all metal mode or discriminate mode (which eliminates ferrous metal response). The all-metal mode is the industry standard VFL type which does not require motion of the search coil for proper operation. The discriminate mode is based on motion of the search coil, but allows control over the detector’s response to ferrous metals.

Since the primary goal of this work was to determine if additional low density architectural remains were present, the instrument was operated in an all-metal mode. This would ensure that architectural hardware, especially nails, would be identified.

This survey involved walking transects through the gridded area, and about 50 feet beyond in all directions, "sweeping" the metal detector across the ground surface. "Hits," or areas were metal was identified, would be flagged for ground truthing through shovel testing. The study, however, found no "hits" whatsoever.

The reason for this absence, in retrospect,
Figure 16. Auger tests, area of the block excavations, and topography of the John Whitesides settlement core.
is clear. Given the very early date of the site it is likely that most structures, including utility buildings, were of peg construction. In the eighteenth century craft tradition very few nails would be used. Those which might be present, for example associated with roofing, would be small. The site's wet and acidic soils have likely significantly reduced the numbers of such nails through corrosion. Indeed, very few identifiable nails were found even in the block excavation, serving to confirm both their rarity and poor condition.

Block Excavation

The auger test grid at 38CH1471 served as the basis for the general site grid. Units were 10 foot squares, although each one was further subdivided into four quadrants (SE, SW, NW, and NE) in an effort to maximize spatial distribution data. Units were simply identified by sequential numbers in the field, since the auger test data indicated that only one tightly contained block would be excavated. In total 11 units were excavated, totalling 1025 square feet (Figures 16 and 17).

Vertical control at the site was maintained through the use an off-site mean sea level development stake. Elevations were expressed as feet above mean sea level (AMSL) as determined by reference this established datum. This system allows widely separated areas of the site (and between this site and other plantation components such as 38CH1473 and 38CH1562) to be precisely compared.

Soils from the block excavation were screened through ¼-inch mesh using mechanical sifters. Units were troweled at the top of the subsoil, photographed in b/w print and color transparency film, and plotted. Excavation was by natural soil zones and soil samples were routinely collected. The one feature identified was bisected. Normally both a small soil (approximately 2 quarts) and flotation samples would be collected. Given the low incidence of features and the mucky nature of the soil, all of the fill from this feature was collected for mechanized water flotation. The feature was also excavated by natural soil zones and was separately photographed, plotted, and profiled.

Field notes were prepared on pH neutral, alkaline buffered paper and photographic materials were processed to archival standards. All original field notes, with archival copies, are curated at the South Carolina Institute of Archaeology and Anthropology (SCIAA). All specimens have been evaluated for conservation needs and have been treated prior to curation (this process is discussed in a following section of the study). The materials have been cataloged as 38CH1471-1-1 through 38CH1471-67-1, using SCIAA’s proveniencing system.

Excavations

The first two 10-foot excavation units were placed based on the auger study. Unit 1 was placed north of Auger Test 18, in an area of low artifact density, but which produced a small quantity of brick rubble. Unit 2, on the other hand, was placed northwest of Auger Test 32, which produced the largest quantity of materials.

In both cases the soil stratigraphy at the site were found to be very simple. The surface soil, to a depth of about 0.9 to 1.0 foot was a very dark gray (10YR3/1) loamy sand, overlying a dark grayish brown (10YR4/2) sand. On occasion it was difficult to distinguish the two, but universally the subsoil was slightly lighter in color, or slightly grayer, than the overlying Ap horizon.

These soils, which throughout the excavation in late January and early February were wet, reflect chemical reduction caused by the lack of oxygen in the soil. Because of the high water table, aerobic organisms quickly deplete the supply of oxygen, dying or becoming dormant. Anaerobic microorganisms multiply rapidly and use oxidized soil compounds such as iron and manganese oxides, nitrate, sulfate, and their own metabolites as electron acceptors in redox reactions. The point is that under such conditions, nitrates are rapidly converted to ammonia and nitrogen gas and are lost from the soil. Manganese is readily reduced to a soluble form and also lost. Ferrous iron is even
Figure 17. Plan view of excavations at 38CH1471.
brought into solution and eventually lost (Merkle 1955). Consequently, reduced soils not only make the differentiation of stratigraphic zones difficult, but also precludes chemical studies of occupation.

Another side effect of the wet soils was that excavation screening, which normally progresses at the rate of around 12 cubic feet per person hour slowed to as low as 8 cubic feet per person hour. The obvious solution would have been to either conduct the excavations during dry weather, precluded by the developer's schedule, or use water screening, precluded by the distance to even a fire hydrant. Consequently, excavation progressed as quickly as the soils would allow using mechanical sifters.

Unit 1 was found to produce very low quantities of artifacts (only 26 were recovered from the 10-foot square). Five pounds of brick were recovered from the northeast quadrant of the unit. Although none of this brick was articulated and most of the fragments were under two inches in diameter, it nevertheless did suggest that the unit was placed in close proximity to a brick feature, perhaps a hearth or pier.

Meanwhile, excavations in Unit 2 produced 156 artifacts, but only 4 ounces of brick. Although not as clearly associated with structural remains, the decision was made to focus on excavations in the Unit 2 area, hoping to not only obtain a larger sample of the cultural remains associated with the structure, but to also work toward what we perceived to be an architectural feature.

As can be seen in Figure 17, excavation generally expanded southward, eventually encompassing a block of 925 square feet. As the work progressed careful note was maintained of artifact densities by 5-foot quadrants, since we wanted to encompass the densest portions of the artifact scatter.

As excavation progressed only a single feature, identified as Feature 1, was encountered along the east wall of Unit 5 (Figure 17). Measuring about 4 feet east-west by about 3 feet north-south, it contained a mass of brick and mortar rubble. The surrounding soils were a mucky very dark gray (10YR3/1) loamy clay so it was not possible to determine if this feature may have been impacted by plowing, but the sides were generally well defined and the rubble fairly compact (Figure 18).

Upon excavation the feature was found to a maximum of 0.4 foot in depth and to be confined to a basin with sloping sides. No articulated materials were found, although the feature did contain several areas of dense brick or mortar remains. Also recovered from the features were noticeable quantities of plaster, some with lathe impressions. Most of these were highly fragmented and none were found which evidenced pigment.

Artifacts recovered from the feature included a small quantity of delft, slipware, and pearlware. Also present was a possible fish hook fragment, a brass pin, bottle glass fragments, and...
EXCAVATIONS

window glass. Perhaps the most interesting recovery from the feature was a large quantity of charcoal and a relatively large quantity of very small fish bone and fish scales.

The feature appears to represent a portion of a probable hearth pad or chimney footing. It also appears that the area around this footing was a collector of small debris, such as the pin and fish bones. During the demolition of the structure, as the chimney was being salvaged, fragments of plaster and other refuse were likely intermixed with the remains of the footing.

Taken in the context of the other excavation units, this chimney was probably situated at the western end of the structure. The brick encountered in Unit 1, 60 feet to the northeast, may be the remains of a second end chimney, at the other end of the structure. If so, then the archaeological data suggest that the main house measured about 55 feet in length. This explanation, however, seems unlikely since the artifact density falls off so dramatically to the northeast.

In addition to the feature, two post holes were also identified. Found only a few feet apart in Unit 3, they do not fit into any obvious structural pattern. Nevertheless, each was well defined. Post Hole 1 measured 0.4 foot in diameter and had a depth of 0.6 foot, terminating with a point. One undecorated creamware sherd was recovered from the fill. Post Hole 2 measured 0.8 foot in diameter and was 0.9 foot in depth with a rounded bottom. This post hole produced a fragment of "black glass" and a lead glazed slipware ceramic.

Distribution Studies

The excavation of the units by quadrants allows the density of remains in the block excavation to be more carefully explored. Figures 19 through 22 present the density of kitchen artifacts, architectural artifacts, brick, and shell.

Kitchen and architecture artifacts are both concentrated in the center of the block (in the southeast quadrant of Unit 3 and the northeast quadrant of Unit 8. Kitchen artifacts appear to be somewhat more diffusely spread across the excavations than the architectural remains, which form a northeast-southwest linear pattern. In both cases, however, the density of remains begins to drop the further away from the core found in Units 3, 4, 5, and 8.

Brick weights are very clearly associated with Feature 1, being concentrated in the northeast quadrant of Unit 5 and the northwest quadrant of Unit 8. The brick density declines quickly as you move away from Feature 1, with the outlying quadrants suggesting little more than a smear of brick scattered by plowing.

There is a curious correlation between the brick and shell. Shell is concentrated in the northern half of Unit 5 and the northwest quadrant of Unit 8 and tends to smear outward from this core no more than about 5 feet. Although the origin and function of this shell is not well understood, it appears to closely associated with the chimney footing or at least the western end of the structure.

Summary

The excavations produced only one identifiable feature — a probable chimney footing consisting of a shallow depression filled with brick and mortar rubble. No other well defined evidence of architectural features was found. The two post holes identified, for example, do not appear to form any definable portion of the posited structure. While there is a second brick concentration about 55 feet east of Feature 1, there are few artifacts in association.

The architectural artifacts suggest a linear smear running northeast-southwest, the anticipated orientation of the John Whitesides' structure. And Feature 1 does appear to be in an appropriate location for a western end chimney (Figure 23).

Research at several other late eighteenth and early nineteenth century low status structures, such as the Rose Hill plantation house in Prince William's Parish (see Adams et al. 1995) suggests that structural remains and artifact concentrations will be closely associated. If this is also the case at
Figure 19. Distribution of kitchen group artifacts in the block excavations.

Figure 20. Distribution of architectural group artifacts in the block excavations.

Figure 21. Distribution of brick in the block excavations.

Figure 22. Distribution of oyster shell in the block excavations.
EXCAVATIONS

Figure 23. Block excavations at 38CH1471 showing the location of Feature 1. View is to the west.

38CH1471, then the structure is probably little more than perhaps 30 by 20 feet.

This is an exceptionally modest structure — a concern which was also faced at Rose Hill, where the structure was found to measure about 24 by 28 feet with a gable end chimney located on the east end with a door centered on the south wall facing the oak allée. There was also evidence of a porch at Rose Hill, perhaps 7 feet in depth. The Rose Hill structure, associated with a planter of modest means, was built on shallow brick piers with a wood superstructure. The internal layout of the house was thought to be a simple two room plan with the east room measuring about 24 by 18 feet and the smaller room measuring 24 by 10 feet. There was possibly additional space in an overhead loft, but the posited floor plan provided around 672 square feet of living space.

Both the Whitesides house and the rather better defined structure at Rose Hill are very small, especially by nineteenth century standards. Small main houses have been located at plantations dating to the early eighteenth century

(see Carrillo 1978; Adams 1995), but generally they were rebuilt or enlarged in the late eighteenth century or early nineteenth century when rice cultivation became more profitable or when the planter began to reap the profits of Sea Island cotton. Based on the historic documentation it is unlikely that John Whitesides saw any great profit from his small patch of rice and the plantation never participated in the cotton boom of the nineteenth century.

The limited archaeological evidence, therefore, suggests a very modest structure with a single, gable end chimney. The scatter of brick to the northeast may represent an anomaly, or more likely the remains of a utility building not associated with large quantities of domestic remains.
"WITH CREDIT AND HONOUR"
ARTIFACTS

Introduction

This section is intended to provide an overview of the material culture present at Whitesides Plantation. Since the excavation focused on one portion of the plantation through the excavation of one block (and one isolated 10-foot unit), these discussions combine all of the materials recovered into one analytical unit. A general overview of the recovered artifacts, their contribution toward architectural or feature reconstructions, mean ceramic dating, artifact pattern analysis, and exploration of status indicators (including, where appropriate, Miller's indices) are provided for the site. The only artifacts not included in the detailed discussions (but, for example, included in the artifact patterns) are the Colono wares, which are discussed in greater detail in the following section of this study.

Laboratory Processing, and Analysis

The cleaning of artifacts was conducted in Columbia, after the conclusion of the excavations. Cataloging of the specimens was conducted intermittently during mid to late 1995. The analysis of the specimens was conducted during late 1995. Artifacts were evaluated for their conservation needs by Chicora personnel at the Columbia laboratory during the processing of the collections. Materials from the site, because of the intermittently wet soils, were in very poor condition and no diagnostic materials were identified which warranted conservation efforts.

As previously discussed, the materials have been accepted for curation by the South Carolina Institute of Archaeology and Anthropology. The collection has been cataloged using this institution's accessioning practices. Specimens were packed in plastic bags and boxed. Field notes were prepared on pH neutral, alkaline buffered paper and photographic materials were processed to archival standards. All original field notes, with archival copies, are also curated with these facilities. All materials have been delivered to the curatorial facility.

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 in these investigations (and outside the scope of the research plan) that it is not included in the study. The temporal, cultural, and typological classifications of the historic remains follow such authors as Cushion (1976), Godden (1964, 1985), Miller (1980, 1991), Noël Hume (1978), Norman-Wilcox (1965), Peirce (1988), Price (1970), South (1977), and Walton (1976). Glass artifacts were identified using sources such as Jones (1986), Jones and Sullivan (1985), McKearin and McKearin (1972), McNally (1982), Smith (1981), Vose (1975), and Warren (1970). Additional references, especially for the porcelains and Colono wares will be discussed in the following sections.

The analysis system used South's (1977) functional groups as an effort to subdivide historic assemblages into groups which could reflect behavioral categories. Initially developed for eighteenth-century British colonial assemblages, this approach appears to be an excellent choice for the Broom Hall collection. Although criticized for problems in sample comparability (see, for example, Joseph 1989), even the system's detractors note that:

whatever its flaws, the value of artifact patterning lies in the fact that it is a universally recognized method for organizing large collections of artifactual data in a manner which can be easily understood and which can be used for comparative purposes (Joseph 1989:65).
The functional categories of Kitchen, Architecture, Furniture, Personal, Clothing, Arms, Tobacco, and Activities provide not only the range necessary for describing and characterizing most collections, but also allow typically consistent comparison with other collections.

Another important analytical technique used in this study is the minimum vessel count, as both an alternative to the more traditional count of ceramics and also as a prerequisite to the application of Miller's cost indices. The most common approach for the calculation of minimum number of vessels (MNV) is to lay out all of the ceramics from a particular analytic unit (such as a feature), grouping the sherds by ware, type, and variety (e.g., floral motif vs. pastoral). All possible mends are then made. Body sherds are, from this point on, considered residual and not further considered. Remaining rim sherds, which fail to provide mends, are examined for matches in design, rim form, colors, and other attributes which would indicate matches with previously defined vessels. Those which fail to match either mended vessels or other rims are counted as additional vessels. Since there were no closed features, such as wells or privies suitable for this level of analysis, the analytic unit used was all of the units from the excavations. These were combined for this analysis, using a minimum distinction method for the MNV, which tends to provide a relatively conservative count.

Although no cross mend analyses were conducted on the glass artifacts, these materials were examined in a similar fashion to the ceramics to define minimum number of vessel counts, with the number of vessel bases in a given assemblage being used to define the MNV. Attempts were made to mend and match vessel bases in order to ensure the accuracy of the count. If a glass artifact exhibited a different color and/or form not represented by the counted bases, then it was designated a separate vessel or container.

The method used to determine the occupation span of the excavations at Whitesides is South's (1977) bracketing technique. This method consists of creating a time line where the manufacturing span of the various ceramics are placed. The left bracket is placed by determining where at least half of the ceramic type bars touch. The right bracket is placed the same way, however, it is placed far enough to the right to at least touch the beginning of the latest type present (South 1977:214). We have chosen to alter South's bracketing technique slightly by placing the left bar at the earliest ending date when that ending date does not overlap with the rest of the ceramic type bars.

38CH1471, Main Settlement

The investigations at the main settlement consisted of 1,025 square feet of excavations centered on what is thought to be the main house of the Whitesides' plantation. This work produced 2,013 artifacts, yielding an artifact density of 2.0 artifacts per square foot or 1.9 artifacts per cubic foot.

Kitchen Group Artifacts

A total of 1,558 Kitchen Group artifacts was recovered, most (999 or 64.1%) representing ceramics or glass (359 or 23.0%). Recovered were a wide range of eighteenth and early nineteenth century ceramics, including porcelains, white salt glazes stonewares, Nottingham stoneware, Westerwald stoneware, lead glazed slipwares, delft, creamwares, and pearlwares. As discussed below,
the latest ceramics recovered, which provide the TPQ date for the sheet midden around the main house, are transfer printed and hand painted pearlwares.

The major types of ceramics are shown in Table 7, revealing that tablewares, such as the porcelains, white salt glazed stonewares, slipware, delft, creamwares, and pearlwares, account for 72.2% of the ceramics. Utilitarian wares,2 such as the brown and gray stonewares and the coarse earthenwares, account for about 20.1% of the collection. This is far in excess of the 5 to 10% utilitarian wares found at the high status areas of Broom Hall, but is very similar to the distribution found in Area E of Broom Hall, where utilitarian wares accounted for 17.3% of the collection (Trinkley et al. 1995:138). This suggests that lower status occupations may exhibit a higher proportion of ceramics intended for storage or preparation. One reason for this difference may be that on high status sites utilitarian wares tend to be concentrated at special use areas, such as kitchen and storage buildings. In contract, at lower status sites it seems more likely that utilitarian wares would be found throughout the occupation area, serving a variety of functions.

