A PHASE I & II Cultural Resources Survey of Bal Gra, Bertie County, North Carolina

VOLUME I

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PHASE I & PHASE II CULTURAL RESOURCES SURVEYS OF BAL GRA, BERTIE COUNTY, NORTH CAROLINA

Prepared for:

ALG FCLG Bal Gra Harbor LLC 1001 Chestnut Street, Suite 101 Philadelphia, PA 19107 (919) 732 5650

Prepared by:

Karisa Jacobsen, B.A. Clay Swindell, B.A. Charles Heath, M.A. Nicholas Luccketti, M.A. Garrett Fesler, Ph.D. Matt Laird, Ph.D. James River Institute for Archaeology, Inc. 223 McLaws Circle, Suite 1 Williamsburg, Virginia 23185 (757) 229-9485

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MANAGEMENT SUMMARY

The James River Institute for Archaeology, Inc. (JRIA) conducted a Phase I cultural resources identification survey of approximately 1,000 acres and five Phase II significance evaluation surveys at Bal Gra in Bertie County, North Carolina. The Bal Gra property is located at the confluence of Salmon Creek and the Chowan River.

The Phase I survey was designed to identify all historic properties present within the project area and to obtain sufficient information to make recommendations about the potentially eligibility of cultural resources for listing on the National Register of Historic Places. This was accomplished by conducting both documentary research and archaeological field testing that complied with the Secretary of the Interior's standards for cultural resources surveys.

JRIA excavated 5,314 shovel test holes throughout the project area at 100 ft. intervals or less during the Phase I survey. Eighteen archaeological sites were identified including six prehistoric activity, nine historic sites, and three multi-component sites. Five sites are recommended as being potentially eligible for nomination to the National Register of Historic Places: 31BR189, 31BR243, 31BR244, 31BR245, and 31BR246. The potentially eligible prehistoric sites, 31BR243 and 31BR244, date to the Woodland period, and the three multi-component sites, 31BR189, 31BR245, and 31BR246 all also contain significant Woodland period components. The historic component at 31BR189 dates to the late nineteenth/early twentieth century while the historic component at 31BR245 dates from the early eighteenth century to the early nineteenth century. A midseventeenth/early eighteenth century component was found at 31BR246. 31BR242 is not recommended for Phase II significance evaluation, however, avoidance/monitoring during construction was recommended.

Phase II archaeological significance evaluation surveys were conducted on sites 31BR189, 31BR243, 31BR244, 31BR245, and 31BR246. The Phase II surveys consisted of controlled surface collections with individual plotting of surface artifacts by GPS, hand-excavated one-meter squares, and mechanically excavated test trenches. Based on the results of the Phase II surveys, sites 31BR189, 31BR244, 31BR245, and 31BR246 are recommended as being eligible for nomination to the National Register of Historic Places. 31BR243 is recommended as being not eligible for nomination to the National Register of Historic Places. 31BR189 represents a major Middle Woodland period occupation. 31BR244 is a multi-component prehistoric site with site occupations that span from the Early, Middle and Late Woodland periods. 31BR245 is either the mansion and service area of the eighteenth-century Pollock plantation or a major quarter of the Pollock plantation. The historic period component at 31BR246 may relate to the earliest development of the Pollock plantation or it may possibly be associated with Nathaniel Batts whose 1654 trading post along Salmon Creek is regarded as the first English settlement in North Carolina. Current development plans indicate that only 31BR189 may be impacted by construction and data recovery is recommended. Avoidance is recommended for the remaining four eligible sites at Bal Gra.

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PART I: PHASE I CULTURAL RESOURCES SURVEY

INTRODUCTION

The James River Institute for Archaeology, Inc. (JRIA) conducted a Phase I cultural resources identification survey of approximately 1,000 acres and five Phase II significance evaluation surveys at Bal Gra, in March/April and June – October of 2007, respectively (Figures 1 and 2). Located at the confluence of Salmon Creek and the Chowan River in Bertie County, Bal Gra is bounded on the north by privately owned property; on the west by inundated tributaries of Salmon Creek and private property; on the south by Salmon Creek; and on the east by private property along the Chowan River (see Figure 2). Bal Gra is approximately 0.6 miles south of Route 17 and about 8 miles by road from the Town of Edenton east side of the Chowan River (see Figure 1). The property is slated to be developed into a residential community to be called Bal Gra Harbor with an inland harbor near the mouth of Salmon Creek.

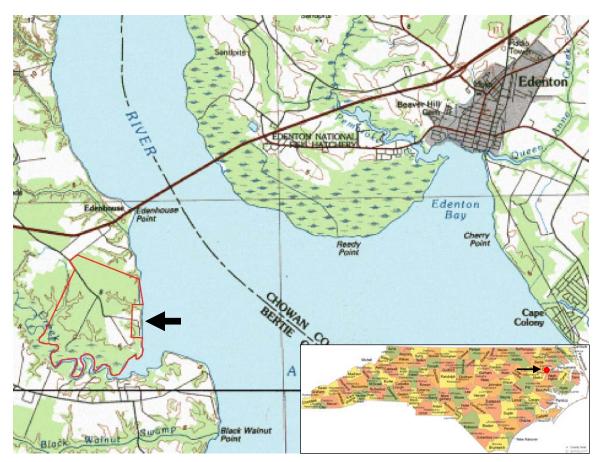


Figure 1. Location of the project area (U.S.G.S. 1:24,000 scale Edenhouse quadrangle [1982]).

Bertie County is one of 20 North Carolina counties subject to the rules and policies of the Coastal Resources Commission, which administers the Coastal Area Management Act (CAMA). Because the construction of the Bal Gra Harbor development will involve the creation of an inland marina (Figure 3), the project falls within the jurisdiction of the CAMA, as specified in Section §113A-120.2 (2007).

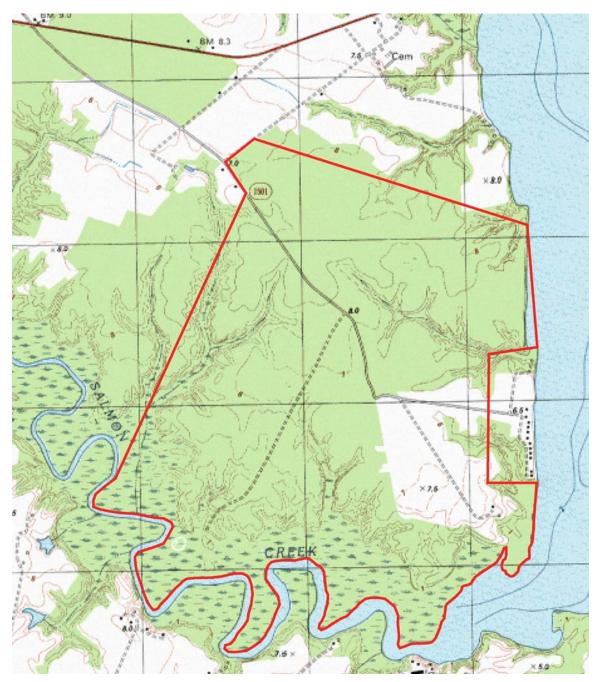


Figure 2. Location of the project area (U.S.G.S. 1:100,000 scale Edenhouse quadrangle [1982]).

The Phase I survey was designed to identify all historic properties present within the project area and obtain sufficient information to make recommendations about the further

research potential of cultural resources based on potential eligibility to the National Register of Historic Places. This was accomplished by conducting both documentary research and archaeological field testing conducted in compliance with the Secretary of the Interior's standards (Department of the Interior 1983, [48 FR 44720-44723]). Moreover, the field survey was conducted to comply with statutes regarding the impact of undertakings on historic properties as summarized by the Advisory Council on Historic Preservation (Advisory Council 1986 [36 CFR 800]). To meet Advisory Council standards, a Phase I survey must be carried out in "a reasonable and good faith effort to identify historic properties that may be affected by the undertaking" (36 CFR 800.4). JRIA submits that the Phase I cultural resources survey was performed and documented at a level that meets or exceeds these standards.



Figure 3. Preliminary plan for Bal Gra Harbor.

This report contains a description of the project area's physical and environmental setting, an outline of meaningful historical contexts for the property, a general research design which summarizes field methods, previous research in the area, and the expected results, and finally, the survey results are described, the findings are reviewed, and recommendations are explained.

Nicholas M. Luccketti (M.A.) served as Principal Investigator for the project and edited the report with Garrett R. Fesler (Ph.D.). Karisa Jacobsen (B.A.) supervised the fieldwork, and was assisted by Kurt Bressler (B.A.), Brittany Bishop (B.A), Karl Bressler (B.A.), Andrew Cox (B.A.) and Fred Lumb (B.A.). The Physical and Environmental chapter and the Prehistoric Context were written by Clay Swindell (B.A.) and Charles Heath (M.A.) and Matt Laird (Ph.D.) wrote the Historic Context. The Results chapter of the Phase I survey was written by Mr. Swindell and Ms. Jacobsen co-authored. Mr. Swindell, assisted by Ms. Jacobsen, also wrote all the prehistoric sections of the Phase II survey report, while the historic sections of the Phase II were written by Mr. Luccketti and Ms. Jacobsen. JRIA curator Sherrie Beaver (B.A.) catalogued all the historic artifacts while Mr. Swindell catalogued all the prehistoric artifacts. The graphics were composed by Evan Leavitt. The report was produced by Kathy Mapp. All artifacts, field notes, maps, correspondence, and other material associated with the project temporarily are on file at the JRIA offices in Williamsburg, Virginia, and will be permanently curated at the State Historic Preservation Office in Raleigh.

PHYSICAL AND ENVIRONMENTAL SETTING AND HISTORIC CONTEXT

PHYSICAL SETTING

The majority of the 1,300-acre Bal Gra property is wooded, although approximately 135 acres in the southeast quadrant of the property are active agricultural fields (Figure 4; Plate 1). Approximately 300 acres, primarily fronting on Salmon Creek, are located below 1.0 ft. mean sea level and are consequently not archaeologically testable with standard shovel testing procedures due to permanent saturation (Plate 2). Nor is this type of terrain useful for development; thus the wetlands portions of the project area were not subjected to Phase I testing (see Figure 3). Overall, approximately 1,000 of the acres on the property were tested at the Phase I level.

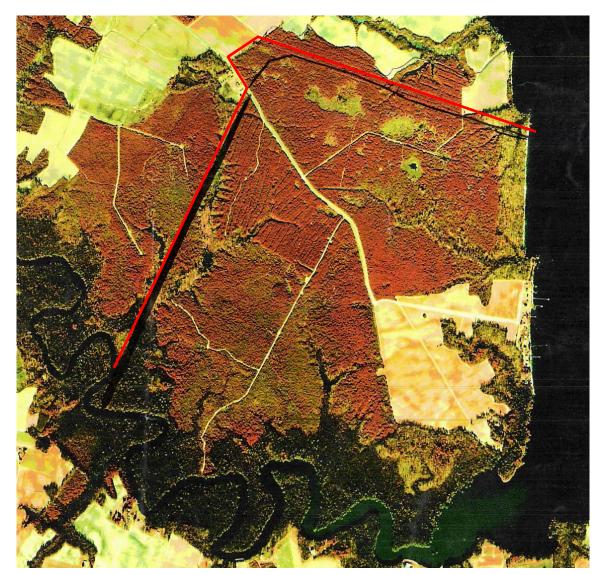


Figure 4. Aerial view of project area.



Plate 1. Overview of agricultural fields in the southeast section of project area.



Plate 2. View of typical wetlands fronting Salmon Creek on the south side of the project area.

Given the size of the property, there have not been too many changes to the natural landscape. Bal Gra Road (Route 1501) slices diagonally across the property from the northwest (see Figure 2). Eventually it leads to Wheeler Road in a small out-parcel on the east side of the property overlooking the Chowan River (see Figures 2 and 3). A series of farm roads branch off from Bal Gra Road and crisscross the property (see Figure 4). Otherwise, there have been minimal modifications to the property.

Some areas of the property have been logged recently, but the logging does not appear to have caused much disturbance to the underlying soils (Plate 3). The vast majority of the property is forested in mixed hardwoods and pine (Plate 4) and was logged several decades ago.



Plate 3. View of recently logged areas in the project area.

GEOLOGY AND TOPOGRAPHY

The project area is situated in northeastern North Carolina on the Atlantic Coastal Plain in the Ablemarle Sound watershed. From a geological standpoint, the project area consists of Tertiary period Yorktown Formation and Duplin Formation geologic materials. The Yorktown Formation is comprised of fossiliferous clay with varying amounts of fine grained sand, bluish gray in color, with shell material commonly concentrated in lenses. The Duplin Formation is shelly with medium- to coarse-grained sand, sandy marl, and limestone, bluish gray in color (National Geologic Map Database [NGMD] 1985).



Plate 4. View of typical forested section of the project area.

Bertie County in general is relatively flat and low lying with the highest elevation at 103 ft. above mean sea level (AMSL) in the far northwestern corner of the county. Elevations within the project area range from sea level to no more than 10 ft. AMSL (see Figure 2). The terrain throughout the project area is very flat, with the only notable elevation differences in the tributary ravines that cut through portions of the property. The tributaries from Salmon Creek and the Chowan River have carved the property into low-lying terraces.

HYDROLOGY

The primary bodies of water affecting the project area are the Chowan River and Salmon Creek, which form the southern and eastern boundary of the property. The confluence of Salmon Creek and the Chowan River forms the southeast corner of the project area. To the east of the property the Chowan River immediately empties into the western end of the Albemarle Sound (see Figure 1) which eventually flows into the Atlantic Ocean roughly 50 miles to the east.

SOIL MORPHOLOGY

Surface soils within the project area were formed by several factors, including the weathering of parent material, the subsequent processes of plants and animals, and topographic relief over time. Additionally, cycles of cultivation and logging have affected soil development and condition. Prior to modern disturbances, the character of the soil influenced the kind of vegetation and hydrology of the area, as well as the land's human habitation and usage. For instance, there is a strong correlation between settlement density and soil fertility. A recent study of eighteenth-century settlement

patterns in relation to soil types in Tidewater Virginia indicates that historic settlement closely correlated with the location of prime farmland (Lukezic 1990).

The project area is comprised of approximately 11 different soil types (Figure 5). The most prominent soil type within the project area is Craven fine sandy loam (CrA, CrB, and CrC) between 0 and 8 percent slopes (see Figure 5). Craven soils are moderately well drained and considered prime farmland. There are also sizeable areas of Goldsboro sandy loam (GoA) between 0 and 3 percent slopes and Norfolk sandy loam (NoA, NoB) between 0 and 6 percent slopes. Goldsboro and Norfolk soils are moderately well drained to well drained and both rated as prime farmland. Also of considerable importance to the property are belts of Leaf loam (Lf) and Lenoir fine sandy loam (Ln) which are poorly drained and somewhat poorly drained, respectively, and are not considered prime farmland for that reason. Dorovan mucky peat (Dk) is located extensively along Salmon Creek and along the other tributary drainages. Because of the high hydric content, Dorovan soils are not conducive to human settlement nor are these soils useful for agriculture (see Figure 5) (Web Soil Survey).

The areas comprised of Goldsboro, Norfolk, and to a lesser degree, Craven soils are currently under cultivation (see Figure 5). There are other areas with these highly productive soils, but these have been allowed to revert back to forest over the past 30 to 50 years. The most agriculturally useful soils are primarily located in the southern half of the project area, on the low terraces overlooking Salmon Creek. Less productive Lenoir and Leaf soils are located on the terraces on the northern portion of the project area and have not been planted in crops for at least a generation (see Figure 5).

NATURAL RESOURCES

The project area's topography, proximity to water, and the soil fertility have had a direct effect on the variety of flora attracted to it over the course of hundreds, if not thousands of years. Prior to the modern era, the landscape was comprised of open farm fields and large tracts of hardwood and pine forests. In wooded areas, loblolly pine and longleaf pine tend to dominate (see Plate 4). However, there are hardwoods present, as well as Southern red oak, white oak, willow oak, sweetgum, yellow poplar, and American beech. Within the wet areas there is an ample amount of bald cypress, swamp tupelo, and water tupelo as well (see Plate 2).

The undergrowth of these areas includes sapling species of the dominant trees augmented with dogwood, wax myrtle, and American holly. Poison ivy, green brier, grape, and honeysuckle are also present, thick in some areas, and thin in others.

A variety of wildlife species prosper in the upland setting. Deer, fox, raccoon, opossum, squirrel, rabbit, weasel, and groundhog comprise the larger terrestrial animals in the area. Amphibians and reptiles such as snakes, lizards, salamanders, frogs, and turtles are found throughout the property. Dozens of wild birds nest in the area, while birds of prey and game birds also inhabit the area, drawn to the area by Salmon Creek and the Chowan River.

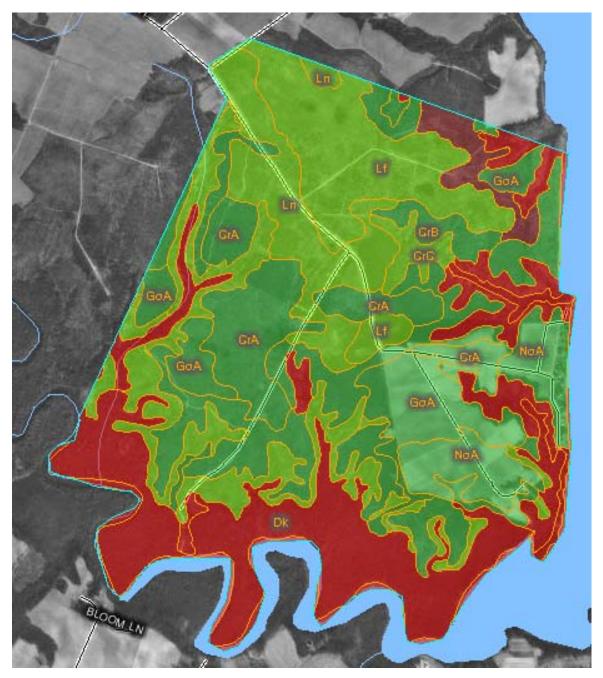


Figure 5. Soil designations for the project area with farmland ratings (WSS 2007).

Modern development of the area has dramatically altered the original natural settings utilized by prehistoric and colonial settlers. For instance, pine has become the dominant tree species in the region, having grown up quickly in abandoned agricultural fields. The prehistoric landscape and early colonial landscape was comprised of more hardwoods and fewer conifers. The available plant and animal species also were different and more diverse centuries ago. For example, wolves, bear, and other predators once roamed the area, whereas now wolves are non-existent, and the sighting of bear is an occasional occurrence. Thus, today's natural environment in Bertie County is reminiscent of the past ecology of the area rather than wholly reflective of it.

PREHISTORIC AND HISTORIC CONTEXT

PREHISTORIC BACKGROUND

The pre-Contact period (i.e., prehistoric) cultural context overview offered here focuses on North Carolina Coastal Plain archaeological data, with an emphasis on the northeastern Coastal Plain sub-region. Where pertinent to the discussion, relevant information from neighboring regions is incorporated, since many behavioral inferences, or chronological assumptions, frequently assumed for the northeastern Coastal Plain at different points through time, are based on data from neighboring areas. It is within the cultural context presented here that the Bal Gra survey project's Pre-Contact period (prehistoric) sites are interpreted and subsequent site specific recommendations, in light of National Register of Historic Places (NRHP) criteria, for "no further work" (NRHP ineligible) or "further work recommended" (NRHP potentially eligible) are made in subsequent report sections.

For the interpretive and comparative study of archaeologically defined, Pre-Contact (ca. 10,000 B.C.—A.D. 1525), Contact (ca. A.D. 1525—1650) and Post-Contact (ca. A.D. 1650—A.D. 1750) period American Indian cultural traditions and/or societies of North Carolina, archaeologists most typically employ an analytical framework that sub-divides past cultural systems into four broad chrono-cultural divisions, the Paleo-Indian, Archaic, Woodland and Historic (Contact, Post-Contact) periods. In the western Piedmont and Mountain regions of the Carolinas, a Mississippian period (ca. A.D. 1000—1600) is recognized as well, but material evidence of Mississippian cultures is not evident, or ephemeral at best, in the archaeological records of the Coastal Plain and bordering eastern Piedmont regions (Byrd 1999; Phelps 1983; Ward and Davis 1999). The concept of dividing past cultural traditions into a manageable sequence of chronologically organized units was envisioned for the Eastern United States by Ford and Willey (1941), and later widely adopted by most archaeologists working in both the Northeast and Southeast cultural areas (see Griffin 1952). Patterned material or behavioral variation within the more broadly defined prehistoric periods can be captured by dividing the chronologically broader periods into sub-periods (e.g., Early, Middle and Late Woodland). Regional expressions of particular archaeological cultures within such broadly organized chronological parameters are usually referred to as phases.

In general, prehistoric archaeological data are interpreted using a culture history model that is based on spatial and temporal and patterns. Artifact assemblages with discrete geographic distributions are associated with specific time spans, which are generally interpreted as material markers of past cultures or societies (Clarke 1968; Willey and Phillips 1958). The occurrences of artifact groups sharing similar attributes in a particular geographic region are typically interpreted as the material representations of shared cultural knowledge or adaptive strategies. Pre-European Contact period archaeological cultures are essentially scientific constructs used to interpret archaeological data in the absence of documented knowledge of particular American Indian societies. In some cases, archaeological cultures can be associated with known American Indian tribes through the judicious application of the Direct Historical Approach (Steward 1942) (i.e., reasonable empirical evidence of association between the documented occupation of a site by people of a historically identified tribe and the related material record).

The culture history model most generally used in the study of pre-Contact era North Carolina history has its foundations in the cultural sequence for the North Carolina Piedmont as originally developed by Joffre Coe and his graduate students in the 1940s and 1950s (Coe 1952, 1964). This perpetually useful analytical framework has been continually modified and enhanced by succeeding generations of archaeologists through academic and compliance-based archaeological investigations conducted across the state (see Ward and Davis 1999: Figure 1.5). While useful for the organization and comparative study of archaeological data, Coe's (1952:302) admonishment to his colleagues is still worthy of note when he suggested that proposed classificatory periods "…were not intended to be regarded as classificatory units of culture or as strict time markers. They merely indicate a general cultural trend within a rather flexible period of time."

Paleo-Indian period

The earliest generally recognized cultural tradition in North America dates to the beginning of the Paleo-Indian period (ca. 11,000-8,000 B.C.). The earliest sites from this period are associated with the most broadly distributed, and most archaeologically recognizable, early inhabitants of the Americas who apparently arrived on the continent well before the end of the last great ice age. Their cultural adaptations, typically represented by Clovis phase material manifestations, were specific to the environmental conditions encountered during the Late Pleistocene epoch (ca. 20,000-14,500 B.C.) and transitional Early Holocene climate at the end of the last glacial advance (see Dillehay and Meltzer 1991). Late Pleistocene period climate conditions, with cool summers and moderately cold winters, across the more southerly environs of the North American Eastern Woodlands essentially reversed, circa 14,500-10,500 B.C. (Anderson and Sassaman 2004; Gremillion 2004; Wright 1991), when a period of global warming, with a concurrent shift to dramatic seasonal temperature variations with the glacial retreat, resulted in significant changes among floral communities in the Mid-Atlantic and Southeast regions. Jack pine and spruce-dominated, southern Atlantic Coastal Plain forests of the Late Pleistocene gradually gave way to more species diverse, mixed deciduous forests in the Early Holocene, ca. 10,500-6,000 B.C. (Gremillion 2004; Wright 1991). This later period forest complex, at least in the Southeast region of the Atlantic Slope, was typically dominated by oaks, hickories and other hardwoods in the uplands, but Tidewater zone data from the era are minimal at best (Delcourt and Delcourt 1985). Most of the large mammalian, "mega-fauna" species (e.g., mammoth, giant land tortoise, horse) of North America disappeared into extinction by 11,000 B.C. (Anderson and Sassaman 2004), the combined result of radical climate change, vegetation shifts, and increased human predation (Wright 1991). As such, Paleo-Indian hunter-gatherer bands in the Southeast and lower Mid-Atlantic regions, despite the unstable climate, exploited faunal and floral resources somewhat similar, at least in terms of available species, to those found in "modern" environmental settings by about 9,500 B.C. (Anderson and Sassaman 2004).

For many decades, the earliest archaeological evidence for human occupation in the southeastern United States was considered to be associated with peoples who produced basally fluted Clovis spear points and blades. Radiometric dates associated with Clovis phase site components indicate that Clovis sites across the United States were typically occupied, ca. 11,000—9,000 B.C. (Taylor 1991). In the early 1990s, however, excavations at the Cactus Hill site in Virginia revealed possible evidence of "Pre-Clovis" technology, ca. 13,000 B.C., in the form of micro-blade flake tools, lanceolate/triangular projectile points stratigraphically associated with a possible hearth scatter. Carbonized wood fragments from the proposed hearth feature yielded a radiocarbon assay date of 15,070±70 B.P. (McAvoy and McAvoy 1997). Materially similar "pre-Clovis" technologies and site occupation dates suggested at ca. 14,000—18,000 B.C. and older, have been further postulated for the Topper site in South Carolina (Goodyear et al. 1998; Tibbetts 2005). Based on site data recovered and assessed from several pre-11,000—10,000 B.C. sites across North and South America, archaeological researchers in recent decades have collectively challenged, with ephemeral yet mounting evidence, the notion that the Early Paleo-Indian period Clovis phase peoples actually represent the earliest human inhabitants of the Americas (see Dillehay and Meltzer 1991; Tibbetts 2005).

A tripartite system for the organization and interpretation of Paleo-Indian period archaeological data further divides the broader period into early, middle and late subperiods (Phelps 1983; Ward and Davis 1999). In North Carolina, the Early Paleo-Indian (ca. 11,000—9,000 B.C.) sub-period is materially represented by fluted/lanceolate form, "Eastern Clovis" projectile points that share production attributes similar to "classic" Clovis points recovered from sites in the western United States. Slightly later, Cumberland, Redstone, Suwannee and Simpson projectile point types, variously fluted or unfluted, typically found throughout the Southeastern United States are thought to represent the brief Middle Paleo-Indian period, ca. 9,000—8,500 B.C. (Goodyear 2007; Ward and Davis 1999). Goodyear (2007), based on evidence of the decrease in site frequency during the Middle Paleo-Indian period, specifically Redstone phase sites, recently suggested that there was a distinct population decline in the Southeast during the 9,0000—8,500 B.C. period.

To date, projectile points from these earliest eras of North Carolina's prehistory most typically have been recovered from the surfaces of disturbed sites, primarily plowed agricultural fields or wave eroded coastal sites (Perkinson 1971, 1973; Phelps 1983; Ward and Davis 1999). At the time of Phelps' (1983) regional synthesis, "less than 50" fluted points were officially reported as originating from sites across the greater Coastal Plain and none were reported for Bertie County. Since that time, a few additional specimens have been reported, including one Clovis point from Bertie County (Daniel 2005). While many such points are known in unofficially reported relic collector collections, the data suggest that Early and Middle Paleo-Indian period land use of the Coastal Plain was somewhat limited or that rising Holocene era sea levels inundated early sites along the coast. Evidence of coastal adapted Paleo-Indian societies (Wisner 1997) does, however, suggest that many Coastal Plain Paleo-Indian sites may be inundated, thus biasing interpretations of past Paleo-Indian land use of the modern-day Tidewater regions (see also Schuldenrein 1996). Rising sea-levels aside, Phelps (1983) argued that the paucity of Paleo-Indian materials and/or sites identified in the Coastal Plain is largely due to a lack of intensive research, rather than avoidance of the area by Late Pleistocene/Early Holocene American Indian peoples. Recent regional efforts in this area of research, primarily spearheaded by archaeologists affiliated with East Carolina

University, have proven productive in that several sites with probable Early-to-Middle Paleo-Indian period components have been located and initially investigated in the Tar River drainage (Christopher R. Moore, personal communication 2007).

The Late Paleo-Indian period (8,500-8,000 B.C.) is generally represented in the Southeast by the unfluted Dalton and/or Dalton-like projectile points (Anderson et al. 1996), although Anderson and Sassaman (2004) recently suggested that Dalton points may not have been produced after about 9,300 B.C. (contra Goodyear 1982). In the Piedmont and Coastal Plain Provinces of North Carolina, Hardaway blades/points associated with early Hardaway phase occupations, as well as the somewhat later sidenotched Hardaway-Dalton manifestations, materially represent the activities of Native peoples during the Late Paleo-Indian period (Ward and Davis 1999). These early type unfluted points, while not necessarily ubiquitous, are more prevalent across the Coastal Plain than fluted points, perhaps indicative of a population increase. Unlike the continentally distributed Clovis tradition, the more geographically restricted Hardaway and Hardaway-Dalton points may represent the earliest material evidence of a regionalized population (Anderson 1995). Hardaway-Dalton points, however, are obviously related to a greater, pan-regional technological tradition referred to as the Dalton Complex, which extended over most of the Southeast and into eastern fringe of the Great Plains (Daniel 1994; Goodyear 1974; Wyckoff and Bartlett 1995). The Hardaway Side-Notched point followed the Hardaway-Dalton and likely represents the latter end of the phase, perhaps produced well into the Early Archaic period (Cable 1996). Daniel (1998) and others (e.g., Anderson and Sassaman 2004) argue that the Hardaway phase should be placed in the subsequent Early Archaic period, but the model discussed here reflects a more traditional interpretation (e.g., Phelps 1983; Ward 1983; Ward and Davis 1999). Since Hardaway Complex toolkits are most similar to earlier Clovis age toolkits (Ward and Davis 1999), rather than later Early Archaic period toolkits, one suspects that the Hardaway phase does represent a regionalized late Paleo-Indian culture. As Ward and Davis (1999) note, Paleo-Indian research conclusions in North Carolina, as well as many other areas of the Southeast, are especially limited because of the perpetual lack of stratified, undisturbed site deposits from the era.

Archaic Period

For the next several thousand years, the subsequent Archaic Period reflected increasingly specific adaptations to a slowly stabilizing Southeastern regional environment with corresponding population increases and regional cultural specialization. The frequency and density of habitation sites and other resource extraction sites, as well as intra-site artifact densities, increase over the course of the Archaic period, patterns indicative of population growth across most of the Eastern Woodlands (Anderson and Sassaman 2004). Production of polished stone tools, steatite (soapstone) cooking vessels, and the systematic harvesting of native plants develop over the course of this period. Like the previous Paleo-Indian and subsequent Woodland periods, regional archaeologists typically subdivide the Archaic period into early, middle, and late sub-periods. These subdivisions, while not firmly demarcated in time, are broadly marked by technological changes and the development of more efficient systems to extract localized food resources. On the North Carolina Coastal Plain, technological changes observable in the archaeological record essentially parallel the cultural pattern first recognized and described by Coe (1964) for the North Carolina Piedmont (Phelps 1983; Ward 1983; Ward and Davis 1999).

Early Archaic period

As noted above, climactic changes that coincide with, or slightly pre-date, Early Archaic period (ca. 8,000–6,000 B.C.) land use of the Coastal Plain Province by early Native peoples stimulated changes in the technology utilized to adapt to the evolving environment. Continuity between the somewhat arbitrary chronological break between the Late Paleo-Indian and Early Archaic periods is reflected in Hardaway-side notched points as well as in the "transitional," Hardapalmer/Small Dalton points (Anderson and Sassaman 2004, Daniel 1998; Oliver 1985). Archaic period changes in the morphology of the hafting element of projectile points are represented by the corner-notched Palmer and Kirk projectile points materially characterize this technological shift. The technological attribute of corner-notching appears to be related to a macro-regional phenomenon in that similar type points are found across much of eastern North America (Justice 1987; Sherwood et al. 2004). These projectile point forms are followed in the sequence of point types for the Early Archaic by variant Kirk stemmed forms, which more generally date to the subsequent Middle Archaic period (Coe 1964; Justice 1987). Analysis of the Early Archaic toolkit reveals continuity in the general functional aspects of the preceding Paleo-Indian toolkit, but with the addition of more specialized curated tools for the processing of hunter-gather byproducts. Such specialized tools include adzes, drills, gravers, and perforators.

Interpretation of Early Archaic toolkits suggests that the varied tools materially reflect increasingly efficient adaptations in the exploitation of evolving faunal and floral resources in the changing environment. Despite evidence for an abundance of mast-producing floral communities in the Piedmont and Coastal Plain of North Carolina, the paucity of ground stone tools in the Early Archaic toolkit may suggest that the gathering and processing of resources such as acorns and hickory nuts was not a subsistence focus of early Holocene populations (Ward and Davis 1999). By the mid-Holocene, ca. 6,000 B.C., the climate of the southeastern United States became warmer and drier. This environmental trend, known as the Hypisthermal climatic event, initiated vegetation changes that resulted in a gradual shift from oak dominated deciduous forests to pine dominated forests, bordered by swamps rich in wetland floral species, across most of the Coastal Plain (Watts et al. 1996). Oak and Hickory species would have been restricted to upland stands in well-drained soils. The reduction of mast-producing deciduous species from the localized floral communities in the Coastal Plain may have had a significant impact on the subsistence practices of the human population (Gremillion 1996).

With the pronounced environmental changes associated with the Holocene, corresponding shifts in early hunter-gatherer mobility strategies occurred. While a number of settlement pattern models have been proposed for the early Holocene era (Anderson and Sassaman 1996), two recent models have gained popularity among archaeologists in the Carolinas. In the "Band-Macroband" model (Anderson and Hanson 1988) aggregated bands occupied logistical base camps during winter seasons, but seasonally diverged to occupy and use temporary foraging camps in milder seasons. Cultural groups in this model are thought to have moved primarily within a single drainage basin with economic and social interaction with other cultural groups occurring

at fall line zones, near winter base camps (Anderson 1996a). In their seasonal round, dispersed bands foraged on Coastal Plain resources during the spring and moved back through the upper Coastal Plain and Piedmont by summer. Exploitation of late summer/fall upland forest floral resources, along with migratory deer, continued into the late fall season when socially networked bands merged to form macrobands at Fall Line base camps. From winter base camps, groups were "logistically organized" into specialized hunting and gathering parties that radiated out to collect resources at smaller camps before returning to the base camps during the winter and early spring seasons (Anderson and Sassaman 2004). In such a system, a band might number 50 people, while the macroband populations ranged from 500 to 1500 persons (Anderson and Sassaman 2004:91).

Other archaeologists working in North Carolina have challenged the Band-Macroband adaptation model, arguing that subsistence resources were too geographically or seasonally limited during the early Holocene epoch for such a foraging round to actually work in practice (Ward and Davis 1999). The alternative "Uwharrie-Allendale" model as proposed by Daniel (1996, 1998) suggests that the settlement pattern and seasonal movements of early hunter-gathers was essentially dictated by the restricted distribution of high-quality lithic materials most suitable for Paleo-Indian period toolkits. While Anderson and Hanson (1988) emphasize river valley focused settlement patterns, Daniel (1998) argued that Early Archaic period point distributions, when broken down by material types, indicate cross-drainage band movements, a view further supported by Moore and Irwin (2002) in their analysis of Carolina Sandhills sites. Both settlement pattern models allow for loosely defined band networks whereby small kin-based bands interacted and/or were socially interrelated at the macroband level. Recent observations (Cooke 1999) of projectile point raw material distributions across the Coastal Plain generally support Daniel's (1996, 1998) model, but other studies suggest that localized lithic resources (quartz, quartzite, jasper), especially in the Tidewater region, were equally important for the production of informal, expedient tools (e.g., scrapers, retouched flake tools) as well as formal projectile points and blades (e.g., Gardner 1985b; Phelps 1983). Evidence of what appear to be large, Archaic period base camp sites on the Lower Coastal Plain (Phelps 1982) suggests that both the Uwharrie-Allendale and the Band-Macroband models require further refinement.

Middle Archaic period

The Middle Archaic period (6,000—3,000 B.C.) in the Eastern Woodlands, is characterized by obvious changes in technological and social organization related to evolving subsistence practices and settlement pattern changes. Changes in technology connected to the mid-Holocene climate are evident in morphological changes in projectile points and the introduction of new tool types associated with evolving subsistence activities. Lithic technologies, at least in terms of the production effort, are simplified in the Middle Archaic period; projectile points are comparatively crude and well-made formal tools less common. The earliest cultural material of the mid-Holocene era is associated with broad triangular projectile points with square, basally-notched stems (Coe 1964; Justice 1987). These projectile points, regionally known as Stanly Stemmed points, have been found in North Carolina in contextual association with atlatl weights. Stanly Stemmed points are followed in the mid-to-late Middle Archaic sequence for the Piedmont (Coe 1964) by contracting stemmed Morrow Mountain I/II points. These projectile points, along with the coeval lanceolate Guilford and side-notched Halifax types, represent a developmental continuum, but with some temporal overlap among the latter types (Coe 1964; Drye 1998; Justice 1987; Ward and Davis 1999). Past, regional level site data assessments for the lower Chowan River watershed indicate that Middle Archaic period sites, with Guilford, Morrow Mountain and/or Halifax phase components, account for nearly half of the sites in the region, but sites of this period are typically encountered in plowed contexts with little or no evidence of vertically stratified deposits (Gardner 1985a, 1985b; 1990b; Phelps 1982). While Middle Archaic period, bifurcate base points (e.g., LeCroy, St. Albans) are encountered on Coastal Plain sites, including sites in the Chowan River basin, such points are less common than other Middle Archaic types described here and the chronological and/or cultural relationships between the various types are not well-understood (Gardner 1985b; Phelps 1983).

