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North Carolina Archaeology

Volume 47 October 1998

CONTENTS

ARCHAEOLOGICAL HISTORY AND HISTORICAL ARCHAEOLOGY: REVISITING THE EXCAVATIONS AT BRUNSWICK TOWN, 1958–1968

by
Thomas E. Beaman, Jr., Linda F. Carnes-McNaughton, John J. Mintz, and Kenneth W. Robinson

Abstract

This year marks the fortieth anniversary of the archaeological rediscovery and the beginning of scientific excavations at Brunswick Town. Archaeology conducted at the site from 1958 until 1968 was crucial to the development of Brunswick Town into an historical park, which later became a State Historic Site. This study summarizes the archaeological investigations conducted at Brunswick Town during this decade, considers what these excavations revealed about the town, and emphasizes the importance of these excavations in the history of archaeology in North Carolina.

"Archaeology without history has no fruits; history without archaeology has no roots." – Mrs. Johns of St. Fagans, South Glamorgan, Wales (personal communication to Linda Carnes-McNaughton, 1991)

Located on the west bank of the Cape Fear River in what is now Brunswick County, Brunswick Town was for many years a "lost town." It was deserted and partially destroyed during the Revolutionary War and reoccupied for only a brief time afterwards. By 1842, when the land was sold to Dr. Frederick J. Hill for $4.25 and reincorporated as part of Orton Plantation, the town had been long abandoned and was partially overgrown by vegetation (North Carolina Land Grants, CL:150). The earthworks of Fort Anderson, a Civil War-period Confederate fort, were constructed over a portion of the town site in the early 1860s. In the 1890s, James Sprunt, owner of nearby Orton Plantation, described the foundation walls of Russellborough (the former residence of colonial governors Arthur Dobbs and William Tryon at Brunswick Town) as being only two feet above the surface of the ground and "hidden in a dense undergrowth of timber" (Sprunt 1916:105). By the mid-twentieth century Brunswick Town survived in the minds of North Carolina historians as little more than a historical footnote. Only the high brick walls of St. Philip's Church remained visible in the woods and thick undergrowth as a silent marker of the once thriving colonial port town.

In the late 1950s, owing largely to the efforts of three important individuals—E. Lawrence Lee, William S. Tarlton, and Stanley A. South—Brunswick Town was rediscovered. The town became the subject of an extensive archaeological project from 1958 until 1968. This study summarizes unpublished data about these excavations and reviews this research in an historical perspective. Revisiting this period of research at Brunswick Town is informative, not only for an understanding of how the archaeological excavations were conducted and what they revealed, but because the investigations represent an important chapter in the history of archaeology in North Carolina. Though of nineteenth-century historical interest, the Civil War-period occupation of the area by soldiers of Fort Anderson is not considered in this study.

Archaeological History: Developing and Implementing the Archaeological Research Design

The potential value of archaeological resources at Brunswick Town was first realized in the late nineteenth century by historian James Sprunt. In the 1890s, Sprunt enlisted the aid of a former slave at Orton Plantation to show him the location of Governor Tryon's former residence at Brunswick Town. Sprunt later wrote:

> We proceeded at once to the spot . . . [and] found hidden in a dense undergrowth of timber the foundation walls of Tryon's residence. . . . The stone foundation walls of the house are about two feet above the surface of the ground. . . . A careful excavation of this ruin would doubtless reveal some interesting and possibly valuable relics of Governor Tryon's household [Sprunt 1916:105–106)].

Sprunt also noted "fragments of blue Dutch tiling" and "peculiarly shaped bottles" near the surface of Russellborough, the former governors' residence (Sprunt 1916:106). Later, during the excavation of Russellborough in 1966, South noted that the ruin had been dug into in several places, but "the holes seldom reached sufficient depth to disturb the cellar floors or the plaster layer covering them" (South 1967a:366). The disturbances noted by South were likely the result of Sprunt's early exploration of the site.

Over half a century later, historian Lawrence Lee began to research Brunswick Town. While a graduate student in history at the University of North Carolina at Chapel Hill, Lee wrote his Master's thesis in 1951 on the history of Brunswick Town, under the tutelage of prominent North

Carolina historian Hugh T. Lefler. As part of his thesis research, Lee gathered sale and transfer information about the town lots from deeds. He found the standard lot size to be 82.5 ft wide by 264 ft deep. Also, he was able to identify the names of several streets. With these data, Lee was able to reconstruct Maurice Moore's original lot plan of Brunswick Town (Lee 1958:Appendix B).

On December 7, 1951, at the fifty-first Annual Meeting of the North Carolina Literary and Historical Association, Lawrence Lee presented one of the first scholarly papers on the history of Brunswick Town. Lee concluded his paper with the following remarks:

> It is obvious from this paper that there are many things not known about the town of Brunswick. This is especially true of its physical aspects. Some of these gaps might be filled by later documentation; others only by archaeological investigation. Brunswick is an ideal location for a project of this nature. It has not been occupied to any significant extent since the time it was a thriving colonial seaport. Today it is covered with wild growth and surface deposits accumulated over a period of almost two centuries. Excavation under this surface would yield several interesting results. It would reveal the form and layout of a colonial village unadulterated by later occupancy; foundations would reveal much about the architecture of the buildings, and of the nature of their construction; artifacts would tell us much of the everyday lives of the people. These findings, viewed as the remains of a type rather than of a single, isolated community, would have more than local significance. Brunswick could well be the North Carolina counterpart of the Jamestown excavations [Lee 1952:245].

Inspired by Sprunt's earlier writings and possibly influenced by John Cotter's excavations at Jamestown, Virginia (cf. Cotter 1958), Lee recognized the potential for archaeological investigations at Brunswick Town.

As Superintendent of Historic Sites in North Carolina, William S. Tarlton had also recently realized the value of archaeology at historic sites. As shown in Figure 1, during the early 1950s he conducted archaeological investigations as part of the initial restoration of Somerset Place, a nineteenth-century plantation located near Creswell in eastern North Carolina (Tarlton 1954). Following this project, Tarlton was hired in 1955 by the North Carolina Department of Archives and History to head the newly-formed Historic Sites Section (William S. Tarlton, personal communication 1998). Through the efforts of Tarlton and Lee, the land for Brunswick Town was acquired by the State of North Carolina later that same year.

Figure 1. William S. Tarlton excavating a brick walkway at Somerset Place in April 1953. Tarlton's experience at Somerset Place greatly influenced the development of Brunswick Town into an historic park by making archaeology a major component of the research design. Courtesy of Historic Sites Section, North Carolina Department of Cultural Resources.

Whether conducting an archaeological field school or preparing an environmental impact assessment for the widening of a road, a well-crafted research design is essential to the success of any project. The same was true 40 years ago. At Brunswick Town, the early archaeological research was conducted as part of a plan developed by Tarlton to turn the site into an historic park. This two-phase plan included first identifying and mapping as many of the foundation ruins as possible, and then correlating the physical remains of the ruins to their locations as shown on the 1769 Sauthier Map. The second phase was to develop an area of the town for public visitation by restoring streets to their original locations, clearing and excavating ruins, and marking the ruins with interpretive signs for visitors (Lee 1958:2). Based on Lee's knowledge of Brunswick Town's history, Tarlton made arrangements for Lee to conduct the first phase of archaeological exploration and site development (William S. Tarlton, personal communication 1998).