The most common eighteenth century pottery was lead glazed slipware. As Noël Hume notes this ware has a red (or salmon) colored body, is coated with a white slip through which patterns were incised. The result was then covered with a clear to pale yellow lead glaze that produced a "rich yellow surface and light-brown ornament where the body color showed through" (Noël Hume 1978:104). Principal forms were plates, trenchers, mugs, and pitchers. As John Cushion observes, the slipware potters were "primarily concerned with producing the everyday necessities for the more humble table" (Cushion 1976:79).

During the eighteenth century utilitarian slipwares made in Staffordshire and other parts of England were exported to the colonies in huge numbers. These were often offered for sale in newspapers and while no examples are immediately available from Charleston, Jefferson Miller cites several examples from elsewhere:

in 1757 a New York merchant offered for sale: "... Crates Common yellow Wares both cups and Dishes ..." Another New York vendor, in 1768, advertised "yellow Dishes by the Crates ..." (Miller 1974:2).

One hundred ninety-eight examples of slipware were recovered from the excavations at the main settlement and these account for nearly 20% of the entire European ceramic assemblage.

Recovered from the excavations are six plain slipware bowls, one cup, 10 pans, and one "standing salt." Two of the five bowls have diameters of 5-inches, while the others include 7, 8, and 10-inch examples. The one cup has a bulbous body and a straight collar neck with a diameter of 3½-inches. Five of the 10 pans or trenchers are plain and the other five have pie crust rims. Sizes range from 5-inches to 14-inches.

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2 Utilitarian wares are those used in food preparation and storage. They typically include stonewares and coarse earthenwares, but exclude Colono ware, because of the possible ethnic differences in food preparation and consumption practices.
The salt is an interesting example rarely found in archaeological collections. The recovered specimen is an example of a "standing salt" properly used at individual place settings. It would have appeared as a small bowl mounted on a turned pedestal food. Similar examples are found in redware and are described by Ketchum (1991:20).

The other eighteenth century wares—such as Westerwald, white salt glazed stoneware, and delft—are considerably less common, comprising only 1.7% of the collection. Only four examples of porcelain are present. Two are an overglazed enamelled Chinese porcelain and the remaining two are likely English porcelains. Together, porcelain accounts for only 0.4% of the ceramics from the Whitesides plantation.

James Deetz observes that at least by 1780 the porcelain found in colonial inventories is largely limited to:

- tea sets, and probably demonstrates the adoption of the full-blown English tea ceremony for the first time. This custom can be considered a good indicator of the re-Anglicization process that was at work at the time (Deetz 1977:60-61).

He points out that porcelain is therefore a socio-technic artifact and therefore less likely to be broken, and enter the archaeological record, than more technomic artifacts. Henry Hobhouse describes this ritual, as well as the ceramics associated with it:

The eighteenth century Europeans, like the Japanese but unlike the Chinese or the Russians, regarded tea making as a ceremony. There was the boiling water, not boiled for too long. There was the specially warmed pot. There was the infusion time. There was the pouring, a little bit of a ceremony all on its own (Hobhouse 1987:111).

Richard Waterhouse (1989) explores the structure of values in Carolina society, noting that "the behavior patterns of the wealthy eighteenth-century Carolinians were based on luxurious living and imitation of upper-class English taste and manners" (Waterhouse 1989:103). The reasons for this "exaggerated imitation of the . . . English gentry" (including the adoption of the tea ceremony) were complex, but seem to involve the high mortality of the new colony, the long-established links between Carolina's elite and the English gentry, the close trading (and economic) ties between the two groups, and the desire for the Carolina elite to establish itself as a ruling class which was rigidly hierarchical and mobility was severely limited. Waterhouse also contends that the "black majority" of Carolina "deepened the psychological need for South Carolinians to adhere to the normative values of English culture" (Waterhouse 1989:108). The tea ritual, and the associated very expensive imported porcelains were one aspect of this overall process.

There are some components of the tea ceremony at the Whitesides plantation, such as the small quantity of porcelain, but clearly the Whitesides were not either interested, or more likely, able to participate fully.

The other eighteenth century specimens from Whitesides include two Westerwald bowls with mouth diameters of 6 and 7-inches and one 7-inch jar. The overglazed enamelled Chinese porcelain specimen is a 4-inch bowl, while the two English specimens represent a 5-inch bowl and a saucer.

In the 1760s cream-colored earthenware, creamware, or "Queensware" began to replace the tin glazed earthenwares in the world markets. The creamwares were fine lead glazed ceramics with a light-colored body and a slight yellowish to green glaze. While the earliest documented English example has an underglazed blue hand painted design and is dated 1743, the ware was not perfected until the work of Josiah Wedgwood in the 1760s. It wasn't until the 1790s that much was seen in North America.
Peter Walton notes that there are four major decorative styles for creamware—colored glazes (including many molded examples and some of the so-called "clouded wares"), enamel hand painting, transfer printing, and slips (Walton 1976:73). The transfer printed wares, beginning perhaps as early as 1761, were printed in either an Indian-red, black, or lilac enamel. Subjects included pastoral, coats-of-arms, figures, landscapes, birds, and flowers (Cushion 1976:88).

The bulk of the Whitesides collection is undecorated creamwares, although both hand painted and transfer printed wares are present. The creamwares include six undecorated plates, including one 8-inch, one 8½-inch, two 9-inches, one 10-inch, and one 11-inch. There are also 11 undecorated bowls, ranging from 4-inches to 8-inches in diameter; two cups, both 3½-inches in diameter; two saucers, both 5-inches in diameter; and one undecorated mug, about 3½-inches in diameter. There are also five examples of the "Royal" pattern creamware plates (see Noël Hume 1978:Figure 35), ranging from 8-inches to 11-inches. Only one vessel could be identified with a hand painted overglaze decoration—a bowl with a 5-inch diameter.

As potters continued to experiment with creamware in an effort to imitate the Chinese porcelains, pearlware was eventually produced. By 1779 Wedgwood had produced pearlware, what he called an "improvement" on the creamware with a bluish glaze (Walton 1976:77; see also Noël Hume 1978:129-132). At Whitesides the pearlwares are the second most common European ware, following creamware (accounting for 25.5% of the collection). Examples of polychrome hand painted, blue hand painted, transfer printed, edged, annular, and undecorated wares are present in the collection.

Nine pearlware plates were identified—eight with blue (n=1) or green (n=7) edged decoration ranging from 7 to 10-inches in diameter and one hand painted overglazed plate 7-inches in diameter. Twenty-two pearlware bowls were identified, including one undecorated bowl 5-inches in diameter, four blue hand painted bowls ranging from 5 to 8½-inches in diameter, 11 annular bowls (six were 5-inches in diameter, four were 6-inches, and one was 7-inches), one annular and mocha bowl 5-inches in diameter, two annular and cable bowls 5 and 6-inches in diameter, and three transfer printed bowls. Only one pearlware cup was encountered, with four saucers (one polychrome hand painted, two hand painted overglaze, and one black transfer printed).

The collection, therefore, included 20 plates, 47 bowls, four cups, seven saucers, one mug, one platter, four jars, 10 pans or trenchers, one standing salt, and one jug. Table 8 illustrates this distribution, revealing the dominance of tablewares, and (within this category) hollowware. Teaware accounts for only a little over 5%, while utilitarian vessels, such as jugs and jars, account for over 15% of the assemblage.

The mean ceramic date for the plantation, 1779, is shown in Table 9. If only the ceramics recovered from Feature 1 (the chimney footing) are used in the calculation the mean date is even earlier—1762.7. This table also provides information concerning manufacturing date range for the various ceramics. The terminus post quem (or TPQ) date is that date after which the zone or provenience was deposited. It is based on the latest dated artifact present in the assemblage. The TPQ date for this site is about 1795 and is based on the presence of the transfer printed and polychrome hand painted pearlwares. Using South's bracketing technique discussed earlier, the site reveals a range of occupation from about 1762 to 1815.
These dates closely approximate the previously discussed historic range of 1762 through 1834 for the plantation and its historic mean date of 1798. The date from the chimney footing, in fact, is exactly that anticipated as the historic beginning date of the plantation and the mean for the entire assemblage is only 19 years earlier than the posited historic mean. South's bracketing date suggests a somewhat earlier cessation of activity at the plantation, but this may reflect the very limited activities carried on in the nineteenth century by Whitesides' widow.

Container glass accounts for 359 fragments or 23% of the Kitchen Group total. The most prevalent glass type is that commonly called "black," which is actually dark green in transmitted light, comprising 87.2% of the glass found at the plantation (n=313). These represent "wine" bottles commonly used in Europe and North America. Olive Jones (1986) has conducted extensive research on this bottle style, discovering that the cylindrical "wine" bottle represents four distinct styles — two for wine and two for beer — linked to their size and intended contents. These four styles, however, were not just used for wines and beers. Other products, such as cider, distilled liquors, vinegar, and mineral waters might also have been sold in these bottle styles. In addition, they would have been used by private individuals as containers for decanting, storing, and serving beverages either bought in barrels or made at home.

At the plantation, seven bottles were identified: three with basal diameters of 77 mm, one with a diameter of 95 mm, one with a diameter of 102 mm, and two with diameters of 115 mm. The first two sizes represent wine style sizes, dating from 1790-1850 and 1760-1800 respectively. The 102 mm size is most likely an undersized beer style, dating from 1765 through 1805, while the largest bottle bases most likely represent beer styles dating from 1750 through 1810.

In addition to these cylindrical bottles there was also one example of a case bottle. These bottles were blown into a square-sided mold, have nearly flat bases and relatively thin side walls. They are often called "Dutch gin bottles," but as Noël Hume (1978:62, 69) notes, they were almost certainly made by both the English and French as well and housed a range of liquids.

Also present in collection are three aqua glass fragments, three dark aqua glass sherds, two manganese glass, and 38 clear glass fragments. The clear glass represents two small clear blown bottles, both with bases about 50 mm in diameter. The aqua glass represents a fragmentary panel bottle and the dark aqua bottle represents a cylindrical bottle with a 1½-inch base.

The kitchen artifacts also include 12 fragments of tableware and three kitchenware
items. The tableware items represents a minimum of one goblet with a 2¼-inch base and 3 tumblers with bases of 2, 2½, and 3-inches. Also present is a small fragment of etched glass, possibly representing a unidentified vessel.

All are of lime-metal and colorless. All are also very plain and likely represent the least expensive wares available. This, however, does not mean to imply that they were "cheap," since glass was often sold by weight and tumblers, even of lime glass, tended to be heavy. There was frequently a great deal of breakage in shipment, further increasing the cost (McNally 1982:63).

The kitchenware items included two fragments of cast iron kettles and one fragment of a light weight metal container, perhaps a tin box or some form of inexpensive dutch oven.

Architectural Group Artifacts

The soils at 38CH1471 were exceptionally harsh on metal artifacts, especially small metal items such as nails. The combination of high acidity and periodic wetting and drying caused extensive corrosion so that of the 353 nails recovered from the excavation only one would be identified as hand wrought. The remaining 352 could not be identified as either intact or fragmentary, much less as to type.

The one wrought nail identified had a rose head. This type of nail has a distinctive head created by four strikes of a hammer, giving it the form of a four-leaf clover. Lounsbury (1994:412) notes that this style was most commonly used in rough framing and attaching exterior cladding.

The only other architectural remains encountered in the excavations are eight fragments of flat glass (all of which appears to represent window glass). Until the modern period window glass was either crown or cylinder, with crown glass dominating the eighteenth and early nineteenth century market. Regardless, it is usually difficult to distinguish the two unless certain, usually large, parts of the glass are present (Jones and Sullivan 1985:171). At Whitesides all of the fragments are small, suggesting considerable fragmentation of the panes prior to their disposal. All of the glass, however, had a greenish tint, common to eighteenth century specimens (Noël Hume 1978:233).

The near absence of nails is of no particular concern since it may only indicate that the structure was built using eighteenth century craft techniques which focused on peg joinery.

Timber framing through most of the eighteenth century relied on labor intensive mortise-and-tenon joinery. Pegs, also called treenails or trunnels, were wooden pins used to secure framing members together at their joints. Similar pegs might even be used to anchor floorboards to sleepers, plank sheathing to wall framing, or wood shingles to sheathing or laths (Lounsbury 1994:264, 379). Consequently, it is possible to have structures built with virtually no use of metal nails or spikes.

Although soil conditions are a significant factor affecting the small number of nails present at 38CH1471, it is also likely that the Whitesides plantation house was simply constructed with relatively few nails.

The sparseness of window glass suggests that there were few glassed windows present. Although it is possible that the glass was salvaged when the structure was abandoned, more than eight fragments would be expected just from normal damage and replacement. There seems to be little literature on the availability or use of window glass in the mid-eighteenth century. Regardless, the Whitesides do not seem to have had many glassed openings.

Feature 1 does, however, reveal that the interior walls were plaster on riven wood lath. This reveals that the structure possessed at least some of the refinements expected of planter's homes.

Furniture Group Artifacts

Only one furniture item, representing 0.1% of the total collection from the Whitesides plantation, was recovered. This item is a medium-
Figure 24. Artifacts recovered from Whitesides main settlement. A-D, lead glazed slipware; E, decorated delft; F, transfer printed creamware; G, hand painted creamware; H, transfer printed pearlware; I, annular pearlware; J-K, hand painted pearlware; L, brass escutcheon; M, lead flint wrap; N, tobacco pine bowl with Masonic symbols; O, brass buckle; P, silvered brass button (South's Type 9); Q, domed brass button (no type number); R-S, beads; T, lead fishing weight.
sized brass escutcheon measuring 1/4-inches in height and 1/4-inches in width. While it might be associated with a door lock, it is also the size that might be found on a chest or cabinet. The item is simple and offers no additional information on dating.

Arms Group Artifacts

Arms artifacts are uncommon at the main house settlement, with only two being recovered (accounting for 0.1% of the total assemblage). These include one gunflint (honey colored) and lead flint wrap.

A review of research concerning gunflints is provided by Davis (1986). In general, however, both Emery (1979:37-48) and Noël Hume (1978:220) agree that English flints tend to be gray or black, while French flints tend to be brown or honey-colored, with the majority of flints found on colonial sites coming from France because of their superior quality. This appears to be the case at Whitesides.

The lead wrap measures 39 mm in length and 40 mm in width. These pieces of folded lead were used to wrap the flints prior to inserting them into the cock grip or jaws of flintlocks (Noël Hume 1978:2210-221; White 1995:10).

Tobacco Group Artifacts

The Whitesides main plantation area produced 29 tobacco artifacts (representing 1.4% of the total assemblage), including 24 pipe stem fragments and five pipe bowl fragments.

Of the 5 bowls, four were plain and the fifth example had a deer’s head peering at the smoker with masonic symbols on both sides. On one side was a motif which incorporated the trowel, square, compass, golden vessels, and “G,” flanked by three pillars on each side (representing wisdom, strength, and beauty and relating to Solomon’s temple). On the side of this motif was also a representation of Jacob’s theological ladder and at the bottom was the mosaic pavement. On the reverse side was a shield, likely representing one of the major lodges (Anonymous 1935; Jones 1967).

The Masonic order originated largely in Britain. What was introduced into the south during the colonial period came primarily from the York Rite. The other major Masonic movement was the Scottish Rite, which was introduced from either France or the West Indies. The first South Carolina lodge was chartered in 1760. Allen Cabaniss and Ernest Easterly have noted that:

Masonry spread widely after the American Revolution and was a conspicuous feature of southern life. Virginian George Washington used a Masonic Bible during his first inauguration and a Masonic trowel in ceremonies laying the cornerstone for the Capitol building in Washington, giving the Masonic order new prominence (Cabaniss and Easterly 1989:620).

The most common diameter pipe stem is 5/64-inch, accounting for 66.7% of the collection (n=16), followed by 4/64-inch (n=8, 33.3%). All are plain.

Clothing Group Artifacts

This category includes 23 buttons and five other clothing items, accounting for 1.4% of the total assemblage from the main settlement. The buttons, classified by South’s (1964) types, are listed in Table 10. Most (specifically Types 2-9, or 90% of the intact, dateable buttons) are thought to date from the first three-quarters of the eighteenth century. The remaining types are nineteenth century examples. This collection reveals the heavy use seen by the site in the eighteenth century and its reduced importance in the early nineteenth century.

