Archaeological Survey and Testing of Select Locations, McLeod Plantation, James Island

Archaeological Contributions 41
The Charleston Museum
September 2008

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2007Archaeological Field School
College of Charleston/The Charleston Museum

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Acknowledgements

Archaeological survey and testing at McLeod plantation by The Charleston Museum and the College of Charleston was made possible by the vision and dedication of the American College for the Building Arts and Historic Charleston Foundation. Like Historic Charleston Foundation before, The ACBA embraces a plan of preservation and study of the rich resources at McLeod, combined with education and restoration. The present project was designed to identify significant resources, and to provide information to be used in developing the property for education. We are grateful for the hospitality and guidance of Mr. Colby Broadwater, President, and Mr. Simeon Warren, Dean of the American College of the Building Arts. Our deepest gratitude goes to Tim Chesser, Professor, for his assistance and guidance, his detailed research, and his dedication to the stewardship of McLeod Plantation.

Archaeological survey at McLeod plantation by The Charleston Museum builds on years of research by a number of individuals. The background section of this report is based on documentary research by a number of scholars. Excellent historical studies of McLeod Plantation by Bruce Harvey, Fillmore Wilson, Robert Stockton, and Sara Fick form the basis of the present study. Studies of other James Island plantations, and of the Island itself were also central to the present project. Research by Jeanne Calhoun, Eugene Frazier, and Michael Hartley formed the foundation of the present study. Most useful were the numerous studies of James and Johns Island, and of Sea Island cotton plantations by Sara Fick. Don Orth of Erwin, Tennessee, and formerly of James Island, devoted years to the study of McLeod, and shared his many findings with area scholars. The Museum houses a sample of the McLeod materials collected by Dr. Orth.

Many scholars were willing to share their ongoing research through conversations and site visits. We are grateful to Carl Borick of The Charleston Museum, for information events of the Revolutionary War, to Michael Hartley of Old Salem for his continuing interest in seventeenth century settlements, and to former Heritage Trust archaeologist Chris Judge for ongoing interest in preservation of James Island sites. Dr. Eric Poplin of Brockington generously shared data from their projects at McLeod and elsewhere on James Island. Mona Grunden and Sean Norris of TRC shared the results of excavations along New Town cut.

Fieldwork was directed by Martha Zierden and Ronald Anthony of The Charleston Museum, and Barbara Borg of the College of Charleston. Dr. Lynn Harris planned and conducted research on the McLeod waterscape. Field school students include Drew Beckham, Judi Bushnell, Jeanna Crockett, Cara Frigerio, Christine Heacock, Jennifer McCormick, Thomas Meacher, Jessica Phillips, Jasmine Utsey, Jennifer Self, and Daniel Robinson. The crew worked in a cheerful and efficient manner, allowing us time to conduct the extra testing projects. Danny Nolan plowed the fields in a quick and efficient manner. Maps and site grid were prepared by Lynn Harris and Tina Rust. In addition, Tina Rust prepared the artifact density maps from the survey.

Laboratory analysis was conducted by College of Charleston interns and volunteers, some of whom also worked in the field. We appreciate the dedication of Mary Antley, Lauren Johnson, Christine Heacock, Jennifer McCormick, Thomas Meacher, William Price, Anahita Tipnis, Britton Williams, and John Wall. Barbara Aldrich analyzed much of the material, and Dr. William Turner assisted with conservation of the artifacts. The materials from the present project are curated with the American College for the Building Arts.

Our thanks to all who assisted with this project. We assume responsibility for any errors contained herein.

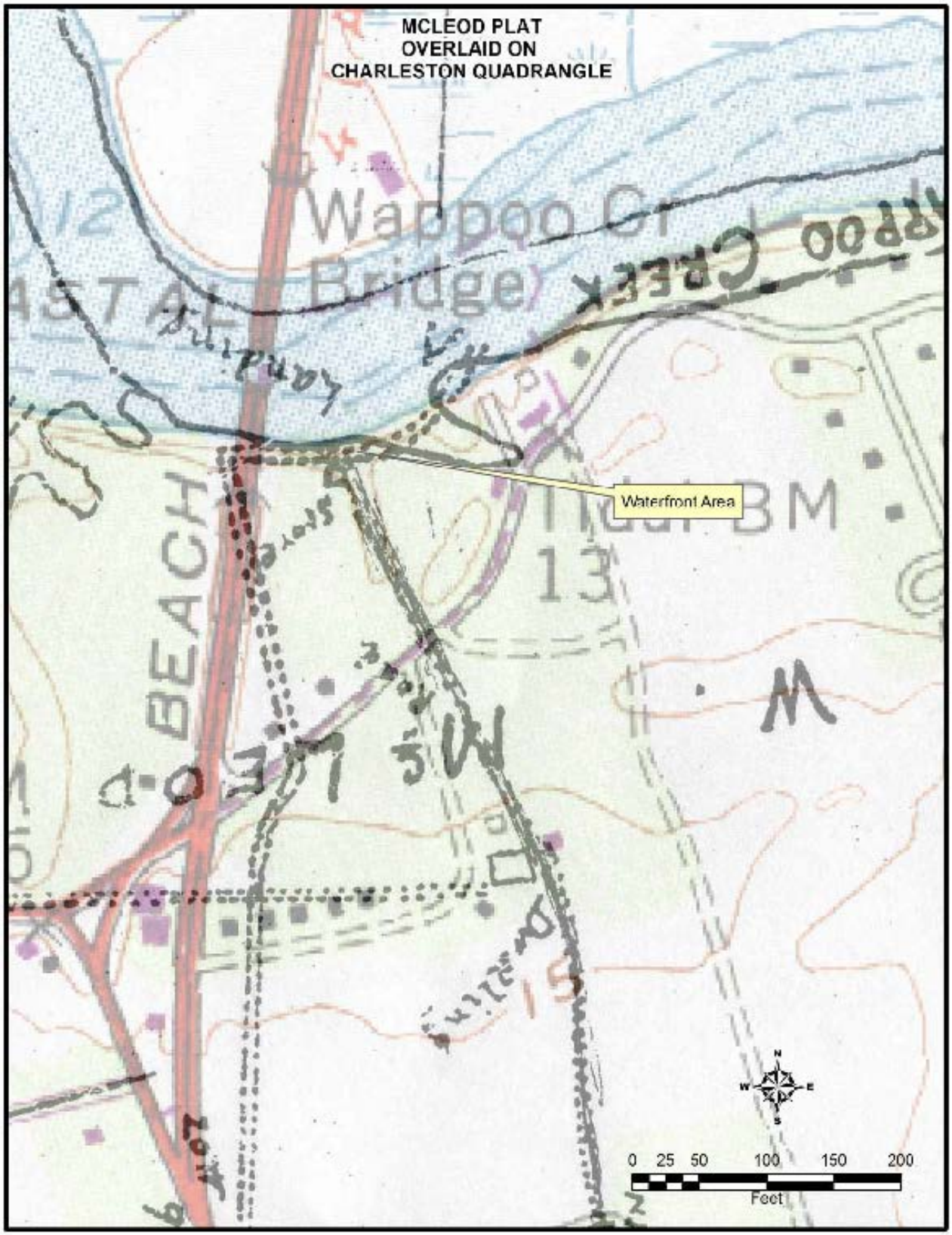
Chapter I
Introduction

Located on James Island, McLeod Plantation has functioned as a plantation for over 300 years. First designated on a 1695 map, the property changed hands several times during the 18th century, before purchase by William Wallace McLeod in 1851. The property remained in the hands of the McLeod family until 1990. The property is unique in its proximity to Charleston and the survival of a large number of plantation buildings, including a row of slave quarters. The property also contains significant archaeological resources, reflecting the lengthy and diverse human occupation of the property. The precise boundaries and components of many of the archaeological sites have not been determined.

McLeod Plantation was, at its zenith, a tract of over 900 acres. Portions were sold in small tracts from the 1920s onward, and the property was slightly less than 50 acres when Mr. William Ellis McLeod died in 1990 at the age of 105. A bequest by the McLeod family left the property to 13 nonprofit beneficiaries, with Historic Charleston Foundation holding controlling interest. To prevent loss of the property, Historic Charleston Foundation acquired undivided title to the property, and developed a long-range plan for future preservation and use. In 2004 the property was sold to the American College for the Building Arts (ACBA). The ACBA plans to balance construction of a building arts campus with preservation and restoration of the property's historic fabric. The conservation agreement between Historic Charleston Foundation and the ACBA includes identification, preservation, and mitigation of archaeological resources.

Figure 1: McLeod house, south elevation

The American College for the Building Arts has developed a conceptual plan for the college campus at McLeod Plantation. This calls for construction of classroom, laboratory, and office space in an area of the property containing few, if any, cultural resources. The purpose of the present project is to test the areas available for construction. In addition, The ACBA envisions long-term research on the historic buildings and landscape at McLeod. Project time remaining after survey was spent exploring portions of the landscape with pending management issues. McLeod Plantation remains a high-profile public property, one that has generated considerable interest among scholars, residents of James Island, and visitors to the Charleston area. Data generated from the present project will be incorporated into interpretation of the history of McLeod Plantation.


MCLEOD PLAT
OVERLAID ON
CHARLESTON QUADRANGLE
Waterfront Area
0 25 50 100 150 200
Feet

The survey and testing project was conducted as part of the 2007 Field School in Historical Archaeology offered by the College of Charleston (ANTH-493). The crew consisted of Charleston Museum archaeologists Martha Zierden and Ron Anthony, College of Charleston Professor Barbara Borg, and eleven undergraduate students. Students also worked with Dr. Lynn Harris, underwater archaeologist with the College of Charleston, and Professor Tim Chesser from the American College of the Building Arts. Fieldwork at McLeod was conducted for three weeks, from May 14 through June 1. The crew spent 8 field days conducting the survey of Area C. During the remaining time, the crew excavated shovel test pits along the shoreline of Wappoo Cut, and excavated a series of 5' test units in yard area between the main house and slave cabins, on the south side of the allee. The crew returned to McLeod for two days on June 26-27 and explored the foundation of the dairy building.

Figures 3 and 4: View of east-west allee, facing west. Existing slave cabins are on the north side of the avenue. View of the survey area, facing south from the same location.

Previous Research

The McLeod property has been subject to a number of archaeological projects, most of them small surveys. There has been one previous project in the survey area. The first professional survey was conducted by Michael Hartley and Jolee Pearson, as part of their study of 17th century sites on the Ashley River (Hartley 1984). Hartley and Pearson collected materials from the plowed fields on the south side of the allee, between Folly Road and the main house. They recovered 17th, 18th, and 19th century materials, and pinpointed the concentration of early materials. They prepared a State site record, and McLeod Plantation was designated 38Ch679.

A small, limited survey of two areas was conducted in 1985 by Todd McMakin of Brockington & Associates. Site 38Ch679-1 was near the allee on the north side of the house. Site38Ch679-2 was located at the juncture of the allee and Country Club Rd, in an area of purported Native American materials. Neither site produced significant results. Brockington conducted a large data recovery project at 38Ch679-3. This site is located on a 10-acre tract east of the McLeod house complex, sold by Historic Charleston Foundation to secure the remainder of the property. The data recovery project explored a dwelling and a slave building from the mid-18th century (Eubanks, Harvey, and Poplin 1996).

New South Associates has conducted two projects at McLeod. In 1991, J.W. Joseph prepared an Archaeological Inventory for Jaeger/Pyburn, Inc, as part of a Preservation and Development plan prepared for Historic Charleston Foundation. The literature and field survey included excavation of 20 shovel tests in the fields south of the slave allee, as well as limited exploration of the main house complex and a reported Deptford site at the intersection of Country Club road (Joseph 1991). Their findings mirror those of Heritage Trust archaeologists Chris Judge, who visited the site in 1990 to evaluate the property for inclusion in the State's list of significant sites (Judge and Smith 1991).

New South Associates also explored the site of the firehouse at the northeast corner of Folly and Country Club roads. The firm was hired by the City of Charleston to explore the property, to determine whether unmarked graves from the McLeod Plantation cemetery intruded into the property. Initial survey was inconclusive, but subsequent excavation for a new firehouse revealed human remains. Additional investigations by New South identified ninety-nine graves. The building project was abandoned and the firehouse removed. The site, which adjoins the McLeod property to the northeast, remains preserved as sacred space (New South Associates 1996).

Most germane to the present project was the 1997 survey of a one-acre tract at the southwest corner of McLeod Plantation by Brockington and Associates. This site was proposed as an alternate location for the new firehouse, following the discovery of human remains on the original site. The tract is located at the northeast corner of Folly Road and Tatum Street, and is within the present project boundary (38Ch679-4). The survey included shovel testing and metal detector survey of the entire tract, and mechanical

stripping of the building footprint. Evidence of the stripping is still visible in the form of a depression and adjoining soil mound. The excavations revealed a very light scatter of materials from the late 19th to 20th centuries. Brockington suggested that the property contained no significant deposits, and that further management considerations were not necessary (Brockington 1997). The proposed structure was never built, and the property reverted to Historic Charleston Foundation, subsequently to the American College for the Building Arts. This area is included in the present survey footprint, and includes the gridded area between N150E50 and N300E50, to N300E300.

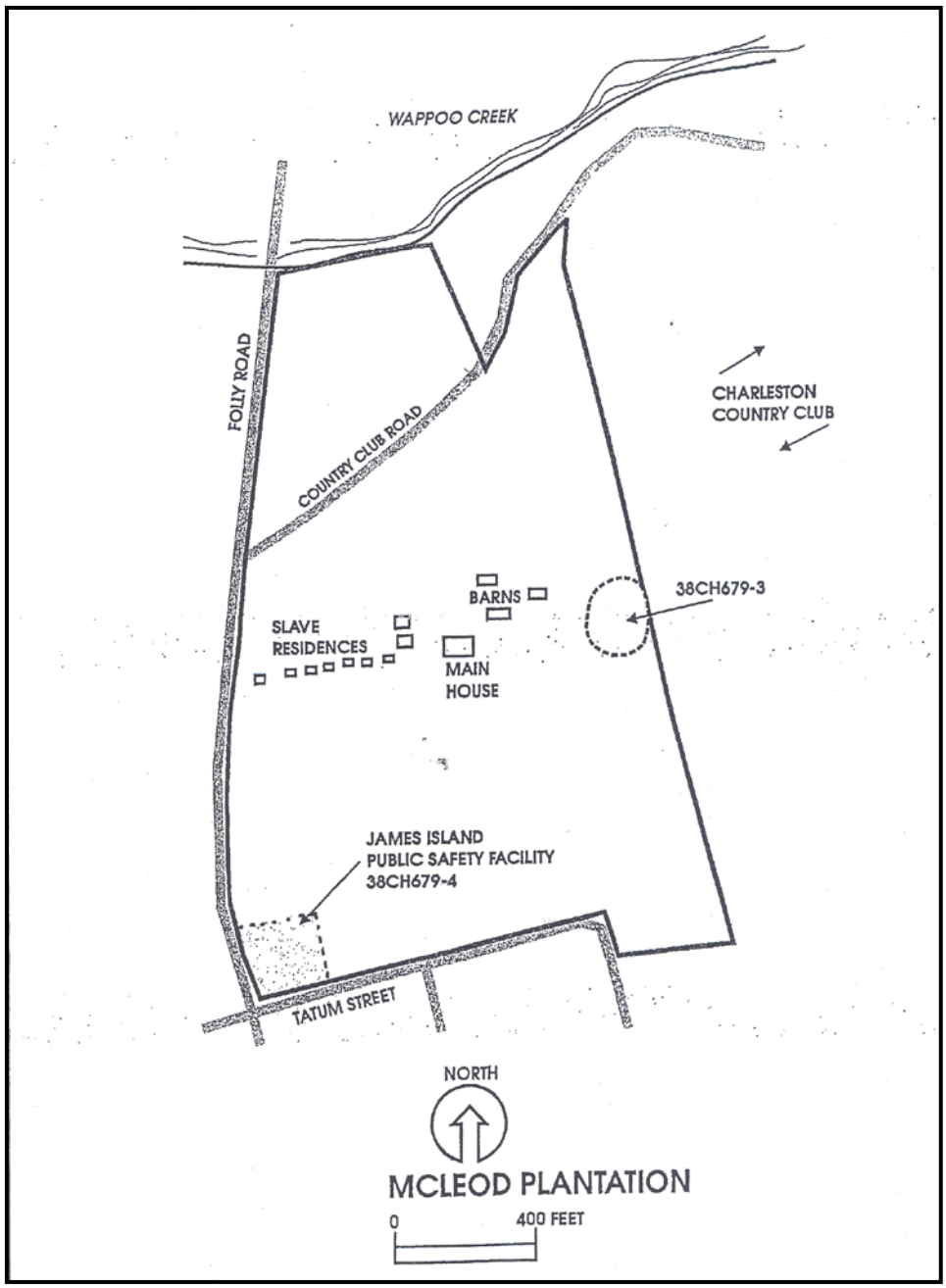


Figure 5: Map of McLeod Tract, showing location of projects conducted by Brockington, 1996 and 1997 (courtesy of Brockington, Mt. Pleasant, SC).

Research Potential

Human occupation of the McLeod tract covers thousands of years of prehistoric occupation by Native Americans, followed by over three hundred years of occupation by Euro American and African American settlers. The property was the scene of many events significant to the development of the lowcountry, and sites at McLeod have the potential to inform on the history of James Island and the region. Details of this occupation are described in the next chapter, but the research potential, based on current documentary and archaeological research, is summarized below. The present project contributes to the developing research database.

Previous research, as well as the current waterfront survey, has documented an extensive Deptford period occupation on the north side of the main house. Additional research focused on this occupation may provide details on the nature, extent, and duration of Native American occupation of the property. It is possible that Native occupation of McLeod continued through the early historic period. Recent archaeological research on the western portion of James Island has revealed Native sites dating to the late 17th and early 18th centuries (Anthony 2005; Norris 2007). McLeod has the potential to contribute to this growing body of data.

Grants and deeds, as well as a series of maps, suggest the property was granted and occupied in the late 17th century, likely by a Mr. Morris. Other names appear on the 1695 map, so it is possible that the McLeod tract contains evidence of early occupation on James Island. Research by South and Hartley (1980) suggests the "Morris" occupation may be located between the oak allee and the main house. Though grants and maps suggest extensive occupation of the lowcountry in the early years of European settlement, documented 17th century sites are rare. Discovery of intact 17th century remains on McLeod would add to this small, but growing, database.

The proximity of James Island to the burgeoning seaport of Charleston resulted in a settlement and land use pattern different from more remote areas. This pattern developed as early as the mid-18th century. The 18th century occupation of the McLeod tract during the second half of the colonial period (possibly the Lightwood occupation) was documented and excavated by Brockington and Associates in 1996. These artifacts are curated at The Charleston Museum and are suitable for interpreting the colonial period.

Many important agricultural products were raised on McLeod plantation, and these changed through the decades, depending on demand and technological advances. Throughout the 18th and 19th centuries, James Island plantations raised crops to support local and regional markets, in addition to the better-known cash crops such as indigo, rice, and cotton. Beef, vegetables, and provisions were raised at McLeod. In addition, William McLeod is credited with successful Sea Island cotton production following improvements to drainage on the property.

The McLeod family owned the property during the turbulent years of the Civil War and postbellum Reconstruction. During the Civil War the plantation was occupied by Confederate troops and used as a hospital. Later, Union troops, particularly the 54th and 55th Massachusetts regiments, occupied the site. The plantation served as District headquarters for the Freedman's Bureau. Thousands of freed slaves may have been temporarily housed on the plantation after the War.

Descendants of James Island slaves remained in residence and worked the fields of McLeod plantation through the middle of the 20th century. During that time, crops changed from cotton to truck to dairy. Several former residents remain on James Island, and have discussed life on McLeod with Eugene Frazier (Frazier 2006). The extant buildings at McLeod were actively used until Mr. McLeod's death. McLeod Plantation is central to exploration of African American life on the Sea Islands after emancipation. Many of the artifacts retrieved during the present project are associated with this period.

Figure 6: Slave cabins, facing west, in 1930 and in 2008 (photo by William Henry Johnson, Collections of the South Carolina Historical Society)

Chapter II
Background

Site Description

McLeod plantation currently consists of approximately fifty acres. The property is bounded by Folly Road to the west, Tatum drive to the south, and Wappoo Cut to the north. A series of private tracts bound the property to the east. Centered on this rectangular tract is the mid-19th century building complex associated with the McLeod family occupation. This complex includes a main house facing the waterfront, surrounded on the north side by a series of service buildings (gin, barn, carriage house, kitchen, dairy). A row of slave cabins runs from the main house west to Folly Road, and the road in front of the cabins serves as a second entrance to the property. An allee of live oak trees leads from the front of the house to the edge of Wappoo Cut; this allee and the acreage in front of the house are bisected by Country Club Drive.

Figure 7: Front of the main house at McLeod plantation; allee to Wappoo Cut from Country Club Drive

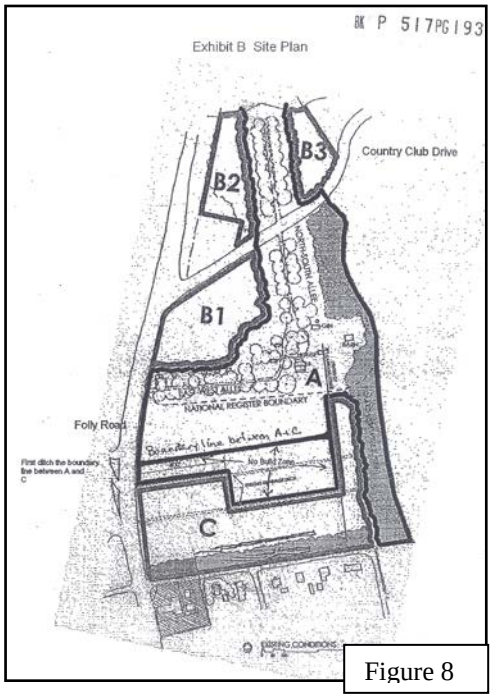


Figure 8

The northern portion of the property, from the waterfront to the southern edge of the slave row allee is listed on the National Register of Historic Places. The southern half, not listed on the Register, consists of open farm fields, divided by drainage ditches. Based on previous documentary and archaeological research, the McLeod tract has been divided into areas of potential significance and potential impact, designated A, B, and C.

The areas of least significance are designated "C", and include the fields along the southern and eastern border of the property, inside the vegetative border. These areas are under consideration for construction of campus

buildings by the American College of the Building Arts (ACBA). These areas were surveyed by The Charleston Museum.

History of the McLeod Property

James Island is the first of a series of large sea islands extending south from the Charleston peninsula. Its proximity to the Charleston harbor and the city that served as the cultural hearth for the Carolina colony gave James Island significant roles in both the economy of the city and defense of the harbor. Farmsteads and fortifications were constructed on the island within the first decade of settlement. Farms became plantations based on slave labor by the mid-18th century, and James Island remained mostly farmland through the mid-20th century, the island divided into roughly 17 large plantations and a series of smaller farms. Charleston was easily accessible by boat, and the close proximity of city to plantations meant that the development of James Island was somewhat different from rural areas farther removed from the port city. Plantation tracts were smaller than anywhere else in the lowcountry (Morgan 1998:42). Proximity to the city and the harbor also gave James Island strategic significance. The remains of fortifications from the early colonial period, the American Revolution, and the Civil War still dot the island landscape.

The Carolina colony was developed by a group of English noblemen who found themselves on the winning side of a battle for the monarchy. In 1663 King Charles II granted a large tract of land, and sweeping powers to govern it, to eight men. The Lords Proprietors set out to attract as many settlers as possible, not necessarily from England. After a series of distractions at home – the London fire of 1666, the Great Plague of 1667, and a war between the Dutch and French – the Proprietors were successful in sending an expedition of settlers to Carolina in 1670. After a series of disasters at sea, the settlers finally selected the Charleston harbor and settled at Albemarle Point on the Ashley River. A number of settlers came from Britain's West Indian colonies, where successful sugar production combined with the laws of primogeniture to reduce the amount of land available to younger sons of planter families. Barbados was a principal source of early English settlers to Carolina. The Barbados settlers brought with them the traditions of plantation agriculture and African slavery.

By the late 17th century, the English had learned valuable lessons from the early attempts at colonization in Virginia and Massachusetts. The Carolina colony was soon a thriving enterprise. Following a series of clashes and alliances with the local Native Americans, the colonists were already benefiting from an expanding trade in deerskins, furs, and Indian slaves by the mid-1670s.

Ten years after the settlement at Albemarle Point, the Proprietors moved the colony to Oyster Point, which they deemed more defensible and "well cituated for trade" (Salley 1928:105; Mathews 1954:153). The plan for the city, known as the Grand Modell, established a town along the Cooper River, with broad streets and deep, narrow lots. But historian Robert Weir notes that the peninsular location was not without its

shortcomings (Weir 2002:66); indeed, the town's very survival was questionable through the end of the century. The bar at the harbor entrance was shallow, making entry into the harbor difficult for larger vessels. The water table on the low-lying peninsula was high, so that underground cellars were impractical and wells were shallow, compromising the quality of drinking water. Mortality rates were high and population growth was slow. Food supplies were relatively plentiful, however, and by the end of the first decade of settlement, the colony was supplying food to Barbados and other islands in the West Indies (Weir 2002:69).

Located adjacent to the Charleston peninsula and to the original English settlement along the Ashley River, James Island was occupied by European settlers in the first years of colonization. A year after Charles Town was established at Albemarle Point, the Council of the Province ordered a town to be established on James Island. The short-lived James Town was evidently located on New Town Creek, though its precise location has not been determined. By the mid-1670s, there were scattered settlements along the waterways, as far south as the South Edisto River. Various scholars (South and Hartley 1980; Fick et al. 1992) have noted patterns in these early settlements. Early settlements were located on both the mainland and the Sea Islands, scattered along navigable rivers. The settlements were often on high ground adjacent to the riverfront, wherever possible. Fick (1992) also suggests that the availability of freshwater springs and abandoned Indian fields may also have been a factor in site selection. The extent to which these granted tracts were occupied and improved is unknown. The best guide to 17th century settlements are maps produced in the 1690s; the Thornton-Morden map of 1695 and the Mortier map of 1696 (South and Hartley 1980). Both maps show a series of settlements along Wappoo Creek, including "Morgan", "Young", Morris", and "Rivers". Previous researchers (South and Hartley 1980; Hartley 1984) have suggested that "Morris" is the best match for the McLeod tract. Artifacts available during the late 17th century have been recovered at McLeod (Hartley 1984). Wilson (1993) suggests this may be Morgan Morris, who came to James Island from the Virginia colony in 1671. Hayes (1978) suggests that Morgan Morris and his wife Sarah Hill first lived at Charles Town.

Figure 9: portion of the 1696 Mortier map showing settlements along Wappoo Creek; "Morgan, Young, Morris, Rivers"

The growing colony never lacked settlers. Dissenters, Anglicans, Scots, New Englanders, Jews, and African and West Indian slaves formed the core of this diverse group. The West Indies remained a source for early settlers, and these planters, merchants, artisans, servants, and slaves influenced development of Carolina's social and

political ways. Walter Fraser cites the West Indian slave code, loyalty to the Anglican Church, old-world elegance, and frontier boisterousness as defining characteristics of Carolina residents. He further describes the men who came to Carolina as "experienced, aggressive, ambitious, sometimes unscrupulous…and not really interested in the Proprietors' plans for the colony" (Fraser 1989). This was particularly true of a group of men who settled in the upper reaches of the Charleston peninsula, known in the early 18th century as the "Goose Creek Men". Principally from Barbados, they thwarted the Proprietors' efforts to establish urban settlement and to regulate the Indian trade, a major source of income in the early years of the colony (Edgar 1998). Several of the families who owned McLeod Plantation through the 18th century descended from the early settlers of Goose Creek.

This same tract, consisting of 617 acres, was laid out by James Witter in 1701 and became a Royal Grant to Captain David Davis in 1703. Three years later, Davis passed the land to son-in-law William Wilkins. Wilkins emigrated from Nevis with his family in the 1690s. He was socially successful and politically active in the colony, serving as a highway and road commissioner, a member of the seventeenth Assembly from 1720-1721, and a member of the Grand Jury for James Island. There is considerable documentary evidence for Wilkins' ownership of McLeod, particularly a puzzling series of sale and repurchase of the same tract for nearly four decades. Researchers have interpreted these transactions in a variety of ways, suggesting that it may reflect mortgaging, land speculation or annual leasing. Like Mr. Morris before him, there is currently no documentary evidence for cultivation or improvement of the land by Mr. Wilkins.

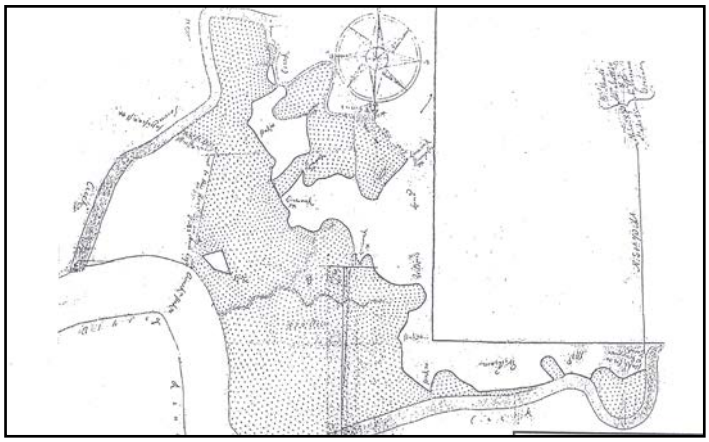


Figure 10: 1701 plat of William Wilkins' land (from Eubanks et al, Brockington 1996)

Wilkins sold the 617 acres to Samuel Perroneau in 1741. Samuel Perroneau was part of a successful merchant family in Charleston, and he cultivated plantation tracts on Edisto Island and James Island. The Perroneaus were French Huguenots, and Henry Perroneau arrived in Charles Town from France in 1687. By the time he died in 1743, he had acquired considerable fortune. His three sons – Henry Jr., Alexander, and Samuel – were all successful merchants. Samuel Perroneau sold dry goods and fabrics at the corner of Broad and Union Streets (Calhoun et al. 1985:200-206) and imported a small number of African slaves.