REVISITING THE EXCAVATIONS AT BRUNSWICK TOWN

Lawrence Lee began the first scientific archaeological investigations at Brunswick Town on June 9, 1958. He used the northeast corner of the extant remains of St. Philip's Church as a base point for mapping and identifying ruins (Lee 1958:4). Using Sauthier's map as a guide, Lee and his two-person field crew began clearing brush, noting any above-ground structural remains, and conducting small test excavations to determine if the ruin dated to the colonial period (Lee 1958:4–5). This area was chosen as a starting point for several reasons. First, as illustrated in Figure 2, there were no earthworks related to the Civil War-period Fort Anderson. It was assumed the construction of the earthworks either destroyed or buried any intact colonial-period deposits on the northern portion of the site (Lee 1958:7). Secondly, this area was located between two major features of the natural landscape, a deep gully in the middle of the site and a low, swampy area on the southern end of the site. The low, marshy area would eventually prohibit Lee and his crew from continuing to clear and map ruins south of the Public House structure (Lee 1958:6).

After noting a number of foundation ruins, Lee soon discovered a north-south stone retaining wall with a semicircular inset, a unique architectural feature which was also shown on Sauthier's map of the town. Parallel east-west walls which met the ends of the north-south wall measured a distance of 82.5 ft apart, the same size of a town lot as stated in the deeds. The fortuitous discovery of this lot wall gave Lee the ability to integrate his lot plan and deed information with the physical remains and Sauthier's map, as shown in Figure 3 (Lee 1958:Appendix A). Thirty-four above-ground features were recorded by Lee during this phase of the project. Lee appeared pleased with his initial efforts, even if it covered only a small area of the total site. He later commented that "along these streets we found, in varying degrees of preservation, the remains of every major [domestic] structure shown by Sauthier to have existed" (Lee 1958:9).

Though he was very interested in the further exploration of Brunswick Town, Lawrence Lee had been teaching history at The Citadel in Charleston, South Carolina since 1956. He soon realized he could not continue the full-time archaeology and other duties that would be required to turn the site into an historical park. Fortunately, Tarlton knew of someone with both the archaeological training and practical experience necessary to develop the site into an historical park. He offered the job to Stanley South, who had already been working under Tarlton as site manager and archaeologist at Town Creek Indian Mound since 1956 (Coe 1995:32–33; William S. Tarlton, personal communication 1998).

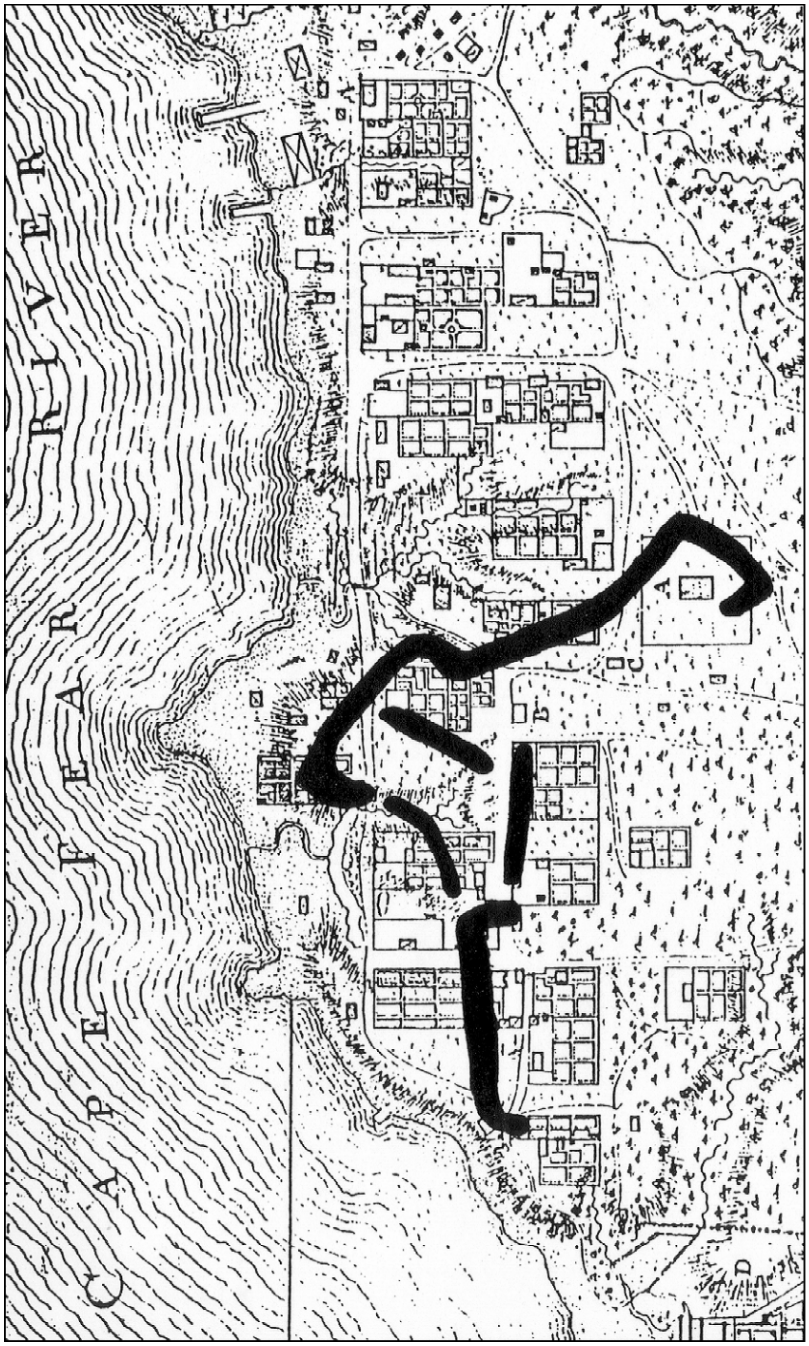

Figure 2. Portion of the 1769 Sauthier Map of Brunswick Town combined with the location of the Fort Anderson earthworks. The earthen mounds were an obvious obstacle to early archaeological explorations of the site. Not surprisingly, they were also a determining factor in the areas chosen for excavation within the colonial-period town.