Other clothing items include two plain brass buckles, one brass decorative element perhaps associated with clothing, and one brass straight pin measuring 29 mm in length, and one fragmentary iron pin.
Table 10.
Buttons Recovered from Whitesides Plantation

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
<th>#</th>
<th>Other (measurements in mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>brass dome</td>
<td>1</td>
<td>16.2</td>
</tr>
<tr>
<td>7</td>
<td>spun brass/white metal with eye cast in place</td>
<td>15</td>
<td>2 - 13.2 (gold wash), 14.0, 2 - 14.5, 15.1, 16.3, 17.4, 18.5, 19.4, 21.6, 23.8, 24.4, 24.9, 26.9 (silvered)</td>
</tr>
<tr>
<td>9</td>
<td>brass disc, hand-stamped face design</td>
<td>2</td>
<td>14.7 (gold wash), 35.6</td>
</tr>
<tr>
<td>18</td>
<td>stamped brass</td>
<td>1</td>
<td>19.1 &quot;GILT JAAS &amp; CO.&quot;</td>
</tr>
<tr>
<td>29</td>
<td>cast white metal with wire eye in boss</td>
<td>1</td>
<td>24.2</td>
</tr>
<tr>
<td>31</td>
<td>brass, spun back with drilled eye</td>
<td>1</td>
<td>17.6</td>
</tr>
<tr>
<td>13/35</td>
<td>clear, faceted glass insert fragment</td>
<td>1</td>
<td>16.0 by 3.5</td>
</tr>
<tr>
<td></td>
<td>brass dome with eye soldered to reverse of dome</td>
<td>1</td>
<td>18.5</td>
</tr>
</tbody>
</table>

One brass buckle is rectangular, measuring 1-inch by 1½-inches. The rims are plain and the buckle is missing its tongue and tongue pin. Although slightly small, this example otherwise matches Abbitt's Type III shoe buckle (Abbitt 1973:32). The other buckle is also plain, but has the shape of a flat oval measuring 1½-inches by 5/16-inches. This was not a shoe buckle, but is use is problematical. The decorative element is a piece of flat brass measuring 18.7 mm by 23.4 mm which had been adhered to a leather strap by a number of small nails. While this might represent tack hardware, it is rather delicate and more strongly suggests a clothing application.

Brass pins are occasionally found on historic sites, depending on the size of the screen and the diligence of the excavators (Noél Hume 1978:254). The example from the Whitesides' excavation was recovered from Feature 1 in the heavy fraction resulting from water flotation.

The second, fragmentary, example also came from the heavy fraction of this feature and is of particular note since it is iron. Noél Hume suggests that these were as common as brass pins, but are much more rarely recovered from archaeological sites. It is likely that it survived because the feature's fill contained large quantities of mortar and plaster which served to somewhat stabilize the soil chemistry.

Personal Group Artifacts

Only five specimens found at Whitesides main settlement could be classified as Personal Group items (representing 0.3% of the total assemblage). These included two beads, one coin, and two key fragments.

One bead is a faceted tube of manganese glass measuring 20.64 mm in length and 7.87 mm in width with a 1.8 mm diameter hole. The bead has seven sides, but otherwise closely approximates the Type 1f developed by Kidd and Kidd (1970).

The other bead is an example of the wire wound "doughnut" type in blue glass. It measures 4.2 mm in length and 7.1 mm in width. It can be classified as a type W1d (Kidd and Kidd 1970).

Two iron keys were recovered. One represented a shaft fragment measuring 4½-inches in length and including the key blade, which measured 1¼-inches in height. The other example is intact and measured 3½-inches in length. Both are the type of keys which might be associated with a door lock.

The last Personal Group item is a badly worn copper coin. Using reflected light and careful scrutiny, it appears that this may represent a copper imitation halfpence from the 1780s. On the obverse is the head of George III facing right and on the reverse a seated figure holding a wheat ear (Breen 1976:117; see also Newman 1976). The British Royal mint ceased the production of coppers in 1775 and did not resume until 1797. In the intervening years a number were issued by different states and the one found at Whitesides most closely resembles those from Connecticut,
with "CONNEC" found to the rear of the King George's bust.

Activities Group Artifacts

This final artifact group includes a total of 29 specimens (or 1.4% of the total assemblage from the Whitesides main settlement). The category is broken down into a variety of classes — construction tools, farm tools, toys, fishing gear, storage items, stable and barn items, miscellaneous hardware, and a rather general class called simply, "other" (South 1977:96).

At 38CH1471, the only tool item was a badly deteriorated hoe fragment. Fishing gear included two round lead weights. One measured 1/4-inch in length and 3/8-inch in width. The other was 1/2-inch in length and 3/8-inch in width. Also present was a "home-made" weight, consisting of lead melted and allowed to cool in a spoon bowl. The resulting weight measured 1 1/2-inches in length, 1 1/4-inches in width, and 3/8-inch in depth. Afterwards the weight was pierced with a 5/16-inch hole.

Miscellaneous hardware items included an iron hook measuring 3 1/2-inches in height and 1 1/2-inches in width, a small iron washer, and a fragment of a brass nail. Brass and copper nails are frequently found associated with ship building and their presence at coastal sites is rather common.

In the "other" category are 12 fragments of unidentifiable iron, one lump of melted lead, two cut lead fragments, one fragment of gray flint which may be a portion of a gun flint, four slate fragments which may represent counting or writing slate pieces, and two flint cobble fragments most likely introduced to the site as ballast.

An Overview of Dating at the Plantation

As previously discussed the historic dates for the plantation range from about 1762, with the death of Thomas Whitesides and division of his estate, to 1834, with the death of John Whitesides. Although it continued to operate for a short period after John's death, the historic evidence suggests that the activities on the tract were substantially reduced. It is also not clear if the settlement was actually used by John's widow. These beginning and ending dates produce a mean historic date of 1798.

Turning to the archaeological collection, the ceramics from Feature 1 — the chimney footing for the main house — produce a mean ceramic date of 1762. While this is based on only three ceramics, it is exactly the date of the anticipated beginning of the Whitesides plantation. A more accurate date, however, is provided by examining the TPO of the feature. This is 1790, as evidenced by a fragment of annular pearlware. Regardless, the feature reveals that the plantation was in operation prior to the 1798 plat showing the settlements of John and Moses Whitesides.

The mean ceramic date for the entire assemblage is 1779, 19 years earlier than the posited mean historic date. This suggests that activities at the plantation were dramatically reduced in the nineteenth century and that the bulk of the ceramics were introduced into the archaeological record prior to the end of the first quarter of the nineteenth century. This tends to be supported by South's bracketing technique, which suggests a beginning date for the plantation of 1762 and a terminal date of 1815.

This dating reconstruction is supported, at least in a general fashion, by the total assemblage. The only identifiable nail is hand wrought, characteristic of the eighteenth century. The buttons are generally eighteenth century styles and none of those recovered clearly post-date about 1830. The single coin is consistent with a late eighteenth century date. In sum, the assemblage presents a rather tight date range entirely consistent with the historic documentation and our expectation that the site primarily represents a mid- to late-eighteenth century plantation settlement.

Pattern Analysis

The artifact pattern for the Whitesides main settlement is illustrated in Table 11. A range
of previously defined artifact patterns is provided in the same table for ease of comparison.

The most obvious conclusion, of course, is that the Whitesides artifact pattern appears not to fit the pattern suggested by South (1977) and later revised by Garrow (1982) for British colonial domestic sites. The kitchen artifacts are entirely too numerous and the architectural remains are almost non-existent. Curiously, the Whitesides assemblage fits the parameters of the Revised Carolina pattern in every other respect.

In looking at other, published and generally patterns, the Whitesides main settlement comes very close to that suggested as typical for eighteenth century slave settlements in the Carolina low country. In fact, the Whitesides assemblage fits the slave pattern in all but two respects — Whitesides exhibits a slightly higher proportion of personal artifacts and a substantially higher proportion of activity related artifacts.

These findings, of course, are somewhat disconcerting, at least initially. They would suggest that the artifacts recovered from the main settlement more closely resemble those one would expect from a slave row than from the dwelling of a freeholder seeking to establish himself as a planter in the eighteenth century.

Yet, when the Revised Carolina Pattern is carefully examined it is revealed as reflecting a rather high wealth and status. For example, the Charleston Townhouse Profile, developed by Martha Zierden and her colleagues (Zierden and Grimes 1989) to reflect the wealth and prosperity of townhouse owners in the late eighteenth and early nineteenth century, is very similar to the Revised Carolina Pattern. In fact, the only real difference is that the Townhouse Pattern has an even higher quantity of architectural items that the Carolina Pattern, reflecting the former's elaboration of the building as a reflection of wealth and power (see, for example, Bushman 1992:100-138). Very high status plantations such as Broom Hall (Trinkley et al. 1995:117) exhibit patterns which are nearly identical to the Revised Carolina Pattern and the Charleston Townhouse Pattern, serving to emphasize that these patterns may better be seen as expressions of gentility, or refined, eighteenth century society, than of typical planters. This is especially true as we remember that, as Bushman (1992) warns, the materials signs of refinement, elegance, and gentility could be picked and chosen by society at large.

This is even clearer when we realize that there are other plantation main settlements which exhibit equally rude assemblages. One of the earliest studied was that of the Elfe Plantation on Daniels Island in nearby, and wealthier, St. Thomas and St. Denis Parish.

It is worth re-visiting the Elfe Plantation and re-examining the explanation for the seeming poverty of the site. At the time it was suggested that during Elfe’s lifetime the plantation (which was acquired in 1765 and passed to his widow at his death in 1775) was a minor investment and as a consequence contained very spartan furnishings. It was suggested that "Elfe's wealth was apparently contained within the city walls of Charleston" (Trinkley 1985:34) and Friedlander (1985) was drawn upon to emphasize that "plantation" in the colonial period had a considerable range in

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### Table 11.
Artifact Pattern for the Whitesides Main Settlement Compared with Previously Published Patterns (numbers in percents)

<table>
<thead>
<tr>
<th>Group</th>
<th>Whitesides</th>
<th>Elfe</th>
<th>Magnolia</th>
<th>Revised Carolina Pattern</th>
<th>Carolina Slave Pattern</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kitchen</td>
<td>77.4</td>
<td>81.6</td>
<td>89.7</td>
<td>51.8 - 65.0</td>
<td>70.9 - 84.2</td>
</tr>
<tr>
<td>Architecture</td>
<td>17.9</td>
<td>7.3</td>
<td>7.7</td>
<td>25.2 - 31.4</td>
<td>11.8 - 24.8</td>
</tr>
<tr>
<td>Furniture</td>
<td>0.1</td>
<td>-</td>
<td>-</td>
<td>0.2 - 0.6</td>
<td>0.0 - 0.1</td>
</tr>
<tr>
<td>Arms</td>
<td>0.1</td>
<td>0.4</td>
<td>-</td>
<td>0.1 - 0.3</td>
<td>0.0 - 0.2</td>
</tr>
<tr>
<td>Tobacco</td>
<td>1.4</td>
<td>1.3</td>
<td>1.8</td>
<td>1.9 - 13.9</td>
<td>0.3 - 9.7</td>
</tr>
<tr>
<td>Clothing</td>
<td>1.4</td>
<td>0.5</td>
<td>0.1</td>
<td>0.6 - 5.4</td>
<td>0.3 - 1.7</td>
</tr>
<tr>
<td>Personal</td>
<td>0.3</td>
<td>-</td>
<td>0.3</td>
<td>0.2 - 0.5</td>
<td>0.1 - 0.2</td>
</tr>
<tr>
<td>Activities</td>
<td>1.4</td>
<td>3.6</td>
<td>-</td>
<td>0.9 - 1.7</td>
<td>0.2 - 0.4</td>
</tr>
</tbody>
</table>

1 Trinkley 1985:Table 8  
2 Wayne and Dickinson 1990:Table 11-2  
3 Garrow 1982
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apparent grandeur, depending on the property's importance in the owner's portfolio. Later, when Elfe's widow Rachel began living on the property, the Elfe fortune was seriously reduced by the Revolution and her husband's previous support of the Crown. It may be that Rachel had difficulty maintaining an affluent lifestyle as local commodity prices dropped and import prices rose.

The study suggested that the explanation based on "an understanding of the plantation's original use and importance to Elfe, the economic and political effects of the Revolutionary War and the ensuing years, and the vagary of the archaeological record" appeared most reasonable. A similar approach to the data at Seasides seems equally appropriate.

In addition, Wayne and Dickinson (1990:11-1-11-15) support the Elfe data through the discovery of a similarly impoverished plantation (subsistence farm might be a better term) on the Wando River. The property, known as Magnolia, was given to John Baxter by his wife's father, Thomas Lynch. Baxter was apparently a minister and the tract was used as his home and farm during his tenure in the Charleston area. They note that the house, while having "a substantial fireplace," was a simple, small two-room frame building. They note that, "the limited and low status artifact assemblage is possibly a reflection of the early period" (Wayne and Dickinson 1990:11-14).

The Whitesides settlement begins to place both the Elfe and Baxter settlements in a firmer perspective. Some plantations simply do not fit the ideal represented by the Revised Carolina Artifact Pattern. There was a range of what might be called a plantation. Friedlander, for examples, observes:

[a] plantation could also mean something in the order of Cedar Grove, Onslow County, North Carolina. Although owned by the wealthy and prominent Howard family, the settlement complex at best probably included a fairly simple farmhouse, outlying kitchen, and associated farm buildings — stable, barn, corn crib and the like. While we may not think of these as plantations, it is important to remember that the contemporaries did (Friedlander 1985:3).

This range in what was called, and recognized in eighteenth century society, as a plantation will exhibit a range in artifact patterns. These ranges are only now being recognized.

Curiously, sites such as 38BU96 locus 6, at Cotton Hope Plantation on Hilton Head Island (Trinkle 1990:Table 16); 38BU1591, the Rose Hill Plantation site in Prince Williams Parish (Adams et al. 1995:Table 7); and 38BU1289, Stoney Creek Plantation in Prince Williams Parish (Kennedy and Roberts 1993: Table 15) all exhibit another plantation pattern, with kitchen artifacts ranging from about 45.0% to 48.9% and architectural items ranging from 43.0% to 46.8%. While these patterns also fail to fit the conventional Carolina Artifact Pattern, they certainly reflect late eighteenth and early nineteenth century plantation development in the Beaufort area.

The point is that there will be a range of patterns reflecting what we call plantations. What is seen at the Whitesides settlement is a pattern of a small, perhaps even poor, planter. That it appears unusual to us should be reason enough to continue research and explore these small planters in even greater detail.

CERAMICS AND STATUS

Since one goal of archaeological research (in general and certainly for this project), is to better understand how different people lived, a wide variety of techniques have evolved for looking at status and lifestyle. At times the efforts have devolved into rather simplistic statements, causing at least one researcher to remark, "It is well know that the rich lived better than the poor," and suggest that archaeologists should "count less and think more" (Friedlander 1990:109). Hopefully, it is possible to both count more (or at least in
different ways) and to also think (both more and better).

In the past archaeologists have used assemblage level studies to gain some indication of status. For example, Otto (1984:64-67) has explored the percentages of decorated ceramic types, finding that nineteenth century coastal Georgia slaves tended to use considerably more undecorated, banded, edged, and hand painted wares than the plantation owner, who tended to use transfer printed wares. Zierden and Grimes (1989:96) have observed that while porcelains are typically taken as indicators of status in the eighteenth century, they were replaced by transfer printed wares in the early nineteenth century, with this decorative style at upper status townhouse sites typically accounting for around 22% of the ceramics.

Table 12 reveals the proportion of different designs on creamwares and pearlwares, by both counts and MNV. Annular and edged wares (typically considered inexpensive) account for between about 58% and 60% of the assemblage, compared to the hand painted and transfer printed wares (typically considered more expensive and hence of higher status) which account for 40% to 42%. These figures clearly place the Whitesides settlement outside the range of either Cannon Point's planter or even overseer.

Of perhaps greater interest are the very large quantities of undecorated ceramics. When they are added the counts, the combined proportion of annular and edged wares falls to 14%, the painted and printed wares account for 10% of the assemblage, and the plain wares account for 76% of the collection.

A similar situation is seen at the Elfe Plantation site, where undecorated wares account for an amazing 92% of the collection. Annular and edged wares contribute only 3% of the ceramics while painted and printed wares contribute an additional 6% (Trinkley 1985:Table 5).

Although the sample is very small, it appears that at small planter sites undecorated wares may dominate the collection. Relegating these wares to the status of "cheap" or "inexpensive" is difficult since each ware initially was expensive and was lowered in cost as its novelty wore off. In addition, as Miller (1980:10) points out, there were less expensive alternatives, such as tinware, which Whitesides chose not to extensively use. Regardless of the reason, planters like the Whitesides appear to have preferred undecorated wares.

In a similar manner vessel form has been used to explore status and wealth, since slave assemblages most often contain relatively high percentages of bowls and utilitarian wares, while planters' sites tend to exhibit more plates and teawares. Table 8 reveals that at the Whitesides main settlement tablewares dominate the collection, accounting for 79.2% of the collection, with utilitarian wares the next most common. Teawares account for only 5.2% of the assemblage, suggesting that the Whitesides were only occasional participants in the tea ceremony.

Among the tablewares, plates or flatware, account for only 35.5%, while bowls contribute 61.8% of the vessel forms. While not dominating the collection, bowls do account for 37% of the Elfe collection (Trinkley 1985:Table 6).

