MANAGEMENT SUMMARY OF ARCHAEOLOGICAL DATA RECOVERY AT 38CH1541, WITH ADDITIONAL INVESTIGATIONS OF A POSSIBLE BURIAL, MULLET HALL, JOHNS ISLAND, CHARLESTON COUNTY, SOUTH CAROLINA

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Introduction

Previous Archaeological Investigations

Initial investigations, consisting of a reconnaissance level investigation, were conducted in 1994 (Adams and Trinkley 1994). A series of 29 shovel tests were excavated, helping to define a site thought to measure about 600 feet east-west by 300 feet north-south. Artifacts collected during the reconnaissance dated from the eighteenth to early twentieth century (Adams and Trinkley 1994:30). The archaeological site was correlated with a main plantation settlement identified on nineteenth century maps of the plantation and was recommended as potentially significant (Adams and Trinkley 1994:34).

During the subsequent intensive survey, 225 shovel tests were conducted at 50-foot intervals, with 109 containing cultural remains, including both prehistoric and historic materials. All of the artifacts were found in the plowzone. Prehistoric remains were a minority, accounting for about 3% of the assemblage including 21 small sherds (i.e., under 1-inch in diameter), three chert flakes, and one possible core. None of the artifacts were diagnostic, although the pottery is indicative a Woodland or Mississippian occupation.

The historic assemblage contained seven different data sets – Kitchen (84.5%), Architecture (8.6%), Furniture (0.3%), Tobacco (6.0%), Clothing (.3%), Personal (.1%), and Activities (.1%) groups. This pattern closely resembled the Carolina Slave Artifact Pattern, typically associated with eighteenth century slave settlements where the structures are ground fast (i.e., of wall trench construction). This seems to be a curious pattern for what is known to have been a main plantation residence with a variety of probable structures, including a main house, several flankers, and other buildings. This is clearly an anomaly that is worthy of further research.

Chicora recommended as eligible for inclusion on the National Register of Historic Places and the State Historic Preservation Office concurred with this opinion.

A management summary for this site has been previously prepared and submitted (Trinkley 2017), but as will be detailed in following sections, additional work was undertaken and this document provides a compilation of the original report and the additional investigations.

Brief Historical Synthesis

Mullet Hall did not produce an abundance of early historic documentation. Further complicating explanations, the original study tract was historically made up of four plantations: Mullet Hall, “Home Place,” Rosebank, and The Oaks. Site 38CH1543, however, was situated on Mullet Hall.

We believe that the 600± acre tract was acquired by Anthony Mathews (also Mathewes, Matthews), possibly in 1727 from Richard Floyd (DB 0, pg. 72, Dower Bk A53, pg. 18, Charleston County RMC; Jordan and Stringfellow 1998:58). Relatively little is known of his life, although his obituary reported that he was born in London and arrived in Carolina in 1680. He was described as “an eminent Merchant & Settler” who “acquired one of the greatest Estates in the Country” (South Carolina Gazette, September 6, 1735).

His will revealed his considerable wealth, including his residence “on the Bay of Charlestown,” as well as four tenements on Tradd
INTRODUCTION

Street, a lot on Church Street, and 780 acres at “Winyau.” His “plantation or tract of six hundred acres of land or thereabouts situated on John’s Island” was devised to his son Anthony (1697-1756).

While the plantation remained in the Mathews family, its ownership becomes less clear. In late 1769, there is an advertisement that “household furniture, a good boat, with sails, about thirty head of black cattle, some horses, mares, &c. &c.” were to be sold on the “plantation of the late Mr. Anthony Mathews, deceased, on Johns Island” (South Carolina Gazette, September 26, 1769). This suggests that the plantation passed from Anthony Mathews (1667-1735) to his son Anthony (1697-1756) and then to his son Anthony (1722-1768). From there it appears to pass laterally to Anthony’s cousin, Benjamin Mathews (-1801).

Benjamin was the son of Benjamin (1723-1754) and Ann Holmes. He married first Sarah, who died in 1723 and subsequently Mary, who died in 1769. It was this Benjamin and Mary Mathews who sold the property in 1791.

Prior to this, however, Benjamin advertised the sale of a 1,000 bushels of rough rice in 1771 (South Carolina Gazette, December 17, 1771) documenting that rice was being grown in rather large quantities. Jordan and Stringfellow (1998:236-237) identify Captain Benjamin Mathews in the project area on an unspecified Revolutionary War era map. Benjamin is found on Johns Island in 1780 when he appears on the Grand Jury and Petit Jury lists (Jury Lists, Acts 1078, pg. 1, 3, SC Department of Archives and History). In 1790, he appears in the first Federal Census with three males under 16 years, one male over 16, two white females, and 93 African American slaves.

By 1791, Benjamin appears to have hit hard times. A newspaper advertisement reveals that 26 enslaved African Americans had been seized in execution of a judgement against him and were being sold. The sale, however, was made difficult since the slaves were to be delivered to his wife should he predecease her (which he did) (State Gazette, July 28, 1791, pg. 4).

The conveyance of the parcel is clouded by conflicting evidence. A deed reveals that Benjamin Mathews and Mary his wife sold the property to Thomas Mullet in 1791 (Charleston County RMC DB D7, pg. 49; recorded December 1800). Nevertheless, there is an advertisement in early1791 indicating that the plantation was being sold at auction,

To be Sold at Public Auction, Before our office on Tuesday the 14th of February next, at 12 o’clock in the forenoon. That Valuable Plantation on John’s Island, containing 648 acres, late the property of Benjamin Mathews, Esq. On the premises are a good dwelling house, and all necessary plantation buildings. Conditions – one half of the purchase money cash, the remainder on 1st January 1793, giving bond and approved security. William Holmes & Co. (City Gazette, February 10, 1792, pg. 1).

