

Dill Sanctuary Archaeology: The Catherine Parker Site

Archaeological Contributions 48 The Charleston Museum









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Ву

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Archaeological Contributions 48 The Charleston Museum May 2014

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Dedication

This report is dedicated to **Catherine Parker**, Museum Board Member (1990 -1994) and ardent supporter of the Archaeology Department at The Charleston Museum. Her passion for history and archaeology, particularly regarding the Dill Sanctuary, was obvious and infectious. Mrs. Parker's proactive interest in our local heritage was manifest in the successful and productive organization and management of a group of friends tasked with historical research of the Dill Sanctuary, among other activities. It is a pleasure to name Dill Sanctuary site 38CH857 the *Catherine Parker Site* in remembrance of this special lady.



Capt. Ewald's Diary (dated February 21, 1780)

"At dawn the light infantry and the grenadiers, Major Moncrieff in command, crossed near Hamilton's house to James Island and advanced as far as Newtown New Cut and Fort Johnson."

Introduction

Besides owning and managing two historic houses in downtown Charleston, South Carolina, The Charleston Museum owns and operates the Dill Sanctuary (Figure 1). Located on James Island, the Sanctuary has been and is the locus of intensive and extensive cultural and natural investigations which contribute significantly to area education and research. The Dill Sanctuary has been protected by The Charleston Museum as a cultural and wildlife preserve for over a quarter century in accordance with the devise by which it was acquired – which states:



To hold and manage the said property for a Wild Life Refuge and restricted recreational sanctuary, to educate persons interested in the work of the Museum, for field trips, research and other educational purposes (Brumgardt 2008; Anthony 2009). Encompassing about 580 acres, the Sanctuary is bordered by the Stono River on the west, by New Town Cut to the north, and by Riverland Drive on its eastern limit (Figure 1). Adjacent to private property on its southern limit, Dill Sanctuary's southernmost section, referred to as the Airport Tract (former location of the Carolina Skyways Landing Field), is separated from the northern or Stono Tract by a tidal drainage - once the west terminus of James Island Canal (Figures 1 and 2).



The Catherine Parker Site (38CH857), one of at least four colonial period occupations on the sanctuary, is located at the northern boundary of Dill Sanctuary, about 800 feet southwest of the intersection of **Riverland Drive and Camp Road** (Figure 2.). Extending north to New Town Cut, this cultural property occurs over an area of approximately 700 feet northeast/southwest by 400 feet northwest/southeast (6.4 acres). The Parker Site is bisected and drained by a narrow northeast/southwest trending ditch and has been crossed along its southern limit by a dirt "farm" or access road. Besides these landscape modifications, the principle post occupational activity at the site has been cultivation, typical for this region.

Figure 2. Colonial Period sites on the Dill Sanctuary.

The Parker Site is one of at least 15 archaeological sites within the current sanctuary bounds. It was discovered in 1986 as part of an extensive archaeological survey of non-wooded areas of the Dill Sanctuary, referred to at the time of the survey as the Dill Wildlife Refuge (Hacker and Zierden 1986). This 1986 survey represents the baseline archaeological inventory of the Dill Sanctuary to date. Upon discovery in 1986, the Parker Site, an undocumented

cultural property, proved to be a multi-component resource reflecting both prehistoric and historic period occupation. Initial representative "grab" surface collections quickly revealed that most of the cultural materials at the Parker Site date from the late 17th/early 18th through the 20th centuries. Colonial Period artifacts dominated the recovered assemblage. Hacker and Zierden (1986:31) note that the site "... appears to be an early colonial site with a good concentration of materials".

Due to the research potential inferred by the initial site survey, three separate research efforts have been performed at the Parker Site (38CH857) since its discovery in 1986. These included: 1) a controlled aligned systematic surface collection and site mapping via transit-level in 1994, 2) extensive and intensive subsurface testing in 1995, and 3) a limited remote sensing (GPR) survey in 1997. These investigations demonstrated that the Parker Site is a significant cultural resource characterized by a moderately dense but a rich and diverse artifact assemblage as well as intact subsoil cultural deposits.

Environmental Setting

South Carolina is characterized by three physiographic areas; the Blue Ridge region, the Piedmont, and the Atlantic Coastal Plain (Figure 3). The Blue Ridge area occurs in the northwestern section of the state and is part of a larger Blue Ridge system extending from Pennsylvania to Georgia. The Piedmont zone, with elevations ranging from about 400 to 1,200 feet above sea level, consists of rolling hills which become lower and less hilly towards the southeast. Marking the boundary between the Piedmont and the Coastal Plain, the Fall Line is an ecotone where upland rivers fall to the lower elevation Coastal Plain.



The Coastal Plain represents the largest physiographic region in the state – about 2/3 of South Carolina. Varying temperatures within this eco-region are directly affected by distance to the Atlantic Ocean. Temperatures normally are higher as one travels south with summer highs approaching 100 degrees F. and winters reaching the 20s F. in extreme cases. The average yearly highs along the South Carolina coast are 75 degrees F. and average lows about 53 degrees F. Most areas of the coastal plain receive about 50 inches of rain per year. The driest months of the year are October and November while the wettest are July and August. The South Carolina Coastal Plain has a growing season of about 290 days.

The Coastal Plain contains marshlands, swamps, savannahs, vast flood plain areas, Carolina Bays, and man-made lakes. Nearly level, the Outer Coastal Plain extends about 70 miles inland. This zone contains several substantial and generally northwest/southeast trending rivers and associated swamps, particularly near the coast. Immediately to the northwest, an Inner Coastal Plain of gently rolling hills contains the state's most fertile soils. A zone of forests referred to as Pine Barrens occurs centrally in this expanse. The westernmost section of the Coastal Plain encompasses a linear expanse of sand hills. Referred to, at times, as the upper Coastal Plain, these hilly unconnected linear bands of sand are remnant ocean dunes from the Miocene Epoch, 23 – 5 million years ago (Mathews et al. 1980). In the area immediately east of the sand hills lies a zone of numerous elliptical depressions called Carolina Bays. These oval shaped bays are characterized by long axes which trend generally in the same direction, northwest to southeast. Often one side of the bay is higher in elevation that others. These high relatively dry sides were, at times, occupied by pre-contact Native Americans. Carolina Bays can range in size from a few acres to several thousand acres and are characterized by diverse sets of biota. Occurring primarily in the central coastal plain, Carolina Bays can form bogs or conversely stay dry and be savannah-like (Murphy 1995).

The lower or outer Coastal Plain consists of several relatively steep slopes and 7 broad terraces. These terraces are remnant ocean floors that rose and fell through time. The terraces represent cycles of receding oceans during Pliocene (5.3 - 2.5 million years ago) and Pleistocene epochs (2.5 million – 12,000 years ago). James Island lies on one of the most recent terraces (the Pamlico and the Talbot) that formed during the end of the Pleistocene. Near the end of the Pleistocene, huge amounts of water were contained within continental sized glaciers. So much water was contained in these glaciers that sea level dropped worldwide. South Carolina's coast was 50 - 100 miles east of its present location. Extensive notable changes in regional environments have occurred within the last 20,000 years. One of these changes was a gradual warming trend resulting in the melting of the large glacial masses of North America's Wisconsin glaciation. Because of this action, profound sea level rise of as much as 330 feet occurred along the South Carolina coast (Brooks et al. 1989). Sea level steadily rose during the Holocene until about 5,000 ago when 400 -500 year cycles of sea level fluctuations of approximately 7 feet began along South Carolina's coast (Brooks et al. 1989; Fletcher 2013).

The general warming trend of the Holocene greatly affected regional vegetation. After about 12,000 years ago, boreal forests dominated by pine and spruce first transformed to

forests of deciduous trees dominated by "northern" hardwoods such as beech, hemlock, and alder. Gradually, as the warming trend continued, oak and hickory, as well as southern pine came to dominate southern forests (Kovacik and Winberry 1987).

Today forested habitats occurring within the coastal plain and into the coastal zone include: pine woodland, bottomland hardwood, oak-hickory or hardwood dominated, mixed mesic hardwood and cypress-tupelo gum swamp (Kovacik and Winberry 1987). Grasslands and wet flatwoods are also founds in larger landmasses. Very diverse types of forests and habitats characterize the lower or outer Coastal Plain. In fact, the coastal zone contains the most diverse regime of habitats within the state. Typical lower Coastal Plain hardwood forests, sometimes varied due to coastal influences, extend throughout the lower coastal zones. These areas include pine woodlands, hardwood bottoms, upland forests, and Cypress-tupelo hardwood bottoms, often influenced by tidal flow. Cypress-tupelo swamps can be isolated from river zones and may be found in remnant rice fields. Various ponds and depressions also occur in the lower Coastal Plain including depression meadows, cypress ponds, swamp tupelo ponds, pocosins, and limestone sinks (Mathews et al. 1980).

With a long growing season of about 290 days, the climate of coastal South Carolina is mild and temperate. The average daily temperature is 76 degrees F with temperatures generally ranging from 61 to 89 degrees F (Miller 1971). This area averages around 4.06 feet of annual precipitation - most of which occurs during the summer season (Miller 1971).

South Carolina's Sea Islands and coastal marsh eco-region is highly dynamic. Derived from Quaternary sands, silts, and clays, this zone supports forests of live oak, slash pine, red cedar, and saw and Sabel palmetto (Kovacik and Winberry 1987). The coastal marsh is dominated by cordgrass, saltgrass, and various rushes. James Island, one of a series of Pleistocene barrier islands along the South Carolina coast, is situated south of the Charleston peninsula, essentially the southern edge of the Charleston harbor. Protecting the mainland from the Atlantic, Barrier Islands are sand dune ridges which continually shift and erode (Hacker and Zierden 1986; Anthony 1995; Epps 2004). Immediately inland from the Lowcountry's Barrier Island perimeter are immense expanses of resource rich tidal marshlands traversed by numerous river and creeks systems. Barrier Islands can be characterized as rich and diverse in biotic resources. James Island, dominated by a pine-mixed hardwood forest, contains an impressive variety of ecological zones providing estuarine, maritime, and upland resources which have been intensively exploited diachronically.

Well suited for farming, James Island soils are of the Wando-Seabrook association. Generally, soils of this association are characterized by a surface zone of dark brown loamy sand overlying yellow red sand atop various clays. Edisto, Seabrook, and Wando loamy fine sands are the most frequently and extensively occurring soils series on the Dill Sanctuary. These soils support woodlands but are also suitable, if properly managed, for crops such as potatoes, tomatoes, corn, soybeans, and small grains (Miller 1971). The Catherine Parker Site (38CH857) is contained within Edisto loamy fine sand, a well drained soil commonly found on barrier islands. This well drained soil is nearly level to gently sloping (Miller 1971). James Island itself is relatively level with a maximum elevation of 15 feet MSL. While the Parker Site lies at about 10 feet MSL, areas of the Dill Sanctuary about 4,000 feet to the south reach approximately fifteen (15) feet in elevation (Figure 2.). These well drained zones in close proximity to permanent water sources have been favored occupation areas for human groups over millennia.

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Synopsis of Prehistoric and Early Historic Aboriginal Occupation

Human prehistory, east of the Mississippi river, traditionally has been divided in to four broad cultural periods which span the time of the first settlement of the Americas until the initial encounters of New World populations by Europeans. These cultural divisions are the: *Paleoindian, Archaic, Woodland, and Mississippian* periods. They are distinguished from one another primarily because they are characterized by different Native American life ways including changes in subsistence, social and political organization, settlement pattering, and technology. Famous sites associated with each of these cultural periods are found in South Carolina. Evidence of Archaic and Woodland period occupation as well as proto and early historic period aboriginal occupation has been observed on the Dill Sanctuary. The Parker Site has yielded artifacts dating to the Woodland Period as well as 18th century Native American cultural materials.

Today, investigation of the initial human settlement of the New World is characterized by an increasingly multidisciplinary approach utilizing archaeology, linguistics, medical anthropology, biology, and geology, among other fields. Currently, most scholars believe that the peopling of the Americas was a result of a general expansion of Old World Stone Age hunter-gatherers into arctic zones during the Upper Pleistocene period. Presently, many, if not most, scholars believe that these "First Americans", referred to by archaeologists as Paleoindians, migrated into the Americas via Beringia, a thousand mile wide land bridge exposed at the Bering Strait connecting Northeast Asia with Alaska during the late Pleistocene. From Alaska, these bands are thought to have entered and populated the interior of the Americas via an "ice free" corridor, between the Laurentide and Cordilleran ice masses, located near the eastern flanks of the Rocky Mountains. Some prehistorians, however have offered an alternate hypothesis which suggests that upper Paleolithic groups from Asia migrated southwards along the Pacific coasts of the Americas - very rich ecological zones unquestionably capable of supporting bands of hunter/gathers. Fully Homo sapiens sapiens, paleoindians have been linked by physical anthropologists and molecular biologists to populations of Asians who were most closely related to modern Mongolians.

Presently, there is not a consensus among prehistorians concerning when humans first migrated into the New World. It is quite possible that some bands of hunter/gatherers, focusing on moving Pleistocene herd animals, migrated back and forth into the New World and Asia through time while others spread southward into the Americas (Haviland et al. 2011). Since the early 20th century when Folsum and then Clovis bifaces were found in clear association with extinct Pleistocene fauna, it has been thought that nomadic bands, of about 30

people per band, entered the Americas no earlier than about 12,000 to 15,000 years ago. In open plain environments, the subsistence and economic systems of these nomadic populations were believed to have revolved around the hunting ice age mega-fauna such as mammoth, bison, reindeer, and wild horse, among others. South Carolina, at this time, characterized by boreal spruce and pine forests rather than open grasslands, evidently hosted egalitarian nomadic bands of more generalized hunter-gatherers. To the surprise of many, within the last decade or two, archaeological evidence has been steadily mounting from Paleoindian sites in both North and South America such as Meadowcroft Rock Shelter in Pennsylvania, Monte Verde in Chile, and Pedra Furada in Brazil, among others, which suggests that humans entered the New World much earlier than 15,000 years ago. A "case in point" is the occupational evidence recovered from the Topper site, located near Allendale, SC. At this important site, pre-Clovis Paleoindian deposits at this nationally known site have been recently dated to about 50,000 years ago (Goodyear 2005).

The Holocene, marking the end of ice age conditions, began about 10,000 ago. As essentially modern climatic conditions developed, non-sedentary Archaic period bands of hunter/gatherers successfully adapted and exploited an increasingly diverse set of biotic and abiotic resources. Archaeological research demonstrates that small game, fish, mollusks, and vegetable foods assumed greater importance in the lives of Archaic period populations who moved seasonally within an environmentally defined territory ever more efficiently exploiting a broad range of resources. Well known Late Archaic period shell ring sites along the South Carolina coast attest to the development of more sophisticated subsistence strategies through time by these egalitarian bands. Early and Middle Archaic phase stone tools have been recovered from the Dill Sanctuary; the earliest examples dating to about 8,000 years ago. Authentic South Carolina Lowcountry examples of these tools are currently on display at The Charleston Museum.

Woodland period life ways, beginning about 2,000 B.C. in South Carolina, appear to have been somewhat more sedentary then in earlier periods. Relatively egalitarian, Woodland societies were managed and organized, for the most part, by kinship groups, such as lineages. During this period, bands came together forming tribal level societies which developed subsistence strategies based on horticulture as well as hunting and foraging. Woodland period settlement patterning included seasonally occupied villages which are evidenced along the South Carolina coast by the relatively frequent occurrence of shell midden sites. Several hallmark cultural innovations are known for this period including, the development and use of domesticated plants and animals, woven textiles, burial mounds, and pottery, among others. Found in South Carolina, Stallings Island pottery, tempered with plant fiber, is the earliest pottery found in North America. This pottery, as well as Middle Woodland phase pottery (ca. 500 B.C. to A.D 400), has been observed on the Dill Sanctuary (Anthony 2012a).

Native American societies in the southeastern United States during the Mississippian period (ca. A.D 800 to European Contact) were, for the first time, ranked socio-political units, referred to by social scientists as chiefdoms. Chiefdoms are societies where a leader (chief) and his/her family or other elite groups are set apart from the rest of the society and allowed

privileged access to wealth, power, and prestige (Lavenda and Schultz 2012). Aboriginal populations of this era subsisted primarily on intensive maize and bean agriculture and resided in permanent settlements normally within dynamic and fertile river floodplains. Chiefdoms were characterized by a settlement hierarchy consisting of a capital with a substantial temple mound complex, often surrounded by a palisade and moat, multiple mound sites, and numerous villages, hamlets, and special purpose/activity sites such as craft manufacturing sites (Smith 1987). Mississippian life ways represented the height of cultural complexity within the Southeast before European contact. Population increase is indicated for this period although the quality of life was not necessarily better than earlier periods, due to nutritional limits and various attendant health problems. Mississippian societies were characterized by complex religious and social organization manifest in material remains such as distinctive, often ornate, pottery, carved shell, bone, and mica, slate and copper ceremonial objects, distinctive settlement pattering, and the construction and use of flat topped truncated temple mounds and other public works. Spanish explorer Hernando de Soto interacted and recorded Mississippian chiefdoms, in the Carolinas and further west, during his travels in the 1540s.

Between about A.D. 800 and A.D. 1600 Native American societies in southeastern North America were grouped in to centrally organized, socially stratified, and agriculturally based chiefdoms, ruled by "noble" lineages (Bowne 2005). Elites in these societies normally retained socio-economic power because they controlled and managed resources, particularly the distribution of resources. When Spanish explorers, such as Hernando de Soto, first travelled within the lower South in the early 16th century, southeastern chiefdoms had already reached an apex of social, economic, and political complexity and the life ways which had defined "South Appalachian Mississippian" society (Ferguson 1971) were markedly less pronounced and functional than circa 100 years earlier. During the late 1560s, when Spaniard Juan Pardo travelled twice into the interior of the Carolinas and Tennessee from Santa Elena (Parris Island, SC), he observed that several sizeable aboriginal towns, visited earlier by de Soto, supported lower populations than before (Hudson 2005). Tristan de Luna in 1559 also witnessed notable population decline and political unrest at towns in the formally powerful chiefdom of Coosa (Alabama/northwest Georgia) where de Soto had visited in the early 1540s (Smith 1987). Marvin T. Smith (1987:1) notes that the "... processes of cultural disintegration ..." regarding Southeastern chiefdoms was a result of European contact. The first documented interaction between Native Americans and Europeans along the Carolina coast was in 1525 when Pedro de Quejo gave seeds to aboriginals near Winyah Bay anticipating Spanish settlement the following year (South 1972; Axtell 1997; Nyman 2011). For interior chiefdoms, like Coosa, Smith (1987) believes that the cultural disintegration was primarily a result of massive depopulation caused by European disease. Importantly, Smith (1987) also notes that the culture(s) of many coastal aboriginal groups, experiencing more sustained intimate contact with Europeans than interior populations, changed substantially via syncretism and genocide - operative processes which occur due to acculturation (Haviland et al. 2011).

In the first half of the 17th century, due to military losses during the "Spanish Entradas" into the Southeast and especially the introduction of Old World disease, aboriginal socio-political systems changed dramatically from chiefdoms to a more egalitarian system where

councils of men "ruled" through consensus and influence (Smith 1987; Bowne 2005). There was a notable decrease in the number of Native American polities and a marked decrease in social stratification within aboriginal societies (Bowne 2005). During the second half of the 17th century, the economy of remnant Southeastern chiefdoms, particularly those interfacing with the English, changed to a commercial hunting economy in which, warfare, hunting, and trading became more important than a focus on agricultural subsistence and attendant settlement patterning (Bowne 2005). Former sedentary societies became more mobile adjusting politically and economically to a capitalistic world economic system operating in eastern North American which was manifest most strikingly in commercial hunting and slaving. Wood (1996:39) speaks of "..., a terrible transformation, the enslavement of people solely on the basis of race, ..." during the second half of the 17th century. This replaced justifications for slavery based on capture during war or on the basis of perceived religious infidelity in the New World (Wood 1996). Several aboriginal groups such as the Westo, likely part of a fragmented population of Erie forced out of New York and Pennsylvania about 1656 during the "Beaver Wars", were much feared by many Native Americans due to their success as "Indian Slavers" in the Southeast (Bowne 2005).

The Westo were first called the Richakhecrians by Virginians who traded with them for beaver pelts and Indian slaves for their tobacco plantations. Being essentially the only aboriginal group with firearms in the Southeast during the mid 17th century (Bowne 2005), the Richahecrians migrated to southern Georgia by 1659 and terrorized many Southeastern Native Americans with their successful slaving forays. By the mid 1660s, after years of lucrative slave raiding on the Spanish and English frontier, they relocated to the Savannah River Valley where they established a fortified town called Hickauhaugau (Bowne 2005). This town, visited by Dr. Henry Woodward in October of 1674, has never been found (Agha and Philips, Jr. 2010; Bowne 2005). Woodward's visit provides the only known ethnographic account of the Westo (Bowne 2005).