Bowls have been taken by archaeologists to be evidence of foodways. In particular, bowls and slavery have been linked — with the vessel form taken to indicate the prevalence of "one-pot" meals, stews, and pilafs.

Such an approach, while clearly contrasting white and black, provides little information concerning the degrees found among each group. It also fails to acknowledge the plebeian origins of the planter class or that differences in status might be found within the groups. Bushman, for example, notes that the meals of upper and lower classes...
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were general very similar, with only one important difference — the upper classes tended to eat much more meat while the more common people "mostly ate grain, prepared in various ways as bread, gruel, or porridge" occasionally garnished by vegetables, meat, or cheese (Bushman 1992:74). He notes that:

[5]poon meals, the name given to soups, gruels, porridges, and similar infusions, were well liked and prepared the year around. The more important ones, made with cereal grains, were porridge, gruels, and brose. Oat porridge when boiled until a thick, stiff jelly was called flummery and was highly esteemed. A similar dish made out of whole wheat was called frumenty. Gruel was made from a thick dark water poured off the grains after they had been steeped but not yet boiled into porridge and then allowed to ferment slightly in a wooden bowl. It was drunk straight with a dash of liquor or ale or thinned down and heated. The high tables, by contrast, provided strange mixtures of spices, mashed meats, and sometimes vegetables in "made dishes" (Bushman 1992:455-456).

Cary Carson observes that the new foods were an integral part of the consumer revolution in British America. These new foods, he notes:

begot a bewildering array of new tableware. Traditional "country fare" had usually been served in wooden bowls and trenchers before the sixteenth century. Thereafter, improving standards of living and rising expectations had set many farmers' tables with pewter and earthenware as well. Still and all, eating and drinking vessels had been as few as need be and strictly utilitarian — bowls and deep dishes for everyday stews and pottages, a few plates and platters for roasted meats, and sundry jugs, bottles, tankards, and flagons to pass around homebrewed beverages (Carson 1994:597-598).

Once again, our view of "planters" is distorted by an emphasis on the wealthy and on the nineteenth century, when the style of gentility had been widely adopted that, in Bushman's words, "the line that once divided gentry from the rest of society now dropped to a lower level and separated the middle class from workers and marginal people" (Bushman 1992:xv).

One of the most powerful tools for analysis of the economic value of archaeological ceramic assemblages is George Miller's (1980, 1991) CC Indices. The technique provides a rough approximation of the economic position of the plantation owner depositing the discarded ceramics. The indices are best used on discrete, sealed, and well-dated deposits. In addition, the indices are best used on collections which date from the last two or two decades of the eighteenth century through the mid-nineteenth century. None of these conditions characterize the Whitesides plantation. Nevertheless, Miller's indices may help us better understand the wealth of John Whitesides, as long as it is remembered that the site is hardly an ideal test.

Nevertheless, the results are shown in Table 13, revealing that the ceramic index for the Whitesides main settlement is 1.63. Compared graphically to other studies in Figure 25, the Whitesides index falls about mid-way along the currently available continuum. While certainly the Whitesides' ceramics were less expensive than those at some nineteenth century planter sites, they were at about the same level as the ceramics recovered from Cotton Hope Plantation and higher than those associated with a free black in eighteenth century Charleston.
abundant they are all simple, furniture artifacts are almost non-existent, and kitchenware items such as utensils are absent. There are none of the markers of the planter class seen at plantation sites such as Broom Hall.

The archaeological record even paints a rather harsh picture of the Whitesides house — small, timber framed, having only a few glassed windows, and lacking elaborate hardware. Its most durable archaeological feature were the remains of the chimney footing, heavily damaged from years of cultivation.

These discussions have already more than hinted at the reason the assemblage appears so impoverished, noting that our vision of the planting class is distorted by a reliance on nineteenth

![Table 13. Ceramic Index Values for the Whitesides Plantation](image)

<table>
<thead>
<tr>
<th></th>
<th>index</th>
<th>value</th>
<th>#</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plates</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>undecorated</td>
<td>1.00</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>edged</td>
<td>1.38</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>HPOG</td>
<td>3.61</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Bowls</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>undecorated</td>
<td>1.00</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>annular</td>
<td>1.60</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>painted</td>
<td>2.33</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>HPOG</td>
<td>2.80</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>printed</td>
<td>4.32</td>
<td>3</td>
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</tr>
<tr>
<td>Cups</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>undecorated</td>
<td>1.00</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>painted</td>
<td>1.60</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Ceramic Index</td>
<td>1.63</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Summary

The assemblage from the Whitesides Plantation provides a unique glimpse of a Charleston planter who was only marginally participating in what we have come to understand as "plantation society." The artifacts might at first glance be dismissed as belonging to a slave: the assemblage is dominated by bowls of plain or simple decoration, the ceramic index is relatively low, there are few examples of tableglass items, luxury items found marking the planter elite are rare or absent, while clothing items are

![Figure 25. Comparison of Miller's Ceramic Indices for a variety of sites](image)
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century data and a tendency to focus on the wealthiest planters regardless of time period. During the nineteenth century the artifacts of gentility and refinement became more common and affordable, allowing their possession by even the middle classes. Consumer goods, as a whole, became more available, and archaeological assemblages dramatically increase in sheer volume. Focusing on the wealthiest planters is probably an inherent bias in the CRM process — sites which "look" larger and contain more artifacts are, we believe, more likely to be seen as "significant." Plantations associated with Carolina's founding families are also more difficult to dismiss than a farm operated by a relatively unknown historical figure. As a consequence, we have a rather large data set of wealthy (relatively speaking) planters, but a fairly small data set of farmers or small planters.

The current research improves our ability to examine and understand the common planter of the eighteenth century.
INTRODUCTION

The most thorough recently published examination of Colono wares is that associated with the eighteenth century Broom Hall Plantation and included a macroscopic typological examination (Trinkley et al. 1995:198-224), coupled with a petrographic, chemical, and mineral characterization of the pottery (Smith 1995). Readers interested in a broad overview of Colono wares will want to consult these studies. The Broom Hall research, however, built on several decades of detailed studies by researchers such as Ron Anthony (1986), Leland Ferguson (1980, 1989, 1992), Thomas Wheaton, and Pat Garrow (Garrow and Wheaton 1989; Wheaton et al. 1983).

The conventional interpretation is that most Colono wares, most commonly called Yaughan, were produced by slaves for their own use, while a somewhat less common pottery, usually called River Burnished or Catawba, is believed to have been produced by Native Americans for sale or trade. While there are a number of attributes used to separate these two wares, thickness and surface treatment are most often stressed and appear to be of primary utility in the gross separation of the two wares. Table 14 provides a summary of the attributes provides by Wheaton et al. (1983:229).

There remains some disagreement over the use of Yaughan and River Burnished as either types or varieties within a "type-variety" system (see Ferguson 1989, Garrow and Wheaton 1989). As will become evident in neither the Broom Hall study (Trinkley et al. 1995) or this current examination, can the two wares be consistently sorted and examination of typological traits reveals considerable overlap. Some researchers (e.g., Anthony 1986) have attempted to resolve this problem - the range of variability present in Yaughan and River Burnished - by creating intermediate "types." This proliferation of types, however, does little to resolve the basic inability to consistently separate collections or to help us better understand the cultural context of Colono ware. As a result, adaption of the type-variety system appears the most reasonable approach, at least for the present time. Since varieties in the type-variety system intergrade, they do not necessarily have to be sortable. In addition, the varieties do not have to have the same areal and temporal distributions. While they may overlap, spatially and temporally, they need not always co-exist (see Phillips 1970 for additional discussion of the type-variety approach).

BRIEF SYNOPSIS OF PREVIOUS RESEARCH

Ferguson (1992:8-9, Figure 14) and others have noted that, quite logically, Colono wares are found in larger amounts at slave settlements than at main houses, and more frequently at plantations than cities. At Limerick Plantation, Lees and Kimery-Lees (1979:9) noted that the use of Colono ware decreased through time. From the period 1701 to 1725, these wares represented 94% of all ceramics. The percentages steadily decreased to 27% for the period 1826 to 1850. This decrease has been noted at a number of other plantation sites and the quantity varies depending on the presence of a high status occupation. Table 15 provides a summary of information on some Charleston area plantation slave sites. This table supports their contention, although there are some deviances. For instance, the Tanner Road settlement at Limerick Plantation had a very large percentage of Colono wares for its late occupation (Babson 1990). This may be a result of the site being more self sufficient since it was a peripheral settlement.

Garrow and Wheaton (1989:178) noted at Yaughan and Curriboo Plantations that by comparing the relative frequencies of Yaughan to River Burnished pottery there is an indication that while Yaughan wares declined through time, the River Burnished wares increased. Whether this is
Table 14.  
Attribute Summaries for Colono ware and River Burnished or Catawba Potteries  
(from Wheaton et al. 1983)

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Yaughan</th>
<th>Catawba</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thickness</td>
<td>Average .725 cm thick up to very uneven on individual vessels and even single sherds.</td>
<td>Average ±.5 cm thick; 1.1 cm, regular and even.</td>
</tr>
<tr>
<td>Form</td>
<td>Generally open incurving bowls and small flared mouth jars, lips were crudely rounded, or flattened with a finger or stick.</td>
<td>Generally straight sided, open, outflaring bowls, and small well made jars, lips were tapered and well finished.</td>
</tr>
<tr>
<td>Body</td>
<td>Wide variation in size, amount and type of non-plastics, generally various water-washed sands, oxidation was usually not complete, leaving a dark core.</td>
<td>Limited variety of nonplastics, generally fine particle size and completely oxidized or completely reduced.</td>
</tr>
<tr>
<td>Surface</td>
<td>Ranged from crudely smoothed to polished with obvious evidence of the polishing tool, generally interiors of bowls and exteriors of jars were polished, color ranged from black to dark brown to reddish orange, great variation on individual vessels and sherds.</td>
<td>Usually highly polished on interior and exterior of bowls and wide mouthed jars, polish marks were often evident, color ranges from black to gray to buff, little variation on individual sherds, some vessels were intentionally reduced.</td>
</tr>
<tr>
<td>Decoration</td>
<td>.3% had decoration on interior of bowls including pre firing notched rims, reed punctate, thimble impressed, incised lines; post firing incision in the form of a cross in a square and a circle occurred on the interior bottoms of a few bowls.</td>
<td>3.5% of Catawba had undulating &quot;day-glo&quot; red painted lines on the exterior of jars and the interior of bowls applied after preliminary or final firing of the vessel; occasionally red dots were placed around the undulating line, or around small regular facts taken out of the interior lip; or both.</td>
</tr>
<tr>
<td>Method of Manufacture</td>
<td>Bases occasionally coil made and body was hand modelled, poor control over firing temperature and firing time, handles appeared to be attached to the surface of the vessel.</td>
<td>Evidence supports hand modelling but sample is too small for definite conclusions, firing temperature and time were well controlled, reduction when it occurs was intentional, handles had plugs on the end which were inserted in the wall and smoothed from the inside.</td>
</tr>
</tbody>
</table>
a site specific occurrence or a regional (i.e., Charleston area) pattern is unknown and future research should focus on determining if larger proportions of River Burnished wares are distinctive of later sites. Certainly the relatively early Broom Hall site (Trinkley et al. 1995:209) produced primarily Yaughan pottery, tending to support this pattern.

Garrow and Wheaton also found that the relative frequencies of Yaughan ware attributable to "cups/bowls versus cooking/storage vessels" within the slave quarters changed through time. The percentage of cooking and storage vessels declined, while cups and bowls increased. They suggest that:

The material culture during the early period appears to have been based on West African and/or Caribbean models, and changed as time passed to become more like the prevalent Euro-American models of the South Carolina coast (Garrow and Wheaton 1989:179).

Again, more research is needed to determine if this is a regional trend. Both the decrease in Colono wares and the decrease in cooking and storage vessel was seen as evidence for the acculturation of the African-American population at Yaughan and Curriboo Plantations (Garrow and Wheaton 1989).

Another trend which may exist is the preference of one ware over another by the planter class. William Gilmore Simms noted in the first quarter of the nineteenth century that Indian pots were highly valued and were:

considered by most of the worthy housewives of the past generation, to be far superior to any other.

Identification of planter preference in Colono ware may be difficult to find since slaves tended to do all the cooking on plantations and it is likely that if there was a planter preference, it will be masked.

It is also possible, if not highly likely, that some of these River Burnished wares were made locally, that is, within a roughly 30 mile radius and therefore, the pastes between Colono ware and River Burnished ware may not be highly variable. Since it seems overly labor intensive for the Catawbas to bring fired pottery or even raw clay all the way from their upcountry villages to the Charleston area, they may have been searching out plastic micaceous clays, similar to what they used

<table>
<thead>
<tr>
<th>Site Name</th>
<th>Colono wares</th>
<th>European Ceramics</th>
<th>Date Range</th>
<th>Context</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smoky Hill</td>
<td>74%</td>
<td>26%</td>
<td>1705-1798</td>
<td>MH/SR</td>
</tr>
<tr>
<td>Early Yaughan</td>
<td>90%</td>
<td>10%</td>
<td>1740-1790</td>
<td>SR</td>
</tr>
<tr>
<td>Curriboo</td>
<td>88%</td>
<td>12%</td>
<td>1740-1800</td>
<td>SR</td>
</tr>
<tr>
<td>Middleburg</td>
<td>60%</td>
<td>40%</td>
<td>1760-1820</td>
<td>SR</td>
</tr>
<tr>
<td>Late Yaughan</td>
<td>71%</td>
<td>29%</td>
<td>1780-1820</td>
<td>SR</td>
</tr>
<tr>
<td>Lexington</td>
<td>88%</td>
<td>12%</td>
<td>1800*</td>
<td>SR</td>
</tr>
<tr>
<td>Spiers Landing</td>
<td>56%</td>
<td>44%</td>
<td>1792-1830</td>
<td>IS</td>
</tr>
<tr>
<td>Tanner Road</td>
<td>78%</td>
<td>22%</td>
<td>1780-1830</td>
<td>SR</td>
</tr>
<tr>
<td>Haldion Hill</td>
<td>36%</td>
<td>64%</td>
<td>1795-1850</td>
<td>SR</td>
</tr>
<tr>
<td>Broom Hall</td>
<td>80%</td>
<td>20%</td>
<td>1715-1775</td>
<td>IS</td>
</tr>
<tr>
<td>38CH1107, Kiawah</td>
<td>68%</td>
<td>32%</td>
<td>1717-1772</td>
<td>IS</td>
</tr>
</tbody>
</table>

Key: MH=Main House; SR=Slave Row; IS=Isolated Slave House; *=no range provided.

1 Affleck 1990  
2 Wheaton et al. 1983  
3 Wayne and Dickinson 1990  
4 Drucker and Anthony 1979  
5 Babson 1990  
6 Trinkley 1995  
7 Trinkley et al. 1995

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Figure 26. Colono ware from Whitesides main settlement. A-B, examples of River Burnished sherds with weak folds to the exterior; C-D, examples of River Burnished "pie crust" rim decoration (D also exhibits fire clouding); E, River Burnished sherd with gadrooned rim; F, River Burnished sherd with heavy exterior sooting; G, heavily abraded River Burnished sherd with linear striations; H-I, River Burnished sherds used as hones; J, River Burnished sherd with wear around edges; K, River Burnished sherd with probable argillaceous (ACF) clots in the clay paste.
near their own settlements.

A number of Yaughan vessels have pre- or post firing incisions consisting of some variation of an "X", including an "X" alone, within a square or a circle, or some other encirclement located on the bottom interior or exterior of the vessels. The marks were all found on Yaughan bowls and none were found on jars. Often these bowls had ring bases (Ferguson 1992:113). Archaeologists had initially believed that these marks were maker's or owner's marks, however, there was not enough variety for them to be owner's marks. While they may be maker's marks, Ferguson (1992:114) states that since many of them are found adjacent to or in water, the marks have some sort of link with water. He suggests that the marks are associated with Bakongo religion since they closely resemble the Bakongo sign of the cosmos (see Ferguson 1992; Thompson 1983). Given the ubiquitous emphasis on water spirits and circularity in West African religion, the presence of these marked vessels adjacent to water may indicate that they are a part of some sort of religious ritual. If this is indeed the explanation for these markings, then they will most often be found at sites on rivers, and will be uncommon, if not absent, on sites without a major water course. However, more research is needed to understand the meaning behind these markings. Perhaps mapping the locations of their occurrence will provide more insight.

Turning to the most recent research at Broom Hall (Trinkley et al. 1995), the conventional typological study, focusing on the examination of variables such as sherd thickness, temper, surface treatment, and decoration, found that the collections identified as Yaughan and River Burnished overlapped tremendously. Macroscopic (including microscopic to 5x) examination of the sand temper revealed that there were no strong or consistent differences in temper size, shape, or frequency between the two wares. It became quickly clear that the two wares could not possibly be consistently sorted into two (or even more) groups. As a result, the work reinforced our impression that the type variety system was the most appropriate for Colono wares. The research also illustrated the benefit of examining the Colono wares using a consistent, detailed approach. This may be especially important as we attempt to refine our descriptions of the type-varieties.