Yet additional questions are raised by the notice of Benjamin’s death “at his plantation on John’s Island” (City Gazette, February 21, 1801, pg. 3). Additional research will be necessary to help resolve these differences, although the most convenience explanation is that Benjamin held several tracts.

In any event, the next documented owner is Thomas Mullet, born about 1745 in Devon, England. He began his mercantile career as a paper-maker and stationer in Bristol, England. He was apparently in England during the Revolution, but is reported to have supported the American cause. In 1783, he visited the United States, including New York and Charleston. Mullet was a business partner with Henry Cruger, first through the firm of Henry Cruger & Co. (dissolved in 1785) and later through the firm Cruger, Lediard & Mullet.
Figure 1. Undated plat of Thomas Mullet’s Johns Island property conveyed to James Legare (McCray Plat 4608) at the top; below is a modern topographic map (Wadmalaw Island, Legareville, Rockville, and Kiawah Island) showing the Mullet Hall property in blue. Sites are shown in red.
of London (dissolved in 1788). In South Carolina, Cruger, Lediard, and Mullet were involved in court actions against Anne and Moses Glover (1789-1798) and John Maitland (1789), likely the result of commercial dealings (Charleston District Judgement Rolls, 1791, item 613A; 1794, item 104A; 1798, item 412A; Court of Common Pleas, Judgement Rolls, 1789, Box 146A, item 372A; Box 149A, item 655A, SC Department of Archives and History).

By 1789, Mullet was listed as a merchant in New York, but by 1791, he left New York for Bristol (New York Daily Gazette, July 4, 1791, pg. 2) and formed an association with Joseph Jeffries Evans, his nephew by marriage to his daughter Mary Anne.

In March 1793, Thomas Mullet of the City of London, merchant, had given his power of attorney to Thomas Morris, Joshua Ward, and John Ward, Esquires, of Charleston, authorizing them to sell his property on Johns Island and in 1794 the plantation was sold to James Legare. The deed (Charleston County RMC DB D7, pg. 49; recorded December 1800) described a parcel that had been conveyed to Mullet by Benjamin Mathews and Mary his wife in 1791, and was bounded west on Paul Fripp and on George Rivers, south on James Witter, and east on Micah Jenkins. Paul Fripp’s tract became Rosebank; the Witter tract was later acquired by Solomon Legare as part of his "Home Place"; and the Micah Jenkins tract became known as The Oaks.

In 1802, Mullet and Evans were known as Thomas Mullet & Co. in London and operated a major mercantile business. Mullet died in 1814, leaving his son, Frederick, as the junior and sole surviving partner of the firm. At the time the company was described as "the most extensive and valuable American business (particularly with New-York) at that time enjoyed by any commercial house in London" (Newbern [North Carolina] Sentinel, August 24, 1822, pg. 1). In spite of the fortune, the business went into receivership in 1815 as the result of his son’s reckless investments.

Thus, although his name is attached to the parcel, Mullet held the property for only four years, likely as an absentee owner looking to make speculative profits off the tract.

When James Legare wrote his will in June 1828, he bequeathed Mullet Hall to two of his children. At his death in 1830, James C. W. Legare (1806-1850) inherited the west half of Mullet Hall Plantation, just over 600 acres including his parents’ “Settlement and Mansion House”. Whether he occupied the residence immediately is not certain, but after his 1833 marriage to his cousin Lydia Ball Bryan (1816-1868), they settled at Mullet Hall.

James C. W. Legare planted Mullet Hall until his death in late 1850. The appraisal of his personal estate made in January 1851 details a large operation: 126 slaves, 22 gins, five plows, 11 oxen, and two mules. There was evidently no ginned cotton on the premises, but foodstuffs and feed included fodder, peas, corn, rice, seed potatoes, and cow potatoes. The inventory of household goods indicates a residence of four bedchambers, equipped for year-around occupancy. Although we have no plats for this tract, we believe that Legare continued to occupy the settlement shown on the Mullet plat (identified archaeologically as 38CH1541). In 1860, his wife, Lydia B. Legare, held 110 slaves on Johns Island, all of them on Mullet Hall.

Lydia Legare died in 1868 and her youngest son, Francis Y. Legare (1850-1905), took over Mullet Hall, managing the plantation and his father’s estate.

By 1880, F. Y. Legare owned one farm (Mullet Hall) and rented additional acreage – either on “Home Place” (the east half of the original Mullet Hall), or Rosebank. His own land, 596 acres, was worth $5,000, comprising 155 acres improved, 160 pasture, 120 woods and forest, and 161 acres of fallow or “old field” land. There were implements and equipment worth about $1,000, and he had spent $1,300 on buildings and repairs. The land he rented was 135 acres: 35 acres improved, 50 in
Figure 2. Coast Survey Chart T-491 prepared in 1854 at the top. Below is a tracing of T-491 prepared in 1863. The main settlement at 38CH1541 is highlighted in yellow.
Figure 3. 1929 unrecorded plat of Mullet Hall at top. Below is a 1939 aerial photo. The main settlement at 38CH1541 is no longer present, but the general area is highlighted in yellow.
woods and forest, and 50 acres fallow, worth altogether $1,800. Production on the two tracts was dissimilar. He had spent only $20 to fertilize the rented tract, but $200 on his own land, where he paid $195 in laborers’ (all African-Americans) wages for fifty weeks. The rented land produced crops worth $700: 100 bushels of corn on 15 acres, seven bales cotton on 15 acres, 70-bushels sweet potatoes on 10 acres. At his own Mullet Hall, he made $4,500 in crops: 200-bushels corn on 30 acres, 150-bushels oats on three acres, 42-bales cotton on 64 acres, and 200-bushels sweet potatoes on 10 acres. Legare held little livestock: four horses, two mules, 18 cows, and eight chickens.