In the Piedmont, Middle Archaic period site sizes, spatial distributions and artifact densities combine to suggest that the logistical organization of the Early Archaic in the form of macroband base camps and specialized hunting/gathering parties likely gave way to small extended family groups or autonomous bands moving about the landscape (Ward and Davis 1999). In general, site distributions across the greater Southeast indicate extensive occupation of inter-riverine and floodplain areas and such a pattern suggest the adoption of a residential mobility system beneficial to the broad-spectrum foraging pattern (Amick and Carr 1996; Anderson 1996b; Ward and Davis 1999). For the northeastern North Carolina Coastal Plain, however, Phelps (1982) suggested that notable variations in site environmental settings and associated artifact densities indicate that large base camps as well as a multiplicity of small, seasonally occupied camps existed during the Middle Archaic period. Large sites are typically found on river and major tributary bluffs, while smaller temporary camps are found in more diverse settings, especially on locally elevated landforms adjacent smaller tributary streams and swampy bottomlands. In the coastal zones of the greater Southeast, evidence for intensive shellfish exploitation, while likely much earlier if inundated sites could be assessed, is readily apparent ca. 4,000 B.C. (Anderson and Sassaman 2004). In the main, Middle Archaic period subsistence economies focused on the seasonal acquisition of a wide variety of floral and faunal resources concurrent with intensification of efforts in the collection of small seeds and in the exploitation of marine/estuarine/riverine resources in Coastal Plain regions of the greater Southeast (Anderson and Sassaman 2004). Specific subsistence data for Coastal Plain North Carolina, however, are lacking (Phelps 1983; Ward and Davis 1999).

Late Archaic period

The Late Archaic period (3,000—1,000 B.C.) is characterized by further changes in technology and settlement strategies as peoples in the lower Mid-Atlantic and Southeast regions adapted to "essentially modern climate and vegetation" after about 3,000 B.C. (Gremillion 2004:53). Although hunted, fished and gathered resources continued to account for the bulk of subsistence resources consumed by Native peoples in this period, higher population densities among Late Archaic period groups apparently reduced their mobility. This reduced mobility appears to be expressed in site distributions that reflect increasing territoriality and the systematic reoccupation of sites within a given region. It is within this cultural milieu that former band-level societies gradually developed into more complex tribal-level societies (Anderson and Sassaman 2004). Restricted residential mobility has a number of effects that create technological responses to cope with reduced access to resources. Changes in Late Archaic toolkits include the expedient use/reworking of debitage and cores, and greater investment in curated tools, such as hafted bifaces (Amick and Carr 1996).

The ubiquitous, most commonly curated biface that occurs along the South Atlantic Slope is the Savannah River Stemmed point with its large, triangular blade and broad stem (Coe 1964; Justice 1987). While typologically distinctive, Savannah River bifaces appear to reflect a trend that is geographically widespread, even more so than the distribution of earlier Early and Middle Archaic point types found in North Carolina. Similar stemmed bifaces of contemporary age are known from the Mid-Atlantic and Southeast, and extend well into the Northeast region (Justice 1987; Ward and Davis 1999). The earliest Savannah River manifestations may represent the development of a generalized Coastal Plain maritime/estuarine/riverine adaptation complex (Turnbaugh 1975). In eastern North Carolina, Phelps (1983) noted similarities between Savannah River phase assemblages and the contemporaneous Susquehanna tradition of the Northeast. By the end of the Late Archaic, Savannah River points become smaller and co-occur on some non-pottery sites with stemmed Gypsy type points (Phelps 1982), which generally date to the Terminal Archaic and later Early Woodland period (Ward and Davis 1999).

Other technological innovations that accompanied the reduced residential mobility of the Late Archaic include the development of more efficient food processing techniques, especially the development and use of thermally resilient cooking containers in the form of steatite (soapstone) vessels and eventually pottery by 2,500 B.C. (Anderson and Mainfort 2002; Sassaman 1996). Steatite vessels and other objects were fairly common throughout the Southeast for several centuries in the Late Archaic period. Among other objects of material culture, regional sites with components dating to this period often yield steatite (soapstone) vessels and/or sherds as well as steatite ornaments (gorgets/pendants) and net weights. Grooved axes are also common on period sites in eastern North Carolina (Phelps 1982, 1983).

Studies of mid-to-late Holocene coastal environments indicate a period of increased floodplain stability (Schuldenrein 1996). Late Archaic climate conditions in the pine predominant, mixed deciduous forests along the southeastern Coastal Plain of the United States and the upper Florida Peninsula are believed to approach the modern-day climate with mild winters, even precipitation and high summer temperatures and humidity (Gremillion 2004; Watts et al. 1996). Settlement patterns extrapolated from site form data in North Carolina appear to indicate a focus on activities close to main rivers and major tributary streams across the Inner Coastal Plain during this period (Anderson 1996; Phelps 1983; Ward and Davis 1999). In the Chowan River basin, Savannah River phase base camps and seasonal exploitation camps are found in settings similar to those of the Middle Archaic period, suggesting a regional adaptive continuity (Phelps 1982) somewhat different than other areas of the Southeast (see Sassaman and

Anderson 2004), although there is a slight decline in the number of apparent seasonal exploitation camps found up smaller tributary streams (Gardner 1985b; Phelps 1982).

Studies of shell rings and middens in the coastal areas of South Carolina, Georgia and Florida collectively indicate the pan-regional exploitation of increasingly rich estuarine and outer coastal environments during the late Middle Archaic and Late Archaic periods. Russo (1996) suggested that estuarine and marine adapted peoples on the Outer Coastal Plain of the southern Atlantic Slope, who had little need to annually migrate to the interior for lithic and/or subsistence resources, may have experienced a level of sedentism at a scale unknown elsewhere during the Late Archaic period. The proposed sedentary lifeways of such later Archaic period coastal foragers may have created a social environment suitable for the invention and nascent development of pottery (Anderson and Sassaman 2004; Russo 1996).

Paleo-ethnobotanical research conducted in the interior Southeast indicates that mast production (non-fleshy tree fruits), particularly hickory nuts and acorns, were central to local subsistence regimes from at least the beginning of the mid-Holocene and well after the domestication of corn and other cultigens. It is hypothesized that the warmer climate of the later Holocene period stimulated the initial development of plant domestication by attracting human populations to seed producing plants found in rich floodplain area environments. While some plant husbandry was likely undertaken by Late Archaic peoples on the Coastal Plain of North Carolina, it is most generally believed that agriculture was not taken up as a primary subsistence strategy in these areas until the expansion of maize-based subsistence economies around the beginning of the Late Woodland period (Gremillion 1996, 2004; Ward and Davis 1999). As in the previous Archaic sub-periods, little or no direct evidence of Late Archaic period subsistence strategies has been encountered on regional sites and proposed subsistence strategies are based on inferences gleaned from settlement pattern data (Phelps 1983). A period trend toward river bluff oriented site locations with a concurrent reduction in the number of sites located on small tributary streams, may suggest greater reliance on riparian resources (Gardner 1985b; Phelps 1982), an interpretation bolstered by the common occurrence of stone "net-sinkers" in regional Late Archaic artifact assemblages. At the end of the Late Archaic period the widespread development of ceramic technologies in the southeastern United States may signal a revolution in food storage and processing techniques. The earliest ceramic vessels in the Southeast occur as variations on a similar theme variously found in coastal zones from North Carolina southward down to the east coast of Florida. Developed around 2,500 B.C., the fiber-tempered ceramic Stallings series is the earliest ceramic technology in the Southeast (Anderson and Mainfort 2002; Sassaman 1993). While the earliest ceramics seem to have been produced first in the Southeast (Sassaman and Anderson 2004), Fiedel's (2001) analysis suggest the possibility of coeval types in the Mid-Atlantic and Northeast as well.

Woodland Period

It is generally agreed upon by most archaeologists working in the Mid-Atlantic and Southeast regions that the demarcation between the Archaic period and the subsequent Woodland period is based upon an interrelated triad of socio-technological innovations. Although these particular cultural manifestations varied in the specificity of their development over space and time, the evolution of thermally resilient containers (i.e., pottery), the rise of horticulture (i.e., farming), and the wide-spread development of semi-sedentary villages are collectively considered as hallmarks of the Woodland period, ca. 1,000 B.C.—A.D. 1650 (Anderson and Mainfort 2002; Jeffries 2004; Sassaman and Anderson 2004; Ward and Davis 1999). In eastern North Carolina, regional cultural adaptations with deep roots in the Late Archaic period waxed and spread over the course of the Woodland period (Phelps 1983; Ward and Davis 1999). On the Coastal Plain, the Early Woodland period is noted by Phelps (1983) as a time of marked cultural regionalization, a cultural phenomenon associated with developments across the greater Southeastern United States as well (Jeffries 2004).

It has been suggested that increasingly higher population densities shaped increasingly sedentary actions, which stimulated both subsistence and social change in the directions of increasing complexity and diversity (e.g., Jeffries 2004; Sassaman and Anderson 2004). Domestication of wild cultigens in the neighboring Piedmont Province intensified in the Early and Middle Woodland periods as inferred by the increase in ground stone tools needed to process domesticated seed harvests and other wild plant resources such as gathered nuts and seeds, for consumption by increasingly larger populations (Ward and Davis 1999). Concurrently, the widespread development of pottery, which originally initiated a Late Archaic period revolution in cooking and food storage techniques in Southeastern coastal areas, rapidly spread to the interior and northwards (Sassaman 1993; Sassaman and Anderson 2004). Pottery vessels exhibiting a variety of forms, surface treatments and paste/temper types appeared throughout the Carolinas during the Transitional Late Archaic-to-Early Woodland period. Moreover, informal, expedient stone tools came to dominate Woodland period toolkits as semisedentary fisher-farmers of the Coastal Plain shifted away from hunting focused subsistence strategies and the behaviorally associated need to maintain formal tool kit of the specialized hunter-gatherer (Parry and Kelly 1987). Moreover, the regional material record reflects these changes along with another highly significant technological revolution, the development of the bow-and-arrow weapon system and the subsequent regional eclipse of the more ancient atlatl (spear thrower) technology (Anderson and Mainfort 2002).

Early Woodland Period

In eastern North Carolina, subsistence strategies and settlement patterns, when compared with archaeological inferences associated with the region's Late Archaic period, changed very little during the subsequent Early Woodland period, ca. 1,000—300 B.C. (Anderson and Mainfort 2002; Phelps 1982, 1983; Ward and Davis 1999). Given that pottery is considered a substantive hallmark of the Woodland period across the Eastern Woodlands, and that the earliest manifestations in eastern North Carolina are thought to date to ca. 2,200 B.C., ostensibly the Late Archaic period, Herbert (2002), suggests that the region's Early Woodland period should be considered as the entirety of the ca. 2,200—400 B.C. period. However, the other two elements of the triad of cultural attributes expected for Woodland period societies in the greater Southeast (Anderson and Mainfort 2002), evidence of intensive horticulture and village lifeways, are not readily evident in eastern North Caroline before the end of the Early Woodland period. Thus the later initial date of ca. 1000 B.C. reflects a more conservative appraisal of the region's Early Woodland period should period and period.

Aspects of the semi-sedentary patterns that presumably evolved near the end of the preceding Late Archaic period continued into the subsequent Woodland era. The widespread diffusion of nascent pottery technologies from neighboring regions of the Southeast, however, is materially evident in the rapidly developing technology. North of the Neuse River basin, the northeastern Coastal Plain ceramic tradition, most influenced by Mid-Atlantic traditions of Chesapeake Bay area, emerge during the Early Woodland period. South of the Neuse River basin, however, ceramic traditions continue to be influenced by traditions emanating from coastal South Carolina and Georgia (Byrd 1999; Herbert 2002; Phelps 1983). By circa 1,500 B.C., steatite-tempered ("soapstone") ceramic wares appeared in coastal Virginia and Maryland, which are generally typed as the Marcey Creek series. Marcey Creek-like materials are found in sporadic occurrences north of the Neuse River, on Early Woodland period sites presumably dating to ca. 1,500-800 B.C. (Egloff and Potter 1982; Herbert 1999, 2002; Phelps 1982, 1983; Ward and Davis 1999). Prepared clay as a ceramic tempering agent was introduced to northeastern North Carolina, probably out of eastern Virginia, with the development and spread of Croaker Landing pottery technology, which is thought to be contemporaneous with the Marcey Creek series (Egloff and Potter 1982; Byrd 1999). Like Marcy Creek examples, Croaker Landing materials are typically encountered on Early Woodland period sites north of the Tar-Pamlico Estuary, where minor frequencies of fiber-tempered Stallings Island series examples are encountered as well (Green 1986; Phelps 1982, 1983; Ward and Davis 1999). Along the Northeastern coast of North Carolina and north into the Virginia the Waterlily series, a shell-sand tempered series represents the earliest use of shell as a ceramic tempering agent in the region (Painter 77; Herbert 2007). These flat bottom lug handled vessels are considered contemporaneous with Marcey Creek and early Croaker Landing. This ware appears similar to the generic series described by Egloff and Potter (1982) as Flat Bottom Jars. From the Neuse River south, the limestonetempered ("marl") Hamp's Landing (ca. 2,200-500 B.C.) and the sand-tempered/nontempered Thom's Creek (2,000-1,200 B.C.) series are most prevalent early in the period and reflect a South Carolina coastal influence (Herbert 2002, 2003). In the Currituck Sound locality, a number of sites have yielded shell and sand-tempered Currituck series vessels and fragments of vessels, oft referred to as beakers, produced using the coil method, but with flat bottoms on most vessel forms; the associated dates from the Currituck site cluster in the ca. 800—600 B.C. range (Byrd 1999; Egloff and Potter 1982; Painter 1977).

Well before the end of the Early Woodland period, steatite and clay-tempered ceramics were largely supplanted by sand-tempered wares for the remainder of the period. Croaker Landing and Marcey Creek vessel forms, like most early Stallings Island series forms found southward typically exhibit slab construction techniques with thick walls, flat bases and lug handles (Fiedel 2001). This rudimentary technology gave way to coil-built/paddle-and-anvil production techniques first regionally manifest in coarse sand-tempered, Deep Creek series vessels that are a regionally ubiquitous material element of mid-to-late Early Woodland period sites across the northern Coastal Plain region (Phelps 1982, 1983; Byrd 1999; Ward and Davis 1999). South of the Neuse River/Cape Lookout locality, the sand-tempered New River series is considered coeval with Deep Creek (Herbert 2002; Phelps 1983). For the northern Coastal Plain, Deep Creek surface treatments are diverse and include plain, cord-marked, fabric-impressed, net-impressed

and simple-stamped types. Incised or punctated decorative treatments are not found in the series. Phelps (1983) further suggested that Deep Creek attributes were similar to Stony Creek series materials from southern Virginia. Stratigraphic data, in the absence of sufficient radiometric dates, suggests that the Deep Creek phase can be chronologically segregated, based on surface treatment variations, into three sub-phases (Byrd 1999; Herbert 1999; Phelps 1983).

The dramatic shift in projectile point morphologies over the course of the Earlyto-Middle Woodland period is indicative of the development and subsequent spread of the bow-and-arrow technology across the Southeast (Anderson and Mainfort 2002). On the Coastal Plain, the presumably intrusive technology first influenced the production of projectile point forms in the Early Woodland period. The earliest presumed arrow points are small stemmed Gypsy type points that likely derived from the large stemmed projectile point tradition of the Late Archaic period, Savannah River tradition. Large triangular projectile points, regionally typed as Large Roanoke points, eventually superseded the earlier and less aerodynamic, small stemmed points. Large Roanoke points, similar in size and form to the Piedmont Province's Yadkin Large Triangular points, have been recovered in association with Deep Creek series ceramics (Phelps 1983, Ward and Davis 1999). Although the technology likely originated sometime deep in the earlier Archaic period (Anderson and Sassaman 2004), dugout canoes were shaped and utilized in eastern North Carolina waters by the Terminal Late Archaic-to-Early Woodland period. Notably, a dugout canoe from Lake Phelps, which was found with several Deep Creek sherds in the hull, yielded a radiocarbon assay of ca. 1,100 B.C. (Eastman 1994; Phelps 1983).

While a reasonably solid foundation of Early Woodland period research exists for the North Carolina Coastal Plain, in terms of a basic ceramic sequence and to a certain extent lithic technologies, many Early Woodland sites are only known through surface collections or plow disturbed contexts. Single component Early Woodland period sites are rare (Phelps 1983; Ward and Davis 1999), a problem recognized for other regions in the Southeast (Anderson and Mainfort 2002). As in the preceding Archaic period, Early Woodland adaptive strategies are largely inferred from settlement pattern data, material data from other regions, or inferences gleaned from careful study of pottery and projectile point assemblages. While it is believed, largely based on settlement pattern data and other artifactual inferences, hunting, foraging and fishing were significant elements of subsistence strategies in the period (Phelps 1983). Little, save Green's (1986) investigations along the Chowan River, is actually known, in terms of direct material evidence, about plant domestication, faunal exploitation, social structure or mortuary practices (Herbert 2002; Phelps 1983; Ward and Davis 1999). Early Woodland period features investigated at 31HF30 (Green 1986) produced a small quantity of nutshell, deer, rabbit, turtle (box, snapping) and fish (gar, catfish).

Middle Woodland Period

By the region's Middle Woodland period (300 B.C.-to-A.D. 800), sand-tempered ceramic technology further evolved and primarily manifested itself north of the Neuse River valley in the Mount Pleasant series and south of the Neuse River in the Cape Fear series (Herbert 2002; Phelps 1983). Phelps (1983) suggested that the two series are essentially the same in that both share a similar suite of attributes (see also Herbert 2002,

2003). Ceramics of the typically coil-built Mount Pleasant series are characterized by the presence of sand-temper with the addition of larger clastic inclusions ("classic" Mount Pleasant), typically rounded, sub-rounded or sub-angular pebbles and/or granules ("grit"). Cape Fear series materials typically do not include frequent pebble size clasts. Mount Pleasant tempering elements, in terms of grain size, "varies widely" (Phelps 1983:33), but recent strides have been made in the sorting of Mount Pleasant series materials into varieties that may reflect temporal variations (Holm et al. 1999). Most discussion of the sand tempered variant of the Mount Pleasant series only goes as far as suggesting that its occurrence coincides with the "classic" variety (Byrd 1999, Green 1986, Phelps 1983). Holm et al. (1999) however go further in suggesting that this tempering variation should be considered temporally sensitive and further suggest its frequency of use increased towards the terminal portion of the Middle Woodland. Their data suggest that by the conclusion of the Mount Pleasant phase at site 31HF99, "classic" tempered and "sand" tempering were being used equally in the production of Mount Pleasant phase ceramics. While Phelps in 1983 noted the tempering variations, separating ceramics with the sand tempered variety from the "classic" variety in analysis was not done until Cook's small survey of areas around Middletown in Hyde County (Cook 1984). A few years later the variety was formally described as Middletown in Greens 1987 report on excavations at site 31HY48 (Green 1987) and considered consistent with his earlier LH-1 series described in work done at the Chowanoke site (Green 1986). Substantiating the claim made by Holm et al. (1999) that this sand tempered variety was as equally popular towards the end of the Middle Woodland is two radio carbon dates from two overlapping features at the Chowanoke site. These dates were not available at the time that report was written (Green 1986) and have remained unpublished until now. Feature 16 was a pit feature containing large amounts of Deep Creek and "classic" Mount Pleasant with a very minor amount of LH-1 (Middletown). It yielded a radio carbon date of BC 355 +/- 60. Feature 18, also a pit was dug sometime later intruding into feature 16. It possessed a much more significant amount of LH-1 or Middletown and vielded a radio carbon date of AD 400 +/- 70 (David Phelps personal communication 2000). Re-analysis of the material from features 16 and 18 done in 2000 by the author concluded that what Green had described originally as LH-1 and later Middletown was consistent with the sand tempered material described by Holm et al. (1999). That said, the Middletown series is considered consistent with what Phelps (1983) originally described as the sand temper variant of the Mount Pleasant series, what Green (1986) described as LH-1 from excavations at the Chowanoke site, and what Holm et al. (1999) described as their sand tempered variant of the Mount Pleasant series. Spatial distribution for the Middletown series is considered consistent with that of the Mount Pleasant series and series types mirror it as well. One notable attribute for the Middletown series is the preponderance of the Fabric Impressed type (Holm et al. 1999).

Surface treatments include plain, fabric-impressed, cord-marked and netimpressed types, with some vessels further including incising as a decorative treatment; vessel forms typically include conoidal/sub-conoidal base jar and pot forms, as well as hemispherical and flat-bottomed bowl forms (Phelps 1983). Similarities between Mount Pleasant and Deep Creek ceramics suggest that these two series may be related and coeval during the transitional Early-to-early Middle Woodland period (Phelps 1983; Ward and Davis 1999). Since a number of radiometric dates associated with presumed Mount Pleasant and Cape Fear series examples range between ca. A.D. 800 and A.D. 1000 period (Herbert 1999, 2002; Hutchinson 2002), these Middle Woodland period series were apparently produced into the Late Woodland period in some areas of the greater Coastal Plain Province, perhaps by peoples displaced by ancestral Tuscarora and Coastal Algonkian peoples who were relative late arrivals to the region (see below).

The producers of Mount Pleasant ceramics are associated with regionally distinct shifts in settlement patterns, which suggest a concurrent shift in subsistence practices, but floral and faunal data from the period are limited. Deer, small game, turtle, fish and shellfish remains, as well as a hickory nut fragments have been recovered from Middle Woodland period contexts. An increased frequency of sites associated with the Mount Pleasant phase are found on well-drained sandy-sandy loam terraces above main rivers, major tributary steams and estuary environments, a shift from earlier periods where outer Coastal Plain habitation sites are found in more diverse micro-environments, especially along minor tributary streams (Phelps 1983). Phelps (1982) suggested that this trend may reflect the development of horticulture and the associated need for arable lands. While the ubiquitous Middle Woodland period marine and estuarine shell middens of the Tidewater zone suggest the frequent use of seasonal exploitation camps during the period (Phelps 1983; Skinner 2002), larger Middle Woodland period sites found along the major rivers of the Upper Coastal Plain suggest increased sedentism and most likely the rudiments of early horticulture (Phelps 1983) as noted above. Although evidence is limited, maize-like pollens from a coastal North Carolina context has been dated to ca. 50 B.C.—A.D. 0 (Phelps 1982, 1983), and no other evidence for maize horticulture (i.e., carbonized cob/cupule fragments) has been recovered from regional archaeological contexts dating before A.D. 1,000 (Hutchinson 2002; Ward and Davis 1999). In the Northeast, evidence of widespread horticulture is not evident until ca. A.D. 900 (Fiedel 2001), suggesting that horticultural cultigens were not especially important to indigenous peoples until well into the later portion of the Middle Woodland period.

While sand-tempered ceramic technology manifested itself south of the Neuse River in the Cape Fear series, other ceramic technologies diffused from the south and/or developed *in situ* across Coastal Plain during this period. Grog and/or clay-tempered Hanover series ceramics, likely originating from the present-day South Carolina coast, are encountered on Middle Woodland period sites from the Carolina Sandhills on the southwestern fringe of the Coastal Plain, northward to the Currituck Peninsula after about ca. A.D. 500. While Hanover phase manifestations continue well into the subsequent Late Woodland period in the southeastern Coastal Zone, perhaps as late as A.D. 1500— 1550 (Gardner 1990a; Herbert 2002), Hanover series materials apparently disappear from the northeastern Coastal Plain by well before the end of the Middle Woodland period, ca. A.D. 650—700 (Skinner 2002). In several coastal areas north of the Neuse River, Hanover and Mount Pleasant series wares are found in equally significant quantities in contemporaneously dated deposits (Skinner 2002), suggesting both a chronological and cultural overlaps in the technologies.

In addition to the Hanover series, shell-tempered pottery of the Mockley series (cord-marked, net-impressed) occurs in the northeastern Tidewater after ca. A.D. 600. The technology apparently originated from coastal Virginia and Maryland, ca. A.D. 200 (Byrd 1999; Daniel 1999; Egloff and Potter 1982; Gardner 1990a; Phelps 1983; Shumate and Shumate 2000), and may materially represent material evidence for the movements of ancestral Carolina Algonkian peoples who eventually occupied most of the northern and north central Tidewater region from about A.D. 800—1650. Recent data from the central coast suggest that Mockley materials date as early as A.D. 300—400 in North Carolina (Shumate and Shumate 2000). Byrd's (1999) assessment of excavation data from 31BR39's stratified deposits indicated that Mockley sherds were essentially equally abundant in their stratigraphic association with both Early and Middle Woodland period ceramic types, suggesting a much earlier occurrence of Mockley wares in the northern coastal region as well.

Middle Woodland period lithic assemblages are generally similar to those found in late Early Woodland period contexts. Triangular projectile points continue to be made, but in smaller sizes (Medium Roanoke) than in the preceding period and the stemmed point tradition (Gypsy, Randolph) wanes and essentially disappears by the end of the period. Eared and notched triangular points, once thought to potentially represent a Coastal Plain, Terminal Paleo-Indian period technology (Phelps 1983), are now known to be stratigraphically associated with Early, Middle and early Late Woodland period occupations in the central and south central Coastal Plain. These Swansboro type points, originally identified by Loftfield as Woodland period points, have been recently discussed by Daniel (1999) and Shumate and Shumate (2000). Woodland period Polished stone tools, grass matting, bone tools, ornamental shell and stone gorgets/pendants and beads of worked shell or polished stone, as well as ceramic and stone (schist, steatite) pipes, are encountered in both Middle Woodland period occupation and burial contexts (Heath 2003; Phelps 1983; Ward and Davis 1999).

In the Chowan River basin, site locations during the Middle Woodland period do not differ significantly from Early Woodland period settings, but Phelps (1982) suggested that small Middle Woodland period sites found on or near larger river bluff sites (i.e., villages) may represent single or extended household farmsteads. On the outer coast, small Middle Woodland period sites are typically associated with shell midden deposits that reflect the seasonal use of such areas for shellfish exploitation (e.g., Skinner 2002). In the main, both Early and Late Woodland period sites on the northern Coastal Plain are found in environmental settings similar to Late Archaic period Savannah River phase sites, a pattern that does change in the subsequent Late Woodland period (Phelps 1982, 1983). Mortuary patterns encountered on Mount Pleasant phase sites (individual flexed/semi-flexed primary inhumations, secondary cremation interments), which variously include an array of burial goods, suggests subtle shifts in social complexity in the form of age and gender based ranking perhaps associated with semi-sedentary adaptations and the development of village life (Heath 2003; Phelps 1983; Ward and Davis 1999). Although late Middle Woodland-to-Late Woodland period, sand burial mounds are found on the southeastern Coastal Plain, no such interment monuments, presumably associated with Pre-Contact era, Coastal Siouan peoples, are known in the northeastern coastal region (Irwin et al. 1999; Phelps 1983).

Late Woodland Period

An array of kin-based, ranked tribal and ranked chiefdom level societies emerged on the South and Mid-Atlantic Coastal Plains during the late prehistoric period, some 700 years before European Contact. In general, cultural adaptations during the region's Late Woodland period are notable in that there are multiple lines of evidence for welldeveloped horticultural systems, largely focused on the production of maize and beans, long-distance commodity exchange, chiefdom level social structures and other aspects of complex, hierarchically ranked lifeways in large communities, either in the form of populous, but dispersed towns or in the form of highly nucleated villages (Byrd and Heath 2004; Herbert 2002; Hutchinson 2002; Phelps 1983, 1984).

In northeastern North Carolina, the distinctive archaeological antecedents of two historically recognized ethnic groups, the Iroquoian Tuscaroras and the Carolina Algonkians, are evident in the regional archaeological record by A.D. 800-1000 (Phelps 1983; Phelps and Heath 1998); archaeologically speaking, the material manifestations of the historically recognized Meherrin tribe are essentially those of the Tuscaroras (Binford 1964; Heath and Phelps 1998; Phelps 1983). The late prehistoric and transitional early Contact period of cultural development in the Coastal Plain Province, ca. A.D. 800-1650, is generally referred to as the Late Woodland period. Pre-Contact period Native groups located in the Tidewater region and southeastern Coastal Plain developed cultural elements respectively affiliated with Contact and early Post-Contact period Carolina Algonkian and Coastal Siouan societies. However, the principal inhabitants of the northern Inner Coastal Plain, ancestral Tuscarora peoples, manifested cultural aspects most similar to those of other Southern Iroquoian peoples, the Meherrin and the Nottoway, whose ancestors apparently migrated out of the Northeast, into southeastern Virginia and northeastern North Carolina, sometime after A.D. 800 (Phelps 1983; Snow 1995, 1996; Ward and Davis 1999).

At the time of European Contact, North Carolina's northern interior Coastal Plain (Inner Coastal Plain), primarily west of the Cashie River drainage, was the domain of the Tuscaroras. Culturally and linguistically associated Meherrin and Nottoway territories were respectively found northward of the Roanoke River, along the present-day North Carolina Virginia boundary, northward into southeastern Virginia. Cashie series ceramics are the primary material marker for the Late Woodland period, Cashie phase of the northern Inner Coastal Plain of North Carolina. Past research suggests that the suite of Cashie phase archaeological manifestations (e.g., palisaded villages, longhouse architecture, small ossuary burials, granule/pebble-tempered pottery) are most likely associated with the historically known Tuscarora and Meherrin Indians-Southern Iroquoian peoples—regionally identified in the ethnohistoric record. The northeastern Outer Coastal Plain, from the Neuse River Estuary, northward to the upper reaches of Currituck Sound, and into Virginia, was Coastal Algonkian territory, where competing chiefdoms vying for control of the Tidewater emerged by the mid-sixteenth century. Colington series ceramics, similar to Roanoke and Townsend wares from Virginia and Maryland, are directly associated with the Late Woodland period, Colington phase in this region. Colington phase material manifestations (e.g., longhouse architecture, large ossuary burials, shell-tempered pottery) are affiliated with the peoples who came to form the chiefdoms visited and variously described by early English explorers in the 1580s. Based on the presently available archaeological, ethnohistorical and ethnological evidence, it is clear that both Tuscarora and Carolina Algonkian cosmologies, cultural practices and material life incorporated both Southeastern and Northeastern culture area beliefs and practices, perhaps most similar to southern Middle-Atlantic region societies in the Lower Chesapeake Bay region (Binford 1964; Boyce 1978; Byrd and Heath 2004; Driver and Massey 1957; Feest 1978; Phelps 1983, 1984; Phelps and Heath 1998).

Cashie phase.

From south-to-north, Cashie phase sites are roughly distributed between the Neuse River in North Carolina and the upper Meherrin River in southeastern Virginia. From west-to-east, Cashie sites occur along the fall-line at the eastern edge of the Piedmont Province, to the western fringes of the great Pamlico-Albemarle estuary system. Single component Cashie phase sites are rare east of the westerly shores of the Chowan River, apparently an ancient, but permeable and/or chronologically fluctuating social boundary between the pre-Contact Tuscarora and Coastal Algonkian societies of the western Tidewater area. While current archaeological data indicate a maximal southerly distribution of Cashie phase sites just beyond the main course of the Neuse River, ethnohistoric sources suggest that Tuscarora hunting and foraging parties may have ranged as far south as the Cape Fear River in the early 1700s (see Barnwell 1908). As such, seasonal, Cashie phase camps, well south of the Neuse River, will likely be encountered in the future, but have yet to be definitively encountered in the Upper Cape Fear River valley. Due to the present lack of reported site data, the western and southern limits of Cashie site distribution are not particularly well defined (Byrd and Heath 2004; Phelps and Heath 1998).

The Cashie ceramic tradition is relatively homogenous, in terms of vessel forms (conoidal/sub-conoidal jars and pots, beakers, hemispherical and simple bowls, ovoid orifice ladles/dippers) and paste characteristics, through time and notable for its rather conservative range of surface and decorative treatments over the presently estimated span of the Cashie phase, ca. AD 800—1715 (Heath 2002; Phelps and Heath 1998). Cashie series surface treatments include plain and/or stamped and smoothed, fabric-impressed and simple-stamped types. Vessels of various types in the series may further include incised or punctated decorative treatments and folded rims. Ceramic smoking pipes are commonly recovered from Cashie phase sites as are bone/antler/shell tools, incised bone pins, marine shell/stone beads/pendants and pottery figurines. Lithic artifacts recovered from such Southern Iroquoian sites include Small Roanoke and Clarksville triangular projectile points, formal biface tools (knives, drills, awls), expedient bifacially/unifacially worked tools, ground stone adzes/celts and cobble tools (Phelps 1983; Phelps and Heath 1998).

Combined archaeological and ethnohistorical data suggest that Cashie phase peoples were semi-sedentary horticulturalists with a distinctively ranked social structure (Byrd 1997). Cashie phase settlement patterns range from permanently occupied, nucleated villages to loosely organized, multiple household hamlets and single household farmsteads dispersed over the landscape (Byrd and Heath 2004; Phelps 1983). Cashie phase sites are most commonly found on well-drained, sandy loam ridges or other elevated landforms along river channels and navigable streams, typically at or near confluences with smaller tributary streams. Such a settlement pattern reflects natural resource exploitation of multiple microenvironments within a catchment area. Seasonal camps and resource extraction sites (e.g., fishing camps, upland hunting camps) have been investigated. Late Woodland period, Cashie phase habitation and seasonal resource exploitation sites were more selectively chosen in less environmentally variable locations than were sites selected by either Archaic or Early/Middle Woodland peoples in the same region. Such selectivity was apparently due to a combined fishing and farming subsistence focus (Byrd 1997; Byrd and Heath 2004). Cashie phase settlements were typically dispersed, suggesting that each community remained relatively autonomous within the greater tribal structure observed at Contact (Boyce 1978). Socio-political complexity and more pronounced social stratification developed among the Tuscaroras over the course of the Late Woodland period. Evidence for the nascent development of a ranked social structure is found in a number of ethnohistoric sources. However, any sociopolitical evolution that was occurring among the Tuscaroras during the late 17th-to-early 18th century period ended along with their cultural autonomy when they were forced onto reservations after the Tuscarora War of 1711—1715 (Phelps 1983; Byrd 1997; Byrd and Heath 2004).

In addition to material evidence from archaeological sites, Cashie phase settlement patterns provide clues to the subsistence strategies employed by ancestral Tuscarora communities. The distribution of Cashie phase settlements appears to have been largely dispersed within the major drainage basins of the Roanoke, Tar, and Neuse Rivers (Phelps 1983). The locations of Cashie phase settlement clusters appear to be part of an adaptive strategy that took advantage of riverine and interior wetland resources while occupying areas that are still some of the richest agricultural lands in North Carolina (Byrd 1997; Byrd and Heath 2004). John Lawson's (Lefler 1967) account of Tuscarora subsistence practices further mentions the cultivation of maize, beans, and various fruits as well as the exploitation of a variety of fauna. Study of faunal remains from Cashie phase sites indicate that ancestral Tuscarora peoples intensively utilized the available biomass of riverine settings, regularly exploiting fresh and brackish water fish, anadromous fish, turtles and freshwater mussels. Large fauna, such as deer and bear, were typically hunted during the winter months when such efforts did not interfere with horticultural and fishing efforts in milder seasons (Byrd 1997).

In general, Cashie phase burials are typically comprised of the disarticulated and bundled skeletal remains of two-to-six individuals, which likely represent single family interments over a period of time. Many such secondary burials include burial goods such as shell beads, bone tools, decorated bone pins, pottery vessels and other mortuary goods, which stand in stark contrast to the larger Coastal Algonkian ossuaries on the Outer Coastal Plain, which typically incorporated the skeletal remains of significantly more individuals, but few, if any, burial goods (Phelps 1983; Heath 2003). Phelps (1983) interpreted this pattern as representative of family focused, rather than communal (i.e., Colington phase/Carolina Algonkian), burial rituals. However, some of the single inhumations may simply represent first-stage, or "in-process," mortuary ritual, an intermediate stage of ritual before final ossuary interment (Heath 2003).

Colington phase.

Most archaeologists believe that the Carolina Algonkians, a sub-group of American Indians related to the maritime adapted Coastal Algonkians originally distributed from North Carolina to Canada (Trigger 1978), migrated down the Mid-Atlantic coast to re-settle in the Albemarle-Pamlico Sound region of North Carolina late in the Pre-Contact period. Ancestral Carolina Algonkians apparently moved into the Coastal Plain Tidewater (Outer Coastal Plain), ca. A.D. 600—900 and absorbed or displaced the indigenous peoples who previously occupied the coastal zone during the preceding late Middle Woodland/early Late Woodland period. Coastal Algonkian settlements typically found within petty chiefdoms ruled by an elite class of hereditary chiefs extended southward at least as to Cape Lookout (Feest 1978; Mook 1944; Phelps 1983), and perhaps as far south as Cape Fear (Loftfield 1976; Ward and Davis 1999).

Much like the Tuscaroras of the neighboring Upper Coastal Plain, Carolina Algonkians inhabited the Tidewater for nearly a millennium. After Contact, the coastal tribes were largely decimated through a series disease epidemics, small-scale local conflicts and regional wars (1584—1715). As early as the time of the initial English explorations, Thomas Hariot reported that an entire "tribe" of Algonkian peoples died after contracting measles in 1583—1584. With the coming of permanent European settlements in the 1650s, the subsequent competition for territory and the rise of the Indian slave trade, warfare and slave raids took their respective tolls as well. By the early 18th century, several remnant bands were officially restricted to four reservation tracts, or unofficially to marginal environments not taken up by land hungry European settlers. These fragmented communities languished and eventually disintegrated as unique social entities by 1800. As Paschal (1984:4) observed, "The astonishing rate of attrition by the Indians of North Carolina dwarfs all other aspects of their history."