The petrographic study (Smith 1995) of the Broom Hall collection found that the two wares have broadly similar temper mineralogy but exhibited some textural differences. The different styles of argillaceous (ACF) clots and the grain size difference of the temper materials (primarily quartz) could be used to separate at least some of the two wares. However, the proportions of temper and paste overlap and do not provide a discrete separation index. Based solely petrographic evidence it would also be difficult, perhaps impossible in most cases, to distinguish Yaughan from River Burnished on the basis of muscovite abundance. Mica, in other words, is not a consistently distinguishing characteristic.

Chemical data acquired by Smith (1995) from the Broom Hall collection suggest that manganese concentrations may be used to distinctly separate the two types, although this was the only one of 32 different chemicals which exhibited consistent meaningful differences. At the conclusion of this study it was not clear whether manganese would be a consistent identifier, or whether it was specific to Broom Hall.

**Analytical Methods**

The Colono wares from John Whitesides' main settlement were analyzed following the procedures established for the study of the Broom Hall Colono wares (Trinkley et al. 1995:204-205). The variables used in both studies were:

- Sand Temper Size, based on the U.S.D.A. standard sizes for sand grains, 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), and very coarse (1.0 to 2.0 mm);

- Sand Temper Shape, also known as degree of rounding, defined as angular (convex shape...
and sharp corners), subangular (convex shape with rounded-off corners), and rounded (convex shape and no corners);

- Frequency of Sand 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 25% being moderate, and 5% or less being sparse;

- Temper type: mica, quartz, clay inclusions, and voids;

- Surface treatments: smoothing, identified when the sherds had a regular but not glossy surface, and burnishing, identified when the sherds had a semi-glossy finish;

- Core Cross-Sections, consisting of a visual observation of a freshly broken edge. Sherds were characterized as (1) oxidized with no core, (2) oxidized with an interior core margin, and (3) reduced, being dark throughout with no core;

- Rim diameter, measured in centimeters when a reliable arc was present;

- Rim form;

- Thickness, measured in millimeters and taken 3 cm below the lip of the rim. When this portion of the vessel was not present sherd thickness was taken as a distinct measurement;

- Vessel form;

- Presence of charring or sooting;

- Evidence of use (i.e. cutlery marks or spoon scrapes);

- Decoration; and

- Appendages.

After formal and morphological attributes were determined, rim sherds would examined to determine the minimum number of vessels (MNV) as well as range of vessel sizes, shapes, and styles.

Some changes were implemented during the Whitesides study. For example, the initial Broom Hall work found that sand temper shape was very difficult to judge even using a 5x hand lens. There was a very low agreement between the visual inspection and the results of the petrographic study. Initially an effort was made to improve the accuracy of this assessment by using a binocular microscope at 15x. The vast bulk of the sand inclusions are so fine as to make consistent evaluations, even using the higher magnification, impossible. Unable to provide consistent (and replicable) results, the evaluation of sand grain shape was abandoned.

The use of the higher magnification, however, was very useful in evaluating the presence of mica. Many River Burnished sherds have small grains which "sparkle," giving the impression that the pottery contains abundant mica. The previous petrographic examination of the Broom Hall collection, however, revealed that mica inclusions ranged between 1 and 3% of the paste — hardly quantifiable. It appears that certain quartz and feldspar grains are frequently misidentified at a macroscopic level as mica since they have a similar "sparkle." Using the binocular microscope on the Whitesides collection it became apparent that they, too, lack mica inclusions.

The core cross-sections from the Whitesides collection were also examined in greater detail and an effort was made to explore those sherds which in the paste had been lumped
As work progressed on the Whitesides collection it became obvious that efforts to determine the minimum number of vessels, and the range of vessel sizes, shapes, and styles would be unproductive. The collection contained relatively few rim sherds (only 27% of the collection are rim sherds) and all were relatively small (95% were under 2 inches in diameter). Even the rim diameters must be considered estimates.

In spite of these differences and problems, the analysis of the Whitesides collection is directly comparable to the previous Broom Hall study. Further, the information resulting from the study is highly reliable and represents a significant data source for further Colono ware studies.

Results of Traditional Analytical Techniques

Proportion of Colono and European Wares

The proportion of Colono ware to European ceramics was briefly explored at the Whitesides’ main settlement to examine the reliance a small planter in close proximity to Charleston might have on either slave or Native American made wares. At the main house complex (38CH1471) Colono wares represent 15.7% of the ceramic collection, with European wares representing the remaining 84.3%.

The relatively low quantities of Colono ware at main house sites is relatively common. Table 16 provides comparative information from Charleston area eighteenth century plantation main houses. This table illustrates that although Colono ware percentages are low, there is a wide range in frequency. This may be a factor of occupation span or perhaps more likely, the strength of the African-American presence in the main house complex.

Previous research by Lees (1980) at the Limerick plantation main house plotted the frequencies of Colono ware through time. This suggests that perhaps when the plantation was pioneered, planters may have relied on Colono wares since manufactured items were difficult to come by, especially the further one was from a trade center (like Limerick). During the 1740s, rice prices plunged which caused plantations to become more self sufficient. It is likely that this could also account for the larger quantity of Colono wares during this period. When the low country economy became more established by the mid-eighteenth century, money was more abundant and manufactured items were easier to obtain. This may account for the drop in Colono wares at this time. The increase in use around the turn of the century is perhaps due to the effects of the American Revolution. Again, the economy was in ruins since during the war the exportation of both rice and indigo were drastically curtailed (Lees 1980). After the war, the indigo market never recovered and it was not until the turn of the century that a new staple crop was identified. Eventually, as European ceramics became cheaper, the need for Colono wares diminished.

The pattern at the Limerick main house is also evident at Broom Hall. While the percentage of Colono wares through time is much lower at Broom Hall, this is perhaps due to the planter’s wealth, to the plantation’s proximity to the Charleston markets, or to planter/slave relations. There is some indication that during the early occupation of Broom Hall there is a heavier reliance on Colono wares. Mean dates in the 1740s contain the highest quantities of Colono wares for the eighteenth century. From the 1750s to the turn of the century the use of Colono wares remains steadily low. Colono wares peak to their highest use around 1800, perhaps as a result of the American Revolution, and then drop off again by the 1820s. It could also be argued that the increase

<table>
<thead>
<tr>
<th>Plantation</th>
<th>European Ceramics</th>
<th>Colono Wares</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elfe</td>
<td>98</td>
<td>2</td>
</tr>
<tr>
<td>Green Grove</td>
<td>89</td>
<td>11</td>
</tr>
<tr>
<td>Whitesides</td>
<td>84</td>
<td>16</td>
</tr>
<tr>
<td>Broom Hall</td>
<td>75</td>
<td>25</td>
</tr>
<tr>
<td>Archdale Hall</td>
<td>57</td>
<td>43</td>
</tr>
<tr>
<td>Limerick</td>
<td>52</td>
<td>48</td>
</tr>
<tr>
<td>Crowfield (privy)</td>
<td>46</td>
<td>54</td>
</tr>
</tbody>
</table>
in Colono ware use correlates to increases in the importation of slaves directly from Africa. The patterns in importation roughly approximate the patterns in Colono ware use at Broom Hall, although there appears to be a lag effect.

The sherds from Whitesides' main settlement were initially sorted into categories of Yaughan or River Burnished, using the attributes previously discussed and generally accepted as "valid" indicators by other researchers. There were 185 sherds included in this analysis, representing all of the Colono pottery recovered from 38CH1471, regardless of size. The decision to include all pottery, rather than just those sherds over 1-inch in diameter, was made because of the small collection size and our desire to obtain a valid sample.

Sherds classified as River Burnished were by far the most common "type" of low fired pottery. Of the total assemblage, 173 or 93.5% were classified as River Burnished and 12 or 6.5% were classified as Yaughan.

Wheaton has suggested that the use of River Burnished wares began in the late eighteenth century and increased through time (Wheaton et al. 1993). Examination of his data, drawn primarily from the Awendaw area of northern Charleston County, supports this assessment. The presence of River Burnished wares increased greatly sometime between 1775 and 1789. By the 1820s the percentage of River Burnished wares declines dramatically, probably because by this time the Catawba had stopped trading their wares in the low country (Simms 1841). There seems to be good evidence that River Burnished wares will peak at sites with mean ceramic dates around the turn of the century.

It is, however, also possible that areas closer to major trade centers, such as Charleston, had greater access to the wares and for a wider range of time than areas around Awendaw and on the Santee. As a result, not only would these areas have higher proportions earlier and later than areas further from trade centers, but might also have higher proportions during the peak of trade.

Another variable may be associated with the ability of slaves to procure the time to produce their own wares, as opposed to using wares provided by the planter. It may be that on some plantations the slaves' time was more valuable as labor in the fields than as producers of pottery. Just as many small planters found it more cost-effective to purchase food for his slaves rather than raising it, they may have found purchasing Catawba pottery cheaper than having their slaves take time from other tasks to make pottery.

Certainly at the Whitesides plantation, in the late eighteenth century, the slaves were using very large quantities of River Burnished wares, presumably made by Native Americans, while using few slave-made vessels.

Non-plastic Inclusions

Through macroscopic examination both Yaughan and River Burnished sherds were found to contain varying degrees of primarily quartz sand. Both wares also included a small number of sherds with what are called voided, apparently reflecting organic matter which burned out during the firing. For the most part these appeared to be very small rootlets, suggesting incomplete preparation of the clay. These voids were considerably more common in the Yaughan wares than in the River Burnished (Figure 27).
Present only in the River Burnished collection were also a small number of sherds with clay lumps included in the paste. These appear to be very similar to the argillaceous (ACF) clots found in the Broom Hall collections. At Whitesides they also appear to represent small amounts of dried clay which had become included in the paste during the manufacturing process.

Although the more highly burnished River Burnished wares tended to reveal inclusions which "glittered," neither ware produced recognizable quantities of mica inclusions at even 15x. As suggested by the Broom Hall petrographic study, mica does not appear to be a significant inclusion nor does it appear to be a defining feature of either River Burnished or Yaughan pottery.

Figure 28 illustrates the distribution of temper size of the low fired earthenwares. This suggests that the slaves used clays for their vessels which a range of particle sizes, although the bulk were fine sands. In contrast, the producers of the River Burnished ware apparently either sought out clays with only very fine sand inclusions or intentionally prepared their clay by sorting out the larger sands. Regardless, there is a very clear macroscopic difference in non-plastic inclusions.

Just as quartz sand inclusions in the River Burnished wares were smaller, they were also considerably less common (Figure 29). Inclusions in the Yaughan pottery, in contrast, were more common, even abundant.

In sum, the paste analysis suggests the same general differences between the two wares as pointed out by other researchers and revealed in the Broom Hall study — the River Burnished pottery is finer and includes less sand, the Yaughan pottery is coarse and includes more non-plastic inclusions. The current study continues to support the conclusions from the Broom Hall Study (Trinkley et al. 1985:214). It appears that the Native Americans gathered their clays from sources along river beds where the clays are well sorted. In contrast, the slave gathered their clays from both river and upland areas, probably to maximize clay sources within circumscribed areas. Slaves, producing pottery not for sale or trade but only for local use, may also have been less concerned with the quality of the clay, its firing characteristics, or its appearance.

Manufacture

Most of the sherds of both Yaughan and River Burnished from Whitesides' main settlement were reduced with dark surface colors (Figure 30). For the River Burnished
wares the next most common condition was complete oxidation, which produced bluffs, reds, and browns.

Although a relatively small quantity of the River Burnished wares were incompletely oxidized, there sherds are worth special attention since they may help us to better understand firing and use conditions. Curiously, sherds evidencing incomplete oxidation in an oxygen rich environment are relatively uncommon, comprising only 5.8% of the River Burnished collection. Also present were a very few sherds (comprising less than 1% of the River Burnished collection) which had been fired in a reduced atmosphere, but which were rapidly cooled in open air.

The most common incompletely oxidized sherds were those with reduced interiors and exteriors, but an oxidized core. During normal firing temperatures and in an oxidizing atmosphere, the surface of the vessels with organic matter in the clay will have a black color as the carbon is moved to the surface of the clay before being burned off — resulting in an oxidized core and reduced surfaces. This same cross-section, however, can also result from reduction when organics are not originally present in the clays. Given the prevalence of reducing firing atmospheres, this latter explanation seems more likely. 

The next most common form of incomplete oxidation are sherds with a fully oxidized exterior surface and a reduced interior. This suggests that the vessels were placed upside down, or somehow otherwise had their mouths covered during firing. The vessel interiors were fired in a reducing atmosphere, while the exteriors were exposed to oxygen and were consequently oxidized.

Fire clouding, caused by the differential access to air during firing and cooling, is observed on only 2.9% of the River Burnished collection. This suggests that while firings with both abundant air and very little oxygen were conducted, they were relatively well controlled. This is perhaps the most notable difference between the Whitesides collection and that from Broom Hall (Trinkley et al. 1995:214), where fire clouds were common on River Burnished wares.

Six examples of spalled surfaces were identified in the collection — all from River Burnished wares. Spalling is usually a firing defect and its presence suggests firing on-site since there has been an assumption that defective vessels would not have been sold. Functional vessels, however, may have been sold regardless of appearance, albeit at reduced pricing.

Since there were so few rim sherds in the collection, sherd thickness was measured on all examples, regardless of what portion of the vessel they represented. As observed fairly consistently, River Burnished pottery tends to be thinner than Yaughan — this was also the case at Whitesides' main house. The mean thickness of the River Burnished pottery is 6.85 mm with a standard deviation of 1.41 mm and a range of 3.6 to 10.0 mm. In contrast, the Yaughan collection, in spite of its small size, had a mean thickness of 7.98 mm and a standard deviation of 0.9 mm. The range for the Yaughan was 6.5 to 8.8 mm. While the mean for the Yaughan is thicker (8 mm compared to 7 mm) the range of the Yaughan pottery is entirely subsumed within the range of the River Burnished. 
Surface Treatment and Decoration

As was expected, the River Burnished vessels exhibited a high to moderate degree of smoothing on a large percentage of the wares (Figure 31). Very few of the River Burnished vessels had rough, or poorly prepared surfaces. Some of these, in fact, may be explained by post-depositional damage. In contrast, the Yaughan wares exhibited, on the average, very poorly finished surfaces. Very few exhibited a high degree of smoothing. These patterns are fairly consistent when both interior and exterior smoothing is considered.

While burnishing facets are often found associated with the River Burnished ware (hence its name), they were relatively rare on the Whitesides collection. This may reflect post-depositional erosion and damage. On the other hand, this (taken in conjunction with the incidence of spalling) may suggest that John Whitesides was purchasing less expensive Catawba pottery.

A single River Burnished sherd evidenced highly smoothed cord impressions. Since the sherd is too small to reflect the portion of the vessel represented, it is impossible to determine whether these impressions are the result of the vessel being built on a cord mat, with an attempt to obliterate the resulting impressions, or whether this is an intentional decoration. No evidence of grass punctations like those found at Broom Hall (Trinkley et al. 1995:218-219) were observed. Nor were examples of paint slips present in the Whitesides collection.

Rim/Lip Types

Lips were identified as flat, beveled, rounded, or other, with the first three including a range of variation and elaboration. For example, beveled lips included those which were beveled to the interior or exterior, as well as those which were beveled to a point. Rounded lips included those which were rounded to the interior or exterior. The "other" category includes bulbous lips and those with interior and exterior folds. In all at least 13 different lip styles were identified prior to being collapsed into the current typology.

As Figure 32 reveals, the greatest variation is found among the River Burnished wares, although variations of the flattened and rounded lips are the most common. The Yaughan pottery, perhaps because the sample size is so small (n=2), reflected only the rounded and flattened styles.

Rim decoration was found on about a third of the River Burnished examples (Figure 33). The most common was the "pie crust rim" common to the English lead glazed slipware.
WITH CREDIT AND HONOUR

This, however, probably should come as no surprise.

It appears that the Whitesides' main complex had a fairly even distribution of sizes, with a slight preference for 32 cm rim diameter vessels. Such a clear trend is not seen in the Broom Hall data, although there does appear to be a significant peak in the number of vessels around 26 cm (Trinkley et al. 1995:220).

Use and Wear

Vessels used for cooking will sometimes retain evidence of this use through the presence of sooting or charring. Although laboratory processing will sometimes remove this evidence, lab personnel were instructed to carefully clean all low fired earthenware. We do not believe that processing had a significant impact on the Whitesides collection.

Sooting, or charring, is present on very few of the River Burnished sherds and none of the Yaughan specimens (Figure 36). Where identified, it is more common on the exterior, suggesting use over open fires burning resinous woods, such as pine.

The collection, unfortunately did not allow further examination of sooting by vessel form. In addition, there was sufficient post-depositional damage that wear analysis ( scratch marks, abrasion
caused by use) was not undertaken.

Four sherds, however, evidenced post-depositional re-use as abraders or hones. Since these sherds can provide considerable insight into the lives of the site occupants they are worthy of special mention.