The state business directory for 1905 shows Francis Y. Legare with a general store and gristmill near the Mullet Hall post office. The Legares traditionally relied on the Charleston firm of Dill, Ball Company for credit and cash advances. Upon the death of Francis Y. Legare in New York, “where he had temporarily gone for his health for a few weeks,” his widow Kate turned to the Dill, Ball Company. This company became inexorably intertwined with Mullet Hall. When Francis Yonge Legare (1890-1955) reached adulthood in 1911, the Estate of Francis Y. Legare, Sr., was closed.

Nevertheless, debts mounted and in July 1923, Mullet Hall was sold at public auction to the Dill, Ball Company for $10,000.

The main settlement is shown in the 1854 and 1863 plats (Figure 2), but have disappeared by 1929. Since the Julian S. Limehouse structure was not constructed until ca. 1940 (and is not shown on the 1929 plat of the plantation), it is certain that Legare was living elsewhere by at least the second decade of the twentieth century. The archaeological research will likely be essential in helping to date the abandonment of the Legare settlement.

Memorandum of Agreement

A Memorandum of Agreement (MOA) was approved by the State Historic Preservation Office (signed August 17, 2015), the Corps of Engineers (signed September 3, 2015), and Kiawah River Plantation Holdings (signed August 6, 2015) in partial fulfillment of Permit Number SAC-2008-01605-2IG.

A Data Recovery Plan for 38CH1541 was prepared by Chicora Foundation and was submitted to the signatory parties on October 3, 2016. The plan was approved by the State Historic Preservation Office on December 13, 2016 and the Corps by the end of December.
Project Goals and Objectives

Research Questions

Site 38CH1541 was determined eligible for its historic data; the prehistoric remains appeared inconsequential, consisting of only small sherds, a few flakes, and a core, that were not diagnostic. Consequently, they were not considered contributing resources.

A fundamental research question involved a better understanding of Johns Island historic settlement. In spite of exceptional development, there is a dearth of detailed archaeological investigations for the immediate area. Using the resources of the SC Institute of Archaeology and Anthropology and the South Caroliniana Library, we found only one investigated site on Wadmalaw Island (38CH1422), and no sites on Seabrook Island. On Johns Island there has been only minor research at Fenwick Hall (38CH84), and limited data recovery at 38CH2048 and 38CH1244. The Charleston Museum has conducted the bulk of the work on James Island at 38CH857, 38CH851, 38CH465, and 38CH464. Some investigation has also been conducted at the McLeod Plantation (38CH679-3), as well as work at 38CH2105 and 38CH1511. On the mainland, we could find investigations at only Dixie Plantation, Bolton (38CH2017) and Wappoo (38CH1199/1200). Kiawah has received extensive investigations by Chicora at the Vanderhorst settlement (38CH127), Shoolbred “New Settlement” (38CH129), Stanyarn Plantation (38CH122), and Shoolbred’s “Old Settlement” (38CH123).

A careful review of these studies reveals that we are far from the point of redundancy at plantation settlements in the area. A tremendous amount of variability exists. We have previously noted that even at 38CH1541 we have found a pattern that does not immediately make sense given what we know about the site (more closely resembling a slave settlement than a main plantation). Another research question involved the occupational time span. While the ceramics suggested a colonial to postbellum occupation, we failed to identify the actual abandonment of the Mullet Hall complex, so we have little information regarding the plantation or its occupants during and immediately after the Civil War.

Moreover, we view the investigations at 38CH1541 and 38CH1542 as only the initial phase of research since the Mullet Hall property consists of four distinct plantations found in close proximity to one another.

Looking at previous archaeological work, we have identified five primary research concerns at 38CH1541: architecture, landscape, dietary studies, artifacts and status, and refuse disposal.

In terms of architectural investigations, 13 of the 28 structures we identified in background work consist of slave structures. Area slave houses have dimensions ranging from about 64 to 345 square feet. Only five possible kitchens have been encountered. Eight main houses have been documented at some level. We hope to be able to identify structures through artifact concentrations and open sufficient ground to obtain additional architectural data.

Relatively few of the previous projects in the region have been able to examine the plantation landscape. Often only a small portion of the plantation has been available for investigation, precluding any study of plantation organization or layout. The best efforts include the work by The Charleston Museum at their Dill Sanctuary sites and by Chicora on Kiawah Island. However, the sample is so small that it precludes any meaningful
commentary, except to note that by studying plantation arrangement it is possible to approximate the owner’s worldview. For example, at Vanderhorst Plantation, the main house is oriented toward the water, with shell paths that, even without formal gardens, created a social space.

We are fortunate that at 38CH1541 we have a relatively detailed plan of the settlement. By exploring as many of the structure areas as possible, we hope that the artifacts may guide us to the function of the individual buildings. We also recognize that the two available plats are essentially frozen in time, failing to provide much assistance in understanding earlier colonial settlement that is hinted not only by the Thomas Mullet plat, but also by the artifacts themselves. We hope that it may be possible to explore how the plantation changed from the colonial to the antebellum.

Dietary studies is another significant research concern. While faunal and, generally, floral studies are common components of data recovery reports, pollen and phytolith studies are not the norm.

Artifacts and status is another research area. Beaman (2001) has developed the Carolina Elite Pattern, a rural compliment to Zierden’s urban Townhouse Pattern observed in Charleston, South Carolina (Grimes and Zierden 1988). This may provide assistance in distinguishing between the planters on the several islands.