The founding of South Carolina increased the demand for Indian slaves since a market for labor continued for decades in the Caribbean. Gallay (2002) believes that, at minimum, 24,000 and perhaps up to 50,000 Native Americans were sold as slaves between 1670 and about 1715 by the English to the "Sugar Islands". The Westo, a name first used by early South Carolina colonists, and subsequently, groups such as the Yamassee and Chickasaw were central in human trafficking as well as the lucrative trade in deer skins. These were the first profitable enterprises characterizing early English South Carolina. British colonists, primarily from Barbados, established the plantation system in early South Carolina and also extensively used aboriginal slave labor on their plantations. Historians (Clowse 1971; Wood 1974) believe that at least a third of the South Carolina plantation slave population was composed of Native Americans until approximately the second quarter of the 18th century.

The Catherine Parker Site (38CH857) has yielded several examples of historic Native American ceramics. An 18th century site (38CH2105) within a mile east of the Parker Site has yielded Tunica pottery, quite possibly the result of Chickasaw slave raids into the lower Mississippi River Valley to provide Indian slaves to Charleston area planters (Ramona Grunden

personal communication 2012). 38CH2105 may reflect the remnants of a *Trading House* operated by Jonathan Drake, the late 17^{th/}early 18th century owner of Stono Plantation (Ramona Grunden personal communication 2012) and a Commissioner for Indian Trade during the early 18th century. According to Preservation Consultants, Inc. (Frick et al. 1989:5), an "... *Act for the Regulation of Indian Trade*, adopted by the General Assembly in December, 1716, provided for Indians residing in the settlements to trade their deer skins, etc. at various plantations in the Lowcountry, including that of Capt. Jonathan Drake on James Island and that of Col. John Fenwick on the Stono River, Johns Island."

Interestingly, the Catherine Parker site (38CH857), as well as Stono Plantation (38CH851a), both within the Dill Sanctuary, have yielded Kasita Red Filmed pottery (Figure 4) believed to be associated with the Creek Indians (Jennings and Fairbanks 1940; Knight 1994). This pottery may very well have been associated with "trading activities" in the vicinity or linked to free and/or unfree residence by Native Americans in the immediate area (Anthony 2012a, b).



The poorly understood yet significant historic Native American component(s) on the Dill Sanctuary are protected and merit professional archaeological management and investigation.

Figure 4. Kasita Red Filmed pottery from 38CH857.

In early colonial government documents, the term Cusabo "…emerged as a term of convenience to describe the diverse Indian people on the South Carolina coast." (Nyman 2011:11). The use of this term incorrectly implied an ethnic unity or possibly a socio-political aggregate, a confederation of Native American groups, such as the Creek or Catawba, in coastal

South Carolina during its formative years. This, however, was not the case (Nyman 2011). Up to 16 different aboriginal groups occupied the Lowcountry from the Savannah River to the Santee River when Charles Towne was first settled in 1670 (Nyman 2011). Four principal groups in the Charleston vicinity were the Kiawah and Coosaw, on the lower and upper Ashley River, respectively, and the Etiwan on Daniel Island and the Sewee north of the Etiwan (Poplin et al. 2011). Often, free "neighbor Indians" or "settlement Indians", another convenient label used after the Yamassee War, lived in close proximity to, or perhaps on, working plantations of the early colonial period (Steen and Barnes 2010). They are known to have traded commodities such as deer skins and pottery as well as provide wild foods for planter tables (Dunn 1976; Waddell 1980; Nyman 2011). Nyman (2011) stresses the value of local Indians to early European and Caribbean settlers in South Carolina and notes that in Carolina's formative years, these early settlers would not have been successful without the aid of Native Americans living among Lowcountry colonists. The maintenance of good trade relations with early English

colonists, settlement near or on plantations, and the aggregation of ethnically distinct aboriginal groups represent defensive and subsistence strategies used by Lowcountry Aboriginals in a world of Indian slavery and colonial capitalism. At present, relatively little is known archaeologically about contact period Native Americans in the South Carolina Lowcountry (Nyman 2011; Marcoux et al. 2011; Anthony 2012a, b; Poplin and Marcoux 2013). Sites that likely will yield information regarding the lifeways of Lowcountry historic period aboriginals should be considered significant (Anthony 2012a, b).

Historical Overview

During the 16th century, the French and Spanish, New World competitors along with the English, were the first European powers to attempt to settle South Carolina (called Chicora by the Spanish). In the late 17th century, as payment of crown debts, the English King Charles II granted territories, including South Carolina to eight Lords Proprietors whose interest in the Carolinas focused primarily on economic gain (Clowse 1971). The first permanent English settlement was established in 1670 on the west side of the Ashley River at Albemarle Point. The social and economic roots of Charles Towne lay in the West Indies, particularly Barbados, settled in 1627 (Wood 1974). Barbadians by the late 17th century were motivated to invest their resources in South Carolina due to the savvy selling tactics of the proprietors and because their island was overpopulated and suffered from land and labor shortages and disease. Barbadians from "all walks of life" migrated to the Carolina colony including many of the Lowcountry's prominent socio-economic families such as the Pinckneys, Colletons, and the Middletons. Accompanying this group of colonists to South Carolina were their capitalistic ideologies regarding a slave-based plantation system. Due to the ingress of "Sugar Island" planters into South Carolina, notable differences existed among New England, Chesapeake, and Carolina societies (Edgar 1998). According to Edgar (1998:37), Barbadian society had developed without "...restraints of any sort, whether governmental or social ...The pursuit of wealth and the pleasures it could purchase was the order of the day...". Thus, material success was valued above honor as an indicator of a person's value (Bowne 2005).

New lands in the colony were awarded by a headright system – a proprietary decree. Modified through time, by the late 17th century, because of low economic gains, the system eventually allotted 150 acres of land to a head of household and to each new arrival whether free or not. This latest version of the headright system resulted in an accelerated influx of pioneering settlers, particularly black slaves (Wood 1974).

In need of a staple crop, the new colony was still poor and economically diversified during the late 17th century (Wood 1974). Lumber products and livestock were second only to deer skins and Indian slaves as mainstay exports. Experimental crops were grown in the hope of developing a staple commodity crop and included corn, cotton, grapes, ginger, olives, rice, silk, and tobacco. Of these crops, rice, introduced between 1685 and 1690, began to assume dominance, and by 1705 it had been mastered sufficiently for staple production (Clowse 1971).

Due to increasing mismanagement by the proprietary government, over-spending for defense, trade disruption by pirates, the Yamassee War, and the lowering of the English bounty on naval stores, South Carolina during the first third of the 18th century, especially between about 1715 to 1725, was economically depressed (Clowse 1971). This economic stress, which substantially impacted small landowners who could not obtain loans or credit, fueled the development of a marked social dichotomy between more affluent "rice planters" and the remainder of the colony's population (Clowse 1971). As the interests of the colony's population moved away from the proprietary government towards the Crown's interests, a major economic shift occurred encompassing a "stepped-up" production of rice. Clowse (1971) notes that after proprietary control was broken after 1729, bounties supporting naval stores were renewed, new colonial markets opened, new Board of Trade policies were established by England's Parliament, and South Carolina embarked on economic recovery. In the 1720s most people worked in naval stores and livestock, but rice brought in at least half of the colony's profits (Wood 1974).

The successful production of rice and subsequent development of a rice "monoculture" was likely the greatest and most far reaching economic development in 18th century South Carolina. First grown in inland hydric areas then along river systems affected by tidal flow, the successful production of rice was largely due to knowledge possessed by West African slaves regarding the growing and processing of rice (Wood 1974). Without question, the historical record demonstrates that South Carolina rice planters preferred to purchase slaves from rice growing areas of West Africa (Wood 1974; Littlefield 1981). Black and Indian slaves were preferred over indentured servants due to their temporary service and a stigma of laziness which became attached to indentured labor (Wood 1976). Since South Carolina's developing plantation society favored a permanent labor source, it established "... social, religious, legal, cultural and political structures and strictures which validated and perpetuated such a system." (Drucker and Anthony 1979:23). Rice was the foundation of the Lowcountry's economy and came to dominate the colony's life during most of the 18th century (Wood 1974).

South Carolina's plantations suffered substantially during and immediately after the American Revolutionary War. With wide spread property loss, soil depletion, and the loss of British bounties on rice, naval stores, and indigo, Carolina was hard hit economically throughout most of the last quarter of the 18th century (Clowse 1971). Factors such as the loss of English bounties led to increased attention to expanding cotton production on plantations. However, it was not until the late 18th and the early 19th centuries with the help of the invention of the cotton gin in 1793 that economic stability occurred in the former British colony of South Carolina (Orvin 1973). As a staple cash crop in South Carolina, cotton prevailed during the 19th century. Its dominance was instrumental in directly and indirectly bringing about substantial changes in ecology, economy, and demography (Oliphant 1964). As cotton production soared, it was accompanied by large influxes of black slaves, soil depletion was common as planters often preferred to expand holdings rather than rejuvenate their lands, and, particularly in the South Carolina "Upcountry", diversified farms were replaced by cotton monoculture (Oliphant 1964). The Civil War brought an end to South Carolina's cotton-based plantation society.

Again South Carolinians adapted to new political, economic, and social systems operative in the post war Southeast. Three, probably four (4) Civil War fortifications are located and protected on the Dill Sanctuary as well as several post bellum farmsteads (Figures 5 and 6).

Stono Plantation (38CH851), on the south side of New Town Cut, one of four (4) plantations within the Dill Sanctuary, raised vegetables for Charleston in addition to indigo during the 18th and 19th centuries (Figure 2). Provision crops such as turnips and potatoes, livestock, and probably fish were sold in Charleston extensively (Anthony et al. 2009). This



practice continued well into the 19th century at Stono Plantation under the Rivers then Dill families. For example, in 1850, under the ownership of Captain John Rivers, Stono 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 (Calhoun 1986a). Local plantations, and particularly the blacks who lived on them, were the primary producers for the Charleston markets.

In contrast to other areas of the South, most of the South Carolina Sea Island black farmers, during the post bellum period, disliked group contract systems 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. This resulted in the division of some large plantations into small farms. Some of the larger tracts, such as Stono Plantation and Sol Legare Island, featured dispersed freedmen's farmsteads (Fick et al. 1989). These small truck farms, operated by black farmers, co-existed with larger commercially managed farms (Fick et al. 1989; Frazier 2006). Farmers on James Island also raised dairy cattle. By the late 19th and into the 20th century, low profitability of crops and livestock was exacerbated by the out-migration of black James Islanders, who left the Figure 6. Lidar image depicting James Island Canal and Civil War fortifications on and adjacent to the Dill Sanctuary.



Sea Islands for better opportunities in the Northeast (Anthony et al. 2009). Mr. Willie McLeod, owner of McLeod Plantation, stated (Fick et al. 1989:312) in 1944:

"Up to 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."

Until the mid 20th century, James Island remained rural, crossed by a series of dusty dirt roads (Frazier 2006). African Americans continued to work island farms, formerly plantation lands, living and working in depressed conditions. Gradually, improvements in transportation and suburban development dramatically changed James Island's landscape and agrarian character.

Catherine Parker Site Ownership History

The Parker Site (38CH857) is located within a tract of land (western area) that was called the "Hanahan" property in the early 19th century. Figure 7 depicts a section of an early 1930s property map (Kollock 1932), showing its location on the south side of New Town Cut

(James Island Creek). The property (colored red) is bisected by Riverland Drive (known historically as Stono River Road, Broad Road, or King's Highway) and is bounded on the south by the property of George Rivers and on the east by Episcopal Church land(s). These same boundary "markers" are used on several conveyances, diachronically. Table 1 presents a partial list of the owners of the property containing the Parker Site – the earliest currently known being James Taylor. It is possible that an earlier owner of the property was an individual named Walter Frances. Another candidate for ownership before James Taylor is John Taylor, who received a relatively large grant of land in the vicinity on August 28, 1701 (Calhoun 1986b). John Taylor's relationship, if any, to James Taylor is unknown presently. Following James Taylor's ownership, it is possible that the "Hanahan Tract" was owned by Thomas Hayward and then by James Witter before being conveyed to Daniel Legare, Jr. The Catherine Parker Site became part of Stono Plantation upon its ownership by Capt. John Rivers.



Virtually nothing is presently known historically regarding the settlement pattern and demography of the "Hanahan" property during the colonial and ante bellum periods. Only one graphic found during the current study, a late 18th century map of the Charleston vicinity (Faden 1780), potentially illustrates settlement (circled) on the property – possibly showing settlement at the Parker Site (Figure 8).

On January 1, 1840 the *Charleston Mercury* published the following:

Under Decree in Equity Hanahan et al. vs. M'Intyre and al. On Wed., the 8th of Jan. 1840 Will be sold, near the Custom House, at 11 o'clock

"All that PLANTATION OR TRACT OF LAND situated and being on James Island, known as the property of the estate of Hanahan, and measuring and containing 120 acres of highland, and about 8 acres of marsh, be the same, more or less."

ALSO,

" 9 prime Negroes, some in families, and a few single, accustomed to the culture of Cotton and Provisions." "Conditions – for the real estate, one third in cash; balance in bonds payable in one and two years, interest from date, payable annually, with mortgage of the property. For the Negroes one half in cash, balance in bond payable in one year, with interest from date, payable annually, mortgage of the property and approved personal security. Purchaser to pay for papers.

> EDWARD R. LAURENS Master in Equity"

Currently, information regarding the Catherine Parker Site's ownership, settlement, demographic, and economic history is incomplete and somewhat ambiguous. Additional historical research will be required to "flesh out", verify, clarify, and complete this record. This research should accompany any further archaeological investigation of 38CH857.





Figure 8. Town, Bar, Harbour, and Environs of Charlestown ... by Wm. Faden, 1780.

Previous Archaeological Investigation in the Vicinity of the Catherine Parker Site

Previous professional archaeological investigations near the Catherine Parker Site have included survey, remote sensing, testing, and extensive block excavation at several sites on the Dill Sanctuary. Initial archaeological activity on the sanctuary occurred as part of a larger project. In the late 1970s Stan South and Michael Hartley, (SCIAA) South Carolina Institute of Archaeology and Anthropology archaeologists (South and Hartley 1980) visited two sites on the sanctuary during a well known Lowcountry survey project focusing on 17th century sites. In 1978, The Charleston Museum's Elaine Herold and Alan Liss conducted a limited survey and preliminary surface collections at two of the Dill Sanctuary's primary sites, Stono Plantation

(38CH851) and Turquetts Plantation (38CH465), both to the south of the Parker Site (Figure 2). A comprehensive reconnaissance level survey of non-wooded areas of the Dill Sanctuary was accomplished by the Museum's Martha Zierden and Debbie Hacker in 1986 (Hacker and Zierden 1986). This effort located sixteen prehistoric and historic sites, one of which, 38CH856, is currently outside the property limits of the Dill Sanctuary (Figure 9). The results of the 1986 survey currently serve as a major part of the overall management guide for cultural resources



on the Dill Sanctuary. By 1989, museum archaeologists and volunteers performed systematic controlled surface collection and extensive testing at Turquetts Plantation and soon thereafter the multiyear field investigation of Stono Plantation began in earnest (Anthony 2012a).

The most recent archaeological endeavor near the Parker Site occurred in May of 2012 at the intersection of Camp Road and Riverland Drive. The Cultural Resource Management (CRM) consulting firm of Brockington and Associates, Inc., (Mt. Pleasant, SC office), performed an archaeological survey near this locale. The survey was required by Federal legislation as part of SCDOT plans to construct a roundabout at this intersection (Fletcher 2013). This project included document search, pedestrian

field survey of visible areas, and systematic shovel testing (Fletcher 2013). Two Dill Sanctuary archaeological sites northeast of the Parker Site were re-visited and re-assessed, 38CH855 and 38CH858 (Fletcher 2013) as part of the survey. Both sites 38CH855 and 38CH858 are located outside of current SCDOT project direct impact zones. The archaeological fieldwork also documented the northeastern terminus of *Military Road* on the Dill Sanctuary, a transportation route depicted on 18th and 19th century maps (Figures 8 and 10). This road remnant is immediately west of the current SCDOT direct impact zone for roundabout construction at the

intersection of Camp Road and Riverland Drive. Although, currently, *Military Road* does not have an official site number, this resource contributes to the historical context of the Dill Sanctuary Historic District.



Research Orientation and Theoretical Frame

The archaeological research carried out on the Dill Sanctuary, including the Catherine Parker Site, embraces an anthropological approach that is guided by the objectives of documenting and explaining past cultural behavior(s). This orientation is geared to help accomplish The Charleston Museum's mission to preserve and interpret the cultural and natural history of the Lowcountry. The research accepts the positivistic belief that anthropologically oriented archaeology should be rooted in empirical data – data which is amenable to sensory delineation (Trigger 1986). Also accepted are the basic elements of materialism. Archaeological research often lies within a materialist camp which accepts the premise that meaningful correlations existed between the way a society functioned and the material products generated by a given society (Kohl 1981). Scholars acknowledge several forms of materialism which often stress the importance of techno-economic as well as techno-environmental determinism relative to cultural behavior (Kohl 1981). This orientation rests upon inquiry that uses replicable quantitative and qualitative methods, and seeks to determine relationships among entities (Harris 1979). Cultural ecology, as a form of materialism, is concerned with producing "... generalizations about the nature of cultural processes." (Kohl 1981:101). However, unlike other forms of materialism, cultural ecology generally accepts the active causal role of a culture's value and belief systems (Steward 1955; Kohl 1981). This approach, concerned with cross-cultural regularities, as a vehicle for explaining cultural processes, focuses on the interface between culture and the environment. Marquardt (1985:67-68) states that:

Humans respond not only to environment determinants but also to sociohistorical structures – values, myths, class relations ... Therefore, cultural change not only is a function of adaptation to physical environmental challenges, but also is a function of the resolution of conflicting and contradictory interpretations of the meaning of sociohistorical structures.

The archaeological research effort at the Catherine Parker Site accepts the concepts presented by Marquardt (1985). His notions reflect an approach which allows a view of culture formation and change via environmental as well as social variables (Anthony 1989). Basic assumptions for archaeological research at the Catherine Parker Site as well as the Dill Sanctuary in toto include:

- A. Culture is a mediator, a buffer between humans and their environment(s). In other words, the function of culture is to enable humans to survive in their environment(s), both physical and social.
- B. Culture should be viewed as a system; cultural systems are example of "open systems" in which the degree of influence exerted by environmental, social, and techno-economic events is closely related to external as well as internal limiters.
- C. Human behavior, perpetuated according to a composite of shared behavioral patterns and perceptions, is not random. Thus, it is possible to delineate and study the structure of various subsystems within a cultural system.
- D. Archaeological patterns are reflective of behavioral patterns of people within a cultural system. The isolation of pattern in the material remains of a culture is a crucial step toward reconstructing past human behaviors and activities, and is vital for the understanding of various cultural processes.
- E. Culture change is not unidirectional, but multidirectional.

Figure 11. Archaeological sites on the Dill Sanctuary.



Cultural Resources on the Dill Sanctuary

Cultural resources on the Dill Sanctuary include both prehistoric and historic period properties (Figure 11). The most visible prehistoric sites (shore line shell midden loci) within the sanctuary are likely seasonally occupied Early and Middle Woodland Phase sites (Stallings Island and Deptford), while historic properties include four colonial and antebellum plantations, Rose (Airport Tract), Stono, Turquetts, and the Catherine Parker Site (Stono Tract), as well as historic-period Native American (Ashley Phase) occupation(s), four earthen Confederate batteries, a number of post bellum and early 20th century African American occupations, two African American cemeteries, and an approximate 150 linear foot (north/south)

expanse of, colonial and ante bellum period, wooden pier/dock remnants associated with a ferry landing. The ferry landing is located south of Battery Pringle and immediately south of the mouth of the James Island Canal (Figures 12 and 13). The ferry landing remnants, as well as an Early and Middle Woodland Phase shell midden, are clearly visible during very low tide levels (Figure 14). This crossing (circled in black), as well as Matthews Landing (circled in red) was used by the British Army to cross the Stono River from John's Island onto James Island in 1780 (Figure 15). It was in operation at least until 1820 (Figure 15).

The Dill Sanctuary is currently being nominated for inclusion on the National Register of Historic Places as a Historic District. This nomination is based primarily on the exceptional degree of intact cultural context present on the property as well as the sanctuary physically evidencing a long continuum of human occupation – from the Early Archaic Phase to the present (ca. 8,000 years). The cultural context of the Dill Sanctuary is such that individual formally cultivated fields and field systems on the property still retain their same size and







Figure 15. Ferry crossings (left) in 1780 (used by the British Army) and in 1820 (right).