One sherd, about 2.5 cm in diameter, evidences a circular worn spot about 1.4 cm in diameter in the center of the exterior face. No striations are apparent and the sherd may have been used in a circular motion on a flat surface to smooth or grind relatively soft materials. Such use might be evidenced by grinding dried herbs.

A second sherd, about 4.5 by 2.5 cm in size, has been severely ground down, losing approximately 50% of its body thickness. The sherd reveals clear linear striations in reflected light, indicating that it was used to abrade a relative hard object using back and forth motions.

A slightly concave rim sherd, 6.5 by 4.5 cm in size, shows evidence of wear around the edges. This wear is suggestive of use in grinding or smoothing where only the edges of the sherd and not the central, concave portion, came into contact with the material. Since the edges are broken, it is difficult to determine more, although the wear appears to suggest a soft, yielding material was being ground.

Two additional sherds exhibit very similar wear patterns closely resembling those expected for hones. One reveals two wear areas — one measuring about 3 mm in width and a minimum of 2.4 cm in length (the sherd is broken and the terminal end of the hone is not present). The remaining end reveals that the wear gets deeper toward the central edge of the sherd, suggesting a sharpening motion which starts shallowly and moves downward with each stroke. Such wear might result from sharpening a needle or pin. A second sherd reveals a very similar wear pattern, measuring about 5 mm in width and again broken at each end.

Also associated with the former sherd is another wear area, 10 mm in width but broken at both ends. The wear in this example is deepest in the center of the sherd and more shallow toward the edges. It might have been formed by rubbing a small object back and forth with a slight circular twist.

These sherds reveal that the Colono
pottery, even when broken, continued to be used. Found in the main complex it is likely that these abraders and hones were devised and used by the owner and his family rather than by the slaves.

Relatively little information is available in most studies concerning secondary uses of Colono ware pottery. The Broom Hall study (Trinkley et al. 1995:218) found only one such example, a Yaughan sherd from the slave settlement which had been abraded to create a shallow bowl-like surface. The suggestion was made that it was used as a mortar to grind herbs in medicine or food preparation.

Conclusions

Aside from site-specific features, the River Burnished and Yaughan pottery from 38CH1471 closely resemble that from other sites, especially sites like Broom Hall were detailed typological studies have been conducted. There continues to be compelling evidence that no matter how detailed the analysis, the "types" Yaughan and River Burnished cannot be consistently separated based on any typological criteria. As suggested by the Broom Hall study, this should be adequate to recommend the adoption of a type-variety approach with both Yaughan and River Burnished accepted as varieties of the Colono ware type.

Using the generally accepted criteria for separating River Burnished from Yaughan, the Colono wares from 38CH1471 are dominated by River Burnished materials. That is to say, the bulk of the collection is somewhat thinner and has a much finer paste with almost no sand inclusions.

The prevalence of River Burnished wares may be a result of the site's proximity to Charleston and the major trading route of the Catawba coupled with the early date of the site, which fits well into the height of the River Burnished trade. The near absence of Yaughan material may also reflect the poverty of the site, suggesting that the owner would prefer to purchase cheap wares for utilitarian use than spare any of his slaves' time to make pottery.

While there are many possible explanations for the reliance on River Burnished and near absence of Yaughan, taken together the Colono ware potteries comprises only about 16% of the total ceramic assemblage — placing the site at end of the continuum dominated by European rather than Colono pottery. While this is often taken for granted at main house complexes, even there Table 16 reveals that Colono wares may vary from only 2% of the collection to over 50%.

Those plantations with 20% or more Colono in their main house collections are typically plantations of very wealthy planters — Broom Hall, Archdale, Limerick, and Crowfield. Given the small sample size this may be a spurious relationship. Or it may be an indication that the wealthier planters needed, purchased, and used a greater variety of cooking and storage vessels, while the less wealthy planters either had less need or were forced to make-do with fewer vessels.

The relatively low incidence at Whitesides may therefore reflect the economic or social status of the owner. By this we mean that Whitesides economic status may have prevented him from purchasing more Colono vessels, or alternatively, that his social status reduced his need for entertaining and hence storing and preparing a variety of dishes.
POLLEN ANALYSIS

Dr. Arthur D. Cohen
University of South Carolina

Only one sealed context was identified during the field investigations of the Whitesides main settlement — that associated with the posited chimney footing identified as Feature 1. Approximately 1 pound of soil was collected from this feature specifically for pollen analysis. The goal of this work was two fold: first, to determine if cultigens might be present and second, to determine if the samples might help to better understand the landscape surrounding the main settlement.

The samples were macerated for pollen and to slides were scanned to identify pollen types and percentages. The organic matter within the maceration consisted of angular fragments and some very dark, fine grained debris. Some larger fragments were identifiable as gymnospermous (pine-like wood) and some resinous globs were present.

Sufficient well-preserved pollen were obtained to construct a pollen diagram. However, given the small numbers of nonarboreal pollen present, it was decided to construct a single pollen diagram on the basis of the total number of palynomorphs, rather than to separate the arboreal and nonarboreal types. Table 17 provides information on the types recovered from the feature and Figure 37 provides the information graphically.

The large variety of arboreal forms is

![Figure 37. Pollen recovered from Feature 1.](image-url)
interesting. In fact, with the exception of the Chenopodiaceae, this sample is more characteristic of a forested area than a cleared area. No cultigens were encountered in the study. Most pollen and spore types are suggestive of relatively dry, open, sand lowland woods. The presence of Nyssa (gum) and ferns would indicate that some swampy areas may have been located nearby.
PHYTOLITH ANALYSIS

Dr. Irwin Rovner
Binary Analytical Consultants

Introduction

Phytolith analysis was conducted on a soil sample collected at the Whitesides main settlement. The sample was taken from a depression underneath and around disarticulated brick, mortar, and plaster rubble associated with a postulated chimney footing, identified as Feature 1. The sample is thought to represent the environmental (edaphic and taphonomic) conditions of the eighteenth century plantation prior to or during its formation.

The project goals and methods followed those stated in the phytolith study conducted concurrently at the Seabrook Plantation on Hilton Head Island (Rovner 1995d).

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 of morphologically distinctive (and sometimes frequent) phytolith types in the category of "unknown." 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 Twiss et al. (1969) into panicoid (lobate forms), chloridoid (saddle-shaped forms), and festucoid (trapezoids, cones, hats, sinuous-sided forms), along with elaborations by Brown (1984), was used. Panicoid grasses favor (and tend to dominate) under warm, moist conditions. Ethnobotanically significant maize produces panicoid phytoliths as does rice and millet. Festucoid grasses favor cooler, moist conditions, such as those found in northerly latitudes and higher elevations. Wheat, barley, oats, rye, and Old World animal fodder grasses fall into 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 ethnobotanical significance for chloridoid grasses (i.e., no cereal cultigens) in this region.

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, Virginia (Rovner 1988b); Hampton, Virginia (Rovner 1989); Harpers Ferry, West Virginia (Rovner 1994); Jordon Site (31NH256),
Results

Sample extract was relatively large and the slide mount, dense with abundant biosilica of many recognizable categories. Morphologically distinctive individuals and categories of "unknowns" were videotaped for future reference. Qualitatively and quantitatively, this extract resembled the shell midden extracts from Seabrook Plantation (Rovner 1995d). A frequency count of 200 phytoliths in selected phytolith type categories used with the Seabrook Plantation study was conducted for comparison. Diatoms and sponge spicules were tabulated as separate counts. When 200 phytoliths were reached, the aquatic particle counts were arbitrarily ended as well to provide a frequency relative to the phytolith population.

Results from the Whitesides Plantation samples were appended to the Seabrook Plantation tabulations and are provided in Table 18. 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 fashions, no specific attempts were made to control or equalize soil weight or volume processed, to measure the volume or weight of phytoliths extracted, or to control the density of each slide mount.

The Whitesides Plantation feature contained 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, but some categories were repetitive and some tentative taxonomic assignment is possible. In particular, several narrow, Y-shaped bodies reported from oak (Quercus sp.) and a few irregular rectangles with scalloped surfaces attributed to magnolia (Magnolia sp.) were observed. These, amid a high frequency of well formed polygonal (pentagonal and hexagonal) plates, some showing distinctive stippled or otherwise textured surfaces, several long and narrow plates with a one thickened lateral margin (taxon assignment unknown), along with the usual abundance of "dicot junk phytoliths" testify to a strong presence of trees in this sample. The small spheres with distinctive conical surface projections, tentatively attributed to palmetto, were unexpectedly rare. Likewise, aquatic bioliths — diatoms and sponge spicules — were present but also quite rare.

Grass phytoliths were common and an important part of the assemblage. Compared to the Seabrook samples, grass phytolith counts increase in absolute numbers. This is clearly a statistical artifact of the rarity of palmetto spheres. Thus, relative frequencies, e.g., rations of festucoids to panicoids to chloridoids, are more instructive. 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 slide), trichomes (a.k.a. hook-bases, prickle cells), were counted. These have a high potential for taxonomic significance, but no relevant study of these for this region now exists. They are used as 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.

| Table 18. Frequency Counts of Selected Phytolith Types from Whitesides and Seabrook Plantations |
|---------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
|                                | Whitesides Feature 1 | Seabrook Feature 1 | Seabrook Feature 2 | Seabrook Feature 3 | Seabrook Feature 4 |
|                                | 3676  | 3677  | 3678  | 3569  | 3593  |
| Palmetto                       | 2     | 4     | 1     | 8     | 116   | 70   |
| Panicoid                       | 14    | 4     | 3     | 19    | 8     |
| Chloridoid                     | 38    | 4     | 3     | 12    | 28    |
| Festuclid                      | 1     | 3     | 9     | 3     |
| Elongate                       | 41    | 1     | 5     | 19    | 11    | 47   |
| Square                         | 31    | 8     | 24    | 10    | 7     |
| Bulliform                      | 54    | 1     | 5     | 18    | 15    | 21   |
| Trichome                       | 2     | 1     | 2     | 6     | 5     | 3    |
| Rectangle                      | 14    | 4     | 6     | 12    | 68    |
| Diatom                         | 4     | 7     | 5     | 21    | 26    | 40   |
| Total #                        | 200   | 15    | 21    | 87    | 200   | 200  |

Diatoms and sponges are not included in the phytolith population counts.
Panicoid and chloridoid short cells were commonly observed in these samples, with a clear dominance of chloridoids. The high chloridoid frequency coincides with the relative dryness signature provided by the rarity of diatoms and sponge spicules. Panicoids should dominate in the general climate of South Carolina when moisture is available while chloridoid frequency should reflect high drainage loss in coastal sandy soil, especially during hot, dry summer periods favoring seasonal "desert grass" growth. Festucoid grasses should represent either introduced European grasses (including cultigens) or local minority grass occurring under specific ecological conditions such as near permanent water along streams, and so forth.

Discussion

The first notable aspect of the Whitesides sample is the substantial reduction in two categories abundant at Seabrook Plantation on Hilton Head Island — aquatic bioliths and palmetto spheres. The former is a strong signature of drier conditions at Whitesides compared to Seabrook. The most obvious explanation is the difference in proximity to the marsh and open waters — Seabrook was on a major tidal drainage while Whitesides’ settlement was 3000 feet from high marsh and over a mile from open tidal water. A more subtle alternative explanation may derive from differences in land management conditions at the time of phytolith deposition. The Whitesides sample likely predates house construction and plantation management practices, while the Seabrook samples reflect a plantation in full operation.

The Whitesides pre-construction sample indicates a mixed floral ecology of trees, probably including oak and magnolia, interspersed with open grass meadow dominated by chloridoid grasses. Surely other trees and meadow plants are present in the phytolith assemblage hiding in the host of "unknowns" precluding any attempt at assessing the profile or relative frequencies of most non-grass taxa. At Seabrook Plantation, general reduction of tree cover in the water shed for housing and agricultural fields, is obvious. Plowed field runoff and/or deliberate modification to surface hydrology could cause ponding and other similar localized conditions contributing to the appearance of wetness indicators in the phytolith assemblages. Obviously verification may be sought through geomorphological and related analyses and recourse to historic records and documents.

The rarity of palmetto at Whitesides compared to its ubiquity at Seabrook is clearly significant. The most reasonable explanation, of course, involves the different ecological setting of the two plantations with Seabrook within the maritime forest on the edge of a large tidal drainage, and Whitesides in an area further inland and dominated by upland vegetation.

The Whitesides pre-architectural sample is expected to show no evidence of landscaping or gardening — and does not. At Seabrook Plantation, ornamental flowers appear at one structure while maize and wheat phytoliths appear at another — a potentially interesting difference helpful in assessing behavioral activities and patterns associated with these features.

Short cell grass assemblages are perhaps the most instructive — enhancing interpretation of both the Whitesides and Seabrook phytolith data. An absence of agricultural activities in the Whitesides sample is based on a dominance of chloridoid grasses, and absence of maize phytoliths, and the low level of festucoid short cells. There is strong agreement between the pre-construction Whitesides short grass profile and the ratios of short cells at Seabrook Plantation's Structure 1, but not at Seabrook’s Structure 2 (Table 19). The Structure 2 sample is anomalous by comparison as relative percents of both panicoids and festucoids

<table>
<thead>
<tr>
<th>Sample</th>
<th>Chloridoid</th>
<th>Panicoid</th>
<th>Festucoid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whitesides, Fea. 1</td>
<td>9.5</td>
<td>3.5</td>
<td>1.0</td>
</tr>
<tr>
<td>Seabrook, Struct. 1</td>
<td>9.3</td>
<td>2.7</td>
<td>1.0</td>
</tr>
<tr>
<td>Seabrook, Struct. 2</td>
<td>1.3</td>
<td>2.1</td>
<td>1.0</td>
</tr>
</tbody>
</table>

Table 19.
Ratios of Grass Short Cells at Whitesides and Seabrook
The presence of maize and wheat phytoliths are the obvious contributors reinforcing the earlier assessment for agricultural presence at Seabrook Structure 2 (Rovner 1995d).

**Conclusions**

The feasibility test of phytolith analysis at 38CH1471 was successful. Phytoliths were present, well preserved, and represented a variety of important taxonomic groups, broadening the range observed at Seabrook Plantation in Beaufort County, South Carolina. In conjunction with the Seabrook data, 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. Although Whitesides Plantation provided only a single sample for study, its cultural context contributed considerable insight into local ecology and ethnobotanic practices.

Whitesides Plantation prior to architectural construction appears to have been a relatively dry locale, interspersing forest — including oak, magnolia, and very little palmetto — with open grass meadow dominated by chloridoid grasses. No evidence of agriculture or landscaping appears prior to construction. This study further supports and emphasizes the necessity of a reference phytolith data base for regional flora to address identification of the many "unknowns" observed in the sample.

The results of this study also contribute to the development of effective sampling strategies in application of phytolith analysis. It is not difficult to appreciate how much more insight could be gained if undisturbed contexts for the active period of plantation operations were available for phytolith sampling and analysis. It may be necessary to wait for the investigation of other plantation sites where both pre-architectural and plantation contexts are available. Alternatively, such samples may be available from the investigation of the slave settlement by Brockington and Associates, especially since several large, sealed feature contexts were present.
FLORAL AND FAUNAL REMAINS

Ethnobotanical Remains

The excavations at the Whitesides main settlement produced very little ethnobotanical material. Most of the proveniences were collected by dry screening through %-inch mesh — this work resulted in one hand picked sample, recovered from the post hole in Unit 3. The low incidence of hand picked samples is probably related to the difficulty encountered in screening the wet, gummy soils. Only one flotation sample was taken, from Feature 1, the chimney footing associated with the main house.

Handpicked typically produce little information on subsistence since they often represent primarily wood charcoal large enough to be readily collected during either excavation or screening. Some handpicked samples are particularly useful for providing architectural information through examination of the wood species present. Since the one sample was encountered in a post hole it may represent the wood used as the post. This does not, however, necessarily mean the post (and associated structure) had to burn. An 1825 building guide remarked that charring posts and other wood timbers was the "most effectual mode of preserving timber from decay" (quoted in Fitchen 1986:133). Charcoal from post holes may therefore simply reflect the lingering charred fragments from a post long rotted away.

Charcoal may also provide ecological information. Such efforts assume that charcoal from different species tends to burn, fragment, and be preserved similarly so that no species naturally produce smaller, or less common, pieces of charcoal and is less likely than others to be represented — an assumption that is dangerous at best. Such studies also assume that the charcoal was being collected in the same proportions by the site occupants as found in the archaeological record — likely, but very difficult to examine in any detail. An examination of wood species may also assume that the species present represent woods intentionally selected for use as fuel — probably the easiest assumption to accept if due care is used to exclude the results of natural fires. While this method probably gives a fair indication of the trees in the site area at the time of occupation, there are several factors which may bias any environmental reconstruction based solely on charcoal evidence, including selective gathering by site occupants (perhaps selecting better burning woods, while excluding others) and differential self-pruning of the trees (providing greater availability of some species other others). Smart and Hoffman (1988) provide an excellent review of environment interpretation using charcoal which should be consulted by those particularly interested in this aspect of the study.