Does the abundant colono pottery at the site suggest African American slaves were present in the main settlement area; or alternatively are these wares specifically intended for the planter’s table? If an enslaved population is present, can it be recognized, isolated, and further examined?

We also notice that often a single slave or European structure is examined and this does not allow intrasite comparisons. Samples may not need to be especially large, but it seems useful to obtain samples from multiple houses. Comparison of ceramics, personal items, clothing, and other artifacts may help establish differences between individuals residing in these structures, as well as their status in the plantation community.

It seems unreasonable to continue to explore colono typology, given the excellent studies currently available. This does not preclude, however, the need to compare collections to the available typologies to ascertain the extent of variation. What is also reasonable, we believe, is to examine where the colono occurs, in what frequency, and in what shapes and forms.

Planned Analyses and Curation

All of the collections from 38CH1541 have been transferred to Columbia. All of these have been washed and rough sorted. Analysis has not yet begun on the collections.

The artifacts from 38CH1541 account for approximately 25 cubic feet. They are being processed according to the requirements of the South Carolina Institute of Archaeology and Anthropology and are curated with that institution. Conservation of selected objects will be performed by Ms. Kate Singley with Conservation Anthropologica in Decatur, Georgia.

All original and duplicate records will be provided to the curatorial facility on pH neutral, alkaline-buffered paper. Photographic materials will be provided as tiff images on archival gold DVDs meeting the preservation standards of the National Register of Historic Places.

Analysis of the collections will follow professionally accepted standards with a level of intensity suitable to the quantity and quality of the remains. The temporal, cultural, and typological classifications of the historic remains will follow such authors as Cushion (1976), Godden (1964, 1985), Miller (1980, 1991a, 1991b, 1991c), Noël Hume (1978), Norman-Wilcox (1965), Peirce (1988), Price (1970), South (1977), and Walton (1976). Glass artifacts will be identified using sources such as Jones (1986), Jones and Sullivan (1985), McKearin and McKearin (1972), McNally
Additional resources, for example for porcelains and Colono wares, will be used as necessary.

The analysis system will use South's (1977) functional groups as an effort to subdivide historic assemblages into groups that could reflect behavioral categories. The functional categories of Kitchen, Architecture, Furniture, Personal, Clothing, Arms, Tobacco, and Activities provide not only the range necessary for describing and characterizing most collections, but also allow typically consistent comparison with other collections.

Another important analytical technique we anticipate using in this study is the minimum vessel count. It is, of course, a prerequisite to the application of Miller's cost indices. The applicability of this approach, however, will depend on the materials found and their context. Although no cross mend analyses will be conducted on the glass artifacts, these materials will be similarly examined to define minimum number of vessel counts, with the number of vessel bases in a given assemblage being used to define the MNV.

Two methods will be used to determine the occupation span. The first method is South's (1977) bracketing technique. Since South's method only uses ceramic types to determine approximate period of occupation, Salwen and Bridges (1977) argue that ceramic types that have high counts are poorly represented in the ceramic assemblage. Because of this valid complaint, a second method to be used is a ceramic probability contribution chart (Bartovics 1981).

Faunal remains will be collected and submitted to Dr. Homes Hogue (Department of Anthropology, Ball State University, Muncie, Indiana) for analysis. The ethnobotanical remains collected through flotation will be examined in-house. Four samples have been submitted to Paleo Research Laboratory in Golden, Colorado for pollen and phytolith analyses.

Mortar samples have been submitted to U.S. Heritage in Chicago, Illinois for analyses. No intact bricks have thus far been identified at 38CH1541, but should they be found during analysis they will be further examined by the National Brick Research Center at Clemson University. A series of soil samples have already been submitted to Waypoint Analytic for further chemical study.
Field Methods

Site Grid

The client’s surveyors, Thomas and Hutton, established a skeleton site grid at 50-foot intervals for horizontal control. We used a modified Chicago grid system. Such a system assumes an off-site 0R0 point and the southeast corner of each unit designates the feet north and right (or east) of this arbitrary 0R0 point. Hence, the southeast corner of unit 10R50 would be 10 feet north and 50 feet right, or east, of the 0R0 point.

The surveyors’ grid is tied into the South Carolina State Plane Coordinate system so it can be easily reconstructed and so excavations at different sites could be correlated, if necessary. Thus, our point 800R280 is also N292,150 E2,267,950.

Vertical control at the site uses one of several data established by Thomas and Hutton. These are in feet tied into the North American Vertical Datum of 1988 (NAVD 88). All elevations were taken in relation to these points, allowing widely separated areas of the site to be precisely compared (as well as comparing one site to another).

Using the 50-foot interval, we further gridded the site into 20-foot blocks for the first phase of investigation at the site.

Further Testing

Our initial investigations at 38CH1541 used shovel testing; no unit excavations were conducted because surface visibility was high (although tomatoes, squash, and zucchini were planted in the fields). Shovel tests were excavated by natural strata (although not all shovel tests penetrated the B-horizon because of depth), but we identified no stratigraphy not associated with plowing.

Although the site was shovel tested at 50-foot intervals during the previous survey, during the intervening years it became impossible to reconstruct the original grid. This made it difficult, if not impossible, to cost-effectively conduct block excavations.

As a result, we determined the best approach would be to further explore the site area, not only ensuring that we incorporated the entire site, especially to the north and south, but also that we used a method that obtained the best information possible to guide block excavations.

For the next phase of investigations, we chose to conduct auger testing to determine the close interval spatial distribution of key artifacts in order to indicate possible structural locations. We have decades of experience using this technique with numerous reports demonstrating that it can successfully indicate structural or occupational areas. In addition to Chicora’s work, the same technique has been used by the National Park Service, with its outstanding record of archaeological protection and investigation.