French Huguenots, suffering persecution in their native land, were a major component of the early Carolina population. After the revocation of the Edict of Nantes, guaranteeing religious freedom, in 1685, the Lords Proprietors eased Huguenot

immigration to Carolina. While some Huguenots remained in Charles Town, many moved to vacant plantation lands, particularly along the Santee River. The two groups remained socially separate until the second quarter of the 18th century, when Huguenots began to abandon their language and cultures and to merge with the English. Assimilation was followed by financial and social ascendancy.

Samuel Perroneau's will indicates that he was cultivating his James Island plantation and seeking to improve the status of his property. The inventory of his estate indicates meager furnishings at his "Plantation", including chairs, desk, table, two bedsteads, a rum case, and assorted dishes. It is unclear if Perroneau lived on the plantation, but twelve slaves were in residence. They tended nearly 100 head of cattle, 37 head of sheep, and 58 swine. Revolutionary-era maps and documents place the Perroneau homestead on the western edge of the plantation tract, fronting the Stono River.

Early colonial settlers experimented with a variety of income-producing ventures. Cattle ranching was one of the earliest successful ventures, and cattle remained an important part of plantation economy thereafter. Governor Yeamans sent to Virginia for cattle shortly after his arrival in 1671 (Edgar 1998:133), and, like hogs, cattle thrived in the woods and grasslands of the lowcountry. The Barbadian emigrants recognized the lack of provisions on the overcrowded sugar islands of the West Indies, and immediately began to export provisions, including beef, lumber, and provision crops.

Trade with Native American groups was an early economic venture, and deerskins and Indian slaves were the principal product exported to England and other colonies. Deerskins soon became the colonists' most profitable export. The earliest trade was a secondary, small-scale pursuit of individual planters. Some of these entrepreneurs hired an Indian hunter to supply them with skins; others traded in more haphazard fashion (Crane 1981:118). By the mid-18th century, dressed deerskins accounted for 16 percent of the colony's exports and tanning was the city's most important industry (Bridenbaugh 1955:76). The defeat of the Indian alliance in the Yemassee War of 1714-1715 dramatically changed the mechanics of this trade as the defeated tribes moved inland. Those involved in the fur trade now required storage facilities to support their long-distance enterprise. Early towns, such as Willtown on the South Edisto River, were no longer situated on trade routes and were bypassed (Zierden et al. 1999).

Soon the trade was transformed from one operated on a small scale by individuals to a capital-intensive industry controlled and dominated by Charleston's burgeoning mercantile community. These merchants established credit relations with British businessmen, enabling them to procure and finance the trading goods necessary. The wealth and standing acquired by these merchants led to diversification, into commodities such as naval stores, provisions, rice, and African slaves (Calhoun et al. 1985; Calhoun 1986; Earl and Hoffman 1977:37).

A large number of Carolina's settlers came unwillingly. After the introduction of rice as a successful staple in 1695, the increasing cultivation of this crop created a voracious demand for slave labor. Moreover, many Africans brought to the lowcountry

came from rice-producing areas of Africa. They possessed skills in rice cultivation and other tasks considered essential to the colonial plantation economy (Littlefield 1981; Wood 1975; Carney 2001). Significant continuities between African and Carolinian methods of planting, hoeing, winnowing, and pounding rice persisted until the demise of rice cultivation (Joyner 1984:13-14). By 1708 the majority of lowcountry residents were black. African bondsmen and women worked the crops in the country and provided labor for building and maintaining the city.

By the second quarter of the 18th century, rice was the principal money crop for lowcountry planters. Rice was grown successfully in inland swamps, where extensive networks of dikes and dams regulated and controlled the flow of water on the crop. Production of rice jumped from 8000 barrels in 1715 to more than 40,000 by the 1730s. Inland swamp cultivation remained the major production technique throughout the colonial period, contributing to expanded settlement along the coast and the increased importation of slaves.

But rice was only one of many profitable staples of the colonial period, and experimentation was endless. The trans-Atlantic trade was regulated by a series of Navigation Acts, which included bounties for desired crops. Under this system, indigo and naval stores were also profitable colonial crops. Naval stores included pitch and tar produced from the longleaf pine that covered the lowcountry. Eliza Lucas Pinckney first experimented with indigo on her father's plantation in 1739 (Edgar 1998:146; Rogers 1980).

Indigo flourished on the high land where rice did not. But like rice it was a demanding crop, and fetid water was a characteristic. The plant needed little tending in the field, but processing indigo was arduous and putrid. The plantations of James Island, including McLeod, were not suited for rice, but indigo was an important cash crop in the mid-18th century.

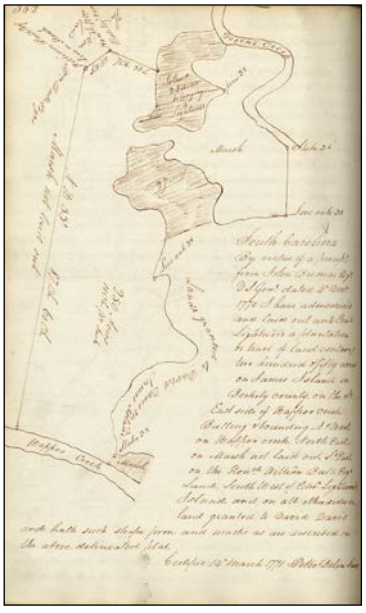


Figure 11: Plat of land acquired by Edward Lightwood

Samuel Perroneau Jr. inherited controlling interest in the plantation, but troubles with his wife led him to devise his plantation to his sisters. It was through his sister Elizabeth that the McLeod tract passed to the Lightwoods, another Charleston merchant family. Elizabeth married Edward Lightwood, Jr. in 1770. Like his father, Edward Lightwood had extensive ties to the shipping trade. He owned interests in a number of vessels and, with partner Thomas Eveleigh, commanded an extensive import business. Lightwood and Eveleigh also imported cargoes of slaves.

By 1750, Charleston's plantation-based economy was thriving. As the 18th century advanced, Charles Town's economic importance continued to expand and, with it, the relative affluence of its citizens. White per

capita income was among the highest in the colonies (Weir 1983). Personal wealth poured into the colony from Europe in the form of furniture, silver, tableware, clothing, and paintings; imports were matched by a rise in local craftspeople and their slaves who produced this finery. The city supported, in particular, a number of cabinetmakers and silversmiths.

Merchants emerged as a distinct social and economic group. They invested their earnings in the local economy, instead of returning to England after making their fortunes (Rogers 1980; Stumpf 1971). They, and the planters of the lowcountry, emerged as the leaders of society; indeed, the two groups often overlapped, for planters dabbled in mercantile endeavors, and merchants invested their earnings in land, becoming planters themselves. The James Island plantations adjacent to Charleston likely were a convenient investment for merchants such as Perroneau and Lightwood.

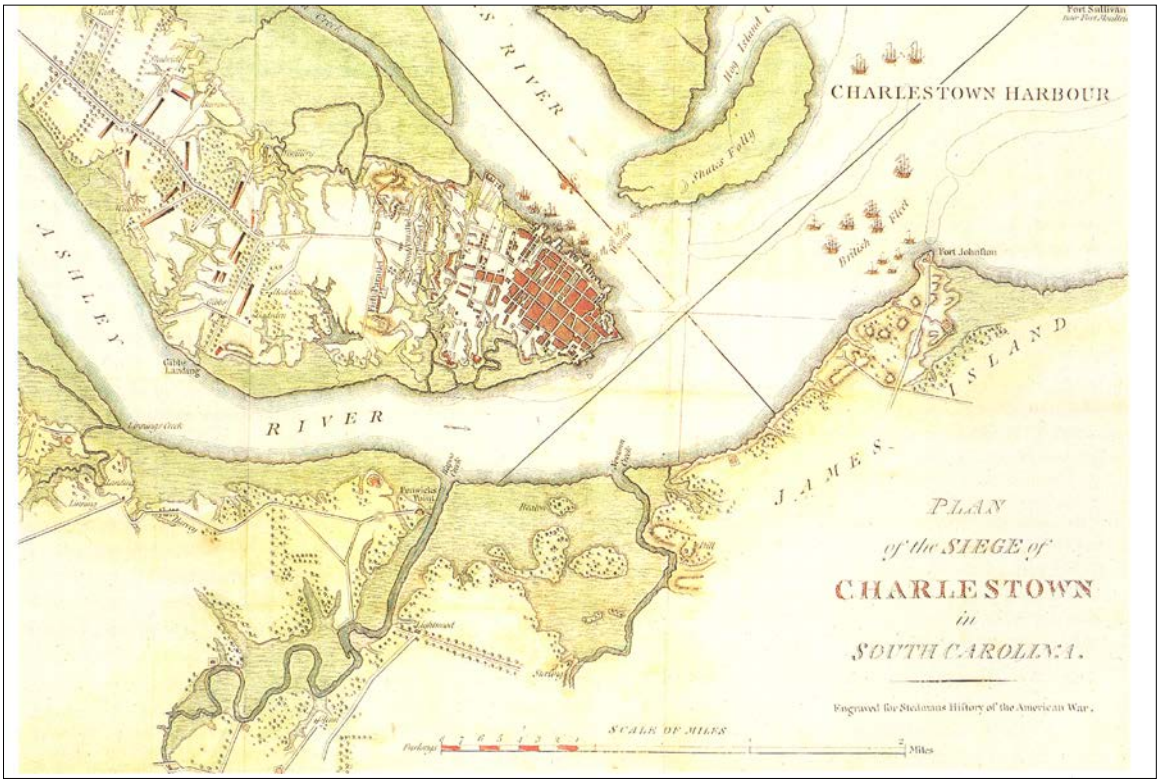
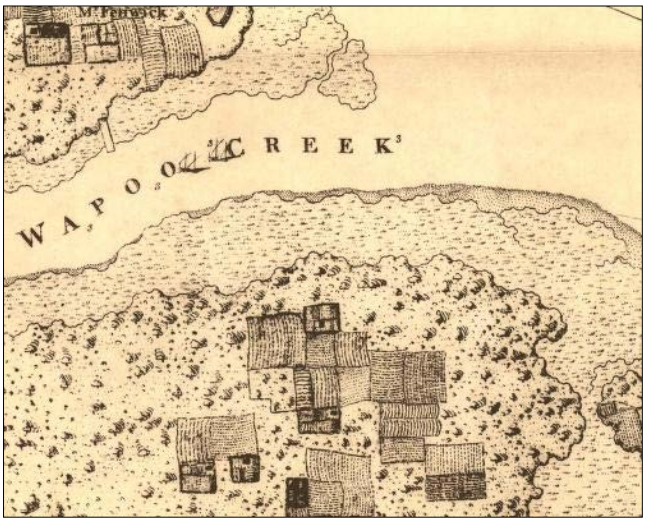


Figure 12: Revolutionary War map, showing location of Lightwood's plantation on Wappoo Creek (from Coker: 2000)

Edward Lightwood acquired 250 of the 617 acres from his brother-in-law, though the details of this transaction are not clear. Plats of James Island during the American Revolution suggest that Lightwood constructed a number of buildings in the 1770s. A 1787 map shows the Lightwood buildings in approximately the same location and configuration as the current McLeod plantation. The map suggests the Lightwood house was approached from the south by a tree-lined allee. A second road tending east-west, in the same location as the present allee, continued to the Perroneau household on the Stono River. Archaeologists located a house and possible slave quarter from the Lightwood era a few hundred yards east of the McLeod house in 1995 (Eubanks et al. 1996).

On July 4, 1776, the American colonists proclaimed their independence from the British Empire. Tensions between the mother country and her North American colonies had been building over the years. The first attempt to conquer South Carolina came in 1776 when the Royal Navy attacked Fort Sullivan (later Fort Moultrie). Repelled, the British withdrew. In 1779, the British again attacked the province. American forces, alerted to the danger, began to converge on South Carolina. British General Prevost, alarmed at the prospect of being caught between the troops commanded by Generals William Moultrie and Benjamin Lincoln, retired to James and Johns Island. There, the troops languished in the oppressive lowcountry heat. Though repulsed, Prevost's invasion was not without cost. Plate, jewelry, horses, and other movable property were taken by the British as plunder. Some three thousand slaves appropriated from their owners were sold by the British in the West Indies or were lost to sickness (Calhoun 1986; Borick 2003).

The British returned to the attack in 1780. General Clinton moved part of his forces overland from Savannah to Charleston. The majority, however, came by sea to the southern end of Johns Island and then over to James Island. The first ships apparently put in at Hamilton's landing on Stono Plantation. Later, the British used Samuel Perroneau's property on the Stono River at the end of Wappoo Drive. By February 14, British forces occupied James Island and began to deploy toward the city. Captain Johann Ewald, a Hessian officer in the British forces, described the British position on James Island by the following landmarks:



"Headquarters and light infantry at Wappoo Bridge, British grenadiers and fusiliers at Mr. Scott's house, jaegers and the 33rd at Newtown New Cut, Hessian grenadiers one and one-half miles this side of Fort Johnson, Huyn's, the 63rd, the 64th, and two companies of the 71st at Hamilton's house, two companies of the 71st on Lighthouse Island, while the baggage ships, a row gallery, and two armed vessels are stationed at headquarters" (Ewald 1979:200-204).

Figure 13: portion of "A Sketch of the Operations before Charlestown", copied from Sir Henry Clinton, c 1789, showing farmlands adjoining Wappoo Creek. The accuracy of the farms is unknown.

General Clinton had a large army at his disposal. American General Lincoln, badly outnumbered and outmaneuvered, was forced to surrender Charleston on May 12, 1780. The British occupation of Charleston and the lowcountry lasted until December 1782. After the British withdrew, inhabitants of James Island adapted to a new order. Sequestered rebel property was returned, but estates belonging to Tories suffered

confiscation or heavy taxation. Paul Hamilton found himself on the losing side of this battle, and relinquished control of his Stono River plantation. Edward Lightwood retained his lands.

Commerce began to normalize, but the withdrawal of the indigo bounty forced planters to consider other crops. Colonial Carolinians had experimented with the cultivation of cotton but had found it unprofitable in comparison with indigo, which thrived in the same soil. The withdrawal of the British bounty on indigo, however, severely reduced the feasibility of continuing to raise the plant as a staple cash crop. Sea island cotton soon came to the fore as a profitable replacement. James Island was suited for this crop.

The first post-Revolutionary cotton exported from Charleston to Liverpool reached England in 1785. Experimentation finally resulted in the selection of the green seed (short staple) and black seed (long staple or sea island) types as suitable for South Carolina. By 1798 sea island cotton had replaced indigo in the coastal region, and cotton plantations stretched from James Island to Georgia. Led by the Burden family of Johns Island, experimentation continued, and by 1827 it was recognized that a careful selection of seed from the best plants greatly improved the quality of sea island cotton. This quest emphasized quality over quantity, and the cotton brought high prices in England (Porcher and Fick 2005).

But the labor required in the cultivation and preparation of sea island cotton for market would have made large-scale development of the crop unfeasible without the cotton gin. Invented in 1793 by Eli Whitney of Massachusetts, the gin revolutionized the economic life of the South. The varied agricultural systems and small-scale development of manufacturing which had previously characterized the state declined as cotton took precedence over all else.

According to the 1790 Federal Census, Edward Lightwood kept 53 slaves on his James Island plantation. He attempted cultivation of sea island cotton, but evidently saw only moderate success. He continued his more lucrative merchant trade and kept a house in Charleston, located at the corner of Meeting and Atlantic Streets.

Upon Edward Lightwood's death in 1798, his widow Elizabeth maintained the James Island plantation, operated by her son-in-law William McKenzie Parker, Jr. In 1816 Mrs. Lightwood advertised for "An Overseer who understands Cotton Planting and Gardening, for a plantation on James Island, about three miles from the city…Apply to E. Lightwood, no. 244 Meeting Street" (Fick in Porcher and Fick 2005:474; Charleston Courier, November 29, 1816). When Elizabeth Perroneau Lightwood died in 1826, William McKenzie Parker Jr. purchased the plantation from his grandmother's estate. At that time, it was advertised as a "valuable and well settled Plantation and Farm, 744 acres of prime cotton and provision land, a little over two miles from Charleston, as the mouth of Wappoo Creek and Ashley River" (Fick in Porcher and Fick 2005:474; Charleston Courier, December 1827). William McKenzie Parker Jr. died in 1830 and, to settle the

estate, his mother Sarah Lightwood Parker purchased and operated the plantation through the antebellum period.

Despite the productivity of the plantation (600 acres of improved land yielding 26 bags of cotton in 1849), the family decided to sell, advertising a "valuable cotton plantation and farm, with a dwelling house, and all necessary out buildings and accommodations for 90 Negroes. The Cotton land has undergone a general system of improvement from manuring, leveling and ditching and is now in good heart, and fine planting order. The Farm land is in the highest state of cultivation…On the tract there is a summer settlement, and a locality for building unequaled, as regards the prospects of the bay, harbor, and city" (quoted in Porcher and Fick 2005:474; Charleston Courier, 1850). The advertisement clearly distinguishes between lands used for cotton and those used for provision crops, and indicates that both are active and productive. It also suggests a modest settlement, with land set aside for a more impressive dwelling.

The Parker family settled early in the Goose Creek area, and the family developed Hay plantation. The "Goose Creek men", as the settlers were known, were politically influential in the late 17th and early 18th centuries, and played a key role in the overthrow of the Proprietary government. The Goose Creek men were also heavily involved in trading slaves, both African and Native American. William McKenzie Parker II owned several vessels that operated out of Charleston and participated in the slave trade.

William McKenzie and Sarah Parker, along with their sons William McKenzie Parker III and Edward Parker, operated the James Island plantation, growing Sea Island cotton. At the time of Elizabeth Lightwood's death in 1829, the property was 769 acres. In 1851, the Parkers sold the property to William Wallace McLeod. By this time, the holdings had increased to 914.5 acres of land and 779 acres of marsh.

The overwhelming reliance on cotton affected not only the agricultural areas, but also Charleston itself. Like the advances wrought by the development of tidal rice production after the Revolution, the successful utilization of the cotton gin resulted in twenty years of unbridled prosperity for the city. But the national depression that began in 1819 slowed Charleston's expansion considerably. Although the economy stabilized, Charleston's business community learned that dependence on a single crop and its international market made the local economy vulnerable to outside fluctuations. Both rice and cotton faced debilitating competition from newer agricultural areas in the American Southwest. Charleston's failure to fully embrace the new rail system left the city further marginalized. As sectional tensions mounted in the mid-19th century, South Carolina led the fiery rhetoric calling for defense of slavery and secession from the United States. The War between the States ended many social and economic traditions of the lowcountry.

Like the previous owners of the plantation, the McLeod family arrived in the lowcountry early in the 18th century. William W. McLeod had grown long staple cotton on Edisto Island before acquiring the James Island plantation. Several of the McLeod children migrated to James Island, marrying into other James Island families with Edisto

ties. According to tradition, he was the first owner of the property to farm successfully, owing largely to drainage improvements. Fick notes that in 1859 he had 600 acres in cultivation, and his 64 bags of cotton more than doubled Parker's. She further enumerates "corn, peas, and sweet potatoes for plantation use, and garden crops worth $3,000 for the Charleston market (Fick in Porcher and Fick 2005:475). Livestock that year included "7 horses, 3 mules, 50 cows, 25 other cattle, 24 sheep, and 70 swine, valued at $3,400" (Cote 1995:53). According to the 1860 census, McLeod farmed the property with 74 slaves. Like other James Island planters, the McLeods continued the practice of raising market provisions as well as cotton.

Like McLeod, plantations on James Island generally focused on market produce, as well as commercial crops such as rice and indigo. They also supplied the vendors for the city market. Stono Plantation on New Town Cut raised vegetables for Charleston in addition to indigo. This practice continued in the early 19th century under new owner Captain John Rivers. In 1850, the 760-acre plantation produced 335 bales of sea island cotton, but it also produced 1,000 bushels of maize, 80 pounds of wool, 50 bushels of peas and beans, 20 bushels of Irish potatoes, and 2,000 bushels of sweet potatoes. Produce grown specifically for Charleston at Stono was valued that year at $1,000 (Calhoun 1986:6). Local plantations, and particularly the slaves who lived on them, were the primary produces for the Charleston markets.

Historian Philip Morgan suggests that James Island slaves, in particular, were an important, and distinct, link in the lowcountry marketing system. He cites several references to James Island slaves who worked in the Charleston markets, surmising "an identifiable group of island peddlers had emerged by the late colonial period" (Morgan 1998:251). This tradition continued through the mid-twentieth century (Frazier 2006; Bresee 1986). The connection of Charleston markets to individual plantations is underscored by an ordinance of 1786. Six stalls at the Lower Market on Tradd Street were reserved for "the use of the planters that bring or send their own stock to market" (Edwards 1802:39). Such arrangements were stipulated again in legislation for the new central market in 1807, providing "for the use of planters bringing or sending meat of their own stock or raising to market, there shall be reserved six stalls in the Centre Market" (Eckhard 1844:137). Many of the planters on James Island grew vegetables such as watermelons, musk melons, tomatoes, okra, peanuts, Irish potatoes, green peas, beans, squash, cabbages, turnips, and sweet potatoes for the Charleston market. Clay peas and corn were also cultivated, and were a significant part of the diet of the slaves, as well as feed for the stock (Calhoun 1986).

Slaves, from both the city and the countryside, made up a large portion of the city market vendors. These vendors huckstered a variety of items, both for their own benefit and that of their masters. Maurie McInnis notes that most planters encouraged the practice of slaves provisioning themselves and the urban market. She notes that slaves brought their wares to the market on Saturday nights (McInnis 2005:184).

The prevalence of slave hucksters, and their de facto control of the Charleston market economy, is reflected in legislation regarding slave badges. These copper tags,

used only in Charleston, were licenses purchased from the City by slave owners, and they permitted slaves to work for others or without supervision. In the late 18th century, badges for vendors, hucksters, and butchers were the most expensive and were accompanied by extensive legislation. Slave badges have been recovered on James Island plantations, including McLeod (Singleton 1984; see also Greene et al. 2004).

Bondsmen and women from the countryside sold their own eggs, chickens, and garden produce. Black women also sold dry goods, cakes, and other baked goods. Philip Morgan notes that Charleston's large urban market created specialized opportunities for men, as well. There are many references to slaves who were butchers (Morgan 1998:55), either on plantations or in the city markets. Bondsmen from the countryside who spilled into the city selling provisions were often the subject of rancor and legislation. But despite repeated attempts at legislation, it appears that African American women dominated the colonial market, and their monopoly had a direct effect on supply and price of goods in the city.

By the third quarter of the 18th century, Charleston was evidently large enough and wealthy enough to support several markets. In addition to the original market at the corner of Meeting and Broad streets, a fish market was constructed on the waterfront at Vendue Range (Queen Street). This location was ideally suited to receive the catch, and to clean and prepare for sale with ready access to the water for the disposal of waste. This, too, seems to be the case for the Lower Market, constructed at the foot of Tradd Street and active until 1800. The foot of Tradd Street remained a convenient docking point for James Island hucksters through the early 20th century (Bresee 1986; see Frazier 2006).

Many market women were wives of fishermen. Slaves who plied the waters of Charleston harbor exercised an unparalleled level of independence. Most of the fishing, to supply either the home or the urban market, was done by African American men. Slaves had time to fish because of the personal time afforded them under the task system and because of their de facto ownership of boats and canoes (Berlin 1998:153, 168; Morgan 1998:55-57; Wood 1975:123). Their catch was sold by peddlers who hawked fish in residential areas and by women who sold in the markets. In particular, Philip Morgan cites a 1772 reference to a runaway slave who "was carrying on the fishing business between town and James Island" (Morgan 1998:240). Charleston's famed "Mosquito Fleet" of the late 19th century was the latest manifestation of this long tradition. In 1880, 94% of those Charlestonans identified as 'fishermen' were black (Fick 1992:37). The faunal record at Stono Plantation contains an unusually large number of catfish remains, possibly reflecting commercial fishing (Dukes and Reitz 1994).

Shortly after acquisition of the property, William McLeod built the existing plantation house. It is unknown whether he razed the Lightwood/Parker house to make room for his new dwelling, or if the house was located elsewhere. Cartographic and architectural evidence suggests that some of the existing cabins, the kitchen, and the dairy may date from the earlier period. The McLeod house faced south, but the waterfront landing on the north side of the property was central to plantation operation, and McLeod

built a general store on the waterfront that remained in operation into the 20th century. The Wappoo Cut landing provided easy access to Charleston via the harbor.

The McLeod property was central to Civil War activities on James Island, and the plantation is perhaps best known for that era. At the outbreak of the war, the Confederate army ordered the evacuation of James Island. Middle-aged and not required to serve, William McLeod was outspoken in his support for secession, and joined the Charleston Light Dragoons out of sense of duty in 1861. He died in service, of pneumonia in Moncks Corner, in 1864 and is buried in Biggin Church cemetery (Fick in Porcher and Fick 2005: 475; Hayes 1978:124); his wife died in 1861.

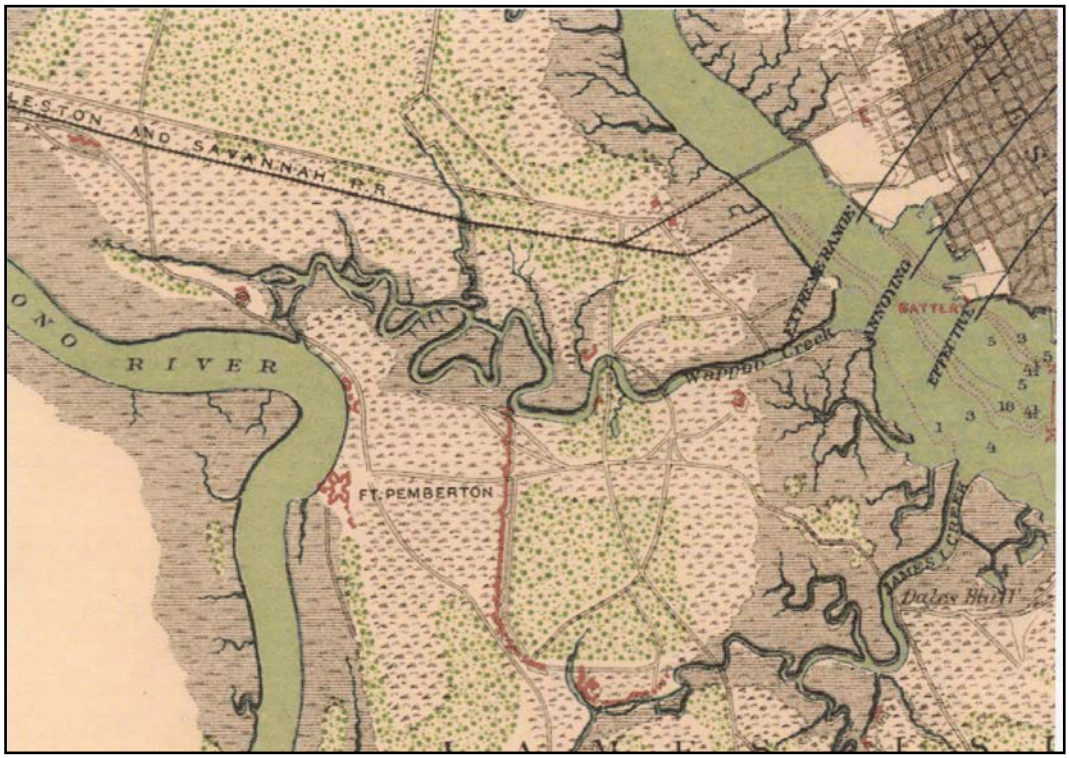


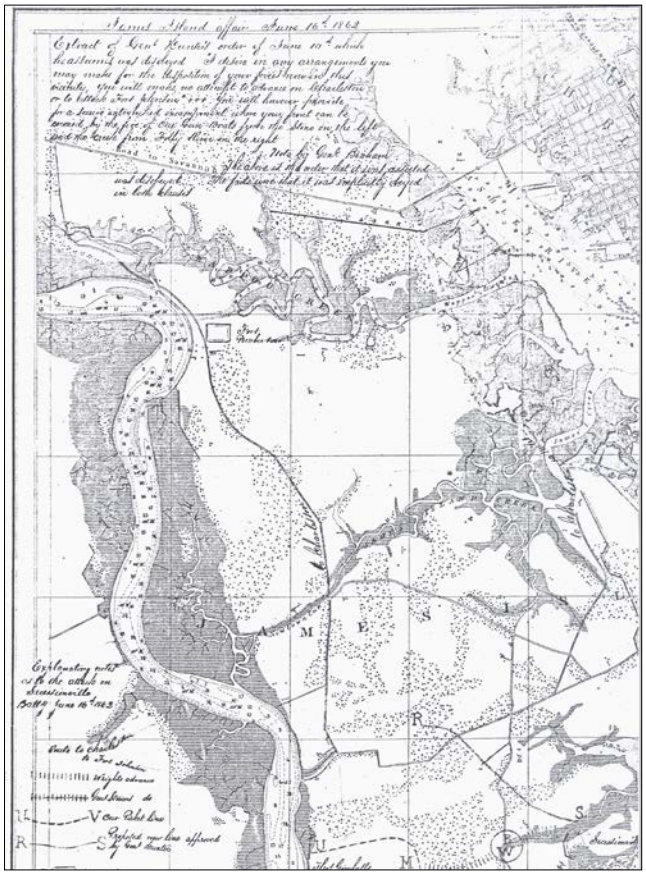
Figure 14: Confederate Engineer's map of James Island, showing location of McLeod Plantation and Road to Secessionville

Disputes simmered between Northern and Southern states over tariffs, State's rights, and slavery through the antebellum period. After 1850, war was inevitable (Fick 1992:35). South Carolina seceded from the Union on December 10, 1860 and troops fired on the Union-held Fort Sumter in 1860. James Island was considered a key to the possession of Charleston, and Confederates began construction of defenses across the island, including Fort Pemberton at Elliott's Cut and Fort Lamar at Secessionville. Only partially completed, these were abandoned when General Pemberton assumed control of the area. Pemberton also removed the eleven large caliber guns from Cole's Island, where they had guarded the mouth of the Stono River. Federal troops immediately entered the river and set up a permanent camp on the southeast end of James Island.