Flotation samples, offering the 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 of processed fill or carbonized material are usually considered adequate, if no bias was introduced in the field. 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 sampled, between the materials recovered through flotation and those lost or broken, and even between those that are considered identifiable and those that are not. In the case of 38CH1471 only one feature was identified and available for study. The entire feature, however, was retained for
flotation, so the volume was approximately 15 gallons. This soil was water floated (using a machine assisted system) after the excavations at Chicora's Columbia laboratories.

Procedures and Results

The handpicked sample was examined under low magnification with the wood charcoal identified to the genus level using comparative samples, Panshin and de Zeeuw (1970), and Koehler (1917). Wood charcoal samples were selected on the basis of sufficient size to allow the fragment to be broken in half, exposing a fresh transverse surface. A range of different sizes were examined in order to minimize bias resulting from differential preservation. The one sample available, from the post hole in Unit 3, produced only pine (Pinus sp.).

Lounsbury notes that one of the most common woods used was yellow pine, which:

became the principal building material in the colonial and early national periods. Pine, the most versatile of woods, was used in framing, flooring, weatherboards, shingles, wainscoting, and other interior woodwork (Lounsbury 1994:274).

Yellow pine was also called turpentine pine, hard pine, fat pine, heart pine, and pitch pine, and was most commonly the longleaf pine (Pinus palustris). The wood was heavy and hard, straight-grained, making it perfect for building and construction.

The one flotation sample (from Feature 1) was prepared in a manner similar to that described by Yamell (1974:113-114) and was 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). This particular float sample consisted of the charcoal obtained from approximately 15 gallons of soil (by volume) — the entire amount of soil present in the feature after the removal of plaster, mortar, and brick. The resulting flotation sample was subdivided to produce a sample of 10.12 g. The results of this analysis were rather disappointing — only trash, a normal component of flotation samples, a small quantity of fish bone, present in the heavy fraction as well, and wood charcoal were recovered. There is no evidence of food remains. The sample included 2.86 g of trash — primarily rootlets, and small brick and mortar fragments — accounting for 28.3%. Fish bone and scales accounted for 0.03 g or only a trace percent. The remainder, or 7.23 g representing 71.4% of the sample, is wood charcoal.

Given that the sample was dominated by wood charcoal, the larger fragments were selected for taxa identification. Pine was the primary constituent, account for 79.3% of the collection. Oak (Quercus sp.) accounted for an additional 6.8%, followed by sweetgum (Liquidambar styraciflua) at 2.1%. Tupelo (Nyssa sp.) was found to contribute 1.9% of the sample, while dogwood (Cornus florida) was found to represent 1.5% of the sample. The remaining 8.4% represented unidentifiable woods and resinous particles.

The collection is unusual, even among historic sites where relatively few food remains are found, in the prevalence of pine. This may reflect the materials used to built the Whitesides house, or more likely, it reflects the choice of firewood by the planter.

As previously discussed in the environmental and historical overviews, pine was abundant on many colonial plantations. Robert Weir, however, mentions that wood burning fireplaces in Charleston during the colonial period were not only so common as to be rapidly eliminating the vast stands of pine, but were also putting out so much smoke that ships were sometimes prevented from entering the harbor (Weir 1983:44). Mills (1972 [1826]) found the same abuse of the woodlands in the antebellum and recommended that planters begin conserving their forest tracts. Regardless, pine was almost certainly the dominant fire wood among all classes for many
years. R.V. Reynolds and Albert H. Pierson (1942) and Henry S. Graves (1919) found that pine produces between about 77 and 80% of the heat value of coal. The choice of a wood for fuel, however, does not depend solely on its calorific power. Other factors may be equally, or even more, important. While it tends to burn somewhat rapidly and is smoky, pine is easy to ignite and easy to split. When adequately dried it tends to throw relatively few sparks. All in all, it was probably found to be not only easily accessible, but a relatively adequate heating and cooking wood.

Oak was also a favorite fire wood, providing a relatively hot fire. Oaks, for example, have a heat value estimated at about 86% that of coal (Reynolds and Pierson 1942:Table 1). Compared to pine, oak provides a steadier, longer lasting fire. It is, however, more difficult to procure.

Oaks, including live oaks and water oaks, were also favorites of plantation owners to create avenues and other landscape features. Thomas Chaplin, at Tombee on nearby St. Helena Island, mentions digging up oaks to later "set out" (Rosengarten 1987:399).

The sweetgum, tupelo, and dogwood are all found in such low quantities that they may represent opportunistic encounters of downed trees. Sweetgum is very tolerant of a wide range of soils, and may even be found as understory trees with pine. It, however, prefers the moist, alluvial loams of wet areas and would most likely be found in the numerous wet areas of the Whitesides plantation. Sweetgum is moderately heavy and difficult to split or work. It is an unlikely architectural timber and provides only 68% of the heat output of coal.

Tupelo, possibly either the black tupelo (N. sylvatica) or the water tupelo (N. aquatica), can be found on soils ranging from well-drained light sands to low, wet flats or sloughs. While it is about equal to the heat output of pine (71% that of coal), the wood is moderately heavy to heavy and exceedingly difficult to split. The butt logs of the water tupelo are typically somewhat softer, but it is unlikely that these would have been first choices for firewoods.

The dogwoods are found on a wide range of soils, usually as understory trees. The wood produces a particularly hot fire, yielding 97% of the heat of coal. While not as difficult to split as gum and tupelo, it isn't as easy to deal with as pine. It is also difficult to ignite and tends to spark.

Summary

The ethnobotanical materials yield no real surprises. The presence of pine associated with architectural features is reasonable. The failure to identify food remains in the flotation sample is unfortunate, but not unexpected given its context (see, for example Zierden and Trinkley 1984). The woods identified from the feature may all represent fire woods associated with the main house.

Faunal Materials

The faunal collection from around the main house at Whitesides consists of bone elements and fragments weighing 157.80 g. Material was recovered by dry-screening unit soil through ¼-inch mesh or hand sorting the heavy fraction of the Feature 1 water flotation.

No detailed analysis of the collection has been undertaken since it represents a very small sample — far under the 200 individuals or 1400 bone elements recommended for statistically valid studies. Consequently, the collection was only briefly examined to provide information on the range of species.

Results

Mammals contributed the greatest amount of bone, 152.38 g or 96.8% of that recovered. Identified species include cow (Bos taurus), pig (Sus scrofa), and raccoon (Procyon lotor). Based on bone weight the next most common material was fish, accounting for 5.42 g or 3.4% of the collection. The only immediately recognized species was drum (Sciaenidae), the bulk of the collection consisting of fish scales and vertebra measuring 1 mm and less.
Absent from the collection are reptiles and birds. In fact, when the material from Feature 1 is removed, the collection is dominated by large mammal bones — items which are most likely to be recovered when attempting to dry screen gummy soils through ¼-inch mesh. Considering the importance of this site, and the potential of faunal studies to contribute to our understanding of the foodways associated with small planters, this is unfortunate.

When the mammal remains are examined, 47.0% of the bones by weight are pig. Cows comprise the second largest category at 29.5%, with unidentifiable mammal remains ranking third at 21.8%. The raccoon remains account for only 1.7% of the mammals remains at the site.

Pigs are one of the most important domestic mammals used for food in the Southeastern United States (see Hilliard 1972:92-111). Pigs require little care, as they can be allowed to roam free, or they can be penned. Their diet can consist of a variety of food resources, including seeds, roots, fruits, nuts, mushrooms, snakes, larvae, worms, eggs, carrion, mice, small mammals, kitchen refuse, feces, and grain. Pigs store about 35% of the calories they consume, and can gain about 2 pounds for every 15 to 25 pounds of feed (Towne and Wentworth 1950:7-8). Within 18 months, a pig can gain up to 200 pounds, of which about 120 pounds can be consumed. Dressed, a pig carcass can yield between 65% and 80% meat. It is difficult to estimate the size of the pigs that were available to the inhabitants of Christ Church during the late eighteenth century. Prior to 1800 there were no standard breeds of pig (Gray 1933:206). An idea of the possible size of the pigs that were available, however, can be gained from the average weight of 140 pounds for 4,000 southern pigs slaughtered in 1860 (Fogel 1965:206). Pork preserves very well, is satisfying due in part to its high fat content, and is a very good source of thiamine (Towne and Wentworth 1950:249).

This view is largely espoused by the early eighteenth century Virginia historian, Robert Beverly, who remarked that swine were the best of all domesticated animals. He recounted that "hogs swarm like Vermine upon the earth" largely because they "find their own Support in the Woods, without any Care of the Owner" (Carson 1985:2). Most period cookbooks concentrate on recipes for preserving the meat, typically listed as "For making Bacon," using salting and smoking to preserve the meat.

Although cattle have been an important meat source during the history of the United States, they are in many ways a more burdensome resource to raise than pigs (see Hilliard 1972:112-140; Towne and Wentworth 1950, 1955). Cows provide less of a return for the energy input necessary to raise them (Towne and Wentworth 1950:7-8). They feed on grain and grasses, and will not produce good weight gains without quality and quantity sources for both. Also, cattle store only about 11% of the calories they consume and yield only 50% to 60% dressed meat. Beverly comments that in Virginia beef was inferior to English meat, largely because of his countrymen’s habit of starving young cattle. Even when penned and fed grain they were still lean and tough. In spite of this, recipes for beef are common, and include such dishes as "calves head," "beef alamode," "collard’d beef," "beef collops," beef potted like venison, calves head dressed in imitation turtle, and rump of beef (Horry 1984 [1770]). Balanced against the greater labor required to raise cattle above that for swine and the fact that beef does not preserve as well as pork (Tomhave 1925:275) there has been a significant demand for secondary products such as the hides, milk, and butter.

Raccoon bones are present in small numbers in many historic faunal assemblages. The mammal served as a food resource for both blacks and whites, although its meat was apparently less prized than that of the opossum (Hilliard 1972:80). Gathering raccoons could be done using firearms and hunting dogs, to which blacks presumably had less access than whites prior to the later portion of the nineteenth century. Raccoons could also be obtained by trapping. This nocturnal mammal is able to adapt to a variety of habitats, although they prefer wooded areas near water. The low wet sloughs common to the Seaside area would have provided a perfect habitat for raccoons. Since eighteenth century recipe books were designed for
the emerging gentry it isn’t surprising that traditional foods, like raccoon, are not present.

The only fish species identified from the collection is drum. Members of the drum family (Scianidae) include black drum, silver perch, seatrout, spots, red drum, star drum, and Atlantic croaker. All of these are commonly found in bays and estuaries, such as those associated with the marshes and sounds of Christ Church Parish.

William Elliott, who lived on Beaufort’s sea islands, discusses drum fishing at length (Elliott 1994:110-116 [1846]). Although the fish were available every month of the year except December and January, April (when they spawned) was the only month in which they could be taken by hook. He observed that in one season the Beaufort planters, "succeeded in taking . . . at least twelve thousand of these fish; and . . . that except the small number consumed in their families, the remainder were salted and distributed among their slaves" (Elliott 1994:112 [1846]). For the time, they were among the largest fish taken, with the average about 3 feet in length and weighing 30 to 40 pounds. A sport fish among those on the coast, drums may have been acquired through indirect behaviors such as trade or gift-giving. Drum was also one of the few fish with any commercial value. Although it was distributed among the slaves, it seems to have had a special place on the planter’s table, where it might be boiled, stewed, baked, or roasted.

Only one bone was found with butchering marks reveals knife cuts. No saw marks are present. This suggests that the butchering took place on the plantation. This is not, however, unexpected, especially for the time period. It is more likely that livestock was being traded into Charleston than that it was being purchased.

The prevalence of pig, when compared to beef, is more surprising. Reitz (1986:51-53) has found that cow is typically more common than pig at rural plantation sites, although she observes that pig is likely underrepresented because of differential preservation practices. At the very high status eighteenth century Broom Hall Plantation, Hogue et al. (1995:272-273) found that cow remains were significantly more common than pig at both the planter’s residence and the slave settlement.

For pig to be so noticeable in the Whitesides assemblage suggests there may be either a social or status difference between large and small planters or perhaps that the plantation, participating in ranching, chose not to eat their cattle profits.

Most surprising is that 60.6% of the pig remains represent jaw and jowl cuts, and that all of the cow bones are teeth. These cuts are typically considered very low status, being relegated to the slaves. Not only does their recovery help confirm that the butchering was taking place on the plantation, but it also suggests that the Whitesides were keeping only the least expensive cuts. The better, more meaty cuts were going elsewhere — perhaps being sold or traded into Charleston as either fresh or salted meats.

Conclusions

Relatively little can be made of these results given the very small (and likely biased) samples. The findings, however, are curious and offer a new perspective on the foodways of eighteenth century small planters.

The faunal assemblage from the Whitesides Plantation is dominated by pig, not beef, and by low status cuts with relatively little meat. The combination would seem more indicative of a slave settlement than a main house, but again we must be careful in our interpretations. Not only were few remains found, but those present tend to be large items easily recovered from screening.

Regardless, the apparent importance of pig in the diet may be a result of the plantation’s focus on ranching during the late eighteenth century. Cattle may have been too valuable a commodity to be slaughtered for home consumption on a regular basis. Pigs, however, were likely more cost-effective and therefore a more viable option for the small planter. The emphasis on jaw and jowl cuts tends to support the notion that John Whitesides was
attempting to maximize his financial returns. Much of even those cattle slaughtered on the plantation may have been sold or traded to neighbors, leaving his own table with the least desirable cuts. While there is greater variety among the pig bones, jaw and jowl cuts are still the most common, again suggesting that Whitesides may have converted as much of his livestock into cash proceeds as possible.

The meat cuts present would most often have been prepared as soups and stews, corresponding to the large numbers of bowls. There is relatively little evidence of roasts, reducing the need for plates and platters.

While fish remains were only common from the one feature this is most likely a result of collection technique rather than feature function or some other cultural indicator. Forced to speculate, we are inclined to suggest that fish may have been a much more significant resource on the Whitesides Plantation than recognized.

While slaves are frequently associated with pottery, or baskets, or rice, the connection between the African American bondsman and fishing is rarely made. Timothy Silver is one of the few scholars to comment that:

South Carolina colonists discovered that Africans were especially adept at using small dugout canoes to fish the numerous rivers and creeks of the low country. Slaves from coastal regions of West Africa were also skilled at coasting large nets that could corral large numbers of migrating ocean species (Silver 1990:135).

The location of the plantation, coupled with the owner's modest resources, suggest that fish may have been an important dietary supplement — perhaps far more important than previously recognized.
CONCLUSIONS

Throughout this study we have been laying out, piece by piece, a relatively simple scenario. We have attempted to build on each section and its results, tying them together when appropriate and drawing on other research where possible. Much like some legal cases, much of the "evidence" at the Whitesides settlement is circumstantial. No one piece can be seen as conclusive, or even as particularly startling. Only when all the pieces are viewed together does the picture become clear and, we believe, convincing.

One of the greatest dangers in this study, it has seemed, has been that of creating a "straw argument." Certainly no one would deny that there were less wealthy planters than others. Nor would anyone deny, we suspect, that they less wealthy left behind a different archaeological "signature." Yet when the archaeological literature for South Carolina is examined there seems to be hardly a trace of these smaller planters, especially for the eighteenth century. The archaeological community, for reasons of no particular consequence to our discussions, has focused on planters of the nineteenth century and, when the eighteenth century was examined, planters of wealth. John Whitesides stands in stark contrast.

Overview of Ecology, History, Artifacts and Ecofacts

The environmental and ecological overview suggests that portions of Christ Church Parish, especially those along the "Seashore" were relatively unproductive. The soils were low and wet. The Whitesides tract, for example consists entirely of Rutledge, Scranton, Chipley, and tidal marsh soils. Of these only the Chipley soils, accounting for only 8.9% of the plantation, are even moderately well drained. The remainder of the plantation requires extensive ditching for drainage. This affected not only crops, but also the health and well-being of its occupants. The topography was not especially good for rice. While some was grown along the Wando River, efforts to grow "Carolina Gold" on "Seashore" plantations are apparently limited to small impoundments associated with the poorly drained soils. Cotton never seems to have been profitable for most the planters in Christ Church. The only saving grace, it seems, is that the area is in close proximity to Charleston.

The historical documentation reveals the relative poverty of Christ Church throughout its history. Not only where the assemblymen from Christ Church less wealthy in the colonial period than their colleagues from other parishes, but they owned fewer slaves. Many of the "Seashore" tracts were relatively small, limiting their profitability. Christ Church, even into the late antebellum, offered only limited potential for planters. Christ Church contained about 10% of the improved acreage of Charleston County, but produced only 1% of the county's rice and less than 2% of its cotton. Instead, the parish had focused on orchard products (contributing 20.7% of those produced in Charleston County), oats (again contributing over 20%), and wool (accounting for 18% of all the wool production in Charleston). In other words, a strange mix of cattle ranching, subsistence farming, and cash cropping had developed and matured in Christ Church.