Shell-tempered Colington series ceramics are relatively conservative over time, at least in terms of vessel forms (conoidal/sub-conoidal jars and pots, hemispherical and simple bowls) and paste characteristics, but are notable for their unusual array of decorative treatments, primarily in the form of incised or punctated linear and geometric designs in various combinations. The series includes plain, fabric-impressed and simplestamped types and many vessels further include a range of incised and/or punctated decorative treatments. On late Pre-Contact period and Contact period Colington phase sites, a burnished plain, fine sand-tempered ware is often found, particularly in sites located on the Outer Banks. Originally considered an extra-local "trade item" (Phelps 1983), recent excavation data from Hatteras Island suggests that the well-made pottery represents an *in situ* development, coeval with the Colington series. Ceramic smoking pipes, often with incised or "rouletted" motifs are commonly recovered on Colington phase sites as are bone/shell tools, including whelk shell hoes, bone pins and fish hooks, and an array of marine shell/stone, as well as copper, beads/ornaments/pendants. Lithic artifacts recovered from Coastal Algonkian sites include small triangular projectile points (Small Roanoke), bifacially worked tools (knives, drills, awls), expedient bifacially/unifacially worked tools, polished stone adzes/celts and cobble tools (Phelps 1983, 1984).

Like their Cashie phase neighbors, the Coastal Algonkians were semi-sedentary fisher-farmers, but by European Contact in the 1580s, exhibited a more complex, chiefdom level social structure (Feest 1978; Mook 1944; Phelps 1984). Late Colington phase site types include "capital towns," large villages (nucleated and dispersed), hamlet communities, family farmstead compounds and seasonal exploitation camps (Gardner 1990a; Green 1986, 1987; Phelps 1982, 1983, 1984). In the Chowan River basin, Phelps (1982) indicated that Colington phase sites are most often encountered on "high sandy loam bluffs along the river and its major tributaries," on landforms with "larger expanses of arable, well drained soils." Settlement patterns on the outer coast differed somewhat with most sites found along or near the shores of the great sounds, or along the major river estuary shores on well-drained, sandy landforms. On the Outer Banks barrier islands, recent survey data suggests that there was seasonal movement between the sound shores and island interiors. Similarly, ethnohistoric sources indicate that seasonal movements between mainland settlement areas and inner barrier islands were not uncommon. As such, Colington phase settlements, while distinctly marine or estuarine locales, were somewhat varied and adapted, like Cashie phase sites, to local microenvironments within the limitations of locally available arable lands.

As coastal adapted fisher-farmers, Colington phase peoples settled near shorelines in settlement clusters that took advantage of a diverse array of marine/estuarine resources while simultaneously occupying agriculturally suitable lands (Phelps 1982, 1983). Like the Tuscaroras (Lawson (1967[1709]), the Algonkians, at least by the time of European Contact, cultivated maize, beans, squashes and other cultivars as part of their seasonal subsistence round that included the exploitation of various flora and fauna. Floral assemblages from Colington phase sites yield maize cobs and cupules, squash seeds, acorns, hickory nuts, grape seeds, chenopodium and sumpweed seeds (Green 1986; Phelps 1983, 1984). Hutchinson's (2002) bioarchaeological studies do, however, suggest that maize may have been less significant as primary food resource than previously assumed for Coastal Algonkian peoples. Faunal assemblages from Colington phase sites exhibit greater species diversity than assemblages from Middle Woodland period contexts in the same region (Green 1986). Algonkian peoples regularly exploited saltwater, as well as fresh and brackish water fish, anadromous fish, turtles, freshwater mussels and a wide variety of marine shellfish including multiple species of clams, pear conchs, mussels, oysters, scallops and whelks. Large fauna, such as deer and bear, were probably hunted during the winter months when such efforts did not interfere with horticultural and fishing/shellfishing efforts in milder seasons (Byrd 1997; Green 1986; Phelps 1983). Faunal data from the Chowan River Basin, when compared with Colington phase data from back bay, Outer Banks sites, indicate—somewhat as expected—that Algonkian peoples settled in inner Tidewater estuarine/riverine areas may have exploited more terrestrial, mammalian and reptile resources, while their neighbors in the outer Tidewater marine areas exploited proportionately more marine/estuarine species (Green 1986). Green's (1986) data further indicate that saltwater shellfish, primarily clams, were transported or trade over significant distances within the greater Tidewater region.

Colington phase burial patterns include some single primary inhumations, but large ossuaries, which contain between 30 and 60 sets of human remains are most common. The degrees of articulation and bundle consolidation within these dense ossuaries are highly variable (Hutchinson 2002; Phelps 1983). Phelps (1983) interpreted this mass interment pattern as the material manifestation of elite communal focused, rather than individualized family oriented, burial rituals. Segregated clusters of remains in large ossuary pits, such as found at the Hollowell site (31CO5), however, may represent segregated kinship groups included within a single ossuary feature (Phelps 1982, 1983).

During the late Pre-Contact era and at the time of European colonization in the 1650s, the lower Chowan River locality was the domain of the Algonkian Chowanoke

chiefdom and sites associated with Chowanoke towns and peripheral farmsteads have been recorded and variously investigated up-and-down the shores of the Chowan River (Gardner 1990b; Green 1986; Haag 1958; Phelps 1982, 1983, 1984). In the same are, however, Cashie phase sites are encountered as well, particularly on the west side of the Chowan River. While Phelps (1982:14) suggested that such westerly sites likely date to the later 17th century, after the Chowanokes were forced onto a reservation on Bennetts Creek, the Chowan River was clearly a fluid boundary between Tuscarora and Algonkian peoples during the Late Woodland period. As such, pre-seventeenth century Cashie phase settlement sites likely exist on both sides of the river, a social boundary that undoubtedly fluctuated through time.

For the Bal Gra project locality, previous archaeological survey and site testing projects indicate that the lower Chowan River basin was first utilized, perhaps sporadically, by American Indian peoples during the Early and Middle Paleo-Indian periods. Over time, Native populations increased as they adapted to environmental changes of the Early and Mid-Holocene periods; especially notable is the ubiquitous presence of Middle and Late Archaic period sites throughout the region. Due to the lack of regional radiocarbon dates, floral/faunal remains, burials, structural remains and stratified sites, little is known of Paleo-Indian or greater Archaic period adaptations beyond what might be inferred from site sizes, site locations, site artifact densities and dated materials from other regions outside of North Carolina. While many prehistoric sites on the Coastal Plain have been irreversibly damaged by agricultural plowing, the potential for sites with partially intact subsurface features that might produce datable materials, floral/faunal remains exists. Green (1986) and Gardner's (1990) investigations readily demonstrate that sub-plowzone features exist on many plowed sites that otherwise lack undisturbed stratified deposits, both in the Chowan River Basin and on the Outer Coastal Plain. Recently, Abbott (2005) reported the investigation of a Savannah River phase site in the eastern Sandhills. Careful excavation of the sandy soils site resulted in the documentation of *in situ* architectural remains, occupation floors and one burial. Given the need to amass regionally specific data and the potential that even partially intact sites remain in the Tidewater, both Paleo-Indian and Archaic period sites and site components are of special regional research interest. As such, period sites with the remotest potential for intact subsurface features should be considered of research significance if encountered.

Although more regional archaeological data for the lower Chowan River locality exists from Woodland period contexts, single component ceramic assemblages from datable contexts are especially needed to refine the existing regional ceramic chronology. While the basic outlines of the region's pre-European Contact cultural history have been summarized (Phelps 1983; Ward and Davis 1999), the Early Woodland period is the least understood, in terms of the transition from Archaic period adaptations to adaptations incorporating ceramics and possibly early cultigens. For example, the relationships between the Terminal Archaic and Early Woodland phases materially represented by Croaker Landing, Marcey Creek, Deep Creek and Savannah River series ceramics variously encountered in the region are largely unknown (see Herbert 2002, 2003). The Middle Woodland period is somewhat better understood, but significant gaps exist in basic ceramic/phase chronologies (Herbert 2002), and little can be said of subsistence practices or settlement patterns at the level of the site or the household. Due to the better preservation of more recent materials and a somewhat greater research emphasis on late prehistoric sites, the culture histories for Late Woodland period archaeological cultures are more refined (Byrd 1997; Phelps 1983, 1984; Ward and Davis 1999). Nonetheless, little is known of the timing or processes related to the migrations of either ancestral Tuscarora or ancestral Algonkian peoples during the A.D. 800–1000 period. Similarly, little is known regarding the evolution of the Carolina Algonkians' social systems, from presumably autonomous communities of the early Late Woodland period to the petty chiefdoms of the Contact period. Much of our presumed knowledge of these distinctive regional cultures comes from a few key archaeological sites and inferences drawn from the ethnohistoric record.

As Herbert (2002:292, 316) recently noted, more work is needed to refine the most basic building block of regional archaeological interpretation, ceramic chronologies, before we can hope understand the diachronic processes of cultural development over the long span of the Woodland period, ca. 1,000 B.C.—A.D. 1650, in coastal North Carolina. The results of Phelps' (1982, 1983) and Green's (1986, 1987) investigations in the lower Chowan River valley provide baseline data on which to refine and expand current regional knowledge of past archaeological cultures, and additionally demonstrate that prehistoric sites in plowed field contexts oft retain some degree of integrity and can yield archaeological data of research significance (see also Gardner 1990b).

Given the issues discussed here, Archaic and Woodland period sites within the Bal Gra project area should be considered of regional research significance under National Register of Historic Places Criterion-D, if some degree of integrity can be demonstrated at the survey level, <u>and</u> if the diversity and quantity of materials encountered at the survey level suggest the potential for the recovery of non-redundant data at the site testing level.

HISTORIC BACKGROUND

Early European Settlement

The first serious English efforts to explore the Albemarle River were driven by the search for the lost Roanoke colonists. John Smith sailed upriver past the project area in 1608, and Samuel Argall followed the same route two years later, reaching as far as Salmon Creek. Returning to Virginia from an overland trek to the Chowan River in 1622, John Pory reported that this area was ideal for settlement. The Heath Patent of 1629, granting territorial rights to Sir Robert Heath and his assignee Henry Frederick Howard, Lord Maltravers, lapsed without any visible results, however, and no concerted effort was made to colonize the Albemarle region until the late 1640s, when Virginians once again turned their attention to this promising area (Smallwood 2002: 29-31; Hill and Wilde-Ramsing 1987: 1-2).

Generally recognized as the first English settler in North Carolina, Nathaniel Batts established a trading post south of Salmon Creek in the mid-1650s. Evidence concerning his tenure in this area is relatively slight. In 1654, Francis Yeardley reported that Batts, "a young man, a trader for beavers," had recently explored the Roanoke Island area with a small party. In July of the following year, Yeardley sent carpenter Robert Bodnam to build Batts a dwelling, described in later court records as measuring 20 by 20 ft., with two rooms and a chimney. A 1657 map by London cartographer Nicholas Comberford

indicated the location of the "Batts House" on the Albemarle River between Salmon Creek (labeled "Fletts Creek") and the Roanoke River (Figure 6). Batts evidently divided his time between his property in Virginia and his trading post in North Carolina. He was living on the Salmon Creek tract in 1672 when he was visited by Quaker missionary

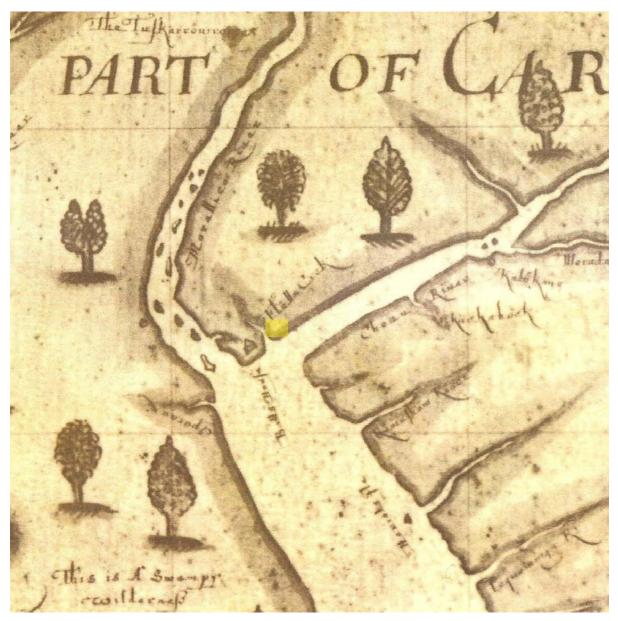


Figure 6. Detail, The South Part of Virginia (Comberford 1657).

George Fox, but subsequently disappears from the records (Cumming 1939: 82-89; Hill and Ramsing 1987: 2-4).

During the late 1650s and 1660s a number of Virginia settlers arrived to take up land in the Albemarle. Around this time the political situation changed significantly, as the Heath Patent was superseded by the Carolina Charter of 1663, a sizeable land grant made by King Charles II to eight "Lords Proprietors." Almost immediately after the Carolina Charter was enacted, the Proprietors began officially granting land in the area.

The following year, they enacted the "Fundamental Constitutions" which laid out the system of government—a sort of manorial feudalism—that was intended to bring order to this frontier region. Chowan County was divided from Albemarle County in 1670, and the project area was encompassed by the Bertie Precinct (Smallwood 2002: 13; Watson 1987: 3).

The relative isolation of the area, continuing hostile relations with the local Native Americans, the neglect of the Proprietors, and a steep imperial tariff on tobacco tended to hamper development during the colonial period. Throughout the seventeenth and eighteenth centuries the region was predominantly agrarian. Unlike Virginia to the north, tobacco never came to dominate local economy. Corn was the principal agricultural crop, feeding people and animals alike, and providing an exportable commodity that was shipped to New England. Wheat was another important source of income through trade, and cotton and flax were grown, though mainly for local consumption. Some tobacco was produced, but the absence of major ports in the Albemarle Sound made it necessary to transship it through Virginia. By the 1670s, Virginia had outlawed the import of North Carolina tobacco, which essentially precluded the development of a viable local industry. Livestock also formed an important part of the local economy, and a considerable quantity of beef and pork was sold to Virginia and some northern colonies. Taking advantage of imperial trade incentives, the county also became a leading supplier of naval stores, including tar, pitch, and turpentine, to the British Navy and merchant fleet, and produced a variety of other wood products, including sawn lumber, staves, and shingles (Watson 1987: 8-13).

The Pollock Plantation at Salmon Creek

From the latter years of the seventeenth century through the antebellum period, the history of the project area was intimately connected to the wealthy and politically well-connected Pollock family. The patriarch of the North Carolina clan was Thomas Pollock, who was born in Scotland in 1654. The family's ancestral estate in Renfrewshire was known as "Balgra," and this name ultimately became associated with the large tract of land north of Salmon Creek. Emigrating first to Maryland, Pollock arrived in North Carolina in 1683 as the deputy of Lord Proprietor Carteret. Over the next 30 years, Pollock held a variety of important military and civil offices in the colony, including two brief stints as acting governor. "Well educated, wealthy, and closely identified with the Proprietary and royal interests," described one biographer, "Pollock was in full sympathy with the ideals and ambitions of the privileged classes of the colony." He supported acting Governor William Glover in opposition to the Quakers and their allies led by Thomas Cary, and briefly followed Glover into exile in Virginia. During Cary's Rebellion he acted as Governor Edward Hyde's principal lieutenant. When Hyde died in September 1712, Pollock was appointed acting governor, a position he held until the arrival of Governor Charles Eden in 1714. During this period he helped bring the colony's various factions together to successfully fight the Tuscarora Indians. Pollock once again took over the governorship when Eden died in March 1722, holding the office until he died in August of that year (Gass 1994: 116-17; Crabtree 1974: 26-27).

In addition to his role in the political life of the colony, Pollock was a successful lawyer and merchant who acquired vast landholdings along the Chowan, Roanoke, and Trent Rivers. More detailed research is required to better understand Pollock's earliest associations with the Salmon Creek tract, but a preliminary investigation of early land records indicates that he resided here at some point prior to leaving for Virginia in 1708. A deed dated June 30, 1709, recorded that Pollock sold to David Henderson "half the cattle & hogs of the place at Salmon Creek where Thomas Pollock himself lived." After his return from Virginia, he patented 476 acres on Salmon Creek in Chowan precinct, "joining Captain Robert Welsh¹, ye creek, ye river, Mr. Perrott, and Cary Godby." Two years later, in August 1714, he patented five additional tracts in the Salmon Creek area totaling 3,200 acres (Bradley 1992: 27, 33; Hoffman 1979: 43, 61).

Further evidence that Pollock was living at the Salmon Creek tract is contained in a deed dated December 1718, in which Major Robert West and his wife Mary, and Thomas West and wife Martha, sold him the "tract of land whereon said Pollock now lives, on the West side of Chowan River, being on said river and Salmon Creek." It is not clear why Pollock was purchasing this land from his stepsons, as it appears to have been encompassed by his earlier patents. Yet, this is clearly the same property that Pollock bequeathed to his son George Pollock in his will dated August 1721: "I Give & Bequeath unto my Son, George, his Heirs & assigns ffor Ever, The Land Lately Bought of Major West, on w'ch I now Live (Hathaway 1900b: 627; Brayton 2005, vol. 2: 148-52).

While Thomas Pollock's Salmon Creek plantation is commonly referred to as "Bal Gra" in numerous secondary sources, the earliest documentary evidence indicates that—during the early eighteenth century, at least —it was another of his properties south of the Roanoke River which bore that name.² In October 1716, Richard Rose sold 930 acres to Pollock. The land was situated on the southwest side of the "Morattic" (Roanoke) River, a portion of which was adjoined by Pollock's land "called Bald Grey." Later, in September 1717, Pollock patented 3,250 acres in Chowan Precinct "on ye ______ side of Morratock River on both sides of Roses Creek³ called Ball Gray. . . ." He subsequently willed this property ("ye Land Purchased of Richard Rose") to his son, Cullen Pollock, along with other nearby tracts south of the Roanoke River (Hathaway 1900a: 298). Cartographic evidence indicates that the Salmon Creek property had become known as "Bal Gra" by the early twentieth century; however, further research may clarify exactly when and how the change occurred.

George Pollock (1699-1736), Thomas Pollock's youngest son, was 22 years old when his father died, leaving him the Salmon Creek estate. A successful merchant, George evidently took up residence here, as Edward Moseley's 1733 map of North Carolina indicates "G. Pollock" north of Salmon Creek (Figure 7). George died prematurely in 1736 leaving no heirs. His widow, Elizabeth, later remarried Thomas Blount; over the following years, his elder brother Cullen evidently waged a legal battle

¹ Subsequent records indicate that "Welsh" was actually his step-son Robert West, the child of Pollock's first wife Martha Cullen West and her late husband, Robert West.

² At least two secondary sources also distinguish between Pollock's Salmon Creek property and "Bal Gra." In *North Carolina Governors, 1585-1974* (1974: 27), Crabtree notes that "the Pollocks lived at Balgra on Queen Anne's Creek or at a plantation located on Salmon Creek." Similarly, the entry on Thomas Pollock in the *Dictionary of North Carolina Biography* (Gass 1994: 117) states that "Pollock's residences included a plantation on Salmon Creek and Balgra, his plantation on Queen Anne's Creek, where he was buried."

³ There is still a Roses Creek south of the Roanoke River, between the towns of Williamston and Plymouth in present Martin County.

with Blount to maintain the family's control over the Salmon Creek property (Hathaway 1902: 156-57; North Carolina State Archives 1751).

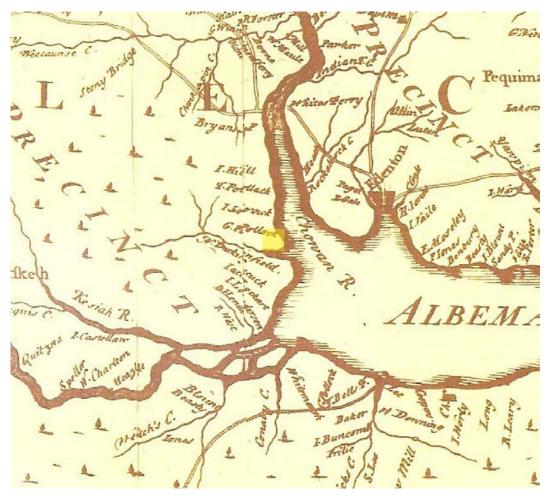


Figure 7. Detail, A New and Correct Map of the Province of North Carolina (Moseley 1733).

In his will dated 1749, Cullen referred to the ongoing legal dispute, and granted "all ye Stock of Cattle at the Plantation on Salmon Creek" to his nephews Cullen and Thomas, the sons of his elder brother Thomas Pollock. In the same clause he also left them 24 slaves; although not explicitly stated, it is likely that they were living and working on the property. These included: "Frank & his Wife Dinah with their Children, George, Frank, Joshua, old Nanne now old Dicks Wife, Bodwin & his wife Hoope & their four Children Jamie, Seesar, todge, & Moses, the Boy Dowe, Jamie & his four Children yt he had by his wife Patience, or rather Patiences four Children; Jamie & Hanna, Pat & Mingo: Jack the Cooper, little Rose & her two Children, Dinah, & Seasar, wth their Increas, to be delivered to my sd. Nephews when they arrive at the age of twenty & one Years. . . ." (North Carolina State Archives 1751). From this list alone, it is evident that the slaves at Salmon Creek ranged in age from young children to the elderly, and had formed well-defined family groups. And at least one of them, Jack the Cooper, practiced a skilled trade.

More detailed documentary research will shed light on the chain of ownership of the Salmon Creek tract in the second half of the eighteenth century, yet map evidence indicates that it remained associated with the Pollock family at least through the early nineteenth century. In 1767, surveyor William Churton mapped the land of Nathaniel Duckenfield, located to the south of Salmon Creek from the Pollock land. This survey indicates the location of the Pollock's plantation house ("Mr. Pollock") near the Albemarle Sound shoreline north of the creek (Figure 8). The map of North Carolina prepared by John Collet in 1770 also labels this area "Pollock" (Figure 9). And the 1808 Price and Strother map of the state indicates that the Pollock family still had a connection to the Salmon Creek property in the early nineteenth century (Figure 10).

The Salmon Creek Tract in the Nineteenth- and Twentieth Centuries

Wealthy Bertie County landowner Augustus Holley (1809-1882), who owned Ashland and Hermitage plantations, reportedly purchased the former Pollock estate on Salmon Creek in 1855. A coast survey chart of the Albemarle Sound published in 1860 is the earliest detailed map of the project area in detail (Figure 11). Although only the eastern portion of the property was shown, the pattern of land use is easy to distinguish, and is remarkably similar to the modern landscape. In the mid-nineteenth-century, the eastern part of the tract nearest the Sound consisted of cleared agricultural fields, while the remainder of the property to the north, west, and south was wooded. A road appears to coincide with the current northern property limits, while access to the property was via a farm road with essentially the same alignment as the current Bal Gra Road (Route 1501). It is somewhat difficult to distinguish individual buildings, but it appears that there may have been a structure along the shoreline in the general location of the Pollock house depicted on the 1767 Churton survey. At least two structures appear to have been situated in the southeastern corner of the tract, near the mouth of Salmon Creek, while a short road led west to another possible structure. Another possible building appears to have been located south of the drainage in the northern part of the property. None of these structures was labeled, but it is possible that they were occupied by enslaved African-Americans owned by Holley who lived and worked on the plantation.

Though far less detailed, and evidently less accurate, than the earlier coast survey chart, a military map of Bertie County produced under the direction of Confederate Chief of Engineers Jeremy Francis Gilmer in 1863 depicts a similar landscape, with the central portion of the project area consisting of cleared fields, while the marginal areas were wooded (Figure 12). The road network on the Gilmer map is only vaguely sketched, with one main farm road leading south to a single structure. A second possible structure is located to the northeast, in the general location of original Pollock house.

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Figure 8. Detail, *A Plan of a Tract of Land Belonging to Esqr. Dukenfield* (Churton 1767).



Figure 9. Detail, A Compleat Map of North-Carolina From an Actual Survey (Collet 1770).

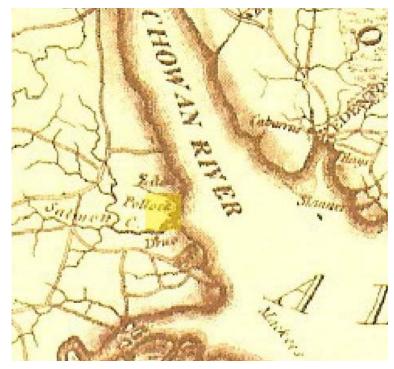


Figure 10. Detail, *First Actual Survey of the State of North Carolina* (Price and Strother 1808).

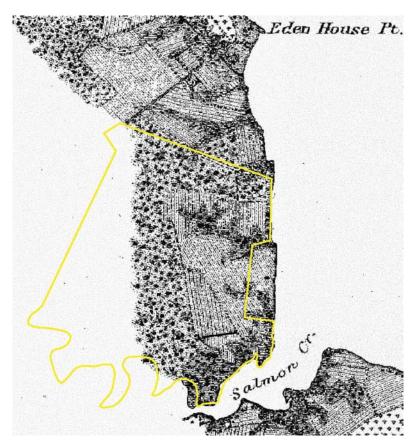


Figure 11. Detail, Albemarle Sound, N. Carolina (Bache 1860).

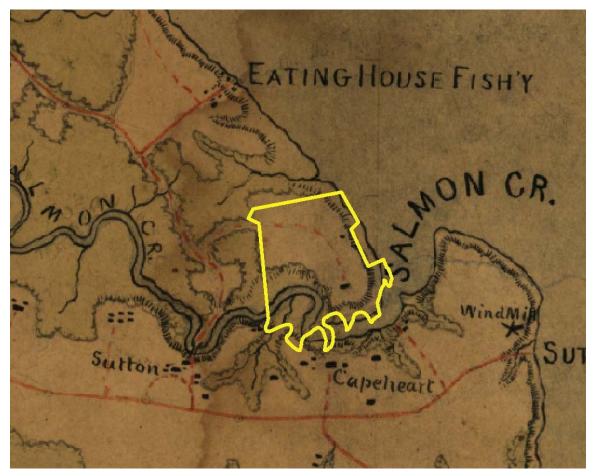


Figure 12. Detail, Map of Bertie County, North Carolina (Gilmer 1863).

Originally published in 1902, the U.S.G.S. 15' Edenton quadrangle sheet appears to be the earliest map to identify the property by name, labeling it "Ball Grey Pt" (Figure 13) Interestingly, when the same sheet was reprinted in 1941 the spelling was changed to "Balgrae Point." The cultural landscape of the property evidently had changed little since the mid-nineteenth century. A somewhat complex network of unimproved farm roads traversed the open agricultural fields in the center of the tract, while four structures were located in its southeastern quadrant. These appear to coincide fairly closely with those visible in the 1860 coast survey chart.

Only one of the structures depicted on the property in 1902 appears to have been standing by 1940, while two additional buildings had been erected on the north bank of Salmon Creek (Figure 14). By this time, only a small area in the southeastern section remained as cleared agricultural fields, while the rest of the property had reverted to woodlands. A single unimproved farm road traversed the property from northwest to southeast, providing access to the three structures.

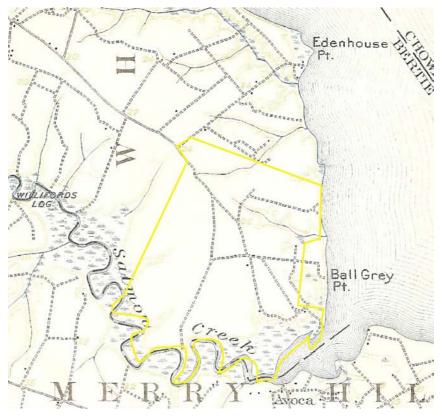


Figure 13. Detail, U.S.G.S. 15' Edenton quadrangle sheet, 1902.

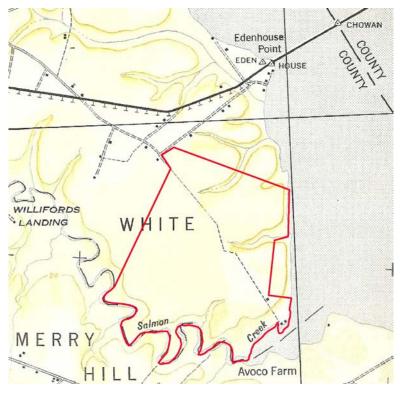


Figure 14. Detail, U.S.G.S. 15' Edenton quadrangle sheet, 1940.

RESEARCH DESIGN

OBJECTIVES

The Phase I cultural resources survey was designed to locate archaeological and architectural resources within the project area. A principal aim of the Phase I survey is to determine the possible significance of resources in terms of National Register of Historic Places eligibility criteria. A cultural resource is gauged to be significant if at least one of the four National Register criteria can be applied to it:

- A. Associated with significant events in the broad patterns of national history.
- B. Associated with the lives of persons significant in our past.
- C. Representative of a type, period, or method of construction, or the work of a master.
- D. Capable of yielding important information about the past.

Criterion D—and occasionally Criterion A—typically applies to archaeological sites, whereas Criterion B and C tend to relate to architectural properties. In order to yield important information about the past, a site must possess artifacts, soil strata, structural remains, or other natural or cultural features, which make it possible to test historical hypotheses, corroborate and amplify currently available information, or reconstruct the sequence of the local archaeological record.

METHODS

Archival Research

Primary and secondary documentary sources used to develop the historic context for the project were consulted at a variety of repositories, including the North Carolina Office of State Archaeology; the North Carolina State Archives; and the Library of Virginia. Historic maps were obtained from the Virginia Department of Historic Resources; the Geography and Map Division of the Library of Congress; and the Historical Map & Chart Collection, Office of Coast Survey, National Oceanographic and Atmospheric Administration.

Field Methods

The field survey strategy consisted of systematic shovel testing on transects at intervals of 100 ft. or less across the property. The shovel test hole interval was reduced to 50 ft. or 25 ft. around positive holes and the soil extracted from each test hole was sifted through ¹/₄" screen mesh. Each shovel test hole measured approximately 1.2 ft. in diameter or larger and was excavated into subsoil. Representative soil profiles were drawn at 1in.=1 ft. scale and recorded on standardized forms using Munsell color designators and U. S. Department of Agriculture soil texture terminology.

Because of its large size, the project area was divided into nine subsections. The limits of each subsection are based on natural or manmade boundaries such as roads, tributaries, tree lines, and so forth (Figure 15). The location of each shovel test hole was recorded on a scale map, and all shovel test holes were assigned an individual Shovel Test (ST) number that corresponded to an alphanumeric coordinate on the master grid.

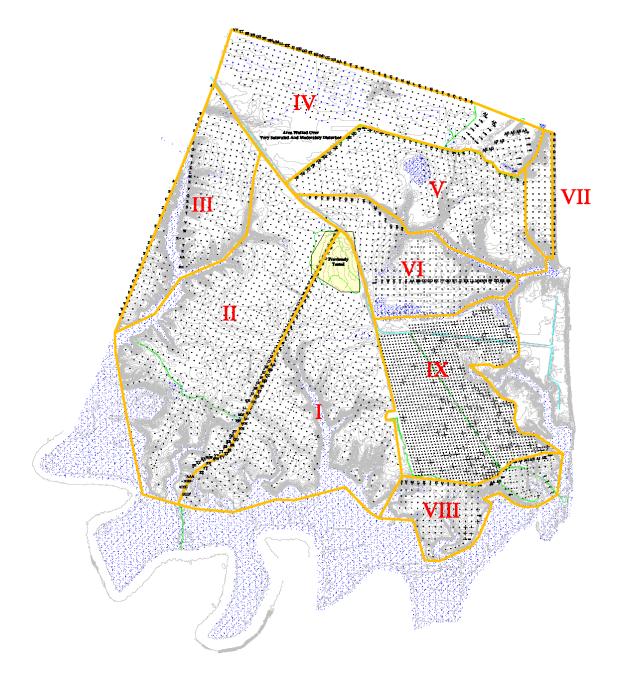


Figure 15. Project area as divided into nine subsections.

Field notes summarizing the findings at each site were recorded on a standardized Site Survey Form.

Laboratory Methods

Once removed from the field, all archaeological data and specimens were transported to JRIA's laboratory for processing and analysis. All processing procedures followed the guidelines outlined in the North Carolina Archaeological Curation Standards and Guidelines (2007). All artifacts generated by a project were curated according to the standards outlined in 36 CFR Part 79 of the Department of the Interior and National Park

Service code (Department of the Interior 1991). The artifacts will be permanently curated at the State Historic Preservation Office in Raleigh.

Prehistoric Artifact Analysis

The land use patterns for the area north of Salmon Creek suggest a complexity similar to that of other large multi-use areas in the region like the Chowanoke complex of sites in Hertford County (Green 1986), Davenport in Bertie County (Byrd 1999), Bandon in Chowan County (Hagg 1958, Herbert 2003) where continued reuse by prehistoric peoples over thousands of years created a complicated use sequence with large gaps, overlapping and varying rates of deposition. Classification of Native American artifacts on the basis of regional typologies has proven beneficial in assessing these complicated and overlapping site sequences. Therefore, analysis of prehistoric material from the Bal Gra project adhered to established and tested typologies to make the data directly comparable to other large sites in the region.

Lithic Artifacts

The prehistoric lithic assemblage is comprised of four major groups based on this analysis. These are debitage, tools, cracked rocks, and geological specimens. Debitage was classified based on the categories that reflect the sequence of lithic reduction to the final product (the tool). Categories for this reduction sequence are: core, shatter, primary flake (significant amount of cortex present on dorsal face), secondary flake (fair amount of cortex present on dorsal face) and interior flake (little to no cortex present). Tools were classified based on morphological form and when possible classified using regional chronologies. Tool types include: projectile point, biface, utilized flake, microblade, scraper, axe, ground stone and hammerstone. Cracked rocks represent lithic material not used in tool production but still considered cultural byproducts. Generally, this category consisted of rocks cracked from thermal alteration. The category geological specimen was reserved for lithic material showing no apparent cultural manipulation but whose presence itself was considered important. Generally this category consisted of large unmodified cobbles. Lithic sources in the north eastern portion of the North Carolina Coastal Plain are limited, as such all lithic occurrences were considered noteworthy. Where identifiable, basic raw material type and color were recorded for all four lithic groups.

Native American Ceramics

For the Late Archaic and Woodland period, ceramics represent the best chronological markers in use but require accurate series and type classifications. Assuring proper series classification required that sherds only of a certain size be exposed to series and type analysis. Facilitating this process required sherds with a maximum diameter less than 1/2" to be filtered out of the collection, receive no attribute analysis, and quantified as residual. Sherds whose diameters were greater than 1/2" received the relevant attribute (portion, temper, surface treatment, decoration) analysis for classification. When listed in tables, series type percentages reflect the total percent of identifiable and untyped ceramics. Artifacts classified as residual while part of the total are not included in overall series type percents.

Ceramics with no regional series affiliation were listed by temper and surface treatment. This category primarily consisted of a fine sand / no temper series commonly

found accompanying many Colington and Cashie assemblages. Assigning Series affiliation for material in this category is problematic due to its affiliation with both Late Woodland series material, the likely hood series assemblages from all regional phases include a temperless variant, and the uncertainly of its origin. An unidentified clay tempered series similar to the sand tempered Deep Creek series was also encountered. Unfortunately, a firm temporal assignment can not be given at this point, but surface treatments and similarity to the Early Woodland Deep Creek series suggest an Early Woodland association is likely. These ceramics may relate to the Late Archaic / Early Woodland series Croaker Landing and Waterlily, however neither of these series includes a Net-Impressed type which was observed on the untyped clay series. Until more studies are targeted at these early series and their variations, this material remains unassigned. This analysis also made use of the sand tempered variant of the Mount Pleasant series defined as Middletown (Green 1987, Holm et al. 1999). Middletown ceramics are known to spatially persist along side the Mount Pleasant series, share similar surface treatment types with it and temporally grow in popularity through the Middle Woodland (Holm et al. 1999).

Faunal Remains

Faunal remains received a simplified classification where a generalized common name was described.

Botanical Remains

Botanical remains like faunal remains received a simplified classification. All botanical remains encountered in this analysis were charred and noted as such.

PREVIOUSLY IDENTIFIED AND REGISTERED SITES

Since the 1970's, a series of formal and informal archaeological surveys have taken place in the vicinity of the project area. Sites have been identified a short distance north of the project area at Blackrock, as well as in the vicinity of Edenhouse Point, and on the south side of Salmon Creek at Avoca Farms (Figure 16; Table 1). In addition, some amount of archaeological investigation has taken place in the 1,300-acre project area, primarily focused at the confluence of Salmon Creek as it empties into the Chowan River (see Figure 16; Table 2).



Figure 16. Previously identified archaeological sites in, and within the vicinity of, the project area.

VDHR #	Type-Function	Date	
31BR36	Historic unknown; Prehistoric unknown	Indeterminate; Indeterminate	
31BR37	Prehistoric camp	Archaic and Woodland	
31BR38	Historic (Batts House); Prehistoric camp (Metowuem Village)	18 th c.; Woodland	
31BR39	Prehistoric camp	Archaic	
31BR40	Historic unknown; Prehistoric camp	Indeterminate; Indeterminate	

Table 1. Previously identified archaeological sites within the vicinity of the project area.