On June 2, 1861, the Union troops began landing a large force on James Island. Skirmishes were fought June 2 through June 15. On June 16, General H.W. Benham led

Northern troops against Fort Lamar at the southeastern end of the line of Confederate works, which were dotted across the island from Secessionville to the Stono River at Rivers' plantation. The Federals were repulsed and evacuated the island. In September, General Beauregard once again took command of the department of South Carolina and Georgia, and he replaced Pemberton's line with the James Island Siege Line in 1863. Three batteries – Pringle, Tynes, and Leroy – were placed on Stono Plantation. Battery Means was located on the McLeod plantation. Confederate troops were stationed on James Island throughout the War.

During the early summer of 1862 the James Island planters were ordered to evacuate themselves and their slaves from the island. The slaves were known to carry information to the Union forces and the island was too embroiled in fighting to be safe for non-combatants. James Island was put under martial law. William McLeod entrusted care of the plantation to Stephen and Harriet Forest (Frazier 2006:131). Claims filed by McLeod in 1862, however, suggest that others were not so loyal. William McLeod testified that "one or about 25th May 1862, ran away the following Negroes viz: Syphax 55, Beck 55, Tony 40, Ben 35, Rose 24, child 14 months, William 28, York 34, Molly 25".



Thousands of Confederate troops were stationed on the island, often causing damage to the absent planters' property. In an 1862 Claim, McLeod also complained of damages done to his land, including corn, cotton, and potato crops, and "Oak & Pine wood cut down for making two military roads & causeway through plantation, by order of General Pemberton" (Magistrate Book no 2: 10-30-44-126). A year later, members of the SC Volunteers, stationed at McLeod as a guard for the bridge at Wappoo Cut, evidently cut an ornamental cedar tree "285 yards from the house but evidently on an ornamental avenue and within what used to be the Enclosure" (Ripley 1986)

Figure 15: 1862 map of James Island. The numerous structures on McLeod are visible.

The McLeod home was used as a field hospital, regimental headquarters, and commissary by the Confederate army through 1863. Later, Union forces penetrated the

Confederate defenses on James Island, and the Union army occupied McLeod plantation. The house was again used as a Military District hospital and officer's quarters. The 55th Massachusetts Volunteers, one of the Union Army's first black regiments, occupied the property.

On September 22, 1862, President Lincoln issued the Emancipation Proclamation. All slaves in parts of the South still in rebellion were "thenceforward and forever free". In 1865 Federal troops took control of South Carolina and enforced the declaration of freedom for all still in bondage. Convinced by planters of the necessity of establishing control over the freedmen, the Union Army officers began to assist in putting former slaves back to work. In April, an order was issued that the planters of Georgetown and Charleston districts were to take an oath of allegiance to the United States, assemble their former slaves to tell them they were free, and to enter into reasonable contracts with the freedmen. But lowcountry rice and cotton planters no longer had a subservient labor force, and taxes and debts mounted as planters struggled to make their plantations profitable.

The Bureau of Refugees, Freedmen, and Abandoned Lands, popularly known as the Freedman's Bureau, was established on March 3, 1865, to protect and guide the newly freed African Americans. At least some of the land on James Island was confiscated. The Freedman's Bureau helped negotiate contracts between planters and wage-earning workers (Fick, Schneider, and Stockton 1989). Following the war, the McLeod house became the headquarters for the Freedman's Bureau. Hundreds of freed slaves camped in the fields south of the house, where they could take advantage of the services offered by the Bureau. Each slave family was given 37 acres, only to have the land later returned to the white owners. Local residents recall at least two freedmen who gained and lost farmland in this manner (Frazier 2006:132-135). Wilson (1993) suggests that several black families occupied the house in the years after the war, as did a white schoolteacher from the north.

In contrast to other areas of the South, most of the Sea Island black farmers disliked the group contract system, and preferred to work individually for wages. By 1870, many black farmers worked under a tenant farmer system, in which rent for land was paid in cash. Sharecropping, in contrast, required farmers to pay rent in produce. Tenancy freed the farmer from direct owner supervision and provided the opportunity to accumulate cash and purchase farmland. This resulted in division of some large plantations into small farms. This was particularly pronounced on nearby Johns Island, which featured 61 properties in 1860 and 400 by 1870. James Island included some 17 large plantations and several smaller farms. Some of the larger tracts, such as Stono Plantation and Sol Legare Island, featured dispersed freedmen's farmsteads (Fick, Schneider, and Stockton 1989:28).

After the Reconstruction era, William Wallace McLeod II regained possession of the portion of McLeod containing the house and outbuildings, nearly 300 acres. His sisters, Anna Mikell Frampton and Regina L. McLeod, acquired adjoining tracts to the south. Farming continued on McLeod, under a variety of arrangements with island

freedmen, including paid labor and tenants. McLeod continued to raise long staple cotton. McLeod was a central member of the James Island Agricultural Society.

The James Island Agricultural Society was formed in 1871 to coordinate labor policy between plantation owners and freedmen, and to improve the production of sea island cotton. The Society also worked to improve the cotton strains. Dr. Elias Rivers of Centerville Plantation on James Island helped develop a strain of wilt-resistant Sea Island cotton, when in 1899 he recovered a single healthy plant in a field infected with the fungus. Seeds from this plant were sown successfully the following year and, with the aid of the U.S. Department of Agriculture, the wilt-resistant Rivers Sea Island Cotton was released (Porcher and Fick 2005:297). The Rivers strain of Sea Island cotton was introduced in the West Indies in 1902, to replace sugar cane. The cotton was so successful there that it began to impact the market. In response, the James Island Agricultural Society halted the sale of the seed anywhere, and this contributed to the decline of local Sea Island cotton (Porcher and Fick 2005:329).

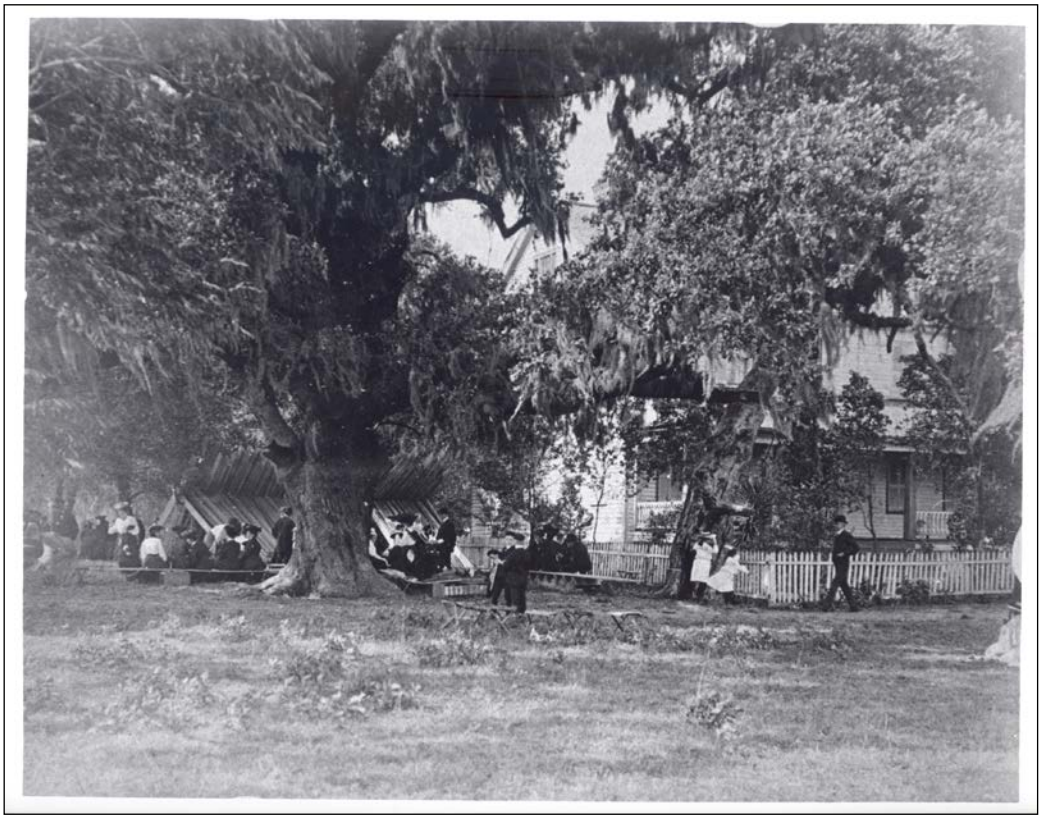


Figure 16: Agricultural Society picnic at McLeod, June 1903 (photo by M.B. Paine, Collections of The Charleston Museum.

The McLeod house was a frequent meeting place of the Agricultural Society, which remained active until World War II. McLeod Plantation was also a frequent meeting place of the Haskel Rifles, a white militia group. Festive gatherings of the Haskel Rifles included dances, inspections, and tilts. Tilting contests were similar to lancing contests, but done with sabers (Hayes 1978:86). The Haskel Rifles were formed partly in response to formation of the Hunter Volunteers, a black militia unit under the

command of Captain Isaac Ferguson. Black residents of James Island exercised new freedoms by joining and building new churches, lodges, and schools (Fick, Schneider, and Stockton 1989:26).

Economic difficulties continued for Sea Island planters. The nationwide depression of 1873 struck an already debilitated South. A wave of bankruptcies swept South Carolina, forcing many farmers into tenancy. By 1900 almost 61% of the farmers in the state were tenants. A series of natural disasters in the late 19th century delivered blow after blow to lowcountry planters. A number of hurricanes destroyed buildings, crops, and livestock, and killed many island residents. These storms were largely responsible for the demise of commercial rice, as well as cotton. The cyclone of 1885 blew down over 50 buildings on James Island. The larger Sea Island Hurricane of 1893 killed thousands of sea island residents. It damaged many houses on James Island and swept away much of the livestock. The earthquake of 1886 caused hot springs to erupt across James Island (Fick, Schneider, and Stockton 1989:28). The Mexican boll weevil, on the march from the Rio Grande since 1892, reached Georgia in 1915 and James Island in 1917. In 1919 the boll weevil destroyed 90% of the sea island cotton, forcing planters to abandon the long fiber crop.

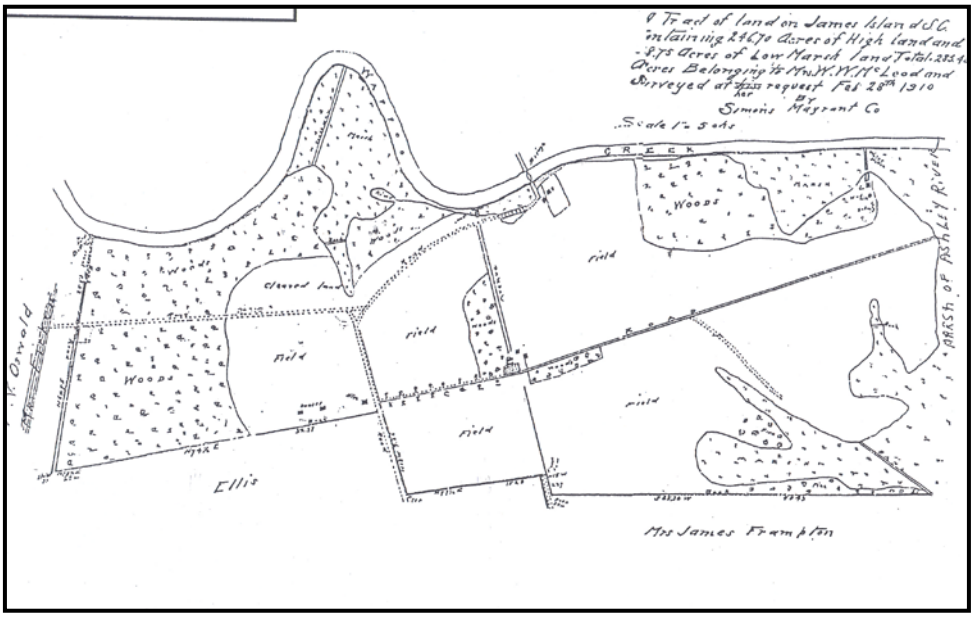


Figure 17: 1910 plat of McLeod Plantation, showing open fields and a store on the waterfront

William McLeod II died in 1919, and his property passed to his children, William Ellis McLeod, Rose McLeod Barnwell, Susan McLeod, and Wilhelmina W. McLeod. William Ellis McLeod, already assisting with management of the plantation, assumed full control when his father died. McLeod was one of the first on James Island to install the new tile drainage system, under recommendations from the U.S. Department of Agriculture. After poor yields in 1867-1868, planters considered installation of subsoil drainage. The first systems were installed in 1872, with excellent results (Porcher and Fick 2005:148-151).

But bigger changes were in the wind for James Island plantation owners. William Ellis McLeod planted the last crop of Sea Island in 1918. Thereafter, McLeod joined other James Island plantation planters in shifting to truck farming. The land was planted in potatoes, asparagus, and cucumbers. Small truck farms operated by black farmers co-existed with larger, commercially managed farms (Fick, Schneider, and Stockton 1989:28). Farmers on James Island, including McLeod, later raised dairy cattle. The adjoining Lawton's Bluff plantation became the largest dairy in the area. Milk was taken by launch to the Battery Dairy in Charleston twice daily (Fick, Schneider, and Stockton 1989:29; Bresee 1986). Transportation of truck crops was aided by construction of new rail lines and tramlines. In the early 20th century, vegetables grown in Charleston County were shipped north by train from local depots, largely bypassing Charleston (Fick 1992:40). Low profitability of these crops was exacerbated by the out-migration of black James Islanders, who left the Sea Islands and the Southern states for better economic opportunities in the north. Mr. Willie McLeod commented on the changing James Island population in 1944:

"Up to about 1914, James Island was a real country community of approximately one hundred and fifty white people and four thousand Negroes; now the white population has doubled many times by an influx of suburban residents, while a considerable number of the colored population have moved away" (Fick, Schneider, and Stockton 1989:312)

Modernization came gradually to James Island. The first bridge over Wappoo Cut (since the Civil War) was opened in 1899. Folly Road was established in the early years of the 20th century, and was James Island's first paved road in 1930. A bridge across the Ashley had been in existence from the Civil War. Despite these road improvements, James Island remained rural, crossed by a series of dusty dirt roads. African Americans continued to work the Island farms and plantations, living and working in unequal conditions. Improvements in transportation and suburban development gradually changed the face of the island.

Figure 18: McLeod house and cabins, c. 1930 (Photos by William Henry Johnson, collections of the South Carolina Historical Society).

In 1940, William Ellis McLeod gave up farming, and leased out portions of the property to other farmers. The cabins remained occupied by black tenants and, later, migrant farm workers. The McLeod lands were gradually reduced to less than 80 acres. Upon his death in 1990, and that previously of his sister, the property passed to a group of beneficiaries, principally Historic Charleston Foundation. Through various means, including sale of a 10-acre tract on the east side of the property, Historic Charleston Foundation acquired total interest in the property.

Summary of Occupational Data

History of the McLeod tract, and general topography of the property, suggests that successive occupation sites may be located along the ridge of high ground currently occupied by the mid-19th century McLeod complex.

Archaeological and cartographic information strongly suggest the presence of late 17th century occupation of the property. Artifacts possibly in use during that period have been recovered along the south side of the allee, close to the intersection of Folly Road and in the area at the intersection of the allee and the western lawn. Archaeological survey and testing, including the present project, has failed to locate any intact features dating exclusively to the earliest occupation. The search continues.

There is no documentary evidence for construction of a dwelling during the Wilkins ownership (1706-1741), though it is possible that one existed. The Perroneau occupation (1741-1771) was, according to later maps, located at the west end of the plantation tract, along the Stono River, currently outside the property boundary.

Excavation of 38Ch679-3 revealed evidence of a modest dwelling and smaller structure, likely a slave cabin, east of the current McLeod house. Archaeological evidence suggests occupation during the second half of the 18th century. The site was interpreted as a house built and/or used by Perroneau heir Edward Lightwood. The most likely period of occupation of this site is 1750-1780. It is interesting to note that the 1849 advertisement mentions both "a summer settlement" and a "locality for building". Together, this suggests only a modest structure during the Lightwood/Parker tenancy.

Edward Lightwood constructed a house and other plantation buildings in the 1780s that passed to his son-in-law, William Parker. Plats show the Lightwood building complex in approximately the same location as the McLeod buildings. Foundations have been noted immediately east and west of the McLeod house; these may be remnants of the Lightwood buildings. It is also possible that some of the extant outbuildings, including the dairy, date to the Lightwood/Parker occupation.

William Wallace McLeod constructed a new house in 1854, shortly after his purchase of the property. Like the Lightwood house, the McLeod house was oriented to the south. The house was renovated and reoriented to the north in 1926. The McLeod complex included a number of additional buildings, including 23 slave cabins. There is both architectural and archaeological evidence for construction and alteration of other buildings through the late 19th and 20th centuries. The archaeological record likely contains evidence of additional McLeod-era structures.

Figure 20: Cabins at McLeod, c. 1982. Folly Road and commercial buildings are visible in the background (Collections of The Charleston Museum

Chapter III
Survey of Area C

Field Methods

Area C consists of three fields, designated A, B, and C, totaling eight acres, more or less. Largest is the southernmost field (field A), measuring approximately 300' north/south by 1000'. The western half of the field to the north was also included in the survey; this was designated field B. Field B was approximately 150' north/south and 350' east/west. Field C was a narrow strip along the eastern border of the property, covering the eastern edges of three established fields. The area in question measured 80' east/west by 400' north/south.

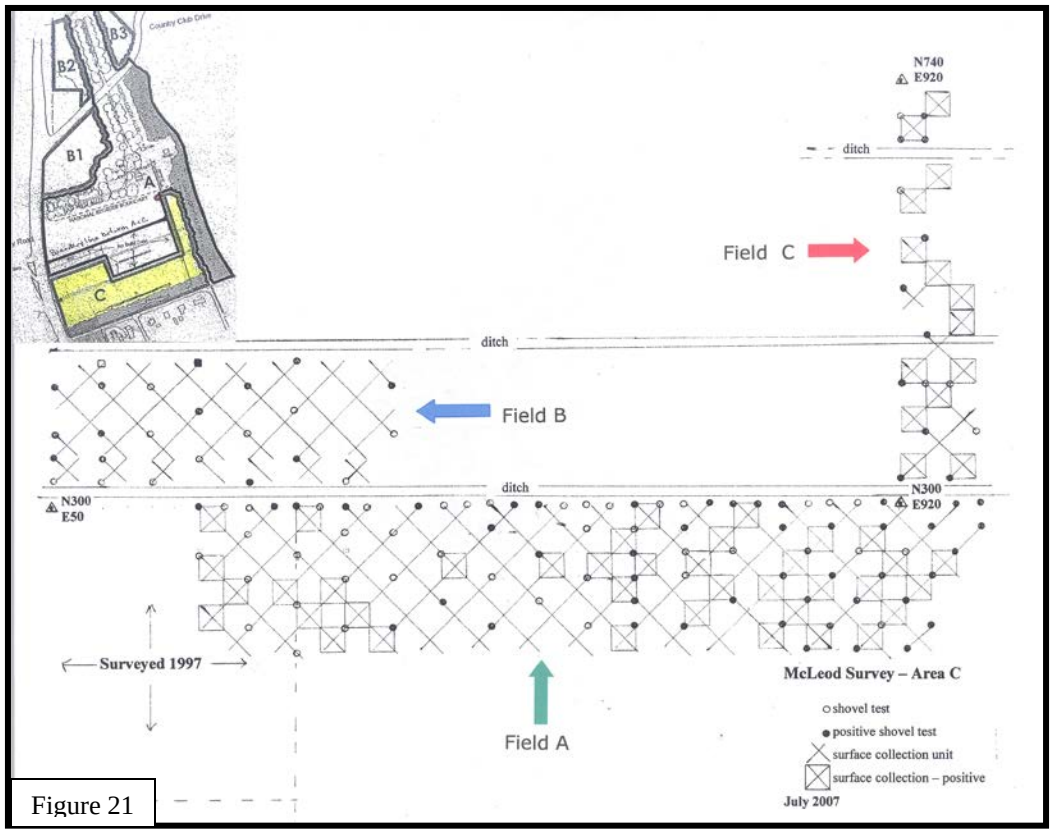


Figure 21

Prior to initiation of fieldwork, the fields presented as old-field growth. They have not been plowed for a few years, and were covered in vines, small gum and cherry trees, and a variety of weedy species. The fields were bush-hogged prior to our arrival on site. Disking was scheduled to occur two days after field school began. Three passes with the disc were necessary to achieve desired surface visibility. The combination of mowing and disking produced a new ground surface, and at least 60% visibility in each of the 25' units. The discing on Thursday, May 17, was followed by one-half inch of rain on Saturday, the only measurable rainfall during the field project.

An overall site grid was established with manual transits, uniting survey of the fields in Area C with later work across the property. The Chicago grid, oriented to the southwest corner of the property, initiated at the corner of Folly Road and Tatum Street. Actual grid layout began with establishment of a datum point at the northwest corner of field A. A 2' section of iron rebar was placed in the ground under the shadow of a moderate-sized gum tree, 50' east of Folly Road and approximately 300' north of Tatum Street. This point received the arbitrary grid designation of N300 E50. The rebar grid point was marked with a section of white pvc pipe, and was left in place upon completion of the survey.

Figure 22: Layout of baseline along northern edge of field C; the baseline was designated N300. Images are after mowing, but before plowing.

From this point, a base line was established parallel with the drainage ditch, 85 degrees east of magnetic north. Grid points were placed at 25' intervals, from E50 to E975. A second datum point was established at N300 E920, at the western limits of field C. Grid points continued at 25' intervals (including N300 E925) to E975.

The transit was then set over N300E920, and base line was established north at 25' intervals to N725. A third permanent point was established adjacent to a tree (in an area beyond the limits of a mower) at N740E920. Points were established south to N150. The transit was then set over baseline points at even 200' intervals (E800, E600, E400, E200). At each of these points, grid points were placed at 25' intervals to the south. From here, tapes were stretched between the southern lines to establish remaining grid points at 25' intervals. All grid points, other than the three key points described above, were established with pin flags.

Grid points were established in Field B in a similar manner. The transit was set over N300E200 and N300E400, and grid points were placed at 25' intervals to N450. Tapes were used between the two grid lines to establish points at 25' intervals, from E50 to E400. Field C was gridded in a slightly different manner. As this field was extremely narrow, the E920 line was used as the meridian for the grid, and flags were placed at 25' intervals from this point. The 25' units, then are off-set 5' to the west, relative to those in fields A and B. A second grid was established with the transit at E950 to facilitate grid layout in field C.

Figure 23: Grid layout in Field B, after plowing; placement of grid points with tapes

Survey was initiated after completion of the site grid. Two methods were used at the site, surface collection of alternating 25' units and shovel testing at staggered 50' intervals. Survey included collection of 145 surface units and excavation of 128 shovel test units.

Surface collection in Field A began with unit N150E225 and continued to the north and east with alternate collections made. The grid flag at the southwest corner of the unit served as the designated coordinates for that square. Individual crew members were assigned a north/south line of units, and materials were collected by walking in linear fashion back and forth across the unit. All visible cultural materials, including brick, mortar, shell, and other artifacts noted on the surface were collected, and notations were made of the degree of surface visibility. Placement of surface collection units in Fields B and C were slightly less regular. Adjoining, rather than staggered, units were collection from the N325 and N350 lines in Field B, due to a communication error. The remainder of the field was collected in staggered fashion. Units in Field C were collected in staggered fashion, but the discontinuous shape of the field created an irregular collection pattern.

Survey continued with shovel testing. The crew was divided into teams of three, and every other (25') grid point was tested. Shovel tests measuring 1' by 1' were excavated into culturally sterile soil through ¼" mesh. The grid pin flag served as the southwest corner of the shovel test, and as the coordinates for that test. When field conditions required that the unit be placed some distance from the pin flag, this was noted. All materials, including brick and mortar rubble, were collected. Soil profiles were measured and recorded, and notation was made of soil color, based on the Munsell system.

Figure 24: Survey of field C: shovel testing (left) and surface collection (right)

All of the shovel tests and surface collections were bagged separately, and the bags were labeled by site, method of test, and grid coordinate. Artifact bags were inventoried, and assigned an ordinal Field Specimen Number (FS#) in the field. In the laboratory, each bag or provenience was washed and sorted individually. For the purposes of this document, all bags were examined and materials identified and quantified. In the laboratory, brick and mortar was weighed and recorded, and artifacts were identified and catalogued. A catalogue card listing the number of identified artifacts was prepared for each provenience. Density maps of the cultural materials were prepared by Tina Rust.

Results

The field survey yielded a very low density scatter of cultural materials, primarily from the second half of the 19th century up to the present. Field A, roughly 120,000 square feet, yielded 60 artifacts from shovel tests and 56 artifacts from surface collections. These totals do not include brick and mortar, but the recovered amount was negligible, except for a single half-brick recovered from N175E350. This averaged one artifact per 2000 square feet. These results are comparable to those from the Brockington survey of the acre at Folly and Tatum roads; here, 17 artifacts were recovered from the surface (90,000 square feet). The artifacts in Field A were broadly scattered, and there was no evidence of definable concentrations. Materials were slightly more dense at the

eastern end of the field, from E800 to E1000; here, positive shovel tests were more common.

Artifacts were slightly more common in Field B, roughly one-third the area of field A (43,750 square feet). Here, 21 artifacts were recovered from shovel tests and 59 from surface collection. This averaged one artifact per 740 square feet. Artifacts were distributed across the survey area, with no concentrations evident.

Field C yielded a slightly different assemblage. This long, narrow area (30,000 square feet) yielded 32 artifacts from shovel tests and 34 artifacts from surface collection, or 1 artifact per 800 square feet. There was a notable concentration of material in the northern 100' of the study area. The shovel test at N675E945 yielded a particularly large assemblage of materials (23 items), including brick, architectural material, oyster shell, ceramics, and bottle glass. Shovel tests at N575E945, N675E920, N700E920, and N700E945 were also productive, yielding at least 3 artifacts per test. The collection unit at N675E945 was particularly dense, yielding five glass fragments and a concentration of brick and mortar fragments. The majority of these were recovered from a dark soil deposit about 1.0' below surface, likely a feature. All of the observed materials dated to the mid-19th century and later.

Figure 25: The north end of field C, location of a concentration of cultural materials from the mid-19th century. Facing south.

Based on the recovery of these materials, two 5' by 5' test units were excavated in this area. Unit N700E920 was excavated to sterile subsoil, encountered at .7' below surface. The unit contained a moderate amount of cultural material. No features were present. Unit 675E940 was located adjacent to the productive shovel test at N675E945. The overlying plowzone soils were excavated in two levels. Level 1 contained few cultural materials, but artifact density increased in level 2. Excavation to sterile subsoil revealed a large feature, filled with soil similar to the above plowzone. This feature covers the southern half of the unit, and appears to be a large pit, filled with overburden sand. The feature was mapped, but not excavated at this point. It is likely the same feature noted in the adjoining shovel test; here, the dark soil 1' feet below surface produced brick and architectural material.