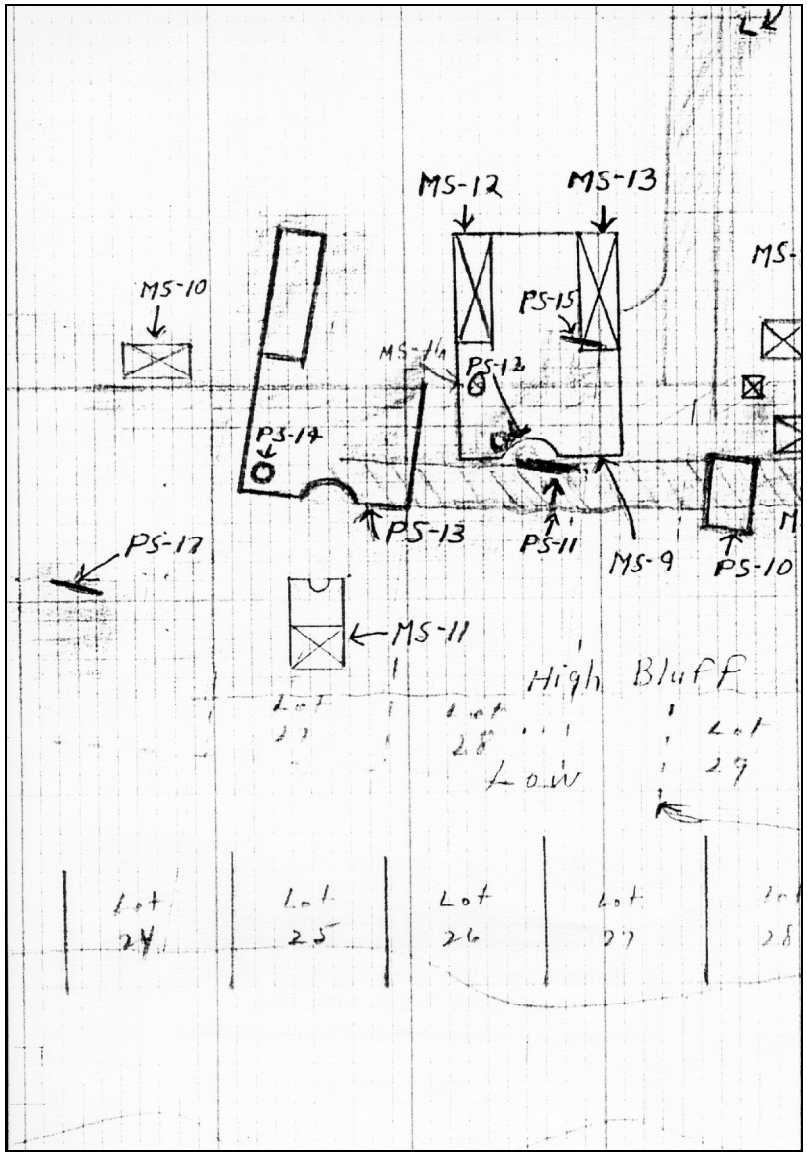

Figure 3. A detail from Lawrence Lee's field map of Brunswick Town based on his archaeological investigations. Each structure or architectural feature to the south of the archaeological base line, either as shown on the Sauthier Map ("M") or discovered at the site ("P"), was categorized with an "S" and an individual reference number. The feature shown, a stone wall with a curved semi-circular inset, provided Lee the critical clue to combine the Sauthier Map with his field map and lot plan. Courtesy of Historic Sites Section, North Carolina Department of Cultural Resources.

Figure 4. Stanley A. South studies a copy of the 1769 Sauthier Map of Brunswick Town from atop the Fort Anderson earthworks. South's training in archaeology and anthropology greatly contributed to the success of the Brunswick Town archaeological project. Courtesy of the North Carolina Division of Archives and History.

On August 1, 1958, Stanley Austin South arrived to begin what would be a decade-long position at Brunswick Town as site manager and archaeologist (Figure 4). South would later note that he was cautioned against the move by a colleague who "assured me that making this change in data bases would put an end to any hope that I might have for a career in archaeology. He assured me that I would find nothing of interest on historic sites" (South 1994:168). Lewis R. Binford, a classmate of South's at the University of North Carolina at Chapel Hill in the early 1950s, remarked that South embraced historical archaeology "because it was the only way he could stay in the region and not be told what to do [by his former graduate advisor who was a prehistorian]" (Thurman 1998:36).

Working with Lee, South immediately began a systematic survey of the site and generated a base map of the extant remains of the church and recorded ruins (South 1960a). The physical features identified by Lee

appeared on the base map to be oriented about four degrees to the east of north from their two-dimensional counterparts on the 1769 Sauthier Map (See Figure 3). Lee (1958:8) noted in his report that "this discrepancy might result from error in our own measurement as well as in the Sauthier map." South's base map also included an overlay of Lee's reconstructed lot plan and the locations of the Fort Anderson earthworks.

Lee and South assigned individual numbers to the ruins by using Lee's reference point on the northeast corner of St. Philip's Church. Using a base line which stretched between the northeast corner of the church and the Cape Fear River, structural ruins identified to the north of the line were given an "N" prefix and a number, and any ruins to the south of the same line were designated with an "S" and a number (South 1962a). Though many ruins at Brunswick Town are still referred to by this system, the present system of identification developed by the Historic Sites Section involves a state site number, followed by a lot number, and a specific component number of that lot. For example, any subsurface feature (e.g., cellar, well, smokehouse, etc.) associated within a specific lot receives a corresponding component number. Specific names for individual ruins and architectural features were later coined by South based on information found in property transfer records. These names were often based on the lot's first owners, such as "Nath Moore's Front" and the "Newman Kitchen," and occasionally for sequential owners, such as the "Jones-Price Ruin" and the "McCorkall-Fergus House."

Based on the number of above-ground ruins located between the deep gully and the low, marshy area of the site, South and Lee made the decision to develop that area of the site for public visitation (Lee 1958:9). The preservation of the Fort Anderson earthworks was also considered in this decision (Lee 1958:7). Following two weeks of working together, Lee officially turned the project over to South at a brief ceremony on August 15, 1958, with William S. Tarlton and several local dignitaries present.

Excavation of foundation ruins was part of the next phase in the plan for developing the site. From September of 1958 until May of 1968, South oversaw the continued identification, testing, and excavation of many domestic structures, outbuildings, wells, and public buildings in areas designated for future public access. South fondly remembers his field crew from these early excavations being comprised primarily of African-American men from Southport who made their primary living as menhaden (shad) fishermen and worked with South at Brunswick Town in

Figure 5. South's field crew of fishermen/archaeologists excavating on the Leach-Jobson House, May 1968. Courtesy of Historic Sites Section, North Carolina Department of Cultural Resources.

their off-season (South 1994, 1995) (Figure 5). In addition to excavating structures, South continued to identify and test structural ruins in the northern part of the site. Much of the site was still so overgrown that South decided to burn away the undergrowth, which he remembered as ironic considering the fate of some structures in the original town (Stanley South, personal communication 1998).

Eventually a total of 60 colonial-period architectural features were identified, and 23 of these were excavated (see Table 1). Though the excavations were primarily focused on the central and southern portion of the town site, South searched for several ruins on the north end of town that were shown on the Sauthier Map. These test excavations, such as the one at Prospect Hall (South n.d.m), revealed that in most cases, sites buried under the earthworks of Fort Anderson retained a high degree of contextual integrity. To date, the only ruin located beneath earthworks to have been extensively tested and excavated was the Newman-Taylor House (Figure 6). Any portion of the earthworks subjected to

Table 1. Brunswick Town Architectural Features as Excavated by Year.