New Town Cut

shape as documented in the late 18th and 19th centuries. This outstanding cultural integrity also includes many farm/plantation drainage ditches – some serving as property lines – canals and historic roads. At least two (2) historic canal remnants, both trending generally southwest/northeast, travel through and extend beyond the Dill Sanctuary. The northernmost of the two, depicted on an early 19th century map, is located about 200 feet south of Battery Tynes (Figures 16). Sections of this canal are well preserved (Figure 17). A second canal, referred to as James Island Canal, separates the sanctuary's Stono Tract from the Airport Tract – immediately south of Battery Pringle (Figures 6 and 18). The most visible historic road on the property is referred to as (the) "Military Road". It is depicted on various 18th through 20th century illustrations (Figures 5, 8, and 10) showing James Island and vicinity. In the late 18th century, *Military Road* appears to have extended from the current intersection of Riverland Drive and Camp Road, southwest to the eastern edge of the Stono River, then south beyond Dill Sanctuary and Grimball Plantation – almost to Holland Island Creek (Figure 8). Most of *Military Road* within the Dill Sanctuary has survived until today with the exception of an approximate 2,500 linear foot section, lost to cultivation, between an existing small oval shaped farm pond and archaeological site 38CH855 (Figure 9). Based on historic maps and aerial photographs, this section was lost between 1949 and 1974 (Figures 19 and 20). Currently, the northernmost remnants of "Military Road" can be observed in secondary wooded areas of the northeastern corner of the Dill Sanctuary (Figure 19). It is situated in the northeastern section of 38CH855 and extends northeast to the western edge of Riverland Drive (Fletcher 2013) (Figure 11).

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To date, since 1990, a sustained focus of the archaeological investigations at the Dill Sanctuary has been one concerning the colonial and antebellum occupations of the sanctuary, particularly at Stono Plantation (38CH851), although smaller scaled investigations have occurred at Turquetts and Rose Plantations as well as at the **Catherine Parker Site** (38CH857) (Anthony 2012a). Anthony (2012a) provides a comprehensive listing and brief description of all of the archaeological efforts which occurred on the Dill Sanctuary from 1989 to 2011.

Figure 17. Nineteenth century canal south of Battery Tynes.

Systematic Controlled Surface Collection

The Catherine Parker Site (38CH857) was noted by Hacker and Zierden (1986:39) as being "... an early eighteenth century site which may represent a small colonial plantation." This interpretation was based primarily on site location and a "grab" collection of artifacts designed to recover diagnostic materials, that is, a representative sample of the sites artifact content from the site's visible cultivated and exposed field surface areas. Surface collection methods such as this provide a reasonable working idea of site size and cultural components present at cultural resources within this region and characteristically are employed during a reconnaissance level survey. Temporally diagnostic artifacts surface collected initially, such as ceramics and glass, clearly demonstrated that the Parker Site was characterized by historic

Figure 18. James Island Canal on and adjacent to the Dill Sanctuary (1971).



period occupation from the early 18th century into the 20th century with most materials dating to the colonial period. However, as recommended by Hacker and Zierden (1986:41) after their survey, the Parker Site, as well as other cultural resources within Dill Sanctuary, "... needs subsurface

testing to determine boundaries, clarity and content, as well as to better define living and activity areas." Archaeological investigations at the Parker Site subsequent to its initial survey were structured to accomplish these objectives and to determine the site's research potential and status relative to the National Register of Historic Places.

Redman and Watson (1970:279) state that "... controlled surface collecting will yield data that can make an excavation or regional survey more efficient and productive." With the help of the students, staff, and volunteers of the (3rd) College of Charleston/Charleston Museum archaeological field school, the first archaeological fieldwork at 38CH857 following the initial 1986 Dill Sanctuary inventory archaeological survey commenced in June of 1994 (Appendix #1). Archaeological plans called for the set up and completion of a controlled aligned systematic surface collection at the Parker site (Figure 21). Transit-Level readings for site map construction were scheduled to be collected during the surface collection as well.

The field activity at the site actually began with the establishment of a *Chicago* type grid. A key grid marker, represented by a 2.5 inch diameter section of PVC pipe, was securely implanted into the ground on the west side of an existing "farm road" remnant – at the current northwestern open field edge of the Parker Site. This grid point was designated as N200 E200 with grid north aligned with magnetic north. From this location, the grid was established throughout open field areas – actually two fields separated by a drainage ditch – across an area of ca. 820 feet northeast/southwest by 175 feet northwest/southeast(3.3 acres) (Figure 22). Within this expanse, 270 contiguous surface collection units were located via transit-level and tapes. Square shaped surface collection units, twenty feet on a side (400 square feet), were defined by wire flags. Each wire flag was labeled with grid coordinates. Grid points located via transit-level were designated by orange colored flags while yellow colored flags were used at grid points derived via manual triangulation using "cloth" tapes. From June 23 – 28, 1994, field



school students, instructors, and museum volunteers surface collected every collection unit (100% sample) established at the site (Figure 21). Ground surface visibility during the systematic surface collection ranged from about 50% – 100% - most, subjectively, averaging, perhaps, 75% or more visibility.

By far, most of the artifacts recovered from the Parker Site during the surface collection were kitchen and architecturally related items such as ceramics, olive green and container glass, and brick. Personal items, hardware, and various specific activity related materials often are less visible and infrequent in surface contexts, varying, of course, with the actual site function and post occupational status of the remains. At first

glance, the eastern 200 feet of the area collected seemed to be a "hotspot" for surface artifacts of most types (Figure 22). Although artifacts were distributed with notable frequency on either side of the site's bisecting northeast/southwest trending drainage ditch, higher frequencies clearly occurred on the north side of the ditch throughout the site area collected (Figure 22).

Figure 20. Northern section of the Dill Sanctuary (2008).



Figure 21. Controlled systematic surface collection at the Parker Site (1994).



Functional and temporal analyses of surface collected cultural materials suggest the existence of at least three (3) probable multi-activity areas within the currently defined bounds of 38CH857 (Figure 22). Surface artifact frequencies defining the multi-activity areas change diachronically - suggesting varying activities or

occupations through time. Reflected by higher relative artifact frequencies, the three multiactivity loci are:

A) Locus #1 - from North 300 to North 460 and from East 620 to East 800;
B) Locus #2 - from North 260 to North 340 and from East 380 to East 540; and
C) Locus #3 - from North 180 to North 240 and from East 220 to East 280.



In order to date these multiactivity loci, an analysis of the distribution of European-American ceramics was accomplished as well as the derivation of a MCD from surface ceramics recovered as a result of the controlled surface collection (Table 2). South (1977:220)

states that, "The mean ceramic date seldom deviates from a range of +- 4 years from the known median historic date ..." of a documented occupation. Thus, the MCD, as a site dating tool, is of value at the many surviving undocumented sites. The distribution analysis employed four (4) groupings of ceramics : 1) pre-creamware (before ca. 1762), 2) creamware (median date ca. 1791), 3) pearlware (median date ca. 1805), and post- pearlware (ca. 1820s to early 20th century). Less temporally sensitive ceramics such as colono ware and coarse lead glazed redware were not used in these analyses.

The ceramic distribution clearly infers that the focus of early to mid 18th century activity at the site occurred in Locus #1, the northeastern area of the Parker Site (Figure 22). Through time, primary site use appears to have moved initially southwest, with creamware found most frequently in Locus #2 and then various pearlwares dominating the surface ceramic assemblage at Locus #3 (Figure 22). Lastly, post-pearlware ceramic frequencies (post ca. 1820) are high in Locus #3 as well as in the northeast site area (Locus #1) again (Figure 22).

The surface distribution of brick at the Parker Site generally agrees with the occurrence of historic period glazed ceramics on site. However, the highest frequencies are clearly

indicated at Locus #1 and to a somewhat lesser extent at Locus #3 to the southwest (Figure 23). This suggests that likely locations for structures at 38CH857 are within Locus #s 1 and perhaps Locus #3, although it should be noted that various earthfast structures were commonly built and used during this time as well. The surface distribution of shell (primarily oyster), quantified by weight, as was the site's brick, is also concentrated in Locus #1 north and south of the site's bisecting drainage ditch (Figure 24). Although a noticeable peak in shell density occurs in a small linear area along the western section of Locus #2, its shape and size is not really comparable to the larger dominating distribution across Locus #1. This shell may be the result of residential refuse disposal and/or the reclaiming/cleaning of brick for

	Table 2	2.					
C. Parker Site - MCD From Controlled Surface Collection							
	(38CH8	57)					
Ceramic Type	Date Range	Median Date	Count	Sum			
Stoneware							
Alkaline Glazed (Edgefield)	1800-1880	1840	1	1840			
Black Basalt	1750-1820	1785	2	3 570			
Brown Mottled	1690-1775	1733	18	31,194			
Elers Ware	1763-1775	1769	1	1769			
Nottingham	1700-1810	1755	5	8.775			
Scratch Blue	1744-1775	1760	4	7.040			
Westerwald	1700-1775	1738	16	27.808			
White Salt Glazed	1740-1775	1758	50	87,900			
Porcelain							
English	1745-1795	1770	1	1770			
Overglazed Chinese	1660-1800	1730	23	39,790			
Underglazed Blue Chinese	1660-1800	1730	85	147,050			
White	1851-1915	1883	16	30,128			
Earthenware							
Agate Ware	1740-1775	1758	1	1758			
Creamware, Undecorated	1762-1820	1791	633	1,133,703			
Delft	1660-1800	1730	65	112,450			
Jackfield	1740-1780	1760	4	7,040			
N. Devon Gravel Tempered	1650-1775	1713	5	8,565			
Pearlware, "Finger Painted"	1795-1815	1805	37	66,785			
Pearlware, Mocha	1790-1820	1805	1	1805			
Pearlware, Polychrome	1795-1815	1805	12	21,660			
Pearlware, Transfer Printed	1795-1830	1813	5	9,065			
Pearlware, Shell Edged	1780-1830	1805	21	37,905			
Pearlware, Undecorated	1780-1830	1805	81	146,205			
Slipware, Combed & Trailed	1670-1795	1733	154	266,882			
Whiteware, Trans. Print (non blue)	1826-1875	1851	1	1851			
Whiteware, Trans. Print (med. blue)	1821-1875	1848	4	7,392			
Whiteware, Undecorated	1820-1900	1860	75	135,500			
TOTAL			1,321	2,347,200			

MCD = 1776.8

future use in a post occupation site context. Interestingly, the surface occurrence of olive green (spirits) bottle glass and kaolin clay pipe fragments are distributed very similarly to the shell across the Parker Site. This perhaps reflects related behaviors associated within a residential zone such as refuse disposal and various leisure activities. Also, this supports an interpretation that the extensive shell distribution at Locus #1 may not primarily be the result of simply post occupational disturbance – such as cultivation.

Although the frequency of colono ware at 38CH857 is not very impressive relative to other investigated rural colonial and early 19th century residential sites (e.g., Anthony 1979;
Wheaton et al. 1983; Zierden et al. 1986; Trinkley et al. 1995), the distribution of surface occurring colono ware at the Parker Site in 1994 is interesting in that it was actually one of the most spatially localized surface artifact concentrations on site. Most frequently



observed north of the site's bisecting drainage ditch, the site's colono ware was found, virtually, in one area – that of Locus #1 (Figures 22 and 25). The specific location of the colono ware at 38CH857 likely is the result not only of artifact function (residential use) but of age. Although a few relatively recent investigations of Lowcountry plantations suggest that colono ware was prevalent up to the mid 19th century, most evidence to date primarily supports a late 17th century to early 19th century context for most colono ware manufacture and use in the South Carolina Lowcountry (cf., Anthony 1979, 1986, 2002, 2009; Ferguson 1980, 1990; Wheaton et al. 1983; Trinkley et al. 1995; Espenshade 1996; Hamby and Joseph 2004; Agha et al. 2012).

A total of 59 (not including Historic Aboriginal pottery) colono ware sherds were recovered during the systematic surface collection of the site (Table 3). This number represents 4% of the colonial and early 19th century systematically collected surface



ceramics (N = 1,450). Overall, not very diverse, the Parker Site colono ware surface assemblage was dominated by hemispherical bowl vessel forms; which is common at colonial and ante bellum Lowcountry plantations. Although the colono ware assemblage was limited, a few pieces stood out. One of these was a colono ware lid fragment – perhaps from a teapot or

cooking vessel. An 18th century colono ware teapot lid has been recovered from Stono Plantation (38CH851) to the south, another colonial through post bellum plantation on the Dill Sanctuary (Anthony 2012a). Another rim sherd recovered was characterized by a *coggled* (piecrust-like) lip. This lip form has



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been observed within several other 18th century Lowcountry rural and urban colono ware assemblages and likely mimics the coggled rims of some lead glazed slipwares (e.g., Anthony 1986; Hamby and Joseph 2004). Finally, a Lesesne chamber pot – like rim and handle fragment was recovered from the Parker Site (Figure 26).



Table 3.

C. Parker Site Surface Colono Ware Frequency (38CH857)

(,	
Yaughan	28	49%
Lesesne	7	12%
<u>Residuals</u>	23	<u>39%</u>
TOTAL	59	100%

Archaeological Test Excavations

Subsequent to and guided by the results of the 1994 controlled surface survey at the Parker Site, the next phase of archaeological investigation, extensive subsurface testing at 38CH857, commenced in the spring of 1995. Once again, fieldwork was accomplished with the help of College of Charleston archaeological field school students and College of Charleston and Charleston Museum archaeologists and volunteers (Appendix #1) (Figures 27 and 28). The primary goals of the 1995 investigation were to determine site size, depth, and integrity, as well as the number of cultural components present at the Parker Site and to assess the site's research potential and eligibility for inclusion on the National Register of Historic Places.



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Figure 28. Charleston Museum volunteers excavating at 38CH857.

This effort actually began on May 15, 1995, an unusually hot day, with the re-establishment of the site grid, first used in 1994, and the establishment of a site permanent elevation datum. This datum, given an assumed elevation (AE) of 10 feet MSL, is an orange painted and flagged section of rebar placed in a metal bucket of concrete and buried 15 feet north of N200 E200 (a buried section of PVC pipe). As grid establishment proceeded, via transit-



level and "cloth" tape, two (2) testing baselines were located and flagged to facilitate test unit placement – one each in Locus #1 and Locus #2.



A total of forty five (45) extensively distributed 5 foot by 5 foot test units (1,125 square feet) were excavated at 38CH857 during 1995 – thirty eight (38) in Locus #1 and seven (7) within the stated bounds of Locus #2 (Figures 29 and 30). All test units were shovel excavated to subsoil except unit N405 E705 - due to fire ant infestation. As is

common practice in this region, all soils excavated were routinely screened/sifted through ¼ inch mesh (hardware cloth) for artifact recovery (Figure 31). Plow zone soils atop subsoil ranged in depth from 0.6 feet deep below the extant surface, in the northern open area of Locus #1, to 1.9 feet deep in Locus #2, just north of the Parker Site's bisecting drainage ditch. Plow zone soils in Locus #1 averaged about 1 foot in depth below the ground surface, while plow zone soils in Locus #2 averaged 1.2 feet deep. Generally, deeper plow zone deposits appear to be located in the southern sections of these loci and may reflect limited post occupational soil movement due to colluvial processes and/or cultivation practices including

drainage ditch establishment. Virtually every unit excavated in 1995 exhibited "plow scars" in the unit floor.

During excavation, plow zone soils were routinely divided into as many as three plow zone proveniences – plow zones 1, 2, and 3. Plow zone 1, beginning at the existing surface, is an unconsolidated "loose" gray brown sandy loam reflective of the most recent cultivation/plowing on site, while plow zone 2 is a darker gray brown sandy loam, at times, somewhat mottled, as well as noticeably more compact than plow zone 1. Plow zone three (3), compact mottled tan



colored loamy sand, most likely represents a transition into yellow red subsoil. The designation plow zone 3 was used to separate "transition" zone cultural materials from those collected in plow zones 1 and 2 and thus segregate artifacts potentially associated with subsoil cultural features below cultivation disturbance.



Excavated Cultural Materials

Artifact frequency across the Parker Site was measured by counts per 5' X 5' excavation unit as well as by artifacts per cubic foot of excavated matrix. Tests with the highest artifact frequency per unit were located in Locus #1. Two (2) excavation units, N410 E765 and N435 E780 yielded the highest "top two" artifact frequencies, 477 and 543 items respectively (Figure 29). Artifact frequency per cubic foot ranged from 2 to 24 artifacts per cubic foot. The low count was evidenced at N295 E485, in Locus #2, while the high count per cubic foot was observed in both excavation units N435 E770 and N435 E780 (Figures 29 and 30).

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For a number of years quantitative analysis has been a basic procedure in American archaeology for studying cultural materials recovered from historic period archaeological sites. A goal of quantitative analyses of cultural materials originally was the delineation of artifact patterning – patterning assumed to reflect cultural behavior. Pattern recognition within the realm of historic sites archaeology became popular in the 1970s and into the 1980s largely as a result of Stanley South's (1977) seminal work regarding method and theory in historical archaeology. South (1977) advocated artifact pattern recognition as part of doing "scientific archaeology" or anthropologically oriented archaeology. Orser (1989:28) states that "South maintains that an emphasis on patterns allows historical archaeologists to transcend their reliance on historical documents and leads to true theory building in historical archaeology." This orientation also offers an alternative to the limited and "data wasting" particularistic and humanistic approaches in historical archaeology which simply provide, at best, descriptive culture history. For South (1977), pattern recognition facilitates comparative artifact pattern analysis which is an essential means of discovering cultural processes. The explanation of patterned regularities in the archaeological record is a prime goal in archaeology. The discussion of these cultural regularities is (South 1977:xiii) " ... often expressed as empirical laws." This procedure is a step, using the scientific method, with attendant deductive reasoning, towards the ultimate anthropological objective of delineating and understanding nomothetic laws of cultural behavior.

Applying his concepts to several British Colonial sites along the eastern seaboard, South (1977), subsequent to comparative analyses, offered several named artifact patterns such as the *Brunswick, Carolina*, and the *Frontier* Patterns. The Brunswick Pattern concerns refuse discard whereas the Carolina and Frontier Patterns, via eight (8) functional artifact groups, express artifact assemblage regularity, occurring within a limited range of artifact frequency variability, for each published pattern (South 1977). South (1977) presented these formal artifact patterns as comparative baselines against which artifact assemblages from sites of similar age can be compared in order to help determine site function and possible ethnic affiliation(s) of site occupants. Artifact profiles - a site's artifacts placed into South's (1977) groups – not falling within the expected frequency ranges of the artifact groups associated with South's (1977) named patterns are believed to reflect different site functions, behaviors, and/or cultural processes than those characterizing the sites used by South (1977) to construct his formally named patterns.

There have been several cogent criticisms regarding the use of South's (1977) artifact pattern concept and analysis. Orser (1989:28) states that South's (1977) pattern concept is "...flawed for two important reasons". He (Orser 1989:28) believes that the concept does not provide the means for investigating culture change and that it does not provide "... an effective scale of analysis ..." sensitive to the complexities of most colonial sites. For Orser (1989:28) "...the pattern concept permits only synchronic, functional analysis." Gray (1983) argues that South's artifact groups are not satisfactory for urban or industrial sites. Further, she notes that

different excavation methods, such as the use of varying numbers, sizes, and locations of excavation units at a site, affect the frequency of recovered artifacts, hence the artifact profile of a given site (Gray 1983). Trinkley notes (1993:21) that, "It seems clear that when the excavations fail to explore a broad area of the site, incorporating a range of the activity areas and refuse zones, the resulting pattern will be distorted." Benson (1978), pointing out other potential problems or weaknesses in the artifact pattern concept, notes that British sites of similar origin are not always characterized by artifact profiles similar to South's (1977) named patterns and conversely, some with different origins and European ethnic affiliations do prove to be similar to South's formal patterns. She (Benson 1978) believes that these patterns actually reflect length of site occupation and/or access to viable world markets (Epps 2004). Stevenson (1983) observes that some researchers substitute artifact pattern studies for basic artifact analysis, rather than using pattern analysis to enhance and/or augment behavioral studies. Mullins-Moore (1981) and Stevenson (1983) both point out that another problem with artifact pattern studies has been that researchers often have not gone beyond the pattern analysis to investigate and discuss the behavior/processes reflected therein. While noting the plethora of named artifacts patterns offered by researchers in the 1980s (cf. Garrow 1982; Wheaten et al 1983; Trinkley and Caballero 1983; Drucker et al 1984; Zierden et al 1986) Orser (1989:37) notes, "As long as archaeologists continue to devise specific "patterns" for particular sites, or kinds of sites, an unconnected catalog of worldwide patterns will result."