In 1999 at Magnolia Plantation, archaeologist Dr. Bennie Keel excavated 1,206 auger tests over the 18-acre plantation and was able to ascertain a variety of structures. Keel commented, “the comprehensive auger testing program provides an understanding of the distribution of archaeological remains at the park.” He goes on to specify the use of 25-foot intervals, based not only on this project, but also on his work at the Charles Pinckney site in Charleston County (Keel 1999).
In 2000, National Park Service Archaeologists Christina E. Miller and Susan E. Wood again used auger testing, this time at the 42-acre Oakland Plantation. A total of 1,660 auger tests were excavated. A significant conclusion in their report was that, “the auger testing program has proved to be an efficient and comprehensive method for recovering archaeological baseline data.”

In both cases auger testing did precisely what the researchers wanted it to do – predict structure locations for additional research. Moreover, it achieves this goal in a timely and cost-effective manner. Auger testing is consistent in size (we used a 1-foot diameter bit) and depth – far more so than shovel testing which is affected by crew experience and stamina.

An interval of 20 feet was used based on Chicora’s own work at various plantation sites, as well as the work by NPS. A total of 727 auger tests were opened, with all screened through ¼-inch mesh. The tests yielded 3,132 historic artifacts. Materials were transferred to Chicora’s Columbia lab where they were cleaned and analyzed, allowing the data to be incorporated into a Surfer map using a Kriging gridding method. This method produces visually appealing maps from irregularly spaced data. Kriging attempts to express trends suggested in your data, so that, for example, high points might be connected along a ridge rather than isolated by bull’s-eye type contours. In particular, kriging gives the best linear unbiased prediction of intermediate values. A different algorithm, known as natural neighbor, does not generate data in areas where no data exists; however, in this particular case it does not appreciable change data concentrations within the site area.

The resulting map of historic artifact density is shown in Figure 4. It is of particular interest since it appears to show a variety of posited structure areas in the three middle fields, but helps confirm that the site does not extend either northwest or southeast.

We identified perhaps as many as 11 different concentrations, all roughly oriented southwest-northeast, identical to the structures shown in the late antebellum plans (see Figure 2). Not all of the structures are equally visible and there are more concentrations than illustrated structures, but these factors seem reasonable for a plantation spanning the colonial and antebellum periods. Just as at 38CH1542 (Trinkley 2017), although the association is not perfect, it did provide ample evidence to permit excavations focusing on structural locations.

We should note that the dense concentration at 380R580 is the result of a single auger tests that produced a large amount of animal bone. Subtracting that data the loci, while still present, is not as pronounced.

We also plotted architectural artifacts alone (consisting of window glass and nails) and temporally sensitive colono pottery. These two maps are shown in Figure 5. The architecture plot reveals tremendous overlap with other historic artifacts, suggesting that refuse was discarded around the structures. The colono plot reveals that the majority of these remains are found in the northern field, with only a limited presence in the middle field. To the south, virtually no colono pottery was found with other historic artifacts. This suggests that the historic core of the settlement was in the north, shown in Figure 2 as the likely location of the main house.

A map of the faunal remains was also created, but it is of limited use since it reveals only a single concentration, at 380R580. Elsewhere on the property faunal remains are very sparse, suggesting that bone refuse may have been deposited elsewhere, perhaps in the immediately adjacent marsh.

**Excavations**

The minimal excavation unit was a 5 by 5 foot unit, although typically 10 by 10 foot units were used for horizontal control. Chicora has adopted engineering measurements (feet and tenths of feet) for consistency in its work, especially
Figure 4. Historic artifact density at 38CH1541.
Figure 5. Architectural (top) and colon (bottom) density at 38CH1541.
Figure 6. Auger testing. Upper photo shows the use of an auger. The lower photo shows screening individual tests.
Figure 7. Excavation at 38CH1541. Upper photo shows excavation using mechanical screen. The lower photo shows troweling at the base of the plowzone in a unit with buildup of plowed soil.
The data recovery plan specified that 1,800 square feet would be manually excavated, with all fill screened through ¼-inch mesh. We were able to excavate 4,800 square feet – more than doubling the original estimate.

The excavations comprise 13 “blocks,” with each ranging from as little as 50 square feet (a single 5x10 unit) to as much as 1,100 square feet (a series of nine 10x10 units and four 5x10 units). The southern field included five block comprising 1,250 square feet; the middle field included four blocks with 1,350 square feet; and the northern field included four block excavations with a total of 2,200 square feet (Figure 8).

The excavations were by natural soil zones, although we found that all of the site was extensively plowed, resulting in a plowzone overlying a sterile subsoil. There were plow scars and plow ridges, although generally these were partially removed with the upper plowzone level. Flat shoveling was often necessary to better reveal features, given the density of plowing. The plowzone was a brown (10YR5/3 to 10YR4/3) sand. The subsoil was typically a brownish yellow (10YR6/8 to 10YR6/6) sand.

There were three areas (Blocks A, F, and J) at the field edge where plowing had built up the plowzone (sometimes recognizable as two semi-distinct zones) to depths of 1.5 to 2.5 feet. Although this greatly increased the time necessary for excavation, the depth did help preserve features in these areas.

Excavation was by hand with all fill dry-screened through ¼-inch mesh using both mechanical and hand sifters.

A one-quart soil sample was collected from each provenience for soil chemistry needs. We also collected pollen and phytolith samples from identifiable structures or discrete midden areas.