South Identification Number (1962a)	Historic Sites' Identification Number	Name of Excavated Feature	Reference
1958 Excavations			
N7	31Bw376**78*1	Courthouse	Field notes
S10	31Bw376**29*1	Nath Moore's Front	South 1962b
1959 Excavations			
N1	31Bw376**120*1	Jones-Price Ruin	South n.d.a
N4	31Bw376**77*1	Newman Kitchen	South n.d.b
N21	31Bw376**344*1	Brick oven at Prospect Hall	South n.d.c
N22	31Bw376**8	"Gaol"	South n.d.d
S2	31Bw376**75*1	Roger Moore House	South n.d.e
S7	31Bw376**71*2	Hepburn-Reonalds House	South n.d.f
S12	31Bw376**28*2	Judge Maurice Moore's Well	Field notes
S15	31Bw376**28*3	Judge Maurice Moore's Kitchen	South n.d.g
S18	31Bw376**71*3	McCorkall-Fergus House	South n.d.h
1960 Excavations			
S13	31Bw376**27*1	Wall Around Lot 27	South n.d.i
S25	31Bw376**27*3	Public House and Tailor Shop	South n.d.j
1961 Excavations			
N41	31Bw376**77*2	Newman-Taylor House	South n.d.k
1962-1963 Excavations			
S11	31Bw376**28*1	Judge Maurice Moore House	South 1963a
S20	31Bw376**28*4	Judge Maurice Moore's Smokehouse	South 1963a
1966 Excavations			
N50	31Bw556**1	Russellborough House	South 1967a
N51	31Bw556**2	Russellborough Kitchen	South n.d.l
S1	31Bw376**1	Saint Philip's Church	South n.d.l
1968 Excavations			
N14	31Bw376**40*1	Richard Quince House	Field notes
S8	31Bw376**31*2	James Espy House	Field notes
S9	31Bw376**30*1	Leach-Jobson House	Field notes
S27	31Bw376**30*2	Leach-Jobson Well	Field notes

Field notes are on file at the North Carolina Historic Sites Section, Archaeology Branch, Raleigh.

Figure 6. The Newman-Taylor House was the only colonial-period ruin buried under the earthworks of Fort Anderson to have been fully excavated. The remarkable condition of the Newman-Taylor House remains a promising sign that other ruins buried under the earthworks may be equally well preserved. Courtesy of Historic Sites Section, North Carolina Department of Cultural Resources.

archaeological investigation was reconstructed following the completion of each testing or excavation.

Technical reports were written by South for many of the colonial-period and Civil War-period ruins tested and excavated at Brunswick Town from 1958 until 1968. South also provided a much richer portrait of life in the town by preparing progress reports on the excavations and papers on detailed artifact studies. These were provided to the public through a series of articles in the quarterly Brunswick County Historical Society Newsletter. Additionally, a manuscript detailing much of Brunswick Town's history and early archaeological work, intended for the general public, was written (South 1960b).

The success of the archaeological program at Brunswick Town led South to conduct archaeological investigations at many other historic sites throughout North Carolina. This was part of a public archaeology program started by Tarlton and South to assist other historic sites and non-

profit organizations across North Carolina. This program was designed to assess the potential for future archaeological work at other sites and to help develop certain sites into historical parks for the public (William S. Tarlton, personal communication 1998). While serving as both archaeologist and site manager at Brunswick Town, South tested and excavated historic sites in Asheville (South 1968a), Bath (South 1960c, 1960d, 1960e, 1960f, 1965a), Beaufort (South 1965b, 1966a), Charlotte (South1965c), Fayetteville (South 1968b), Fort Dobbs (South 1967b), Fort Fisher (South 1960g, 1961, 1963b, 1964a), Greensboro (South 1960h), Halifax (South 1965d, 1965e, 1967c), Hertford (South 1963c), New Bern (South 1962c, 1963d, 1964b), Pineville (South 1964c), Swansboro (South 1962d, 1962e, 1962f), Wilmington (South 1962g), and rather extensive excavations in the Moravian communities of Bethabara and Salem (South 1964d, 1965f, 1966b, 1966c, 1972). South's legacy and contributions to historical archaeology in North Carolina have led most historical archaeologists working in the state to feel as if they were following in South's footsteps. Noted one newly-arrived archaeologist: "Since I've been here, I have not investigated an historic site without having found that South had been there before me" (Ewen 1997:85).

In 1968, South left Brunswick Town for Raleigh where he continued his job as Staff Archaeologist for the North Carolina Department of Archives and History. The next year, he joined the South Carolina Institute for Archaeology and Anthropology and moved to Columbia. Since his departure from Brunswick Town, only limited excavations have since been conducted at the site. These small-scale investigations have been associated with specific improvements to the site, such as the expansion of a nature trail for visitors (Schneider 1976), clearance for a walkway at St. Philip's Church, construction of an amphitheater, clearance for a wayside exhibit shelter and utility trench (Carnes-McNaughton and Harper 1995), and installation of new interpretive signs (Harper 1996). The general protection and maintenance of the Brunswick Town State Historic Site are today managed by the Historic Sites Section's current preservation policy.

Historical Archaeology: The Physical Aspects of Brunswick Town

The archaeological excavations conducted at Brunswick Town from 1958 until 1968 made lasting contributions to the field of historical archaeology. Numerous artifact studies were generated by South, including a catalog of ceramic types (South 1959, 1962h), a study of kaolin pipe stem dating (1962i), and a typology of eighteenth- and nineteenth-century buttons (South 1964e). Mean ceramic dating, the

Brunswick pattern of refuse disposal, and the Carolina Artifact Pattern, theoretical concepts presented in South's *Method and Theory in Historical Archaeology* (1977), were also formulated using data from the Brunswick Town excavations. However, it is important to consider what the archaeological investigations revealed about the physical aspects of the town itself.

The Excavated Structures: Architecture, Conjecture, and Preservation

The archaeology conducted by Lee and South at Brunswick Town provided information on the physical aspects of many of the colonial-period structures. All of the foundations of domestic structures excavated were constructed of chert or flint ballast stones and cemented with tabby, a locally-produced mortar consisting of sand, lime, crushed oyster shells, and water (Lounsbury 1994:366). Hand-made bricks were used for chimneys in these dwellings. Bricks were also most often used as floor pavers, although physical evidence for wooden floorboards was found at the Hepburn-Reonalds House (South n.d.f), the James Espy House (South, field notes), the Leach-Jobson House (South, field notes), Nath Moore's Front (South 1962b), and the Judge Maurice Moore House (South 1963a). Cobblestone flooring was also found at the Hepburn-Reonalds House (South n.d.f) (Figure 7). It appears that the bricks used at Brunswick Town were manufactured locally, most likely at a brick kiln found several miles to the north of the town near the mouth of Town Creek. This kiln site also was excavated by South (1963e). Only the small Dutch bricks, used as floor pavers and in the construction of hearths and partition walls in Russellborough, were thought to have been imported (Lounsbury 1994:48; South 1967a:366, 367, 368). Interestingly, the size of all the domestic structures excavated at Brunswick Town complied with the 1745 Act passed by the provincial legislature, which specified the minimum requirements of 20 ft long by 16 ft wide for a residence (Clark 1904:241).