Epps (2004:8) states that "Despite these critiques, patterning is still believed by many researchers to be a viable way to compare material culture among different sites." South's (1977) artifact pattern concept is based on functional artifact groups which organize material culture in a manner useful for baseline comparative analyses. These analyses are capable of addressing broad behavioral questions about a given site, such as "site function". The answers to these sorts of questions are imperative to know concerning undocumented sites, for example – many of which are frequently encountered in CRM archaeology. Joseph (1989:63) states that, "Pattern variation may indicate cultural variation, and not simply the failure of the pattern concept." Some researchers believe that if a large artifact sample from a site is retrieved from excavated contexts, a representative artifact profile can be derived which may overcome the potential bias of varying testing strategies at different sites. This strategy however does not solve the problem of the pattern concept offering only synchronic views of a site. Modifications or imaginative re-grouping of temporally sensitive artifacts may be one way to help transcend this perceived analytical flaw. Additionally, potential new groupings of artifacts, varying from South's (1977) suggested categories, should critically take into account the "true function" of a given artifact or set of artifacts – function(s) ascertained via the social context associated with potentially diverse ethnic groups of site occupants. For example, this way of thinking motivated some researchers (e.g., Drucker and Anthony 1979; Garrow 1982; Zierden et al. 1986) when constructing site artifact profiles to place colono ware into the Kitchen Group rather than into the Activities Group - as South (1977) originally suggested in his Carolina Artifact Pattern.

Tables 4 through 6 provide artifact profiles derived from cultural materials recovered from the 1995 excavations at 38CH857 that dated no later than 1830 or so (post pearlware). It

is believed that artifacts from excavated contexts will furnish a more representative site profile than those from surface contexts only. Surface collections tend to be dominated by more visible kitchen related artifacts. Cultural materials depicted in Table 4 are placed in the groupings suggested by South (1977) for comparison to the Carolina (CAP) and Frontier (FAP) Artifact Patterns. One modification to South's (1977) patterns reflected in Table 4 concerns the placing of colono ware into the Kitchen Group rather than into the Activities Group. This follows the (RCAP) Revised Carolina Artifact Pattern (cf., Drucker and Anthony 1979; Garrow 1982). Table 5 provides a view of the Parker Site's artifact profile compared to the Carolina Slave Artifact Pattern (Wheaton et al. 1983) and the Revised Carolina Artifact Pattern (Garrow 1982). Additionally, Table 6 compares the artifact profile of 38CH857 with the profile derived from Structure #1 within excavation Block #3 at Stono Plantation (38CH851) and the profile

	<u>38CH857*</u>	<u>38CH857*</u>	<u>CAP*</u>	FAP*
Kitchen	9,987 (84%)	9,803 (82.3%)	51.8 – 69.2%	10.2 - 45.0%
Architecture	<mark>869</mark> (7.3%)	869 (7.3%)	19.7 – 31.4%	29.7 - 74.3%
Furniture	72 (0.6%)	<mark>72</mark> (0.6%)	0.1-0.6%	0.0 – 0.5%
Arms	<mark>28</mark> (0.24%)	<mark>28</mark> (0.24%)	0.1 - 1.2%	0.0 - 15.6%
Clothing	<mark>59</mark> (0.5%)	<mark>59</mark> (0.5%)	0.6 – 5.4 %	0.0 - 6.9%
Personal	8 (.07%)	8 (0.07%)	0.1 – 0.5%	0.0-0.7%
Tobacco	780 (6.5%)	780 (6.5%)	1.8 – 13.9%	0.0 – 27.1%
Activities	107 (0.9%)	291 (2.4%)	0.9 – 2.7%	0.0 - 11.8%
TOTAL	11,910 (100%)	11,910 (100%)		

Table 4. C. Parker Site Artifact Profile Comparisons*

Colono Ware included in Kitchen Group* Colono Ware included in Activities Group* Late 19th and 20th century artifacts omitted* % range for Carolina and Frontier Artifact Pattern (South 1977)*

derived from the investigation of the Spiers Landing Site (38BK160) (Drucker and Anthony 1979; Epps 2004; Anthony 2012a). Structure #1 of Block #3 at Stono Plantation is less than a mile south of the Parker Site. It is contemporary with the primary occupation evidenced at the Parker Site (38CH857). The Spiers Landing Site is located on the south shore of Lake Marion in Berkeley County, near the community of Cross, South Carolina. It likely reflects a late 18th/early 19th century plantation slave occupation (Drucker and Anthony 1979).

	<u>38CH857*</u>	<u>CSAP*</u>	<u>RCAP*</u>
Kitchen	9,987 (84%)	70.73% - 84.2%	51.8% – 64.97%
Architecture	869 (7.3%)	11.82% – 25%	25.18% - 31.38%
Furniture	72 (0.6%)	.05%08%	.18%63%
Arms	<mark>28</mark> (.24%)	.02%27%	.09%34%
Clothing	<mark>59</mark> (0.5%)	.30%79%	.55% – 5.38%
Personal	8 (.07%)	.03%07%	.15%54%
Tobacco	<mark>780</mark> (6.5%)	2.43% - 5.41%	1.76% – 13.94%
Activities	107 (0.9%)	.21%86%	.94% – 1.86%
TOTAL	11,910 (100%)		

Table 5. Comparison of 38CH857 to the Carolina Slave Artifact Pattern and the Revised Carolina Artifact Pattern

Colono Ware included in Kitchen Group* Carolina Slave Artifact Pattern (Wheaton et al. 1983)* Revised Carolina Artifact Pattern (cf., Drucker and Anthony 1979; Garrow 1982)*

At first glance, the most striking characteristic of the Parker site artifact profile is the high percentage (84%) of Kitchen related artifacts. This percentage is completely out of the range of the CAP and the FAP (South 1977) as well as the (RCAP) Revised Carolina Artifact Pattern (cf., Drucker and Anthony; Garrow 1982). The 84% figure is barely within the range given for the Carolina Slave Artifact Pattern (CSAP) (Wheaton et al. 1983). It agrees most closely to a late 18th century occupation reflected primarily by Structure #1 of excavation Block #3 at Stono Plantation (38CH851) (Epps 2004; Anthony 2012a). Structure #1, most likely located within Stono Plantation's 18th century slave settlement, may have served multiple functions synchronically and diachronically (Epps 2004). The high relative percentage of Kitchen associated items at this occupation and at the Parker Site quite possibly was affected by site location in close proximity to Charleston, a substantial urban port, as well as site function(s) and post occupational activities (cf., Anthony 1989; Adams et al. 2006). Equally notable, regarding the Parker Site's artifact profile, is the low percentage of architecturally related items recovered from excavated deposits. This may be the result of intensive post occupational "robbing" and recycling of structurally associated artifacts at the site. Unquestionably,

intensive 19th century brick "robbing" activity(s) at Stono Plantation (38CH851), nearby, is evident in foundation remnants as well as in a surviving brick lined well within Excavation Blocks 1 and 2 (Anthony 2012a). Structural materials and deposits - brick, plaster fragments, nails, flat glass - and post holes, do suggest a substantial structural presence at the Parker Site during the 18th and early 19th centuries – occupations that likely would have originally yielded higher frequencies of architecturally associated cultural materials from the archaeological record before post occupational impact.

	<u>38CH857</u>	Structure #1, Block #3*	Spiers Landing*
Kitchen	9,987 (84%)	22,747 (82.4%)	2,275 (73.7%)
Architecture	<mark>869</mark> (7.3%)	3,678 (13.3%)	<mark>623</mark> (20.2%)
Furniture	72 (0.6%)	19 (.07%)	2 (.06%)
Arms	28 (.24%)	56 (0.2%)	<mark>6</mark> (.19%)
Clothing	<mark>59</mark> (0.5%)	325 (1.2%)	24 (.80%)
Personal	<mark>8</mark> (.07%)	38 (.14%)	2 (.06%)
Торассо	780 (6.5%)	654 (2.37%)	74 (2.4%)
Activities	107 (0.9%)	103 (.37%)	<mark>81</mark> (2.6%)
TOTAL	11,910 (100%)	27,620 (100%)	3,087(100%)

Table 6. Artifact Profiles of 38CH857, Structure #1 of Block #3 at StonoPlantation (38CH851), and the Spiers Landing Site (38BK160)

Modified from Drucker and Anthony 1979* Modified from Epps 2004*

The kitchen and architecture group artifacts comprise 91.3% of the Parker Site's excavated assemblage used in artifact profile construction. The remaining excavated assemblage, 1,055 items (8.7%), is dominated numerically by tobacco and activities related artifacts. These two (2) groupings fall within the range of the RCAP (Garrow 1982) while Arms, Clothing, and Personal associated artifacts are within the percentage ranges given for the CSAP

(Wheaton et al. 1983). Table 7 provides a listing of all cultural materials recovered in 1995 placed into South's (1977) artifact groupings.

Artifact Category	Frequency	Percentage
Olive Green Bottle Glass	2,023	18.5%
Leaded (Tableware) Glass	250	2.3%
Clear Bottle Glass	785	7.2%
Manganese Glass	144	1.3%
Aqua Bottle Glass	284	2.6%
Amber Bottle Glass	33	.30%
Other Container Glass*	290	2.6%
Pharmaceutical Glass	12	.11%
Non-Local Ceramics	6,610	60.3%
Colono Ware (Lesesne & Yaughan)	160	1.5%
Kasita Red Filmed	24	.22%
Other Historic Aboriginal	23	.21%
Residual Colono Ware	314	2.9%
Pewter Cutlery	3	.03%
Iron Vessel	2	.02%
Kitchen Group Total	10,957	100%
بله		

Table 7. Catherine Parker Site (38CH857) – Total Excavated Artifacts

blue, light green, milk, translucent*

Furniture Group Total	77	100%	
Upholstery Tacks	70	91%	
Furniture Hardware	7	9%	
Architecture Group Total	902	100%	
Dressed Marble	1	0.1%	
Roofing Slate	3	0.3%	
Spikes	7	0.8%	
UID Nails	25	2.8%	
Non-Wire Nails	302	33.5%	
Cut Nails	114	12.6%	
Hand Wrought Nails	392	43.5%	
Flat Glass	58	6.4%	
Flat Glass	58	6.4%	

Gunflints	5	18%
Shot	22	79%
Sprue	1	3%
Arms Group Total	28	100%
Beads	4	7.0%
Buckles	1	1.8%
Buttons	46	80.7%
Cuff Links (pair)	2	3.5%
Hook 'n Eve	1	1.8%
Thimbles	3	5.3%
Clothing Group Total	57	100%
Coins	2	25%
lewelry	- 5	62.5%
Spectacle Lens	1	12.5%
Personal Group Total	8	100%
Pine Stems	319	<u>41%</u>
Dino Dowle*	411	E 20/
UID Pipe Fragments	50	6%
Tobacco Pipe Group Total	780	100%
(1) one red clay bowl*		
	2	20/
	3 7	۷% ۲۵/
	Ι Λ	⊃% 20∕
Misc	4 129	5% 90%
TYTISC.	123	5070
Activities Group Total	143	100%

Based on the 1995 test excavations, kitchen related artifacts, ceramics particularly, were most frequently encountered in two (2) areas of the site (Figures 22 and 29). One of these areas was contiguous (north and east) to N410 E770 – the second area was immediately north of N435 E765. These areas also yielded the highest frequencies of nails and flat glass. Flat glass

occurrence at 38CH857 seems, albeit subjectively, underrepresented in the site assemblage – perhaps the result of architectural salvage. Further, the area immediately north and east of N410 E770 was an area of relatively heavy surface brick occurrence (Figures 23 and 29). The distribution of these cultural materials suggests the location(s) of, perhaps, a residence and/or residential associated structures nearby. The southernmost of these two (2) "clusters" evidences higher counts of temporally diagnostic early colonial materials – hand wrought nails and ceramics – ceramics dating earlier than creamware (before 1762).

Not surprisingly, the Kitchen group of artifacts recovered from the Parker Site is dominated numerically by ceramics. This circumstance has been noted by others investigating Colonial and Ante Bellum period residences in both rural and urban contexts (e.g., Zierden and Reitz 2005). Ceramics amenable to the derivation of a (MCD) Mean Ceramic Date (South 1977) are depicted in Table 8 while Table 9 depicts the total number of types as well as number of identifiable non – local ceramics recovered from the Parker Site in 1995. Earthenwares dominate the assemblage numerically (84.7%), followed by stonewares (8.5%), then porcelain (6.8%). Most of the identifiable ceramics date to the 18th century. Various whitewares, yellow wares, and 19th century stonewares comprise less than 5 % of the ceramics listed in Tables 8 and 9. Well over half of all the ceramics recovered during the 1995 excavations were comprised of three (3) earthenware types: delft ceramics (6.6%) lead glazed slipwares (22%), and creamwares (30%). Imported Delft and lead glazed slipware are commonly found on early 18th century sites in the Charleston area, while creamwares, first manufactured in the early 1760s, seems not to have become available and popular until the 1770s (Noel Hume 1969; Hamby and Joseph 2004; Zierden and Reitz 2005).

Delft, a soft bodied earthenware, normally exhibits a yellow or pink colored paste and a thick lead glaze containing lead oxide. Often, this tin enamel glaze erodes from the body of the ceramic. Noel Hume (1969) notes that the delft ware industry began as early as 1567 in Norwich via potters from Antwerp. Further he states (Noel Hume 1969:105) that, "The most important ceramic development in England in the seventeenth century was the successful growth of the so-called delft ware industry ...". Early English delft assemblages often consisted of elaborately decorated (hand painted) flatwares, but by the late 17th century, flower vases, jugs, candle holders, drug pots, and chamber pots, among others, were also produced. Originally called "galley ware" in England, delft is relatively rare on colonial American sites after about 1750 (Noel Hume 1969). Delftware was one of several English ceramics competing with the successful Chinese porcelain market (Noel Hume 1969).

Second only to creamware in frequency at the Parker Site, over 1,400 fragments of lead glazed slipware (Staffordshire – type Slipware) were recovered during the 1995 field season (Tables 8 and 9). This often buff bodied earthenware whose paste contains inclusions resembling "cracked black pepper" is coated with white and dark slips. Occasionally, reddish colored pastes occur as pink clay or grog is added to the fabric of particular vessels. Decorated with combed, trailed, dotted, and marbled designs, this slipware often has a clear lead glaze producing a yellowish "background". However, at times, the visible portions of light and dark slips are reversed resulting in a brown "background" with yellow decorations. Lead glazed

slipwares were being made in the Staffordshire area by the mid 17th century where many of the earlier forms were highly decorated dishes and chargers. The production of more utilitarian combed, trailed, and dotted vessels, targeted at middle and lower socio-economic classes, began in earnest during the last quarter of the 17th century (Noel Hume 1969). Staffordshire slipware vessels, made via press molding or the potter's wheel, were widely exported to the New World until the 1770s (Noel Hume 1969). Generally, the best made vessels date to the early colonial period (Figure 32).



C. Parker Site – MCD From Test Excavations (38CH857)

Ceramic Type	Date Range	Median Date	Count	Sum
Stoneware				
Albany Slipped	1805-1920	1863	2	3 726
Alkaline Glazed (Edgefield)	1800-1880	1840	14	25 760
Black Basalt	1750-1820	1785	12	21,700
Brown Mottled	1690-1775	1733	51	88 383
Elers Ware	1763-1775	1769	4	7 076
Nottingham	1700-1810	1755	79	138 645
Scratch Blue	1744-1775	1760	10	17 600
Westerwald	1700-1775	1738	102	177.276
White Salt Glazed	1740-1775	1758	170	298,860
Porcelain				
Overglazed Chinese	1660-1800	1730	107	185 110
Underglazed Blue Chinese	1660-1800	1730	131	226 630
White	1851-1915	1883	4	7 532
			0.00	1,002
Earthenware				
Agate Ware	1740-1775	1758	15	26.370
Astbury	1725-1750	1738	7	12,166
Buckley	1720-1775	1742	43	74,906
Creamware, Annular	1780-1815	1798	4	7.192
Creamware, Feather Edged	1765-1790	1778	6	10,668
Creamware, Overglazed	1765-1810	1788	2	3,576
Creamware, Undecorated	1762-1820	1791	1,881	3,368,871
Delft	1660-1800	1730	421	728,330
Jackfield	1740-1780	1760	110	193,600
Mid-Atlantic Earthenware	1675-1775	1725	48	82,800
Manganese Mottled Ware	1680-1750	1715	34	58,310
N. Devon Gravel Tempered	1650-1775	1713	22	37,686
Olive Jar	1560-1900	1730	4	6,920
Pearlware, Annular	1790-1820	1805	50	90,250
Pearlware, Blue Hand Painted	1780-1820	1800	98	176,400
Pearlware, Polychrome	1795-1815	1805	66	119,130
Pearlware, Transfer Printed	1795-1830	1813	50	90,650
Pearlware, Shell Edged	1780-1830	1805	50	90,250
Pearlware, Undecorated	1780-1830	1805	314	566,770
Slipware, Combed & Trailed	1670-1795	1733	1,417	2,455,661
Slip Coated Ware	1720-1740	1730	8	13,840
Whieldon Ware	1740-1770	1755	32	56,160
Whiteware, Undecorated	1820-1900	1860	134	249,240
Whiteware, Annular	1821-1900	1860	7	13,020
Whiteware, Trans. Print (non blue)	1826-1875	1851	3	5,553
Whiteware, Trans. Print (med. blue)	1821-1875	1848	3	5,544
Yellow Ware	1827-1922	1875	21	39,375
TOTAL			5,524	9,759,836

MCD = 1766.8

Ceramic Type	Frequency	% of Total	Date
Underglaze Blue Chinese Porcelain	131	2%	1660-1800
Overglaze/Enam. Chinese Porcelain	107	1.7%	1700-1780
Undecorated Chinese Porcelain	200	3.1%	1660-1800
Black Basalt Stoneware	12	0.19%	1750-1820
British Brown Stoneware	51	0.79%	1620-1775
Elers Ware	4	0.06%	1763-1775
Nottingham Stoneware	79	1.2%	1700-1810
Nineteenth Century Stoneware	125	1.9%	19 th century
Scratch Blue Stoneware	10	0.16%	1744-1775
Westerwald Stoneware	102	1.6%	1700-1775
White Salt Glazed Stoneware	170	2.6%	1740-1770
American Slipware	177	2.8%	c.1750- 1800
Buckley	43	0.67%	1720-1775
Delft (all types)	421	6.6%	1660-1800
Combed, Trailed, & Dotted Slipware	1,417	22%	1670-1795
Creamware (all types)	1,907	30%	1762-1820
French Green Glazed	11	0.17%	18 th century
Jackfield	110	1.7%	1740-1780
Lead Glazed Course Redware	398	6.2%	18 th century
Manganese Mottled Ware	34	0.53%	1670-1750
Mid Atlantic Ware	48	0.75%	1675-1775
North Devon Gravel Temp.	22	0.34%	1650-1775
Olive Jar	4	0.06%	1490-1900
Pearlware (all types)	635	9.9%	1780-1830
Whieldon Ware	32	0.5%	1740-1770
Whiteware (all types)	151	2.4%	1820-1900
Yellow Ware (all types)	17	0.26%	1827-1922
TOTAL*	6,418	100%	

Table 9. Non-Local Colonial and Ante Bellum Ceramics Excavated At 38CH857

*unidentified/un-typed ceramics excluded

Researchers note that three types of pottery vied for market supremacy in 18th century England (Tower 1978). These wares included delftware (tin-glazed earthenware), white salt glazed stoneware, and several varieties of lead glazed "cream colored" earthenware. Enoch



Booth, in about 1740, introduced a liquid lead glazed cream colored earthenware soon to be modified and marketed by other potters (Tower 1978). By 1750 or so, one of the earliest varieties of cream colored earthenware was created by Thomas Astbury and Thomas Whieldon (Noel Hume 1969). Glazed in purple, blue, brown, yellow, green, and gray, these "clouded" cream colored wares are common on mid 18th century American sites. They were manufactured until about 1770 (Noel Hume 1969; Miller 2000). Thirty two (32) fragments of Whieldon ("clouded") ware were recovered from excavated contexts at 38CH857. By 1759, a refined green glazed cream colored ware was offered via a partnership between Thomas Whieldon and Josiah Wedgewood. It was

somewhat popular until around 1775 (Noel Hume 1969; Hamby and Joseph 2004). Since this green glazed ware generally provided poor, disappointing market sales, Wedgewood eventually decided to produce, on his own, a clear glazed version of this refined earthenware (Noel Hume 1969). His technological development, innovative marketing, and transportation apparatus, placed *creamware* in a leading position in the world market (Noel Hume 1969; Tower 1978). The result of this venture, as Tower states, (1978: Foreward) "... was England's greatest contribution to the art and technology of pottery, and ... the death-blow to tin-glazed earthenware both in England and on the Continent"., among others. Creamware, (Tower 1978: Forward) "... was to be found in every inn from Russia to Spain". It is ubiquitous on late colonial American sites and by the 1780s creamware (along with pearlware) had replaced most other ceramics in North America.