VDHR #	Type-Function	Date	
31BR41	Historic unknown; Prehistoric camp	Colonial; Indeterminate	
31BR42	Historic unknown; Prehistoric camp	Indeterminate; Indeterminate	
31BR43	Prehistoric camp	Indeterminate	
31BR49	Historic domestic; Prehistoric camp	18 th c.; Indeterminate	
31BR50	Prehistoric camp	Indeterminate	
31BR51	Historic unknown; Prehistoric camp	Indeterminate; Indeterminate	
31BR52	Historic (Gov. Eden House); Prehistoric camp	18 th c.; Indeterminate	
31BR53	Prehistoric camp	Indeterminate	
31BR54	Prehistoric camp	Indeterminate	
31BR55	Prehistoric camp	Indeterminate	
31BR56	Historic domestic; Prehistoric camp	Indeterminate; Indeterminate	
31BR57	Prehistoric camp	Archaic	
31BR58	Prehistoric camp	Archaic and Woodland	
31BR81	Prehistoric camp	Indeterminate	
31BR82	Historic unknown	Colonial	
31BR149	Prehistoric camp	Indeterminate	
31BR151	Trash dump; Prehistoric camp	20 th c.; Indeterminate	
31BR152	Trash dump	20 th c.	
31BR153	Trash dump	19^{th} and 20^{th} c.	
31BR154	Historic domestic	20 th c.	
31BR155	Historic domestic; Prehistoric camp	19 th -20 th c.; Indeterminate	
31BR156	Trash dump	20 th c.	
31BR157	Prehistoric camp	Archaic	
31BR158	Historic unknown; Prehistoric camp	Colonial; Middle Archaic	
31BR159	Historic unknown; Prehistoric camp	Colonial; Indeterminate	
31BR160	Historic unknown; Prehistoric camp	Colonial; Indeterminate	
31BR161	Historic domestic; Prehistoric camp	18 th -20 th c.; Middle and Late Woodland	
31BR162	Historic domestic; Prehistoric camp	19 th -20 th c.; Middle and Late Woodland	
31BR163	Historic domestic	20 th c.	
31BR164	Prehistoric camp	Indeterminate	
31BR165	Prehistoric camp	Indeterminate	
31BR166	Prehistoric camp	Woodland	
31BR167	Prehistoric camp	Indeterminate	
31BR168	Prehistoric camp	Woodland	

VDHR #	Type-Function	Date	
31BR163	Prehistoric Native American camp	Middle Woodland	
31BR178	Historic domestic	19 th c.	
31BR188	Prehistoric camp	Woodland	

Table 2. Previously identified archaeological sites within the project area.

VDHR #	Type-Function	Date	
31BR44	Historic unknown; Prehistoric camp	Colonial; Indeterminate	
31BR45	Prehistoric camp	Indeterminate	
31BR46	Prehistoric camp	Indeterminate	
31BR47	Prehistoric camp	Indeterminate	
31BR48	Prehistoric camp	Indeterminate	
31BR80	Prehistoric camp	Indeterminate	
31BR189	Possible prehistoric village	Woodland	

Almost all of the 42 archaeological sites identified in the vicinity have produced artifacts related to prehistoric activity or contain evidence of a prehistoric component. The majority of the prehistoric sites consist of non-diagnostic lithic material in addition to stray historic materials. Of the 42 sites, 31BR38 and 31BR52 appear to be two of the most significant. 31BR38 on the south shore of Salmon Creek is thought to be the homestead of Nathanial Batts, widely considered the first European settler in the area, as well as the site of Metocaum (Metackwem, Metocuuem), a sizeable Native American village. 31BR52 is known as Eden House, the home site of North Carolina Governor Charles Eden in the early eighteenth century, and was extensively excavated in the mid 1990s.

Within the project area, a group of six sites have been identified overlooking the confluence of Salmon Creek as it empties into the Chowan River (see Figure 16; Table 2). All the sites seem to pertain to a large Native American village, perhaps that of Metocuam. Archaeological work on the sites has been sporadic. In the 1970s students from East Carolina University under the direction of Dr. David Phelps apparently conducted some preliminary investigations. In 1983 a small field school affiliated with Catawba College excavated three test units in the general area of 31BR189 (Joyce 1983).

SURVEY RESULTS

OVERVIEW

The project area was divided into nine sections to maintain control throughout the property (see Figure 15). Each section therefore will be discussed individually. Overall, 5,314 shovel test holes were excavated throughout the project area. A total of 322 shovel test holes (n=6.1 percent) yielded artifacts resulting in the identification of 18 archaeological proveniences (Figure 17; Table 3).

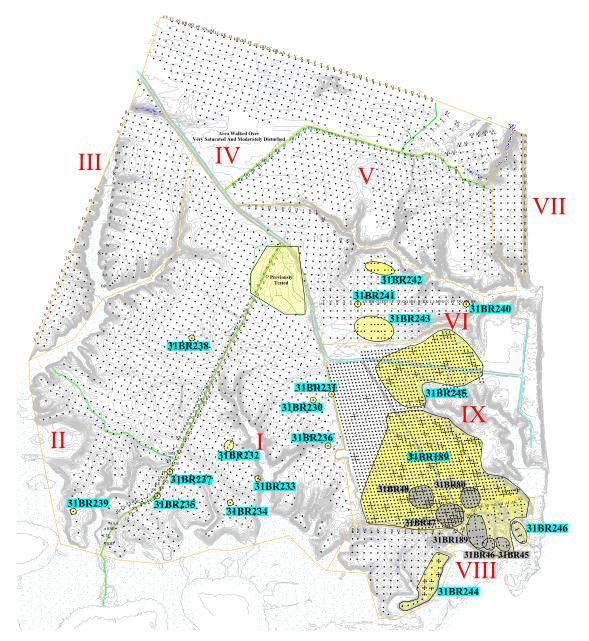


Figure 17. Plan showing project area and sites as divided into nine sections, sites recorded on the Bal Gra property prior to the JRIA survey are shaded in grey.

Identification #	Description	Туре	Date
Section I			
31BR230	Artifact	Brick	Historic
31BR231	Artifact	Brick	Historic
31BR232	Small Concentration	Quartz flakes	Prehistoric
31BR233	Artifact	Rhyolite flake	Prehistoric
31BR234	Artifact	Rhyolite flake	Prehistoric
31BR235	Artifacts	Unid. Iron	Historic
31BR236	Artifact	Ironstone	Late 19 th c.
31BR237	Artifact	Railroad spike	19 th c.
Section II			
31BR238	Artifacts	Wire nails	20^{th} c.
31BR239	Artifact	FCR	Prehistoric
Section VI			
31BR240	Artifacts	Wire nails	20^{th} c.
31BR241	Artifact	Wrought nail	circa 18 th c.
31BR242	Small Concentration	Historic	$18^{\text{th}}/\text{early } 19^{\text{th}}$ c.
31BR243	Site	Multi-component	Woodland/19th-20th
			C.
Section VIII			
31BR244	Site	Prehistoric	Woodland
Section IX			
31BR189*	Site	Multi-component	Archaic/Woodland- $19^{\text{th}}/20^{\text{th}}$ c.
31BR245	Site	Multi-component	Archaic/Woodland- 17 th /18 th c.
31BR246	Site	Multi-component	Woodland/17 th c.

Table 3. Cultural resources identified within the Bal Gra project area.

Five of the sites were exclusively prehistoric, nine sites were exclusively historic, and four sites produced evidence of both prehistoric and historic activity. Eight of the proveniences (31BR230, 31BR231, 31BR233, 31BR234, 31BR236, 31BR237, 31BR239, and 31BR241) consisted of a single, isolated artifact. Two of the proveniences (31BR238 and 31BR240) produced several wire nail fragments, and 31BR235 yielded three iron fragments from the handle of a tool. Proveniences that are considered formal archaeological sites include 31BR232, 31BR242, 31BR243, 31BR244, 31BR245, and 31BR246, most of which are concentrated in Sections VI and IX (see Figure 17; Table 3). Upon completion of the Phase I survey, several previously recorded sites - 31BR45, 31BR46, 31BR47, 31BR48, 31BR80, and 31BR189 - were subsumed into the expanded multi-component site 31BR189.

SECTION I*

Approximately 195 acres in size, Section I is a densely wooded tract that borders open farm fields on the east (Plates 5 and 6). Much of the acreage along the course o

^{* 31}BR189 was previously identified and was expanded after Phase I survey.

Salmon Creek was not testable due to mucky soils and standing water. Archaeologists excavated a total of 584 shovel test holes and eight (n= 1.4 percent) produced artifacts. Eight isolated proveniences were identified all consisting of three artifacts or less; two of these finds were collected from the surface (Figure 18; see Table 3). The stratigraphy is



Plate 5. Overview of Section I, facing north.



Plate 6. West view of dirt road separating Section I (left) and Section II (right).

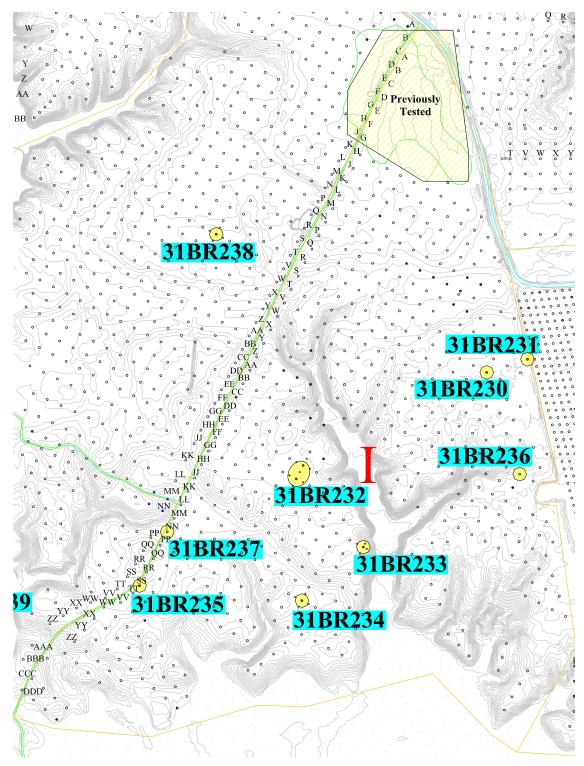
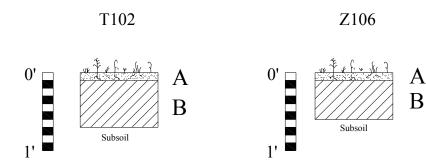


Figure 18. Section I shovel test hole locations and identified sites.

fairly uniform throughout Section I. A typical profile consisted of one layer atop sterile subsoil. Layer A consisted of the root mat on top of a dark olive brown (2.5Y3/3) sandy loam ranging in depth between 0.45 ft. and 0.5 ft. below ground grade. On an infrequent

basis, some shovel test holes extended to 1.0 ft. or slightly more below grade. Subsoil was a light yellowish-brown (10YR6/4) sandy clay (Figure 19).

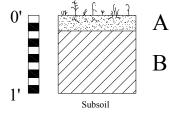


Layer A: Root Mat

Layer B: Dark grayish brown (2.5Y4/2) sandy loam Subsoil: Light grayish brown (2.5Y5/2) sandy clay Layer A: Root Mat

Layer B: Light olive brown (2.5Y5/3) sandy loam Subsoil: Light yellowish brown (2.5Y6/3) sandy clay



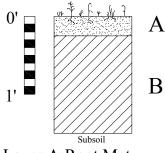


Layer A:Root Mat

Layer B:Light yellowish brown (2.5Y6/4) sandy loam

Subsoil: Yellowish brown (10YR5/8) sandy clay

QQ108





Layer B:Light yellowish brown (2.5Y6/4) sandy loam

Subsoil: Yellowish brown (10YR5/8) sandy clay

Figure 19. Representative shovel test hole profiles in Section I.

31BR230

Shovel Test Hole S115 produced 154.2 grams of brick (see Figure 18). Adjacent shovel test holes failed to turn up any additional artifacts. The location of this shovel test hole is in proximity of a large scatter of historic materials in the open field to the east (see Figure 18), and most likely represents peripheral scatter from that area. No viable research questions can be formulated for this isolated brick, and therefore 31BR230 is recommended as not eligible for nomination to the NRHP.

31BR231

Similar to 31BR231, Shovel Test Hole Q117 produced 3.1 grams of brick and is situated on the edge of a large scatter of historic materials in an open field to the east (see Figure 18). Most likely this small amount of brick represents peripheral scatter from the field. No other finds were found within 100 ft. of Shovel Test Hole Q117, further suggesting that the brick is an isolated occurrence. No practicable research questions can be devised for the isolated brick material, and therefore 31BR231 is recommended as not eligible for nomination to the NRHP.

31BR232

31BR232 consists of three positive shovel test holes: EE107, FF107, FF107-South. The site is located on a reasonably level terrace along a small second order tributary of Salmon Creek (see Figure 18). All four radial shovel test holes for EE107 were negative. Three radial shovel test holes for FF107 also were negative, while FF107-South was positive. Each of the shovel test holes yielded quartz or quartzite debitage (1secondary reduction flake, 1-bifacial thinning flake, 1-core shatter) associated with stone tool production and/or maintenance.

This prehistoric site locality likely represents a limited activity area of equally limited chronological depth. Given the total absence of prehistoric pottery (surface and subsurface) at 31BR232, as well as within the greater land area encompassed by survey Sections I and II, past human activities at 31BR232 probably date to the Archaic period.

With its close spatial proximity to isolated occurrence sites 31BR233 and 31BR234, which also produced lithic reduction flakes, one suspects that all three occurrences represent a single occupation activity area dating to the Archaic period. Soil profile assessments indicate a well-deflated natural soil column in the immediate site area with subsoil evident at 0.45 ft. to 0.50 ft. below the modern ground surface. Given both the compromised stratigraphy, as well as the limited nature of the archaeological deposits, site 31BR232 is considered of minimal research value. As such 31BR232 is recommended as not eligible for nomination to the NRHP.

31BR233

Situated approximately 600ft south of 31BR232, 31BR233 consists of shovel test hole HH113 and is also located along the small tributary of Salmon Creek on a fairly level terrace (see Figure 18). One metavolcanic bifacial thinning flake was recovered from the single positive shovel test hole, but all four radial shovel test holes dug at 25 ft. and 50 ft. intervals in each cardinal direction were negative. This isolated find is likely related to other limited prehistoric activities peripherally associated with sites 31BR232 and 31BR234. Given the low frequency of archaeological materials and the deflated nature of the site's soil column, the isolated find is of minimal research value 31BR233 is recommended as not eligible for nomination to the NRHP.

31BR234

31BR234 is represented by Shovel Test Hole NN111 and consists of one metavolcanic secondary reduction flake. The site is situated on a small terrace about 400 ft. north of Salmon Creek and approximately 500 ft. southwest of 31BR233 (see Figure 18). All four radial shovel test holes were negative. This isolated find may represent a small temporary prehistoric campsite, but is probably a limited prehistoric activity area peripherally related to sites 31BR232 and 31BR233. Given the low frequency of archaeological materials and the deflated nature of the site's soil column, the isolated find is of minimal research value and 31BR234 is recommended as not eligible for nomination to the NRHP.

31BR235

Archaeologists recovered two iron handle fragments from Shovel Test Hole SS101, located within a ditch running adjacent to a farm road (see Figure 18). The fragments appear to be from a set of iron tongs and probably date to the twentieth century. No radial shovel test holes were dug because of the obvious road disturbance and the likelihood that the artifact(s) is relatively modern. 31BR235 is recommended as not eligible for nomination to the NRHP.

31BR236

On the surface near Shovel Test Hole Y120, archaeologists collected a whiteware ceramic plate fragment (see Figure 18). The shovel test hole itself produced no artifacts. Given the location of the artifact less than 200 ft. to the west of a large scatter of historic materials in an open field (see Figure 18), the whiteware fragment most likely represents peripheral scatter from the field. No feasible research questions can be addressed with one fragment of whiteware. 31BR236 is recommended as not eligible for nomination to the NRHP.

31BR237

31BR237 consists of an iron railroad spike collected from the surface near Shovel Test Hole NN101, which itself turned up no artifacts (see Figure 18). The spike was resting next to a farm road, and it likely was dropped from a vehicle using the road. No other material was observed in the vicinity. Since the railroad spike cannot alone generate practicable research questions, 31BR237 is recommended as not eligible for nomination to the NRHP.

SECTION II

Section II is located in the west section of the project area (see Figure 15). Approximately 148 acres is size, the section is bounded on the south by Salmon Creek; on the west by a substantial tributary that flows into Salmon Creek and demarcates the boundary with Section III; on the north and northeast by Bal Gra Road; and on the east by a farm road that marks the division between Section II and Section I (Figure 20). The northernmost piece of the parcel previously was tested and has since been clear-cut. The remaining portions of Section II are heavily wooded with mature growth forest and dense underbrush (Plate 7). Portions of Section II overlooking Salmon Creek were demarcated as wetlands and thus not tested.

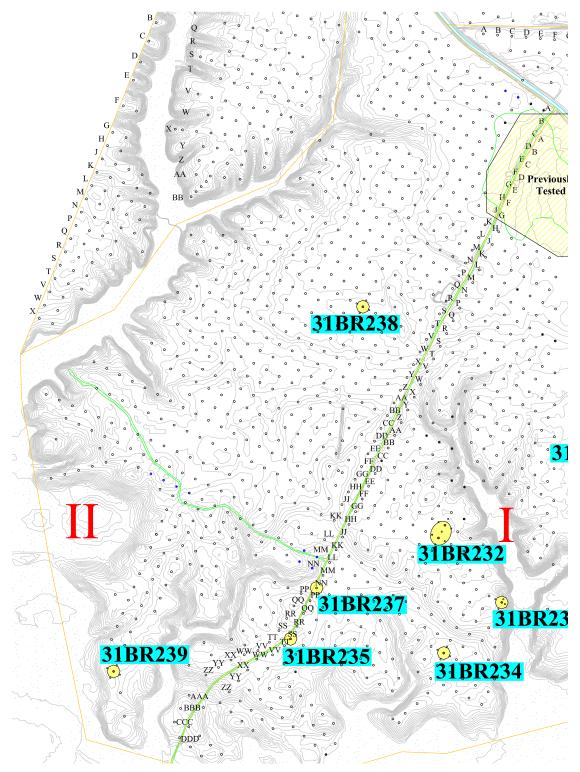


Figure 20. Section II shovel test hole locations and identified sites.



Plate 7. Overview of Section II, facing west.

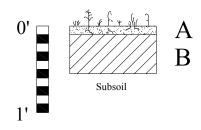
Archaeologists excavated 652 shovel test holes from which two (n= 0.1 percent) produced artifacts. Two isolated proveniences were identified, both consisting of five artifacts or less (see Figure 20; see Table 3). The stratigraphy was quite uniform and shallow throughout the parcel. A typical profile in Section II consisted of one layer overtop of sterile subsoil: Layer A consisted of the root mat on top of an olive brown (2.5Y4/4) sandy loam ranging in depth between 0.50 ft. and 0.55 ft. below existing grade. Subsoil was an olive yellowish (2.5Y6/6) sandy clay (Figure 21).

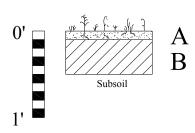
31BR238

31BR238 is located in middle of a flat terrace approximately 600 ft. west of a dirt farm road that divides Section II from Section I (see Figure 20). The findings consist of five wire nail fragments collected from Shovel Test Hole V206. All four of the radial shovel test holes excavated at a distance of 50 ft. around Shovel Test Hole V206 were negative, an indication that the wire nail fragments are not related to a larger site and probably inadvertently lost are discarded at their location. Indeed, given the use of the property for hunting, wire nails could be related to the construction of deer stands. A few wire nail fragments retain no practicable research potential. 31BR238 is recommended as not eligible for nomination to the NRHP.

PP209

VV201





Layer A:Root Mat

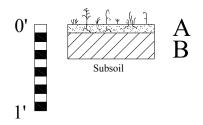
Layer B:Olive brown (2.5Y4/4) sandy loam

Subsoil: Olive yellow (2.5Y6/6) sandy clay

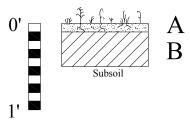
Layer A:Root Mat

Layer B: Olive brown (2.5Y4/3) sandy loam Subsoil: Olive yellow (2.5Y6/6) sandy clay





G204



Layer A: Root Mat

Layer B: Dark olive brown (2.5Y3/3) sandy loam

Subsoil: Yellowish brown (10YR5/8) sandy clay

Layer A: Root Mat Layer B: Olive brown (2.5Y4/3) sandy loam

Subsoil: Olive yellow (2.5Y6/6) sandy clay

Figure 21. Representative shovel test hole profiles in Section II.

31BR239

31BR239 is located on a small, south sloping spur that projects southwesterly from Section II (see Figure 20). Shovel Test Hole CCC212 yielded a single fragment of quartzite fire-cracked rock, but all radial shovel test holes were negative, producing no additional cultural materials. This isolated likely represents the ephemeral presence of a temporary prehistoric, limited activity camp. Given that the soil column was found deflated, with subsoil encountered at approximately 0.50 ft. to 0.55 ft. below the modern ground surface, and the minimal artifactual evidence, this isolated occurrence has little research value and 31BR239 is recommended as not eligible for nomination to the NRHP.

SECTION III

Section III is situated along the western border of the project area and is approximately 59 acres in size (see Figure 15). A large tributary of Salmon Creek splits Section III into two small portions but still bounds Section III to the east. Private property bounds Section III to the west and a combination of Bal Gra Road and Section II bounds the northeast portion (Figure 22). The area consists of open mature woods with moderate underbrush. For the most part, Section III is a fairly flat terrace with the sides sloping steeply into wetlands (Plate 8).



Plate 8. View of the tributary between Sections II and III, facing southeast.

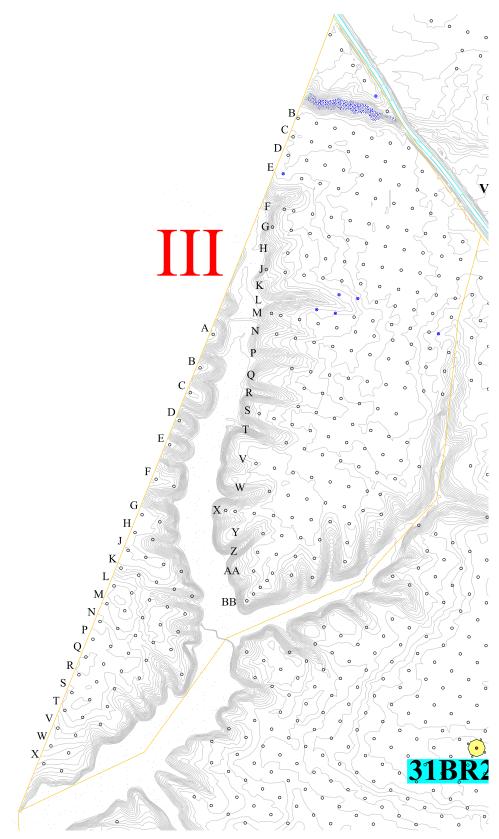


Figure 22. Section III shovel test hole locations.

A total of 257 shovel test holes were excavated throughout the 59 acres in Section III (see Figure 22). No culturally significant material was recovered. The stratigraphy was consistent throughout Section III with little variation in the depth. A typical profile consisted of a thin root mat layer overtop Layer A which consisted of olive brown (2.5Y5/4) sandy loam at a depth between 0.4 ft. and 0.5 ft. below ground surface. Subsoil was comprised of a light olive brown (2.5Y5/4) sandy clay (Figure 23).

Given the fact that nothing of historical or cultural consequence was identified in Section III, no further archaeological work is recommended for the parcel.

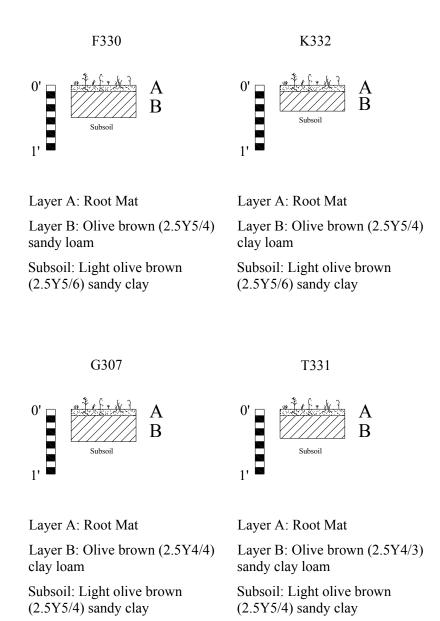


Figure 23. Representative shovel test hole profiles in Section III.

SECTION IV

Approximately 94 acres in size, Section IV is located in the northernmost portion of the project area (see Figure 15). It is bounded by private property to the north; a tributary and Section VII to the east; by Bal Gra Road to the southwest, and is bordered with Section V on the southeast (Figure 24). The easternmost portion of Section IV consists of mature open woods and is easily traversable. However, only limited areas of the remaining portion of Section IV was testable. There are demarcated wetlands throughout the parcel and disturbance from the previous and recent logging of the trees. In fact, archaeologists did not dig any shovel test holes in the southernmost portion of Section IV because the ground was so saturated (Plate 9). Several creeks and tributaries cross through Section IV, creating a rolling, hilly landscape. The slopes along the said tributaries were, however, steep.



Plate 9. Example of saturated and water-logged terrain in Section IV.

A total of 408 shovel test holes were excavated in Section IV (see Figure 23). No artifacts were recovered and no cultural resources were identified. The stratigraphy varied somewhat throughout the tract, particularly due to the wet soils. Nevertheless, a typical shovel test hole profile consisted of a root mat overtop a Layer A which was comprised of a dark olive brown (2.5Y3/3), olive brown (2.5Y4/3) to light olive brown (2.5Y5/4) sandy clay loam. Sterile subsoil consisted of either a light olive brown (2.5Y5/4) or a light yellowish brown (2.5Y6/4) sandy clay (Figure 25).

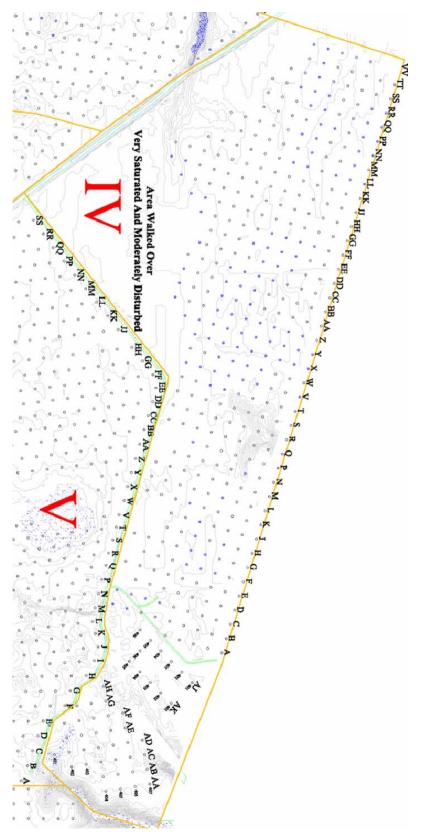
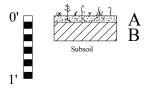
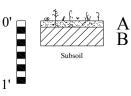


Figure 24. Section IV shovel test hole locations.

A401

L401





Layer A: Root Mat Layer B: Olive brown (2.5Y4/4) sandy loam Subsoil: Light yellowish brown (2.5Y6/4) sandy clay

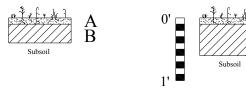
Layer A: Root Mat Layer B: Olive brown (2.5Y4/3) sandy loam Subsoil: Light olive brown (2.5Y5/6) sandy clay





А

В



Layer A:Root Mat

1'

Layer B: Dark olive brown (2.5Y3/3) sandy clay loam Subsoil: Light olive brown

(2.5Y5/4) sandy clay

Layer A:Root Mat

Layer B:Light olive brown (2.5Y5/4) sandy loam

Subsoil: Light yellowish brown (2.5Y6/4) sandy clay

Figure 25. Representative shovel test hole profiles in Section IV.

Given the fact that nothing of historical or cultural consequence was identified in Section IV, no further archaeological work is recommended for the parcel.

SECTION V

Section V is situated in the north-central portion of the survey area and using dirt roads and tributaries, the parcel is bounded to the north by Section IV; by Section VII to the east; by Section VI to the south; and in the southwest corner by a small length of Bal Gra Road (see Figure 15). Section V is approximately 101 acres in size and contains a "duck pond" within its bounds. Overall, the parcel is fairly flat and densely wooded with new growth forest (Plate 10).



Plate 10. Overview of Section V, facing north.

A total of 440 shovel test holes were excavated in Section V and turned up no artifacts or evidence of cultural resources (Figure 26). The stratigraphy varied somewhat throughout the tract. A typical shovel test hole profile was comprised of a thin root mat overtop a Layer A which consisted of a dark grayish brown (2.5Y4/2) to an olive brown (2.5Y4/3) sandy loam with depths ranging between 0.55 ft. to 1.0 ft. below current grade. Subsoil was either a yellowish brown (10YR5/6) or a light yellowish brown (2.5Y6/4) sandy clay. A few shovel test holes revealed a gray (2.5Y5/1) silty clay subsoil, indicative of saturated soils (Figure 27).

Given the fact that nothing of historical or cultural consequence was identified in Section V, no further archaeological work is recommended for the parcel.

SECTION VI

Section VI is approximately 62 acres in size and centrally located within the project area. The north is bounded by a large tributary and Section V; east by a small private out parcel; the south by Section IX, and the west by Bal Gra Road and Section I (see Figure 15). The parcel contains both hardwood and pine trees and moderate to heavy underbrush, with occasional logging roads zigzagging throughout (Plate 11). Small areas of this section have been delineated as wetlands. All in all, the topography is relatively flat with slopes occurring near the tributary.

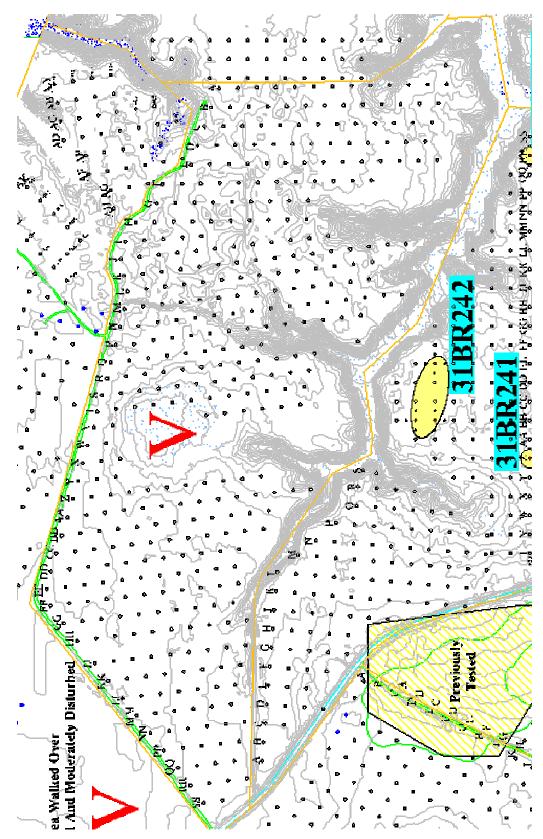
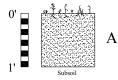
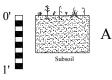


Figure 26. Section V shovel test hole locations.



W501





Layer A: Dark yellowish brown (10YR4/4) sandy clay loam

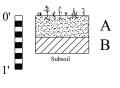
Subsoil: Yellowish brown (10YR5/6) clay

Layer A: Dark grayish brown (2.5Y4/2) sandy loam Subsoil: Light yellowish brown (2.5Y6/4) sandy clay

SS502

A





Layer A: Dark grayish brown (2.5Y4/2) sandy loam Layer B: Olive brown (2.5Y4/3) sandy loam

Subsoil: Light yellowish brown (2.5Y6/4) sandy clay

Layer A: Very dark gray (2.5Y3/1) silty sand loam Subsoil: Gray (2.5Y5/1) silty sand loam

Figure 27. Representative shovel test hole profiles in Section V.



Plate 11. Overview of Section VI, looking along a logging road, facing south.

A total of 303 shovel test holes were excavated in Section VI, 12 (n=4.0 percent) of which yielded artifacts. The positive shovel test holes could be grouped into four archaeological proveniences, two of which (31BR240 and 31BR241) are isolated artifacts from single shovel test holes (Figure 28; see Table 3).

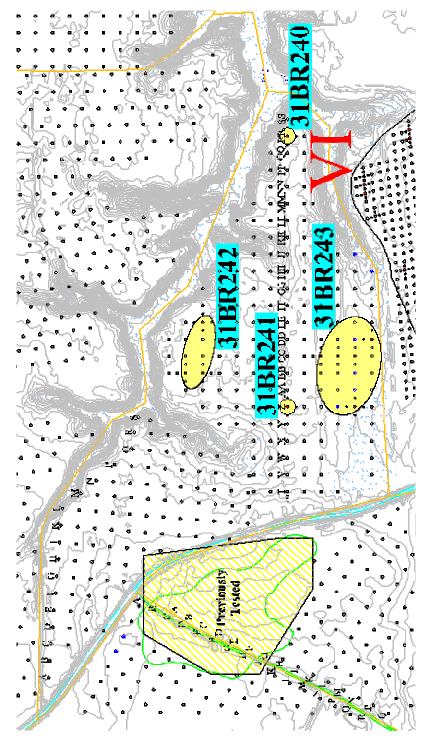


Figure 28. Section VI shovel test hole locations and identified sites.

The shovel test hole profiles throughout the parcel were uniform with little variation in depth. Typically, a thin root mat sealed a single Layer A deposit of dark grey (2.5Y4/1) to an olive brown (2.5Y4/4) sandy loam extending 0.45 ft. to 1.4 ft. below ground surface. Subsoil consisted of a light olive brown (2.5Y5/6) sandy clay (Figure 29).

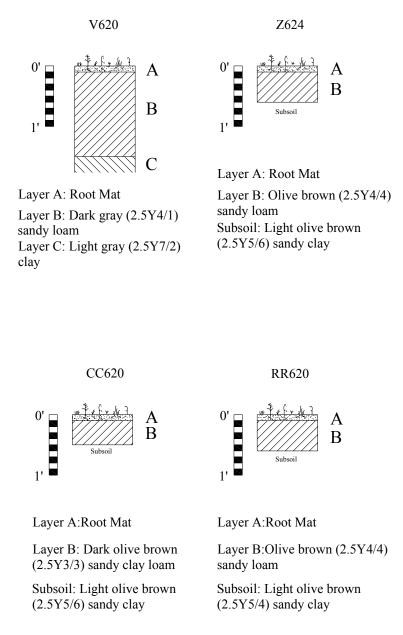


Figure 29. Representative shovel test hole profiles in Section VI.

31BR240

31BR240 consisted of two wire nail fragments recovered from Shovel Test Hole RR620 (see Figure 28). Located at the eastern end of Section VI, all four radial shovel test holes at 50 ft. intervals were negative. Given the isolated nature of the find, no viable

research questions can be formulated from the nail fragments. 31BR240 is recommended as not eligible for nomination to the NRHP.

31BR241

One complete hand wrought nail was collected from Shovel Test Hole Z620, located in the approximate center of Section VI (see Figure 28). Designated as 31BR241, all four radial shovel test holes were negative for cultural material. The wrought nail likely represents an accidental loss or discard and retains no practicable research potential. 31BR241 is recommended as not eligible for nomination to the NRHP.

31BR242

31BR242 is represented by a small number of historic artifacts dating to the eighteenth and early nineteenth century. Located on a flat terrace overlooking a tributary to the north, artifacts were recovered from four shovel test holes (BB614, BB615, EE615 and EE615 West) within an area approximately 150 ft. by 300 ft. in size (see Figure 28). The artifacts include: creamware (n=1), coarse Staffordshire iron glaze (n=1); wire nail fragments (n=3) and 4.1 grams of burned brick.

The wire nail fragments are intrusive and likely date to the twentieth century again probably the result of building deer stands in the vicinity. However, the small amount of brick and the two eighteenth-century pieces of ceramics suggest a possible historic domestic site at 31BR242. The landform is well suited for habitation, on a flat, well drained terrace above a sizeable inland drainage (see Figure 28). Though the soil stratigraphy at 31BR242 has been deflated by long-term erosion over the course of several centuries of farming and logging, the integrity of the site remains relatively good. If the site possesses historic archaeological features—postholes, foundations, storage pits, trash pits, etc.—these almost certainly remain intact and have withstood erosion.

The wealthy and powerful Pollock family owned and occupied the property for roughly a century, from the earliest years of the eighteenth century until the early nineteenth century. The location of the Pollock plantation house can be projected from historic maps and has likely eroded into the Chowan River, some 3,200 ft. to the east-southeast from 31BR242 (Figure 30; see Figure 8).⁴ Like all high-status planters of the day, the Pollocks owned a substantial number of enslaved Africans, who would have been dispersed throughout the plantation.