Public buildings at Brunswick Town were not built from ballast stones and tabby. St. Philip's Church was constructed of brick and oyster-shell mortar. The "gaol" (or jail) and the courthouse appear to have been

Figure 7. Archaeological investigations of the domestic ruins at Brunswick Town revealed many architectural details of the former residences. For example, this photograph of the excavated Hepburn-Reonalds ruin illustrates a ballast stone foundation, with hand-made bricks used for the chimney, a terrace, and pier supports for a porch. The remains of burned planking from a wooden floor are also visible. Courtesy of Historic Sites Section, North Carolina Department of Cultural Resources.

impermanent structures, or structures without stone or brick foundations (South n.d.d, field notes). Because stone-walled foundations guided the initial part of the research design and the subsequent excavations, very little is known about the impermanent architecture of Brunswick Town, which should be an objective of future study.

Based on archaeological evidence, conjectural drawings of many structures at Brunswick Town were initially formulated by South (1962j). Specific details of these drawings, such as porch design and window size and placement, were recently reviewed in light of 30 years of new research on eighteenth-century vernacular architecture in the North Carolina coastal plain region (Carnes-McNaughton 1997:5). These new drawings, as well as South's original interpretations, are on file at the Historic Sites Section Archaeology Branch. Some of the new drawings have also been included on recently installed interpretive signs at the Brunswick Town State Historic Site.

The condition of many excavated foundations has deteriorated since the 1960s. Much of this deterioration is due to natural weathering from exposure to the elements, as well as from visitors climbing on and walking inside of the ruins. New methods of preservation are presently being researched to supplement South's original preservation plan for the exposed foundations (South 1968c). One of these studies has yielded additional information about the architecture of Russellborough (Stephens 1997).

Archaeology and the Sauthier Maps

The Sauthier maps have been and continue to be an integral tool in understanding the layout of North Carolina's colonial-period towns. These maps were created for the British Board of Trade, who charged Governor William Tryon with having a survey conducted of "all the considerable landing places and harbours of Our said Province" (Powell 1980:209). From 1768 until 1770, Tryon's surveyor Claude Joseph Sauthier produced measured maps of 10 towns: Hillsborough, Brunswick Town, Bath, New Bern, Edenton, Halifax, Wilmington, Cross Creek, Salisbury, and Beaufort. These maps illustrate detailed spatial accounts at a fixed point in time, and as such, have been used as a type of "aerial photograph" by historians and archaeologists (Allcott 1963:9; Carnes-McNaughton 1992).

Such was the case of the initial exploration of Brunswick Town. Lawrence Lee and Stanley South used the 1769 Sauthier Map of Brunswick Town to locate ruins of structures illustrated on the map. This method of comparing buildings shown on Sauthier's town maps with archaeological remains has subsequently been applied to a lesser extent to colonial-period discoveries in New Bern (Kelso et al. 1994; Lautzenheiser et al. 1994; Zawacki 1997), Cross Creek (Robinson 1986a, 1986b, 1986c, 1989a, 1989b), Hillsborough (Carnes 1987:158), and at State Historic Sites in Edenton, Bath, and Halifax (Carnes-McNaughton 1992).

While black-and-white copies of the Sauthier maps have been in the North Carolina Archives for a number of years, a recent exhibit featuring early maps of the southeastern United States allowed many historians and archaeologists their first look at color photographs of the original Sauthier maps. The most striking feature of the Sauthier maps was the many structures colored in red. On each map, a number of public buildings such as churches, courthouses, and "gaols" (jails), along with private buildings such as residences and detached kitchens, and industrial sites such as mills and tanneries were colored in red on the original maps.

While the precise function of each red-colored structure remains undetermined, evidence from Lee's and South's archaeological investigations at Brunswick Town strongly suggest that red may have been used by Sauthier to indicate structures occupied or in-use at the time of his survey in April 1769. The map of Brunswick Town shows 51 structures colored in red, which corroborates J. F. D. Smyth's contemporary traveler's description of Brunswick Town as having "fifty or sixty houses" (Smyth 1784:88). Using this theory of the red-colored structures, the Sauthier maps were further studied to roughly compare the population of Brunswick Town with other North Carolina towns of the period, as shown in Table 2. This comparison resulted in the delineation of three distinct size categories for North Carolina's colonial towns: large (New Bern, Edenton, and Wilmington), medium (Hillsborough, Halifax, Brunswick Town, Cross Creek, and Salisbury), and small (Beaufort and Bath). When compared to the other towns, Brunswick Town appeared to have been a medium-sized town, while its rival Wilmington appeared to have been over twice its size. As a larger town, Wilmington most likely would have provided adequate housing as well as a more desirable center of social activity, a potential reason why Brunswick Town was not resurrected after the American Revolution.

Table 2. Number of Structures Shown as Extant or Occupied on the Sauthier Maps of North Carolina.

Town	Date of Map	Number of Structures Colored Red
New Bern	May 1769	149
Edenton	June 1769	133
Wilmington	December 1769	128
Hillsborough	October 1768	76
Halifax	June 1769	59
Brunswick Town	April 1769	51
Cross Creek	March 1770	46
Salisbury	March 1770	46
Beaufort	August 1770	27
Bath	May 1769	21

Archaeology of the Abandonment and Reoccupation

Archaeological excavations further aided historians and archaeologists in the study of Brunswick Town's initial abandonment and brief reoccupation. Documentary and archaeological evidence suggests that Brunswick Town was totally abandoned by April or May of 1776. At this time North Carolina Colonial Governor Josiah Martin met with British generals Cornwallis and Clinton at Fort Johnson, located south of Brunswick Town at the mouth of the Cape Fear River. While encamped in the area, British troops raided plantations along the Cape Fear River (Cross 1975; Lee 1952:243–244). Archaeological evidence indicates that a few residences, such as the Jones-Price Ruin and the McCorkall-Fergus House, were abandoned prior to this time. It is possible these were vacated as the result of a 1769 hurricane in which many houses and the courthouse at Brunswick Town were blown down (Saunders 1890:71). While this was not the only hurricane recorded in the region during the third quarter of the eighteenth century, it is the only storm which is reported to have damaged structures at Brunswick Town. For whatever reasons, Brunswick Town appears to have been completely abandoned by October of 1777 (Watson 1856:50).