The majority of this creamware was plain - characterized by darker and lighter versions. Miller (2000) assigns a date range of 1762-1780 to the darker variety and 1780-1820 to the lighter version. Overglaze painting and transfer printing were used to decorate some creamwares. Creamware came in virtually all tableware forms. Early molded plates (Figure 33) copied designs, such as the barley pattern, found on white salt glazed plates (Noel Hume 1969). By 1765 a creamware plate form called "feather edged" became popular (Noel Hume 1969). Besides flatware, other tableware vessel forms included punch pots and bowls, jugs, and tureens. Additional creamware vessels produced included chamber pots, figurines, lattice work (pierced) baskets, toiletry wares, and elaborate centerpieces (Tower 1978). At the Parker Site, plain creamware was the most frequent ceramic encountered. Over 1,900 sherds (about 30%) of the pottery recovered in 1995 were plain creamware tablewares. Other creamware vessels observed included Feather-edged plates and those with Spearhead rims, probable teapot and/or coffee pots with beaded rims and fluted bodies, and two fragments of "pierced" creamware possibly the remnants of a Cruet-Stand, Center-Piece, or Cream-Bowl (Noel Hume 1969; Tower 1978). Hand painted and annular creamwares were also recovered.

Figure 33. Creamware plates from The Charleston Museum collection(s).



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Non-architecturally associated glass was the second most frequent artifact (following ceramics) recovered at the Parker Site during the 1995 excavations. Of this artifact category, 53% (N = 3,821) was olive green bottle (spirits) glass fragments dating to the 18^{th} and early 19^{th} centuries. Later clear container glass (n = 785) fragments (bottle and jar forms) were the next most frequently occurring glass artifact observed from 1995. Leaded table glass (n = 250) represented 7% of the "kitchen" glass category and the remainder of the assemblage was comprised of aqua, amber, and manganese glass, among others (Table 7). The numerical dominance of olive green bottle glass, coupled with likely comparably aged leaded table glass, supports, as do other temporally sensitive artifacts, primarily a colonial period occupation(s) at 38CH857.

Architecturally related cultural materials at the Parker Site are represented primarily by nails followed by flat glass fragments. Hand wrought/forged nails (49%) were the most numerous of the identifiable nails observed - again supporting a colonial period occupation of the site. Spatially, they seemed to cluster in an area of about 50 feet in diameter with a center near N430 E775 (Figure 34). Other items include a few pieces of possible "roofing" slate or flagstone and a fragment of dressed marble (Table 7). It is possible that the slate is actually the remnants of a "writing" slate or recycled architectural slate used for counting. Slate fragments used to tally have been encountered at other area colonial plantations (e.g., Zierden et al. 1986).

As indicated in Tables 4, 5, and 6, less than 10% of the cultural materials recovered in 1995 were items other than those associated with kitchen and architectural activities. Most of these artifacts were kaolin clay tobacco pipe fragments. Relatively inexpensive for consumers, kaolin pipe remains are ubiquitous at American colonial and ante bellum sites. Noel Hume (1969:303) presents a reliable evolution of pipe bowl shape through time, however, most archaeological sites yield stem fragments which are relatively dated by the diameter of the pipe stem hole. Generally, the larger the pipe stem hole, the older the pipe. About 39% (n = 305) of the kaolin pipe fragments recovered from 38CH857 in 1995 were measured for pipe stem hole diameter – recorded in 64^{ths} of an inch. The pipe stem hole diameters ranged in size from 4/64



to 6/64 of an inch with the majority (74%) measuring 5/64 of an inch. From an investigation of thousands of kaolin pipes dating from 1620 to 1800, Harrington (1954) produced a study demonstrating the diachronic variations of pipe stem hole sizes. According to this study, hole diameters of 5/64 cluster most between 1710 and 1760. Binford (1962), using Harrington's (1954) data offered a straight-line regression formula (Noel Hume 1969:299) "... enabling a mean date to be arrived at

for any assemblage of stem fragments, be it large or small." According to Binford's (1962) regression formula, a mean date of 1746.2 characterizes the 1995 pipe stem assemblage from the Parker Site. Thus, a primarily colonial period occupation for 38CH857 is again suggested.

Seventy seven (77) furniture related artifacts were recovered from the Parker Site during the 1995 excavations (Table 7). Most of these items were "furniture tacks". Others included hinge fragments, decorative hardware, and a drawer pull. Noel Hume (1969) notes that upholstery tacks are among the earliest furniture fittings found on American colonial sites. Normally made from a copper alloy, many of these tacks were decorative as well as functioning to anchor leather or fabric onto furniture. Colonial travel trunks were, at times, decorated with numerous upholstery tacks while larger tacks were used as ornaments on harness and on coaches (Noel Hume 1969). Furniture associated hardware (18th century) at the Parker Site seems to cluster in the most northeastern section of the site tested in 1995 – between N410 and N455 (Figure 29). This seems to re-enforce the belief that this section of 38CH857 is the area of the most intense 18th century occupation/activity at the site.

In 1995 the Parker Site yielded about the same number (N = 65) of personal and clothing related artifacts as furniture associated items (Table 7). Moreover, these items occurred most frequently in the same area within 38CH857 as did the furniture associated artifacts. Items encountered which were assigned to South's (1977) Personal Group included an 18th century British coin (halfpenny), a cut Spanish silver coin (bit), several jewelry fragments (glass), and a spectacle lens (Figure 35). Clothing associated artifacts recovered were blue and red brown colored beads (Kidd and Kidd [1974] types 1c12 and 11a2 respectively), thimble fragments, a buckle and a hook ('n eye), a pair of silver cuff links, and buttons (Figure 36). As documented in Table 7, buttons were the most numerous artifacts of these two categories. Copper alloy, white porcelain, glass, and iron buttons were excavated at 38CH857. Most of the buttons recovered



were 18th century copper alloy buttons. Of those identified, most complied with South's (1964) button types 7 and 9.

Figure 35. Spectacle lens and jewelry fragments (38CH857).

Having received local and national press (first issue of *George Magazine*), one of the most "exciting finds" of the 1995 field season was a George Washington Inaugural Button - now on permanent exhibition at The Charleston Museum (Figure 37). Dating to 1789, this large copper alloy button was found by Charleston Museum volunteer Steve Davis in excavation unit N300

E460 – Locus #2 (Figure 30). Cobb (1968:25) refers to this specimen as "A rare variation with only two specimens known." Both of these examples are purported to have been found in South Carolina (Cobb 1968). The Parker Site George Washington inaugural button is similar to the Dotted Script GW and Cobb Type #10 (Cobb 1968). Cobb (1968:25) labels it as "Cobb Unlisted, DeWitt 1789-2 variation, Albert WI-10 variation".

Referred to as "GWs" by collectors, George Washington inaugural buttons are among the earliest American political memorabilia. According to Cobb (1968), 300 – 400 examples are known in various collections – most having been found in New England, Pennsylvania, and New York. Over seventy (70) varieties among several patterns are known for these GWs. Patterns such as, Eagle & Star, dated Eagle, GW in Oval, Linked States, Sunburst, and Wreath & Star, among others, are observed by serious collectors (Cobb 1968). Most of these buttons contain the initials "GW" and the statement "Long Live The President" presented in various forms/styles.

GW inaugural button enthusiasts note a relative lack of documentation regarding the 18th century manufacture, use, availability, and popularity of these collectables. Some researchers believe that this lack of data may be because they were regarded as high socio-economic status items – objects of conspicuous consumption produced in limited numbers and thus not commonly advertised or discussed in newspapers and other media. Cobb (1968:4) states that,

Figure 36. Buttons and glass beads (38CH857).



"...these buttons were considered in the same category as we consider a fine pair of cuff links and a tie pin today, accessories for the well groomed gentleman of that period ... They were not sewed on the great coats but were worn by inserting the shank through a button-hole and a tape, knotted at the top and bottom ... at the end of the day they were removed and carefully preserved for the next wearing. They were expensive and not easily replaced if lost."

Figure 37. George Washington Inaugural Button.



Like items usually assigned to South's (1977) Personal Group, cultural materials normally placed within the Arms Group are often some of the least numerous artifacts found on historic period sites not associated with a military function. At 38CH857 only 28 non-modern artifacts were encountered that could be placed into the Arms Group. These objects included lead shot, sprue, and "English" gunflints. Encountered primarily in excavation units from E665 to E790, these artifacts seemed to cluster within an approximate thirty (30) foot diameter area with its center near N445 E775 (Figure 29). This generally is the location where other cultural materials tended to occur most frequently, although shot, particularly, appears to have been distributed somewhat more evenly than other artifacts

throughout the eastern section of the site. About 1/3 of the lead shot recovered in 1995 was hunting and/or buckshot. Only one (1) example of an impacted shot was observed from the testing phase. This mix of "hunting shot" and larger ball shot is fairly typical of colonial Lowcountry Plantations. Shot was often manufactured on colonial sites thus sprue at colonial sites, military and residential, can be infrequent but not uncommon. Lead cast net weights were made in bullet molds as well.

Artifacts placed into South's (1977) Activities Group can be diverse – representing quite a few activities. For instance, the Parker Site yielded artifacts as diverse as lead fishing and cast net weights, toys (doll parts, marbles, gaming pieces), strike-a-lights, a copper alloy ruler, a copper alloy candle holder, slate pencil fragments, a harness buckle, and farm tools, among others (Figures 38 and 39). While these artifacts clearly reflect particular behaviors quite possibly associated with specific gender, age, and/or socio-economic status groups, at times, some cultural remnants placed within the Activities Group are not as straightforward in terms of the "kinds of behavior" they reflect. For example, fragments of copper and lead, ferrous sheet and strap metal fragments, English flint flakes, wire fragments, pewter fragments, are remnants of activities not easily discernible. Some may reflect more than one activity – perhaps the result of recycling behavior. For instance, English flint debitage, usually from



ballast, is commonly found on colonial Lowcountry Plantations as well as in downtown Charleston. (Davis 1986; Zierden and Reitz 2005). English flint tools such as blades, strike-a-lights, scrapers, utilized flakes (debitage), among others, have been recovered from colonial rural and urban contexts and often are examples of recycled cultural materials (eg. Zierden et al. 1986; Zierden and Reitz

2005; Anthony 2012). Recycling behaviors, as evidenced in artifacts from colonial contexts, is one avenue of research which merits additional focused investigation when studying colonial plantations.

The artifact assemblage from 38CH857, as expressed in the site's artifact profile, reflects residential activities. The types and frequencies of individual artifacts as well as artifact classes support this interpretation. Under the assumption that artifact frequency correlates with occupation intensity, temporally sensitive cultural materials recovered from 38CH857 support primarily an 18th century occupation at the Parker Site. Ceramic frequency suggests that the most intense occupation occurred during the third quarter of the 18th century. Tables 2, 8, and 9 provide a listing of most of the ceramics identified at 38CH857 to date. The presence and frequency of what is known archaeologically as relatively "higher socio-economic" status artifacts such as leaded glass tablewares, jewelry, porcelain, personal objects, and clothing

items, coupled with a low incidence of artifacts such as beads, pierced coins, and colono ware, often prevalent in lower status plantation contexts, suggest that the colonial residential occupation of the Parker Site was primarily a middle to upper socioeconomic class occupation(s), perhaps that of a free yeoman farmer(s) or relatively small plantation owner(s). Further historical and archaeological research should be performed regarding 38CH857 in order to address this hypothesis and others.



Figure 39. Candle holder (copper alloy).

Subsurface Cultural Features

The stratigraphy at the Parker Site (38CH857), that is, the vertical arrangement of culture bearing deposits, are straightforward and more or less typical for most rural archaeological sites in this region. Most undeveloped areas, similar to the Dill Sanctuary, containing archaeological sites have either been logged or cultivated or both at some point since the 16th century thus, most sites exhibit a plow zone, and at times, more than one plow zone, (archaeological deposits disturbed via cultivation). The plow zone(s) potentially overly intact site remnants that are contained within lower elevation subsoil deposits. Outside of an alluvial setting, below plow zone subsoil contained deposits are often the only intact remnants at a rural archaeological site. Bearing important cultural/behavioral information, these deposits are often used to define a given site's research potential and significance – particularly in the realm of (CRM) *Cultural Resource Management*.

Of the forty five (45) 5 by 5 foot units excavated at the Parker Site (38CH857) in 1995, thirty seven (37) units (82%) evidenced intact subsoil cultural features immediately below plow zone deposits. One hundred and twenty three (123) cultural features were recorded during the 1995 study. Several of these deposits are suspected of being more than one feature, in other words, reflecting more than one activity. Confirmation of this circumstance awaits excavation of the deposits. Most of these features are likely architecturally related. Table 10 provides a brief description and location of the features recorded during the 1995 field season at the Parker Site.

Table 10. Cultural Features Recorded For 38CH857.

<u>Feature #1</u> – Located in the southwestern corner of unit N300 E460, this generally semi-circular area of dark mottled soil extends into at least three other 5' by 5' excavation units. Within N300 E460, it exhibits clearly definable limits extending ca. 1.5 feet north/south by 1 foot east/west. Feature function is presently unknown.

<u>Feature #2</u> – Bisected by a northeast/southwest trending plow scar, this deposit appears to actually be two adjacent circular shaped features. Characterized by mottled dark brown and yellow red fill, both of these generally circular deposits are about 1 foot in diameter. Feature #2 most likely represents two individual post holes.

<u>Feature #3</u> – This linear appearing feature trends northeast/southwest and was exposed in the southern half of excavation unit N300 E470. Feature #3 evidently extends into three (3) adjacent excavation units. It is characterized by a linear area of mottled dark soil with notable yellow red sand immediately north of an area of "solid" dark brown soil. It is quite possible that Feature #3, as revealed in unit N300 E470, is a relatively large dark feature with plow scars on its north edge. The activity resulting in this deposit is currently unknown.

<u>Feature #4</u> – This north/south trending feature is an amorphous, but generally linear deposit exposed in excavation unit N300 E450. Extending over more than half of the unit floor, feature

#4 fill consists of mottled dark brown sandy loam, yellow red loamy sand, and loamy clay soils. Feature function of this relatively large feature is unknown.

<u>Feature #5</u> – Located in the northwestern section of excavation unit N300 E450, this somewhat irregular, but generally oval shaped feature may reflect the remnants of a post hole - possibly two adjacent post holes. It is characterized by a mottled grey brown sandy loam and yellowish loamy sand fill.

<u>Feature #6</u> – Located along the west wall of excavation unit N300 E450 and south of Feature #5, this semi-circular shaped deposit extends west into unit N300 E445. About .7 feet in diameter, feature #6 has a slightly mottled dark sandy loam fill with charcoal fragments. This feature quite likely represents a post hole.

<u>Feature #7</u> – Quarter-circle shaped, this feature is located in the southwest corner of excavation unit N300 E450. Feature #7 is characterized by a mottled grey brown sandy loam fill containing charcoal fragments. It extends into three adjacent excavation units. To date, feature function is unknown.

<u>Feature #8</u> – Located in the northwest area of excavation unit N310 E435, this generally square shaped feature exhibits a plow scar along its south side. Feature #8, about a foot square, is characterized by mottled dark grey brown sandy loam and yellowish loamy sand containing charcoal fragments. Its shape and size are suggestive of a post hole.

<u>Feature #9</u> – Located east of Feature #8, this feature's north side exhibits a plow scar. Feature #9 is roughly rectangular in shape and extends into the north wall of excavation unit N310 E435. It is characterized by mottled light brown sandy loam and yellowish loamy sand fill. This deposit may represent a post hole, possibly associated with Feature #8.

<u>Feature #10</u> – Another rectangular shaped feature, this deposit also contains a plow scar crossing its southern section. Characterized by mottled light brown and yellowish fill, Feature #10 may very well be an additional post hole associated with Features 8 and 9. Feature #10 extends north an unknown distance into unit N315 E435.

<u>Feature #11</u> - Exhibiting mottled dark brown and yellowish fill, this feature is situated directly south of feature #10, in N310 E435. Roughly square shaped (rounded corners), this deposit extends 1.1 feet north/south by .9 feet east/west. Feature #11 is characterized by well defined limits and is likely the remnants of a post hole.

<u>Feature #12</u> – Extending about 2.5 feet north/south by 2 feet east/west, this feature is characterized by a mottled dark brown matrix with flecks of charcoal. Feature #12 is bisected by a northeast/southwest trending plow scar and was discovered in the southwest corner of excavation unit N325 E440. It extends into two adjacent units to the west and south. Its function is unknown.

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Figure 40. Features 13 and 14.

<u>Feature #13 and #14</u> – Features 13 and 14 appear to represent a rectangular shaped post hole and post mold, respectively. Feature #13 contains mottled light grey brown fill while feature #14 is characterized by a dark grey brown matrix. This deposit extends over an area of about 1 foot north/south by .7 feet east/west. These features are located in excavation unit N325 E440 and may represent a structural post hole and mold (Figure 40).

<u>Feature #15</u> – This cultural feature represents a post mold and a square shaped post hole. Area "B", a post hole, about a foot square, is



characterized by a fill matrix of mottled medium grey brown sandy loam with light loamy sand and sandy clay. While area "A" is a mottled dark brown. These deposits exhibit substantial bioturbation and are located along the north side of excavation unit N395 E680.

<u>Feature #16</u> – This amorphous deposit of dark grey brown soil extends into the north wall of excavation unit N395 E680. The function of this feature is unknown and it is possible that it is non-cultural.

<u>Feature #17</u> – Located in excavation unit N420 E680, this somewhat oval shaped deposit is characterized by mottled dark brown soils. Disturbed on its south side by plowing and on the west side via bioturbation, it is possible that feature #17 is non-cultural and actually reflects the remnants of a tree and/or roots. No further investigation is recommended for this deposit.

<u>Feature #18</u> – Located in excavation unit N380 E720, this feature is characterized by a mottled brown matrix with lighter colored soils near its center. Extending south into the next excavation unit, this deposit is roughly rectangular in shape. This feature's function is unknown.

<u>Feature #19</u> – Somewhat square shaped, this feature is located in the southwest corner of N380 E720 – just north of feature #18. It is characterized by mottled med grey brown soil with lighter colored sandy soil near the deposit's perimeter. It is likely that this feature is a post hole.

<u>Feature #20</u> - Extending into the east wall of excavation unit N380 E720, this roughly rectangular shaped area may represent another post hole. It is characterized by a mottled brown matrix with a somewhat darker colored area near its center.

<u>Feature #21</u> – Extending into the west wall of excavation unit N405 E690, this deposit is bisected by an east/west trending plow scar. Geometrically shaped, feature #21 may be a post

hole, quite possibly rectangular in form, once entirely exposed. It is characterized by a very mottled dark grey brown soil matrix exhibiting brick, charcoal, and shell fragments.

<u>Feature #22</u> – Originally circular in shape this feature evidences a plow scar on its northern edge. Characterized by a dark grey brown soil matrix, this deposit may very well be a post hole. It is located in the northwestern corner of excavation unit N395 E705.

<u>Feature #23</u> - Located in the southwest corner of excavation unit N405 E755, this quartercircle shaped area is characterized by more or less homogenous dark grey brown and somewhat "loose" soil near its center surrounded by compact dark brown soil with yellowish mottles. This feature extends west and south into adjacent excavation units. Its function is unknown.

<u>Feature #24</u> – Located along the west edge of excavation unit N410 E770, this circular shaped feature likely represents a post hole. Extending into the adjacent excavation unit to the west, this deposit is characterized by a mottled dark grey brown and yellowish soil matrix. Feature #24 is about .75 feet in diameter.

<u>Feature #25</u> – South of Feature #24 and also along the west edge of N410 E770, this deposit may be associated with Feature #24. Circular in shape, this feature is characterized by a mottled dark brown and yellowish soil matrix as well. Feature #25 is about .75 feet in diameter.

<u>Feature #26 and #27</u> – These separately recorded but associated proveniences define a relatively large post hole and post mold. Located in the northeastern section of excavation unit N410 E770, feature #26 is a more or less rectangular deposit of mottled dark brown and yellowish soils surrounding a (feature #27) dark brown generally circular area of compact lightly mottled soil. Feature #26 extends for about 1.5 feet north/south by 1 foot east/west. This feature is sufficient in size to represent a structural foundation rather than a fence or scaffold. It may be associated with features 75 and 109 to the east. Substantial bioturbation is evident within these features.