Munsell soil color notations were made during the course of excavations, typically on moist soils freshly exposed. All materials except brick, mortar, and shell were retained by provenience. The brick, mortar, and shell from the screens were collected, weighed, and discarded in the field. These brick and mortar weights provide information on total brick weight and assist in evaluating construction details. It can also be used as an indicator of salvage or possible reuse of brick. The shell weights may provide clues on the utilization of shellfish as a dietary resource.

Each unit was troweled at the top of subsoil and digitally photographed. Units were drawn at a scale of 1-inch to 2-feet. Profiles were drawn at an exaggerated vertical scale of 1-inch to 1-foot, with a horizontal scale of 1-inch to 2-feet.

Features encountered during the excavations were plotted and photographed. Features were designated by consecutive numbers (beginning with Feature 1). Features, or samples of redundant features, were bisected to provide profiles. All feature fill was screened through ¼-inch mesh, with samples, typically about 5 gallons in volume, also screened through ⅛-inch mesh. Samples retained minimally included a soil sample and flotation samples.

Post holes were consecutively numbered by unit, Chicora’s typical method.

As a result of these excavations, a total of 2,461 person hours were spent in the field and, as discussed, a total of 4,800 square feet of primary excavation were opened and 4,615.6 ft³ of soil and rubble were moved. The investigations produced 417 pounds of shell and 2,108 pounds of brick and mortar rubble. The density of both brick and shell was not uniform across the site and further analyses may provide important architectural and use clues.

The field crew consisted of Andrew Hyder, Kyndra Beatty, Lincoln Caldwell, Rachael Hutchison, Katrina Newburn, and Marly Richison.
Figure 8. Excavations at 38CH1541 (the fields’ agricultural ditch network is shown in blue).
Laboratory processing is being conducted by Debi Hacker. The principal investigator and field director, Michael Trinkley, was on-site throughout the project.
Summary of Results

Auger Testing

As illustrated in the previous discussions, the auger testing, coupled with the Surfer mapping, was successful in identifying core areas, probable structure locations, and directing additional block excavation.

The auger testing incorporated an area in excess of the actual archaeological site, with the fields to the north and south producing only very sparse remains and no clear concentrations. In addition, auger tests to the west extended slightly outside the posited site boundaries and encountered several concentrations at the edge of the marsh. To the east we found the density of remains gradually declining with the sparse remains likely representing plow drag (since plowing was oriented southwest-northeast). We estimate the site boundaries to be approximately 660 feet northwest-southeast and 440 feet southwest-northeast. This represents an area of approximately 6.8 acres. It is of some considerable significance that these dimensions, based on artifact scatter, very closely approximate the dimensions we calculate based on the late antebellum maps (Figure 2).

The auger testing incorporated almost all of this area, although generally stopping at the edge of high ground and the woods line along the western edge. As previously mentioned, it extended to the northwest and southeast into fields with some scattered remains that we do not consider to be within the site area. We also believe that the auger testing to the east was sufficient to clearly define that boundary, without the need to destroy the farmer’s crops that has already been planted.

It appears that the three major field ditches were already established by 1939, but the intermediate drains were not excavated until sometime between 1948 and 1973.

While it would have been interesting to continue augering up to the edge of the marsh, this would have necessitated extensive additional clearing into the buffer zone established by the Coastal Council. Since, as we understand, no development is possible in this area, that work seemed needless.

As previously mentioned, the auger testing also revealed a strong correlation between architectural items and other remains, such as ceramics and glass. This suggests that the concentrations identified represent structures.

Auger testing also revealed a very low density of prehistoric remains with only 2 small sherds recovered across the site.

Block Excavations

The 4,800 square feet of excavation represent about 1.6% of the total site area. While a relatively low percentage, it is nevertheless more than twice what was originally proposed. The excavations were also concentrated in those areas revealed to represent the densest site through auger testing. Thus, while only a small proportion of the site has been investigated, we believe that we have explored the most productive areas. That said, it is important to acknowledge that some features, such as wells probably associated with the complex, were not identified.

Features

We identified ten features during the
Feature 1 was found at the base of the plowzone in units 370-380R580-590 (centered at 382.2R580). Through excavation, it was discovered to be the articulated remains of a small cow in a rectangular pit. When it was discovered not to represent food remains excavations ceased.

Feature 2 was identified in the southwest corner of 590R750 at the base of the plowzone (centered at 521R692.5). It consisted of a rectangular pit measuring about 2.4 by 1.2 feet and was filled with rubble. Its depth was 0.24 feet. Given the sparse remains and shallow depth, only half of the pit was removed. It appears that brick may have been salvaged from the pier prior to plowing the field.

Feature 3 is thought to represent a trash pit encountered at the base of the plowzone in the south half of 790R310. The pit measured about 3.2 by 2.9 feet and was 1.1 foot in depth. The feature included a relatively large quantity of artifacts, including 62 pounds of shell and 21 pounds of brick. Waterscreening produced a large quantity of food bones and fish scales.

Feature 4 is a portion of a wall trench structure. The trench measures about 16 feet in length and has a maximum width of 1.6 feet. It ranges from 0.37 to 0.45 feet in depth and is found at the base of the very deep plowzone in units 650-660R240. Artifacts are sparse, consistent with this being an early structure at the plantation, prior to deposition of much yard trash.

Feature 5 is a wall trench at the base of the plowzone in 650-660R240 and it bisects Feature 4 at the N660 line. It evidenced five distinct post holes, each about 0.6 foot in diameter. It is 11.5 feet in length and 0.8 foot in width. Its depth varies from 0.51 to 0.58 feet.