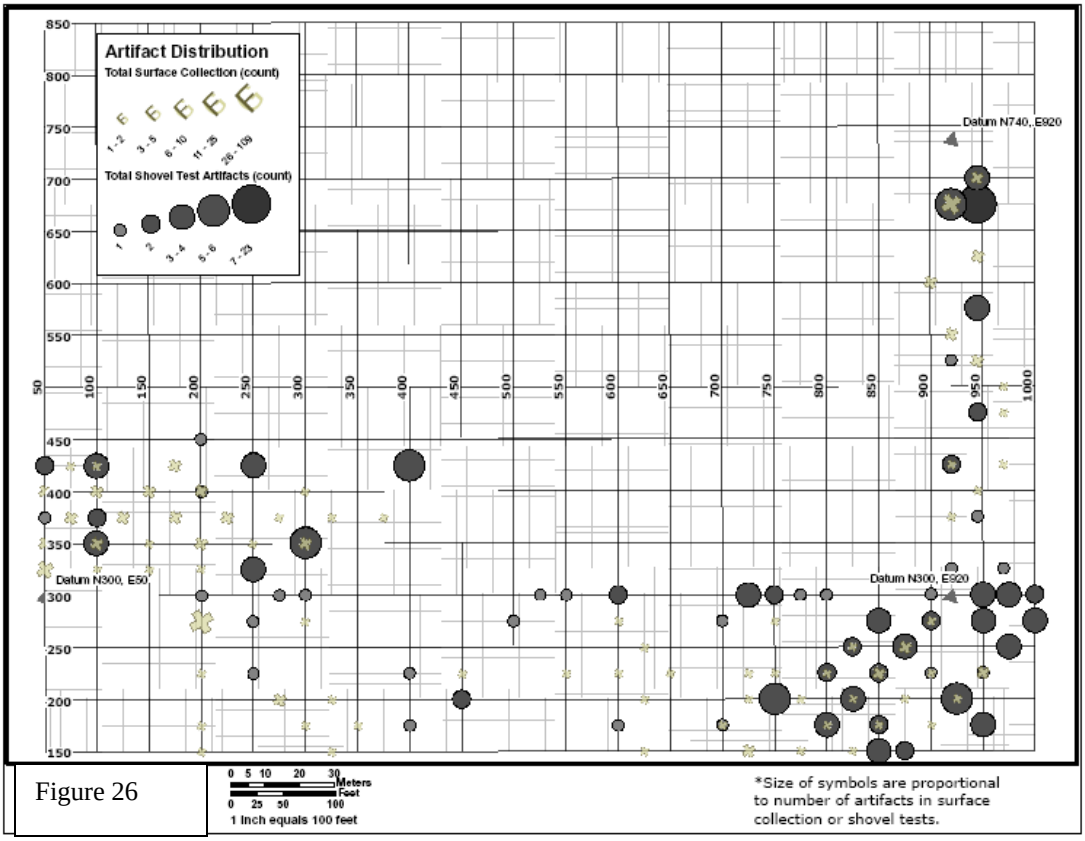


Figure 26

Summary

Survey of the three fields composing Area C revealed a very low density of cultural materials. The materials were sparse, and evenly distributed across the survey area. Artifact density increased slightly along the eastern margins of the survey area. The exception to this was the northern limits of field C, where a concentration of brick and mortar rubble, and a moderate amount of 19th century material was noted. Four shovel tests and two 5' test units in this area revealed a moderate concentration of material and a possible refuse pit. The data recovered suggest a structure was located in this vicinity. No structural features were encountered in the test units. It is possible that the structure itself is located outside of the boundaries of the survey area, and that the test units encountered associated refuse. This area (above the N650 line in Field C) should be subject to further testing prior to any ground-disturbing activities.

The remainder of the survey area does not appear to contain cultural deposits worthy of further study. Based on similar results, archaeologists from Brockington concluded that the 1-acre tract at Folly and Tatum roads contained no significant concentrations of cultural materials (Brockington 1997). Archaeological reconnaissance by New South Associates in 1991 produced similar results. They also noted a low-density

scatter of mid-19th century artifacts, beginning 200' south of the slave allee, and suggest an association with the temporary freedmen's village occupation at the close of the Civil War (New South Associates 1991). The present survey of field A produced similar results. No further work is recommended for this area. Any construction work, though, should be monitored for late discovery of subsurface features. This particularly applies to Field B and the eastern 200' of Field A

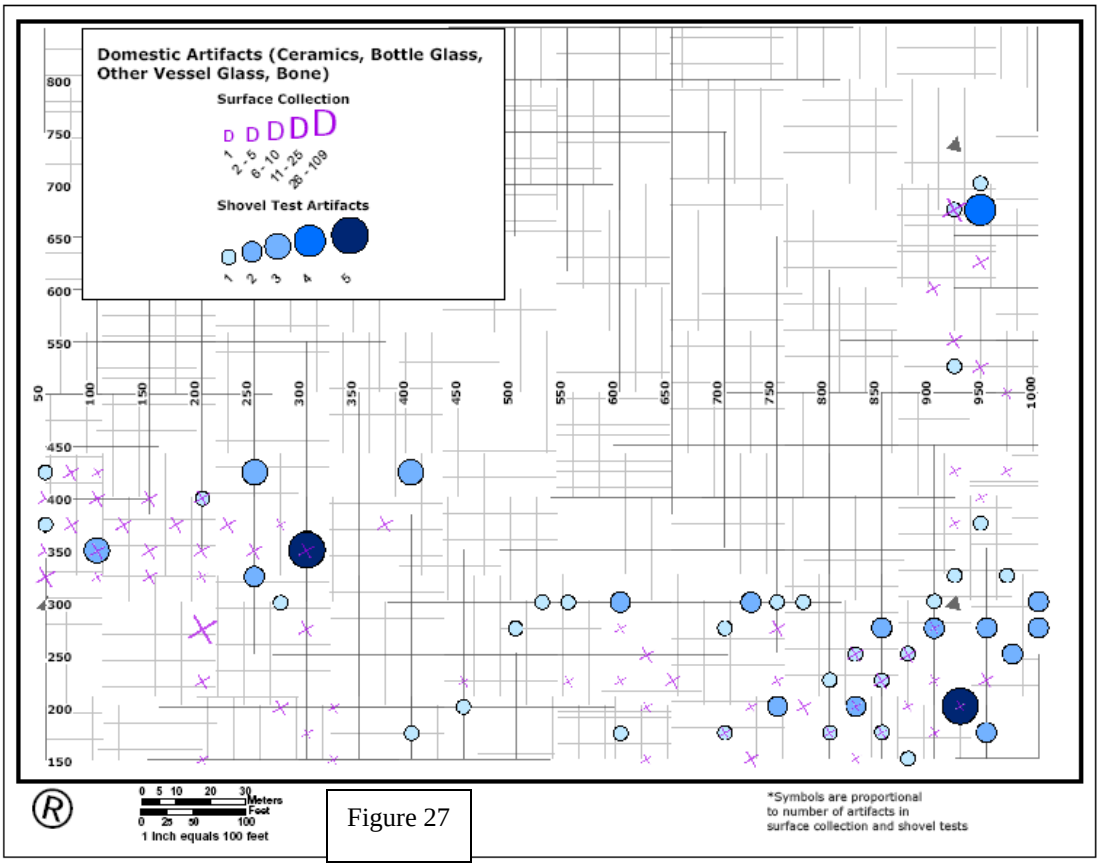


Figure 27

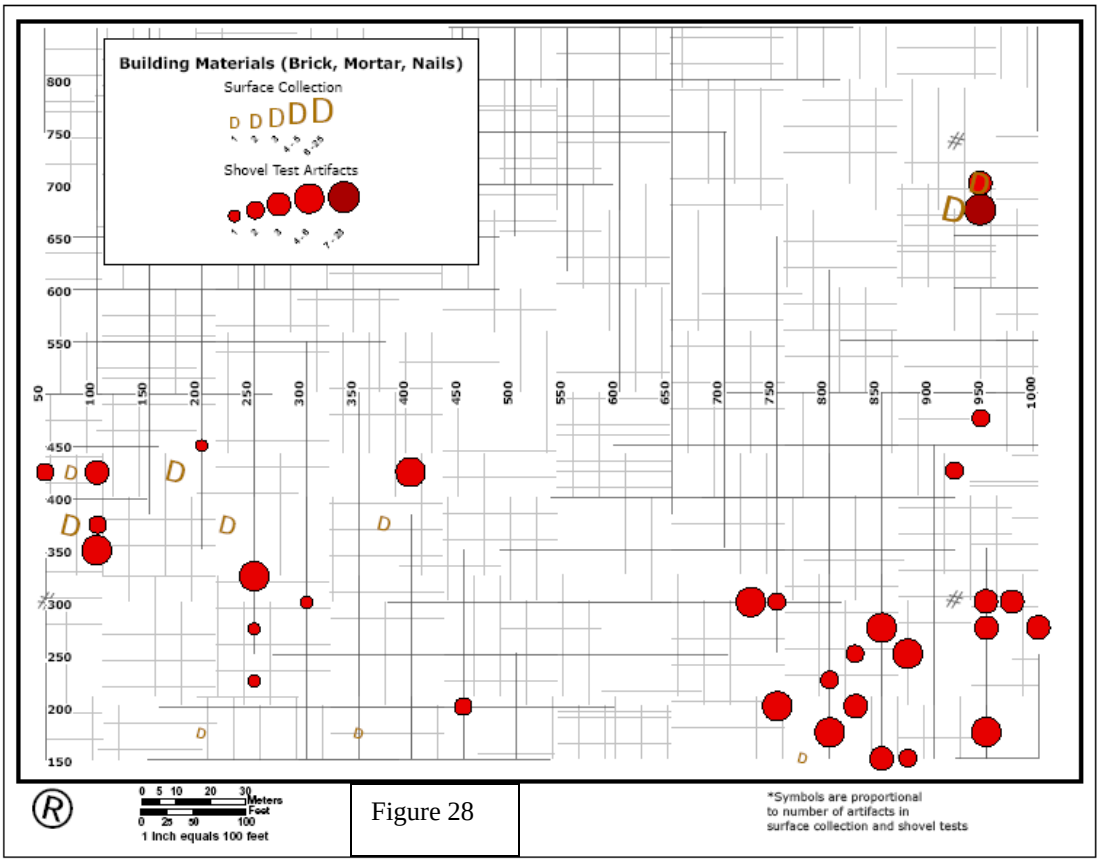

Building Materials (Brick, Mortar, Nails)
Surface Collection
Shovel Test Artifacts
1 Inch equals 100 feet
*Symbols are proportional to number of artifacts in surface collection and shovel tests

Figure 28

Chapter IV
Survey of the McLeod Waterfront
Dr. Lynn Harris

Introduction

The archaeological survey of the McLeod property (38CH679) waterfront was conducted as a 6-day component of the College of Charleston summer field school in 2007. The students assisted in mapping, shovel pit testing, riverbank and underwater snorkeling surveys. A daily rotation schedule ensured that all the field school students were able to participate in this part of the project. Students were introduced to the concept that investigating the waterscape of a historic property complemented the understanding of the landscape.

The fieldwork objective was to provide preliminary information about the archaeological record at this strategic transportation venue. Potential activities that took place at the waterfront included: loading and unloading boats and ships, providing maritime repair services and supplies, and dumping garbage in or near the water that might be associated with the McLeod property. Further, documents suggest the McLeod family operated a plantation store on the waterfront in the postbellum period. Waterfront structures likely to encountered were watercraft, wharf or bridge remnants.

Location

The north-south avenue of oaks leads from the main McLeod house to the waterfront on Wappoo Creek near Wappoo Bridge on Folly Road, James Island. The avenue crosses Country Club Road approximately 150 feet from the creek. Wappoo Bridge is located eighty feet to the west of the survey area (Figure 29). An overlay of a historic plat with both a modern topographic quadrangle and the engineer's property map reveals that the historic waterfront is similar to the location of the waterfront today (Figure 33).

Fieldwork

The crew excavated a total of thirty shovel test pits at the waterfront (Figure 36). A permanent grid datum was established at the waters edge. This grid is separate from that imposed by The Charleston Museum on the south side of the Mcleod property. The GPS location of the site datum was North 32 degrees 43.954 and West 079 degrees 58.391. A fifteen-meter square grid was laid out in five-meter intervals with shovel test pits (STP) A to D0 forming the southern grid boundary and STP A15 to D15 forming the northern grid boundary. This main grid contained sixteen shovel test pits all located at the water's edge and terminal end of the avenue of oaks. An additional STP was located at B1 to investigate the possible continuity of B0 which contained a high volume of cultural material and bone fragments. Although the grid and shoreline mapping was measured using the metric system, all STP strata were measured in 10^{ths} of feet in order to be compared with STP information in the landscape survey.

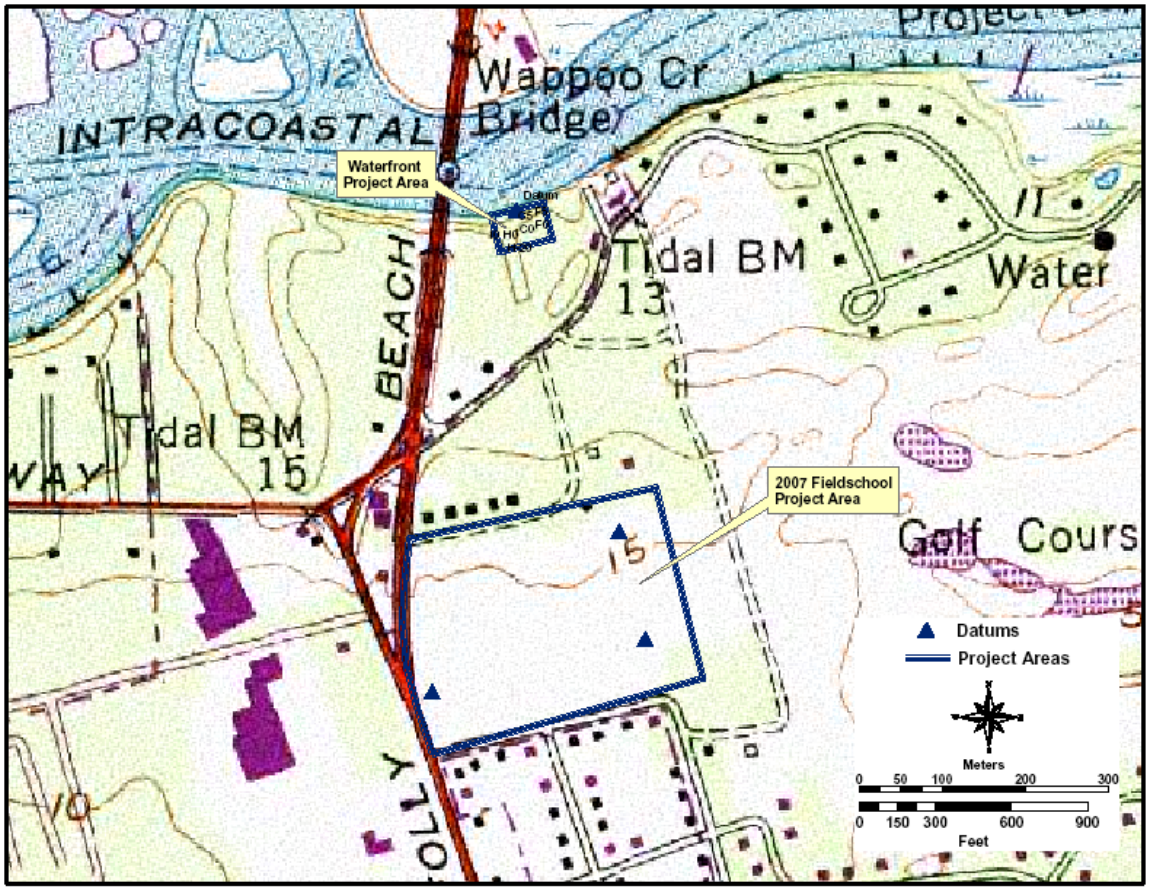


Figure 29: Topography map showing waterfront project area and inland field school project area

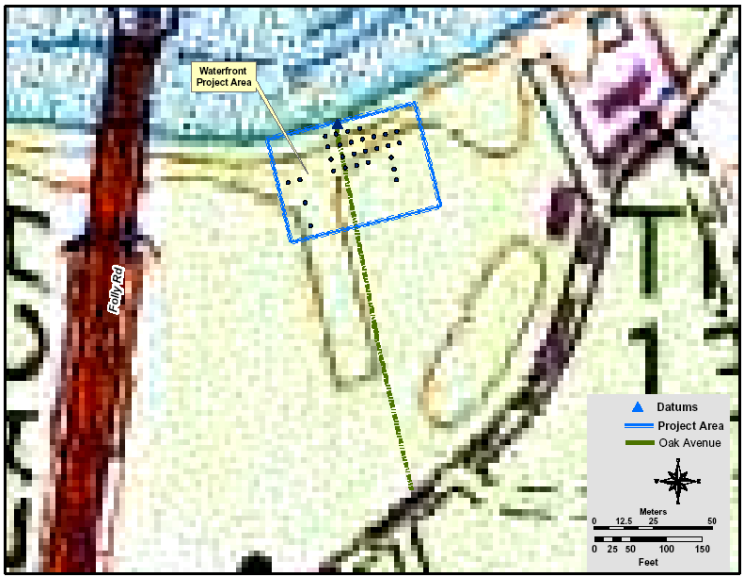


Figure 30: waterfront testing area and shovel tests

Figure 31: Aerial views of McLeod Property and waterfront, facing east and north

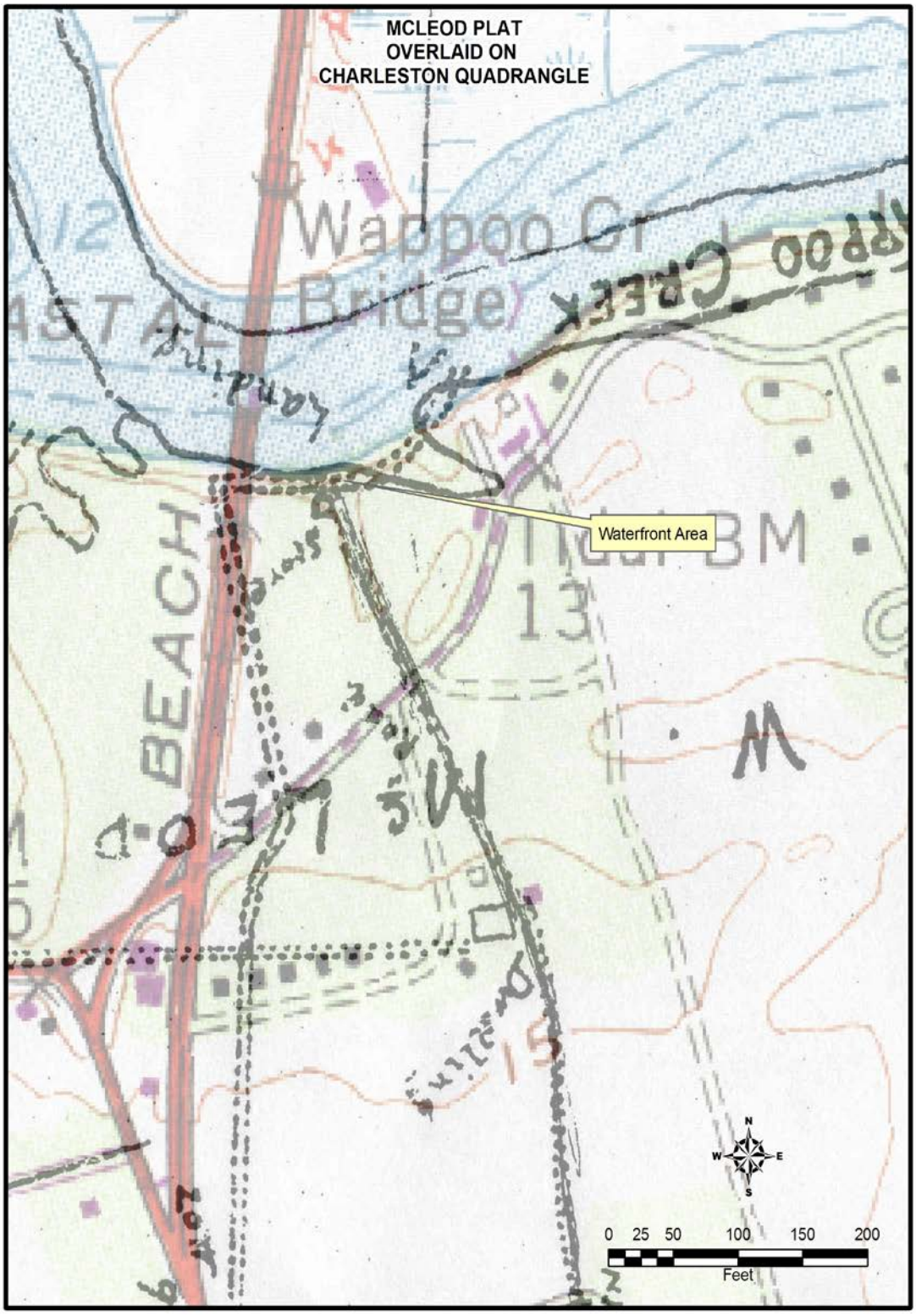


Figure 32: McLeod plat on Charleston quadrangle

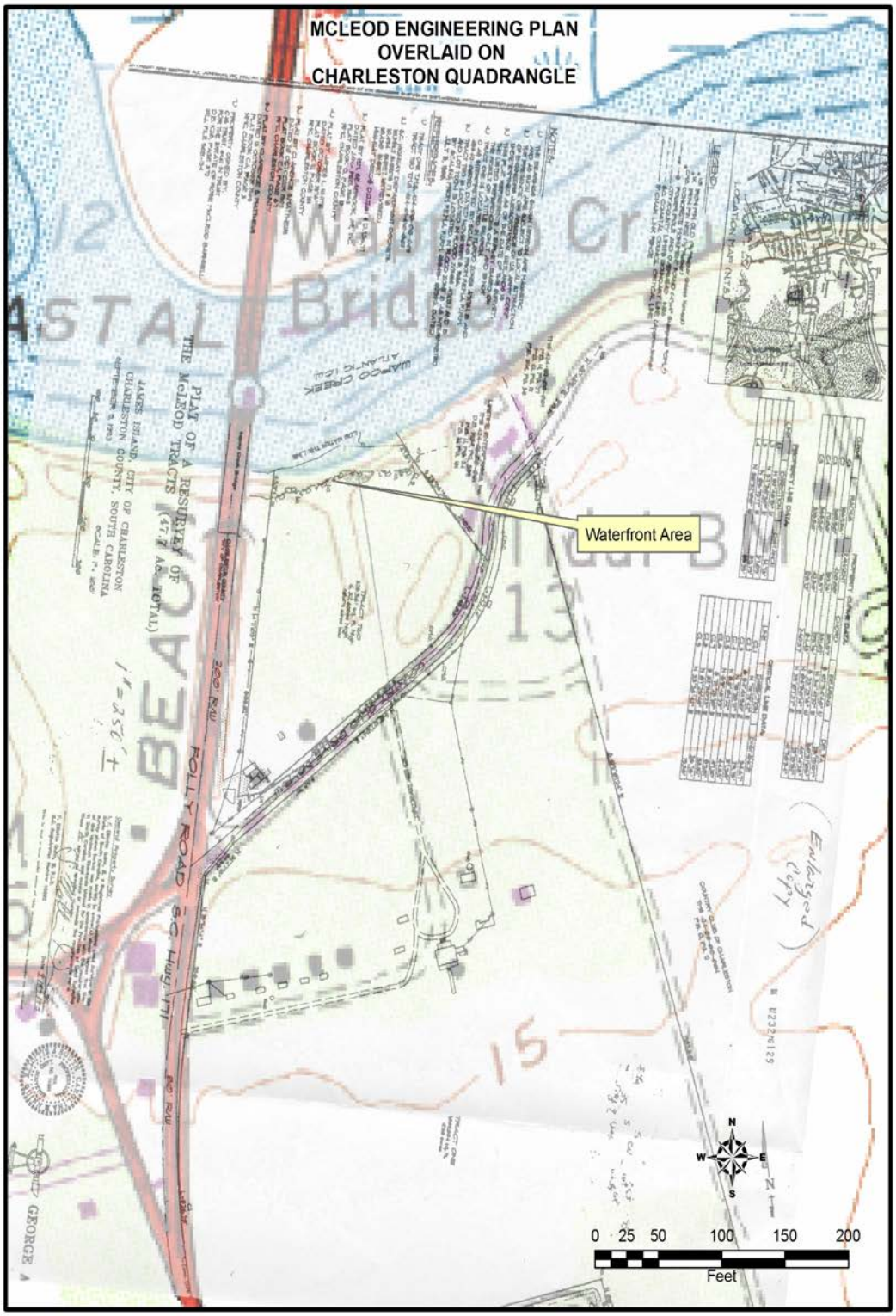


Figure 33: McLeod engineering plan on Charleston quadrangle

Limited testing was conducted behind the avenue of oak trees on the east and west sides of the grid. Nine test pits were excavated on east side and four pits were excavated on the west side (Figure 36). Investigators speculated that stores, work areas and possibly slave or laborer's cabins could have been located behind the trees rather than in the main roadway.

At low tide pilings were visible close to the shore. Archaeological crew mapped these pilings in relation to a shoreline to datum 2 using both triangulation measurements and GPS co-ordinates (Figure 38). The underwater snorkeling team took measurements from the riverbed base to the tops exposed at low tide. The west piling protruded 3 meters from the river bottom substrate. The east piling protruded 4.05 meters. The circumference of the west piling at a midpoint section was 55cm. The pilings were 8.60 meters apart and 9 meters from the shoreline.

The divers conducted a random visual survey of the submerged shoreline within the 11 meters of the bank. A brick scatter, comprising a variety of brick types, and an artifact assemblage of late nineteenth and early twentieth century ceramics and glassware extended along the riverbank. A few eroded Native American pottery sherds were also noted. Many of these artifacts were visible on the exposed embankment during low tide. The boat crew, using a canoe, took hand held GPS coordinates delineating the extent of the observed submerged artifact scatter. The western perimeter of the scatter was N32 degrees 45.963 W079 degrees 58.414 and the eastern perimeter was N32 degrees 45.964 W 079 degrees 58.394.

Figure 34: Shovel Test Pit grid, datum points, and submerged pilings

Material Culture

The main grid contained the greatest volume of cultural material in STPs on the zero grid line along the southern boundary. These units yielded bone fragments, decorative glass sherds, historic ceramics and charcoal fragments. Typical stratigraphy comprised a layer of dark brown/black topsoil with roots and organic material (1 foot BS), a second strata of orange brown sand (2 feet BS), and a third strata of sterile white sand or bottom substrate.

In STP B0 the majority of finds were found in the orange, sandy clay deposit at a depth of 1.3 to 1.8 ($10^{ths)}$ of feet below surface (BS). A dark brown, black layer with charcoal deposits formed the base of this pit (Figure 35). It extended from 1.8 to 2.3 feet BS. This may be evidence of garbage burning or an outdoor activity area involving the use of fire.

Along the fifteen-meter northern gridline, especially in STP units C15 and D15 on the west side, slag, coal and charcoal, is present, possibly representing an area of blacksmithing at the water's edge. Gravel and river pebbles in these deposits could be ship ballast, roadway fill materials, or remains of cargoes taken to the main property.

Shovel test pits gridlines E, G, and F along the eastern avenue yielded less diversity and quantities of cultural material, but contained Native American pottery and a single colono ware sherd in STP F5, F-5 and F0. Stratigraphy in these pits contrasted to the main grid area. The upper dark brown topsoil was separated from lower dark brown topsoil by a white sandy strata. This stratigraphic profile could represent a layer of building sand for leveling the ground above an original topsoil layer. These Shovel Test Pits all had deep deposits of almost 3 feet (brownish red sand). This made it difficult to continue excavating test pits below this level without expanding the size of the pit. Excavators discontinued testing at 3 feet depth.

The western avenue tests, H, I, H-10, H-20 contained small amounts of cultural material similar to that of the main grid unit. The stratigraphy was similar to that of the shovel tests in the main grid. Directly below the topsoil was a strata of fine powdery orange brown sand extending to 2 feet.

Figure 35: Northeast wall, Unit B0, showing an area of charcoal starting at 1.8' below surface

Figure 36: shovel testing in progress

UNIT	DEPTH	MATERIAL
MAIN GRID		
A0	1.8 ft	charcoal
B0	1.8ft	clear glass, charcoal, metal fragments, bone, pebbles. This appears to be a fire pit of some kind
B1	1.5 ft	charcoal, window glass. Excavated to explore continuity of B0.
C0	2.2ft	historic ceramics, green glass, brick fragments, oyster shell
D0	1.8ft	historic ceramics, brown, green and clear glass, nails, brick, bone oyster shell, metal fragments, charcoal
A5	2.2ft	brown and clear glass, brick fragments, charcoal, gravel
B5	2.4ft	green and white glass, oyster shells
C5	1.5ft	historic ceramic, brick and metal fragments, oyster shell
D5	1.55ft	clear glass, metal, nail, brick fragments, oyster shell, white button.
A10	3.1ft	nails, charcoal oyster shell
B10	2.3ft	lots of blue, clear and brown glass, brick fragments, oyster shell, nails, and charcoal
C10	1.8ft	historic ceramics, window glass, decorative glass, brick fragments, oyster shell, metal fragments, gravel
D10	1.1ft	brown glass, brick fragments, rocks, oyster shells and nails
A15	2.5ft	sterile
B15	2.1ft	brick, glass, gravel , oyster shells
C15	2.1ft	brick fragments, barrel stave, coal, metal, lot of slag, gravel, charcoal, river pebbles, oyster shell
D15	1.6ft	slag, tabby, oyster shell, modern wire, brick fragments, historic ceramic, glass.
EAST AVENUE		
E10	2.4ft	sterile
F10	2.0ft	oyster and metal fragments throughout
G10	.8ft	solid base of pebbles and igneous rock
E5	1.9ft	brick fragments, gravel river pebbles and oyster shells throughout

F5	2.8ft	native american pottery, decorative glass, brick fragments
G5	1.6ft	brick fragments, charcoal, rock
F0	3ft	native american pottery, brick fragments, shell
F-5	2.8ft	native american pottery, decorative glass, brick fragments.
F-10	2.0ft	oyster shell and metal fragments.
WEST AVENUE		
H0	1.4ft	historic ceramic, glass, brick
I0	22in	historic ceramic, granite, charcoal, oyster shell, nails
H-10	22in	window glass, brick, nails
H-20	26in	slag, nails

Figure 37: Field inventory of shovel test pit contents

Recommendations for Future Work

1. The analysis of excavated cultural material from shovel test pits. This will be conducted by the Charleston Museum as part of the 2007 field school data.
2. Historical research: compilation of documentary evidence about the use and history of the waterfront.
3. Compilation of maps and photographs: showing any structures or activities at the waterfront.
4. Further controlled underwater surveys of the waterfront and shoreline at low tide.
5. Submission of an Underwater Site Form to the South Carolina Institute of Archaeology and Anthropology at USC.
6. Further shovel testing behind the avenue of oaks on either side of the roadway leading to the waterfront.