The fact that only two eighteenth-century artifacts were found within an area of 150 ft. by 300 ft. at site 31BR242 suggests that the research potential for the site is extremely limited, and therefore it is recommended that the 31BR242 is not eligible for nomination to the NRHP. However, the two artifacts were found on a type of landform on which colonial sites are frequently found; and there is a remote possibility that 31BR242 represents a small quarter site which are sometimes manifested by a very small number of artifacts. Accordingly, while the weight of the evidence is insufficient to warrant a recommendation of eligible, monitoring during construction, if any, is

⁴ Local informants indicate that a large rectangular hole is located immediately offshore and can be observed at low tide in the approximate location of the projected location of the Pollock house.

suggested as a reasonable treatment for a site whose potential to provide significant information is questionable at best.

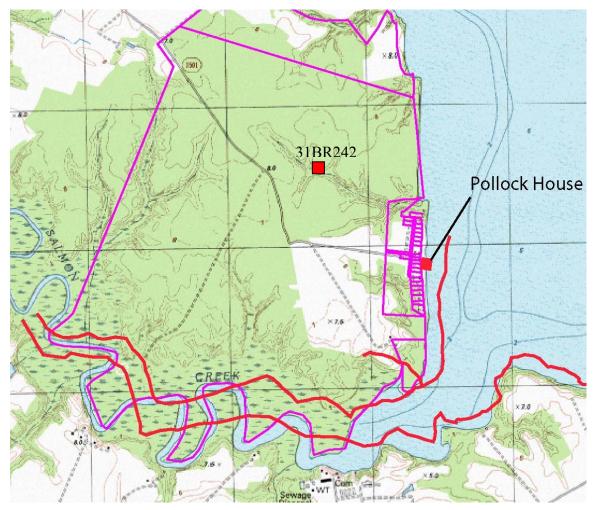


Figure 30. Projected location of the Pollock plantation based on the Churton map (1767).

31BR243

31BR243 is a multi-component Middle and Late Woodland period prehistoric site with a minor historic component located along the southern edge of Section VI (see Figure 28). Five positive shovel test holes (n=21 percent) of the 24 total excavated within the site's boundaries yielded artifacts. Overall, the site measures 250 ft. north-south by 500 ft. east-west. Six prehistoric pottery sherds, lithic debitage and several brick fragments (n=1.5 grams) were recovered. The brick fragments, a historic isolate, are likely associated with the light scatter of late nineteenth-early twentieth-century materials found in other areas of Section IX and are of little specific research value at 31BR243.

The 31BR243 ceramic assemblage includes two Mount Pleasant body sherds, one Colington sherd and two sherdlettes of indeterminate type. Subsurface lithic materials were extremely limited and included one metavolcanic bifacial thinning flake and a piece of quartz shatter. Although prehistoric site activities materially represented by the presence of Middle and Late Woodland period pottery and associated Woodland period lithic materials suggest the site is functionally and chronologically associated with 31BR245 to the south, 31BR243 and 31BR245 are naturally separated by a narrow wetland, which defines the boundary between survey Sections VI and IX. Given that the site area's soil column is less deflated than other portions of the project area, (for example, survey Sections I and II) it is probable that stratified deposits remain intact in this locality. While the artifact frequency, at the survey level, was modest, the site will likely yield additional, non-redundant archaeological data of significant research value. As such, the prehistoric component at 31BR243 is recommended as potentially eligible for nomination to the NRHP. Avoidance of the site or a Phase II archaeological significance evaluation is recommended.

SECTION VII

Section VII is the smallest of the nine sections at approximately 16 acres. This parcel is located in the northeastern corner of the project area along the Chowan River (see Figure 15). Section VII is bounded on the north by a tributary and private property; on the west by Section IV; on the south by a tributary and a private out-parcel property; and on the east by the Chowan River. Portions of Section VII recently have been cleared of trees, although other portions remain wooded (Plate 12). The logging activity has caused only moderate disturbance to the landscape. The tract is characterized by slightly rolling terrain with steep slopes along the two tributaries (see Plate 12).



Plate 12. Overview of Section VII, facing west.

A total of 71 shovel test holes were excavated in Section VII, all of which were negative for cultural material (Figure 31). The shovel test holes revealed fairly shallow stratigraphy throughout the area. A thin root mat overlies a dark olive brown (2.5Y3/3) sandy loam Layer A extending between 0.45 ft. to 0.6 ft. below ground surface. Subsoil is an olive yellow (2.5Y6/6) to a light olive brown (2.5Y5/4) sandy clay (Figure 32).

No archaeological or architectural resources were identified in Section VII and therefore, no further work is recommended.

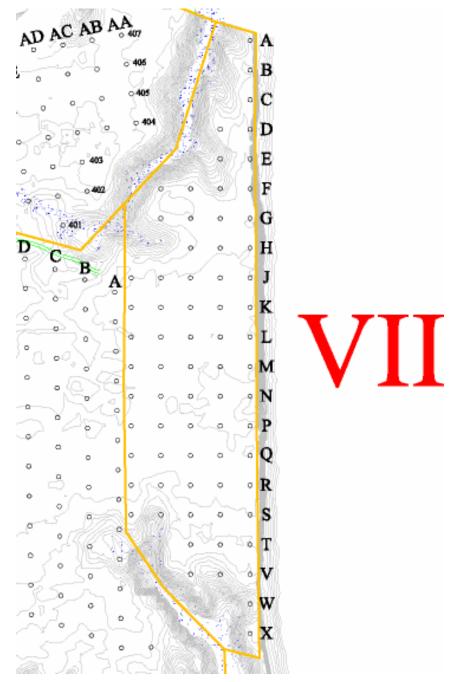


Figure 31. Section VII shovel test hole locations.

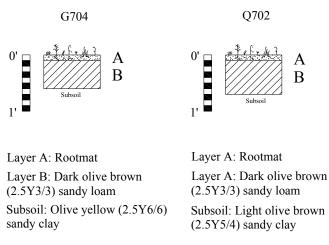


Figure 32. Representative shovel test hole profiles in Section VII.

SECTION VIII

Section VIII is the southernmost section within the project area (see Figure 15). Section IX (a plowed field) bounds Section VIII on the north; Section I and a small tributary on the west; and Salmon Creek borders the parcel on the south and east. This section is comprised of spurs projecting out into Salmon Creek. Overall, the terrain is gently rolling to fairly level. Hardwoods cover the area, however, due to recent, moderate clearing, about one-third of the trees remain and the rest has been cleared as well as the underbrush, through burning (Plate 13). The tree clearing work has had only a minimal impact on the soil stratigraphy.



Plate 13. Overview of Section VIII, facing south toward Salmon Creek.

Section VIII is approximately 38 acres in size (Figure 33). A total of 228 shovel test holes were excavated throughout the parcel. A total of 66 (n=29 percent) produced artifacts. From those artifacts, archaeologists defined two sites—31BR244 and 31BR245—and collected materials that correspond to three previously identified prehistoric sites within the parcel (see Figure 33).

The stratigraphy varied throughout Section VIII. The western third of Section VIII consisted of shallow stratigraphy. In this area soil layers consisted of a thin root mat on top of an olive brown (2.5Y4/3) sandy clay loam Layer A that extended between 0.40 ft. and 0.85 ft. below grade. Subsoil was comprised of an olive yellow (2.5Y6/6) sandy clay.

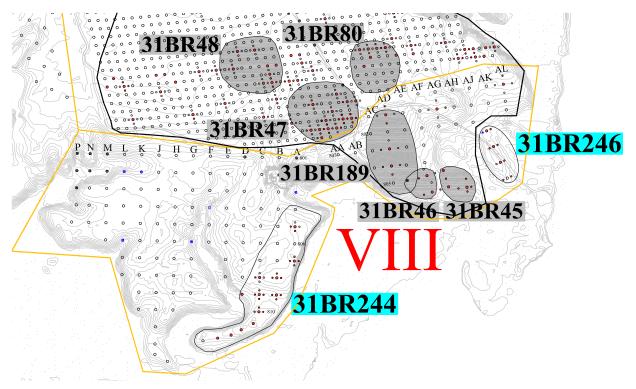


Figure 33. Section VIII shovel test hole locations and location of sites.

The central portion of Section VIII was made up of the deepest soils, not only within this section, but within the entire project area. Here, the thin root mat overlies a yellowish-brown (10YR5/6) loamy sand Layer A that extends between 1.4 ft. to 1.8 ft. below ground surface. Following Layer A is either Layer B or subsoil. Layer B consists of an olive yellow (2.5Y6/6) loamy sand that extends at least 2.4 ft. below ground surface overtop a yellowish-brown (10YR5/8) sandy clay loam subsoil. Elsewhere, subsoil is a light yellowish-brown (10YR6/4) sandy clay loam. Within this portion of the parcel is a concentration of positive shovel test holes resulting in site 31BR244.

The remaining eastern portion of Section VIII was comprised of the greatest variation in the stratigraphy. Most likely, the differences in the soil layering are due to the sequence of development as various houses and associated outbuildings were constructed over the years, including the existing boat ramp. In some areas a profile consisted of a root mat, Layer A, no more than 0.1 ft. thick overtop an olive brown

(2.5Y4/3) sandy clay loam Layer B approximately 0.65 ft. below ground surface. Subsoil consists of an olive yellow (2.5Y6/6) sandy clay.

An example of a multiple layer profile in Section VIII includes a very thin root mat, Layer A, overtop a mottled, compact modern fill Layer B extending 0.40 ft. below ground surface. Layer C is comprised of a brown (10YR4/3) sandy clay loam approximately 0.80 ft. below ground surface overtop a very dark grey-brown (10YR3/2) sandy loam Layer D extending 1.1 ft. below surface. Layer E consisted of a very dark brown (10YR2/2) sandy loam with shell inclusions possibly indicating a shell midden or possibly a feature. Subsoil was not revealed because of the potential of the feature.

31BR244

31BR244 is a multi-component prehistoric site with site occupations that span from the Early, Middle and Late Woodland periods. The site is located within the soil boundaries of the Bonneau series which is defined as well-drained, loamy sand typically found within forested landscapes. Of the 46 shovel test holes excavated within the site boundaries, 32 (n=70 percent) produced artifacts. The overall size of the site is 1,800 ft. northeast-southwest by 800 ft. northwest-southeast with an elevation of 14 ft. AMSL (Figure 34).

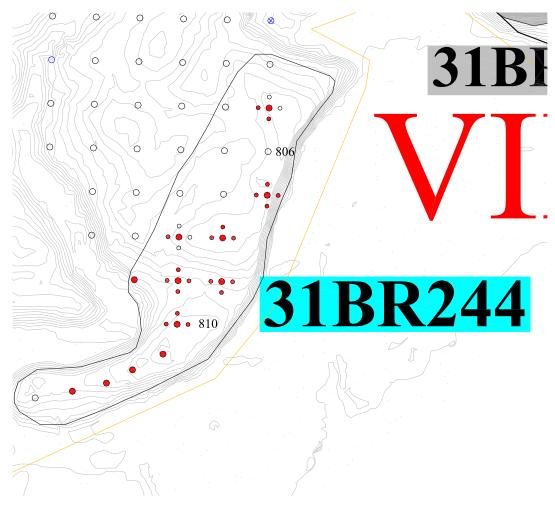


Figure 34. Locations of shovel test holes at 31BR244.

Assessment of the site's artifact assemblage suggests that the locality was most intensively occupied during the Middle Woodland period, as evidenced by the preponderance of Mount Pleasant (92 percent) and Middletown (3 percent) series ceramics in the overall assemblage. Mount Pleasant net-impressed, cord-marked and fabric-impressed types are all well-represented along with cord-marked and netimpressed Middletown types. Minor frequencies of Early Woodland period Deep Creek (1.5 percent) series sherds, as well as a minor frequency of Late Woodland period Cashie (1.5 percent) series sherds and a number of small and/or weathered sherds of indeterminate types (2 percent) complete the prehistoric ceramic assemblage.

In addition to the pottery assemblage, a Middle-to-Late Woodland period triangular projectile point (metavolcanic Roanoke type) and a modest quantity of lithic debitage (greenstone, jasper, metavolcanic, quartz, quartzite) were recovered from surface and subsurface contexts. Consisting primarily of quartz shatter and secondary reduction/bifacial thinning flakes, the site's lithic assemblage materially represents a range of stone tool production and maintenance activities. Although no other historic period materials were recovered from 31BR244, a single retouched chert flake exhibits attributes similar to aboriginally worked gunflints recovered in coastal North Carolina.

With a shovel test hole artifact density of approximately 10.0 ceramic sherds per unit, this site exhibits a reasonably high artifact density at the survey level. Given that some of the deepest, apparently minimally disturbed, natural soil column strata within the entire project area were encountered at 31BR244, it is of significant research value. 31BR244 is likely to encompass both subsurface sheet midden/occupation level deposits as well as potentially intact and/or truncated prehistoric features (e.g., storage pits, hearths/firepits, postmolds) most especially associated with Middle Woodland period site use. Given the relatively high degree of site integrity and the probability for subsurface Woodland period features, 31BR244 is recommended as potentially eligible for nomination to the NRHP. Avoidance of the site or a Phase II archaeological significance evaluation is recommended.

31BR246

Site 31BR246 is located in the southeastern portion of the survey area, south east of 31BR189. 31BR246 constitutes a small concentration of prehistoric artifacts including aboriginal pottery (n=50) and flakes (n=7) (Table 4). Additionally, a small presence of historic artifacts were located which include colonoware (n=1), 1.2g of brick and 9.9g of animal bone. The artifacts were recovered from shovel test holes AJ803 and 803 east; AJ804 and 804 east and west; AJ805 and 805 west and AJ806 east and west. The shovel testing revealed intact stratigraphy with minor disturbance from the frequently used dirt road. The site is located on a small ridge bounded by wetlands on the east, south and west and bounded on the north by the limits of 31BR189 (Figure 35). 31BR246 is approximately 250 ft. from the mouth of Salmon Creek.

Given the relatively high degree of site integrity and the probability for subsurface features, 31BR246 is recommended as potentially eligible for nomination to the NR HP. Avoidance of the site or a Phase II archaeological significance evaluation is recommended.

Temper	Design	Count	% of Total
Sand	Fabric Impressed	14	28
	Net Impressed	3	6
	None	3	6
	Incised	1	2
Gravel	Fabric + Incised	15	30
	Cord Marked	6	12
	Net Impressed	5	10
	Fabric Impressed	1	2
	Simple Stamped	1	2
Shell	Fabric Impressed	1	2
Total		50	100

Table 4. Various forms of aboriginal pottery found at 31BR246.

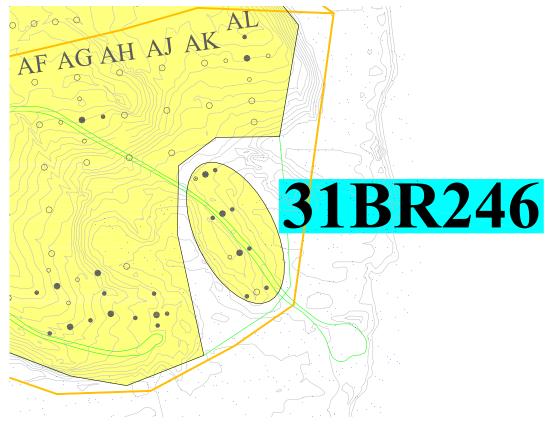


Figure 35. Location of shovel test holes within 31BR246.

SECTION IX

Section IX is located in the southeast portion of the project area and encompasses a large, open field actively farmed (Figure 36). The north is bounded by Section VI; the east by private property and Salmon Creek; the south by Section VIII and the west by Section I. This section is approximately 110 acres in size and 2,371 shovel test holes were excavated in the parcel that resulted in 232 (n=10 percent) positive for cultural material. Two sites were identified in Section IX, in addition to six previously identified sites (31BR45, 31BR46, 31BR47, 31BR48, 31BR80, and 31BR189). The two sites are designated as 31BR189 and 31BR245.

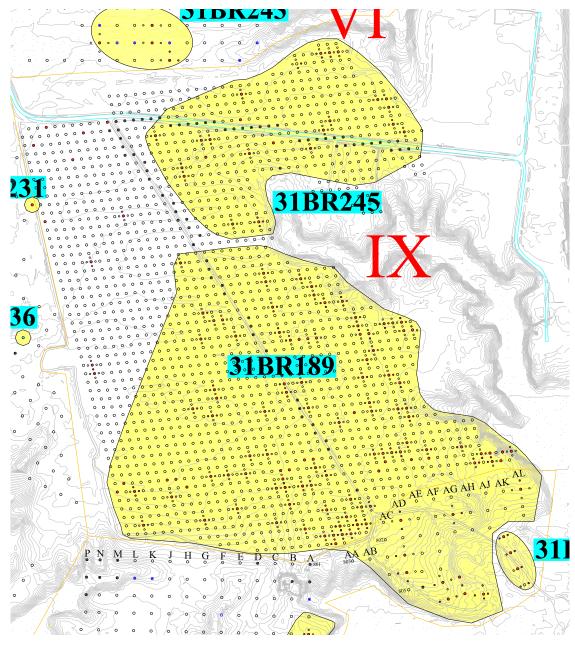


Figure 36. Section IX shovel test hole locations and location of sites.

The stratigraphy throughout Section IX was fairly uniform with some variation in the depths. Typically, Layer A consisted of a yellowish brown (10YR4/6) to an olive brown (2.5Y4/4) sandy loam extending between 0.50 ft. to 1.0 ft. below ground surface. Subsoil consisted of a light yellowish-brown (10YR6/4) sandy clay to a strong brown (7.5YR5/8) clay.

31BR189

31BR189 is a very large multi-component site, measuring 2,100 ft. north-south by 2,350 ft. east-west, and encompassing the entire south half of Section IX and the extreme northeastern corner of Section VIII (Figure 37). This archaeologically complex site fully incorporates six previously identified sites (31BR45, 31BR46, 31BR47, 31BR48, 31BR80 and 31BR189) all of which were identified as prehistoric era sites with varying representations of Archaic and Woodland period components. Given the present high resolution subsurface survey data, it is not possible to clearly correlate previously recorded site boundaries, all of which were roughly approximated, with the presently defined artifact distribution. Since there are no obvious gaps in the present survey data, the former sites, all of which represent activity sub-areas within the presently defined bounds of 31BR189, cannot be neatly segregated as unique sites. For management purposes, it is recommended that all previously recorded sites in survey Sections VIII and IX, as found within the limits of 31BR189 be subsumed into 31BR189.

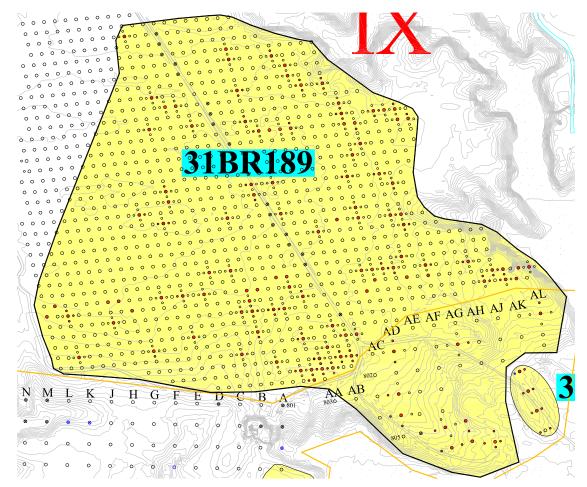


Figure 37. Shovel test holes at 31BR189.

In addition to conducting a controlled surface collection of Section IX, archaeologists excavated 1,208 shovel test holes that resulted in 231 (n=18 percent) positive for cultural material (Figure 38). In all, 905 artifacts were recovered from surface collection and subsurface shovel test holes (Figure 39). The approximate

elevation across the site is 24 ft. AMSL. Soils within the boundaries of 31BR189 primarily consist of well-drained, Norfolk series loamy sands, with Goldsboro loamy sands along the north edge of the site, all suitable for cultivation and consistent with regional Woodland period settlement locales.

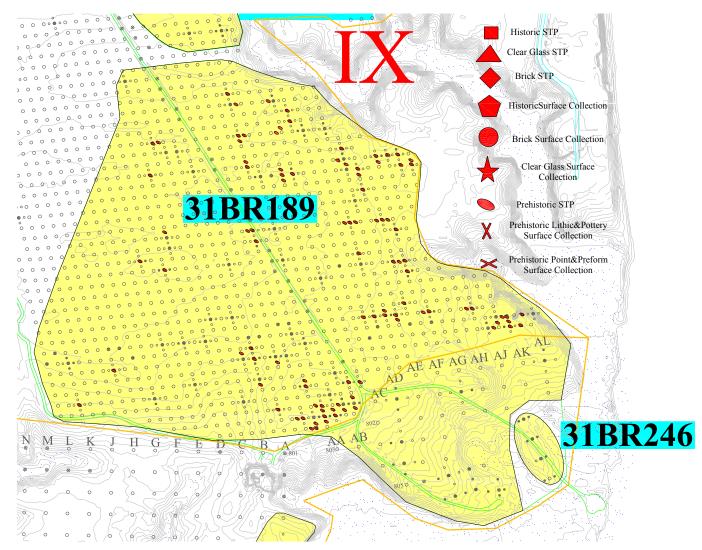


Figure 38. Shovel test holes yielding prehistoric artifacts at 31BR189.

Woodland period ceramics from all three sub-periods are found in the 31BR189 assemblage, but as in the case of 31BR244, Middle Woodland period site area use is most pronounced. Middle Woodland period Mount Pleasant and Middletown type sherds account for 52 percent of the ceramic assemblage with lesser frequencies of Early Woodland (Deep Creek [9 percent], Waterlily [1 percent]) and Late Woodland (Cashie [1 percent], Colington [9 percent]) rounding out the assemblage of identifiable sherds. Due to prehistoric trampling, modern plowing fragmentation and perpetual surface exposure/re-exposure cycles, 26 percent of the recovered ceramic materials were too small or too weathered to make definitive type assessments. Although a relic collector collection attributed to 31BR189 situated within 31BR246 includes a very low frequency of Middle Woodland period, Hanover series (n=3) sherds, no such clay/grog tempered sherds have been observed in the assemblage recovered during this project.

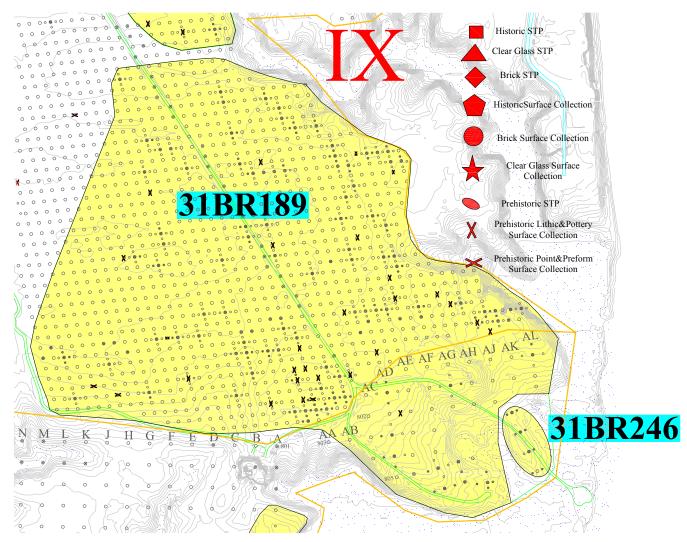


Figure 39. Surface finds of prehistoric artifacts at 31BR189.

Multiple stone tool fragments (bifaces) and diverse amounts of lithic debitage were recovered from surface and subsurface contexts at 31BR189. Across the presently defined 31BR189 site locale in Section IX, archaeologists recovered only one complete biface/projectile point, a Late Archaic period Savannah River Stemmed point (quartzite) from a shovel test hole. In the extreme southeast corner of 31BR189 (Section VIII), in the locality of previously recorded sites 31BR46 and 31BR45, two Middle-to-Late Woodland period triangular points were recovered from surface (metavolcanic Roanoke type) and subsurface (quartz Roanoke type) contexts. The debitage assemblage is diverse in terms of material (chert, greenstone, jasper, metavolcanic, quartz, quartzite) and reduction stage types, a pattern indicative of a range of stone tool production and maintenance activities over time.

The southeastern portion of 31BR189 which is located in the northeastern portion of survey Section VIII represents a somewhat discrete activity area or concentration

within 31BR189. This concentration is naturally segregated from the remainder of the site as it covers a narrow spur projecting from the primary landform to the southeast. Presently a road leading to a boat ramp crosses the landform. In addition to Middle (Mount Pleasant series) and Late Woodland (Colington series) period pottery sherds and lithic materials found in a series of shovel test holes (n=11), late seventeenth- or early eighteenth-century European ceramic sherds, lithic tool fragments (bifaces), lithic debitage (reduction flakes, core shatter) and faunal remains (fish bone) were recovered from what appear to be stratified deposits that retain a particularly high research significance (Figures 40 and 41). Since much of this defined concentration is wooded, save for the boat ramp access road, this locale within 31BR189 is significantly less disturbed than the plowed field areas of the site.

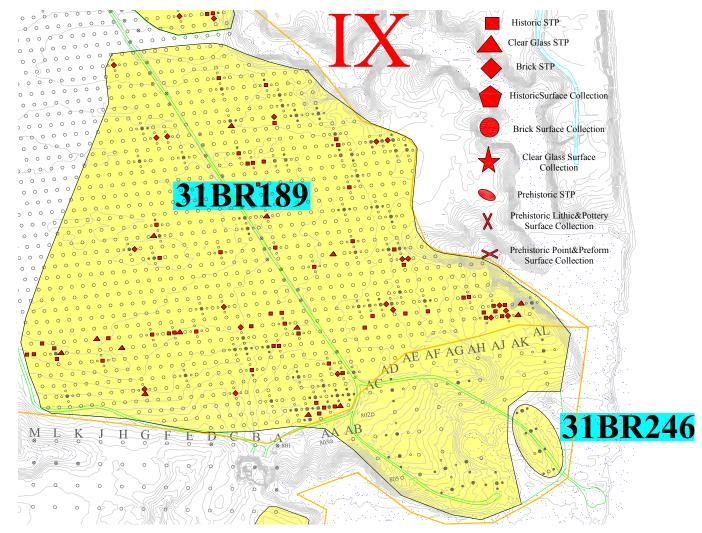


Figure 40. Shovel test holes yielding historic artifacts at 31BR189.

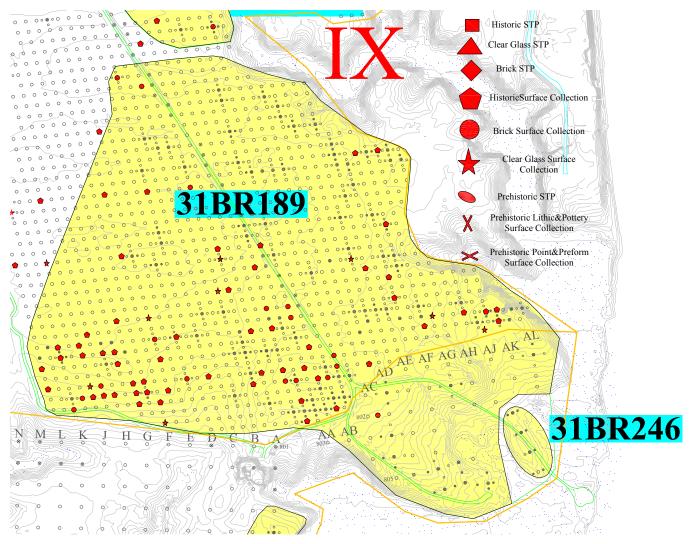


Figure 41. Surface finds of historic artifacts at 31BR189.

The soil stratigraphy at 31BR189, at least within the limits of the agricultural field and excepting the wooded area within Section VIII (see above), is heavily eroded and partially deflated, with subsoil generally encountered at 0.50 ft. to 1.0 ft. below the present ground surface. Decades of tilling has induced erosion which accounts for the number of Early and Middle Archaic period projectile points previously recovered in the south half of the 31BR189 site area, especially in the vicinity of the previously recorded 31BR189. Despite the disturbance to the natural soil column and the loss of vertical separation across the plowed field, the intensity of site occupation over the course of the Woodland period, as reflected in the ceramic diversity, suggests the probability of intact or partially intact occupational features (e.g., storage pits, hearths/firepits, postmolds) remaining in the clayey subsoil below the homogenized plowzone. Given the abundance of such intact features previously encountered at several plowed and/or partially deflated Woodland period sites along the eastern shore of the Lower Chowan River, 31BR189 has significant research value. Moreover, the intact deposits in the southeast corner of the site merit special attention. For these reasons, 31BR189 is recommended as potentially eligible for nomination to the NRHP. Avoidance of the site or a Phase II archaeological significance evaluation is recommended.

31BR245

31BR245 is a multi-component site encompassing most of the northeastern portion of Section IX (Figure 42). The site measures 1,100 ft. north-south by 1,550 ft. east-west, but only 36 (n=8 percent) shovel test holes yielded artifacts out of a total of 439 excavated in this locality. A total of 223 artifacts were recovered and the assemblage includes late seventeenth- and early eighteenth-century artifacts potentially associated with the earliest occupations of the Pollock plantation.

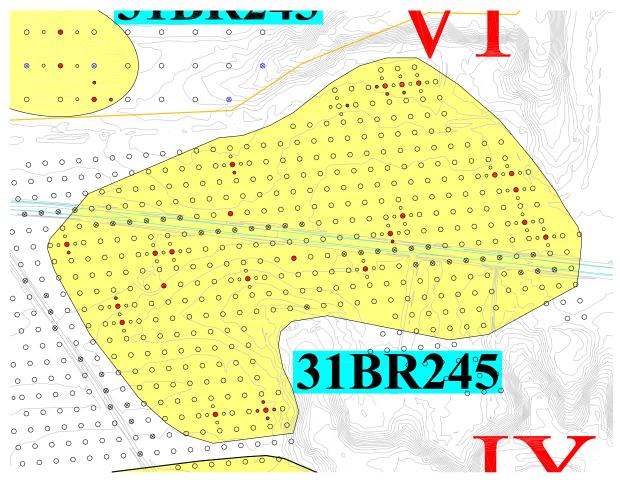


Figure 42. Shovel test holes at 31BR245.

Surface and subsurface findings produced a quantity of prehistoric artifacts, primarily pottery sherds associated with Early, Middle and Late Woodland period occupations of the landform (Figures 43 and 44). The ceramic assemblage principally consists of Middle Woodland period sherds exhibiting attributes associated with the Mount Pleasant series (64 percent) and the chronologically associated Middletown variety (9 percent). Early Woodland sherds include Deep Creek (5 percent) and Waterlily (1 percent) series materials and the Late Woodland period assemblage includes both Cashie (1 percent) and Colington (7 percent) series examples. Thirteen-percent of the surface and/or subsurface recovered sherds are too small or too weathered to securely type.

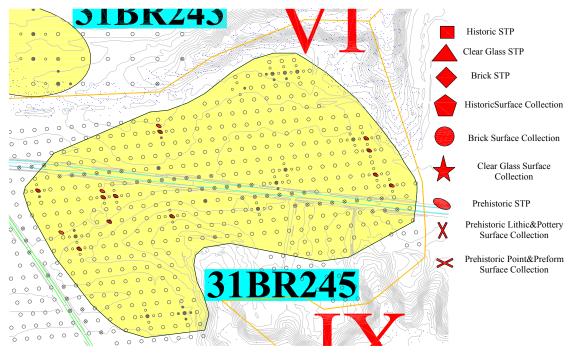


Figure 43. Shovel test holes yielding prehistoric artifacts at 31BR245.

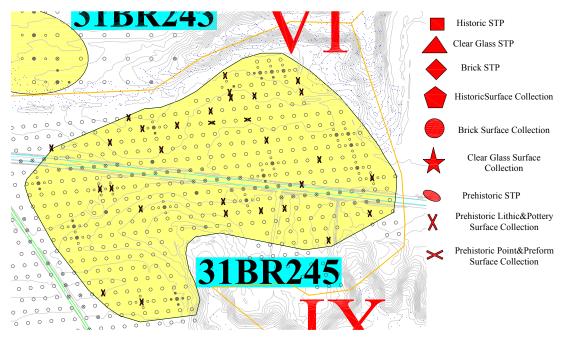


Figure 44. Surface finds of prehistoric artifacts at 31BR245.

In addition to a triangular projectile point (Middle-to-Late Woodland period Roanoke type), stone tool fragments (bifaces) and lithic and debitage, exhibiting a diversity of raw material and reduction stage types, were recovered from surface and shovel test holes. Consisting primarily of quartz shatter and a diverse range of primary and secondary reduction/bifacial thinning flakes (greenstone, metavolcanic, quartz, quartzite), the 31BR245 lithic assemblage is indicative of a range of stone tool production and maintenance activities.

The historic material appears to be concentrated in four areas (Figures 45 and 46). Most of the material dates from the late seventeenth century to the last quarter of the eighteenth century. The concentrations of historic artifacts are heaviest along both side of the road that cuts through 31BR245 and in the north along the drainage (see Figures 44 and 45).

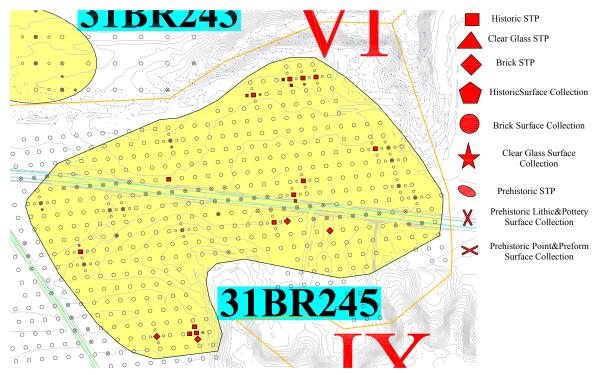


Figure 45. Shovel test holes yielding historic artifacts at 31BR245.

The soil column in the area of 31BR245, as in the plowed field portions of 31BR189, is partially deflated, with a 0.50 ft. to 1.0 ft. deep plowzone capping intact subsoil. Although the site lacks vertical integrity, as is typical of most prehistoric sites found in Coastal Plain agricultural fields, multiple site occupations over the course of the Woodland period would have produced any number of subsurface features including food storage pits, fire hearths, roasting pits, and structural postmolds, which should be readily evident in the clayey subsoil below the modern plow zone. Historic features also tend to survive plowing, and the likelihood that postholes and footings for buildings, trash pits, storage pits, and other infrastructure are present in the historic components is almost a foregone conclusion. For these reasons, 31BR245 is recommended as potentially eligible for nomination to the NRHP. Avoidance of the site or a Phase II archaeological significance evaluation is recommended.

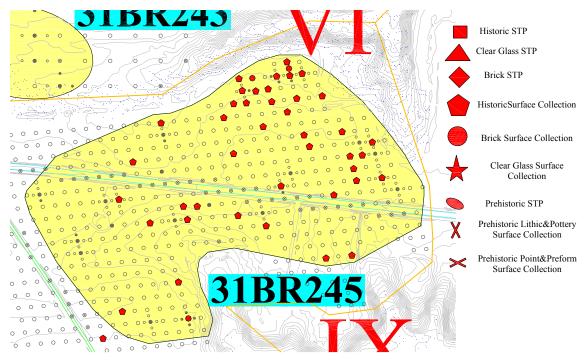


Figure 46. Surface finds of historic artifacts at 31BR245.

CONCLUSIONS AND RECOMMENDATIONS

The Bal Gra Harbor development property is located on a landform, at least in terms of pre-modern era micro-environments, that would have been regularly targeted by American Indian societies adapted to the estuarine/riverine environment of northeastern North Carolina. As expected for this specific project locale, and further evidenced by the number and chronological diversity of previously recorded archaeological sites in-and-around the Salmon Creek watershed, the present survey successfully located eight prehistoric resources, four of which are considered to have research significance. Four prehistoric resources are considered of minimal research value (survey sites 31BR232, 31BR233, 31BR234, 31BR239) and we recommend no further work on these sites beyond the completed assessments. Based on the combined assessment of survey recovered artifacts along with reported artifact collections described for previously recorded sites (31BR 44, 45, 46, 47, 48, 80, 189) on the Bal Gra property, prehistoric land use in the immediate project area was consistent through time, with diagnostic artifacts from all sub-periods of the Archaic (Early, Middle, Late) and later Woodland (Early, Middle, Late) periods represented in the data.

The four significant prehistoric sites, survey sites 31BG243, 31BR244, 31BR189, 31BR245, are recommended as potentially eligible for listing on the NRHP and, as such, require further archaeological investigation unless they can be totally avoided (i.e., no further ground disturbance) when the property is developed as presently planned. These four sites likely hold intact, either partially or minimally disturbed, archaeological deposits from the Early, Middle and Late Woodland periods. While earlier Archaic period deposits and/or features may be encountered through subsequent intensive site testing, the present data suggest that the project area's Archaic period deposits are only found in more disturbed, largely deflated areas of the modern agricultural fields. While the Woodland period sites in the plowed areas are also stratigraphically compromised, there is a much higher probability of encountering subsurface archaeological features, oft significantly extant on plowed Woodland period sites in the Chowan Basin (e.g., Gardner 1990; Green 1986, 1987; Phelps 1982). Moreover, there are most certainly minimally disturbed Woodland period features, sheet midden deposits and/or occupation levels present in the wooded areas of sites 31BR244 and 31BR189. Shovel testing data from these two sites are considered of special significance. Given the proposed development footprint (Figure 3), it appears that all four NRHP potentially eligible prehistoric sites will require additional testing and/or mitigation (data recovery) before any additional ground disturbing actions are undertaken within the proposed boundaries of these four sites.