Feature 6 is a short segment of wall trench found at the base of the plowzone spanning portions of 640-650R240. It runs parallel to Feature 4 and appears to be the east structure wall. As with Feature 4, no postholes are present and artifacts are very sparse. Only about 6 feet of the trench is preserved and its width is 0.9 foot. Depth ranges from 0.47 to 0.54 feet.

Feature 7 was identified at the base of the plowzone in 720R360, centered at 724R353.5. The feature, a wall trench, was intruded by several plow scars, disappearing for short distances. It is about 10.5 feet in length with a maximum width of 0.5 foot. It runs southeast-northwest and at the north end appears to turn to the northeast. It is only 0.08 to 0.22 foot in depth. A series of remnant postholes were found spaced about every 4 feet.

Feature 8 is a wall trench centered at 765.5R402.6 in unit 760R400. It was found at the...
Figure 10. Features at 38CH1541. Upper photo shows the profile of Feature 3 looking west. Lower photo shows wall trench features 4, 5, and 6 looking north after excavation.
Figure 11. Features. Upper photo shows Feature 9 with the north half excavated. Lower photo shows Feature 10 excavated, looking to the north.
base of the plowzone and runs about northwest-southeast for a distance of about 5.2 feet. The trench is 1 foot in width and between 0.22 and 0.38 foot in width. No postholes are present.

Feature 9 is a pit identified at the base of the plowzone in central portion of 680R490 (center point at 684.6R484.5). It measured 4.8 feet in length although only 1.8 feet of its width was exposed, with the remainder heavily impacted by a series of plowscars. Only the northern half of the feature was excavated and it was found to be about 1.87 feet in depth with sloping sides. Fill was homogeneous with little shell or brick rubble. Artifacts were not dense, but included ceramics, nails, and glass. Its function is uncertain.

Feature 10 was encountered at the base of the deep plowzone in 580R400 and 500R410 (centered at 585.8R398.4). It was rectangular, measuring 6.5 feet in length (oriented southwest-northeast) by 3.5 feet in width. The feature was especially well defined since it had been dug into a very stiff, dense dark gray (12.5Y9/1) clay. The fill was a dark gray (12.5Y4/1) silt. At least three plowscars intruded through the upper portion. The feature evidenced a black (2.5N) loamy silt at its base about 0.1 foot in depth. Artifacts include small quantities of colonial remains, included badly corroded nails and several small fragments of wood. Waterscreening of the black fill produced only very small flakes of bones. We initially interpreted this feature to be a colonial grave. We assumed that remains had completely deteriorated since the pit collected and retained water. The small fragments of wood were thought to represent remains of a coffin and this interpretation is consistent with the location of nails encountered during excavation.

We suggested, given the location, that this represented the burial of an African American slave, although that cannot be proven given the absence of remains. A similar grave was identified by Chicora at another Charleston plantation. Reasonably good preservation of remains in that case allowed the individual to be recognized as African American (Trinkley et al. 2006:19-100).

The State Historic Preservation Office requested that we strip an area around Feature 10 to determine if additional burials might be encountered. This work was conducted by the author and Andrew Hyder on June 15-16, 2017. An area of about 3,750 square feet was opened using a track hoe with a toothless bucket. Stripping extended to the depth of excavations at 580R400 and 500R410 (Figure 12).

**Additional Investigations Around Feature 10**

As the track hoe stripped the upper soil zone from around Feature 10, we discovered that the original Feature was not situated in a natural clay deposit, but rather was situated at the north end of a rectangular clay pad. This pad was eventually discovered to measure about 34 feet north-south by 9 feet east-west. On the interior was the original pit, measuring 6.5 feet by 3.5 feet, as well as a second, similar pit 5.8 feet to the north and measuring the same.

As stripping continued an additional four “pads” were encountered and in all, three exhibited interior features.

We believe these five pad represent individual slave structure floors and the interior pits are what have been called elsewhere root cellars. Table 1 identifies the dimensions of the structures, interior pits, and those pits identified in the yard area.

The dimensions of the house floors are unmistakable as the gray clay stands out dramatically against the yellow subsoil. A sample of one clay floor is being sent for soil chemical analysis to determine if organic matter is noticeably high. The soil texture of one clay floor was determined and is shown in Figure 13. The floor is nearly 60% clay. The nearby Capers soil from the marsh wetlands ranges from 35 to 70% clay, so without further study this seems to be the most likely origin for this material. The depth of the several clay flores sampled range from 0.5 to 1.7 feet in thickness.
Figure 12. Stripping conducted around Feature 10 in 580R400 and 500R410.
Three of the structures (3, 4, and 5) have square postholes identified at the edge of their clay pads; the other structures do not.

The features may represent trash pits or exterior hearths. One (Feature 17) may represent the remains of a chimney associated with Structure 2.

The preservation of these house floors was aided by the build-up of plowzone in this area. Toward the open field (to the east), where the plowzone does not accumulate, the depth of the clay floors is reduced and, in one location at the eastern edge of the investigations, was so thin that the southern quarter was removed during the stripping.

While clay floors are not uncommon in South Carolina, they have been reported by other researchers. For example, Wayne and Dickerson identified several “clay floors,” up to 0.6 foot in depth, at a multi-room structure on Lexington Plantation and at a smaller structure (Wayne and Dickerson 1990:8-17, 9-4). Stine and her colleagues report a “puddled clay floor” at True Blue Plantation in Georgetown County. A clay floor is also possible at Structure 10 on Dataw Island (Poplin and Brooker 1993:342). Clay floors are reported from other states as well. For example, found at Montpelier, they are explained as an inexpensive technique that would form a hard surface that produced little dust (http://www.digitalmontpelier.org/mp_media/slideshows/public_show/10?position=4). This would have been especially useful at Mullet Hall, where the soils are very sand and, when dry, are even difficult to walk in.