Figure 38: Underwater survey in progress

Table 2
Inventory of Artifacts, Waterfront Survey

Whiteware, undec.	8
Whiteware, tr. Pr	1
White porcelain	2
Colono ware	6
Deptford punctate	1
Deptford simple stamp	1
Sand tempered, plain	4
Cordmark	8
Olive green glass	15
Clear container glass	113
Brown glass	17
Aqua glass	5
Amber glass	1
Manganese glass	5
Tin can	1
Window glass	5
Nail fragment	83
u.d. nail	20
cut nail	5
wrought nail	3
wire nail	1
tobacco pipe	3
prosser button	2
pocket knife	1
1961 penny	1
shotgun shell	1
flower pot	1
barrel strap	3
misc. ferrous	55

Chapter V
Testing near the Allee

Proposed Research

Following completion of the field survey of the southern portion of the property, remaining days were spent excavating 5' test units. Two areas were targeted for testing. First was the extreme northern edge of field C. Here, shovel test and surface collection revealed a concentration of architectural rubble and cultural materials associated with the second half of the 19th century. The goal of this effort was to better define physical remains of a structure in this portion of the survey area, and to retrieve a larger cultural assemblage. Testing was conducted May 24 through June 1, 2007.

Testing focused on an area between the cabins and the main house, on the south side of the oak allee. The goals here were to search for evidence of 17th and 18th century occupation, as suggested in various early surveys, and to define the nature and association of a rise in the ground surface. This locus of excavation is bounded by the southern avenue of oaks to the north (beginning with the easternmost tree, which is slightly off-set from the rest), the current edge of the recently plowed field to the south and west, and a north/south rise to the east. The gridded area measures approximately 100' east/west by 80' north/south. It does not include the area adjacent to the slave cabin row, which begins immediately to the west. The area south of the cabins, from Folly Road to the main house, has been explored through low-level shovel testing and surface collection following seasonal plowing. These explorations revealed artifacts from the 17th through 19th centuries, with concentrations of 18th century ceramics near Folly Road and roughly mid-way between Folly Road and the main house. The portion of the site associated with the standing cabins was deliberately avoided during the present project, as this area is likely to

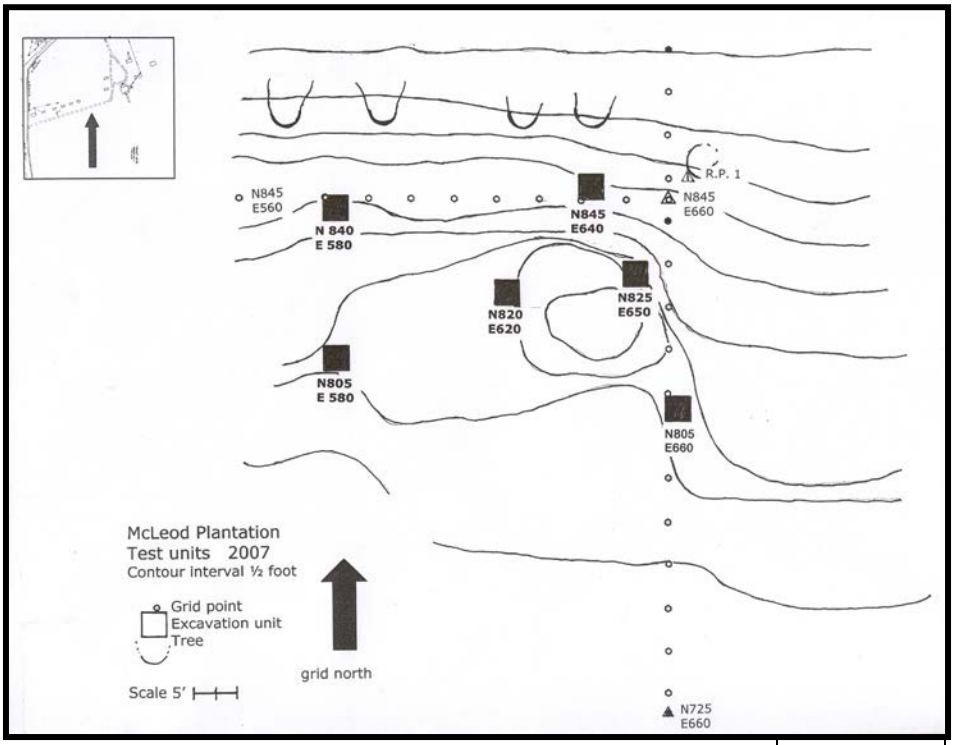


Figure 39

yield well-preserved evidence of the 19th century African American occupation and warrants a separate project in the future. Testing in 2007 was confined to the area between the cabins and the house. This area encompasses the northern half of an area of 18th century material designated "A" by Hartley during his 1980 survey. The designation will be used here, for reference.

Field Methods

The grid system established in the south field for the survey project was carried forward to the test area, making it possible to map the units in relation to the survey area. A grid line was established to the east along the N725 line, to points at N725 E660, E680, E720 and E820. To grid the test area, the transit was placed over the N725E660 point, and grid points were established at 20' intervals to N845 E660. From here, grid points were established to the west at 20' intervals, from N845 E660 to N845 E560. Test units were triangulated from the two grid lines, and from additional taped lines. Six 5' units were excavated in this area. Two 5' units were excavated in the northern limits of field C.

Figure 40: views of test excavations, facing southeast and east

Vertical control was maintained relative to a datum point established at the base of the single palmetto tree located in this vicinity (adjacent to the easternmost oak tree on the south side of the allee). Based on elevations presented on the U.S.G.S. quadrangle for James Island, the datum point was given an assumed elevation of 20.0'.

Figure 41: Location of vertical reference point at base of palmetto

The test area exhibited considerable relief. The oak allee and associated slave cabins running east/west from Folly Road to the main house are located on a prominent ridge. The ground drops off to the south, into plowed fields. A second ridge, located on the eastern edge of area A, runs roughly north/south, from the high ground to the plowed field. A roughly oval depression is visible to the west of this ridge. There is a nearly 5' relief difference from the allee ridge to the plowed fields (see figure 35).

Weather during the excavation project was hot and very dry. The extremely dry conditions hampered soil visibility, and made survival of the grass surface challenging. Units were filled with water prior to troweling and mapping.

Description of Excavated Proveniences

Excavation began with two units. N805 E660 was located on the side of the north/south ridge. Unit N840 E580 was located on the downslope of the allee. The stratigraphy for this unit was typical of the deposits in the area. Dark soils filled with cultural materials averaged one foot in depth, on top of gold sand subsoil. The midden soil was designated zone 1, and was a dark gray-brown loamy soil (10yr3/2). In all units, it was excavated in two arbitrary levels. Artifacts were relatively dense in the unit. Nineteenth century materials dominated the assemblage in level 1, while the quantity of 18th century materials increased in the second level. Many of the artifacts were quite small, suggesting trampling or plowing. Dark gray-brown and gold mottled sands, reflecting a transition zone, were excavated as zone 2.

Figure 42: Unit N840 E580, showing stratigraphy and features intruding into subsoil

Three features were present at the base of zone 2 in unit N840 E580, intruding into sterile subsoil. Feature 1 was the best-defined, and appeared as a linear stain running east/west through the northern half of the unit. The feature was 1.4' wide, and continued the length of the unit. Soils were a dark brown loamy sand (10yr3/4) and some brick fragments were present in the fill. Feature 2 was a small rectangular stain, possibly a post, in the west profile. The soil was a medium brown (10yr4/3) sand with bits of charcoal. Feature 3 was a round stain in the north profile, approximately .7' in diameter. Fill was brown sand (10yr4/4), and the feature was interpreted as a possible post.

The second unit, N805 E660, was located along the north/south ridge and exhibited slightly different stratigraphy. Soil initially encountered below the root mat was a hard-packed, medium brown sand with moderate artifact content (10yr3/3). As this was the first deposit designated in the area, it was initially labeled zone 1. These soils

were .6' deep. This was followed by a darker midden soil, closely resembling the zone 1 soil defined in N840 E580 but defined here, stratigraphically, as zone 2 (10yr3/2). Artifact content increased dramatically in the dark midden soil, and included numerous 19th century materials. The interface of the two soil deposits was linear and quite distinct.

Figure 43: Unit N805 E660, east profile. Overburden from roadbed is distinct from underlying midden

Based on these characteristics, the overlying brown soil has been interpreted as a cultural feature, and so was re-designated feature 21. The underlying midden soil exhibits the same characteristics as zone 1 elsewhere in the locus, and so was re-named zone 1. Based on the location and physical characteristics of the overburden, and the mid-19th century date of deposition for the underlying midden soil, it appears that feature 21 is a prepared surface for a road constructed during the Civil War. A period map shows a road crossing Wappoo cut at the same location as current Folly road, continuing south through the entrance to McLeod plantation, and then curving gradually to the southwest (figure 14). Remnants of this rise continue south of Locus A, and turn gradually to the southwest, before disappearing in the altered landscape of the plowed fields. The physical appearance of the soil strata, and the dates of artifacts contained in the soil, offer strong evidence for the Confederate roadbed.

Figure 44: View of test area, facing west, showing rise in foreground, and sloping relief to the west

Sterile subsoil was encountered 1.4' below ground surface, at the base of zone 2. Additional features were present intruding into sterile subsoil, principally in the western portion of the unit. Six features were defined in the unit. Features 4, 5, and 6 were all small round to oval features filled with dark gray brown soil (10yr3/2), and all may be post stains. All three

Figure 45: features in N805 E660

are intrusive into a linear feature (feature 8), running north/south along the western edge of the unit. Feature 8 was slightly lighter in color (10yr3/3), and was less well-defined near the southern edge of the unit. Feature 9 was a slightly larger oval area intruding into the east wall (10yr4/4), with poorly-defined edges. Feature 7 was a dark stain, roughly rectangular. In addition to these features, a heavy concentration of oyster shell was noted at the interface of zones 1 and 2, in the eastern portion of the unit. Though not clearly defined, the shell deposit may represent a former feature. Shell concentrations were not noted elsewhere on the site.

Additional units in area A confirmed the basic stratigraphic sequence defined in the first two units. Unit N805E580 was located at the base of the slope, within the margin of recently plowed fields. The plowzone deposit was shallower here, and artifacts were slightly less frequent. The plowed soils were excavated in two zones, and gold sterile subsoil was encountered at .8' below surface. Plow scars were clearly visible in the unit floor, reflecting heavy plowing of soils in this area. Five features were defined at the base of zone 2, and all were relatively amorphous. Features 10, 12 and 13 contained dark gray-brown loamy sand fill (10yr3/3). Both were amorphous in shape. Features 11 and 14 were slightly lighter (10yr4/3). Both were roughly circular, and are tentatively interpreted as posts.

Three additional units were located to give even coverage to the test area. N845 E640 was the northernmost unit excavated, and was located along the ridge of the allee. Two zones were designated and excavated, and artifact content within these soils was moderate. The zone 1 soil was relatively dark and organic (10yr2/2), followed by a lighter brown zone 2 (10yr3/2). A single feature was present at the base of zone 2. Feature 17 was a well-defined square posthole with a visible mold.

N825 E650 was located north and west of N805E660, adjacent to the raised roadbed. Stratigraphy was similar to other units, and excavation revealed a number of features. Most distinct was feature 18, an oval post hole with a square mold. The post hole was a lighter, mottled brown soil (10yr3/3), while the square post was a dark organic soil (10yr2/2), suggesting a post that rotted in place. Feature 19, west of feature 18, was similar in configuration, but slightly less well-defined. It, too, appeared to be a square postmold within an oval hole. Feature 20, along the southern edge of the unit, was less well-defined, and was a small circular area of dark soil (10yr3/2). The boundaries of feature 20

Figure 46: Post features in N825 E650

were poorly defined, and may be refined with additional excavation. Together, the features suggest a fence line.

The final unit, N820 E620, was located in the center of the depression, to measure the relative depth of cultural deposits. As expected, soil deposits were relatively shallow here; zones 1 and 2 together were .6' deep. No features were present in the base of the unit; however, plow scars trending east/west were clearly visible. This suggests that the tested area has been plowed at some point, and that the zone 2 soils, at least, are a plowzone.

Figure 47: plow scars visible in N820 ES620

Concurrently, two 5' units were excavated in the northern limits of field C, to further explore artifact concentrations noted in four shovel tests, N675 E920, N675 E945, N700 E920, and N700 E945, as well as on the ground surface. The shovel test at N675 E945 was particularly dense, yielding five glass fragments and a concentration of brick, mortar, and metal fragments. The majority of these were recovered from a dark soil deposit about 1.0' below surface. All of the observed materials dated to the mid-19th century or later. Unit N675 E940 was located adjacent to the productive shovel test. The overlying plowzone soils were excavated in two levels. Level 1 contained few cultural materials, but artifact density increased in level 2. Excavation to sterile subsoil revealed a large feature, filled with soil similar to the overlying plowzone. Feature 15 was large with straight, regular sides, and covered the entire south half of the unit. Fill was medium brown (10yr3/4) sand, and the deposit contained brick, mortar, and metal artifacts. Feature 16 was a small circular stain, .5' in diameter and likely a post, located north of feature 15. Feature 16 was filled with medium brown sand (10yr4/4). Neither feature was excavated. Unit 700E920 was located adjacent to the productive shovel test of the same coordinates, and was excavated in two levels to sterile subsoil, .7' below surface. The unit contained a moderate amount of cultural material. No features were present. Inspection of the plowed ground surface and adjacent bushes suggest that the heaviest brick concentration is north of the edge of the plowed field. The materials may represent a late 19th century structure.

Figure 48: N675 E940, feature 15

Upon completion of these investigations, the shovel tests and excavation units were backfilled. The datum point and other grid points were tied to permanent features on the landscape, and temporary grid markers were removed. Nails along the N840 line were left in place, and hammered flush with the ground surface, to minimize mowing hazards. Sod was replaced on each unit.

Table 3
Features Designated in Test Units

Feature #	Unit	Description	Function
1	N840 E580	linear area of medium gray sand	trench or ditch
2	N840 E580	small circular stain w/charcoal	possible post
3	N840 E580	small circular stain, brown soil	possible post
4	N805 E660	oval stain, dark circular interior	postmold and posthole
5	N805 E660	small circular area of dark soil	amorphous, poss. post
6	N805 E660	small circular are of dark soil	possible post
7	N805 E660	rectangular area of dark soil	amorphous, unknown
8	N805 E660	linear area of dark soil	poss. trench or ditch
9	N805 E660	large oval area of mottled soil	unknown
10	N805 E580	amorphous area of dark soil	residual midden?
11	N805 E580	small circular area w/charcoal	possible posthole
12	N805 E580	linear area of dark soil	unknown
13	N805 E580	small oval of dark soil	possible post
14	N805 E580	small rectangular area, mottled soil	possible post
17	N845 E640	rectangle of mottled soil, dark circle	postmold and posthole
18	N825 E650	rectangle of mottle soil, dark circle	postmold and posthole
19	N825 E650	small amorphous area	possible post
20	N825 E650	oval area of dark soil	unknown pit
21	N805 E660	hard-packed layer of brown sand	roadbed, mid 19th cent.

Laboratory Procedures

Following excavation, all materials were removed to The Charleston Museum where they were washed, sorted, and analyzed. All bagged materials were sorted by the field provenience number (FS#) and inventoried. Each artifact from each provenience was then washed in warm water with a soft brush and rebagged when dry.

Washing and sorting was followed by analysis by provenience, which included identification and counting and/or weighing of each artifact by type. Washing and sorting commenced immediately after the field project, and was conducted by trained laboratory technicians, students from the College of Charleston, and experienced

volunteers. College interns included those enrolled in the 2007 summer field school at McLeod; they provided valuable connection between the fieldwork and the laboratory work. Students volunteered approximately 250 hours on the laboratory analysis.

Conservation included electrolytic reduction of ferrous and non-ferrous metals. Ferrous materials were separated during analysis. Several ferrous and all non-ferrous metal artifacts were selected for further treatment through electrolytic reduction. The ferrous items were placed in electrolysis in a weak sodium carbonate solution with a current of six amperes. Upon completion of electrolysis, ranging from a few weeks to a few months, they were placed in successive baths of distilled water to remove chlorides and dried in ethanol. Ferrous artifacts were coated with a solution of tannic acid and phosphoric acid, and dipped in microcrystalline wax to protect the surfaces. Non-ferrous artifacts were also placed in electrolytic reduction, in a more concentrated solution with a current of 12 amperes. Electrolytic reduction of these artifacts was usually accomplished in one to two days. They were then placed in distilled water baths to remove surface chlorides, dried in ethanol, and gently polished before being coated with Incralac to protect the surfaces.

Faunal materials were washed, separated from other materials, and weighed by provenience. They remain in separate bags within the general provenience bag, available for faunal analysis in the future. Soil samples, ranging from one to two quarts in size, were inventoried, double-bagged, and boxed for permanent curation.

Upon completion of the analysis, all cultural materials, soil samples, and architectural samples were packed in standard-sized boxes for return to American College for the Building Arts, where they will remain in curation as the property of the College. Field notes, photographs, and catalogue cards were also returned to ACBA; copies were retained by The Charleston Museum.

Analysis

Identification of the artifacts was the first step in the analysis of materials. The Museum's type collection, Noel Hume (1969), Stone (1974), Ferguson (1992), and Deagan (1987, 2002) were the primary sources used. Ceramics references included Towner (1978), Gaimster (1997); Austin (1994), Sussman (1997), and Cushion (1976). Other references were consulted for specific artifacts. Lorrain (1968), Huggins (1971), Kechum (1975), and Switzer (1974) were used to identify bottle glass. Epstein (1968) and Luscomb (1967), as well as South (1964) were used for button identification, and Fontana and Greenleaf (1962) and Sutton and Arkush (2006) were consulted for nails.

Some artifact types were subject to more detailed identification. Ceramics were separated into types, and identified by vessel form, whenever possible. Cross-mends and matches were noted, but a complete cross-sorting by minimum number of vessels (MNIV) was not undertaken. Nails were identified by manufacture type, head type, and

size, where possible. Architectural rubble - brick, mortar, and plaster - was weighed by provenience.

For basic descriptive purposes, the artifacts from each of the temporal and locational assemblages were sorted into functional categories, based on South's (1977) model for the Carolina Artifact Pattern. South's methodology has been widely adopted by historical archaeologists, allowing for direct intersite comparison; all of the Charleston data have been organized in this manner. For nearly thirty years, archaeologists have attempted to classify the artifacts they recover by function, or how they were used in the everyday life of their owners. Artifacts are quantified in relative proportion to each other within eight broad categories. Broad regularities, or patterns, in these proportions prescribe the average retinue of activities on British colonial sites. While some have criticized this methodology as being too broad, it has been widely adopted by historical archaeologists working in the southeastern United States. In the Charleston area, it has been used as an initial organizing tool.

Under Stanley South's model, the Carolina Artifact Pattern prescribes broad regularities in the daily life of British colonists. Artifacts are sorted, and then quantified, within eight broad groups, based on function. The largest is usually those artifacts related to kitchen activities, such as food preparation, service, and storage. The Kitchen group includes most ceramics, bottle and table glass, cooking vessels, and cutlery. Food storage containers, from crocks to bottles to tin cans, are also included. The second group relates to Architecture and the buildings themselves. This group includes nails, window glass, and other architectural hardware. Smaller groups include Arms and weaponry items, and Furniture items, principally hardware. The Clothing group includes items from clothing, such as buttons and buckles, and items used to make or repair clothing, such as straight pins and scissors. The Personal group includes items of personal possession. Though small, this group can be quite varied, and includes keys, coins, jewelry, combs and brushes. The Tobacco group includes clay pipes and other items from tobacco smoking. The final group is somewhat larger and more eclectic, and includes items from a range of domestic Activities. Included in the Activities group are farm tools, toys, fishing gear, equestrian hardware, storage items, and any other specialized craft activities.

The allee assemblage contained 2400 artifacts. The materials range in date from the early 18th century through the late 19th century. Nineteenth century materials are slightly more numerous than those from the colonial period. The artifact proveniences were initially separated by stratigraphic position, and materials from plowzone 1 and plowzone 2 were quantified separately. Although colonial materials were more numerous in the lower levels, there was an overall lack of temporal sequencing, a phenomenon noted in the field. In other words, there was no discrete temporal difference between the materials in level 1 and level 2 The materials retrieved are described as a single assemblage, shown in Table 3; quantified subassemblages are shown in Table 4.

These were initially quantified by the eight functional categories that define the Carolina Artifact Pattern. Following this exercise, the relative proportions of a variety of artifact types are examined, based on the work of King (1990, 1992), and many others in

the mid-Atlantic region. Similar analysis of Charleston assemblages has provided more details on proportions of consumer goods and how lowcountry residents used them (Zierden 2002; Zierden and Reitz 2007).

Table 4
Comparison of McLeod Assemblages to Carolina Artifact Pattern

Category	*PZ 1*	*PZ 2*	*Total*	*Carolina Pattern*
Kitchen	66.1%	68.1%	66.8%	60.3%
Architecture	28.4%	24.9%	26.5%	23.9%
Arms	.3%	.1%	.2%	.5%
Clothing	.6%	.4%	.7%	3.0%
Personal	.2%	-0-	.1%	.2%
Furniture	.3%	.1%	.2%	.2%
Pipes	3.6%	4.3%	4.2%	5.8%
Activities	.4%	1.2%	1.2%	1.7%

Kitchen Group; Ceramics: Several colonial earthenwares were recovered in small quantities from the McLeod units. The earliest is North Devon gravel tempered ware, developed in the mid-17th century. This has been considered a marker of 17th century occupation (South and Hartley 1980), but the ware was manufactured through the colonial period, and may be found on 18th century sites in some quantity. The utilitarian earthenware consists of smooth red and gray clay with heavy quartz inclusions, hence its name. The interior of the vessel is coated with a thick apple-green lead glaze. The lowcountry examples are usually cream pans or one-gallon pots. The test area yielded 6 fragments. Buckley ware, developed in 1720, features an agate-like body of red and yellow clays, but the heavy vessels are ribbed on the interior and/or exterior and covered with a thick, black lead glaze. Two fragments were recovered. Forms include cream pans and bowls, glazed only on the interior, and large storage jars glazed on both sides (Noel Hume 1969:135).

Figure 49: 18th century lead glazed wares, including North Devon Gravel Tempered ware (upper right)

The most common utilitarian ceramic on 18th -century sites in the Charleston area is the body of wares known collectively as Combed and Trailed Slipwares. Noel Hume attributes most of these wares to factories in Staffordshire and Bristol, but British archaeologist David Barker suggested Buckley or Liverpool as a source for much of the slipware imported to Charleston (Barker, personal communication 1991; Barker 1999). Most of these wares feature a buff- to yellow body and are decorated with combed lines

in iron oxide or manganese under a clear to pale yellow glaze. The simplest were trails of brown glaze over the buff body, sometimes combed into elaborate designs. Other variations occur with light trailed stripes over a black slip, or with "…skillfully marbleized blend of white, dark, and light-brown slips." Noel Hume (1969:136) declines to date these variants with accuracy, but the dark-based variety is more common in early 18th century proveniences in Charleston (Zierden and Reitz 2005). Noel Hume further suggests that the importation of slipwares ended with the American Revolution, though they were produced through the 1790s.

Slipwares are recovered in large numbers on Charleston sites, and average 10% of the ceramics for this period in Charleston. They are not so common in the test area, however, as they comprise less than 5% of the ceramics recovered. The slipwares recovered at McLeod include large flatware pieces – shallow bowls of all sizes – that feature an unglazed exterior and molded rim reminiscent of piecrust. The interior features slips and spriggles of white, dark, and brown clay, often combed in elaborate designs. The hollow wares, most often mugs or cups of various size but also pitchers and candlesticks, are thinner and glazed on both sides. They are most often decorated with a series of brown dots near the rim and combed trailings around the exterior.

Red-bodied slipwares trimmed with trailings of white clay are also common in 18th -century lowcountry contexts. Some of these vessels feature splotches of green or brown glaze. All of these are attributed to potteries in the North American colonies, likely Philadelphia and, to a lesser extent, Salem, North Carolina. Carl Steen has recently suggested that the many Philadelphia potters were the source of these wares, and the *South Carolina Gazette* regularly advertised ships arriving from that port. The most common Charleston examples are called Trailed Philadelphia Earthenwares by Steen (1999), and match the description above. Cream pans and heavy, small bowls are the predominant common vessel forms recovered in Charleston. They are most common in the second half of the 18th century (Zierden and Reitz 2005), and provide archaeological proof of inter-colonial trade, a venture rarely discussed in the documentary record (Steen 1999:68). The McLeod units yielded 28 fragments.

Figure 50: Combed and Trailed Staffordshire slipware (upper right) Trailed Philadelphia Earthenwares

Lead-glazed earthenwares are a common component of 18th and early 19th century ceramic assemblages. Most are the products of regional potteries in Britain, and are not named types with defined date ranges. The McLeod assemblage included 80 fragments of lead-glazed earthenwares, in a variety of forms and glazes. The most common examples

featured a dark brown or black lead glaze. A few examples of greenish or yellow lead glaze were also recovered. Lead glazed earthenwares comprised 8% of the ceramics.

Figure 51: Lead-glazed earthenware

Other utilitarian ceramics were stonewares. Noel Hume suggests that these wares were manufactured in the Rhineland and imported into England; they were then shipped to the colonies in large numbers in the 17th and first half of the 18th centuries. After 1760, the Rhineland's virtual monopoly was broken by the potters of Staffordshire (Noel Hume 1969:276), and the ware was manufactured until 1775. The most common ware was brown saltglazed stoneware. While the 17th century "bellarmine" jugs decorated with a bearded face are the best known, the undecorated bottles of the 18th century are the most common in the lowcountry. Nine fragments were recovered from the test units.

Somewhat less common were fragments of Westerwald stoneware. This ceramic is gray-bodied and decorated in blue. Vessel forms for the mid-18th century include chamber pots, small crocks, and mugs of various sizes; earlier 18th century sites contain jugs with bulbous bodies and reed necks, and porringers. Westerwald was imported to Charleston from c. 1700 through 1775. Four fragments were recovered in the units; two additional fragments of grey saltglazed stoneware exhibited no blue decoration, but were likely fragments of Westerwald vessels.

Figure 52: Brown saltglazed stoneware (neck); scratch blue stoneware (saucer base)

The assemblage also contained a few fragments of ceramics from non-English sources. Two fragments of Spanish Olive Jar were recovered. Olive Jars are the amphora-shaped vessels ubiquitous on Spanish colonial sites, and are commonly recovered in other lowcountry settings. The long, narrow vessels feature a rounded to pointed bottom, wide shoulders, and a restricted neck. The vessels are thick, with a buff to pinkish sandy clay body and a finger-ridged exterior. The vessels are often glazed on the interior and feature a think white slip on the exterior (Deagan 1987:30-35). They were manufactured from 1490 to 1800, and were used to transport and store liquid goods of all kinds.

The McLeod assemblage contained a few examples of earthenwares typically in use during the mid-18th century and recovered in small amounts on Charleston area sites. These include two finely-made earthenwares – Agate Ware and Jackfield ware. A third

such ware is slightly earlier, and is known as slip-coated ware. Agate ware features a body of ribboned red and yellow clays, covered with a clear lead glaze. This allowed the mixed clay to be visible through the glaze, giving a marbled, or 'agate' appearance. Occasionally, white clay strips were added for decoration. Agate ware vessels include small bowls and tea wares. Agate ware was produced between 1740 and 1775; a single sherd was recovered from the yard area of McLeod. Jackfield refers to a ceramic with a grey to dark red body under a shiny, almost oily, black lead glaze. Jackfield vessels are very well made and appear in more elaborate tea forms; handled cups, footed tea pots, creamers, and waste bowls. Jackfield was produced between 1740 and 1780. A single fragment was identified.

Slip-coated ware is similar to a more common ceramic of the late 17th-early 18th century, known as Manganese Mottled ware. These vessels are most often tankards in a variety of sizes, and feature a yellow-buff colored paste with small dark inclusions, similar to that of Combed and Trailed Slipware. Whereas Mottled Ware features a streaky brown glaze, Slip Coated Ware features a solid brown glaze in two varieties. The dark variety has a very dark brown, almost black lead glaze over the buff paste, while the light variety is brown. Slip Coated Ware was identified by David Barker, keeper of ceramics at Stoke-on-Trent Museum, and he suggests the ware was most common between 1720 and 1740. The ceramic is rare in Charleston, but has been recovered most frequently from deposits dating to the second quarter of the 18th century. Two fragments were recovered from McLeod.

The McLeod assemblage included small numbers of tablewares from the 18th century; these are earthenwares, stonewares, and porcelains. Delft tableware was common in the early colonial period, and persisted to some extent through the late 18th century. British delft features a soft yellow-to-buff-colored earthenware paste and an opaque, sometimes chalky-textured glaze consisting of tin oxide in a lead glaze. The glaze can be white, but often exhibits a light 'robin's egg' blue background color. Individual vessels may be undecorated, or feature hand-painted decoration in blue or a range of colors, the latter classified as polychrome. Such wares were common on 17th century sites, but they were fragile. Teacups and small vessels faded in popularity after 1750, but larger vessels such as plates, bowls, platters, and punch bowls continued throughout the 18th century (Austin 1994). The McLeod assemblage includes 14 fragments of delft, both undecorated and with blue hand-painted decoration. All of the pieces are fragmentary.

Figure 53: examples of delft; example on the right is a tile fragment

Tin enameled earthenwares were produced elsewhere in Europe in the 18th century. French ceramics are known collectively as faience, while those from Spain and her colonies are known as majolica. Though Britain's mercantile policies called for trade only with the mother country, a small but significant number of wares from other nations are recovered in the Charleston area; these increase in frequency as the 18th century progresses. A single fragment of Spanish Majolica was recovered from McLeod.

Though French tin-enameled wares, known as faience, are often recovered on 18th -century sites in South Carolina, only a single fragment was found during the present project. Faience was imported into Charleston, and other English colonies, at the time of the Revolution, and is most common in the last quarter of the 18th century (Waselkov and Walthall 2002). Faience is distinguished from British delft by an orange to salmon-colored paste and hand painted decorations on the rim. The vessels may be thicker and feature more curves than delft. The most common variety features a brown lead-glazed exterior.