<u>Feature #28</u> – Located on the eastern edge of excavation unit N410 E770, this large rectangular deposit extends east into the adjacent excavation unit. Characterized by mottled dark grey brown soils, feature #28 extends 2 feet north/south by .8 feet east/west. Its size and shape suggest that it reflects an architecturally related function or association.

<u>Feature #29</u> – Exposed in the north section of excavation unit N410 E780 and northwestern corner of N410 E785, this deposit is a rectangular shaped mottled area of dark grey brown and yellowish soils extending about 4 feet east/west by 2 feet north/south. It is bisected by a northeast/southwest trending plow scar. Its size and shape suggest an architectural function. It may be associated with feature #30.

Figure 41. Feature #30 partially excavated.



<u>Feature #30</u> – This feature is one of two (2) features partially excavated during the 1995 testing phase at the Parker Site. Exposed in three excavation units, this large linear shaped feature is likely architecturally related. It extends across an area of about 12 feet northeast - southwest by 2.1 feet northwest - southeast. This well defined expanse contains a heavily mottled dark grey brown soil matrix with charcoal flecks. Sections of feature #30 excavated in units

N410 E775 and N410 E780 revealed gently sloping sides (semi-circular shaped) to a maximum depth of .9 feet near the feature center (Figure 41). This feature appears to have been filled in one depositional episode. Bone, charcoal, and hand wrought ferrous nails were recovered from the feature fill. The occurrence of hand forged nails within feature #30 fill suggests a date of deposition before 1800 for this feature.

<u>Feature #31</u> – Located in the southwest corner of excavation unit N410 E780, this quarter-circle shaped deposit is characterized by grey brown soil mottled with lighter colored loamy sand and sandy clay. Extending into at least two other excavation units, the function of this feature is unknown.

<u>Feature #32</u> – Exposed along the south side of excavation unit N410 E780, this half-circle shaped deposit is likely a post hole. Feature #32, about .7 feet in diameter, has a lightly mottled dark brown soil matrix and extends into the adjacent excavation unit to the south.

<u>Feature #33</u> – Located less than a foot north of Feature #32, this generally circular shaped deposit also exhibits a lightly mottled dark brown sandy loam soil matrix. Approximately .8 feet in diameter, feature #33 may be a post mold associated within a larger faintly delineated post hole – possibly associated with features 75, 109 and 112. A re-examination and possible excavation is needed to determine the function of feature #33.

Feature #34 – This deposit is evidently part of Feature #112 described below.

<u>Feature #35</u> - Located just northwest of the approximate center of excavation unit N410 E780, this feature actually intrudes into a plow scar. About .5 feet in diameter, this circular deposit of dark brown sandy loam may represent a "late" post hole - possibly a fence post hole.

<u>Feature #36</u> – Located in the northwest corner of excavation unit N435 E770, this rectangular shaped feature extends north and west into adjacent excavation units. Extending 1.4 feet

north/south by .8 feet east/west, feature #36 is characterized by a dark grey brown fill mottled substantially with yellowish loamy sand. The northern area of feature #36 is crossed by a northeast/southwest trending plow scar. This deposit may be a relatively large post hole.

<u>Feature #37</u> – Extending from the west wall of excavation unit N435 E770, this feature is located less than a foot south of feature #36. Exhibiting a generally amorphous but linear shape, this deposit is characterized by a mottled dark brown soil matrix containing brick, charcoal, mortar, and shell fragments. It occurs across and area of approximately 2.5 feet east/west by 1.1 feet north/south. The function of this feature is unknown.

<u>Feature #38</u> – Located in excavation unit N435 E770, southeast of feature #37, this deposit is generally square shaped – approximately .8 feet on a side. It is characterized by dark grey brown soils mottled with yellowish sandy loam. Its north side evidences a plow scar. Its size and shape are suggestive of the remnants of a post hole. It is likely associated with feature #39.

<u>Feature #39</u> – Situated immediately north of feature #38, this cultural feature may also represent a post hole. This deposit is characterized by a roughly oval shaped area of yellowish brown soil matrix mottled substantially with dark grey brown soil. It extends over an area of 1.4 feet northeast/southwest by .7 feet northwest/southeast. A plow scar is evident on the south side of feature #39. It is quite possible that features 38 and 39 reflect a single post hole bisected by a plow scar. If so, this deposit is large enough to be the remnants of a structural post hole rather than a fence post or posts associated with scaffolding.

<u>Feature #40</u> – Located about mid way along the east wall of excavation unit N435 E770, this feature is likely a post hole like several other features exposed in this excavation unit. Feature #40 is square shaped, about .8 feet on a side, and contains a light brown soil matrix mottled with dark brown sandy loam. This feature extends a short distance into the adjacent excavation unit to the east.

<u>Feature #41</u> – Exposed in the northeast corner of excavation unit N435 E770, this circular shaped deposit, probably a post hole, would likely "square up" in shape upon excavation. Feature #41 currently exhibits a diameter of about a foot and extends a short distance into the north wall of the excavation unit. It is characterized by a light brown soil matrix heavily mottled with dark grey brown sandy loam.

<u>Feature #42</u> – Located immediately east of feature #41, this feature, as exposed in the northeast corner of excavation unit N435 E770, is a square shaped area of light brown soil mottled by dark brown sandy loam. It extends into two adjacent excavation units to the north and east. Its shape is suggestive of a post hole but further exposure of this deposit and possibly excavation of this feature is needed to determine its function.

<u>Feature #43</u> – Extending over approximately one quarter of the excavation unit floor in the southwest area of N430 E755, this deposit is bisected by a northeast/southwest trending plow scar. Recorded as sections "A" and "B", the function of feature is unknown. Area "A",

surrounding "B" to the north and east, is a large area of mottled medium brown soil, while "B" is characterized by dark brown soil matrix containing charcoal fragments. Feature excavation is needed to determine feature function. This feature may actually represent more than two features.

<u>Feature #44</u> – Located in the northwest corner of excavation unit N430 E755, feature #44 is characterized by a mottled brown soil matrix with brick fragments. Designated in the field as Feature #44 "A" and "B", this deposit is likely one feature bisected by a plow scar. Both sections appear to extend into adjacent excavation units to the west and north. This deposit is geometrically shaped, however feature function is unknown.

<u>Feature #45</u> – Located near the center of excavation unit N430 E755, this deposit is defined by a square shaped area, .8 - .9 feet on a side, of mottled grey brown sandy loam. A somewhat darker area of soil can be seen in the feature's southwest corner. Shape and size suggest that Feature #45 may very well be a post hole with a post mold. Feature excavation would likely verify this deposit's function.

<u>Feature #46</u> – This large deposit was exposed in four (4) excavation units, N400 E720, N405 E720, N400 E725, and N405 E725. Roughly oval in shape, Feature #46 extends over an area of about seven (7) feet east/west by four (4) feet north/south. Full of brick rubble within a heavily mottled dark grey brown sandy loam matrix, this sizable feature may be the result of brick "robbing" and processing activity(s) (Figure 42). This feature, the second of two features partially excavated during the 1995 testing effort, yielded faunal material, ferrous nail fragments, and two (2) kaolin pipe stem fragments. The pipe stem hole diameters are 4/64 and 5/64 of an inch for the fragments recovered from feature #46. This supports a likely terminus post quem (TPQ) of the second half of the 18th century for this deposit. Feature #46 extends west of the above mentioned excavation units for an unknown distance.



Figure 42. Feature #46 (brick rubble) partially excavated.

<u>Feature #47</u> – Located on the south side of feature #46, this deposit extends across two excavation units – N400 E720 and N400 E725. Feature #46 has intruded into approximately the northern third of feature #47 which survives as a semi-oval area of mottled brown sandy loam with brick rubble. The function of feature #47 is unknown.

<u>Feature #48</u> - Located in the southwest area of excavation unit N400 E720, this generally round shaped deposit likely would "square up" in shape upon excavation. Currently, about .9 feet in diameter, feature #48 is characterized by heavily mottled grey brown soil containing brick fragments and charcoal. It probably is a post hole.

<u>Feature #49</u> – Located in the northeast section of excavation unit N405 E720, this oval shaped deposit may represent another post hole. Characterized by heavily mottled grey brown soil with charcoal fragments, this deposit also evidenced a single brick fragment. It extends over an area of .8 feet east/west by .4 feet north/south.

<u>Feature #50</u> – Located about midway along the west side of excavation unit N400 E725 and generally circular in shape, feature #50 is bisected by a plow scar. It is characterized by a .5 foot in diameter area of mottled grey brown soil with brick fragments. Feature #50 may represent another post hole, perhaps one associated with a fence line.

<u>Feature #51</u> – Located just northeast of feature #50 in excavation unit N400 E725, this feature is generally rectangular shaped (with rounded corners). It is characterized by mottled dark brown soil with brick and a substantial amount of charcoal. Feature #51 extends over an area of about 1 foot north/south by .8 feet east/west. Feature function is unknown but size and shape suggest that it may be a post hole.

<u>Feature #52</u> – Located in the southeast area of excavation unit N405 E725, this feature is bisected by a northeast/southwest trending plow scar. Like several other features at the Parker Site, feature #52 is circular shaped and may represent a post hole. Approximately .7 feet in diameter, this deposit is characterized by heavily mottled grey brown soil containing brick and charcoal fragments.

<u>Feature #53</u> – This feature is located in the northwest section of excavation unit N420 E770. It is characterized by a linear amorphous shape of mottled dark grey brown sandy loam. Plow scarring can be seen along the feature's northern edge. This currently defined deposit is potentially more than one feature. The eastern extent of feature #53 is darker and roughly circular. This circular area may very well be a post hole. The function of this cultural deposit is unknown pending further excavation and subsequent evaluation.

<u>Feature #54</u> – Like feature #53, this feature exhibits a somewhat linear amorphous shape. Encompassing almost the entire southern half of excavation unit N420 E770, feature #54 may actually represent several individual features. Overall it is characterized by a dark brown matrix mottled with tan loamy sand. Its function(s) is unknown. Further excavation of this deposit is recommended.

<u>Feature #55</u> – Located in the northwest corner of excavation unit N420 E780, this feature is slightly oval shaped. Characterized by a dark grey brown fill, feature #55 barely extends into

excavation unit N425 E780. This deposit is about .8 feet in diameter and may represent a post hole.

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<u>Feature #56</u> – Immediately southeast of feature #55, this feature is a circular deposit which may "square up" upon further excavation. It is characterized by mottled dark brown fill across an area of .9 feet in diameter. Additionally, substantial bioturbation is evident in this deposit. Its regularity and size suggest that it is a post hole. It may be associated with feature #60.

<u>Feature #57</u> – This generally circular deposit intrudes into the southwestern edge of feature #56. It is characterized by lightly mottled dark grey brown fill across an area of about .6 feet in diameter. Its possible that feature #57 also is a post hole.

<u>Feature #58</u> – This feature occurs near the center of the west wall in the floor of excavation unit N420 E780. Approximately half of the deposit extends west into excavation unit N420 E775. This deposit is an almost square shaped area (.7 feet/side) with mottled brown fill around a dark semi circular feature. Feature #58 is probably a rectangular shaped post hole with either a square or circular shaped post mold.

<u>Feature #59</u> – Located south of feature #58, this circular shaped deposit extends west barely into excavation unit N420 E775. Feature #59, characterized by lightly mottled dark brown sandy loam fill, is .5 feet in diameter. It may be a small post hole associated with a fence line.

<u>Feature #60</u> – Located in the northeastern section of excavation unit N420 E780, this feature is bisected, as others, by a northeast/southwest trending plow scar. Characterized by a heavily mottled dark brown fill this feature is roughly square shaped (rounded corners) and about .9 feet in diameter. Feature #60 exhibits intense bioturbation. The matrix has "the look" of old feature fill. This deposit is likely a structural post hole. It appears intrusive into the northwestern corner of feature #61.

<u>Feature #61</u> – Extending for about four feet north/south along the east wall of excavation unit N420 E780, this feature extends west into the unit floor for about .8 feet. This expanse is defined by an area of dark brown soil which may actually be several features whose fill overlaps at the unit floor elevation. This dark area extends east an unknown distance into excavation unit N420 E785. The northern half, more or less, of this expanse is somewhat rectangular in shape and is impacted on its northwestern corner by feature #60. Further excavation of this deposit is recommended in order to determine accurate feature(s) dimensions and function.

<u>Feature #62/63</u> - Located in the southwest area of excavation unit N420 E755, this roughly circular shaped feature with charcoal fragments, about 1.2 feet in diameter, is characterized by medium grey brown fill heavily mottled with yellowish loamy sand. This feature, originally recorded as two separate deposits, is potentially a post hole.

<u>Feature #64</u> – Located in the northwest quadrant of N420 E755, feature #64 may extend into the next excavation unit north. Excavation may reveal that this deposit is the remnants of more

than one feature. Feature #64 is roughly oval in shape. Evidencing a plow scar along its southern limit, this deposit is characterized by a medium grey brown soil matrix mottled with yellowish loamy sand. This relatively large feature is approximately 1.7 feet northeast/southwest by 1.4 feet northwest/southeast. The function of this cultural deposit is unknown although its shape and size strongly suggest that it is a structural post hole.

<u>Feature #65</u> – Located along and in the north wall of N420 E755, about half of this circular feature extends into the next excavation unit. It is characterized by a lightly mottled dark brown soil matrix with shell fragments. Approximately 10 inches in diameter, this deposit very likely is a post hole.

<u>Feature #66</u> – Located in the northeast section of N420 E755, this small deposit is characterized by a mottled medium brown soil matrix. It has one side relatively straight and one rounded side and may represent a "shovel ding" into unit subsoil.

<u>Feature #67</u> - Located about half way along the west wall of N415 E770, this semi-oval shaped deposit extends west for an unknown distance into excavation unit N415 E765. It is characterized by heavily mottled grey brown and yellowish colored soil. A determination of feature function awaits full exposure and possibly excavation.

<u>Feature #68</u> – Intrusive into feature #69, this feature is roughly circular shaped. Exhibiting a dark mottled grey brown fill, feature #68 has a diameter of approximately 1.1 feet. Its shape and size suggest an architecturally related function perhaps associated with feature #69.

<u>Feature #69</u> – Located in the center of excavation unit N415 E770, this relatively large oval shaped deposit is somewhat lighter in color than feature #68. Characterized by a mottled brown sandy loam matrix, this deposit intrudes into feature #s 70 and 71. It is suspected that the function of feature #69 is architecturally related.

<u>Feature #70</u> – Located near the center of excavation unit N415 E770, this oval shaped feature has been impacted in its northern section by feature #69. Feature #70 is characterized by grey brown fill heavily mottled with yellow-red sandy clay. The shape and size of feature #70 suggest an architectural affiliation.

<u>Feature #71</u> – Adjacent to feature #s 69 and 70, this deposit appears to have been intruded upon by both of these features. Feature #71, deposited earlier than features 69 and 70, appears to have originally been circular to oval shaped. Characterized by a mottled dark grey brown fill, this deposit is also likely to be architecturally related – perhaps a post hole.

<u>Feature #72</u> – Located immediately north of feature #69 in excavation unit N415 E770, this feature is rectangular shaped - .8 feet east/west by .5 feet north/south. This deposit is characterized by dark grey brown sandy loam mottled with yellow-red soils. Feature #72 is likely a post hole and may be associated with feature #73 to the northeast.

<u>Feature #73</u> – Located in the northeastern section of N415 E770, this roughly rectangular deposit may be associated with feature #72. Exhibiting dark grey brown fill mottled with yellow-red soil, feature #73 extends .6 feet northeast/southwest by .4 feet northwest by south east. The shape of this deposit suggests that it is a post hole – perhaps associated with a fence line.

<u>Feature #74</u> – About 1.2 feet in diameter, this circular feature is contained within two excavation units – N410 E785 and N410 E790. It is characterized by an almost homogenous brown fill, lightly mottled. Its shape and size suggest that it is possibly a post hole – perhaps associated with feature #75. No post mold was discernible.

<u>Feature #75</u> – Located in the center of excavation unit N410 E790. This well defined feature is a circular post hole containing a darker colored post mold. About 1.4 feet in diameter, feature #75 is characterized by medium brown fill mottled with dark grey brown sandy loam. Its center contains a generally round shaped area of dark brown soil about .6 feet in diameter. The size, shape, and caliber of post hole and post mold indicated by these remains suggest the location of a structure rather than fence line or scaffolding remnants. Feature #75 is quite possibly associated with features 26, 27, and 109.

<u>Feature #76</u> – Originally oval, almost circular, shaped, this feature exhibits a large plow scar in its southern area. About 1.2 feet in diameter, it is characterized by mottled dark grey brown fill. No evidence of a post mold is discernible although this feature may very well be a post hole. Feature #76 is barely intrusive into the northwest limit of feature #75.

<u>Feature #77</u> – Adjacent to the center of the north wall of excavation unit N410 E665, this cultural feature is a roughly oval shaped deposit. It is characterized by dark grey brown fill mottled with yellowish loamy sand. Feature #77 is possibly a post hole.

<u>Feature #78</u> – Extending west from the east side of excavation unit N410 E665, this roughly rectangular shaped deposit possibly is another post hole. Highly mottled, this feature's fill is virtually the same as the fill observed in feature #77 – dark grey brown soil with light colored loamy sand mottles. Feature #78 is visible in the profile of the east wall of excavation unit N410 E665 and extends an unknown distance east into the next unit.

<u>Feature #79A</u> – Located on the north side of excavation unit N435 E780, this deposit is semioval shaped. About a third of this feature extends north into excavation unit N440 E780. It is characterized by a dark grey brown soil matrix mottled with yellow-red sandy clay. Feature limits are distinct, however feature function is unknown.

<u>Feature #79B</u> – Intruding into the northeast section of feature #79A and feature #80, this deposit is smaller than feature #79A, but also semi-oval shaped. It is characterized by a mottled dark brown sandy loam fill. Its function is unknown although its location may indicate an association with feature 79A.

<u>Feature #80</u> – Impacted by feature #79B on the west and a plow scar on the south and east, this deposit may have originally been oval to circular shaped. This feature extends north an unknown distance into excavation unit N440 E780. It is characterized by a mottled dark grey brown soil matrix. This feature's function is unknown.

<u>Feature #81</u> – Located in the southwestern area of excavation unit N435 E780, this deposit(s) may be a post hole evidencing two post molds – one possibly a replacement post. Alternately, it may represent two separate circular features – possible post holes. These circular deposits are characterized by dark grey brown mottled fill. An area of lightly mottled brown sandy loam occurs between them. Excavation is required to accurately determine the function and context of feature #81.

<u>Feature #82</u> – Located in the southeastern area of N435 E765, this deposit is roughly square shaped (with rounded corners), about .9 feet on a side. Characterized by a relatively light grey brown colored fill mottled with yellowish loamy sand, the shape and size of feature #82 suggests that it is a post hole – probably too large to be a fence post hole. Feature limits are somewhat indistinct. A darker fill area on its northern side may be a post mold. However, excavation is required to confirm this possibility.

<u>Feature #83</u> – Located on the north wall, near the northeast corner of N435 E765, this feature appears roughly rectangular shaped. Impacted on its south side by a plow scar, this deposit is characterized by a medium grey brown soil mottled by yellowish loamy sand. This feature extends north into excavation unit N440 E765 for an unknown distance. Its function is unknown.

<u>Feature #84</u> – Located in the northeast area of N435 E765, this circular feature is about .5 feet in diameter. It is characterized by a mottled light grey brown sandy loam fill. Feature #84 is likely a post hole - possibly a fence post hole. Upon excavation, this feature would probably "square up" in shape.

<u>Feature #85</u> – Roughly circular shaped, this feature is located in the northwest corner of N410 E775. It is characterized by dark grey brown fill heavily mottled with yellow-red sandy clay. Feature #85 is may be a post hole possibly associated with feature #76 to the east. It is likely that this feature would "square up" in shape upon excavation.

<u>Feature #86</u> – Extending south from the north wall of excavation unit N410 E775 about .5 feet, this feature is roughly rectangular in shape. Probably a small post hole, feature #86 is characterized by a mottled dark grey brown fill.

<u>Feature #87</u> – Located in the northeastern area of excavation unit N410 E775, this feature is square shaped. A second heavily mottled geometric shaped area intrudes into the southwestern section of feature #87 which potentially is another post hole. Feature #87 is generally characterized by a mottled dark grey brown fill. The function of feature #87 is unknown although its shape strongly suggests that it is a post hole – possibly a fence post.

<u>Feature #88</u> – Geometrically shaped, this feature extends from the west wall of excavation unit N445 E780 for .5 feet. It extends an unknown distance west into the next excavation unit. Feature #88 is characterized by dark grey brown fill mottled with yellowish loamy sand. Fragments of mortar were observed in feature fill. The function of feature #88 is unknown.