Fire also played a destructive role in the abandoned town during the American Revolution. This most likely occurred around April of 1781, when Cornwallis' army was temporarily stationed at Brunswick Town (Clark 1899:445). Historian Hugh Rankin also implicates local British loyalists in the town's destruction, noting that during Cornwallis' 1781

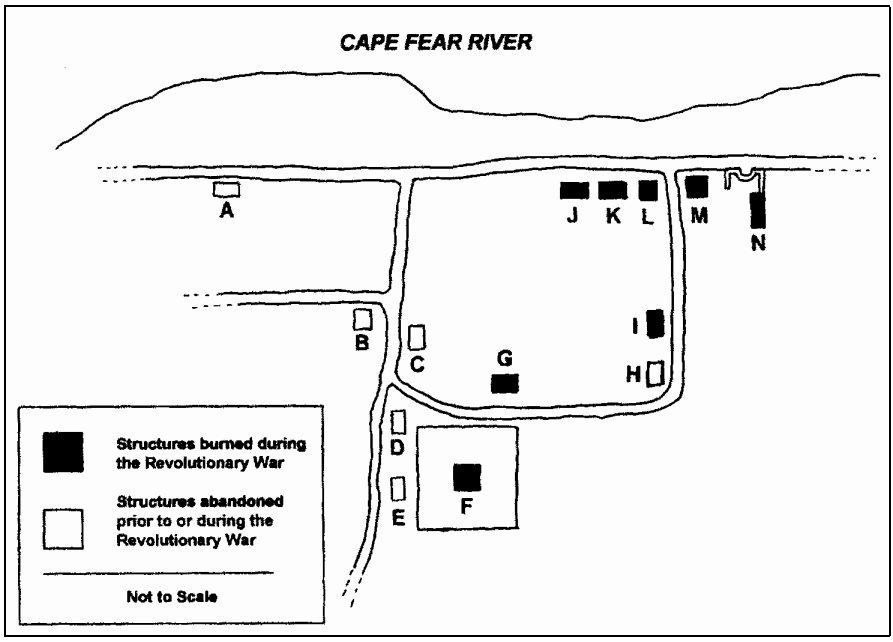

Figure 8. Archaeological excavations have helped historians and archaeologists determine that (A) the Richard Quince House, (B) the Courthouse, (C) the Newman-Taylor House, (D) the "gaol" (jail), (E) the Jones-Price House, and (H) the McCorkall-Fergus House were abandoned either prior to or during the Revolutionary War, while (F) St. Philip's Church, (G) the Roger Moore House, (I) the Hepburn-Reonalds House, (J) the James Espy House, (K) the Leach-Jobson House, (L) Nath Moore's Front, (M) the Judge Maurice Moore House, (N) the Public House and Tailor Shop, and Russellborough (not shown) were destroyed by fire during the war.

march through North Carolina, "Tories and other hangers-on, who followed the British army like a flight of vultures, plundered every farm and plantation along the way. Some homes roared up in a mass of flames and smoke-blackened chimneys marked the path of the marching column" (Rankin1996:62–63). It is now generally assumed that the partial burning of the town site was a result of both British troops and Tory activity.

As shown by Figure 8, excavations offered evidence of those structures destroyed by fire. Many of the houses in the center of town along Front Street and the street perpendicular to Front Street, including the Public House and Tailor Shop (South n.d.j), the Judge Maurice Moore House (South 1963a), Nath Moore's Front (South 1962b), the Leach-Jobson House (South, field notes), the James Espy House (South, field

notes), the Hepburn-Reonalds House (South n.d.f), and the Roger Moore House (South n.d.e), were burned. But it should also be noted that this area has been the most intensively tested and excavated. Archaeological investigations of structures on the northern end of the town, such as the Richard Quince House (South, field notes), Prospect Hall (South n.d.m), and the Newman-Taylor House (South n.d.k), yielded no evidence of destruction by fire. The southern end of town, where buildings associated with Brunswick Town's port facilities and other residences were located, has not yet been archaeologically examined (Robinson 1997). Also burned were St. Philip's Church, the social hearth of the community, and Russellborough, the former governors' residence and home to William Dry, Brunswick Town's customs collector and noted Whig (South, n.d.l, 1967a). Understandably, future archaeological investigations should focus on the exploration of other areas at Brunswick Town destroyed by fire.

Though several travelers noted that Brunswick Town was "completely ruined" (Miranda 1963:14), and "almost wholly demolished" (Schoepf 1968:145) during the Revolutionary War, several structures in the town were reoccupied immediately after the war. As early as 1786, a traveler noted that "only the ruins [of Brunswick Town], with two or three houses that have been since built, are now to be seen" (Hunter 1943:287). In 1804, Methodist missionary Francis Asbury visited Brunswick Town, and saw "demolished houses, and the noble walls of a brick church: there remain but four houses entire" (Asbury 1958:425).

The archaeology conducted at Brunswick Town by South also identified five ruins which contained late eighteenth-century and early nineteenth-century contexts with shell-edged wares, pearlwares, and whitewares. As shown in Figure 9, these were the Public House and Tailor Shop (South n.d.j), the Judge Maurice Moore House (South 1963a), Nath Moore's Front (South 1962b), the Roger Moore House (South n.d.e), and the Newman-Taylor House (South n.d.k). Except for the Newman-Taylor House, the other structures would have had to be rebuilt prior to reoccupation, as they were burned during the war. Property transfers also continued on five town lots into the nineteenth century. Of these five lots, presently only lot number 40, which contained the Newman-Taylor House, corresponded with archaeological evidence for reoccupation. The other four lots which were sold have not been archaeologically investigated. As previously mentioned, in 1842 the land which contained Brunswick Town was sold to Dr. Frederick J. Hill for $4.25, who

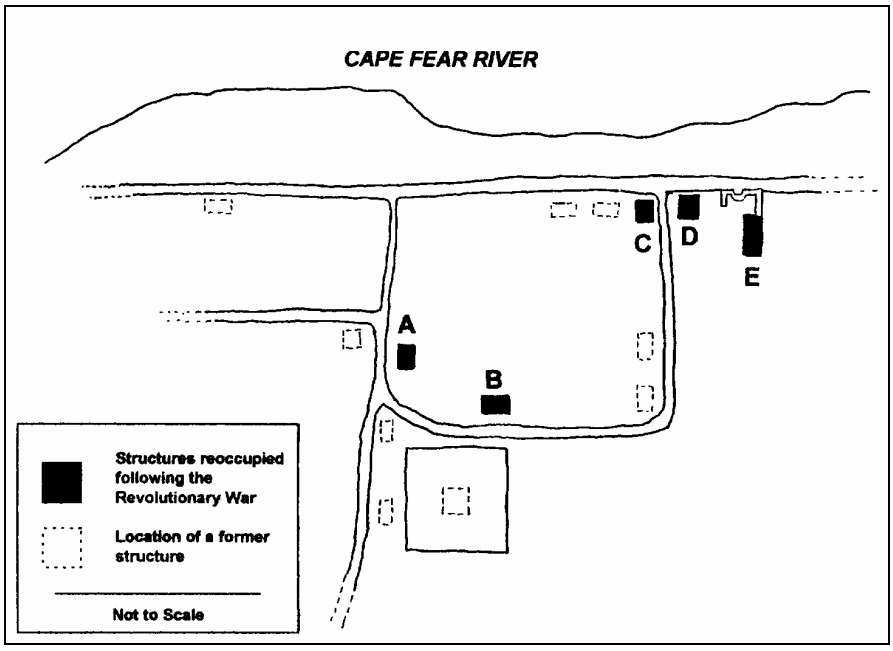

Figure 9. Archaeological evidence indicates that (A) the Newman-Taylor House, (B) the Roger Moore House, (C) Nath Moore's Front, (D) the Judge Maurice Moore House, and (E) the Public House and Tailor Shop were reoccupied for some time following the Revolutionary War.

reincorporated the land as part of Orton Plantation (North Carolina Land Grants, CL:150). At present, available archaeological evidence indicates that all of the structures at Brunswick Town were abandoned prior to this final property transfer.