PART II: PHASE II ARCHAEOLOGICAL SIGNIFICANCE EVALUATIONS

RESEARCH DESIGN

Phase II archaeological significance evaluation surveys were conducted on sites 31BR189, 31BR243, 31BR244, 31BR245, and 31BR246 from June through October 2007. The Phase II surveys included controlled surface collections with individual plotting of surface artifacts, hand-excavated one-meter squares, and mechanically excavated test trenches.

OBJECTIVES

The primary goal of a Phase II archaeological significance evaluation is to determine the significance of a site in terms of criteria for eligibility to the National Register of Historic Places. Phase II archaeological investigations were conducted to obtain more specific information about sites 31BR189, 31BR243, 31BR244, 31BR245, and 31BR246, particularly boundaries, date of use, structural content, function, and integrity through documentary and archaeological research. To yield important information about the past, generally a site must possess artifacts, undisturbed soil strata, structural remains, or other cultural features which make it possible to test historical hypotheses, corroborate and amplify currently available information, or reconstruct local cultural sequences.

FIELD METHODS

The Phase II archaeological significance evaluation surveys at Bal Gra consisted of a combination of controlled surface collection, hand-excavated test units, and mechanically excavated test trenches.

Controlled Surface Collection

The Phase II fieldwork at sites 31BR189 and 31BR245 began initially with a controlled surface collection. 31BR189 was primarily confined to cultivated fields at the southern end of the project area while 31BR245 was located entirely in the northern cultivated fields. Prior to collection all fields had been plowed several times. After the fields were rain-washed, a systematic surface inspection was conducted with crew members spaced at no greater than 10 foot intervals. All artifacts were collected with their position marked in the field by a pin flag and received an individual context number. Subsequently, these artifact locations were recorded by Bass, Nixon, and Kennedy, a professional surveying company, using subfoot GPS. Data coordinates were recorded in Lat/Long (NAD 83 North Carolina State Plane projection) and have an error margin of plus or minus 10 cm. Surface collections with fine resolutions facilitate accurately identifying artifact spatial bounds, densities and enable identification of separate use areas. Recorded data was imported into a Geographic Information System (GIS) to identify artifact concentrations and refine site boundaries.

Test Units

Areas where Phase I survey shovel testing was able to identify artifact concentrations or where potential features were encountered were further investigated by the excavation of test units. Sites 31BR243, 31BR244, 31BR246, and the non-field part of 31BR189 were tested by hand excavation of one by one meter squares. Test squares were excavated in arbitrary 10 cm. levels and all excavated soil was screened through $\frac{1}{4}$ inch hardware cloth retaining all artifacts. A profile drawing of at least one side wall was recorded for each test unit. If possible features were noted and a plan drawing was made of the unit at a 1in. = 1 ft. scale. Digital photographs of the sidewalls and potential features were taken of each test unit.

Test Trenches

Areas where the controlled surface collection identified artifact concentrations at sites 31BR189 and 31BR245 were then tested for the presence of subsurface features by mechanically cut test trenches using an excavator with a smooth edge bucket (Plate 14). Test trenches were cleaned by shovel-shaving and troweling.



Plate 14. Mechanical cutting of test trenches at 31BR189 using an excavator with a smooth edged bucket.

SURVEY RESULTS

31BR189 AND 189**

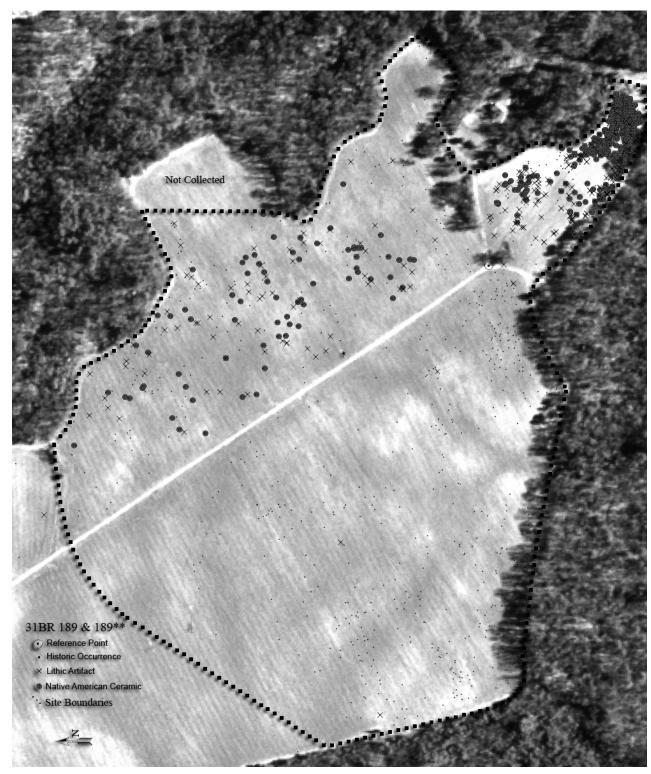
Surface Collection

Archaeologists conducted a high resolution surface collection of all open fields within the project area. 31BR189's site boundary was determined by Phase I shovel testing and this controlled surface collection (Figure 47). Surface artifact extents and densities match those of the subsurface testing which suggests little horizontal movement of plowzone material despite continuous plowing. This is likely an attribute of the flat topography the site is situated within

Figure 47 depicts the clustering of artifacts types based on the three generic categories, historic occurrences, lithic artifacts, and Native American ceramics. The prehistoric components of 31BR189 appear scattered primarily across the eastern portion of the landform with a few occurrences west of the road.

Only five diagnostic projectile points, a favorite of collectors, were recovered from this surface collection. These projectile points include one Guilford/Lanceolate, two Morrow Mountains, and two Roanoke triangulars, all found at the southern end of the site. Previously recorded sites 31BR45, 31BR46, 31BR47, 31BR48 and 31BR80 have been subsumed into 31BR189 and include multiple diagnostic lithic artifacts from all periods of the Archaic and Woodland in their surface inventories. Therefore, their low occurrence in the controlled surface collection may be best attributed to unabated collector activity since these early collections were made. No discreet activity or occupation areas for the Archaic period is apparent, except to say that they were likely distributed across the landform as is evidenced by the few lithic occurrences on the western site bounds. However, unless diagnostic Archaic materials accompany it, lithic debitage can be associated with any period. Previous collections for the site suggest that most Archaic activity took place closer to Salmon Creek.

The evidence of Woodland occupation and activity areas within 31BR189 is much more prevalent given the abundance of prehistoric ceramic material. The entire Woodland ceramic sequence common on the North Coastal Plain of North Carolina is present in the collection. Through unconstrained clustering analysis we can begin to hypothesize likely areas of use both temporally and spatially based on actual artifact occurrences and projected "hot spots". To achieve usable results, Native American ceramics were classified by series, quantified, and filtered based on the established ceramic typologies. The four prominent series for the region were subjected to clustering analysis; the Early Woodland Deep Creek series (1000 B.C to 300 B.C); the Middle Woodland Mount Pleasant series (300 B.C to A.D. 800); the Middle Woodland Middletown series (300 B.C to A.D. 800); and the Late Woodland Colington series (A.D. 800 to A.D 1750). Once separately parsed, a patterned series distribution emerges and can be observed in greater detail in Figures 48-51. Results from the analysis suggest the heaviest and most widely distributed use of 31BR189 occurred during the Middle Woodland period. Not surprisingly, the scale of Early Woodland use appears more infrequent and targeted towards the southern end of the site, closer to Salmon Creek. Colington distribution, though temporally later than Mount Pleasant and Middletown, is



much smaller and focused. Colington ceramics were primarily encountered at the very southern end of the site near Salmon Creek.

Figure 47. 31BR189 and 189** surface collection.

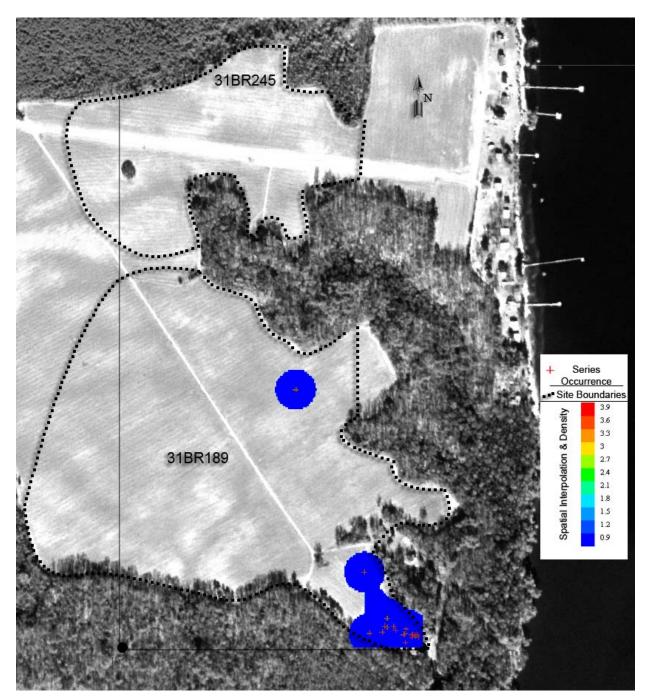


Figure 48. 31BR189 Deep Creek Series spatial bounds and interpolated density. Substantiated by test excavations, the low frequency of Deep Creek ceramics is reflected here in its distribution and density. Deep Creek occurrences are primarily limited to the very southern end of the site where it never exceeds significant frequencies. This implies a much more limited or lower use of the area during the Early Woodland.

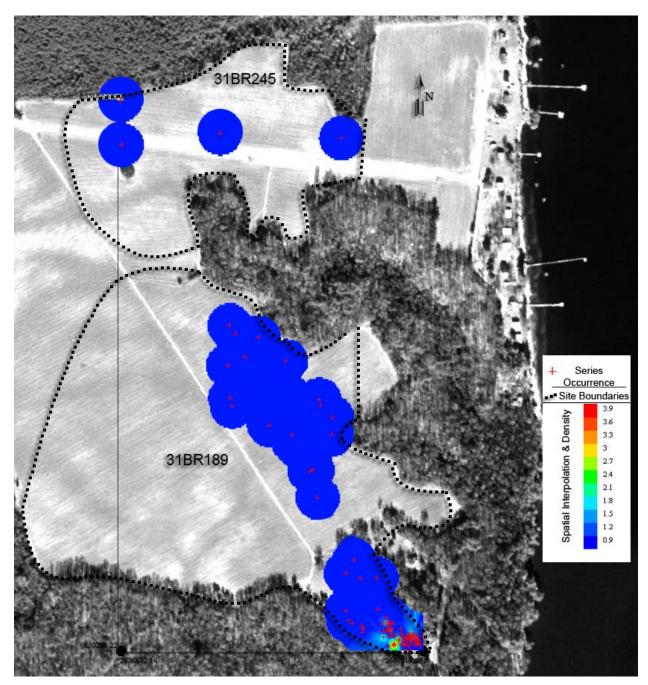


Figure 49. 31BR189 Mount Pleasant Series spatial bounds and interpolated density. Opposite the Early Woodland, a much more widespread land use pattern can be observed for the Middle Woodland. Typical of that period, Mount Pleasant ceramics were recovered all across the eastern portion of the site with a much more intensive focus at the very southern end (color gradient marks likely dense concentration areas).

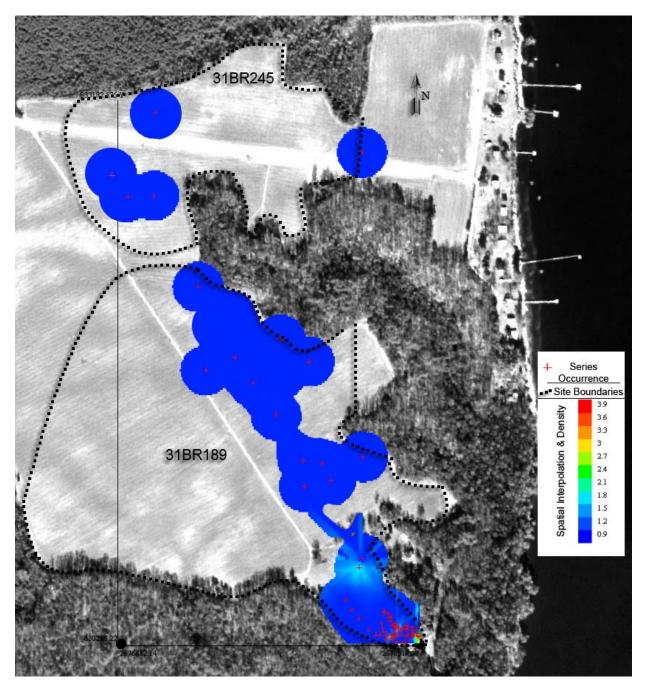


Figure 50. 31BR189 Middletown Series spatial bounds and interpolated density. Middletown distribution, as expected, mimics the pattern of distribution seen with Mount Pleasant ceramics. Concentration areas differ slightly but the pattern remains relatively similar further suggesting these two series are contemporaneous. The Middle Woodland land use pattern appears much more widespread, though still locally focused, than previous and subsequent phases. Color shifts noted at the southern extents of the site correlate with the location of known subsurface remains.

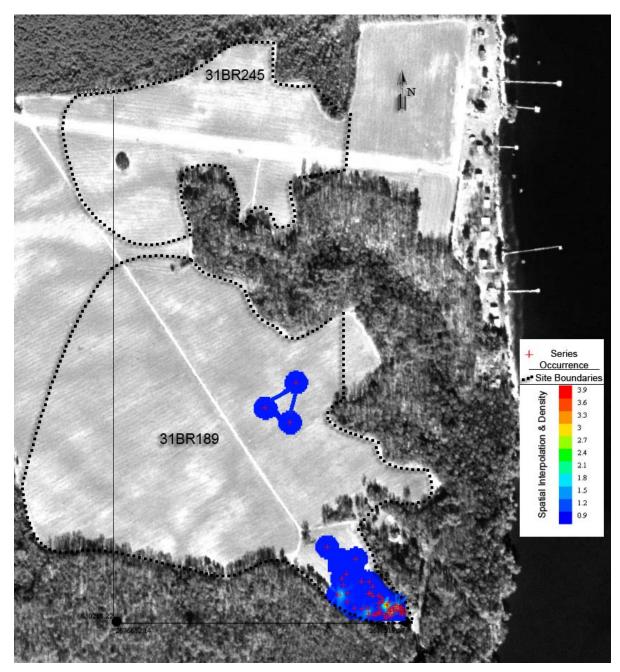


Figure 51. 31BR189 Colington Series spatial bounds and interpolated density. Primarily isolated towards the southern portion of 31BR189 with small concentration areas noted in greens and reds, Colington's highest densities correspond directly with midden and feature deposits identified during sub-surface testing.

Test Units

Two one-meter square test units were excavated at the south end of 31BR189 (Figure 52).

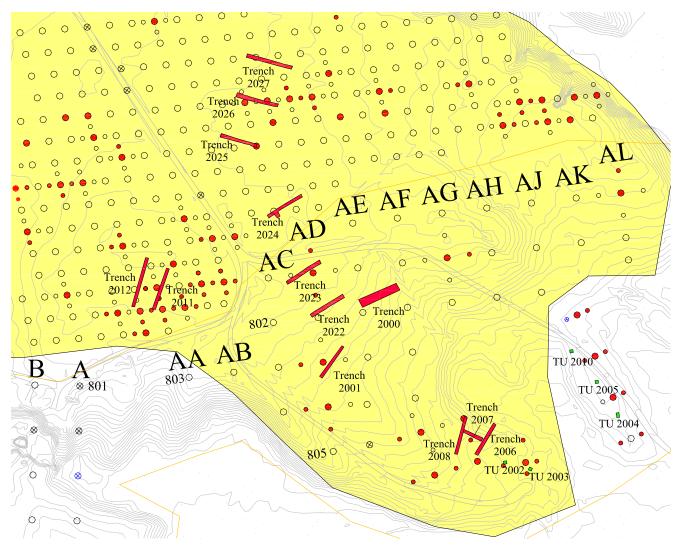


Figure 52. Location of test units and test trenches at 31BR189.

Test Unit 2002

Test Unit 2002 was placed in the vicinity of Shovel Test Hole AG805 west radial. The shovel test hole indicated a possible buried 'A' or midden. A total of 15 levels were excavated comprised of ten modern, prehistoric and natural layers.

The first four levels incorporate a series of compact modern fill and thin wash layers. These layers are plowed alluvial, colluvial deposited soils which were compacted from local traffic to and from the boat ramp and include deposits from recent hurricane flooding. Level I consisted of an olive brown (2.5Y4/3) sandy clay loam root mat. Level II was a stratigraphic change to a very compact light yellowish-brown (2.5Y6/4) loamy sand modern fill. Levels III and IV were a continuation of the very compact soil but changed to a dark grey brown (10YR4/2) loamy sandy clay. Level V was comprised of an olive brown (2.5Y4/4) sandy clay loam mottled with olive brown (2.5Y4/3). The base of Level V ranged between 35 and 37 cm. below ground level and revealed disturbances including plow scars. Level VI comprised of a mottling of dark olive brown (2.5Y3/3), light olive brown (2.5Y5/4) and light yellowish-brown (2.5Y6/4) loamy sand and was located in the north half of the unit. Level VII was located in the southern half of the unit

and consisted of shallow light yellowish-brown (2.5Y6/4) loamy sand. Level VIII was the continuation of Level VI. Level IX consisted of a light yellowish-brown (2.5Y6/3) loamy sandy wash as was Level X. Level X was a thin transitional wash-like layer consisting of a mottling between light olive brown (2.5Y5/3), light yellowish-brown (2.5Y6/3) and very dark grayish brown (10YR3/2) loamy sand.

Level XI was identified from test trenches and coring as a dark refuse midden with a high density of artifacts (Plate 15). This level began at approximately 52 to 60 cm. below ground surface and consisted of a very dark brown (10YR2/2) loamy sand. Level XII consisted of a dark yellowish-brown (10YR3/4) loamy sand (Figure 53). Deposited by erosial and alluvial processes at the bottom of the slope, sediments encountered in the upper portions of Test Unit 2002 have acted as a protective covering for underlying midden and layer integrity.



Plate 15. North profile of Test Unit 2002 at 31BR189 showing Feature 2009 (center of bisection) and buried midden.

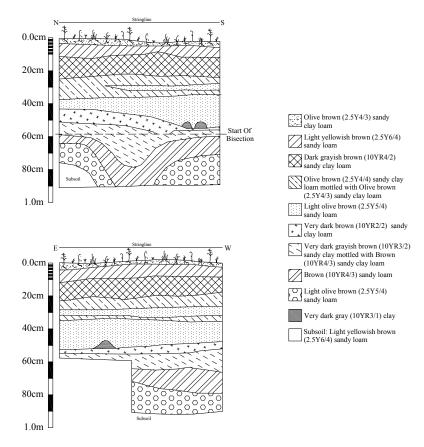


Figure 53. Representative profiles from Test Unit 2002.

Levels XIII-XV encompassed the bisection of the test unit, west half removed, in 10 cm. arbitrary levels until subsoil was reached. Level XIII consisted of a dark yellowish-brown (10YR3/4) sandy clay loam. Level XIV consisted of a brown (10YR4/3) loamy sand. Level XV consisted of a light olive brown (2.5Y5/4) loamy sand. Total depth of the unit in the west half was 99 cm. below ground surface. Subsoil consisted of a light yellowish-brown (2.5Y6/4) sandy loam.

Artifacts

Lithic Artifacts

Prehistoric materials recovered from Test Unit 2002 included 182 lithic artifacts (Table 5). Non tool lithic artifacts included metavolcanic, quartz and quartzite debitage. Consisting primarily of shatter and interior flakes, lithic debitage from Test Unit 2002 suggest nearby production and curation of tools. However, given their consistency throughout stratigraphic layers Phase affiliation is difficult and assumed Woodland.

Lithic Type	Portion	Quantity	Percentage	
Biface	Fragment	3	1.65%	
	Tip	6	3.30%	
Debitage	Interior Flake	69	37.91%	
	Primary Flake	4	2.20%	
	Secondary Flake	2	1.10%	
	Shatter	98	53.85%	
Total Result		182	100.00%	

Table 5. Test Unit 2002 lithic type tools.

Ceramic Artifacts

A total of 2,251 ceramic sherds representative of seven separate series were recovered during excavation of Test Unit 2002. Measuring less than 1/2" in diameter, the majority (N = 1,437) of these sherds were considered residual, counted, but not analyzed or typed. Encompassing the entire ceramic sequence for the North East Coast, Test Unit 2002's ceramic material counts and percentages (see Table 6) offer ample evidence of an intensive Woodland focus at 31BR189. Several minor series found in stratigraphic context, whose temporal placements within the North East Ceramic sequence are vague, were also encountered. Highest densities occurred from Level VI downward relating to a buried midden overlaying much earlier deposits.

Series Type Untyped Clay	Level 1	2	3	4	5	6	7	8	9	10	11	12 0.8%	13	14	Total Result 0.1%
Colington Fabric Impressed Colington Incised Colington	12.1%	22.2%		9.1%		45.5%	20.0%		16.0%	11.9%	9.0%	7.4% 0.8%			9.7% 0.1%
Indeterminate Colington Plain Colington Simple	12.1% 3.0%	33.3%	12.9%	9.1%		9.1%		16.7%	8.0%	2.5%	15.7%	4.1%			10.5% 0.1%
Stamped	3.0%	5.6%								0.8%					0.4%
Currituck Net Impressed												1.6%			0.3%
Deep Creek Cord Marked Deep Creek Fabric			6.5%				20.0%	8.3%	8.0%		2.7%	6.6%			3.1%
Impressed (?) Deep Creek											0.3%				0.1%
Indeterminate			3.2%		6.7%		20.0%		8.0%	0.8%	3.7%	4.1%	10.0%		3.2%
Deep Creek Net Impressed Fine Sand Fabric	6.1%						20.0%		8.0%	5.1%	1.3%	2.5%			2.5%
Impressed			3.2%							1.7%					0.4%
Fine Sand Indeterminate Fine Sand Plain	3.0%				6.7%					5.9%	1.3%	2.5%			2.0% 0.3%
Mockley Indeterminate										0.8%		3.3%		50.0%	0.8%
Mount Pleasant Indeterminate Mount Pleasant		11.1%	9.7%	9.1%					4.0%	10.2%	8.7%	9.0%		50.0%	8.0%
Cord Marked Mount Pleasant	21.2%	5.6%	12.9%	36.4%	26.7%	9.1%		8.3%	12.0%	11.0%	16.0%	2.5%	10.0%		12.6%
Fabric Impressed Mount Pleasant	36.4%	16.7%	32.3%	27.3%	26.7%	36.4%	20.0%	58.3%	12.0%	22.0%	24.3%	41.8% 0.8%	80.0%		28.8% 0.1%

Table 6. Test Unit 2002 prehistoric ceramics type percents by level.

Incised Mount Pleasant															
Net Impressed			9.7%		6.7%					4.2%	1.7%	2.5%			2.4%
Middletown Cord											/				
Marked										5.1%	5.7%	5.7%			4.2%
Middletown Fabric Impressed		5.6%	9.7%					8.3%	12.0%	8.5%	7.3%	4.1%			6.3%
Middletown		5.070	9.170					0.370	12.070	0.570	1.570	4.170			0.570
Indeterminate	3.0%			9.1%	26.7%				12.0%	6.8%	2.3%				3.4%
Middletown Net															
Impressed										2.5%					0.4%
Total Result	100.0 %	100.0%													

Feature 2009

At the base of Level XII in Test Unit 2002 was a feature/anomaly centered in the unit and labeled as 2009 (Figure 54). The feature was bisected and the west half excavated in three 10cm levels. Distinguishing Feature 2009 from surrounding soils in full light conditions proved difficult given the homogeneity of the two. This is obvious when viewing Plate 15, where it depicts both contextual proveniences as dark mottled soils mixed with cultural and faunal material, and no visible boundary between them. Coping with this issue required the use of an arbitrary feature boundary where soils and material removed were tagged as Feature 2009. Feature 2009 consisted of a very dark grayish-brown (10YR3/2) sandy clay loam mixed with fired clay and shell fragments.

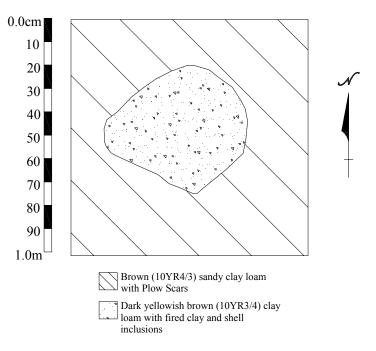


Figure 54. Plan of Test Unit 2002 and Feature 2009 at the base of Level XII.

Artifacts

The artifactual evidence indicates that Feature 2009 was created during the Colington Phase, as is evidenced by the presence of Colington series ceramics. Circular in plan view and extending down into earlier Woodland deposits, it contained a total of 79 prehistoric ceramics (Table 7), 5 lithic artifacts (3 interior flakes and 2 shatter fragments), 168 faunal fragments from fish, fresh water mussel, mammal and reptile species, and 94 unidentified charred botanical fragments. Of the three levels excavated, there was no differentiation in artifact content amongst them. This suggests a single episode of construction and subsequent filling of perhaps what was a refuse pit. Because the pit was dug down through earlier Middle Woodland and Early Woodland deposits, there was a moderate amount of mixing of surrounding material.

Series Type	Quantity	Type Percentage
Colington Fabric Impressed	2	4.26%
Colington Indeterminate	2	4.26%
Colington Plain	1	2.13%
Colington Simple Stamped	1	2.13%
Deep Creek Net Impressed	2	4.26%
Fine Sand Plain	1	2.13%
Mount Pleasant Indeterminate	4	8.51%
Mount Pleasant Cord Marked	9	19.15%
Mount Pleasant Fabric Impressed	19	40.43%
Mount Pleasant Net Impressed	2	4.26%
Middletown Fabric Impressed	4	8.51%
Residual	32	
Total	79	

 Table 7. Feature 2009 series type totals and percentages

Test Unit 2003

Test Unit 2003 was placed in the vicinity of shovel test hole AH 805-south radial. The shovel test yielded a high density of artifacts. A total of seven levels were excavated within five natural/modern layers. Within the southwest corner a wooden post along with metal rod extended from the surface through the unit into subsoil. Disturbance is observed in the unit and no cultural features were observed. A total depth of the unit ranged between 46 and 59 cm. below ground surface.

Incorporating the root mat, Levels I and II consisted of a dark grayish brown (10YR4/2) sandy loam. Level III was an arbitrary level and consisted of a yellowishbrown (10YR5/8) clay appearing to be modern fill. Level IV was indicated by a natural soil change and consisted of a dark olive brown (2.5Y3/3) sandy loam mottled with light yellowish-brown (2.5Y6/4) sandy loam and shell inclusions, possibly indicating middenlike soil. Level V marks another soil change and was comprised of dark olive brown (2.5Y3/3) compact sand. Levels VI and VII consisted of a light olive brown (2.5Y4/4) clay mottled with olive brown (2.5Y4/4) clay transitioning into subsoil (Figure 55).

Artifacts

Lithics

Prehistoric materials recovered from Test Unit 2003 included 130 lithic artifacts (Table 8). Tools recovered during testing include two fragmented projectile points (one triangular), a uniface, biface fragments, one possible marine sandstone abrader, and one small bifacial blade. Non tool types include metavolcanic, jasper, quartz and quartzite debitage, and cracked rock fragments.

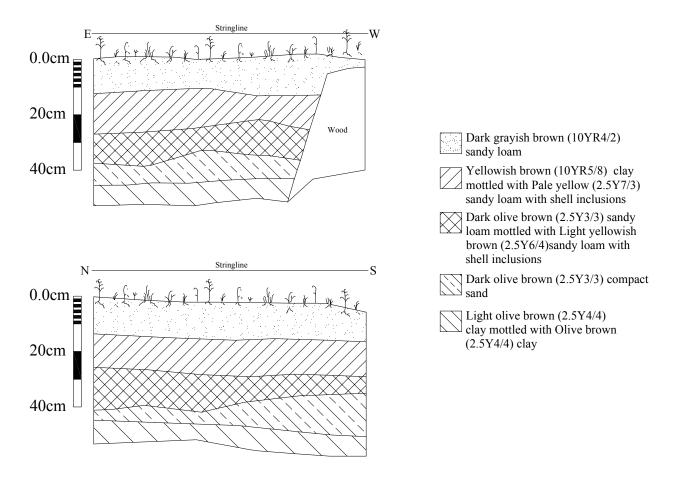


Figure 55. Representative profiles from Test Unit 2003.

Lithic Type	Portion	Quantity	Percentage
Biface	Fragment	2	1.54%
	Micro Blade	1	0.77%
Cracked Rock		24	18.46%
Debitage	Interior Flake	35	26.92%
	Primary Flake	10	7.69%
	Secondary Flake	2	1.54%
	Shatter	44	33.85%
Geological Specimen		9	6.92%
Projectile Point		2	1.54%
Uniface		1	0.77%
Total Result		130	100.00%

Ceramic Artifacts

-

A total of 1098 ceramic sherds representing eight separate series were recovered during Test Unit 2003 excavations (Table 9). Measuring less than 1/2" in diameter, the

majority (N = 1098) of these sherds were considered residual, counted, but not analyzed or typed. Similar to Test Unit 2002, the variety of ceramic series encountered suggests a well represented Woodland period focus.

Type Affiliation	Quantity	Type Percentage
Clay Cord	1	0.25%
Clay Net	4	1.02%
Colington Fabric Impressed	48	12.18%
Colington Indeterminate	33	8.38%
Colington Plain	1	0.25%
Colington Simple Stamp	8	2.03%
Currituck Net Impressed	2	0.51%
Deep Creek Cord Marked	6	1.52%
Deep Creek Indeterminate	16	4.06%
Deep Creek Net Impressed	18	4.57%
Fine Sand Plain	2	0.51%
Mount Pleasant Indeterminate	16	4.06%
Mount Pleasant Plain	3	0.76%
Mount Pleasant Cord Marked	57	14.47%
Mount Pleasant Fabric Impressed	106	26.90%
Mount Pleasant Net Impressed	14	3.55%
Middletown Cord Marked	7	1.78%
Middletown Fabric Impressed	34	8.63%
Middletown Indeterminate	9	2.28%
Middletown Net Impressed	2	0.51%
Untyped Shell Cord Marked	1	0.25%
Untyped Shell Indeterminate	5	1.27%
Untyped Shell Net Impressed	1	0.25%
Residual	704	
Total Result	1098	

Table 9. Test Unit 2003 series type totals and percentages.

Faunal Remains

One small unidentified mammal fragment and one unidentified turtle species fragment were recovered from Level III.

Botanical Remains

No botanical remains were encountered during Test Unit 2003 excavations.

Test Trenches

A total of 12 mechanically cut test trenches were excavated at 31BR189 (see Figure 52). The buried midden identified in Test Unit 2002 was likewise found in Test Trench 2006 and halfway up Test Trench 2007. The buried midden was truncated by plowing so that in this location it survived only to a thickness 15 cm. below plowzone (Plate 16).



Plate 16. Plow-scarred midden beneath plowzone in Test Trench 2006 at 31BR189.

One major cultural feature, Feature 2019, was found in Test Trench 2008 (Plate 17). The feature was oval in shape with a roughly one meter diameter. It was bisected and found to be 65 cm. deep in the center (Figure 56). A total of 40 artifacts were recovered from Feature 2019 excavations. Native American ceramics series recovered included 14 Colington, 3 Mockley, 3 Middletown, 2 Mount Pleasant, and 7 Deep Creek Series. Four fragments less that 2cm and not typed were also found. Lithic material recovered included 1 quartz primary flake, 1 quartz interior flake, 1 quartzite interior flake, and 1 metavolcanic interior flake. Faunal remains recovered included 3 small unidentifiable fragments.



Plate 17. Feature 2019 and Feature 2020 at 31BR189, bisected, facing northwest.

Artifactual data suggest that Feature 2019 was dug sometime during the Late Woodland Colington Phase. As can be noted from its profile (see Plate 17), it appears to have been left open while slowly filling as sediments washed in. Stratigraphically there was no differential representation of diagnostic material. This information suggests the feature may have represented a medium to large storage pit, which when abandoned slowly accumulated fill as sediments washed in. Feature 2019 intruded into an earlier feature, Feature 2020 whose top layer consisted of a black ashy loam and was not tested.

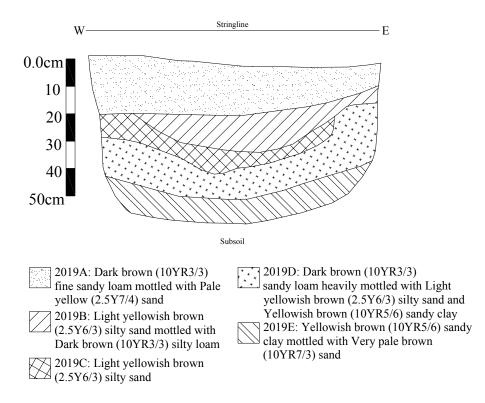


Figure 56. North profile of Feature 2019 at 31BR189.

Other test trenches that contained cultural features were Test Trenches 2001. 2022, 2023, and 2024. Test Trench 2001 contained numerous small posthole and postmold-like features with no obvious structural patterns. Three bisected posthole features appeared to be small well-preserved small postmolds/postholes, possibly affiliated with the historic component of the site (Plates 18 and 19). Test Trenches 2022 and 2023 were similar to Test Trench 2001 as they both contained many small circular soil stains; some of which may be postmolds for Native American structures, although no patterns were apparent. The circular features typically are one centimeter or less in diameter and are indistinguishable from root holes. No other features were present in Test Trenches 2022 and 2023. Test Trench 2024 was devoid of any features, even problematical features like those in Test Trenches 2022 and 2023, except for one area near the west end of Test Trench 2024. Part of feature was exposed in the trench and a perpendicular cut was made to completely uncover the entire feature. Apparently a hearth, the feature was an irregular circle about 55-60 cams in diameter composed of black ashy soil mottled with orange burned sandy clay. Several fire-cracked rocks were present in the feature, which was not tested.

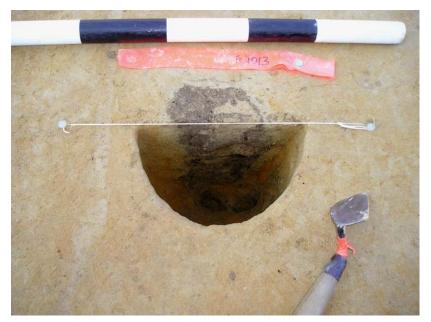


Plate 18. North profile of Feature 2013 in Test Trench 2001.



Plate 19. North profile of Feature 2014 in Test Trench 2001.

31BR189 Artifact Summary

A total of 4070 artifacts were recovered from stratified context during excavations including lithic artifacts (n= 385, 9.46%) (Table 10), Native American Ceramics (n=3371, 82.83%), unidentified charred botanical (n=49, 1.2%) and faunal (n=265, 6.51%) remains.

Lithic Artifacts

While several biface and biface fragments of various production stages were recovered, only two diagnostic projectile points were found. Their morphology suggests affiliation with the Middle/Late Woodland Roanoke triangular variety found throughout the region. Consistent with Phase I findings, lithic debitage consisted primarily of metavolcanic, jasper, chert (?), quartz and quartzite debitage, shatter and cracked rock fragments.

Ceramic Artifacts

A total of 3,371 ceramic sherds representing nine separate series were recovered during test excavations at 31BR189 (Table 11). Measuring less than 1/2" in diameter, the majority (N = 2144) of these sherds were considered residual, counted, but not analyzed. Typical of other Woodland ceramic assemblages for the region, 31BR189's ceramics are considered representative of accepted regional series (Plates 20 and 21). Given the limited testing, little beyond their stratigraphic percentages can be discussed about them at this time, however the presence of several minor series in stratified context posses an interesting discussion.

Several minor series encountered during excavations, included examples of Currituck, Mockley, an untyped clay tempered series, an untyped shell tempered series, and a fine sand series. Their stratigraphic context from these excavations has contributed information on their temporal and spatial affiliations with the major series of the region, but left more unanswered questions about their affiliation to one another. For example, one Curritick base found in Level XII suggests these shell tempered flat bottom vessels were possibly present in the region as early as the beginning of the Middle Woodland and were likely contemporary with Mount Pleasant, Middletown, and Mockley. Like Currituck, Mockley is a Middle Woodland shell tempered ware most prominently found in Virginia, Maryland, and Delaware. Because the two series were both tempered with shell, the flat bases of the Currituck series are currently the only attribute available for separating them. Worth noting is also Painter's (1977) original description for the series which includes clay and sand tempered varieties of these flat bottom vessels. This becomes problematic for any analysis where shell, sand and clay tempered Currituck as well as Mockley ceramics coexist and only body sherds present. Limited evidence from these tests suggests some coherence between Currituck and Mockley but to what extent is not known at this time. Also observed in the 31BR189 assemblage was an untyped shell tempered series having both Cord Marked and Net Impressed surfaces and more resembling of Deep Creek. These ceramics at present should be considered part of the Currituck/Mockley traditions until better observed. As can be noted from this discussion there is much ambiguity which early shell tempering in the region. Obviously current typologies are inadequate to address this confusion

Faunal Remains

Faunal materials recovered from 31BR189 were given a common name species identification when possible. Generally most fragments were too deteriorated for proper identification except when found within feature or midden context. In these cases, identifiable species remains consisted of small mammals, fish, shell fish, and reptiles. Their cultural context is likely attributed to Middle and Late Woodland procurement strategies employed at the site. Given the location of the site at the back end of the

Albemarle estuary and its proximity to large discharges of fresh water from the Roanoke and Chowan Rivers, salinity levels were likely too low for salt water mussel species to thrive. Considering this environmental attribute, all shell was assumed to be freshwater mollusk and, where identifiable, did substantiate this premise. Other middens typical of the region, further suggest that the occurrences of shell at 31BR189 represented riverine subsistence practices common for the region. The degree to which this strategy was practiced varies. No thick deposits of shell were encountered during testing but midden levels did possess a large amount of it.