<u>Feature #89</u> – Located in the northwest corner of excavation unit N445 E780, this feature is geometrically shaped – almost rectangular. This deposit extends an unknown distance into two adjacent excavation units to the west and to the north. Feature sections exposed in 1995 revealed an area of dark brown soil mottled with yellowish loamy sand. A notable amount of charcoal fragments was observed within this feature's fill. Feature #89 extends into N445 E780 two (2) feet east/west by about 1.1 feet north/south. Feature function is unknown.

<u>Feature #90</u> – This amorphous shaped feature extends into at least three (3) excavation units, N445 E780, N450 E780, and N450 E785. Its eastern terminus is unknown. Sections of this feature exposed in two excavation units reveal a feature fill characterized by very dark grey brown soil mottled by yellowish loamy sand. This deposit also contains brick and charcoal fragments within its matrix. A determination of the full size, shape, and function of feature #90 requires excavation.

<u>Feature #91</u> – Roughly rectangular shaped, this feature is characterized by a dark brown fill mottled with yellowish loamy sand. Currently, this deposit extends 1.3 feet northeast/southwest by .9 feet northwest/southeast. Impacted by a plow scar on its southern extent, this feature is probably a structural post hole. Feature #92 intrudes into the southwest corner of this feature. A possible post mold may be located in its southeastern corner.

<u>Feature #92</u> – Impacted by a plow scar along its southern limit, this deposit is located near the center of excavation unit N445 E780. Feature #92 is roughly oval shaped and likely is a post hole. Extending about 1.1 feet along its longest axis (northeast/southwest), this feature's fill is characterized by a mottled medium brown matrix – lighter in color than the fill of both features 91 and 93. Feature #92 intrudes into the southeast area of feature #93. It has a somewhat more east/west trend than features 91 and 93. A roughly circular darker area of fill occurs in its western section perhaps indicating a post mold. Feature excavation is needed to confirm this possibility.

<u>Feature #93</u> – Also impacted by a plow scar, this feature is oval shaped and almost as large as feature #92. Its fill is a mottled mixture of dark brown sandy loam and tan and yellowish colored loamy sands. Feature #92 barely intrudes into the southeast edge of feature #93. This deposit could very well be another post hole. Its trend is close to that of feature #91.

<u>Feature #94</u> - Located in the northwest area of excavation unit N445 E770, this feature is circular shaped. It is characterized by a mottled brown and yellowish colored soil matrix with charcoal fragments. About .5 feet in diameter, it is possible that this deposit is a post hole – possibly associated with feature #95.

<u>Feature #95</u> – Located immediately southeast of feature #94, this circular deposit exhibits a grey brown soil matrix mottled with yellowish loamy sand. The fill of Feature #95 contains shell fragments and its center is somewhat darker than the remainder of the deposit. The shape and size of this deposit suggests that it is a post hole, quite possibly containing a post mold.

<u>Feature #96</u> – Just south of the center of excavation unit N445 E770, this deposit, containing shell fragments, is oval shaped. It is characterized by a mottled brown and yellowish colored fill. It is possible that this feature is a post hole – perhaps a fence post.

<u>Feature #97</u> – Bisected by an east/west plow scar, this roughly rectangular shaped (with rounded corners) deposit extends east into excavation unit N445 E775. This feature is characterized by a very dark grey brown soil matrix mottled with yellowish loamy sand containing charcoal and shell fragments. This deposit's geometric shape suggests an architecturally related function.

<u>Feature #98</u> – Located less than a foot south of feature #97, this deposit is also oval shaped. It is characterized by a fill of heavily mottled grey brown and yellowish soils containing charcoal fragments. This feature may be a post hole as well – one possibly dug via a manual post-hole digger.

<u>Feature #99</u> – Extending south from the north wall/profile of excavation unit N450 E780, this relatively large feature is geometrically shaped. Its northwest section evidences a plow scar while its southeastern extent has been impacted by feature #101. This feature is characterized by a mottled dark grey brown fill containing brick, charcoal, and shell fragments. The function of this deposit is unknown. It extends north into the adjoining excavation unit for an unknown distance.

<u>Feature #100</u> – This semi-oval shaped feature extends east .8 feet from the west wall/profile of excavation unit N450 E780. It is characterized by fill heavily mottled with dark grey brown and yellow-red soils containing charcoal flecks. Its function is unknown.

<u>Feature #101</u> – Located in the north central area of excavation unit N450 E780, this square shaped feature is bisected by a plow scar. It is characterized by a fill of heavily mottled medium grey brown sandy loam and yellow-red sandy clay containing charcoal flecks. This feature appears to be a post hole. A possible post mold is situated in the southwestern corner of the deposit.

<u>Feature #102</u> - Extending west about a foot from the east wall of excavation unit N415 E780, this deposit is semi-circular shaped. Extending north/south along the excavation unit's east wall for two (2) feet, feature #102 is characterized by a dark grey brown sandy loam lightly mottled with yellowish loamy sand. The function of this feature is unknown. It extends east into excavation unit N415 E785 for an unknown distance.

<u>Feature #103</u> – Located in the southwest area of excavation unit N410 E785, this feature is square shaped and characterized by a grey brown fill mottled with yellow-red sandy clay. Immediately south of a plow scar, this deposit may be associated with features 33, 74, and 106. It is quite possible that feature #103 is a post hole.

<u>Feature #104</u> – Impacted by a plow scar on its north side, this deposit is currently semi-circular shaped. It is characterized by a lightly mottled medium brown colored fill. About .6 feet in diameter, this feature may be a post hole associated with feature #105.

<u>Feature #105</u> – Oval shaped, this feature may be a post hole. Its shape suggests that it may have been dug by a *post-hole digger* (tool). Characterized by dark grey brown fill mottled with yellowish loamy sand, feature #105 may be a post associated with a fence. It is located near the center of excavation unit N410 E785.

<u>Feature #106</u> – Located in excavation unit N410 E785, this well defined oval shaped feature extends about 1 foot northeast/southwest by .7 feet northwest/southeast. It is characterized by grey brown fill mottled with yellow-red sandy clay. This feature is possibly a post hole – potentially associated with feature #103.

<u>Feature #107</u> – Extending .8 feet north from the center of the south wall/profile of excavation unit N410 E785, this oval shaped feature is likely another post hole – potentially associated with features 105 and 106. This deposit barely extends south into the adjacent excavation unit.

<u>Feature #108</u> – Located near the center of excavation unit N410 E785, this deposit is basically amorphous, but almost geometric shaped. Its shape distorted by cultivation activity, this feature is characterized by a lightly mottled dark grey brown fill. Its function is unknown.

<u>Feature #109</u> – Located in the east center section of N410 E785, this feature is square shaped. Exhibiting 1 foot long sides, feature #109 is characterized by lightly mottled dark grey brown sandy loam fill. Its size and shape suggest that this deposit may be a structural post hole.

<u>Feature #110</u> – East of feature #107 and extending .7 feet north from the south wall of excavation unit N410 E785, this feature is semi-oval shaped. Its fill is consists of a medium brown sandy loam mottled with yellow-red sandy clay. The function of this feature is unknown. Feature #110 likely extends at least .5 feet south into the adjacent excavation unit.

<u>Feature #111</u> – Located in the southeast corner of excavation unit N410 E785, this feature is geometrically shaped – likely square or rectangular when fully exposed. This feature is characterized by a yellow-red sandy clay fill mottled with grey brown sandy loam. The function of this feature is unknown.

<u>Feature #112</u>- Bisected by a northeast/southwest trending plow scar, this deposit is roughly rectangular shaped and may represent more than one feature/deposit. It encompasses the deposit originally designated as Feature #34. Feature #112 is located within two (2)
excavation units – N410 E780 and N410 E785 - and is characterized by dark grey brown fill heavily mottled with yellowish loamy sand. The function of this feature(s) is unknown. Feature #112 requires excavation in order to fully understand its character and function. It may be associated with Features 75 and 109 (probable post holes) situated to the east.

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<u>Feature #113</u> – Located in the northeast section of excavation unit N455 E770, this semicircular shaped feature is impacted on its southern limit by a plow scar. About 1 foot in diameter, this deposit is characterized by a light grey brown colored fill mottled with yellowish loamy sand. Its size and shape suggest that this feature may be a post hole although excavation is required to confirm this. It may be associated with feature #114.

<u>Feature #114</u> – Southwest of feature #113, this deposit is circular shaped – about a foot in diameter. Adversely impacted in its northern area by a northeast/southwest trending plow scar, feature #114 is possibly a structural post hole. Its limits are currently indistinct. This deposit is characterized by grey brown fill mottled with yellowish sandy soil. It is potentially associated with Feature #113. Further excavation is needed to accurately determine feature limits and function.

<u>Feature #115</u> – Located in the southeast corner of excavation unit N445 E790, this rectangular shaped feature has been bisected by a plow scar. This deposit extends north from the south wall of the excavation unit for about 1.3 feet. Approximately .7 feet east/west, this deposit is characterized by dark brown fill mottled by tan and yellow mineral soils. Feature #115 extends south into the adjacent excavation unit for an unknown distance. Its function is unknown although this feature's shape suggests an architectural association.

<u>Feature #116</u> – Located near the center of excavation unit N445 E790, this generally circular shaped feature is about .7 feet in diameter. It is bisected by a plow scar and is characterized by mottled tan and yellowish sandy soils. This feature is potentially a post hole and may actually "square up" in shape upon excavation.

<u>Feature #117</u> – Near the center of excavation unit N450 E780, this feature is roughly rectangular shaped with indistinct limits. About 1.7 feet northeast/southwest by 1.1 feet northwest/southeast, this deposit has been impacted substantially by plowing. It is characterized by heavily mottled grey brown fill. It is possible that this deposit is architecturally related and associated with feature #118 to the southwest. However, due to cultivation disturbance this area requires further excavation to determine its status and function.

<u>Feature #118</u> – Extending east about .7 feet from the west wall of excavation unit N450 E780, this feature is rectangular shaped and continues an unknown distance west into the adjacent excavation unit. The fill of feature #118 is characterized by highly mottled dark brown and yellowish soils containing charcoal and shell fragments. Its function is currently unknown.

<u>Feature #119</u> – Located near the center of the west wall of excavation unit N420 E705, this feature is circular shaped with a diameter of .6 feet. The fill of feature #119 is a mottled grey

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brown soil. It intrudes into the west side of feature #120. The shape and size of this deposit suggest that it may be a post hole.

<u>Feature #120</u> – Immediately east of feature #119, this feature is oval shaped with its longest axis trending east/west. It is characterized by a mottled grey brown fill and has been impacted by feature #119 on its western side. The function of this deposit is unknown.

<u>Feature #121</u> – Extending west from near the center of the east wall of excavation unit N420 E705, this feature is roughly circular shaped. About 1.3 feet in diameter, this deposit continues east into the adjacent excavation unit for an unknown distance. It is characterized by a mottled grey brown fill. The function of this feature is unknown.

<u>Feature #122</u> – Located in the southeast corner of excavation unit N420 E705, this feature is circular shaped with a diameter of .8 feet. This feature has a mottled grey brown fill and, based on shape and size, may be a post hole.

<u>Feature #123</u> – Extending 1.3 feet from the western wall of excavation unit N390 E730, near the southwest corner of the unit, this feature is roughly semi-circular in shape. It is characterized by a highly mottled area of grey brown and yellow-red fill with indistinct limits. The function of this deposit is unknown. Feature #123 continues west into the adjacent excavation unit for an unknown distance.

Evidence of a variety of probable plantation/farm associated structures, landscape modifications, and associated activities were encountered as a result of the 1995 testing phase at 38CH857. Intact subsoil features were observed in both site Loci #1 and #2. These deposits were most frequently encountered within excavation units located in the northeastern section of the site – particularly from N410 to N450 and from E770 to E785 (Figure 29). Only two (2) features were excavated feature #30, partially exposed in four excavation units and feature #46 - from units N400 to N405 and from E720 to E725 (Figures 29, 41, 42, and 43). Based on artifacts contained within the fill of these features, both of the two sampled features appear to date to the second half of the 18th century.

Figure 43. Feature #30 before excavation.

The function(s) of most of the subsoil features encountered in 1995 at the Parker Site remains uncertain to date. This is not an unusual circumstance at the



completion of a testing phase of archaeological investigation since feature excavation - most often accomplished during a subsequent phase of work - is often required in order to validly and comfortably hypothesize or identify feature function(s) at archaeological sites. Features whose function(s) are particularly challenging to identify under any circumstances are those with amorphous shapes and little, if any, artifact content. At the Parker Site, quite a few features with amorphous shapes were observed – some with considerable brick rubble and mortar fragments within the feature fill. It is believed that these particular deposits may be related to post occupational brick "robbing" or processing/recycling (Figure 42). Further, the relatively low frequency of other architectural materials such as flat glass and nails at the site strongly suggests a deliberate post occupational attempt to recycle/reclaim structural building materials at the Parker Site.

Many of the surviving identified features are post holes – several with associated post molds. A number of these appear to be replacement posts (Figure 44). Smaller round/oval to square post holes likely are the remnants of fence posts or possibly scaffolding. Larger generally square to rectangular post holes, at times with rounded corners, are generally considered to represent structural foundation posts. These types of features are relatively common at colonial and ante bellum Mid Atlantic and Lowcountry sites. Impermanent structures, often of framed form, feature post in the ground construction characterized by ground-to-plate, interrupted sill, or block construction (Neiman 1986; Carson et al. 1988; Epps 2004). Often, the initial structures built on colonial period sites are impermanent structures - a result of adapting to local circumstances – utilized until economic stability and/or the desire to display social status allowed for the use of more permanent brick architecture (Carson et al. 1988). One of the planter residences at (38CH851) Stono Plantation (Structure #1 of Block #1), located within a mile south of the Parker Site, evidenced a change from post in the ground foundations to brick piers by the late 18th century (Anthony 2012a).



Although a fairly extensive distribution of brick fragments occurs at the Parker Site, particularly at Locus #1 (Figure 23), most of the firm architectural evidence, recovered archaeologically to date, argues for the onsite use of framed structures with post in the ground supports. During the 1995 effort, no observation of ground-to-plate

construction or evidence of sills placed within trenches was encountered. Perhaps, the largest structures indicated were of interrupted sill or block construction. With the possible exception of one deposit, Feature #46, no physical evidence of brick structural foundations was observed other than possibly brick fragments distributed mostly in plow zone contexts.

At minimum, (19) nineteen (5 x 5 foot) units excavated in 1995 exhibited square to roughly rectangular features of sufficient size and configuration to suggest that they reflect wooden foundation remnants of various structures. The units are located in both Loci #1 and #2 (Figure 22). Locus #3 was not test excavated during the 1995 investigation. Within these (19) nineteen units, a minimum number of (6) six structures are believed to be evidenced - based primarily on size, shape, and location of probable post holes and potentially robbed foundation remnants. Five (5) of these structures are located in Locus #1 and one (1) in Locus #2. As depicted in Figures 34 and 45, the distribution of both hand wrought ferrous nails and later less frequently occurring ferrous cut nails also suggests that the location of most of the 18th century structures at the Parker site were situated within Locus #1, particularly in the area immediately surrounding N435 E775.

The potential structure discovered in Locus #2 is reflected by two possibly related relatively large square to rectangular shaped post holes (Features 11 & 13) encountered in



excavation units N310 E435 and N325 E440 (Figures 40 and 46). Feature #13 clearly has an associated post mold (Feature #14) situated within its limits (Figure 40). Smaller, circular to oval shaped, features observed in the floor of excavation unit N300 E470 to the southeast are suggestive of fence posts. Further excavation of observed features and those presumed within adjacent excavation units is needed to more fully interpret and understand the occupation(s) reflected in Locus #2.

Post holes (Features 15 & 19) within excavation units N395 E680 and N405 E690 potentially evidence the westernmost structure currently revealed in Locus #1 (Figure 47). Both of these features are square shaped. Feature #15 has an associated post mold in its center. The proximity of these deposits to each other suggests a possible depositional and functional relationship between the two.

Figure 46. Feature #11 (bisected by plow scars).



Moving east in Locus #1, four (4) contiguous units (N400 – N405, E720 – E725) excavated in 1995 exposed several architecturally related features which probably attest to the location of a least one (1) structure (Figures 42 and 48). These units, exposing an area of 100 square feet, revealed several roughly rectangular post holes (Features 50, 51, & 52) as well as an amorphous, somewhat linear, deposit (Feature # 46) containing a substantial amount of brick rubble. Although the western limit of Feature #46 has not been found, a section of this feature in N405 E705 was sampled. Feature #46 may be the robbed brick foundation remnants of a pier or perhaps a chimney base. Further

excavation of this locale is needed to confirm the current interpretation of these deposits.

To the northeast of the four (4) unit block, excavation units N430 E755 and N435 E765 contain several features whose size and shape suggest associations with a structure(s). Rectangular shaped Features 45 and 82, particularly, are large enough to suggest that they are associated with foundation posts rather than fence posts or posts associated with a small shed/lean-to (Figure 49). Further northeast, units N445 E780 and N450 E780 also evidenced roughly rectangular shaped features suggestive of structural post holes (Figure 50). The question of whether features 91, 92, and 93 are related to features 101 and 118 in excavation unit N450 E780 remains unanswered until the excavation of adjacent units is accomplished. Regardless, the number of suspected architecturally related features within units N445 E780 and N450 E780 as well as subsoil deposits in nearby excavation units, argue for the former

presence of at least one structure in this immediate locale – perhaps a sizeable one (Figure 29).

Within fifty (50) feet south of N450 E780, a series of (10) ten contiguous excavation units revealed a relatively dense distribution of subsoil features, particularly along the N410 grid line (Figure 29). The area of the ten unit excavation block generally corresponds spatially to some of the highest artifact frequencies observed in plow zone and surface contexts within the site. This block evolved in size as a result of noticeable feature density and also in order to expose the limits of a well defined, probably architecturally related (Table 10) and relatively large linear feature (#30). This linear feature



Figure 47. Feature #15 (38CH857).

Figure 48. Features 46, 50, and 51 (right to left).



(trending generally northeast/southwest) extends through at least (3) three excavation units (Figure 43). Additionally, four (4) excavation units along the N410 grid line contain several sizeable rectangular to oval shaped post holes (some with post molds) which may be related to one another - based on feature size, shape, and location. These features are, east to west, Features 75, 74, 109, 112, 26, and 27 (Table 10). To the north, Feature #69 in N415 E770 may also

represent the same structure. Based on the number of probable post holes and other cultural features encountered in the (10) ten unit block, it is believed that one or more structures was located in this vicinity. Intensive colonial period occupation of this immediate locale is also supported by the observed artifact content and frequency.

Additional investigation, including as well as focused subsoil cultural features and #2, will be required establish and interpret behavioral relationships, of the features, in this essential for the reconstruction, and activities diachronically



Figure 49. Feature #45 (38CH857).

archaeological further areal excavation excavation of the encountered in Loci #1 in order to soundly depositional and including the function(s) locale – an action(s) delineation, understanding of past at the Parker Site.



Figure 50. Features 91, 92, and 93 (right to left).

Remote Sensing Investigation at the Catherine Parker Site

Remote sensing transpired at 38CH857 as part of a multi-site project accomplished by (USDA – NRCS) the United States Department of Agriculture – Natural Resources Conservation Service in late 1997 (Doolittle 1998). Six agencies and/or institutions participated in this particular project. The Charleston Museum was one of the six (Appendix #2). The remote sensing work at the Parker Site occurred because The Charleston Museum was regarded as a *"preservation partner"* by NRCS. On several occasions, Charleston Museum archaeological staff had facilitated, as well as, offered cultural resource training sessions for NRCS personnel on the Dill Sanctuary and at local NRCS offices.

Field work regarding the remote sensing survey of sections of the Parker Site occurred on two (2) days – December 10th and 17th of 1997. On December 10th the archaeological site grid was re-establish at the Parker Site which facilitated the actual (GPR) ground penetrating radar survey on the 17th. The equipment used was a radar unit called a Subsurface Interface Radar (SIR) System – manufactured by Geophysical Survey Systems, Inc. (Doolittle 1998). A 500 mHz antenna was used with this device at 38CH857 providing a maximum observation depth of about six (6) feet below the present surface (Doolittle 1998). Appendix #2 provides several advantages of using GPR in archaeological investigations as well as the particulars regarding how GPR works in potentially accomplishing some of the basic goals of archaeological field work (Doolittle 1998).

Goals of the Parker Site GPR survey included locating structural remains as well as other types of culturally meaningful subsurface features believed to be present within high artifact density areas of the site – Loci #1 and #2 (Figure 22). One initial task performed to accomplish the survey objectives involved the selection and subsequent marking of three (3) rectangular shaped survey cells (grids) which were aligned with the site's previously established archaeological grid. These cells (grids) spatially defined the site's GPR sampling universe (Figure 51). The surveyed cells, #s 1 - 3, varied in size – 3,600, 4,600, and 2,500 square feet respectively.