Present and Future Research

Lee's and South's excavations continue to enhance our understanding of Brunswick Town and its inhabitants by providing the basis for renewed analysis and investigations. Recent studies have included such diverse topics as exploring the ethnicity of previously undocumented African-Americans through colonowares (Loftfield and Stoner 1997), connecting the presence of olive jars and oil jars in households to Brunswick Town's shipping and trade industry (Mintz and Beaman 1997), examining issues of household status through pattern analyses (Gray 1997), and the

presence of delftware chimney tiles in several ruins (Beaman 1997). Robinson (1997) has studied the role of Brunswick Town in the naval stores industry and assessed the potential for excavations along the waterfront. Additionally, three models by which Iberian olive jars could have reached British ports in an era of stringent mercantilism have been generated based on data from the Brunswick Town excavations (Beaman and Mintz 1998). Presently, an artifact study of the kaolin and local tobacco pipes is in progress, as are processual studies of a patterned comparison of excavated ruins and a comparison of the domestic refuse of Russellborough and Tryon's Palace in New Bern. These on-going reanalyses of the artifacts unearthed during Lee's and South's excavations will continue to illuminate aspects of colonial-period life, such as issues of gender, ethnicity, and household status. There is no doubt that a wealth of information may be learned through systematic reanalyses of the existing artifact collections before additional archaeological excavations are planned.

That said, the resumption of archaeological excavations should be considered as a means to gain additional understanding about the physical aspects of Brunswick Town. Tarlton's site development plan restricted Lee's testing and South's excavations to the area of the site that was to be developed for public visitation. Much of the unexplored portion of the site rests beneath the Civil War-period earthworks of Fort Anderson and in areas which have not been cleared or mapped, such as the area south of the Public House structure.

A non-intrusive methodology for exploring portions of the site is through geophysical survey. Trial geophysical surveys recently were conducted at Russellborough in March of 1998 by Archaeological Research Consultants, Inc. A fluxgate gradiometer (a type of magnetometer) and a soil resistivity meter were used to survey an area of four outbuildings shown to the northwest of the main house at Russellborough on the 1769 Sauthier Map. The gradiometer and the resistivity meter picked up strong anomalies in the vicinity of one outbuilding in particular. The probable sites of two other outbuildings displayed lesser anomalies, and one structure shown by Sauthier was not detected. In addition, an area west of the main house, where Sauthier showed a wide entrance road, was also tested using these techniques. The area of the grand entranceway did not display road-like anomalies, but the anomalies appeared to be those of a structure or another form of disturbance (Thomas Hargrove, personal communication 1998). The

results of these trial geophysical surveys conducted at Russellborough, however, strongly support the notion of using non-intrusive techniques to both guide future mapping of the Brunswick Town site and, ultimately, additional archaeological exploration.

Conclusions

In 1951, historian Lawrence Lee spoke of the potential knowledge of the physical aspects of Brunswick Town that could be gained through archaeological investigations (Lee 1952:245). Based on William S. Tarlton's site development plan, excavations begun by Lee and continued by South yielded information about the physical aspects of the town and data about its former residents which likely surpassed any potential expectations. In addition to site-specific information, the archaeological research conducted between 1958 and 1968 at Brunswick Town revealed key information to understanding the Sauthier maps of North Carolina's colonial towns, and provided data for the growth of the discipline of historical archaeology.

However, there is much more to learn. It has been said that "no matter what the current paradigm, there will always be a place for sound archaeological research at a productive site. Brunswick Town has only begun to be mined for the wealth of data it contains" (Ewen 1997:90). The continuing studies attest to the contributions that still may be achieved by examining data from these excavations. Future archaeological studies will continue to enhance historians' and archaeologists' knowledge of the site's past and yield insight into life in this colonial-period port town on the Cape Fear River.

North Carolina State Historic Sites insures proper management and preservation of Brunswick Town and its archaeological collections for future researchers. Although the site's protection is guaranteed, it must also be remembered that the primary audience for information about Brunswick Town will always be the public (Figure 10). Just as Tarlton's plan for developing the site into an historical park guided Lee's and South's excavations, any future research at Brunswick Town must also be made accessible to the public. The archaeological research conducted at Brunswick Town in the 1950s and 1960s set a standard for responsible fieldwork and reporting, scholarship and science, while at the same time igniting and reciprocating the public's enthusiastic support of archaeology. These are responsibilities no archaeologist should take lightly or forget.

Figure 10. A young David South (right) and R. V. Asbury (center), Director of Historic Wilmington Association, are shown in period costume. Along with Miss Wilmington College 1962 (a.k.a. Miss Tour-a-rama), all served as tour guides during the early 1960s. Courtesy of Historic Sites Section, North Carolina Department of Cultural Resources.

Notes

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We wish to dedicate this study to the memory of E. Lawrence Lee (1912–1996), whose historical and archaeological contributions on Brunswick Town paved the way for future researchers.

A Note Regarding the Dates of South's Archaeology Reports. Many archaeological reports were filed by Stanley South from his work at numerous historic sites between 1958 and 1968. In many cases, these reports were not dated, and have been previously credited to the year in which the structure or architectural feature was investigated. This is especially true of the reports regarding structures at Brunswick Town. As part of this study, every effort was made to ascertain the correct year the report was written. If no year could be determined or verified, the report was listed as "n.d." (no date) in the References Cited section.

Disclaimer. The authors assume full responsibility for any factual errors and the interpretations presented in this article.

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AN ANALYSIS AND INTERPRETATION OF THE ARCHAIC PROJECTILE POINT SEQUENCE FROM LOWDER'S FERRY, STANLY COUNTY, NORTH CAROLINA

by
Carmen Morgan Drye

Abstract

In 1948, the mechanical grading of a parking lot exposed the Lowder's Ferry site, a prehistoric archaeological site at Morrow Mountain State Park in Stanly County, North Carolina. The following year, Joffre Coe directed excavations at the site and subsequently concluded that Lowder's Ferry contained stratified cultural deposits that dated to the Archaic period, making it the first such site to be recognized in piedmont North Carolina. This study reconstructs the site's stratigraphy, as revealed by unpublished field notes from the 1949 excavations, and reevaluates the sequence of projectile points that were recovered. An interpretation of the stratigraphy at the site and an analysis of associated projectile point types provide evidence that the sequence of Archaic projectile points found there should be viewed as an evolutionary continuum.

The Lowder's Ferry site (31St7) provided the first "conclusive evidence for the association of cultural materials with natural stratigraphic levels" in piedmont North Carolina (Coe 1964:21) (Figure 1). However, the site information was never published, but only briefly mentioned in conjunction with excavations at the Doerschuk site, located two miles upstream. Doerschuk apparently provided a better-defined stratigraphic sequence than Lowder's Ferry and was therefore used along with the Hardaway and Gaston sites in Joffre Coe's (1964) construction of the cultural sequence still widely used by southeastern archaeologists.

The excavated artifacts from Lowder's Ferry, which also include material from a substantial Uwharrie phase village at the site, have remained with the Research Laboratories of Archaeology at the University of North Carolina at Chapel Hill, and they have never been reexamined for publication. These are accompanied by maps, field notes, and photographs made by James Wood and Barton Wright, the two principal excavators at the site.