The tin-enameled tablewares of the early 18th century (1740-1775) were replaced by dinner and tea wares of white salt-glazed stoneware, developed in the second quarter of the 18th century. The fine, molded table and tea wares were first developed in the 1740s, and these largely replaced the smaller delft vessels. Plates and soup bowls, as well as tea wares, are the most common forms recovered in Charleston, reflecting the rising importance of individual place settings and matched sets. Serving vessels are also recovered in lesser amounts. While much of the salt-glazed stoneware was undecorated, molded and sprigged examples are found, as well. Typical plate rim forms include the 'dot, diaper and basket', the bead and reel, and barley patterns (Noel Hume 1969:116). Five fragments of these wares were recovered from the McLeod units. A slightly later variant of these tablewares is know as Scratch Blue Stoneware, manufactured from 1744 to 1775, features incised lines filled with cobalt or iron oxide. Later, "debased" examples (beginning in 1763) feature a heavier application of blue cobalt that runs beyond the limits of the incised decoration. Two fragments of Scratch Blue stoneware were recovered.

The most popular tea and tableware of the 18th century was Chinese export porcelain. Chinese porcelain is made from a combination of kaolin clay and a finely ground feldspathic rock, and can be distinguished from other ceramic wares by a high-gloss glaze fused to the body. The body is extremely tight-grained, and the glaze clings to it in a thin translucent line on both sides. Chinese porcelain was decorated in a number of colors, but only the blue cobalt could withstand the firing temperature and was applied under the glaze. Other colors were applied over the glaze after firing. Tea wares, particularly saucers and handle-less tea bowls, are the most common forms recovered, but plates are also recovered in large numbers. The underglazed blue wares are the most common.

Relatively rare and expensive in the late17th to early 18th centuries, Chinese porcelains were increasingly popular and available as the 18th century progressed. Too, the increasing wealth of the lowcountry planters meant that more people were able to

afford these wares. Robert Leath suggests that porcelain had become fairly commonplace in South Carolina by the 1730s, and a decade later was advertised regularly among merchandise in the *South Carolina Gazette*. Merchant David Crawford, for example, advertised "…a large assortment of China ware as breakfast cups and saucers, dishes, plates and bowls of all sorts, tea and coffee cups and saucers, also 3 compleat sets of color'd china for a tea table" (Leath 1999:50). Porcelains often comprise over 20% of the ceramics in late 18th century townhouse assemblages (Zierden 2002, 2006b). The majority of these are blue-on-white underglaze decorated, but most sites yield examples of the more expensive overglazed (or enameled) porcelains. The final tableware was a single fragment of Nottingham. This is a distinctive stoneware, characterized by a lustrous brown glaze over a white slip, on a grey stoneware body. Nottingham was developed in 1700 and produced throughout the 18th century.

Only a small amount of porcelain was recovered from McLeod. The test units yielded eight fragments of underglaze blue porcelain and a single sherd of overglazed enameled ware. Porcelains comprise only .9% of the total ceramics. Together, tablewares produced in the colonial period comprised less than 4% of the assemblage ceramics.

Figure 55: Black transfer-printed creamware; overglaze enameled porcelain

Dominating the assemblage were the refined earthenwares developed by the Staffordshire potters in the third quarter of the 18th century. The most important development was the gradual perfection of a thin, hard-fired cream-colored earthenware that could be dipped in a clear glaze. The ware fired at a lower temperature than the white stonewares, and is thus classified as refined earthenware. Potters Thomas Astbury and Thomas Wieldon pioneered this venture, but it was Josiah Wedgwood who ultimately perfected these wares and marketed them successfully. The original cream-bodied ware was introduced in 1740 and featured a clouded or swirled underglaze design in purple, brown, yellow, green, and gray. In 1759, Wedgwood produced a wholly-green ware. All of these are loosely categorized as Whieldon ware by American archaeologists. The Whieldon wares were manufactured until 1770 and are consistently present in 18th - century lowcountry contexts, but in small numbers. A single fragment was recovered from the McLeod units.

Creamware was the dominant ceramic of the site, comprising 25% of all ceramics in the assemblage. This is in keeping with the almost universal popularity of cream-colored earthenware in the late 18th century. Creamware was manufactured through the first half of the 19th century, as well, and the majority of the fragments from McLeod appear to be examples of the later wares. After Josiah Wedgewood ventured into business on his own in 1759, he found the green glazed ware was not so popular, and he

turned his attention to refinement of the cream-colored ware, later called Queensware (after a set given the Queen of England). Wedgwood appears to have perfected this ware by 1762, although diverse archaeological sites have produced nearly irrefutable evidence of earlier use (cf. Deagan 1975).

Regardless of the initial manufacture date, by the 1770s these wares could be found in the four corners of the colonial world, and are ubiquitous on archaeological sites of the period. In her study of 18th -century consumerism, Ann Smart Martin (1994b:169-185) has commented that Wedgwood himself marveled at how quickly creamware "spread over the whole Globe and how universally it is liked." What is remarkable in Martin's view is that Wedgwood managed to compress the cycle of luxury-to-common consumption into a very short period. By continually bringing out new styles, Wedgwood satisfied both the middle class consumer eager to display their knowledge of manners and the fashionably wealthy who sought to distance themselves from the middling sort (Martin 1994a, 1994b, 1996). Creamware came in highly decorated and expensive styles, and in relatively plain and affordable patterns. Like other colonial residents, Charlestonians flocked to the new ware, and purchased it in quantity through the early 19th century.

The creamwares that flooded the colonial market in the 1770s were augmented a decade later with another Staffordshire product, known as pearlwares. Throughout the 1770s, Wedgwood continued to experiment with production of a whiter ware, the creamwares having a yellowish, or creamy, color. In, 1780, he introduced a new ware, which he termed "pearl white". Thus 1780 marks the beginning of the era when British refined earthenwares feature a bluish tint to the glazing and blue pooling in the cracks and crevices. It was not Wedgwood's intention to replace the earlier creamware, and the two wares were manufactured concurrently; however other potteries produced the new ware in quantity, and pearlwares gradually supplanted the creamwares in archaeological assemblages. In general, pearlwares are 17% of Charleston ceramic assemblages, compared 25% creamware (Zierden 2002). Pearlwares were less frequent than creamwares in the McLeod assemblage, but were present in significant amounts (10% of the ceramics).

Figure 55: examples of pearlwares; annular ware (left), transfer-printed ware (right). A small fragment of transfer printed whiteware with overglaze enamel (center)

As with other Charleston sites of the late 18th century, pearlwares from McLeod come in a wide range of decorative styles, compared to creamware. Earliest (1780-1810) were hand-painted designs under the glaze in blue, often in chinoiserie designs. Hand-painted tea wares in a polychrome palette (brown, sage green, cobalt blue, orange-rust, and yellow) often feature delicate floral designs. The McLeod assemblage included 12 fragments of blue painted ware and 7 fragments of polychrome pearlware. Perhaps the

most readily recognizable historic ceramic is shell-edged pearlware. This ceramic features rims molded in a feathery design, then hand painted in blue or green. Most shell-edged pearlwares are flatwares – plates, soup bowls, and platters. The earlier pieces feature careful, individual brush strokes, accenting the individual feathers. By the early 19th century, the hand painting had deteriorated to a single swiped band around the rim. The early 19th -century wares also featured rims molded in designs other than feathers. Eight fragments of shell edged pearlware were recovered. The majority of pearlware fragments recovered from McLeod (48) featured no decoration, but these are likely from decorated vessels, such as the plain interior of shell edged vessels.

Two additional decorative styles were applied to pearlware after 1795, and they dominate early 19th -century ceramics. Transfer or bat printing involved the creation of detailed designs in a myriad of patterns. The North Staffordshire potters, led by Josiah Spode, successfully produced this blue-on-white ware in 1784. This development, coupled with a significant reduction in the importation of porcelains from Canton after 1793, resulted in a large market for the new wares (Copeland 1994:7; Miller 1991). Transfer-printed wares, the most expensive of all the decorated refined earthenwares, are usually recovered in a wide variety of forms; plates of all sizes, bowls of all sizes, tea cups and coffee cups, with or without handles, mugs and saucers. The list of service pieces is equally lengthy, including platters, tureens, and tea wares. The McLeod assemblage included 12 fragments of transfer-printed ware.

Equally common in the privy features were the much cheaper annular wares. Also developed in 1795, this pearlware features machine-turned stripes in a range of colors on small low-shouldered bowls and mugs. The range of vessel forms is limited, compared to the other pearlware styles, and this ware was the least expensive (Miller 1980). The bowls were suitable for one-pot meals, such as soups, stews, and pilaus. Variants of annular ware include mocha ware, with dendritic patterns in the wide stripes, and cabled ware, featuring swirls and dots in heavy colored slips. Thirteen fragments of annular pearlware were recovered.

When considering the overall proportions of the McLeod assemblage, it is important to note that all creamwares were counted as 18th century ceramics, even though the ceramic remained available and popular through the first half of the 19th century. The pearlwares were included in the 19th century tabulations. More common than pearlwares were the whiteware ceramics that characterize the mid-18th century. Like pearlware, these come in a variety of decorative styles and forms.

The British potters, including Josiah Wedgwood, continued to refine the glaze formulas so that by c. 1820 the blue tinge had been removed from the wares, leaving a white china. All refined earthenwares manufactured after 1820 are classified as whiteware. Much to the confusion of archaeologists, the same decorative motifs continue from pearlware to whiteware. Blue transfer printing gets lighter and sparser on the overall vessel, and after 1830 appears in colors other than blue: black, brown, mulberry red, and forest green. Annular wares likewise continue through the 19th century, with some discernable stylistic differences. Shell-edged and hand-painted wares also remain

popular after 1820. After 1820, the floral designs on hand-painted wares are larger and bolder, and are sometimes known as 'Gaudy Dutch'. The color palette also changes from the earth tones of the pearlware era to the colors found in transfer printed wares: forest green, black, mulberry red, and purple, along with cobalt blue. Shell-edged whiteware exhibits a number of stylistic changes to the rims of vessels, some with specific date ranges.

The McLeod assemblage included a number of decorated whitewares. Annular wares were the most common; 34 fragments were recovered. Twenty-seven fragments of transfer printed whiteware were recovered; blue was the predominant color. Twenty fragments of hand-painted whiteware were also included in the assemblage. Shell-edged wares were less common, and only 8 fragments were recovered.

Unlike pearlwares of the early 19th century, undecorated whitewares are common. Throughout the antebellum period, undecorated whiteware increases in popularity. The mid-century is characterized by heavy, undecorated ware, often in paneled or octagonal forms. The McLeod assemblage included 158 fragments, or 17% of the ceramic assemblage.

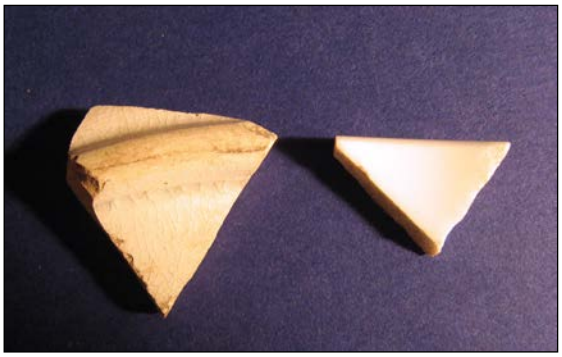


Figure 56: examples of mid-19th century whiteware

The McLeod units contained eleven sherds of yellow ware and a single fragment of Rockingham ware. Rockingham, or Bennington, ware is distinguished by a yellow paste and blotched brown and yellow glaze, and the ware comes in a variety of forms. Pitchers and teapots are the most common forms.

Nineteenth century assemblages also include a number of distinctive utilitarian stonewares. Stoneware vessels of the 19th century are often thicker and heavier than those of the previous periods. Utilitarian stonewares were produced at a number of regional potteries, and archaeological examples are classified simply as "19th century stonewares". The McLeod assemblage included twenty fragments of such ware. Many 19th century vessels are finished on the interior with a lustrous brown glaze known as Albany slip; the McLeod assemblage included 9 fragments with an Albany slipped interior.

The assemblage included a fragment the lead-glazed stoneware known as Ginger Beer bottle. Unlike most stonewares, this ware features a shiny lead glaze. Vessels are tan on the bottom half and mustard yellow on top. The most common form is pint or quart bottles. Ginger beer bottles are particularly plentiful at Civil War encampments.

Slightly more common were fragments of Alkaline-glazed stoneware, a type of pottery developed in the Edgefield district of South Carolina in 1800. A group of potteries in this area produced distinctive ash-glazed crockery from 1800 to 1880, known collectively as Edgefield stonewares. While many examples of Edgefield pottery survive in lowcountry households, surprisingly little finds its way into the archaeological record; this may be due to its durability. The McLeod assemblage includes 8 fragments.

Figure 57: Examples of 19th century stonewares

The final class of pottery in the McLeod assemblage are colono wares. Colono ware is a locally-made unglazed earthenware. It is recovered on all lowcountry sites from the early 18th century to the early 19th century. In Charleston it comprises about 6% of the ceramic assemblage, but on rural plantation sites it can be as much as 50%. Moreover, the proportion of these wares varies through the decades of the 18th century. Joseph (2002:218) has noted that the wares peak in popularity in the 1730s and 1740s. Colono wares comprise 28% of the 1730s assemblage.

Archaeologists have determined that much of this ware was made and used by African Americans (Ferguson 1992), though some of the ware, and many of its characteristics, is likely the result of interaction between African American plantation laborers and Native Americans who were native groups or slaves on the same plantations (Anthony 2002). The most common forms are the globular jar and the shallow bowl. Some vessels copy European forms. The ware varies greatly in quality, ranging from thick, coarse sand tempered wares (classified by Anthony as Yaughan (Anthony 1986)) to intermediately-thick burnished wares (Lesesne lustered) to fine hard micaceous wares (River burnished). The latter type occasionally features painted designs in red or black. These wares have recently been firmly identified as the product of Catawba Indian potters (Schohn 2003; Riggs et al. 2006). In the early 19th century, groups of Catawba often traveled the lowcountry, making and selling pottery (Crane 1993; Ferguson 1992).

Figure 58: examples of colono ware; example on right exhibits red filming

The McLeod assemblage contained a relatively small amount of colono ware; the colono wares comprised only 5% of the ceramics. The majority were Yaughan variety (25 fragments), and only three fragments of Lesesne lustered ware was recovered. No River burnished ware was identified.

Also present in small, but consistent, numbers are fragments of pottery that are Native American in origin, and likely from the historic period. These are generally distinguished from other colono wares by a grit-tempered paste and smoothed interior. Some examples exhibit a stamped or incised exterior. Though native groups had largely disappeared form the lowcountry by the middle of the 18th century, small groups were still present and known as 'neighbor indians'. Contact continued with larger tribes on the interior of the Southeast. Other James Island sites contain evidence of Native American occupation during the 18th century. Eight fragments of stamped Native American pottery were recovered at McLeod.

Figure 59: Pottery with Native American paste

The Kitchen Group, Glass: Fragments of glass and metal containers comprised 42% of the kitchen group. The majority of these were fragments of bottle glass. Hand – blown bottles of dark olive green glass form a significant portion of 18th century kitchen assemblages. Olive green bottles continue in the 19th century, and glass containers become far more common after 1820, when mass-produced glassware becomes available. Added to the assemblage then are container bottles of brown or amber glass (often for beer) and blue glass (often for bottled water in the postbellum period). Clear and light aqua bottles increase in frequency and variety. A variety of patent medicine bottles enter the archaeological record in the last quarter of the 19th century. The multi-component Heyward-Washington site in Charleston provides a measure of relative frequency of glass to ceramics through time. At Heyward, glass comprises 40% of the mid-18th century assemblage, but 62% of the late 19th century materials.

Figure 60: Olive green bottle glass, aqua container glass fragments

The McLeod assemblage was dominated by fragment of olive green glass; 468 fragments were recovered. These hand-blown bottles were used throughout the 18th

century for wine and other alcoholic beverages. The proportions of these bottles changed through time; seventeenth century bottles are relatively short and wide, and are known as 'onion' bottles. Olive green bottles become taller and more slender through the 18th century, until they assume the proportions known today. Size and shape of the bottles may be determined from the diameter of the base. Also common in 18th century assemblages are fragments of square blown green bottles, known as 'case bottles.' These feature straight sides, high shoulders, and a short neck. These cannot be dated precisely, but seem to have been used alongside the round versions. Examples of case bottles were recovered at McLeod.

The olive green glass group also included those likely from 19th century "black" glass, as well as from 18th century hand-blown bottles. Green glass bottles continued to be an essential part of 19th century foodways; they were hand-blown until 1820, and then blown into a mold.

All glass, whether containers or tableware, was hand-blown until 1820. For the remainder of the 19th century, the bodies of glass bottles were molded, and the necks and lips finished by hand. Mold seams on these bottles are visible on the bottom and sides of the containers, and disappear at the hand-blown neck. Clear container glass increases in quantity through the 19th century, and was the most common variety after olive green (95 fragments). Aqua container glass, from condiments or medicines present, as well (52 fragments). Brown or amber glass from beer or ale was less common (22 fragments). Late 19th century types include four fragments of blue glass, usually associated with medicines or water. There were 15 fragments of manganese glass. Manganese was added to glass sand between 1880 and 1917 to give glass a clearer color. When exposed to the sun, however, the manganese content will cause the glass to turn purple (Sutton and Arkush 2006:190).

Aqua container glass was often used for condiments and sauces, as well as medicines. In the 18th century, medicine vials were small, hand-blown containers. Those of the mid-18th century are dark aqua glass, rounded with straight sides and an everted lip on a constricted neck. Bases are typically 1.0 to 1.5" in diameter and vessels are as much as 4" high.

Whenever possible, fragments of thinner pharmaceutical glass were separated from the thicker fragments of condiment bottles. Glass that was positively identified as pharmaceutical was relatively scarce in this assemblage; only three fragments were recovered.

Fragments from table glass are usually recovered on lowcountry sites. The most common vessels include goblets and tumblers, but a range of serving pieces, such as decanters and dishes, can be present. The relative frequency of table glass can serve as a measure of the owner's wealth. Only one fragment of identifiable table glass was recovered at McLeod.

A final component of the kitchen group were fragments of tin cans. They are often poorly preserved in the archaeological record, and are recovered as flat fragments of rusty iron. American mills began producing tinned ware after the Revolutionary War. The bookkeepers of William Underwood Company of Boston shortened the term 'canister' to 'can', and soon the name became popularized (Fontana and Greenleaf 1962). Beginning in the 1800s, tin cans were made by cutting the can by hand from tin-plated sheet iron, then forming the body around a cylinder and soldering the seam. Separate pieces were cut for the top and bottom, and soldered in place. A small hole left in the top of the can was used to fill the container, then a smaller cap was soldered in place after filling. This basic method persisted until the mid-1880s, with continual improvements thereafter (Fontana and Greenleaf 1962). Popular canned products included oysters, lobster, and salmon. Most fruits, vegetables, pickles, jellies, and sauces were eventually packaged and shipped in this manner. Tin cans appear in the mid-19th century, and became more common during the Civil War. Eight tin can fragments were recovered from McLeod.

The Architecture Group: Architectural materials were 25% of the McLeod testing assemblage. This group consisted entirely of nails and window glass. Most of the nails retrieved were fragments (340) or were unidentifiable by method of manufacture (52). In order to standardize analysis, nails are counted as individual nails if a head is evident, regardless of the length. Those lacking a head are classified as 'fragments.'

Identifiable nails spanned the 18th and 19th centuries. Nails of the 18th century were hand-wrought, characterized by a square shank and faceted head. Machine cut nails were developed in the late 18th century, with the shank cut from a sheet of iron; this produced a nail that is rectangular, rather than square, in cross-section. Heads were applied by hand until 1815, when heads were applied automatically. Wire or round nails were developed in France around 1850, and became increasingly common in the second half of the 19th century (Fontana and Greenleaf 1962; Sutton and Arkush 2006:162). The McLeod assemblage included 22 nails that could be identified as hand-wrought. Thirty-four were machine cut, and fourteen were wire.

The other major component of the architecture group was flat glass from window panes. Window glass from the 18th through early 19th centuries is usually aqua, while more modern flat glass is clear. Like bottles of the same era, colonial flat glass was hand blown. Crown glass began as a bubble of blown glass, gradually worked into a disc. These discs featured a thick edge, which was trimmed away and wasted, and a central pontil scar, or bulls-eye, which could be up to one inch thick. The resulting circles of glass were known as 'crowns' and were shipped to America in crates, to be cut to size by the purchaser (Noel Hume 1969:234). Other, earlier, glass was made by blowing large cylinders that were then cut open, spread out, and allowed to cool on a flat surface (Sutton & Arkush 2006:194); quality of this glass varied (Noel Hume 1969:233). The broad glass method was revived, with improvements, in 1832. The new method produced larger sheets of better quality. Window glass tends to increase in thickness throughout the 19th century (Roenke 1978; Orser et al. 1982).

Fragments of both clear and aqua window glass were recovered from the McLeod deposits, though the aqua was much more common. The site yielded 136 fragments of aqua flat glass and 42 pieces of clear window glass.

The Arms Group: Artifacts from the arms group were scarce. The assemblage included a single round lead shot, a lead bullet and shell casing from a .22 calibre arm, and two flint fragments. One appears to be a gunflint. On British colonial sites, arms materials average .5% of the assemblage; at McLeod these materials comprised only .2% of the artifacts.

Figure 61: worked flint from test units

The Clothing Group: A moderate number of items related to clothing were recovered from the test units; seventeen artifacts comprised .7% of the total assemblage. Buttons were the principal artifacts, and many were types typical of the 19th century. Bone buttons were common throughout the 18th and early 19th century. Colonial buttons are usually a flat bone disc with a central hole, and are often made on-site from cattle bone. Those from the 1800s are more finished and exhibit four holes for attachment. The McLeod buttons were the 4-hole variety. A single iron button, with four holes, was also recovered; such buttons were used in the 19th century. The assemblage also included two buttons of white porcelain, or prosser, typical of the mid-19th century. These buttons were manufactured after 1840, by the prosser method. This involves preparation of fine white clay with the addition of quartz to create a 'dust'. The buttons have a very smooth surface, and sometimes a pebbly back (Sprague 2002:11). Prosser buttons have four holes and were commonly used on undergarments. Two sizes are common; ¾ inch and ½ inch; both of the McLeod examples were the smaller size.

Figure 62: examples of buttons; (top) shell, prosser, (bottom) bone, iron

Brass buttons were the most common. Most are plain discs with a wire eye. Those from the mid-19th century often exhibit maker's information stamped on the back of the button. Others were hollow, two piece buttons, often decorated in molded designs, such as basket-weave, spiral, and woven patterns. The McLeod assemblage included an oval two-piece button. A small lead button and a small shell button with two holes were also recovered. A single bead was recovered; this was a small blue glass bead with molded facets, a type typical of the early 19th century. The final artifact was a white class collar stud, typical of the second half of the 19th century.

The Personal Group: Items of personal possession were rare at McLeod. Only two artifacts were recovered from the test units, comprising .08% of the assemblage. A portion of bone toothbrush was recovered. Bone toothbrushes are common on archaeological sites after the turn of the 19th century. The other personal artifact was a glass, or paste, jewel. Such jewels were popular in the 18th and early 19th centuries, as settings in shoe buckles, buttons, and cuff links (Fales 1995). The McLeod example featured a flat back and mutiple facets on a domed face, and was clear.

Figure 63: paste jewel, faceted glass bead

Figure 64

The most unusual artifact of the entire project was recovered from N700 E920. This was a small tab of gold-plated jewelry. A small oval disc with linear projections on the side featured small, but detailed monogramming. Some corrosion on the left side made the inscription difficult to decipher, but a monogrammed "P" is visible. Charleston silversmith Al Crabtree suggests the piece is a baby's finger ring, or a portion of a brooch. The piece is difficult to date; it is unknown whether the "P" is from the Perroneau family or the Parker family. Research on this piece continues.

The Furniture Group: Furniture artifacts were also rare, with six items comprising .2% of the assemblage. The most common furniture items are small brass tacks, used to attach upholstery and to reflect light. Three tacks were recovered in the test units. Other furniture items included two small rings, or collars, likely from canes or other finished poles. One was brass, the other lead. The final furniture item was a section of brass chain.

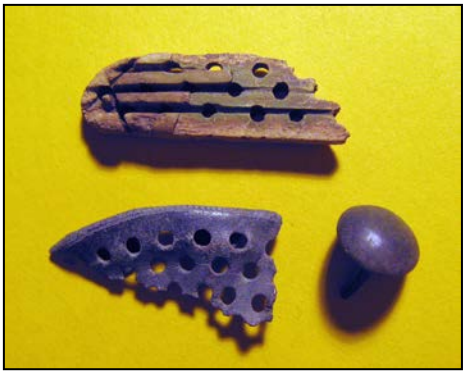


Figure 65: bone toothbrush, portion of a kerosene lamp; brass upholstery tack

The Tobacco Group: White kaolin tobacco pipe fragments, associated with tobacco smoking in the 17th through early 19th centuries, comprised 4.1% of the

assemblage. The pipe group included some fragments of bowls, as well as stem fragments. Tobacco pipes average 5% of the assemblage for Charleston in the late colonial period. They are more common in the early 18th century, averaging 10% of these assemblages, and tend to decrease in frequency through time. The McLeod assemblage is typical of the early 19th century.

The Activities Group: Artifacts associated with specialized site activities were relatively sparse, and comprised 1.5% of the assemblage. The principal artifact in this group was fragments of iron barrel straps. These materials reflect storage of provisions, and are common in the archaeological record. The final activities item was a portion of an iron file.

Summary

Six 5'by 5' test units were excavated on the south side of the drive connecting Folly Road to the building complex, in the area between the oak allee and the main house. These units revealed a moderate assemblage of cultural materials spanning the 18th and 19th centuries. Materials from the 19th century dominated the assemblage, and were those typical of a residential assemblage. The excavations revealed a zone of plowed soil approximately one foot deep over yellow subsoil. Several features were noted intruding into subsoil.

One reason for testing this particular area of McLeod Plantation was to search for evidence of occupation during the 17th and early 18th centuries, as suggested by previous research. Surface collection and shovel testing by a number of individuals revealed possible concentrations of 18th century materials in this area. Our testing suggests that materials pre-dating the 19th century were present, but relatively sparse; therefore, occupation of this particular area during the early colonial period was not confirmed. Still, the recovery of some early artifacts suggests that colonial occupation here, or nearby, remains a possibility.

To further explore the discrepancy between the present data and previous tests, the N805 line was extended to the west, south of the allee and the expected cabin locations. These tests overlapped the southern portion of "Area A" as defined by Hartley (1984). Tests were excavated at 25' intervals, from N805 E555 to E420. Oyster shell, architectural debris, and container glass was recovered in moderate quantity, and the majority of the materials dated to the 19th century, suggesting association with the cabin occupation. No particular concentrations of colonial materials were noted.

Generally, the six excavated units suggest that this area was the scene of moderate cultural activity, principally during the 19th century. No structural remains were encountered, and only a moderate amount of domestic debris was recovered. The linear depressions and numerous post holes suggest an area of active use, perhaps for

agricultural purposes. The stratigraphy, plus the dates of retrieved artifacts, suggests the ridge is a roadbed associated with the Civil War period. Additional testing in this area will be necessary to better define the activities reflected in the archaeological record.

Table 5
Artifacts Recovered from Test Units, Allee area

	PZ 1	PZ 2	profile	total
Kitchen, ceramics				
Porcelain, b/w	2	5	1	8
Porcelain, o/g	1			1
Porcelain, white	3	3		6
Stoneware, brown sg	5	4		9
Stoneware, gray	1	1		2
Westerwald sgs	2	2		4
White sg stoneware	3	2		5
Scratch blue st.wr.	2			2
Nottingham st.wr.		1		1
Alkaline glaze st.wr.	4	2	1	7
Albany slip st.wr.	6	3		9
Misc. 19th cent. st.wr.	9	8	3	20
Whieldon ware		1		1
Creamware	105	112	21	238
Cw, decorated	3	2		5
Pearlware, undec	21	15	12	48
Pw, hand paint blue	3	7	2	12
Pw, poly hand paint	7			7
Pw, transfer print	7	5		12
Pw, annular	9	4		13
Pw, shell edge	5	2	1	8
Cw, annular	3	1		4
Whiteware, undec	80	71	7	158
WW, hand paint	11	7	2	20
Ww, tranfer print	17	8	2	27
Ww, annular	15	17	2	34
Ww, shell edge	3	5		8
Yellow ware	9	2		11
Rockingham ware		1		1
Ginger beer bottle	1			1
Slipware, comb+trail	16	31	5	52
Slipware, American	12	16	3	28
Buckley	1	1		2
Lead glazed e.ware	32	33	15	80
Delft	2	11	1	14
Faience	1			1
Majolica	1			1
Olive jar	1	1		2
Slip Coated ware	1	1		2
North Devon G.T.	4	2		6
Agate ware	1			1

Jackfield ware	1			1
Colono, Yaughan	10	10	5	25
Colono, Lesesne	1	2		3
Colono, Residual	5	11	1	17
Historic Aboriginal	2	5	1	8
Kitchen, other				
Olive green glass	204	211	53	468
Clear container glass	59	28	8	95
Aqua container glass	36	16		52
Brown/amber glass	17	5		22
Manganese glass	9	4	2	15
Blue glass	3		1	4
Pharmacy glass		3		3
Table glass		1		1
Kettle fragment	2	1		4
Tin can	1	7		8
Architecture				
Nail, unidentifiable	28	16	8	52
Nail, wrought	6	16		22
Nail, cut	13	20	1	34
Nail, wire	10	4		14
Nail fragment	148	59	33	340
Window glass, aqua	89	31	13	136
Window glass, clear	34	8		42
Arms				
Lead shot	1			1
Shell casing	1			1
Flint/flake	2			2
Bullet		1		1
Clothing				
Bone button		2		2
Brass button	3	4	1	8
Lead button		1		1
Iron button		1		1
Prosser button	2			2
Shell button	1			1
Collar stud		1		1
Bead	1			1
Personal				
Toothbrush	1			1
Paste jewel	1			1
Furniture				
Tack		2	1	3
Ring/collar	2			2
Chain	1			1
Tobacco pipes				

Pipe stem	31	36	10	77
Pipe bowl	11	11		22
Activities				
Barrel strap	5	17	13	35
File		1		1

Chapter VI
Testing the Dairy

Field Methods

The archaeological field school returned to McLeod Plantation for two days in June (June 26-27). The purpose of this project was to excavate test units around the foundation of the dairy building. The dairy is a frame structure on brick piers. The eastern half of the structure features a deep brick cellar, and the top of the brick forms the foundation for this portion of the structure. The western half is supported by brick piers, and an external chimney of brick fills the center of the west façade.