The bits and pieces of the Whitesides history support this "bigger picture." Acquiring a relatively small tract of 220 acres from his father's estate in 1762, John Whitesides apparently focused on quickly establishing his settlement with his small family and slave holding. All we know historically about his agricultural activities is that he was planting rice and corn — again representing a mixture of subsistence farming and cash cropping. Into the 1820s his wealth was limited. He apparently attained no political office and his serve to Christ Church was marred by a dispute with the rector, who described John Whitesides as more fit to be a tavern keeper than a member of a church.
committee. His physical settlement consisted of a main house and four outbuildings — all within a single acre. A barn was situated midway between his settlement and his four slave houses.

The collection of artifacts from his settlement is consistent with the historic dates. The chimney footing produced a mean ceramic date corresponding to the death of John Whitesides father, although the TPQ is 1790, probably much closer to the origin of the main settlement. The mean ceramic date for the entire assemblage is 1779. This is somewhat earlier than the posited mean historic date, but this may only suggest that new ceramics were only begrudgingly accepted by the Whitesides, either because of their cultural conservativism or perhaps because of their poverty. Alternatively, the earlier mean historic date may suggest that the plantation lapsed into disuse much more quickly after John’s death than previously thought. Regardless, the assemblage dates from the last half of the eighteenth century into the first or second decade of the nineteenth century.

When the assemblage is viewed using Stanley South’s artifact groups to explore its pattern, the collection is not particularly similar to what has been suggested should typify British colonial sites in the Carolinas. In fact, it bears a much stronger resemblance to eighteenth century slave sites, exhibiting a very high proportion of kitchen artifacts to a rather meager proportion of architectural remains.

Yet when the Carolina Artifact Pattern is examined, one wonders if it might not better be called the wealthy white artifact pattern. It seems to nicely fit the assemblages left by the elite Charleston townhouse owners and the wealthy plantations such as Broom Hall. But not everyone fits this stereotypic version of a Southern planter. Those who did not should certainly be expected to exhibit a different artifact pattern. And Whitesides (along with a few other examples such as the Elfe and Magnolia plantations) provides clear evidence of this. The pattern we see is one of poverty, not slavery.

It is just as important to stress that the Whitesides main settlement also exhibits some potentially significant differences with the Carolina Slave Artifact Pattern that at first glance it seems to resemble. For example, the Whitesides settlement exhibits over three times as high a proportion of Activity Group artifacts than anticipated at slave sites. Personal artifacts are also more common at Whitesides than might be anticipated at a slave site — perhaps not by much, but by enough to perhaps suggest a significant difference between the two patterns.

But the site’s artifact pattern is not the only suggestion of poverty. When the ceramics are examined most are undecorated; those which are decorated are inexpensive painted and annular wares. Of course not all plain wares are inexpensive. In addition, the assemblage does contain, albeit in small quantities, some very high status items such as teaware, overglazed enamelled wares, and transfer printed wares.

The ceramics include large proportions of utilitarian wares and the tablewares are dominated by bowl forms. While these features have been associated with slavery, it seems equally reasonable to associate them with the foodways of "country folk" which focus on "spoon meals" of soups, gruels, and porridges. Meat, well into the nineteenth century, was a luxury food used sparingly by all but the wealthiest. The simple fare of country farmers requires few plates, but many bowls coupled with storage containers for a variety of goods.

Miller’s ceramic index for Whitesides, while requiring very cautious interpretation, nevertheless suggests an individual falling into a middling status — certainly not a wealthy planter, but above many of the free blacks and slaves of Carolina.

The archaeological evidence concerning Whitesides’ house is ambiguous. The only feature recovered was that thought to represent the chimney footing — a mass of mortar and brick rubble. The scatter of artifacts suggests the structure’s orientation. The scatter may even provide some vague indication of size, although if so it represents a very small structure, perhaps no
larger than 20 or so by perhaps 30 or 40 feet.

While we don't know much concerning the size of the structure, and absolutely nothing concerning internal arrangement, we can suggest that it was built using good eighteenth century craft traditions, including mortise and tendon construction. There are very few nails — certainly not enough to account for framing, attachment of weather boarding, and shingling. There is also relatively little flat glass, meaning that windows were either uncommon or where not glassed. We do, however, known that the house was plastered, based on recovered plaster from Feature 1.

The ecofact evidence at Whitesides is in some ways less revealing than the artifactual. The pollen data suggests that the environment of the site was much as it is today and certainly as the historic evidence suggests — dominated by pine with evidence of wet type vegetation. Unfortunately no evidence was found of cultigens, but the technique must not be blamed. Far more samples, from a variety of contexts, are necessary. For example, soils from the slave settlement may be more likely to provide pollen evidence of the plantation's cash crops.

The phytolith study was an effort to explore a new avenue for plantations research in South Carolina and in that sense it was exceptionally successful. Phytoliths in large quantities were found from Feature 1 and they largely confirm the pollen study, providing an ecological view of the plantation at its inception. Again, no evidence of cultigens were found, but the state of phytolith preservation suggests that this line of research should be explored at other sites, most especially those associated with the Whitesides slave settlement.

The ethnobotanical data was likewise largely confined to Feature 1. The carbonized material provides no evidence of cultigens or any food remains. They do, however, provide us with a range of woods which may have been used either in the building of the plantation house or as fuel woods in its fireplace. Pine dominates, as might be expected, although oak, gum, tupelo, and dogwood are also present.

The faunal evidence, while limited, is perhaps the most revealing. Pig is the single largest most abundant species in the collection, followed by cow. This is unexpected, since in typical plantation assemblages cow is found more frequently than pig. Pig may be a social indicator, being found more commonly on lower status plantations, while beef is found either on those eighteenth century plantations where the owner is able to imitate high status English foodways or on nineteenth century sites where the pattern has been well established among all classes. Alternatively, since the plantation may have been engaged in ranching, they may have chosen not to eat cattle that could be more profitably sold.

This latter explanation is given additional credence by the examination of meat cuts. When cow is present, it is found only a jaw and jowl cuts. These less meaty cuts are considered lower status and suggest that the Whitesides were selling the prime cuts, retaining for themselves only those cuts which would not bring much return. While jaw and jowl cuts dominate the pig remains, other cuts are also present, reflecting a more balanced use of this animal.

An usually large amount of fish was recovered from the heavy fraction associated with Feature 1. Fish was apparently much more common at the site than the hand collected remains from ¼-inch screening would suggest. It may be that the situation of the Whitesides plantation on the "Seashore" of Christ Church allowed ready access to fish or it may be that fish represented a relatively inexpensive and readily accessible dietary supplement.

The Research Questions

The reader will recall that five research questions were posed in the introduction to this study. Without belaboring what has already been said they were:

• The nature of Euro-American architecture at small plantations during the early to mid-
eighteenth century;

- The effects of the economic base of cattle ranching on owner lifeways;
- Euro-American foodways during the colonial period;
- The relationship of such small plantation settlements to the close urban setting of Charleston; and
- The nature of landscape altering activities on the plantation.

Our success in addressing these questions has been variable. Our inability to answer some questions (or to even contribute much data) should not be viewed as a failure. Rather it should encourage additional research.

As previously discussed, there is archaeological data which suggests that the Whitesides house was little more than a small farmhouse with little architectural detailing and perhaps even lacking windows. The absence of a clear floor plan prevents us from going further with this question, but emphasizes the need for careful block excavations at archaeological sites where architectural data might be present. Once again we see a site where, had the overlying soils simply been stripped off after limited testing, we would have no data with which to address this question.

Our tentative suggestion is that cattle ranching, while perhaps a stable means of earning a living, was unlikely to quickly propel an individual into wealth. In this regard we are inclined to agree with Starr — there were more profitable avenues than ranching. But these avenues were dependent on both having appropriate land and having an adequate supply of labor. Not all (perhaps many) could not meet one or both of these conditions. Such was certainly the case of John Whitesides. In this respect, ranching was likely his only option.

The floral and faunal remains allow us to say relatively little about foodways and diet, although the proportion of cattle and pig, combined with the apparent significance of "spoon meals," does begin to suggest some differences among the planter class. These results also emphasize the possible range which may exist in the archaeological data. Indirectly related to this question is the continuing evidence that which enough samples pollen and phytolith studies can make a significant contribution to our understanding of historic foodways.

Perhaps our least success was found in the area of Whitesides relationship to the urban setting of Charleston. This is partially the result of having so few comparative sites — it is difficult to know if the evidence at Whitesides is aberrant or may reflect a wider pattern. Similar results from the Elfe plantation on Daniels Island suggests that Whitesides may be a valid reflection of a larger pattern. In addition, the unusual butchering pattern also suggests an aspect of the site's relationship with Charleston. For the most part, however, this topic will require more detailed exploration.

The final question, concerning landscape altering activities, was only partially addressed in this research. We found that the soils were not conducive to identifying post holes. We found that metal detecting was of no use, either because of the very wet soils or, more likely, because the buildings did not contribute large quantities of metal artifacts to the archaeological record. We also found that a much larger excavation area would be necessary for landscape studies and it may be in this regard where site stripping has some appropriate use.

Toward a Broader View of Planters

Historians clearly recognize the diversity in the planter class — in fact one need only look at the writings of any economic historian to realize this truism. Yet archaeologists have tended to focus on the wealthier planters. As previously suggested, this is probably a result of both the CRM process, which sometimes forces research justification into social prominence, and our emphasis on nineteenth century plantations, by
which time many divisions based on material goods had become obscured.

The Whitesides Plantation forces us to recognize the diversity in the archaeological record already seen by historians. David Hacket Fischer begins his discussion of planter wealth in Virginia:

"Praised be to God," wrote a gentleman of Virginia in 1686, "I neither live in poverty nor pomp, but in very good indifferency and to a full context." This ideal of material moderation was widely shared by Virginians. The reality, however, was very different. From the outset, the distribution of wealth was profoundly unequal. During the late seventeenth and early eighteenth century it became even more so (Fischer 1989:374).

He moves on to discuss these divisions, noting that in Surry County, Virginia, a low swamp filled country directly across the James River from Jamestown, landowners with 350 or more acres accounted for only 30% of the free landowners. The remaining 60% owned fewer than 350 acres.

John Whitesides, in this sense, was a common planter. He was not rich, he did not possess a grand mansion, he did not circulate among the social or political elite of Charleston. The Whitesides name is not listed in the index of historical tomes as a significant contributor to the colony. In fact, he lived his life in relative obscurity. Whitesides, however, maintained his family, as the title of this study suggests, "with credit and honour."

Whitesides was only a partial participant in the movement toward gentility which characterizes the latter half of the eighteenth century. He picked up odd bits and pieces, adopting what he could, probably ignoring much that seemed either pompous or simply unobtainable. Nevertheless, he was a planter — he owned land, he owned slaves. Perhaps more than anything else, slavery tied all planters together politically, socially, and economically (see McCury 1995 for this discussion).

What we see in the archaeological record at 38CH1471, therefore, is likely a reflection of many small planters throughout the South Carolina low country. The assemblage is spartan, appearing poor by the standards we have developed to look at plantation society. But "poverty" is a relative term and must be used with as much caution as "status."

Hopefully the investigations at the Whitesides settlement have done more than simply document the archaeological signature of this one family. Ideally this research has demonstrated the need to expand on our views of planters and plantation society. Sites need to be better explored before being characterized. Sites from a much broader range of social, political, and economic "classes" need to be explored, compared, and contrasted. Most particularly we need to understand that a very large segment of society lived with "credit and honour" leaving little more than archaeological remains to document their lives and contributions. The challenge is to help provide these planters with a more compelling, and accurate, voice.


Sources Cited

Deetz, James 1977

DeVorsey, Louis, Jr. 1971

Doolittle, W.E. and C.D. Frederick 1991

Donnan, Elizabeth 1928

Drucker, Lesley and Ronald Anthony 1979

Duffy, John 1952

Dusinberre, William 1996

Elliott, William 1994 [1846]

Emery, K.O. 1979

Feild, Rachel 1987

Felton, David L and Peter D. Schulz 1983
The Diaz Collection: Material Culture and Social Change in Mid-Nineteenth Century Monterey, California Archaeological Report 23. California Department of Parks and Recreation, Sacramento.

Ferguson, Leland 1978

1980

1985
Struggling with Pots in Colonial South Carolina. Paper presented at the annual meeting of the Society for Historical Archaeology, Boston.

1989

1992

Fischer, David Hackett 1995

Fitchen, John 1988

Fogel, Robert W. 1965

Friedlander, Amy 1985

1990
Beyond Regionalism: History, Archaeology, and the Future. Historical
Gardner, Jeffrey and Eric Poplin  

Garrow, Patrick  

Garrow, Patrick and Thomas Wheaton  

Geis, James W.  

Godden, Geoffrey A.  


Goldenweiser, E.A. and Leon E. Truesdell  

Graves, Henry S.  

Gray, Lewis  

Greene, Jack P. (editor)  

Gregorie, Anne King  

Hammond, Henry  

Hewett, Alexander  

Hilliard, Sam B.  


Hobhouse, Henry  

Hogue, S. Homes, Jack H. Wilson, Jr., and Jodi Jacobson  

Horry, Harriott Pinckney  

Huneycutt, Philip K.  
<table>
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<tr>
<th>Sources Cited</th>
<th>Year</th>
<th>Reference</th>
</tr>
</thead>
</table>
Lounsbury, Carl R. 

Martin, Alexander C. and William D. Barkley 

Mason, Robert E. 

Mathew, A.J., A.J. Woods, and C. Oliver 

Mathew, William M. (editor) 

Mathews, Maurice 

McCurry, Stephanie 

McKearin, George L. and Helen McKearin 

McNally, Paul 
1982 Table Glass in Canada, 1700-1850. Parks Canada History and Archaeology 60.

Merkle, F.G. 

Merrens, H. Roy (editor) 

Merrens, H. Roy and George D. Terry 

Miller, E.N. 

Miller, George 

Mathew, Jefferson II 

Mills, Robert 

Montgomery, F.H. 

Morgan, Phillip D. 

Newman, Eric P. 

Noël Hume, Ivor 

Newman, Eric P. 
Alfred A. Knopf, New York.

Norman-Wilcox, Gregor

Otto, John S.

Panishin, A.J. and Carl de Zeeuw

Parry, D. Wynn and Frank Smithson

Peirce, Donald C.

Phillips, Phillip

Piperno, Dolores R.

Popper, Virginia S.

Price, Cynthia

Reitz, Elizabeth J.

Renyolds, R.V. and Albert H. Pierson

Rosengarten, Theodore (editor)

Rovner, Irwin


1989 Quick-Scan Phytolith Assessment of Selected Soil Samples from Eighteenth and Nineteenth Century Cultural Deposits in the City of Hampton, Virginia. Binary Analytical Consultants, Raleigh, North Carolina. Submitted to the Archaeology
Project Center, The College of William and Mary, Williamsburg, Virginia.


Starr, Rebecca 1984 A Place Called Daufuskie: Island Bridge to Georgia, 1520-1830. Unpublished M.A.
thesis, Department of History, University of South Carolina, Columbia.

Stoney, Samuel G.
1989  

Sweeny, Keven M.
1994  

Thompson, Robert Ferris
1983  

Tomhave, William H.
1925  
*Meats and Meat Products.* Lippincott, Philadelphia.

Towne, Charles W. and E.N. Wentworth
1950  
*Pigs: From Cave to Cornbelt.* University of Oklahoma Press, Norman.

1955  
*Castle and Man.* University of Oklahoma Press, Norman.

Trinkley, Michael
1985  
*Historical and Archaeological Evaluation of the Elfe (38BK207) and Sanders (38CH321) Plantations, Berkeley and Charleston Counties, South Carolina.* Research Series 5. Chicora Foundation, Inc., Columbia.

1995  

1996  

Trinkley, Michael (editor)
1990  

1993  

Trinkley, Michael and Debi Hacker
1986  

1989  

Trinkley, Michael, Debi Hacker, and Natalie Adams
1995  

Trinkley, Michael, Natalie Adams, and Debi Hacker
1992  
*Landscape and Garden Archaeology at Crowfield Plantation: A Preliminary Examination.* Research Series 32. Chicora Foundation, Inc.

Twiss, Page C., Erwin Suess, and Robert M. Smith
1969  

U.S. Department of Agriculture
1971  

Vose, Ruth Hurst
1975  

Walton, Peter
1976  

Warren, Phelps
1970  

Waterhouse, Richard
1989  
Wayne, Lucy B. and Martin F. Dickinson  
1990 *Four Men's Ramble: Archaeology in the Wando Neck, Charleston County, South Carolina.* Southarc, Inc., Gainesville.

Wheaton, Thomas R.  

Wheaton, Thomas R., Amy Friedlander, and Patrick Garrow  

Weir, Robert M.  

White, Philip R.  

Williamson, Joel  

Yarnell, Richard A.  

Zierden, Martha and Jeanne Calhoun  


Zierden, Martha and Kimberly Grimes  

Zierden, Martha and Michael Trinkley  