Curiously, clay floors are also reported from slave dwellings on Gorée Island, a small island off the coast of Senegal from which many enslaved Africans began their journey to the Americas. Dating from the early to mid-eighteenth century these floors seem to have been used to separate occupations (http://goree.rice.edu/goree.rice.edu/index-5.html?q=taxonomy/term/5).

At South Carolina slave sites, there appear to be many more structures lacking clay floors than found with clay floors, as is the case at Mullet Hall. Nevertheless, the clay floors appear widespread,
Figure 14. Clay floors. Upper photograph shows stripping being conducted. The lower photograph shows Structure 2 looking to the northwest. Structure 1 and Feature 10 are to the left in the photograph.
appearing only in the eighteenth century.

The subfloor pits were perhaps first reported by Kelso (1984) from his excavations at the Kingsmill Plantations in Virginia. There these pits, which he called “root cellars,” appeared at every probable slave site at Kingsmill (Kelso 1984:104).

In synthesizing these Virginia sub-floor pits, Singleton reports they range in size from 2 by 3 feet to 5 by 8 feet and from 2 to 4 feet in depth. They were found both unlined and lined with brick or wood. Researchers, most recently Samford, have suggested these pits were used for a variety of purposes, including food storage, hiding spaces, and even as spiritual spaces (Samford 2007). Singleton provides several period accounts of these storage pits, including one where the overseer complains of slaves pilfering items, than burying them in their cabins (Singleton 1996:151).

Although we haven’t found reports identifying such features at South Carolina plantations (where their presence seems to be an anomaly), Samford (2011) notes that they are present in several northeastern coastal North Carolina slave settlements. Their proximity to Virginia suggests to her the spread of Tidewater Virginia building traditions southward.

Research Topics

We have previously identified several research goals.

One of these goals dealt with architectural remains. The very intensive plowing of this site made it impossible to define architectural features as distinctly as we hoped, except for the vicinity of Feature 10 where we found remnants of five structures (ranging in size from 34 to about 15 feet in length and 6 to nearly 10 feet in width) and seven storage pits. Elsewhere, we found only one pier likely associated with the antebellum plantation, although we found five colonial wall trench segments, with two likely representing one structure measuring about 16 by 10 feet. We found wall trenches both with, and without, interior post holes.

The wall trenches were preserved because they were fortuitously situated in an area of deep plowzone and because their length provided more opportunity for segments not to be entirely lost to plowing. In contrast, the nineteenth century structures were apparently set on shallow brick piers that were entirely plowed out, resulting in areas of brick and mortar scatter.

Although the remains are insufficient to permit any detailed plantation reconstruction, the absence of wall foundations indicates wood frame structures and this is suggestive of a more rustic settlement than the colonial brick structures known historically from Johns Island. This, in concert with the artifacts, may help us establish the status of the Mullet Hall planters.

Also of some interest is the presence of clay floors, storage pits, and wall trench structures at the main plantation settlement. This indicates that enslaved African Americans working in the yards of the main settlement were housed like those laboring in the fields and, at least in terms of housing, were shown no favoritism.

The issue of plantation landscape may be affected by plowing, but we are confident that a majority of the structures can be identified at least through artifact concentrations. The layout seen on the period maps appears to be reasonably accurate and this is useful since it increases our confidence level regarding these Coast Survey maps. It is particularly telling that our measurements from the map are virtually identical to the archaeological footprint, providing further confidence in the accuracy of these survey sheets.

The issue of slave housing is also an important landscape issue since it suggests that the owners were not reluctant for visitors to see primitive slave housing. The recovery of a posited African American burial in the vicinity of the wall trench structures provides another clue regarding early burial rituals of the enslaved on Charleston plantations.
Dietary studies will, frankly, be difficult given the low density of faunal remains present. Of course it will be possible to obtain species lists and some observations regarding biomass and dietary contributions – although we will certainly not have the sample size desired by zooarchaeologists. The condition of the bone at the site – in spite of plowing and its sparsity – is good. This suggests that plowing alone cannot be the reason that faunal remains are sparse. A better explanation is that the marsh was used for refuse disposal. The one feature that produced abundant bone shows extensive use of fish. It will be of interest to determine what species are present and whether they are from the local marshes. Although relatively few features were found, several are worth careful examination of floral, pollen, and phytolith remains.

The final major research goal – examination of artifacts and status is possible given the success in identifying a variety of structures and out opportunity to sample a number of them. The presence of colono pottery concentrated in one area is of considerable interest, especially since it appears distinct from the wall trench structures, suggesting its use not by slaves, but by plantation

Summary

In the area of Feature 10, I recommend that a sample of the storage pits, post holes, and exterior features be investigated. I base this conclusion on the absence of similar pit features in the South Carolina literature and clay floored structures not being commonly reported. Further investigation will help to address the appearance and function of these pit, furthering Samford’s research in Virginia and North Carolina.

Elsewhere, it is my professional opinion that the data recovery plan for 38CH1542 has been fully complied with and no additional investigations are necessary. The site outside the stripped area can be released for development activities.

It is possible that unusual concentrations or types of archaeological remains may be encountered in the area during construction. As always, the developer’s contractors should be advised to report any discoveries of artifact concentrations (such as bottles, ceramics, or projectile points) or brick rubble to the project engineer, who should in turn report the material to the State Historic Preservation Office, or Chicora Foundation (the process of dealing with late discoveries is discussed in 36CFR800.13(b)(3)). No further land altering activities should take place in the vicinity of these discoveries until they have been examined by an archaeologist and, if necessary, have been processed according to 36CFR800.13(b)(3).
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