Within these cells, 84 north/south transects (grid lines), five (5) feet apart east/west, were used to gather data. GPR readings were collected at five (5) foot intervals while manually dragging the system's wheeled antenna along north/south transects. The survey team moved from east to west within each marked cell/grid. This procedure revealed the location of 141 "point anomalies" depicted in Figure 52. However, Doolittle (1998:4) notes that "No major plane reflector, potentially indicating the presence of a major structural feature or cultural layer, was evident on the radar profiles." It is possible that "solid" structural remains may be contained within wooded site areas north of the established GPR cells which have not been archaeologically investigated (Doolittle 1998). The number of subsurface anomalies detected by the GPR survey are somewhat less than had been anticipated and certainly less than inferred by the frequency of subsoil features previously discovered via excavation. This may be a statement regarding the archaeological utility of a GPR system of this nature/type when "solid" foundations are not present and when multiple cultural features frequently overlap spatially at



a site. The survey, however, did locate one cluster of anomalies in the north central section of Cell/Grid #1 – from the North 435 to the North 445 site grid line (Figures 51 and 52). Interestingly, this locale generally corresponds to the area of highest artifact frequency at the site. Quite a few features were discovered in this section via excavation, more than indicated by Figure 52, thus the clustering depicted is viewed as a relative indicator of elevated subsurface anomaly frequency.



Figure 52. GPR Located Subsurface Anomalies at 38CH857.

Conclusion

Archaeological investigation of the Catherine Parker Site (38CH857) by Charleston Museum archaeological staff has been multi phased and has occurred over a number of years beginning with a reconnaissance level survey in 1986 (Hacker and Zierden 1986). From this initial work, Hacker and Zierden (1986:31) stated that the Parker Site "... appears to be an early colonial site with a good concentration of materials". Due to the research potential inferred by the 1986 survey, three (3) separate research efforts were successfully performed at 38CH857. These included: 1) a controlled systematic aligned surface collection in 1994, 2) extensive subsurface testing in 1995, and 3) a limited GPR survey in 1997. These efforts were accomplished by Charleston Museum archaeological staff and volunteers, College of Charleston archaeological field school (ANTH 493) students and professors, and USDA – NRCS archaeological and soil science staff (Appendices 1 and 2).

These investigations demonstrated that the Catherine Parker Site (38CH857) is clearly a significant multi component site characterized by historic period occupation and utilization from the late 17th/early 18th century into the late 20th century. Limited evidence recovered associated with prehistoric occupation (Middle Woodland Phase) at 38CH857, from disturbed contexts, likely reflects ephemeral, perhaps seasonal, aboriginal occupation of the site area. The prehistoric site component is not considered significant in terms of research potential primarily because of low artifact frequency and disturbed context(s). Cultural materials at the Parker Site dating to the mid 19th century and later are also believed to be of limited research potential. In fact, it is quite possible that much of the late antebellum and post bellum cultural materials widely and thinly distributed across 38CH857 may actually be associated with site 38CH855 to the northeast of the Parker Site.

Assuming that artifact frequency correlates with intensity of occupation, the artifact assemblage recovered from the Parker Site supports a colonial period residential farmstead occupation dating primarily to the third quarter of the 18th century. A Mean Ceramic Date (MCD) of 1768.74 was derived from ceramics recovered from controlled systematic surface collection(s) and subsequent testing at 38CH857. The distribution of artifacts across the Parker Site varied and produced three (3) discernible clusters of cultural materials designated as Loci one through three (1 - 3). Of these three (3) areas, Locus #1 contained the highest frequency of artifacts as well as the largest concentration of the earliest datable historic period (late 17th/early 18th century) materials. Loci #2 and #3, to the southwest of Locus #1, were characterized by higher frequencies of late 18th/early 19th century temporally diagnostic artifacts. This circumstance is suggestive of changing activity/occupation areas diachronically. Extensive testing in Loci #1 and #2 at the Parker Site in 1995 revealed a number of architecturally related cultural features likely reflective of colonial and perhaps early ante bellum structures. Further investigation of these and other subsurface cultural deposits would further our understanding of the Parker's Site's overall settlement pattern(s) and intra site activity configuration(s) (yard proxemics) through time.

Artifacts recovered from the Parker Site were overwhelmingly kitchen related materials (South 1977). Architecturally associated items were lower in frequency than observed at many other comparable Lowcountry sites (Tables 4, 5, and 6). The high frequency and relatively diverse number of kitchen associated materials may very well be largely a result of proximity to a substantial urban center. Other researchers have hypothesized regarding how colonial life ways were influenced via access to dynamic urban areas (e.g. Zierden et al. 1986; Anthony 1989; Epps 2004). The low number of architecturally related artifacts observed at the Parker Site may be the result of intensive, deliberate robbing and recycling of building materials. The "robbing" and reuse of brick, for example, was a relatively common occurrence evident on rural colonial sites of this area. For instance, at 38CH851 (Stono Plantation), to the south of the Parker Site, brick robbing of 18th century structural foundations and at least one brick lined well were accomplished in the mid 19th century (Anthony 2012a).

In short, surface, subsurface, and remote sensing investigations of the Catherine Parker Site (38CH857) attest that this site is a significant cultural resource. Overall, this property is characterized by a moderately dense and diverse artifact assemblage(s). Importantly, artifact distribution reflects potentially informative horizontal stratigraphy and the presence of intact subsoil cultural features have been unquestionably demonstrated. The Catherine Parker Site, particularly in concert with research at comparable nearby sites, holds the potential for providing meaningful information regarding several cultural research domains including landscape use through time, diet and foodways of colonial farmstead occupants, material correlates of various 18th and 19th century socioeconomic status groups, and information concerning the effects of close residential proximity to a major urban center on colonial and ante bellum lifeways, among others.

The Catherine Parker Site (38CH857) should be considered eligible for the National Register of Historic Places. It is an integral component of the Dill Sanctuary Historic District and merits careful responsible management.

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APPENDIX #1 – Catherine Parker Site Archaeological Field Personnel

<u>1994</u>

(Instructors) – Ron Anthony, Dr. Barbara Borg, and Martha Zierden

(Students – ANTH 493)

Mary Heyward Belser Russell (Rusty) Clark John (Camp) C. Davis Kimberly DeAmicis Richard (Tony) A. Eustis Annabelle F. Javier (University of Michigan) Brett A. Nachman Thomas Oliver Kristin E. Roberts Kevin Sandifer Rhonda Varallo Monica L. Wiggers



(Volunteers) – Larry Cadigan, Jr., Brian Carrigan, Kimberly Sultan

<u>1995</u>

(Instructors) – Ron Anthony, Dr. Barbara Borg, and Martha Zierden

(Students - ANTH 493)

Claire Anders	Jennifer O'Neal
Beverly Baker	Catherine Orvin
Carrie Bridges	Penn Rice
Marjorie Frazier	Natasha Ries
Bonnie Frick	Steve Roberts
Shana Inman	Joe Stanley
John Lehman	Scott Wolf

(Volunteers) – Larry Cadigan, Jr., Steve Davis, Frank Edward, Brian Kidd, Charry Moseley, Cheryl St. John

(Assistants) – Nat Clarkson (The Citadel), Monica Wiggers (College of Charleston)



United States Department of Agriculture Natural Resources Conservation Service 5 Radnor Corporate Center, Suite 200 Radnor, PA 19087-4585

Subject: Archaeology -- Geophysical Assistance

Date: 5 January 1998

To: Mark W. Berkland State Conservationist USDA - NRCS 1835 Assembly Street, Room 950 Columbia, South Carolina 29201

Purpose:

The purpose of this investigation was to provide geophysical field assistance to the Charleston Museum, South Carolina Institute of Anthropology and Archaeology, South Carolina Department of Natural Resources and the Nature Conservancy. Ground-penetrating radar (GPR) was used to conduct archaeological surveys at the Fort Santa Elena (Paris Island), James Island Archaeological Site, Fort Johnson (Charleston), and Peach Tree Rock (Gaston). At each site, surveys were designed to map major subsurface anomalies. Studies attempted to demonstrate the value of integrating contemporary geophysical and computer technologies with traditional archaeological techniques. The successful integration of these techniques provides more comprehensive site coverage, reduces the number of unsuccessful exploratory pits, and decreases field time and costs.

Participating Agencies:

Charleston Museum College of Charleston South Carolina Department of Natural Resources, Heritage Trust Program South Carolina Institute of Archaeology and Anthropology (SCIAA) USDA-Natural Resources Conservation Service University of South Carolina

Principal Participants:

Ron Anthony, Assistant Curator of Historical Archaeology, Charleston Museum, Charleston, SC Larry Cadigan, Volunteer, Charleston Museum, Charleston, SC Chester DePratter, Research Associate Professor, SCIAA, Columbia, SC Jim Doolittle, Research Soil Scientist, USDA-NRCS, Radnor, PA Jim Errante, Archaeologist, USDA-NRCS, Columbia, SC Tariq Ghaffar, Field Director, University of South Carolina, Columbia, SC Chris Judge, Archaeologist, South Carolina DNR, Heritage Trust Program, Charleston, SC Stanley South, Research Associate Professor, SCIAA, Columbia, SC Carl Steen, Archaeologist, Diachronic Research Foundation, Columbia, SC Sean Taylor, Field Technician, University of South Carolina, Columbia, SC

Activities:

All field activities were completed during the period of 16 to 19 December 1997.

The radar unit used in this study was the Subsurface Interface Radar (SIR) System-2, manufactured by Geophysical Survey Systems, Inc. This unit is backpack portable and requires two people to operate. The use and operation of GPR have been discussed by Morey (1974), Doolittle (1987), and Daniels and others (1988). The SIR System-2 consists of a digital control unit (DC-2) with keypad, VGA video screen, and connector panel. The model 3102 (500 mHz) and 3110 (120 mHz) antennas were used in this investigation. The lower frequency, 120 mHz antenna has greater powers of radiation, longer pulse widths, and emits signals that are less rapidly attenuated by earthen materials than signals emitted from the higher frequency, 500 mHz antenna. The 500 mHz antenna is smaller, provides better depth and lateral resolution of subsurface features, but is more depth restricted than the 120 mHz antenna. The system was powered by a 12-VDC battery.

To help summarize the results of this study, the SURFER for Windows program, developed by Golden Software, Inc.,* was used to construct two-dimensional simulations. Grids were created using kriging methods with an octant search. All grids were smoothed using a cubic spline interpolation.

Ground Penetrating Radar:

The GPR is a time scaled system. This system measures the time that it takes electromagnetic energy to travel from the antenna to an interface (i.e., soil horizon, stratigraphic layer, bedrock surface) and back. To convert the travel time into a depth scale, either the velocity of pulse propagation or the depth to a reflector must be known. The relationships among depth (d), two-way, pulse travel time (t), and velocity of propagation (v) are described in the following equation (Morey, 1974):

v = 2d/t

The velocity of propagation is principally affected by the dielectric permittivity (e) of the profiled material(s) according to the equation:

$e = (c/v)^2$

where c is the velocity of propagation in a vacuum (0.98 ft/nanosecond). The velocity is expressed in feet per nanosecond (ns). The amount and physical state of water (temperature dependent) have the greatest effect on the dielectric permittivity of a material. Tabled values are available that approximate the dielectric permittivity of some materials (Morey, 1974; Petroy, 1994). However, as discussed by Daniels and others (1988), these values are simply approximations.

Calibration trials were conducted at each site. The purposes of the calibration trials were to determine the velocity of propagation of electromagnetic energy through the soil materials, establish a crude depth scale, verify interpretations, and optimize control and recording settings.

Discussion:

Fort Santa Elena, Paris Island

Introduction:

Historic Fort Santa Elena was occupied by the French in 1562 and by Spanish from 1566 to 1587. A goal of the ground-penetrating radar survey was to locate former wells associated with the Spanish occupation.

Study Area:

The survey area was located on the driving range of the Base Golf Course, Paris Island.

Calibration:

The suitability of GPR was assessed during calibration trials conducted on the site. The purpose of these trials was to evaluate the observation depth and resolution of the 500 mHz antenna.

A shovel blade was buried at a depth of 1.58 ft (19 inches). The depth to this buried feature was used to estimate the velocity of propagation through the soil. Based on the round-trip travel time to the buried shovel blade, the averaged velocity of propagation through the upper part of the soil was estimated to be 0.333 ft/ns with the 500 mHz antenna. The dielectric permittivity was estimated to be 8.6. With an average velocity of propagation of 0.333 ft/ns, a scanning time of 40 ns provided a maximum observation depth of about 6.6 ft.

Field Procedures:

An irregular-shaped rectangular grid was established across the site (1.83 hectares). The grid interval was 3 meters. The maximum dimensions of the grid were 135 m by 252 m. The radar survey was completed by pulling the 500 mHz antenna along 46 north-south trending grid lines. Grid lines varied in length from 102 to 201 m. This procedure provided about 6555 m of continuous radar imagery. Each radar profile was reviewed for anomalies.

Results:

Numerous point reflectors were recorded on the radar profiles. Many of the detected point reflectors represent buried artifacts. The artifacts detected with the radar are undoubtedly from different historical periods.

The number of point reflectors detected with the radar was large. It was considered impractical to plot these reflectors individually. Figure 1 shows the survey site and areas having high concentrations of buried point reflectors. In areas having a high concentration of detected subsurface point reflectors, exploratory test pits are more likely to unearth greater accumulations of artifacts.

A goal of the survey was to locate former wells associated with the Spanish occupation. Two areas within the survey site contained unique, high-amplitude, and repetitive signals that suggested potential wells or privies. These two areas are shown in Figure 1. Exploratory test pits in these areas will unearth a structural feature. While GPR located these features, their identities can only be confirmed by traditional archaeological methods.

James Island Archaeological Site - Catherine Parker Site

Study Area:

The Catherine Parker Site represents a colonial period plantation on James Island that is being studied by the Charleston Museum. A goal of the ground-penetrating radar survey was to locate buried structural remains of the former plantation. The Charleston Museum has provided cultural resource training and is a preservation partner with NRCS.

Calibration:

The suitability of GPR was assessed during calibration trials conducted on the site. The purpose of these trials was to evaluate the observation depth and resolution of the various antennas.

A shovel blade was buried at a depth of 1.42 ft (17 inches). The depth to this buried feature was used to estimate the velocity of propagation through the soil. Based on the round-trip travel time to the buried shovel blade, the averaged velocity of propagation through the upper part of the soil was estimated to be 0.302 ft/ns with the 500 mHz antenna. The dielectric permittivity was estimated to be 10.5. With an average velocity of propagation of 0.302 ft/ns, a scanning time of 40 ns provided a maximum observation depth of about 6.0 ft.

Field Procedures:

Three rectangular grids were established across the site. The area enclosed by these grids ranged in size from about 0.06 to 0.10 acre. The grid interval was 5 feet. The radar survey was completed by pulling the 500 mHz antenna along 84 grid lines. Grid lines varied in length from 25 to 45 feet. This procedure provided about 3655 feet of continuous radar imagery. Each radar profile was reviewed for anomalies. Relative distances were recorded and conspicuous anomalies were marked on the radar profiles.

Results:

A cursory review of the radar profiles revealed 141 identifiable point reflectors. No major plane reflector, potentially indicating the presence of a major structural feature or cultural layer, was evident on the radar profiles. Based on knowledge and earlier work at this site, the absence of a major structural feature was surprising. Based on this information, archaeologist will shift their search efforts for structural remains of the former plantation to the surrounding wooded areas.

The approximate locations of the 141 point anomalies have been plotted in Figure 2. Based on exploratory observations and the number of artifacts recovered, the number of detected anomalies is considered low. While no area can be considered virtually free of subsurface features, some areas contain higher or lower concentrations of anomalies than other areas. No major structural feature was detected.

Historic Fort Johnson - Charleston

Study Area:

The fort is being studied by the South Carolina Department of Natural Resources, Marine Resources Division. A goal of the ground-penetrating radar survey was to locate structural remnants of a former tabby fortification.

Field Procedures:

A grid and traverse lines were established across selected portions of Historic Fort Johnson. Radar survey was completed by pulling the 500 mHz and 120 mHz antenna along grid and traverse lines. Each radar profile was reviewed for anomalies in the field. Relative distances were recorded and conspicuous anomalies were marked on the radar profiles. All records of grid and traverse line locations were maintained and kept by Tariq Ghaffar (Field Director, University of South Carolina, Columbia, SC).

Results:

The radar surveys revealed the location of many buried point and plane reflectors. Many of these buried reflectors are believed to represent twentieth century features (mostly buried utility lines and pipe lines). A unique planar reflector was recorded on a portion of a traverse line that was conducted in the middle of a street. This reflector could represent the remains of a tabby fortification. All radar profiles were turned over to Carl Steen (Archaeologist, Diachronic Research Foundation, Columbia, SC) before my leaving the site.

Peach Tree Rock - Gaston

Study Area:

Peach Tree Rock is a prehistoric rock shelter site located near Gaston, South Carolina. Goals of the ground-penetrating radar survey were to provide information on the extent of fallen rock debris and to map buried "cultural" layers within the shelter.

Calibration:

The suitability of GPR was assessed during calibration trials conducted on the site. The purpose of these trials was to evaluate the observation depth and resolution of the 500 mHz antenna.

A shovel blade was buried at a depth of 1.67 ft (20 inches). The depth to this buried feature was used to estimate the velocity of propagation through the soil. Based on the round-trip travel time to the buried shovel blade, the averaged velocity of propagation through the upper part of the soil was estimated to be 0.444 ft/ns with the 500 mHz antenna. The dielectric permittivity was estimated to be 4.86. With an average velocity of propagation of 0.444 ft/ns, scanning times of 50 and 35 ns provided maximum observation depths of about 11.1 and 7.8 ft, respectively.

Field Procedures:

Five lines were established in front of Peach Tree Rock. Four parallel lines, spaced about 5 m apart, were extended outward from the Rock. One additional line was established orthogonal to the others and immediately in front of the overhanging rock ledge. Survey flags were inserted in the ground at a one meter interval along each line. Lines varied in length from about 30 to 44 meters. A radar survey was completed by pulling the 500 mHz antenna along each of the five lines. The scanning time was 50 ns. Each radar profile was reviewed for anomalies.

An irregularly shaped, rectangular grid was also established across a portion of the site. The grid interval was 1 m. Grid lines varied in length from 14 to 11 m. The radar survey was completed by pulling the 500 mHz antenna along 11 parallel grid lines. The scanning time was 35 ns. This procedure provided about 144 m continuous radar imagery. Each radar profile was reviewed for anomalies.

Results:

Radar profiles collected at Peach Tree Rock were comprehensible and contained an abundance of subsurface information. Distinct bands of lamellae within the soil, and strata within the underlying bedrock were discernible. Radar profiles contained numerous point (tree roots, rock fragments, artifacts) and planar (soil layers and horizons, and noise) reflectors. Unique planar reflections occurred within and near the rock ledge. However, without ground-truth auger or pit observations, their identity is uncertain. Conclusions as to their composition is presently speculative. Unwanted background noise was produced by high gained settings (parallel bands appearing at fixed time

intervals or apparent depths) and reflections from the overhanging rock ledge (bands which uniformly plunge from relatively shallow to deeper depths with increased distances from the ledge).

A cursory review of the radar profiles from the detailed grid revealed 61 identifiable point reflectors. Many of these point reflectors are believed to represent tree roots or rock fragments. Some may represent artifacts. The approximate locations of these point reflectors are plotted in Figure 3. In this figure, the area located below an overhanging rock ledge has been approximated with a dashed line. Several buried point reflectors are located beneath or near the overhanging rock ledge. These reflectors may represent buried artifacts.

1. Ground-penetrating radar provided high resolution and continuous measurements of subsurface conditions at each site. Continuous measurements of subsurface conditions provide greater spatial coverage and increase the potential of detecting buried cultural features. At each site, GPR provided archaeologists with a rapid, cost-effective, and non-destructive method to locate buried artifacts.

2. Ground-penetrating radar interpretations are considered preliminary estimates of site conditions. The results of GPR investigations do not substitute for direct observations, but rather reduce their number, direct their placement, and supplement their interpretations. Radar interpretations should be verified by ground-truth observations.

3. A large number of buried point reflectors were identified at each site. Some of these reflectors represent buried cultural features. Location maps have been prepared for three sites. These maps may help archaeologists develop search strategies. Major structural features were identified at the Paris Island and Historic Fort Johnson sites.

4. Copies of all radar profiles from Fort Santa Elena (Paris Island), Catherine Parker Site (James Island), and Peach Tree Rock (Gaston) have been turned over to Jim Errante for disposition.

It was my pleasure to work in South Carolina and with members of your fine staff.

With kind regards,

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