Lithic Type	Rock Type	Quantity	Percent
Biface	Metavolcanic	4	1.04%
	Quartz	9	2.35%
	Quartzite	2	0.52%
Cracked Rock	Unidentified	4	1.04%
	Various	28	7.31%
	Quartz	11	2.87%
	Quartzite	21	5.48%
	Unidentified	2	0.52%
Debitage	chert (?)	2	0.52%
	Jasper	1	0.26%
	Miscellaneous	13	3.39%
	Metavolcanic	66	17.23%
	Quartz	110	28.72%
	Quartzite	59	15.40%
	Unidentified	11	2.87%
Geological Specimen	Ferric Sandstone	3	0.78%
	Ferrocrete	6	1.57%
	Hematite	3	0.78%
	Jasper	2	0.52%
	Marine Sandstone	1	0.26%
	Miscellaneous	10	2.61%
	Sandstone	8	2.09%
	Unidentified	4	1.04%
Projectile Point	Metavolcanic	2	0.52%
Uniface	Quartzite	1	0.26%
Total Result		383	100.00%

Table 10. 31BR189 lithic type totals and percents

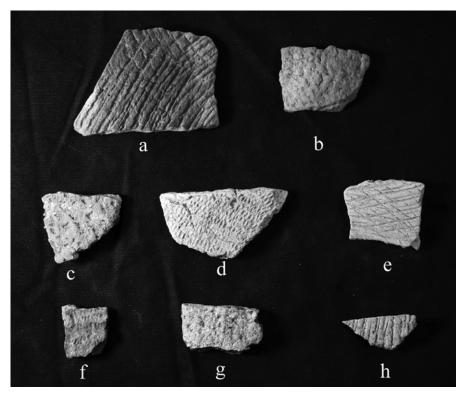


Plate 20. Representative ceramics from 31BR189. Deep Creek Cord Marked (a), Deep Creek Net Impressed (b), Mount Pleasant Net Impressed (c), Mount Pleasant Fabric Impressed (d), Mount Pleasant Cord Marked (e), Middletown Fabric Impressed (f), Middletown Net Impressed (g), Middletown Cord Marked (h). Maximum width of Deep Creek Cord Marked Sherd is 7.7 cm.

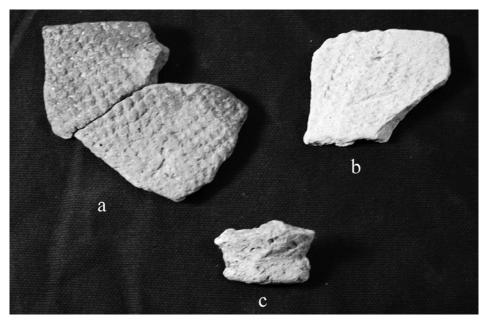


Plate 21. Representative ceramics from 31BR189. Untyped Shell Net Impressed (a), Colington Fabric Impressed (b), Currituck Net Impressed Base (c). Width of Currituck base fragment is 3.5 cm.

Series Types	Quantity	Type Percentage
Clay Indeterminate	1	0.08%
Clay Cord Marked	1	0.08%
Clay Net Impressed	4	0.33%
Colington Fabric Impressed	122	9.94%
Colington Incised	1	0.08%
Colington Indeterminate	111	9.05%
Colington Plain	2	0.16%
Colington Simple Stamped	11	0.90%
Currituck Net Impressed	4	0.33%
Deep Creek Cord Marked	35	2.85%
Deep Creek Fabric Impressed(?)	1	0.08%
DC Indeterminate	42	3.42%
Deep Creek Net Impressed	39	3.18%
Fine Sand Fabric Impressed	3	0.24%
Fine Sand Indeterminate	14	1.14%
Fine Sand Plain	4	0.33%
Mockley Net Impressed	6	0.49%
Mount Pleasant Indeterminate	88	7.17%
Mount Pleasant Plain	3	0.24%
Mount Pleasant Cord Marked	169	13.77%
Mount Pleasant Fabric Impressed	349	28.44%
Mount Pleasant Incised	1	0.08%
Mount Pleasant Net Impressed	39	3.18%
Middletown Cord Marked	39	3.18%
Middletown Fabric Impressed	86	7.01%
Middletown Indeterminate	34	2.77%
Middletown Net Impressed	6	0.49%
Unidentified Shell Cord Marked	1	0.08%
Unidentified Shell Indeterminate	8	0.65%
Unidentified Shell Net Impressed	3	0.24%
Residual	2144	
Total Result	3371	

 Table 11.
 31BR189 series type totals and percentages

Botanical Remains

Surviving due to their burning, botanical remains recovered from excavations at 31BR189 can not be directly considered ethnobotanical. Unfortunately the limited analysis conducted upon these artifacts suggests their occurrence in stratigraphic context is natural. Likely exceptions occur in feature or midden context where their frequency is higher, but analysis to identify ethnobotanical from natural was beyond the scope of this project and better reserved for data recovery where contextual occurrences are better understood.

Conclusion

Assessment of 31BR189's prehistoric artifact assemblage suggests that site occupation in its entirety was more abundant and widely distributed during the Middle Woodland period. This is evidenced by the prevalence of Mount Pleasant (52.89 percent) and Middletown (13.45 percent) series ceramics all across the site. Low frequencies of an Untyped fine sand series (1.71 percent), Currituck (.3 percent), Mockley (.49 percent),

Untyped Shell (.98 percent), and Early Woodland period Deep Creek (9.54 percent) series sherds, as well as a moderate frequency of Late Woodland period Colington (20.13 percent) series sherds complete the prehistoric ceramic assemblage. While overall site occupation was greatest during the Middle Woodland, the moderate amount of Colington series ceramics and associated trash midden at the southern end suggests a much more focused or permanent occupation in this location during the Late Woodland Colington Phase.

Here we may possibly find evidence for a small village or farmstead site associated with this terminal phase of the Late Woodland. Trash middens such as that encountered during testing generally develop from consistent continued dumping. Therefore, based on its size and extent, the midden at 31BR189 seems affiliated with a small village or hamlet and one potentially linked with the Colington components at 31BR243, 31BR244, 31BR245, and 31BR246. The Colington Phase has been associated with the Carolina Algonkians who are historically known to have occupied the Tidewater portion of northeastern North Carolina (Phelps 1983). Suggested settlement distribution and socio political patterns for this phase included a set of polities controlled from capital towns who had within their territorial control several smaller villages and outlying farmsteads. 31BR189 and the complex of Colington Phase occupations within the project area may directly relate to one of these small villages or "hamlet" situated within the historically described Chowanoke polity. The Chowanoke polity is known to have controlled areas as far south as the Roanoke River, so logically this association is likely. What is not understood at present about the Colington phase occupation at 31BR189 is whether it persisted beyond the prehistoric into the historic period. Lacking data to address this point, any association of 31BR1899 with the Chowanoke polity is speculative. Never the less, and assuming the smaller sites of 31BR243, 244, 245 and 246 represent smaller farmsteads interspersed amongst the area, 31BR189 with its larger size may have represented the "core" or main village of a larger settlement dispersed amongst the landscape and encountered in portions of the project area. One characteristic typical of town locations during the Colington Phase was their placement along major river shorelines (Phelps 1983). 31BR189, while not directly located along the shore of the Chowan River, still likely represented a small village. Its atypical placement may be owed to the unique sheltered access granted by Salmon Creek to upper elevations where houses and arable fields could be located.

While continued plowing over the years has undoubtedly damaged or destroyed some portions of 31BR189, as is evidenced by the presence of diagnostic Archaic projectile points on the surface. There is a substantial amount of evidence to support that subsurface integrity is exceptional. Phase II testing at 31BR189 confirmed the significance of the site and its potential to yield information relevant to the regional prehistory of North Eastern North Carolina. Intact features, midden and surface densities which correlate directly with intact surface deposits suggest this potential is also widespread. Potential research questions data from this site might impart include:

• It can address chronological issues with many of the minor prehistoric ceramic series found throughout the region. As discussed earlier, there is serious confusion centered on early shell tempering in the regions. Does the use of shell as a tempering agent persist back as far as the Early

Woodland? If so, is it related to the Middle Woodland shell tempered series Mockley and Currituck, or are these parts of two separate shell tempering traditions? How are the Currituck and Mockley series related? Are the untyped clay tempered series recovered an Early Woodland continuation of the Late Archaic Croaker Landing series, or is its occurrence evidence for more of the early experimentation with all kinds of temper? Are ceramics like the untyped fine sand series found throughout the Woodland or is their occurrence affiliated solely with the Late Woodland?

- It can address the varying degree of settlement distribution across the site. Why is Archaic and Early Woodland material so limited? Also, why for instance is Mount Pleasant phase material so widely spread across the entire site while Early Woodland Deep Creek and Late Woodland Colington phase components isolated primarily towards the southern end? Are Mount Pleasant phase settlements and activity areas more dispersed or are they larger? Does this reflect a larger population during the Middle Woodland or are there other reasons for the disproportionate amount of Middle Woodland material? Is the Colington component isolated at the southern end because it is associated with a nucleated or palisade village /hamlet? What is the temporal association of the Colington component? Is it prehistoric, or does it persist into the Historic period affiliated with the Chowanoke polity?
- Given the occurrence of varying types of triangular projectile points found throughout the project area, what might be learned from recovering them in datable or stratagraphic context? Are these varieties temporally sensitive?
- It can address shifting subsistence regimes from the Early Woodland to the Late Woodland. What is the behavior behind the refuse midden? Is it a result of a focused deposition area, or are subsistence patterns of the Late Woodland producing different patterns from previous sub-periods?
- It can address regional and intersite comparisons. Are sites like 31BR189, Bandon, Davenport and Chowanoke indicative of settlement strategies within the greater northeast region, or is the area west of the Chowan river more "thickly populated" than other areas throughout the prehistoric and historic periods? Is 31BR189 the core location of a complex with smaller sites surrounding it? If so what is its role in that complex? Is it social, political or geographical? Why is this site location targeted from the early Archaic onward?

Phase II testing at 31BR189 confirmed the significance of the site and its potential to yield information relevant to the regional prehistory of North Eastern North Carolina. 31BR189 is recommended as **eligible** for nomination to the National Register of Historic Places under Criterion D. Avoidance of the site or mitigation of adverse affects through data recovery is therefore recommended.

31BR243 AND 243**

Two one-meter square test units were excavated at 31BR243 (Figure 57).

Test Unit 2000

Test Unit 2000 was placed in proximity of Shovel Test Hole Z624 to investigate the northwestern portion of the site. The unit, situated atop an undulating area, possessed very dry soil. A total of four levels were removed. Level I represented the root mat while the remaining levels were all within one natural layer. The soil consisted of a grayish brown (2.5Y5/2) sandy loam over top a light yellowish-brown (2.5Y6/3) sandy clay. Overall, the unit had a depth ranging from 20-24 cm. and no cultural features were observed at the base of the unit (Figure 58).

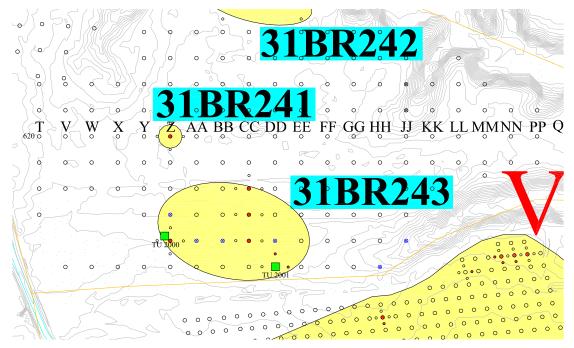


Figure 57. Location of Phase II test units at 31BR243.

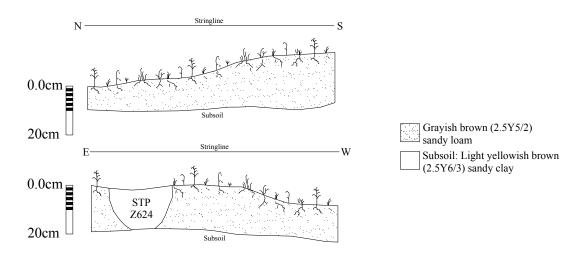


Figure.58. Representative profiles from Test Unit 2000.

Artifacts

Cultural material from Test Unit 2000 included one Mount Pleasant Fabric Impressed sherd, three Mount Pleasant Cord Marked sherds, one residual or indeterminate sherd, and three pieces of lithic debitage (2 Quartz shatter fragments and one metavolcanic).

Test Unit 2001

Test Unit 2001 was placed on level ground over Shovel Test Hole DD625 to investigate the southeastern section of 31BR243. Three levels were excavated into very dry soils. Level I included a dark gray (10YR4/1) sandy loam root mat and Level II consisted of a light yellowish-brown (2.5Y6/4) sandy loam plowzone. The remaining level consisted of what appeared to be dried-up hydric soils-a pale yellow (2.5Y7/3) sandy clay mottled with light yellowish-brown (2.5Y6/3) sandy clay. The unit was in the vicinity of previously demarcated wetlands. The final depth of the unit ranged between 25 and 29 cm. with no cultural features observed (Figure 59).

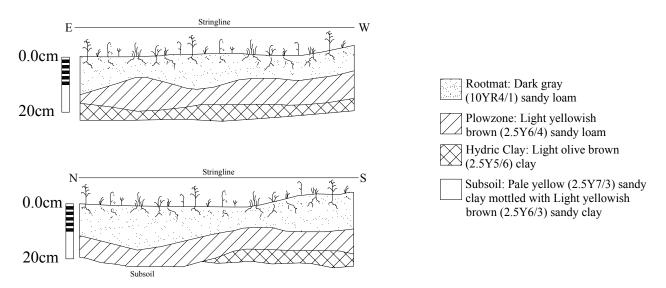


Figure 59. Representative profiles from Test Unit 2001.

Artifacts

Prehistoric cultural material from Test Unit 2001 included nine Native American Sherds: one Deep Creek Cord Marked, one Middletown Fabric Impressed, three Colington Fabric Impressed, two Colington Indeterminate and two residual fragments (Plate 22). Lithic debitage recovered included one Quartz interior flake and one Quartzite shatter fragment. Historic cultural material recovered from Test Unit 2001 included one nail (wrought head), one unidentifiable metal fragment, and three small brick fragments.

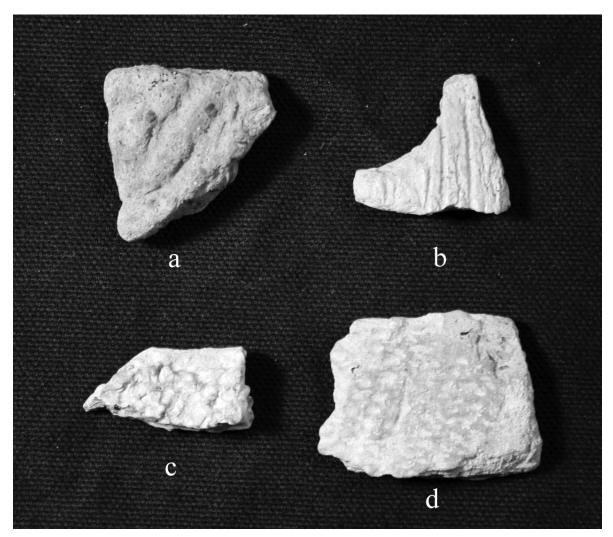


Plate 22. Representative ceramics from 31BR243. Deep Creek Cord Marked (a), Mount Pleasant Cord Marked (b), Mount Pleasant Fabric Impressed (c), Colington Fabric Impressed (d). Width of Colington Fabric Impressed sherd is 3.8 cm.

Conclusion

The Native American artifact assemblage suggests that 31BR243 was occupied throughout the Woodland Period, but never very intensely. The location of the site away from the major drainage supports the contention that use was limited. This is consistent with known land use patterns for the Early Woodland Phase where permanent base settlements were generally observed along major drainages while temporary procurement, seasonal, and camp sites typically found along stream trunks and branches. This land use pattern is likely replicated and amplified throughout the Middle and Late Woodland Phases. Adding to the spatial complexity of the cultural occupations is the effect of sea level rise on streams, wetlands and landforms over time. Interpretation of these small sites becomes much more difficult when taken in the context of ever changing environments. The Phase I survey data indicates that 31BR243 was contemporaneous with the prehistoric component of 31BR245, although they were separated by a natural wetlands boundary. Supporting this notion was the continued similarity of the two assemblages. Unlike 31BR246, which likely saw repeated visits, 31BR243's limited use suggests it use was either a peripheral occurrence to the larger site, or a limited use area for all sub-periods.

Because 31BR243's soil column was less deflated than other portions of the project area, it was assumed more productive and non-redundant deposits would be encountered. However, while excavations did produce intact material, density still remained at levels unworthy of further study. Therefore, 31BR243 is recommended as **not eligible** for nomination to the National Register.

31BR244

Three one-meter square test units, Test Unit 2010, 2011, and 2012, were placed across 31BR244 in relation to the topography as well as the shovel test holes with the highest artifact concentration (Figure 60).

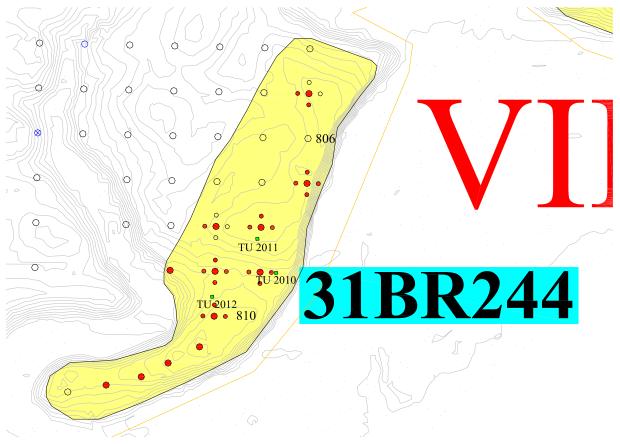


Figure 60. Location of Phase II test units at 31BR244.

Test Unit 2010

Located near Shovel Test Hole C810 west radial, Test Unit 2010 was placed along the southern edge of the site investigating an area of high artifact density. Five levels were excavated within two natural layers prior to revealing subsoil and two possible features. The large feature was sectioned and an additional four levels were removed within the feature fill before subsoil was reached. Levels I and II included the root mat and consisted of a dark grayish brown (10YR4/2) silty loam. Levels III-V all constituted the same layer-a dark yellowishbrown (10YR4/6) silty sand (Figure 61). The base of Level V revealed a light yellowishbrown (2.5Y6/4) sandy clay mottled with a brownish-yellow (10YR6/6) sandy clay subsoil. Additionally, two features were observed (Figure 62). The small feature located within the southeast corner consisted of a grayish brown (10YR5/2) sandy loam and the larger feature along the north wall consisted of a dark yellowish-brown (10YR4/4) silty sand with charcoal inclusions. Levels VI-IX reflect the removal of the west half of the large feature.

The base of Level V ranged between 38 and 42 cm. Feature 2020 had a final depth of 86 cm.

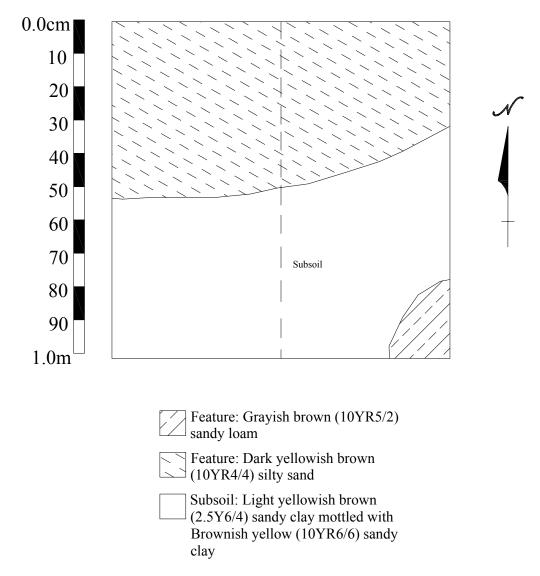


Figure 61. Plan of Test Unit 2010 and Feature 2020 at the base of Level V.

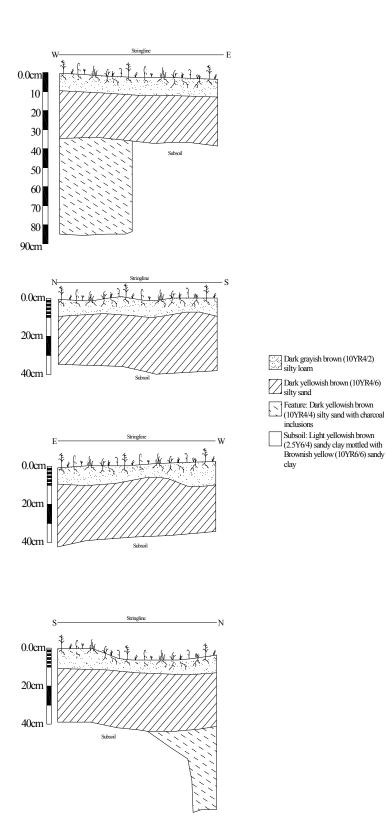


Figure 62. Test Unit 2010 profiles.

Artifacts Ceramics

		Туре
Series Types	Quantity	Percentage
Colington Fabric Impressed	24	19.8%
Colington Indeterminate	6	5.0%
Deep Creek Cord Marked	1	0.8%
Deep Creek Indeterminate	1	0.8%
Deep Creek Net Impressed	2	1.7%
Mount Pleasant Indeterminate	4	3.3%
Mount Pleasant Plain	1	0.8%
Mount Pleasant Cord Marked	8	6.6%
Mount Pleasant Fabric Impressed	48	39.7%
Mount Pleasant Net Impressed	5	4.1%
Middletown Cord Marked	2	1.7%
Middletown Fabric Impressed	7	5.8%
Middletown Indeterminate	7	5.8%
Middletown Net Impressed	5	4.1%
Residual	198	NA
Total Result	319	

Table 12. Test Unit 2010 ceramic series type totals and percentages

Table 13. Test Unit 2010 ceramic series percentages by level.

	Level								
Series Type	1	2	3	4	5	6	7	8	9
Colington Fabric Impressed		12.5%	10.5%	17.1%	33.3%	28.6%	40.0%	16.7%	
Colington Indeterminate		25.0%		4.9%	8.3%				
Deep Creek Cord Marked				2.4%					
Deep Creek Indeterminate			5.3%						
Deep Creek Net Impressed	33.3%	12.5%							
Mount Pleasant Indeterminate		12.5%			8.3%	28.6%		8.3%	
Mount Pleasant Plain									25.0%
Mount Pleasant Cord Marked			10.5%	2.4%	8.3%		20.0%		50.0%
Mount Pleasant Fabric Impressed	66.7%	37.5%	26.3%	53.7%	25.0%	28.6%	40.0%	50.0%	
Mount Pleasant Net Impressed			15.8%					8.3%	25.0%
Middletown Cord Marked			5.3%			14.3%			
Middletown Fabric Impressed			15.8%	4.9%	4.2%			8.3%	
Middletown Indeterminate			5.3%	7.3%	12.5%				
Middletown Net Impressed			5.3%	7.3%				8.3%	
Totals	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Lithics

Lithic Type	Portion	Quantity	Percentage
Biface	Fragment	1	0.30%
Deb	Interior Flake	74	29.70%
	Primary Flake Secondary	1	0.30%
	Flake	6	2.40%
	Shatter	169	67%
Projectile			
Point	Tip	1	0.30%
Total Result		252	100%

Table 14. Test Unit 2010 lithic totals and percentages.

Feature 2020

Feature 2020 was revealed at the base of Level V in the northern portion of Test Unit 2010 and is likely affiliated with the Colington component at the site. It possibly represents a refuse pit or perhaps the edge of a small midden which extended down slope. Observed depth of feature was approximately 40 cm.

Artifacts

Excavated contents include 3 unidentified faunal fragments, 2 unidentified botanical fragments, 1 charred nut fragment, 114 lithic artifacts and 71 prehistoric ceramics representing Middle and Late Woodland phases (Table 15). A single construction/reduction episode from a clear-orange quartz core may have contributed to the high frequency of lithics found within this feature as most debitage was from this same material.

Material	Material Type	Portion	Affiliation	Quantity	Type Percents
Botanical			Indeterminate	2	66.67%
			Nut Charred	1	33.33%
			Total	3	100.00%
Faunal	Bone	Fragment		3	
			Total	3	100.00%
Lithic	Biface	Fragment		1	0.88%
	Core			1	0.88%
	Cracked Rock			21	18.42%
	Debitage			28	24.56%
		Interior Flake		13	11.40%
		Shatter		49	42.98%
	Geological Specimen			1	0.88%
			Total	114	100.00%
Native			Colington Fabric Impressed	6	23.08%
American			Mount Pleasant Indeterminate	1	3.85%
Ceramic			Mount Pleasant Plain	1	3.85%
			Mount Pleasant Cord Marked	3	11.54%
			Mount Pleasant Fabric Impressed	10	34.62%
			Mount Pleasant Net Impressed	2	7.69%
			Middletown Cord Marked	1	3.85%
			Middletown Fabric Impressed	1	8.00%
			Middletown Net Impressed	1	3.85%
			Residual	45	NA
			Total	71	100.00%
Total				191	
Result					

Table 15. Feature 2020 artifact totals.

Test Unit 2011

Test Unit 2011 was situated within the lowest portion of the site, along the eastern edge with a moderate artifact density. A total of seven levels were excavated. Level I consisted of a very dark grey brown (10YR3/2) sandy loam root mat. Levels II-VI were removed arbitrarily but consisted of two natural layers with subtle differences not seen during the excavation. Layer A was comprised of a yellowish-brown (10YR5/4) loamy sand and Layer B consisted of a yellowish-brown (10YR5/6) loamy sand. Level VII marked a change in the stratigraphy, Layer C, and consisted of light yellowish-brown (2.5Y6/4) loamy sand. The last layer appears to be the transition into subsoil comprised of light yellowish-brown (2.5Y6/4) loamy sand mottled with a pale yellow (2.5Y7/4) (Figure 63). A feature was observed in the bottom of Test Unit 2011(Figure 64). There were no artifacts present on the surface of the feature. The feature was not tested and the field interpretation was that it likely is a tree hole.

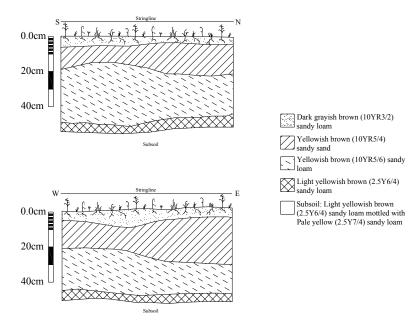


Figure 63. Representative profiles from Test Unit 2011.

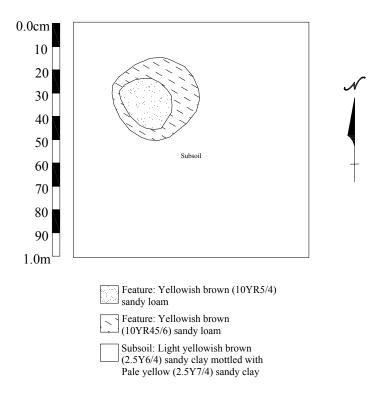


Figure 64. Plan of Test Unit 2011 showing possible feature.

Artifacts Ceramics

		Туре
Series Types	Quantity	Percentage
Colington Fabric Impressed	1	1.6%
Colington Indeterminate	2	3.3%
Deep Creek Indeterminate	1	1.6%
Deep Creek Net Impressed	3	5.0%
Mount Pleasant Cord Marked	11	18.0%
Mount Pleasant Fabric Impressed	6	9.8%
Mount Pleasant Net Impressed	33	54.1%
Middletown Cord Marked	2	3.3%
Middletown Net Impressed	2	3.3%
Residual	12	NA
Total Result	73	

Table 16. Test Unit 2011 series type totals and percentages

Lithics

A total of 5 lithic artifacts, none of which diagnostic, were recovered from Test Unit 2011. These include two metavolcanic interior flakes and 3 quartz shatter.

Test Unit 2012

Test Unit 2012 was placed in the vicinity of Shovel Test Hole C812 to investigate the depth of artifacts revealed in the shovel test hole. In total, nine arbitrary levels were excavated within four natural layers. With the exception of the root mat, the remaining three layers were visible in the profile and were difficult to distinguish during the excavation. Level I was a dark brown (10YR3/3) sandy loam root mat. Levels II and III were comprised of a yellowish-brown (10YR5/6) sandy loam. Levels IV-VII consisted of an olive yellow (2.5Y6/6) silty loam. The remaining two levels also were an olive yellow (2.5Y6/6) silty loam but were mottled with a strong brown (7.5Y5/8) sandy clay.

The final depths ranged between 79 to 80 cm. along the south wall and 83 to 95 cm. along the north wall. Subsoil consisted of a strong brown (7.5Y5/8) sandy clay with some mottling of a pale yellow (2.5Y7/4) sandy loam (Figure 65).

Artifacts

Ceramics

Only 5 Native American ceramics were recovered from Test Unit 2012 excavations. These included 2 Colington Series sherds, 1 Mount Pleasant series sherd and 2 Residual sherds.

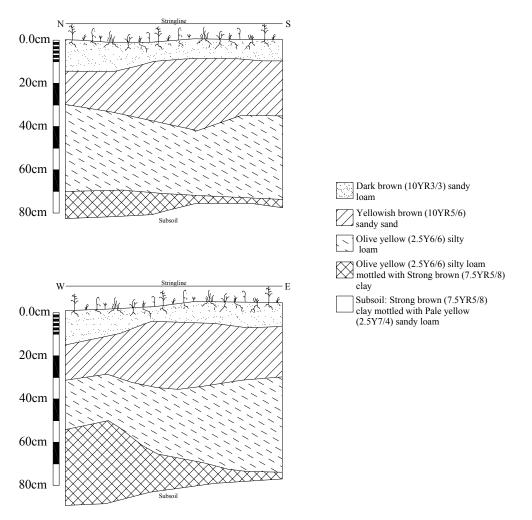


Figure 65. Representative profiles from Test Unit 2012.

Lithics

Table 17. Test Unit 2012 lithic totals and percentages	Table 17.	2012 lithic totals and percentages.
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Lithic Type	Portion	Quantity	Percentage
Cracked Rock		20	32.8%
Debitage	Interior Flake	14	23.0%
	Primary Flake	2	3.3%
	Secondary Flake	1	1.6%
	Shatter	22	36.1%
Geological Specimen		1	1.6%
Ground Stone		1	1.6%
Total Result		61	100.0%

31BR244 Artifact Summary

Lithic Artifacts

Prehistoric materials recovered from 31BR244 included 448 lithic artifacts (Table 18). A single diagnostic projectile point was recovered from Test Unit 2010 Level III and is best described as an eared triangular whose form resembles that of the Yadkin/Hamilton type, typical of some Middle and Late Woodland assemblages (Plate 23). Other tools include unifaces and ground stones. Non tool lithic artifacts include metavolcanic, quartz and quartzite debitage, shatter and cracked rock fragments.

Ceramics Artifacts

A total of 397 ceramic sherds were recovered during test excavations (Plate 24). Measuring less than 1/2" in diameter, the majority (N = 212) of these sherds were considered residual, counted, but not analyzed. Typical other Woodland ceramic assemblages for the region, the remaining sherds and their stratigraphic context for the most part validate the accepted ceramic chronologies of the region (Table 19).

Faunal Remains

Faunal materials recovered from 31BR244 were generally unidentifiable except in cases where shell was encountered. As with bone, shell generally was eroded to the point where accurate species identification was impossible.

Botanical Remains

Six charred botanical fragments were covered from excavations though none can be accurately be assigned as a cultural byproduct. These materials were likely produced through the natural burn cycles of forest.

Lithic Type	Qty	Percent
Biface	5	1.12%
Core	2	0.45%
Cracked Rock	106	23.66%
Debitage	322	71.88%
Geological Specimen	7	1.56%
Ground Stone	1	0.22%
Projectile Point	3	0.67%
Uniface	2	0.45%
Total Result	448	100.00%

Table 18. 31BR244 lithic type totals

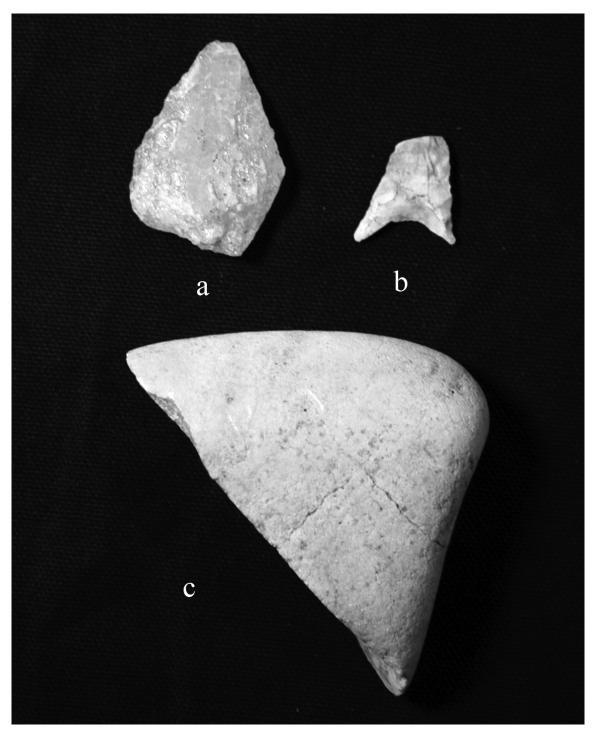


Plate 23. 31BR244 select lithic objects: quartz late stage biface with cortex still present (a), eared triangular (b) ground stone fractured from heat (c). Basal width of eared triangular is 2 cm.

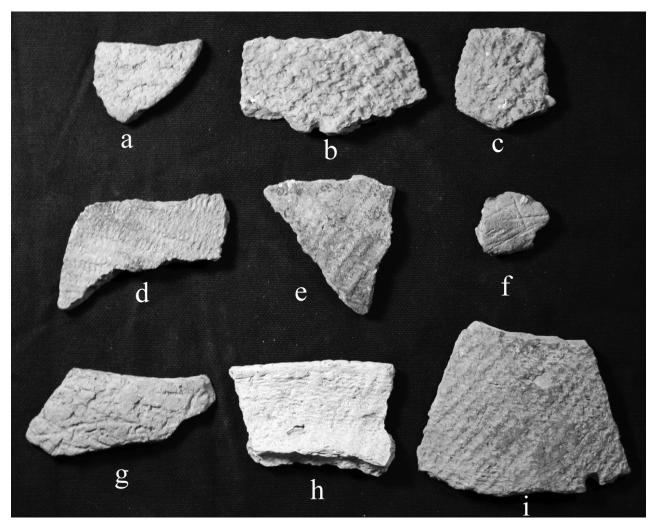


Plate 24. Representative ceramics from 31BR244. Deep Creek Cord Marked (a), Mount Pleasant Net Impressed (b,c), Mount Pleasant Fabric Impressed (d,e), Mount Pleasant Cord Marked (f), Middletown Cord Marked (g), Colington Fabric Impressed Everted Rim with notched lip (h), Colington Fabric Impressed (i).Width of Colington Fabric Impressed rim is 6.8 cm.

Conclusion

Assessment of 31BR244's artifact assemblage suggests that the locality was most intensively occupied during the Middle Woodland period, as evidenced by the preponderance of Mount Pleasant (63.24 percent) and Middletown (11.3 percent) series ceramics in the overall assemblage. Minor frequencies of Early Woodland period Deep Creek (4.27 percent) series sherds, as well as moderate frequency of Late Woodland period Colington (18.92 percent) series sherds, complete the prehistoric ceramic assemblage. Previous Phase I testing at 31BR244 produced a minor occurrence of Late Woodland period Cashie and no Late Woodland Colington ware. Phase II excavations recovered an opposite pattern, and demonstrated a much stronger Late Woodland presence than previously reasoned. Considering the close proximity of 31BR244 likely represents a landform likewise targeted by all periods. The moderate amount of

Colington ceramics suggest only limited use of the area during that phase; however as suggested previously 31BR244 was likely associated and used in conjunction with 31BR189. To what extent is not apparent at this stage. There is some indication of permanent use of the site during the Late Woodland in the way of possible storage or trash pits (Feature 2020).