Figure 66a,b: Views of the dairy; a) facing northwest. The cellar foundation is visible on the right side of the structure, b) position of live oak relative to north side of the structure.

A large live oak tree immediately north of the dairy threatens the integrity of the structure. The root system is clearly extensive, and compromises the foundation of the cellar. A large branch extends over the roof of the dairy, clearing the crown by inches. The building is being lifted, and "squeezed" between the roots and branches of the tree. Both the building and the tree are valuable components of the historic landscape. The purpose of the testing was to expose the foundations for inspection and recording, and to recover artifacts capable of dating construction of the structure.

The excavations at the dairy were not tied to the grid established in the southern areas of the site. Instead, the units were located in relation to the plane of the building and in relation to the structure

foundations. Locations were measured from permanent points on the building. The excavations were therefore designated Test Units 1 through 4, with their respective locations described in detail in the field records.

Description of Excavated Proveniences

Test Unit 1 was a 5'by 5' unit located on the east side of the building. The southwest corner of the unit is aligned with the southeast corner of the building foundation. The western edge of the unit, then, adjoins the foundation of the cellar; excavation was designed to expose a 5' portion of this foundation and to search for a construction trench. Test Unit 2 was a 5' by 5' unit located on the west side of the building, adjacent to the brick pier that supports the southwest corner of the building. The northeast corner of the unit is adjacent to the northwest corner of the pier. The pier is 1.7' in length. The northeast corner of the unit is 1.5' south of the chimney base. Test Unit 3 measured 2.5' by 5.0' and was adjacent to the north side of the chimney. The northeast corner of the unit is adjacent to the northwest corner of the chimney. The short side of the unit fronts the chimney, and the chimney extends west five feet. Based on discoveries in TU 1, a fourth unit was excavated, along the south side of the cellar foundation. Test Unit 4 was a 2.5' by 5' unit, with the short face fronting the cellar foundation. The northwest corner of the unit was aligned with the southwest corner of the cellar pit.

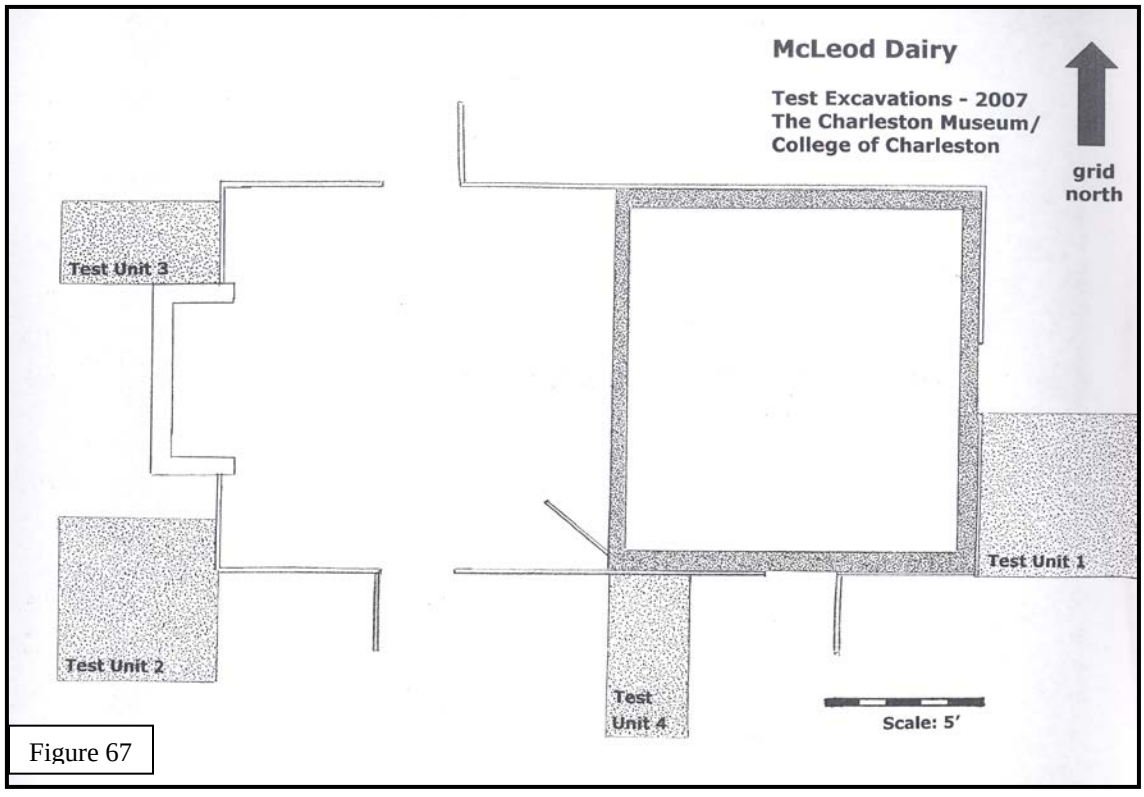


Figure 67

Dry conditions persisted at the site. In addition, the soils were very soft and loosely consolidated.

Test Units 2 and 3 were both located on the west side of the building, the portion supported by brick piers. Three zones were defined and excavated here. Zone 1 was a dark brown to dark grayish-brown sand (10yr3/2). Zone 1 was relatively thick (.6'). Zone 2 was the same color and consistency, and was distinguished from the above deposit by an increase in cultural materials. Cultural materials were dense throughout zones 1 and 2, and included materials from the 19th and early 20th centuries. Zone 3 was defined at 1.4' below surface in Test Unit 3, and this was defined as brown soil mottled with flecks of orange sand (10yr4/2). Artifacts in zone 3 were less dense than in the overlying deposits, and all date to the mid-19th century.

Figure 68a, b: excavation of Test Units 2 and 3, facing southeast

Excavation of Test Unit 3 to sterile subsoil at 1.5' below surface exposed the base of the chimney foundation. Records suggest that the chimney was rebuilt in the 20th century, and the brick and mortar exposed in the foundation were consistent with this record. Directly beneath grade, the brick was covered with a gray mortar, covering three courses of brick. Below this was a footer, consisting of two courses of headers. A second footer course, consisting of two courses of stretchers, followed. No builders trench was visible.

As mentioned above, the soil around the dairy was very soft and unstable. Because the soil was soft and the foundation for the chimney was relatively shallow, TU 3 was backfilled immediately after mapping.

Figure 69: Test Unit 3, base excavation and base of chimney foundation, facing east

Test Unit 2 exposed the western face of the brick pier at the southwest corner. Stratigraphy and soil color was the same as Test Unit 3. Zones 1 and 2 contained a dense artifact assemblage, with a mix of materials from the 19th and 20th centuries. Zone 3 was excavated in two levels to 1.6' below surface. Due to the friable nature of the soil deposits, soil was left intact in front of the pier until the unit was completely excavated. Subsequent removal of the soil revealed that the pier continued 1.0' below the ground surface.

Two features were noted at the base of zone 3. There was a rectangular area of hard-packed sand in front of the pier; this may represent a spilled construction material of some kind. A small rectangular stain of dark brown-gray soil intruded into the south profile of the unit. This was designated feature 24 and appears to be a post.

Figure 70: Test Unit 2, base excavations, close-up exposure of pier, both facing east

Excavation of Test Unit 1, adjacent to the east side of the dairy, produced some startlingly different results. Here, zone 1 soils were slightly darker than the west side of the building (10yr2/2), but equally friable. Like the western units, zones 1 and 2 contained quantities of artifacts from the 19th and early 20th centuries. Excavation of these soils revealed that the lower portion of the cellar was not brick, but Bermuda stone. Further, the interface of the brick and Bermuda stone was irregular, with poorly applied mortar. This led

Figure 71: Test Unit 1, foundation of cellar and associated builders trench, facing west

to a more detailed inspection of the masonry on the inside of the cellar. The interior was covered with lime mortar stucco, which was missing in many areas. The portion of the cellar exposed above the ground surface was brick, beginning with a row of headers. This was followed by five courses of stretchers, then a final course of headers. The brick section measures 1.7' in depth. Below are blocks of Bermuda stone, which continue an additional 2.8'.

Excavation of zone 3, to the base of the foundation, revealed some additional features of the two-phase construction. Unlike the deposits on the west side, the zone 3 soils in TU 1 contained a number of 18th century artifacts. Materials from this era were largely absent from the west side of the structure. Zone 3 continued to the base of the Bermuda stone foundation. There was no distinct builders trench associated with the foundation, though an area of soil adjoining the foundation, .3' in width, was particularly soft and slightly darker than the surrounding soil. This was designated feature 28. Two oval stains of dark soil were also present at the base of zone 3. These were designated features 25 and 26, and both were excavated. Each contained whiteware, dating their fill to 1830 or later.

Figure 72: features in the base of Test Unit 1

In order to confirm the findings in TU 1, Test Unit 4 was excavated on the south side of the cellar foundation. Here, the soil was slightly moister, and so visibility improved. Feature 28 (the builders trench) was also present in this unit, and was recognized at .9' below the top of the Bermuda stone. The feature was mapped at this level, and excavated separately. Feature 28 was excavated to the base of the Bermuda stone, a depth of 1.2'. The excavations produced creamware, supporting a late 18th or early 19th century date of construction for the Bermuda stone structure. No other features were present in the unit. Both units were lined with filter fabric and backfilled, to prevent any settling of the dairy foundation.

Figure 73: Feature 28 in Test Unit 4, Test Unit 1

Material Culture

The dairy excavations yielded a large and rich assemblage of materials, principally from the 19th century. While many of the artifacts are associated with the postbellum period, several artifact types were manufactured throughout the 19th century, and may reflect a longer period of occupation. Moreover, artifacts dating to the 18th century were recovered throughout the excavation units, but particularly from the deepest deposits (zone 3). Twelve percent of the ceramics from Zone 1 were manufactured in the 18th century; zone 3 contained 17% ceramics from the 18th century.

The test units revealed a large amount of cultural material around the dairy, over 8,000 artifacts altogether. The bulk of the materials were recovered from zone 1 (3332) and zone 2 (3478). Cultural material was somewhat sparser in zone 3 (1342). One measure of 'quantity' that has been used in Charleston excavations is the calculation of artifact density, the number of artifacts divided by the total cubic footage of soil excavated. The four units excavated at the dairy yielded 67 artifacts per cubic foot. In comparison, the test units near the allee yielded 19 artifacts per cubic foot. Comparison of the McLeod locations to other lowcountry sites will be discussed in the next chapter.

For initial analytical purposes, the Dairy assemblage was divided by zones; zones 1, 2 and 3 were quantified separately (Table 5). This analysis revealed only subtle differences among the three assemblages, in terms of proportions of various artifact types and groups. Zones 1 and 2 were similar, in terms of date of deposition and proportions of various datable artifact types. Zone 3 exhibited slightly different characteristics, particularly a higher proportion of 18th century artifacts (Table 6). These differences will be discussed at the end of the chapter.

Overall, the assemblage was dominated by architectural materials, suggesting continuous occupation and repair of the building. Architectural materials averaged 55% of the assemblage, higher than the Carolina Artifact Pattern proportion of 24%. This is particularly striking, given the associated kitchen function of the building. As is typical of 19th century assemblages, fragments of glass containers dominated the kitchen assemblage, and were three times as common as ceramic fragments. Artifacts from other functional categories were well-represented. Generally, the Dairy assemblage reflects the retinue of domestic behavior, while the large proportion of architectural material reflects continued use of the building, and the proximity of excavation units to the structure itself.

Kitchen Group: Kitchen materials comprised 41.5% of the Dairy assemblage, and ceramics were one-quarter of the group. Ceramics common after 1830 dominated the assemblage. Most common types from the mid-19th century include White American Porcelain, undecorated whiteware, whitewares with decoration, and a variety of utilitarian stonewares. The assemblage also contained a large number of refined earthenwares from the early 19th century, including creamwares and pearlwares. Ceramics from the colonial period comprised 15% of the ceramic assemblage.

The British factories that produced creamwares and pearlwares in the early 19th century continued to refine their glaze formulas so that by the 1820s the blue tinge had been removed from the wares, leaving a white china. The same decorative motifs continue from pearlware to whiteware, however, making positive attribution difficult on occasion. Undecorated whitewares were the most numerous ceramic recovered from the Dairy; 353 fragments were recovered, for 39% of the assemblage. These included hollow wares, such as mugs and cups, as well as plates of all sizes. Whereas most of the ceramics of the 18th and early 19th centuries are decorated, plain white wares increased in popularity in the antebellum period. Mid-century assemblages are characterized by heavy, undecorated wares, often in paneled or octagonal forms.

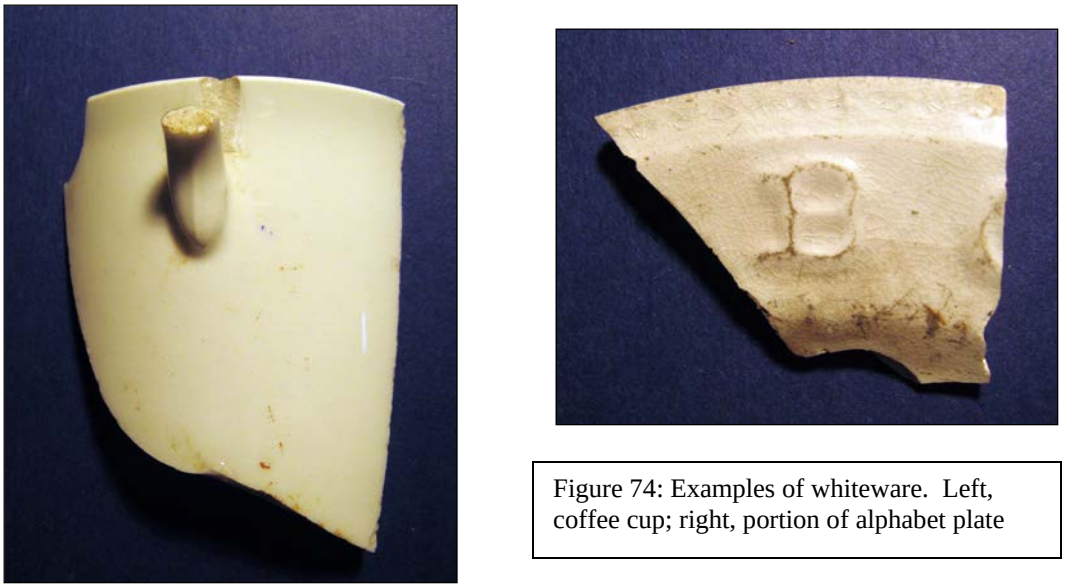


Figure 74: Examples of whiteware. Left, coffee cup; right, portion of alphabet plate

Much smaller amounts of decorated whiteware were recovered. The dairy assemblage included 18 fragments of transfer printed ware. Blue transfer printing, perfected on the earlier pearlwares, continued through the 19th century, though the printing gets lighter and sparser. After 1830, transfer printing appears in colors other than blue; those popular in the 19th century include black, brown, mulberry red, and forest green. Eighteen fragments of transfer printed whiteware were recovered from the dairy. Transfer printed vessels are usually tablewares, and are available in a variety of forms, including plates, platters, and smaller saucers, coffee and tea cups and saucers, and a range of serving pieces. Hand painting also continues on whiteware, though the style and colors of the painting change. The floral decoration becomes larger and much bolder, and the color palette changes from soft earthtones to bright colors such as those found in transfer printing: forest green, mulberry red, black, purple, yellow, brown. Nine fragments were recovered from the dairy.

Annular wares likewise continue through the 19th century, with some discernable stylistic differences. Seventeen annular whiteware fragments were recovered. Unlike transfer printed wares, annular wares forms are limited to inexpensive hollow ware forms; bowls, either rounded or low-shouldered are most common. Less common are mugs and pitchers.

Shell edged wares also continue through the 19th century, with some datable stylistic evolution of the edge decoration. The delicate feathered edge of the 18th century eventually transformed into a solid blue stripe, often over bold molded designs. Five fragments of shell-edged whiteware were recovered.

Whitewares that were slightly harder-fired were developed in 1813, under the trade name of ironstone. The term is little-used among archaeologists, as some wares marked 'ironstone' are not hard enough to be considered such. Generally, all wares are classified as whitewares. However, occasional fragments exhibit a hard, non-porous paste, and are classified as ironstone; six fragments were recovered.

Two distinctive whiteware styles characteristic of the last decade of the 19th century and the early decades of the twentieth century were present in small amounts. Gold-painted decoration was common on whiteware and white porcelain after 1890; a single fragment was recovered. Whitewares in overall shades of green or pink were popular in the early 20th century, and are classified as 'tinted' wares. Two fragments were recovered.

Another common ceramic of the late 19th century is white porcelain, manufactured and distributed in the United States after 1850. These all-white porcelainscome in a variety of tableware forms. The vessels are larger and thicker than Chinese wares, but not so heavy as contemporary whitewares. After 1880, porcelain vessels were often gold-trimmed. Thirty-eight fragments of white porcelain were retrieved from the dairy, and four exhibited gold decoration. Five fragments were classified as soft-paste porcelain. Like ironstone, these wares are intermediate between porcelain and refined earthenware. Soft-paste porcelain exhibits the translucence of porcelain and a paste that is somewhat porous. A single fragment of white bisque porcelain was recovered; this unglazed white porcelain was popular in the last quarter of the 19th century, often for figurines or other decorative pieces.

Two refined earthenwares of the mid-19th century served utilitarian purposes. Rockingham or Bennington ware is distinguished by a yellow body and blotched brown and yellow glaze. Rockingham comes in a variety of forms, but pitchers are the most common. Like contemporary whitewares, Rockingham pitchers often feature octagonal panels. This ware was mass-produced in America and other countries for a century beginning in the 1830s (Claney 1996:107). A single fragment of Rockingham was recovered from the dairy.

A temporally comparable vessel type, but one more common on lowcountry sites, is Yellow ware, again manufactured in America and elsewhere for more than a century beginning in 1827. This ware also featured a buff to yellow body and a plain mustard-yellow lead glaze. Some of the larger vessels, such as mixing bowls and chamber pots, feature white bands on the exterior or wide white stripes with dendritic designs in blue or green. The dairy assemblage included 14 fragments of yellow ware.

The majority of the utilitarian ceramics of the 19th century are stonewares. These are principally crocks and jugs for preparing and preserving foods. Given the likely use

of these vessels, for storage or processing, it is somewhat surprising that relatively few were recovered. Like the refined earthenwares, the majority of these were manufactured in the United States by the early 19th century. Most often, they were produced in regional potteries, and types are not well-defined. Many of the 19th century stonewares feature a brown, buff, or grey saltglazed exterior. The interior is often finished with a lustrous brown slip, known as "Albany Slip". Though the color of the vessels varies, Albany slip is a common marker of 19th century stoneware. Twelve fragments of 19th century stoneware were recovered, and an additional six fragments exhibited the Albany slipped interior.

A group of potteries around Edgefield, South Carolina produced a distinctive ash-glazed crockery from 1800 to around 1880, known collectively as Edgefield stonwares. Many are distinguished by a dark olive to light greenish-gray shiny alkaline glaze on a coarse dark grey body. Some of the earlier vessels are decorated in white and brown slipped designs (Baldwin 1993). Many of these potteries used African American slaves, as revealed in the pots signed by Dave (Drake), owned by Harvey Drake in 1833, by potter lewis Miles before 1840, and by the Landrum family after 1846 (Koverman 1998). While much of the Edgefield pottery survives in lowcountry households, surprisingly little finds its way to the into the archaeological record; this may be due to its durability. Seven fragments were recovered from the dairy.

Figure 75: fragments of Edgefield stoneware

The final stoneware of the 19th century is known as Ginger Beer bottle. This is a lead-glazed stoneware, featuring a shiny surface. The top portion of the vessel is mustard yellow, while the bottom portion is buff-colored. The most common vessel form is beverage bottles, roughly 12 ounces. Ginger beer bottles were introduced in the 1850s and are common on Civil War sites around the lowcountry. A single fragment was recovered from the dairy.

Though there is generally little change in ceramics through the 19th century, a few new types were introduced in the 1840s. One of these was luster ware, and a single fragment of this ware was recovered from the dairy. Copper or plantinum salts added to the glaze produced a metallic luster in gold or silver, over an earthenware or creamware body. Most common in archaeological sites are copper-lustered earthenware, often with a white-slipped interior (Fisher 1965). The dairy contained an unidentified fragment of red stoneware with traces of a yellow wash on the exterior. Stylistic elements suggest an early to mid-19th century date.

Figure 76: unidentified red stoneware

Large amounts of creamware and pearlwares were recovered from the dairy, suggesting the building may be earlier than the 1850s. As discussed in Chapter IV, creamware was available in the lowcountry by the 1770s and was tremendously stylish and popular. In the late 18th century, creamware was available in elaborate forms. Creamware, or "cream colored ware" also continued through the 19th century, as an undecorated and inexpensive (Miller 1980; Miller et al. 2000). Sometimes, but not always, differences can be discerned between creamwares of the 18th century and those from the next century. The dairy assemblage included a large amount of creamware, 162 fragments, comprising 18% of the ceramics.

Pearlwares, manufactured from 1780 to 1820, were replaced by whitewares in the 1820s-1830s, so their presence is a stronger indication of early 19th century occupation. Pearlwares in a range of decorative styles comprise 11% of the dairy ceramics. Most were undecorated fragments, though the assemblage included the types developed in 1780 (hand painted, shell-edged) and those developed in 1795 (transfer printed, annular). Forty-five undecorated fragments were recovered, followed by blue hand-painted (16), annular (14), transfer printed (12), polychrome hand painted (4), and shell edged (7).

The remaining 15% of the ceramic assemblage were types manufactured and used before the Revolutionary War. The most distinctive ceramic recovered from the dairy, particularly from zone 3, was fragments of a chamber pot of debased Scratch Blue stoneware. This ware, manufactured from 1763 until 1775, is well-made white stoneware decorated with incised lines filled with blue glaze. Five fragments of the vessel were recovered from Test Unit 1. There were also five fragments of white saltglazed stoneware, manufactured from 1740 to 1760, again dispersed from zones 1 through 3. Contemporary with white saltglazed stoneware, and often produced from the same molded pattern, is Whieldon ware. This first refined earthenware, the precursor to creamware, features a deep green glaze or green, yellow, and brown streaked glaze. Whieldon ware was manufactured from 1740 to 1760, and is only present in small amounts on lowcountry sites. Four fragments were recovered from the dairy.

Figure 77: debased scratch blue stoneware chamber pot

Three other mid-18th century wares were present in small amounts. Agate ware consists of red and yellow clays swirled together and covered with a clear lead glaze. The resulting finish shows the variegated clays, giving the vessel the appearance of agate or wood grain. Agate ware was manufactured in Staffordshire from 1740 to 1775. Two fragments were recovered from the dairy. Also present was a single fragment of Jackfield ware. This ware, produced from 1740 to 1790, was made by various potters and featured a fine clay body that ranged from grey to purple to red, the red being the hallmark of the Staffordshire potters. The common feature was a deep black, oily to shiny lead glaze. Jackfield vessels, like the agate ware, are most commonly tea wares.

The final mid-19th century ware, again represented by a single sherd, was Black basalt stoneware. Black basalt ware was an unglazed black-bodied stoneware, manufactured from 1750 to 1820. The vessels were finely-made, and featured sprigged decorations or, on later examples, engine-turned lines. Occasionally the interior was glazed. Most of the black basalt vessels were tea wares.

Figure 78: fragments of delft

Only a few fragments of tin enameled ware were recovered. The dairy assemblage included three fragments of British delft and two of Spanish majolica. The other Spanish ceramic, Spanish Storage Jar, is a utilitarian form. Two fragments were recovered.

Chinese export porcelain was also present in the dairy assemblage; 31 fragments were recovered (3% of the ceramics). All of these featured blue underglaze decorations and were small fragments.

Utilitarian wares of the 18th century included earthenwares and stonewares. Slipwares, from Britain and from the mid-Atlantic colonies, were the most common vessels. Twenty-nine fragments of combed and trailed slipware were recovered. Also common were lead-glazed earthenwares (35 fragments), representing a variety of forms. A single fragment of French lead-glazed earthenware was recovered. Earthenwares from Spain and France are present on lowcountry sites in small, but consistent, amounts.

The remaining utilitarian wares from the colonial period were stonewares. The dairy assemblage included six fragments of Westerwald stoneware and two of brown saltglaze stoneware.

Very few fragments of colono ware were recovered from the dairy; the assemblage included only four fragments; two of these exhibited paste characteristic of Native American pottery. The proportion of colono ware varies on lowcountry sites, and the ware is most popular during the 18th century. The amount recovered at the dairy is unusually small (.4% of ceramics), and is smaller than the assemblage from the test units.

Figure 79: paste profile of historic period Native American pottery

The kitchen group of the 19th century is dominated by glass containers, rather than ceramic vessels. With the development of mass-produced, molded bottles after 1820, these vessels increase in frequency and decrease in price; further, they become more disposable. Archaeological sites dating after 1830 often contain large amounts of bottle glass. When fragmentary, glass is categorized by color, which is to some extent

associated with form and function. While the olive green bottles of the 18th century continue into the 19th century, clear glass becomes far more common, and is augmented by container bottles of brown (often for beer or ale) and blue (often for bottled water in the postbellum era). A variety of patent medicine bottles, in clear or aqua, appear in the late 19th century. Condiment bottles, for pickles and sauces, are also common in the second half of the century. Fragments of bottle glass comprise 73% of the dairy kitchen assemblage.

Olive green bottle glass remained an essential part of 19th century foodways; they were hand blown until 1820, and then were blown into a mold. The dairy assemblage includes 442 fragments of green glass, and most of these were from hand-blown bottles. Far more common at the dairy were bottles of clear glass; 1,240 fragments were recovered. Like green glass, clear bottles were hand blown before 1820. For the remainder of the century the bodies of bottles were molded, and the necks and lips were finished by hand. Mold seams on these bottles are visible on the bottom and sides of the containers, and disappear at the hand-blown neck.

Figure 80: Eighteenth-century olive green glass

Container bottles in aqua were less common at the dairy, but still formed a significant portion of the assemblage; 141 fragments of aqua container glass were recovered. A smaller amount of brown glass was recovered, 71 fragments. Blue container glass, from mineral water or from medicines, was less significant in the dairy assemblage; 22 fragments were recovered.

Figure 81: medicinal glass

Over 100 fragments of light purple glass were recovered from the dairy. Manganese glass was developed in 1880, when manganese was added to the glass formula. When exposed to sunlight, the clear glass gradually assumes a lavender hue.

Figure 82: pressed glass

Two types of glass are most often table or decorative ware, rather than utilitarian containers. Press-molded glass, or pressed glass, was developed in 1827 as an inexpensive tableware. By 1845 pressed glass was common in American households (Lorrain 1968:39).

Seven pieces were recovered from the dairy. A second late 19th century development was milk glass, a translucent white glass. Milk glass was used for cosmetic jars, but also appeared in elaborately molded plates, platters, and vases. It was developed after 1870. Milk glass was more numerous at the dairy; 24 fragments were recovered. Seven other fragments of table glass – fragments of tumblers or goblets – were recovered, as well.

A significant component of the 19th century assemblage was fragments of tin can containers. Comparative quantification of these vessels is problematic, as tin cans of the 19th century rust quickly and can crumble into small fragments. They are often poorly preserved in the archaeological record, and are simply flat fragments of rusty iron when recovered. Developed commercially in the mid-19th century, tin cans were first used widely during the Civil War. They were closed and sealed in the top with a ring of solder. Later, cans of varying shapes were developed, and canned foods increased in frequency in the second half of the 19th century (Sutton and Arkush 1996:168). The dairy assemblage contained 380 iron fragments identified as tin cans.

The final kitchen items were three examples of cutlery. These included two spoon bowls. Most distinctive was a section of bone-handled knife.

Figure 83: bone knife handle

Architecture Group: Architectural artifacts dominated the dairy assemblage, comprising 55% of the assemblage. The majority of these were nails, and most were in degraded condition. The assemblage included 1154 nails that were unidentifiable by type of manufacture and 1,668 nail fragments (those shaft sections with no head). Of the nails that were identifiable by manufacture type, 98 were hand-wrought, dating to the 18th century. The majority was cut nails, developed in the 1780s. Machine-cut nails first featured a hand-wrought head attached to a rectangular shaft cut from a sheet of iron; after 1815 the head was also machine-applied. The dairy units contained 376 machine cut nails. Less common were wire nails, round in cross section. These were developed in 1850 and were not in common use until the last quarter of the 19th century. Sixty-four wire nails were recovered from the dairy. Ten small nails, classified as tacks, were recovered.