Series Types	Quantity	Type Percentage
Deep Creek Cord Marked	1	0.54%
Deep Creek Net Impressed	5	2.70%
Deep Creek Indeterminate	2	1.08%
Mount Pleasant Plain	1	0.54%
Mount Pleasant Cord	20	10.81%
Mount Pleasant Fabric Impressed	54	29.19%
Mount Pleasant Net Impressed	38	20.54%
Mount Pleasant Indeterminate	4	2.16%
Middletown Cord Marked	4	2.16%
Middletown Fabric Impressed	7	3.78%
Middletown Net Impressed	7	3.78%
Middletown Indeterminate	7	3.78%
Colington Fabric Impressed	25	13.51%
Colington Indeterminate	10	5.41%
Residual	212	
Total	397	

Table 19. 31BR244 series type totals and percentages.

In addition to the pottery assemblage, a Middle-to-Late Woodland period eared triangular projectile point (metavolcanic Yadkin), a late stage quartz biface (likely the beginnings of a large Roanoke), and a modest quantity of lithic debitage (greenstone, jasper, metavolcanic, quartz, quartzite) were recovered from subsurface contexts. Consisting primarily of quartz shatter and secondary reduction/bifacial thinning flakes, the site's lithic assemblage materially represents a range of stone tool production and maintenance activities. Worthy of note is the lack of ceramic material from Test Unit 2012. Placed at the far end of the finger ridge 31BR244 sits upon, Test Unit 2012 produced a disproportionate number of ceramics (n=5) to lithics (n=39), contrary to other unit patters this likely represented a lithic activity area separate from the main portion of the site. Although, while no artifacts securely assigned to the Archaic were recovered, it is also plausible this portion of the site saw more Archaic period activity contemporary with other sites in the project area.

Based on the Phase II evaluation, 31BR244 should be considered of significant research value for potential research questions data it might impart. These include but are not limited to the following:

• What would data from the deepest, minimally disturbed, soil column strata within the entire project area demonstrate about the project area prior to modern cultivation? It appears from testing that what

disturbances there are at 31BR244 took place as it was occupied during the Woodland, particularly the Late Woodland. What might be the reason for this?

- What are the varying purposes for small sites like 31BR244 being situated so close to low swampy locations? Are these sites temporary? Are the features or disturbances associated with a more permanent land use?
- Given the occurrence of varying types of triangular projectile points found throughout the project area, what might be learned from recovering them in datable or stratagraphic context? Are these varieties temporally sensitive?

Phase II testing at 31BR245 confirmed the significance of the site and its potential to yield information relevant to the regional prehistory of North Eastern North Carolina. Intact soils and features suggest this potential is also widely spread across the small landform and at great depths. Therefore 31BR244 is recommended as **eligible** for nomination to the National Register of Historic Places under Criterion D. Avoidance of the site is recommended. The current Bal Gra development master plan indicates no plans to develop this site.

31BR245

The Phase II at 31BR245 consisted of a controlled surface collection and the excavation of nine mechanically excavated test trenches (Figure 66).

Controlled Surface Collection

The controlled surface collection at 31BR245 recovered a total of 736 historic period artifacts consisting principally of ceramics and glass that spanned the eighteenth and nineteenth centuries (Table 20). In addition, a concentration of brick was observed on the surface of the field that included numerous handmade brickbats and near whole bricks (Plate 25). The quantity of various types of English white saltglazed stoneware in the ceramic assemblage suggests that the site originated in the 1720's (Table 21). The presence of relatively large numbers of sherds of creamware, pearlware, and porcelain indicate that use of the site continued unbroken through the eighteenth century, while predominance of whiteware in the assemblage, in conjunction with the Albany slipped stoneware, indicates that the site continued to be occupied at least until c. 1820.

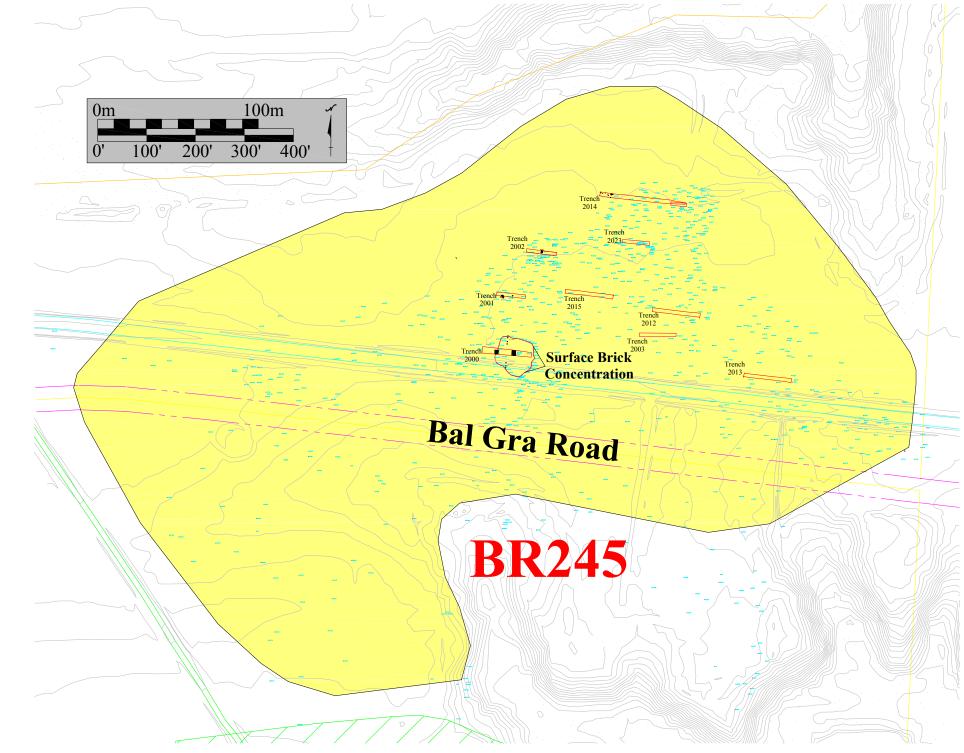


Figure 66. Location of test trenches at 31BR245. Blue marks the location of surface eighteenth-century artifacts

Artifact Type	Count
Nails, wrought	2
Nails, cut	4
Nails, unidentifiable	8
Ceramics	558
Tobacco Pipes, ball clay	18
Tobacco Pipes, local	2
Glass, wine bottle	51
Glass, case bottle	2
Glass, window	7
Glass, green bottle	10
Glass, aqua	13
Glass, amethyst	12
Glass, milk	13
Glass, cobalt	1
Glass, amber	1
Glass, colorless	12
Glass, colorless-solarized	16
Glass, green	3
Button, milk glass	3

Table 20. Total artifact collection from the surface of 31BR245.



Plate 25. Example of brick concentration on surface of 31BR245.

Ceramic Type	Count	% of Total
Aboriginal	61	10.93
Agateware	2	.36
Canaryware	1	.18
Coarse ware	5	.90
Buckley ware	6	1.08
Coarse Lead	5	.90
Coarse Local	10	1.79
Coarse Staffordshire	1	.18
Coarse Staffordshire Ironglaze	1	.18
Colonoware	18	3.23
Creamware	15	2.69
Delft	2	.36
Pearlware	60	10.75
Porcelain	23	4.12
Rockingham	3	.54
North Italian Pisa Slipware	1	.18
Staffordshire Slipware	9	1.61
Staffordshire Comb/Trail Slipware	7	1.25
Albany Slip Stoneware	37	6.63
American Blue and Grey Stoneware	2	.36
American Brown Stoneware	6	1.08
Bristol Glaze Stoneware	1	.18
English Brown Saltglazed Stoneware	1	.18
English Nottingham Stoneware	2	.36
English White Saltglazed Stoneware	9	1.61
English White Salt-Dot/Diaper/Basket	5	.90
Stoneware		
English White Saltglazed Scratch Blue	1	.18
Stoneware		
English White Salt Slip Dipped	2	.36
Stoneware		
Ginger Beer Stoneware	2	.36
Rhenish Brown Stoneware	1	.18
Rhenish Brown Frechen Stoneware	2	.36
Rhenish Westerwald Stoneware	1	.18
Rhenish Westerwald Blue/Purple	2	.36
Sprig Stoneware		
Unidentified Stoneware	4	.72
Unidentified	7	1.25
Whiteware	241	43.19
Yellowware	2	.36
Total	558	100

Table 21. Analysis of ceramic assemblage collected from the surface of 31BR245.

Subsurface Testing

Nine machine-cut test trenches were excavated across 31BR245 (see Figure 65). Test Trench 2000 was cut through a brick concentration found on the surface during the Phase I survey; Test Trenches 2001, 2002, 2014, and 2023 were cut through artifact concentrations that were identified by the controlled surface collection; Test Trenches 2003, 2012, and 2013 were cut to check the area of a pond that is part residential development master plan; and Test Trench 2015 was cut to a gap between the test trench locations. The plowzone across the site was generally about 1 ft. 2 in. deep.

Test Trench 2000

Test Trench 2000, approximately 60 ft. (18.2 m.) long, exposed sections of the foundations of the east and west walls of a major structure (Plate 26). The foundations consisted of handmade brick that was bonded with crushed shell mortar, suggesting that the building was constructed in the eighteenth century. The foundation walls were at least two-bricks wide with a construction, or builder's trench on the on the outside of the foundation. They may have been two-and-one-half wide, or perhaps even three bricks wide, but it was difficult to determine whether the jumble of bricks along the inside of the foundation (Plates 27 and 28). Most of the bricks in the foundations (and on the surface), measured 3 7/16 in. x 7 10/16 in. x 1 5/16 in. They are smaller than those generally employed in foundations and are commonly used as paver bricks. The small bricks also were extremely high-fired to over-fired; many of the bricks have been found on colonial sites in Virginia and Maryland and as far south as Charleston and are believed to have been made in New England (Graham 2008).



Plate 26. Test Trench 2000 at 31BR245 showing sections of brick foundations for east and west walls of a major structure, facing south.



Plate 27. Test Unit 2011 revealing section of west foundation at 31BR245, facing south.

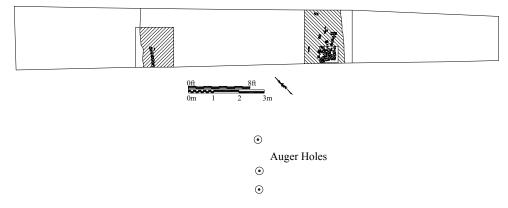


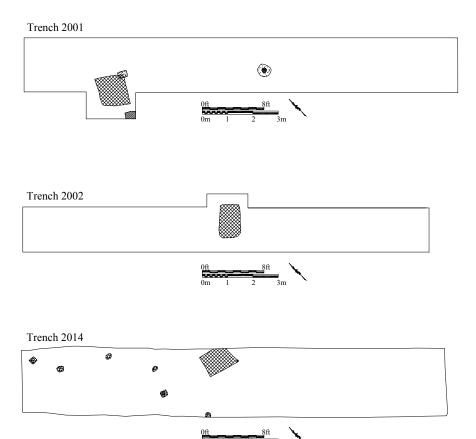
Plate 28. Section of east foundation wall of 31BR245, facing south.

The exterior width (east-west) of the building was approximately 24 ft. (7.3 m.). A series of auger holes were made north and south of Test Trench 2000 along the centerline of the building in an effort to determine the length of the building based on locating the limits of the fill within the foundations in contrast to the surrounding subsoil. The auger holes suggest that the building is at least 34 ft. (10.3 m.) long (north-south) and could be as much as 38 ft. (11.5 m.) long (Figure 67). Test Unit 2011 was excavated



Trench 2000





0ft 0m 1 3m

Figure 67. 31BR245 test trenches that contained intact subsurface features.

across the south end of the west foundation and encountered subsoil at a depth of about two feet below modern grade, indicating that was a crawl space and not a basement under the building, at least in this location (see Plate 27). Numerous ceramics were recovered from the fill in the crawlspace including Colonoware, English white saltglazed stoneware, Bartmann, Yorktown coarseware, Buckley ware, Nottingham stoneware, and Staffordshire slipwares – combed/trailed and dotware. These finds, and the absence of pearlware, imply that the building was destroyed during the third quarter of the eighteenth century.

Test Trench 2001

Test Trench 2001 contained several historic period features including a subfloor pit and postholes. The subfloor pit, or root cellar, measured approximately 4.25 ft. x 4.50 ft. (1.29 m. x 1.37 m.). The northeast corner of the subfloor pit cut through a small posthole, presumably for an earthfast building that contained the feature (Plate 29). There was also a small postmold/posthole in the center of the test trench (see Figure 66).



Plate 29. Subfloor pit in Test Trench 2001, note northeast corner of pit cutting through a posthole, facing south.

Test Trench 2002

Test Trench 2002 contained a second subfloor pit a (Plate 30). This subfloor pit measured 4.3 ft. x 2.5 ft. (1.3 m. x 7 m.) and presumably was located within a building though no evidence of a structure was found (see Figure 66). No other features were observed in the test trench.



Plate 30. Subfloor pit located in Test Trench 2002, facing south, three foot scale and one meter scale.

Test Trench 2014

Test Trench 2014 was the northernmost test trench excavated on the site and contained a third subfloor pit (Plate 31). The subfloor pit in Test Trench 2014 measured



Plate 31. Subfloor pit in Test Trench 2014, facing south, three foot scale and one meter scale.

4.1 ft. x 2.8 ft. (1.2 m. x .8 m.), roughly the same size as the subfloor pit in Test Trench 2002. A small postmold/posthole was located about five feet west of the subfloor pit, thought the postmold/posthole is not large enough to a structural hole. Several other small postmold-like features were found at the west end of the test trench.

No features were found in any of the other test trenches.

Conclusion

The Phase II significance evaluation survey at 31BR245 revealed that the site dates to at least c. 1720 and contains substantial intact subsurface features. A small number of ceramics were recovered from the site that could date to the last quarter of the seventeenth century including North Italian Pisa slipware, Buckley ware, Staffordshire slipware, Staffordshire combed/trailed slipware, and Staffordshire ironglaze coarseware, however these ceramics do not necessarily indicate a seventeenth-century context as they all, except for the North Italian Pisa slipware, were made throughout most of the eighteenth century.

The brick foundations located in Test Trench 2000 belong to a building that measured at least 22 ft. x 34 ft. (7.3 m. x 10.3 m.) and almost certainly represents the principal dwelling at the site, and likely erected in the early eighteenth century. A twobrick wide foundation could support a one-and-one-half storey brick building or a larger frame building. The quantity of brick seen on the surface of the site suggests that this was a frame on brick structure.

The subfloor pits found in Test Trenches 2001, 2002, and 2014 almost certainly signal the location of outbuildings, and consequently indicate that the service area of the plantation was on the north side of the house. This interpretation is further supported by artifact distributions. Colonoware ceramics, thought to have been made by either Native Americans and/or enslaved Africans during the period c. 1650-1830, were related to food preparation and storage activities that would have taken place in the service yard. A plot of the location of all the Colonoware found at the site shows a distinct clustering around Test Trench 2002 and extending toward Test Trench 2001 (Figure 68). A near identical pattern was found for the distribution of other food preparation and storage ceramics that included all the coarsewares and Buckley ware (Figure 69).

Sub-floor pits have increasingly been the focus of research by historical archaeologists studying African-American history and culture in recent years. Beginning in the latter decades of the seventeenth century, many Chesapeake slaves adopted a distinctive method of expanding the useable space within their quarters by digging small cellars into the floors of their dwellings. Several hundred of these sub-floor pits, ranging from cubby holes the size of a shoe box to pits that could have accommodated a large chest of drawers, have been excavated on Chesapeake slave sites, (see e.g., Kelso 1984; Kimmel 1993; Neiman 1997; Samford 2000). Slaves used sub-floor pits for a variety of purposes including as hiding places for concealing goods, as root cellars for the storage of crops such as potatoes, as cold storage units for food, as personal storage lockers, as sources of clay for construction of the chimney and hearth, and perhaps even as religious shrines (see Kelso 1984:200-204; Kimmel 1993; May and Deetz 1997; Samford 2000). In the early eighteenth century it was not unusual to find a dozen or more sub-floor pits under the floor of a slave quarter. However, by the American Revolution, it is more

common to encounter only one or two sub-floor pits or none at all, in a typical slave quarter. By the second quarter of the nineteenth century sub-floor pits disappear almost completely (Fesler 2004).

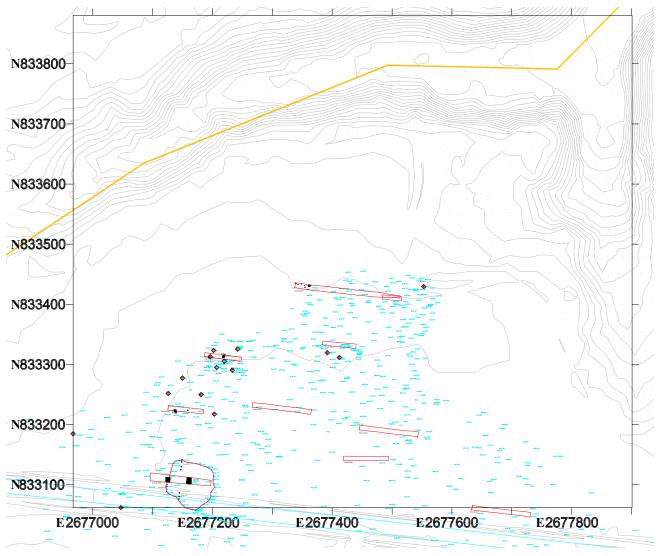
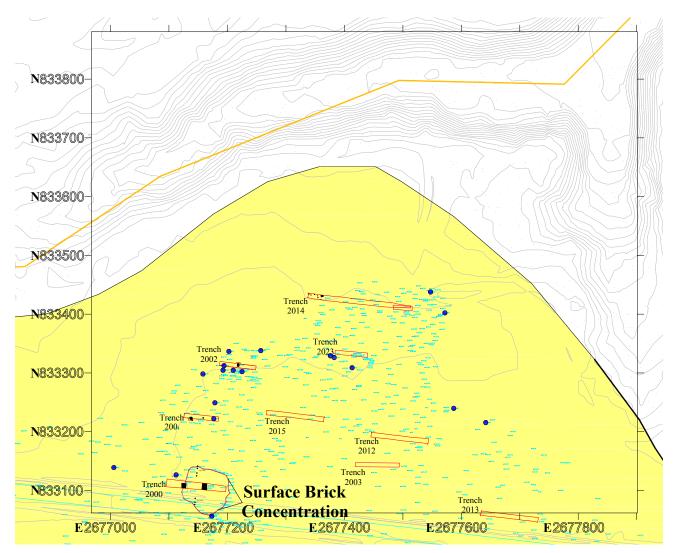
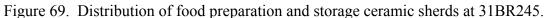


Figure 68. Distribution of Colonoware sherds at 31BR245.





The distribution of refined earthenware ceramics for food service and consumption – English white saltglazed stonewares, creamwares, pearlwares, and porcelain – consisted of a widespread scatter across the site with again a strong concentration round Test Trench 2002 (Figure 70). The distribution of these ceramics is likely a good indicator of the core of the site.

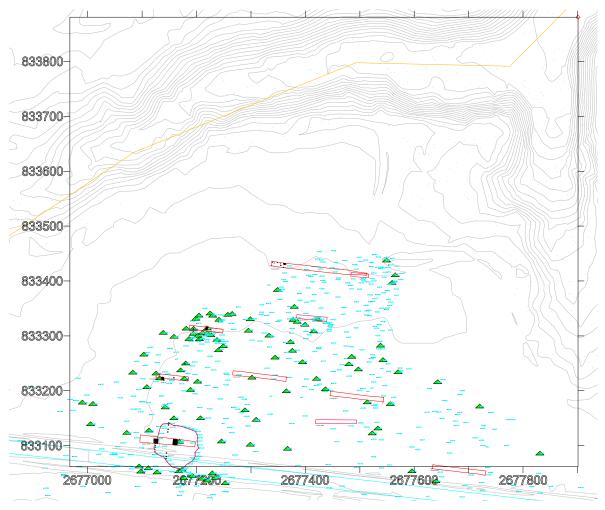


Figure 70. Distribution of refined serving ceramics and porcelain at 31BR245.

The three subfloor pits found at 31BR245 suggest that there is a complex of dependencies in the apparent service yard to the north of the dwelling house. Presumably there would be few, if any, buildings to the south of the dwelling as this area typically would have been devoted to a formal garden. Colonial gardens that have been plowed after the demise of the site usually leave an archaeological footprint of only a posthole pattern for fence lines that enclosed the garden.

The archaeological evidence found at 31BR245 seemingly conflicts with the local tradition that the Pollock Plantation house was further to the west and has been lost to erosion of the Chowan River. In fact, it has been reported that the basement of the Pollock house can seen be seen at extreme low tide. One possible explanation is that the conjectural basement in the Chowan River belongs to a building that post-dates the colonial Pollock Plantation location at 31BR245. Alternately, if the colonial Pollock Plantation complex is east of the project area, and 31BR245 represents a major quarter site.

31BR245 does have a Native American component as described in the Phase I survey. However, no Native American features were found in the test trenches at 31BR245.

The Phase II survey of 31BR245 revealed that beneath the plowzone stratum are numerous well-preserved archaeological features associated with the historic period Pollack plantation, and therefore contain significant research value. Site 31BR245 is recommended as being eligible for nomination to the National Register of Historic Places under Criterion D. It has the potential to provide information on an array of research questions including the architecture and material culture of an eighteenth-century elite planter in the Albemarle region; plantation layout comprising principal dwelling, dependencies, quarters, and likely gardens and yards represented by posthole patterns; and the nature of housing and possessions for slaves at a home plantation. Avoidance of the site or mitigation of adverse affects is recommended. Currently there are no plans to develop the site. The current Bal Gra development master plan does propose a pond to the east of 31BR245, however Test Trenches 2003, 2012, and 2013 were excavated across the east and west boundaries of the proposed pond and found no features. Archaeological monitoring of the pond construction is recommended as peripheral structures such as tobacco barns typically would not be detected by either Phase I or Phase II surveys, and could be found only by stripping of the plowzone from large areas.

31BR246

Three one-meter square test units, Test Unit 2004, 2005, and 2010, were excavated at 31BR246 (Figure 71).

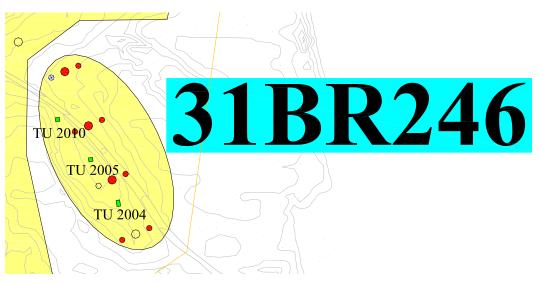
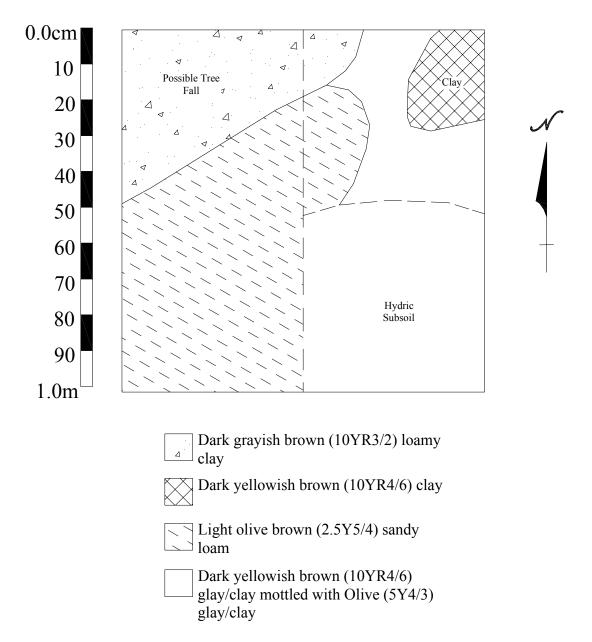


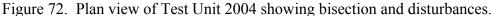
Figure 71. Location of test units at 31BR246.

Test Unit 2004

Test Unit 2004 was placed in the vicinity of Shovel Test Hole AJ806 and shifted south due to a very large tree stump. This unit was disturbed from unknown sources, possibly by an adjacent tree root system. The eastern half of the unit was excavated to subsoil to investigate soils in the test unit (Figure 72). Five levels were excavated within three natural layers.

Levels I, II and III consisted of a very dark grayish brown (10YR3/2) sandy loam. This layer possibly indicates plowzone. Level IV, excavated in the east half of the unit, consisted of a light yellowish-brown (10YR5/4) sandy loam while Level V consisted of a dark yellowish-brown (10YR4/6) sandy clay. Hydric soils were observed within the unit and the unit itself was in close proximity to wetlands. Subsoil was a dark yellowish-brown (10YR4/6) clay mottled with olive (5Y4/3) clay (Figure 73).





The Phase II archaeological significance survey discovered an historic component at 31BR246 that was not identified by the Phase I survey. Levels I, II, and III in Test Unit 2004 produced 21.5g of brick, four wrought nail shanks, a base fragment from a glass wine bottle, four small nondescript pieces of iron, one small piece of copper alloy, part of a locally-made tobacco pipe bowl, and historic ceramics. The ceramics, all small sherds, consisted of one sherd of Surrey/Hampshire Borderware (c. 1480-1900), three sherds of North Devon Plain Slipware (c. 1610-1710), and two sherds of Tudor Green Borderware (c. 1600-1700). All the historic period artifacts are consistent with a component that dates to the second half of the seventeenth century.

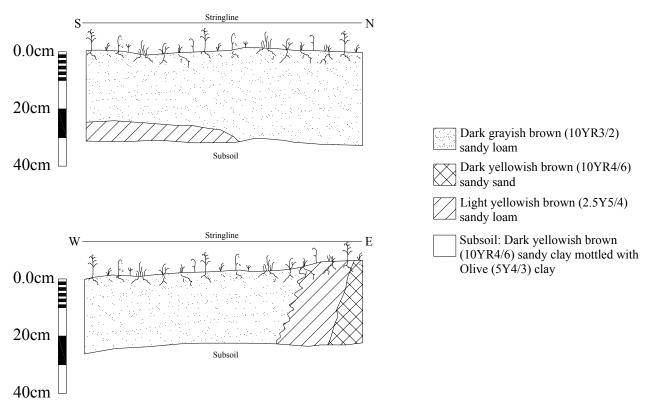


Figure 73. Representative profiles from Test Unit 2004.

Test Unit 2005

Test Unit 2005 was located in the vicinity of Shovel Test Hole AJ805. A total of seven arbitrary levels were excavated within six natural stratigraphic layers. The layers are subtle in change. Subsoil was reached at a depth of 60 cm. in the south end to 70 cm. in the north end of the unit. No cultural features were observed.

Levels I, II and consisted of an olive brown (2.5Y4/3) sandy loam and encompassed the root mat. Level IV marks a soil change and was comprised of an olive brown (2.5Y4/3) mottled with a light yellowish-brown (2.5Y6/4) sandy loam. Level V in the north end of the unit consisted of a dark yellowish-brown (10YR4/6) sandy loam mottled with a light yellowish-brown (2.5Y6/4) sandy loam while the south half of the unit consisted of a pale yellow (2.5Y7/4) sandy loam. Level VI consisted of the pale yellow (2.5Y7/4) sandy loam. Level VII was the transition into subsoil and consisted of the pale yellow mottled with yellowish brown (10YR5/8) clay. Subsoil was a yellowishbrown (10YR5/8) clay (Figure 74).

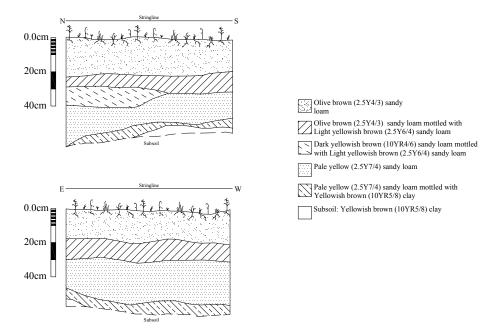


Figure 74. Representative profiles from Test Unit 2005.

Test Unit 2010

Test Unit 2010 was placed in the vicinity of Shovel Test Hole AJ804. A total of five arbitrary levels within three natural layers were excavated. A feature, possibly tree disturbance, was observed within the northeast corner of the unit (Figure 75). The south

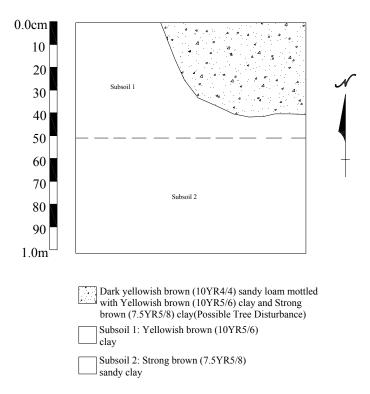


Figure 75. Plan view of Test Unit 2010 with disturbance in northeast corner.

half of the unit was taken down to investigate the subsoil. No other cultural features were observed. The final depth of the unit was approximately 50 cm. below ground surface.

Level I consisted of a black (10YR2/1) fine sandy loam and included the root mat. Levels II and III consisted of a very dark grayish brown (10YR2/1) fine sandy loam. Levels IV and V consisted of a yellowish-brown (10YR5/6) fine sand with inclusions of subsoil seen within Level V. Subsoil was a strong brown (7.5YR5/8) sandy clay (Figure 76).

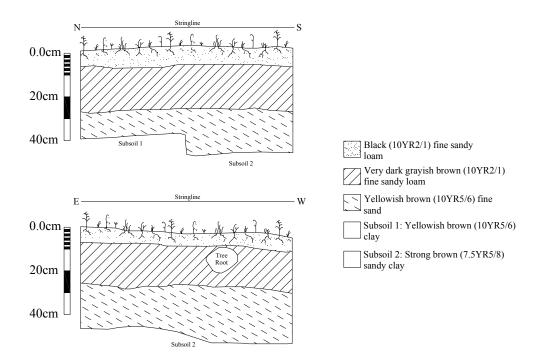


Figure 76. Representative profiles from Test Unit 2010.

31BR246 Artifact Summary

Lithic Artifacts

Prehistoric materials recovered from 31BR246 included 115 lithic artifacts (Table 22). Recovered during testing, two fragmented triangular points represent the only diagnostic lithic type encountered. They are a ubiquitous occurrence at Middle and Late Woodland Coastal Plain sites, but lacking proper sequencing of their varying morphologies (large vs. small, equilateral vs. isosceles, flat base vs. eared) their usefulness as a chronological phase markers is limited. While convenient to call upon triangular chronologies from other regions, caution is suggested until more of them from datable context are recovered. That noted assignment of phase affiliation for these points is limited to the Middle and Late Woodland Phases of the region. Non tool lithic artifacts included metavolcanic, chert, quartz and quartzite debitage, shatter and cracked rock fragments. A possible gray gun flint not necessarily associated with 31BR246** was also recovered.

Lithic Type	Quantity	Percentage
Biface	4	3.48%
Core	1	0.87%
Cracked Rock	38	33.04%
Debitage	68	59.13%
Geological		
Specimen	2	1.74%
Projectile Point	2	1.74%
Total Result	115	100%

Table 22. 31BR246 lithic type totals.

Ceramic Artifacts

A total of 498 ceramic sherds representing five separate series were recovered during test excavations at 31BR246 (Table 23). Measuring less than 1/2" in diameter, the majority (N = 208) of these sherds were considered residual, counted, but not analyzed or typed (Plate 32).

Table 23.	31BR246 series type totals and percent	tages.
1 auto 25.	51DR240 series type totals and percent	agos.

Series Types	Quantity	Type Percentage
Deep Creek Cord Marked	10	3.45%
Deep Creek Net Impressed	17	5.86%
Deep Creek Indeterminate	27	9.31%
Mount Pleasant Cord Marked	26	8.97%
Mount Pleasant Net Impressed	22	7.59%
Mount Pleasant Fabric Impressed	54	18.62%
Mount Pleasant Indeterminate	5	1.72%
Middletown Cord Marked	5	1.72%
Middletown Net Impressed	11	3.79%
Middletown Fabric Impressed	11	3.79%
Middletown Indeterminate	4	1.38%
Colington Fabric Impressed	69	23.79%
Colington Simple Stamped	12	4.14%
Colington Plain	2	0.69%
Colington Indeterminate	6	2.07%
Fine Sand Cord	1	0.34%
Fine Sand Fabric Impressed	3	1.03%
Fine Sand Plain	2	0.69%
Fine Sand Indeterminate	3	1.03%
Residual	208	
Total	498	

Faunal Remains

No faunal remains were encountered during testing at 31BR246.

Botanical Remains

One charred botanical fragment was recovered from test excavations, and can not be accurately assigned as a cultural byproduct. This fragment was likely produced through the natural burn cycles of forest.

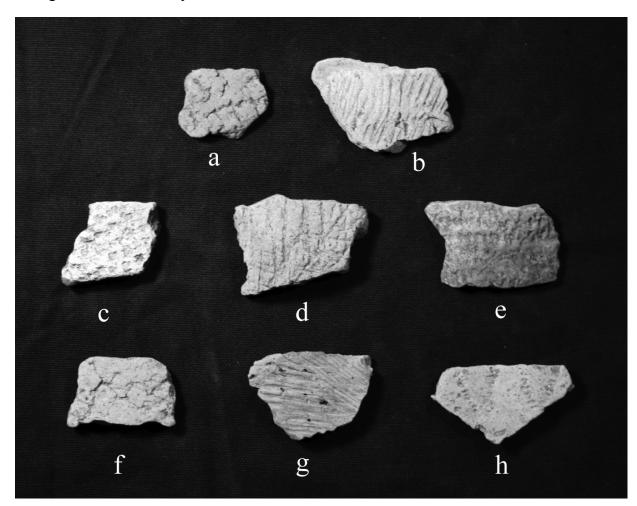


Plate 32. Representative ceramics from 31BR246. Deep Creek Net Impressed (a), Deep Creek Cord Marked (b), Mount Pleasant Net Impressed Rim (c), Mount Pleasant Cord Marked (d), Mount Pleasant Fabric Impressed (e), Middletown Net Impressed (f), Colington Simple Stamped (g), Colington Fabric Impressed Rim Interior, note paddle edge impressions forming chevrons (h). Width of Colington Rim is 5.4 cm.

Conclusion

Assessment of 31BR246's prehistoric artifact assemblage suggest that it was most intensively occupied during the Middle Woodland period, as evidenced by the preponderance of Mount Pleasant (36.9 percent) and Middletown (10.68 percent) series ceramics in the overall assemblage. Low frequencies of an untyped fine sand series (3.09 percent) and Early Woodland period Deep Creek (18.62 percent) series sherds, as well as

moderate frequencies of Late Woodland period Colington (30.69 percent) series sherds complete the prehistoric ceramic assemblage. While a slightly higher amount of Middle Woodland material suggests the site was occupied more during that sub-period, moderate amounts of Colington series ceramics likewise suggest substantial occupation during the Late Woodland.

Considering the close proximity of 31BR246 to the much larger multi-component 31BR189, the topography and wetlands isolating it, 31BR246 likely represents a landform similarly targeted and likely affiliated. It probably saw continued revisits during the Early Woodland perhaps an element of a larger permanent Early Woodland base site at 31BR189. The high percentage of Middle Woodland ceramics is common throughout all sites in the project area, suggesting a much more broad use of the land during that period. Consequently, we can assume any Middle Woodland component at 31BR246 represented a permanent presence with several discrete activity areas. Perhaps 31BR246 itself represented a discrete activity area affiliated with 31BR189? Its close position near the mouth of Salmon Creek allowed quick access by boat to the creek, Chowan River, and Albemarle Sound where fishing, trading etc would have taken place.

Culminating in the Late Woodland, Colington phase occupation at 31BR246 likely represented a continuously reused area affiliated with 31BR189. This affiliation may be carried over from Middle Woodland where it was likely used as an access point to surrounding waters.

In addition to the pottery assemblage, two Middle-to-Late Woodland period triangular projectile points and a small quantity of lithic debitage (metavolcanic, chert, quartz, quartzite, and schist) were recovered from subsurface contexts. Consisting primarily of quartz shatter and secondary reduction/bifacial thinning flakes, the site's lithic assemblage materially represents a range of stone tool production and maintenance activities.

The historic artifacts recovered from 31BR246 strongly suggest that there was some form of activity at the site in the second half of the seventeenth century. This activity might be associated with either the Nathaniel Batts settlement south of Salmon Creek or the beginning of the establishment of the Pollock plantation of the property.

Potential research questions data from this site might impart include:

- Is 31BR189 part of a larger site complex? Given its association with the larger site 31BR189, what is the function of these small component sites situated just beyond core occupation areas? Is site use limited to specific task such as sheltered river access where perhaps fish were processed or is use similar to other Woodland sites on small landforms?
- Given the occurrence of varying types of triangular projectile points found throughout the project area, what might be learned from recovering them in datable or stratagraphic context? Are these varieties temporally sensitive?
- There are known Algonkian villages in the area, how might the Colington component of this site relate to them?

• Is the European historic material associated with Algonkian trade networks (Nathaniel Batt's trading post noted at the mouth of the Roanoke River), or is it part of the initial Pollock settlement.

Phase II testing at 31BR246 confirmed the significance of the site and its potential to yield information relevant to the regional prehistory and history of North Eastern North Carolina. It is determined **eligible** under Criterion D for nomination to the National Register of Historic Places. Avoidance of the site or mitigation of adverse affects is recommended. Currently there are no plans to develop the site.

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