The dairy currently features wooden shutters, but may have at one time had sash windows; window glass was recovered in significant quantity. Generally, window glass of the 18th and early 19th century is light aqua in color, while later flat glass is clear. The dairy assemblage was evenly divided between the two types, containing 527 fragments of aqua glass and 534 of clear.

The remainder of the architectural group consisted of miscellaneous hardware, including wood screws (15), spikes (2), bolts (1), washers (10), and rivets (2). A padlock was recovered, and a brass keyhole cover and escuteon were part of the assemblage.

Arms Group: Arms materials comprised .4% of the assemblage. Included in this group were 13 shell casings of various sizes, ranging from .22 calibre to .32 calibre. There were 12 percussion caps. Both the cartridge casings and percussion caps are typical of the second half of the 19th century. Percussion caps are often associated with the Civil War. Four bases to shotgun shells were included in the assemblage. The most distinctive artifact was a lead minie ball, the ammunition most closely associated with the Civil War. Arms materials from the colonial period included a portion of musket sideplate and a small lead shot.

Figure 84: minie ball

Clothing Group: Clothing materials comprised .75% of the dairy assemblage, and 61 items were recovered. The majority were button types common to the 19th century, and many were flat with four holes, designed to be functional rather than decorative. Most common were plain iron buttons with four holes for attachment; nine were recovered. The bone buttons from the dairy all featured four holes, and were machine-made. Four-hole bone buttons appear in the late 18th and become more common in the early19th century (Deagan 2002:166). They are part of lowcountry assemblages through the first half of the 1800s.

The most common button at the dairy was white prosser buttons, patented in 1849 (Sutton and Arkush 1996; Sprague 2002). These are shiny white buttons, with a somewhat grainy appearance on the back, and an appearance of opaque glass. They feature four holes and come in a range of sizes, 1.0mm and 1.5mm being the most common. Prosser buttons are often plain, but in the late 19th century feature a variety of decorated surfaces. White is the most common color, but prosser buttons in black and blue are also recovered. All of the McLeod buttons were undecorated; 21 were recovered, including both white and black examples.

Figure 85: buttons from the dairy. Top, prosser; second row, black prosser, synthetic; third row, bone and iron 4-hole buttons; bottom, blue glass bead.

Brass buttons were recovered in a range of decorative styles. They often feature a cut or wire eye shank. Five were recovered from the dairy. The test excavations also yielded four shell buttons. Shell buttons are common in the 19th century, and often feature two or four holes. Those of the early 19th century average 7 to 9 cm in diameter.

Figure 86: brass buttons

One small, elaborate button recovered from the site likely came from a lady's dress. This small, molded shank button is black and may be a jet, glass, or a synthetic material. The style is consistent with the late 19th/early 20th century.

The clothing group included a large variety of clothing fasteners and embellishments typical of the postbellum period. Four shoe grommets were recovered; these are recovered on sites dating after the Civil War. Another artifact of the late 19th century is a button or collar studs. They are often of prosser or bone. Also recovered were two corset hooks. More difficult to date is the clothing eye. Made of brass wire, these have not changed in style for three hundred years.

Figure 87: corset hooks (top), shoe grommets (bottom)

Four buckles were recovered from the dairy. One was unusual in form, and may be more decorative than functional. Other items in the clothing group related to sewing or repair, rather than garments. This included a scissors and a thimble. Both are consistently present on historic sites of the 18th and 19th centuries.

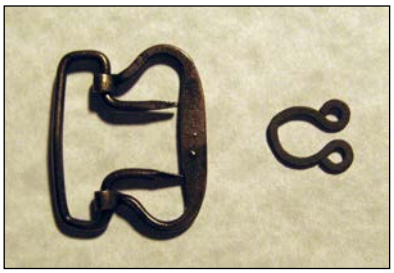


Figure 88a,b: buckles, clothing eye, from the dairy excavations

Personal Group: Eleven items categorized as personal possessions comprised .13% of the dairy assemblage. The majority of these were toys or game pieces. The group included five fragments of pink-tinged bisque porcelain, fragments from the faces of dolls. Dolls were increasingly available in the second half of the 19th century, and often featured cloth bodies with porcelain arms, legs, and heads. Smaller dolls were made of molded porcelain. A fragment of delft had been deliberately shaped to produce a round 'checker' or other gaming piece.

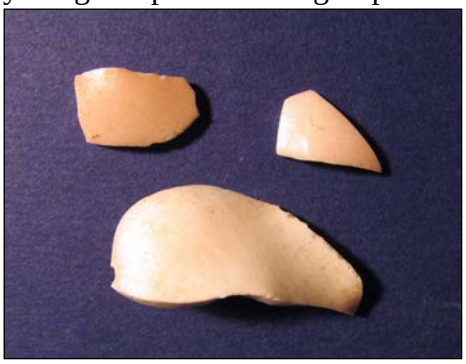


Figure 89: bisque porcelain doll faces

Two pennies were recovered. Two fragments of slate pencils were found. The final item was a tin-plated brooch. The pin was oval, and missing a central stone.

Furniture Group: Furniture items comprised .19% of the assemblage; 16 items were identified. The group included a circular collar or escuteon, likely from a lamp. Also identified were fragments of lamp glass. Kerosene lamps were developed by the mid-19th century, and chimney glass forms evolved through the remainder of the century. A small brass key was recovered; this was likely from a box or clock. Three fragments of decorative wire were classified as furniture, though the function is unknown.

Figure 90: pocket watch face; decorative tag

The most distinctive item was a pocket watch face. The face is likely painted or applied paper, and may be fairly fragile; no cleaning or conservation was attempted. Two decorative stamped plates may be from boxes or furniture. Five drawer pulls were identified. Each was iron, and apparently screwed into the furniture. All were corroded, and exhibited no type of decoration. As they are identical, they are likely from the same piece of furniture.

Tobacco Group: Artifacts associated with smoking comprised .78% of the assemblage; 64 items were recovered. These are typically stem or bowl fragments from white clay pipes. Such pipes were extremely popular in the 17th and early 18th centuries. They decline in popularity as the 18th century progresses, but were still used through the first half of the 19th century. Two additional, unusual artifacts in the tobacco group were tin cigar bands.

Figure 91: tin cigar bands

Activities Group: Items associated with various affairs of daily life are classified in the 'activities' group. This includes artifacts associated with gardening, agriculture,

Figure 92: activities items; lead net weight, whetstone

mechanics, hunting, fishing, and food storage. Artifacts recovered from the dairy include three fragments of clay flower pots. Clay pots were in use in the colonial period, but they increase in popularity in the 19th century. Other artifacts associated with gardening or farming include six fence staples. Flat fragments of strap iron are usually from the bands of wooden barrels, and are associated with food or staple storage. Fishing is reflected in the recovery of two lead net weights. These are common on plantation sites, and the large central hole suggests they were used on the edges of nets, rather than on fishing lines. The activities group also includes miscellaneous tools and accessories; those recovered from the dairy include lengths of chain, sections of a bucket handle, and a conical whetstone. A variety of metal appeared to be fragments of iron stoves, but due to the incomplete identification, the items were classified in activities rather than kitchen. In all, 87 items were counted as activities, for 1.07% of the assemblage.

Table 6
The Dairy Assemblage

	Zone 1	Zone 2	Zone 3	Total
Porcelain, Chinese export	3	11	17	31
White porcelain	2	21	11	34
White porcelain, gilt	--	--	4	4
Soft paste porcelain	1	1	3	5
Bisque porcelain	--	1	--	1
Stoneware, misc 19th	5	1	6	12
Alkaline glazed stoneware	2	4	1	7
Stonware, Albany slipped	1	5	--	6
Westerwald	1	4	1	6
Brown saltglazed stoneware	1	1	--	2
White saltglazed stoneware	1	2	2	5
Scratch blue stoneware	1	2	2	5
Whieldon ware	2	2	--	4
Creamware	35	72	55	162
Pearlware, undecorated	7	25	13	45
Pearlware, hand painted	2	7	7	16
Pearlware, poly hand paint	--	2	2	4
Pearlware, shell edged	1	5	1	7
Pearlware, transfer printed	7	3	2	12
Pearlware, annular	4	4	6	14
Whiteware, undecorated	52	151	150	353
Whiteware, hand painted	2	5	2	9
Whiteware, transfer printed	3	10	5	18
Whiteware, annular	2	5	10	17
Whiteware, shell edge	--	--	5	5
Ironstone	--	4	2	6
Tinted whiteware	--	2	--	2
Gilt-trimmed whiteware	--	--	1	1
Yellow ware	2	7	5	14
Rockingham ware	--	--	1	1
Ginger beer bottle	--	1	--	1
Luster ware	--	--	1	1
Combed and Trailed slipware	5	16	8	29
American slipware	2	3	1	6
Lead-glazed earthenware	7	19	9	35

Delft	--	3	--	3
Majolica, misc types	1	1	--	2
Spanish storage jar	1	1	--	2
Jackfield	--	1	--	1
Black basalte	--	1	--	1
Agate ware	--	--	2	2
French green glazed earthenware	--	--	1	1
Colono ware/Native American	--	2	2	4
Kettle frag	--	1	--	1
Olive green glass	105	217	120	442
Clear container glass	125	510	605	1240
Brown bottle glass	14	30	27	71
Aqua container glass	30	37	74	141
Manganese glass	9	58	49	116
Blue bottle glass	2	13	7	22
Milk glass	2	14	8	24
Table glass	4	8	6	18
Pressed glass	--	7	--	7
Tin can	53	162	165	380
Cutlery	--	2	3	5
Unidentifiable nail	264	656	234	1154
Wrought nail	39	55	4	98
Cut nail	51	119	206	376
Wire nail	2	22	40	64
Nail fragment	297	723	648	1668
Tack	--	--	10	10
Aqua flat glass	76	107	344	527
Clear flat glass	41	197	333	534
Hinge/hardware	--	4	2	6
Screw	3	3	9	15
Spike	--	2	2	4
Bolt	--	--	1	1
Copper nail	--	1	--	1
Washer	1	4	5	10
Rivet	--	1	1	2
Padlock	--	1	--	1
Keyhole surround	1	--	--	1
Shell casing	2	5	6	13
Percussion cap	4	5	3	12
Shotgun shell	--	4	--	4
Minie ball	1	--	--	1
Side plate	--	--	1	1
Lead shot	--	--	1	1
Iron 4-hole button	--	4	5	9
Bone 4-hole button	1	2	1	4
Prosser button	3	9	9	21
Synthetic button	--	1	--	1
Brass button	1	3	1	5
Shell button	--	2	2	4
Bead	--	1	1	2
Shoe grommet	--	3	1	4
Scissor	--	--	1	1
Eye	--	--	1	1

Thimble	--	--	1	1
Clothing clasp	--	1	--	1
Buckle	--	3	1	4
Collar stud	--	1	--	1
Corset hook	--	2	--	2
Brooch	--	1	--	1
Slate pencil	--	1	1	2
Doll part	--	3	2	5
Ceramic game piece	--	1	--	1
Coin	--	--	2	2
Escuteon	--	2	--	2
Mirror fragment	--	1	--	1
Lamp glass	--	1	--	1
Drawer pull	2	1	2	5
Stamped tag	--	1	1	2
Decorative wire	--	2	1	3
Clock face	1	--	--	1
Brass key	--	--	1	1
Pipestem/bowl	20	23	21	64
Cigar band	2	--	--	2
Flower pot frag	1	2	--	3
Type	--	1	--	1
Misc metal	20	1	--	21
Medicinal	1	3	1	5
Misc wire	5	9	5	19
Bucket handle	--	1	1	2
Fence staple	--	6	--	6
Flat/strap iron	6	5	12	23
Chain	--	1	--	1
Net sinker	-	1	--	1
Stove part	1	2	2	5

Interpretations

The principal goal of testing was to determine a date of construction for the dairy and to document additions or changes to the building. Data available at the time of the project suggested the building was constructed after acquisition of the property by William McLeod, possibly with later alterations and additions. Determining the antiquity of the building is central to management issues regarding the building and the adjacent tree. Excavations were placed to encounter construction trenches for key architectural elements, including the chimney, the foundation piers, and the cellar.

Excavations immediately revealed a dense deposit of cultural materials surrounding the building. The majority of the artifacts date to the second half of the 19th century, but the assemblage also included a significant amount of materials from the 18th

century and from the antebellum period. Three zones were defined and segregated, but materials of all time periods were mixed in each of the zones. Therefore, stratigraphy did not inform on construction and evolution of the building.

Current data suggests the chimney was completely rebuilt in the 20th century, and this was confirmed in excavation of Test Unit 3. The unit revealed a shallow foundation and modern mortar. No builders trench was identified for this feature, but the relatively recent date was interpreted from the architectural evidence.

The dense archaeological record around the dairy was dominated by artifacts in use in the second half of the 19th century, particularly along the western side of the structure. No construction trench was identified for the southwestern pier exposed in Test Unit 2, but the artifacts retrieved from the unit date to the second half of the 19th century, and support a date of construction in the middle of the century.

Construction of the lower portion of the cellar in Bermuda stone was completely unexpected. The exposed portion of the cellar was brick, and continued for seven courses to a rough seam with the Bermuda stone foundation. A single datable ceramic was recovered from the builders trench (feature 28) in Test Unit 4; recovery of creamware suggests the cellar was constructed after 1780. Small soil features adjacent to the cellar in Test Unit 1 contained similar artifacts. Excavation of feature 25 revealed four fragments of creamware and a single sherd of hand-painted pearlware, manufactured between 1780 and 1820. This, together with the retrieval of a sizable assemblage of late 18th/early 19th century artifacts, supports construction of the cellar around the turn of the 19th century. Pre-1780 construction is possible, but less likely. The archaeological record therefore supports the suggestion that the dairy, and possibly other outbuildings, were part of the Lightwood landscape. Subsequently, the dairy was drastically altered, or completely rebuilt, after William McLeod purchased the property in 1851. The preponderance of architectural materials and postbellum artifacts, as well as the brick construction on top of the stone, support this scenario.

The material assemblage from the dairy was dominated by architectural materials, reflecting ongoing maintenance of the building. Likewise, the large amount of architectural material in zone 3 may reflect demolition of earlier features for construction of the present structure. Overall, the materials were consistent with a general domestic assemblage, suggesting the building was part of a range of activities necessary for daily life during the 18th and 19th centuries. Moreover, the relative proportions of artifacts, as classified by function, remain the same throughout the period of occupation. The assemblage does not necessarily suggest occupancy of the structure, rather discard of refuse from domestic activities. It is possible that the concentration of artifacts from the late 19th century reflects some occupation of the building during that period, though none is documented. Additional testing near adjacent buildings, and in the areas between buildings, will be necessary to better understand the various uses of the McLeod buildings.

The lack of stratigraphic separation prohibits identification of temporally separate subassemblages, but the dairy collection still provides some data on range of occupation.

The materials recovered, particularly the ceramics, support occupation in this area from the mid-18th century to the present. Ceramic types typically in use prior to the Revolutionary War comprise 16% of the wares. Those from the late 18th/early 19th century were 29% of the ceramics. Materials developed and used in the second half of the century comprise 40% of the dairy ceramics. Moreover, there is some difference in these proportions among the three zone deposits. The late 19th century ceramics, for example, comprise 53% of the materials from zone 1, 45% from zone 2, and are 39% of the zone 3 ceramics. Those from the 18th century, conversely, are 13% of the zone 1 ceramics, and 17% of the ceramics from zone 2 and from zone 3. Most dramatic is the increase in proportion of early 19th century material (creamware and pearlware) from the top of the ground to the base of excavations, increasing from 17% of the zone 1 assemblage to 55% of the zone 3 assemblage. These figures strongly support the presence of a building in this location shortly after the turn of the 19th century.

Table 7
Artifact Profiles for the Dairy Assemblage

	Zone 1		Zone 2		Zone 3		Total	
	#	%	#	%	#	%	#	%
Kitchen	1405	42.1	1470	42.2	498	37.1	3377	41.5
Architecture	1839	55.2	1895	54.4	775	57.0	4470	55.0
Arms	11	.3	14	.4	7	.5	32	.4
Clothing	24	.7	32	.9	5	.4	61	.7
Personal	5	.2	5	.2	0	--	11	.1
Furniture	5	.2	8	.2	3	.2	16	.2
Pipes	21	.6	23	.6	20	1.4	64	.8
Activities	22	.6	31	.9	34	2.5	87	1.1
Total	3332		3478		1342		8118	
Whiteware, % ceramics		52.5		45.5		39.0		
Cw, pw, % ceramics		16.8		29.1		55.8		
18th cent., % ceramics		12.9		17.0		16.2		

Taken together, the data suggest that the Bermuda stone foundation may pre-date the dairy, and the remnant foundation was incorporated into a mid-19th century building. Alternately, the stone was recovered from elsewhere on the plantation and recycled into an antebellum building. The presence of early artifacts around the building and in the construction trench argues against this interpretation. The presence of Bermuda stone on the plantation is in itself interesting. Bermuda stone was a relatively common building material in colonial Charleston, but its use outside the city, and after the turn of the 19th century, is unknown. Clearly, additional research on the dairy, and on the 18th century occupation of the site is warranted.

Chapter VII
Summary

The McLeod property is outstanding for the number and variety of intact plantation structures, in close proximity to the city of Charleston. The 50-acre property features the planter's house and a row of slave cabins, as well as kitchen, dairy, gin, barn, and privy. Many of these were constructed by the late antebellum period. All were in use through the late 20th century, each subject to some degree of alteration during the period. The remaining slave cabins are considered particularly significant, given the extensive oral history on the occupation and use of the buildings and the paucity of documented worker's cabins in the Charleston area. The number and variety of other support structures is also exceptional for the lowcounty. The kitchen and dairy, in particular, are unusual for their age and condition.

According to documentary sources, the McLeod property has been granted and used by European settlers since the last decades of the 17th century. The extent of actual occupation, by the Morris, Davis, and Wilkins families prior to 1740, is unknown. Wilkins' successor, Samuel Perroneau, lived on the property through the Revolution, though it appears his homesite was located west of the present tract, along the Stono River.

The property changed hands several times through the antebellum period, always through family connections, from the Perroneaus to the Lightwoods to the Parkers. Structures were built in the vicinity of the present complex by the 1790s. William McLeod purchased the plantation in 1851, and the property remained with his descendants until the death of William E. McLeod in 1990. The property was continuously farmed until 1940. In addition to ongoing use as farmland, McLeod Plantation saw extensive occupation and used during the American Revolution and the War between the States.

Though eroded by reduction in acreage, the property also contains significant landscape and archaeological, as well as architectural, resources. The extensive material record, particularly from the fields south of the slave cabins, has been noted by scholars, collectors, and local historians for decades. Archaeologists have conducted a number of small surveys since the 1970s, and each has suggested that the site contains evidence of occupation that spans three centuries. Concentrations of cultural materials have been noted in the field south of the slave cabins, around the main house, along the waterfront, and in an area east of the main house, no longer part of the McLeod tract.

The McLeod building complex is situated along an east-west ridge, oriented to Wappoo Cut. The ground slopes gently toward the water to the north, and drops more abruptly to the open fields to the south. Artifact concentrations suggest the ridge has always been a locus of settlement. The extreme southern and eastern portions of the property appeared to be largely devoid of cultural remains, and were designated by Historic Charleston Foundation as areas of least significance. It was here that the American College for the Building Arts plans to construct campus buildings.

Archaeological survey of the areas designated "C" began with establishment of a site-wide grid. Survey included light disking of the open fields, surface collection of 25' units, and shovel testing at staggered 50' intervals. The survey revealed a very low density scatter of historic artifacts, most post-dating the Civil War. A slightly higher concentration was noted in the southeastern corner of the property. The area does not appear to contain cultural deposits worthy of further study.

The single exception was the northeastern corner of Area C, where a concentration of brick rubble and cultural materials from the 19th century was noted. Excavation of two 5' test units, as well as shovel tests, revealed intact features, as well. The present data suggest a small building may have been located in this area. This portion of the site warrants further study.

Shovel testing along the shoreline of Wappoo Cut revealed a concentration of 19th century material and a heavily altered landscape, likely reflecting intensive use of the waterfront throughout the history of the plantation. The limited testing revealed areas of burned material and levels of fill sand, as well as a range of cultural materials. Postbellum artifacts and evidence of a dock or landing were noted below the water's surface. Efforts to locate the store were not successful at this level of survey.

In addition to the historic period materials, the waterfront survey revealed a concentration of middle Woodland pottery, notably from the Deptford period. A Deptford period site was previously noted in this area, extending south toward the McLeod house. Woodland pottery was recovered from the Dairy excavations and the test units, as well. The prehistoric component of the McLeod property warrants further study.

Testing in the western yard, between the main house and the slave dwellings, revealed a moderately dense scatter of cultural materials from the early 18th through the late 19th centuries. The area exhibited evidence of plowing, and materials from all time periods were mixed throughout the soil deposits. A number of features were preserved in the underlying subsoil, including post stains and unidentified pits. There was no evidence for any structures in the five units excavated. The units identified a rise as a roadbed, constructed during the Civil War. Materials retrieved from the testing date principally to the second half of the 19th century, though artifacts from the colonial and antebellum periods were present in significant amounts. Because the soils are disturbed by plowing, it is not possible to individual occupations within the broad continuum.

A similar assemblage was encountered around the dairy. Here, four units were excavated adjacent to the foundation in order to date the structure. Documents suggest a possible construction date contemporary with the McLeod house (1850s), though many of the outbuildings were repaired or rebuilt after the Civil War. Other sources hint at an early 19th century date for some of the outbuildings, including the dairy. Archaeological excavation revealed a concentration of architectural material, consistent with cycles of construction, decay, and repair.

The assemblage also included a rich assemblage of postbellum materials, reflecting intensive use of the structure throughout the second half of the 19th century. Over half of the datable ceramics retrieved, however, predate the Civil War. A moderate amount of colonial artifacts, and a slightly larger amount of late 18th/early 19th century material was present, as well. Early and late artifacts were mixed throughout the three zone deposits, so it was not possible to isolate temporal events at the dairy. Small features and an intact builder's trench were sampled and each contained ceramics from the first decades of the 19th century. This is tentative evidence that the cellar was constructed shortly after the turn of the 19th century, and the structure likely rebuilt shortly after William McLeod acquired the property.

General comparison of the assemblages from the testing in the western yard and around the dairy suggest the two assemblages are similar in many ways, and generally describe the range of occupation of McLeod. Artifact profiles for the two test projects are shown below. Generally, the dairy excavations revealed a larger concentration of architectural materials, typical of excavation of or near a building of long duration. The allee testing, conversely, did not include any building footprint. Both an absence of architectural features and a low level of architectural artifacts support this interpretation.

Beyond the disparity in architectural materials, the two assemblages were remarkably similar in both age and content, suggesting they are but parts of a broad assemblage associated with the general occupation of the plantation house complex. The two assemblages, singly and together, generally conform to the artifact proportions of the Carolina Artifact Pattern (South 1977), which describes the range of daily life on British colonial sites.

Table 8
Artifact Profiles

	Allee	Dairy	Carolina Pattern
Kitchen	66.8%	41.5%	60.3%
Architecture	26.5%	55.0%	23.9%
Arms	.2%	.4%	.5%
Clothing	.7%	.75%	3.0%
Personal	.08%	.13%	.2%
Furniture	.2%	.2%	.2%
Tobacco	4.12%	.78%	5.8%
Activities	1.25%	1.07%	1.7%

Though the stratigraphy did not permit isolation of temporal components associated with individual property owners through time, it is still possible to tease temporal information from the assemblage, through the proportions of datable artifacts. Materials, individually and in groups, from the mid-19th century are quite different from those of the previous century, even in fragmentary form. Datable ceramics from both assemblage were grouped as colonial (pre-1770), antebellum (roughly 1770-1830), and 19th century (styles dating after 1830 or after 1850). Both assemblages are dominated by

19th century materials, though they are more common around the dairy (55% of the dairy ceramics, 32% of the yard ceramics). Colonial materials are a minority, but still a significant portion of the artifacts. They are one fourth (24%) of the yard ceramics and 15% of those from the dairy. Both assemblages contain a significant proportion of creamware and pearlware, together manufactured between 1770 and roughly 1850. These wares are 30% of the dairy ceramics, and 37% of those from the yard.

Table 9
Proportion of Ceramics by Temporal Association

% of total ceramics	Allee	Dairy
Whiteware	26.5	45.8
19th Century wares	31.8	55.4
Creamware/pearlware	37.3	29.0
18th Century wares	23.9	15.0
Colono ware	5.6	.4

These data suggest continuous occupation of the McLeod landscape in the area of the standing structures, at least from the mid-18th century through the present. None of the buildings from the earlier periods remain, though additional study may reveal foundations or other features, similar to the cellar at the dairy. It is possible that the foundations and footprints of many other buildings may be located beneath or between the present buildings.

One informal measure of occupation used in previous studies is artifact density. The use of areas for the affairs of daily life, including refuse disposal, has been measured on Charleston sites by figuring the amount of cultural material present in the soil. To standardize this study, the number of artifacts is calculated against the cubic footage of soil excavated, measured by the depth of the soil deposit and the dimensions of the excavation unit. This system has been used for urban townhouse sites in Charleston, as well as some contemporary rural sites. Studies at two urban sites have focused on comparison of work yard and formal garden areas, with dense artifact assemblages expected in the work yards. The concept of artifact density has also been used in urban settings to measure the shift from primary refuse disposal, common in the 18th and early 19th centuries, to off-site disposal, when the wholesale discard of the refuse of daily life was replaced with municipal trash disposal (Zierden 2001a; 2001b; 1996; Zierden and Anthony 2006; Zierden and Reitz 2005; 2007)

Artifact density for the dairy area and the allee testing area are shown in comparison with contemporary site assemblages, both urban and rural in the table below. It is important to note that, due to space limitations, urban archaeological sites are usually much more dense than contemporary rural sites.

Table 10
Comparative Artifact Density

Site	Artifacts/ft..3
General assemblage, 19th century:	
14 Legare St.	11.8
Nathaniel Russell House	16.7
Miles Brewton House	24.8
Colonial assemblages:	
Heyward-Washington house	37.0
Beef Market	60.4
Plantation assemblages:	
Drayton Hall, work yard	23.0
McLeod Dairy	67.0
McLeod Allee	19.0

The figures suggest that both areas tested contain artifact assemblages consistent with other lowcountry habitation sites that sustained continuous occupation and use. Compared to both rural and urban sites available, the dairy assemblage is particularly dense, and suggests intensive occupation and primary refuse disposal. The Allee assemblage compares favorably with that portion of Drayton Hall containing a series of service buildings of unknown use (Zierden and Anthony 2006). Unlike McLeod, none of the buildings are standing in this locus of Drayton Hall, and it is unknown if any of these were connected with food preparation and service (the usual source of archaeological refuse). Though somewhat more dispersed, the Allee area contains archaeological refuse of sufficient density for further research.

One goal of the present testing was to refine the possible locations of the earliest occupations (Hartley 1984). Ceramics manufactured during the 17th century have been recovered at McLeod, but not in concentration or in isolation sufficient to define an early settlement. Only a few early ceramics, such as North Devon Gravel Tempered Ware, delft, and others, were recovered from the yard testing, and none were found around the dairy. Location of any 17th or very early 18th century buildings remains elusive.

Notably absent from the assemblage in general, and the materials from the dairy in particular, was colono ware, pottery most likely made and used by African Americans and found in quantity on lowcountry plantations. Colono ware was in use through the 18th century, and often dominates the ceramic assemblage of slave-occupied plantation sites. Colono wares peak in the mid-18th century, and decline in popularity after the turn

of the 19th century (Anthony 2005; Joseph 2002). In Charleston, colono wares are less common, but average 5% of ceramics for the late 18th century. Colono wares were 5% of the ceramics in the allee testing, but only .4% of those from the dairy. Colono wares may be more common at the McLeod cabins. Though the sample is very small (five shovel tests), the assemblage includes 19% colono ware. These proportions are in contrast to the contemporary Stono plantation on the western side of James Island. Clearly, this issue warrants further consideration in any future research (Anthony 2005; Zierden 1996; 2003; 2001b; Zierden and Anthony 2003; 2006; Zierden et al. 1999).

Table 11
Colono ware on Lowcountry sites
(% of total ceramics)

Site name	association	date range	Colono ware, % ceramics
Drayton Hall	privy	19th cent.	13%
Drayton Hall	work yard	18th cent.	63%
Willtown Parsonage	kitchen	late 18th cent.	57%
Stobo plantation	house	late 18th cent.	15%
Stono plantation	slave cabin	l8th-19th cent.	47%
Sono plantation	main house	18th-19th cent.	20%
Aiken-Rhett house	work yard	19th cent.	2%
N. Russell house	work yard	mid-19th cent.	1.6%
N. Russell house	work yard	early 19th cent.	5.6%
M. Brewton house	work yard	18th cent.	18%
M. Brewton house	work yard	early 19th cent.	8.2%
M. Brewton house	work yard	19th cent.	2.5%
McLeod allee	gen. Yard	18-19th cent.	5.0%
McLeod Dairy	outbuilding	19th cent.	.4%
McLeod cabins	slave cabin	19th cent	19.0%

The present project was limited in scope, but still has advanced our knowledge of the history of McLeod plantation. The consistent presence of colonial and antebellum materials extends the range of occupation and use beyond the late antebellum landscape embodied by the extant architecture. Moreover, testing suggests continuous occupation of the area of current habitation. Horizontal variation was evident between the dispersed test areas, and this can be refined with further work. The project successfully demonstrated the antebellum origin of the dairy, and suggests the building contains intact elements from previous structures. Interdisciplinary study of the landscape, buildings, documents, and archaeological record at McLeod Plantation will continue to expand our understanding of the unique role of the site and of James Island to development of the lowcountry.

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