Initial classification of the projectile points from Lowder's Ferry was based on the sequence of point types established by Coe (1964) (Figure 2). Coe determined the sequence after completing excavations at the Doerschuk, Hardaway, Gaston, and Lowder's Ferry sites.

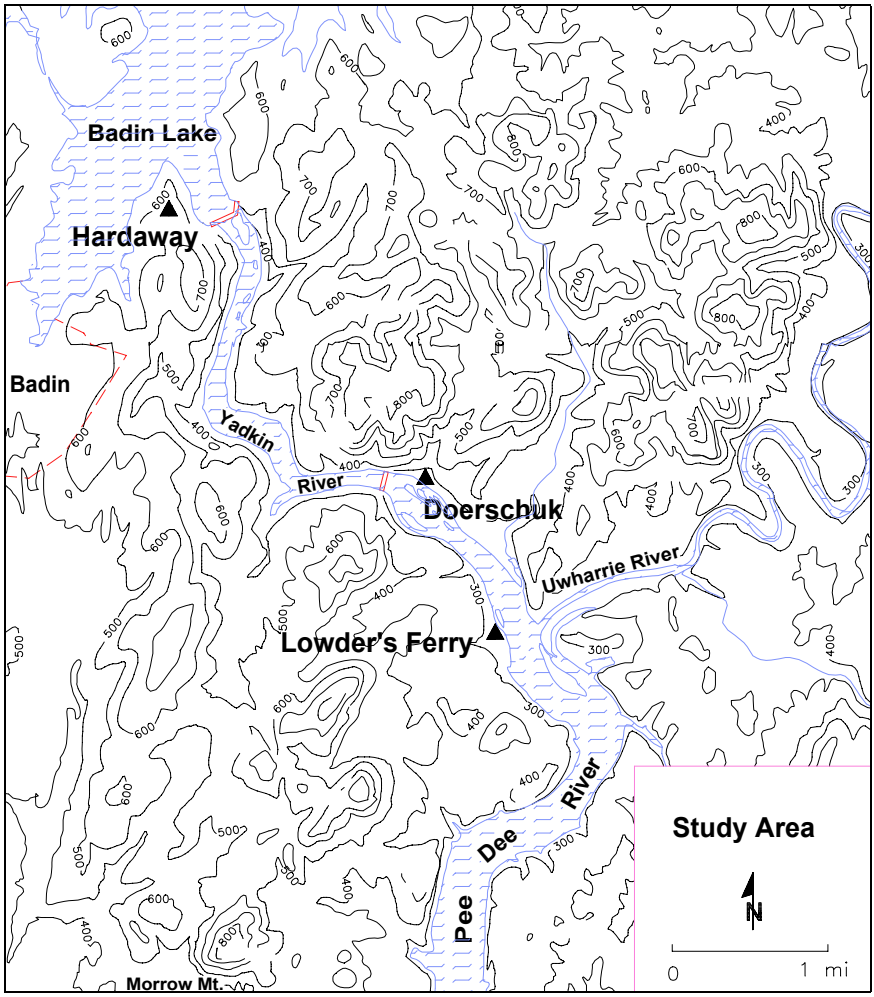

Figure 1. Map of the study area near Badin, North Carolina (adapted from Daniel 1994:2).

Projectile points from the Early Archaic period (ca. 8,000–6,000 BC) were identified in a stratified context at the Hardaway site near Badin, North Carolina. Coe (1964:121) classified these Early Archaic point types as follows: Hardaway-Dalton and Hardaway Side-Notched (ca. 8,000–7,000 BC), Palmer Corner-Notched, and Kirk Corner-Notched (ca. 7,000–6,000 BC).

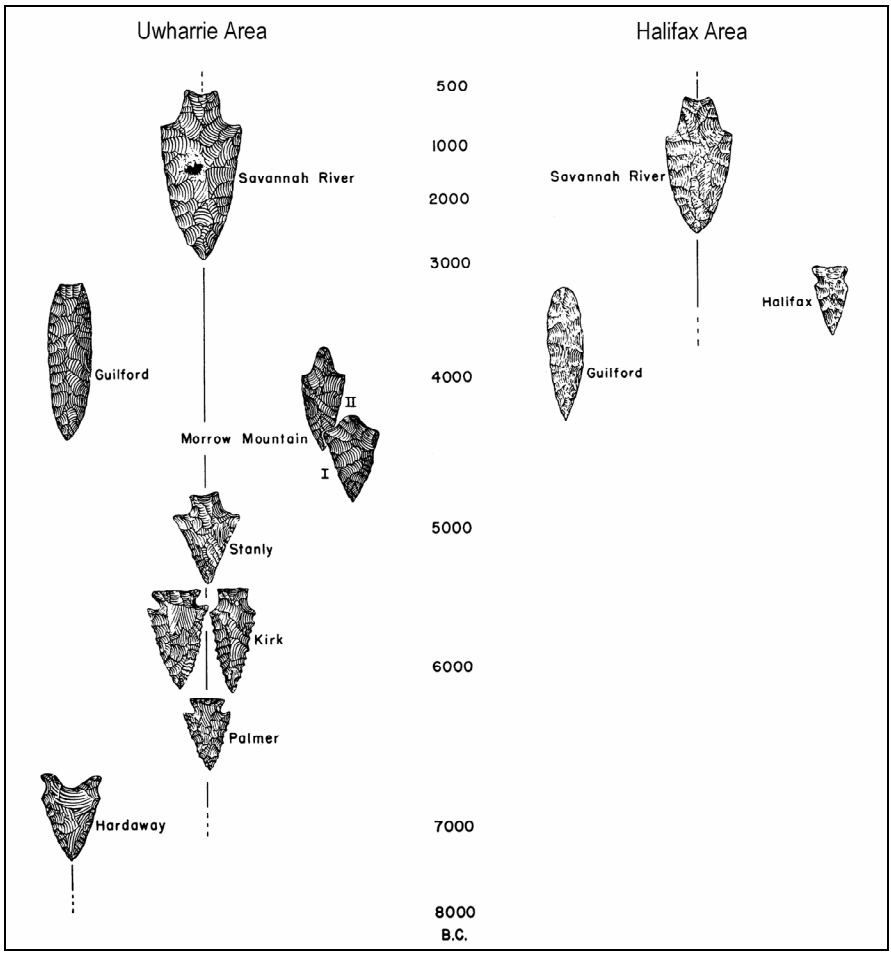

Figure 2. Joffre Coe's sequence of the Archaic projectile point traditions in the North Carolina Piedmont (adapted from Coe 1964:121).

The Middle Archaic period (ca. 6,000–3,000 BC) was ushered in by the Stanly Stemmed type represented by points found in a deeply buried soil zone at the Doerschuk site. According to Coe, the next two phases of the Middle Archaic period were also identified in a stratified context at Doerschuk. These two phases are represented by the Morrow Mountain I Stemmed and Morrow Mountain II Stemmed point types and the Guilford Lanceolate point type. These two types were thought by Coe to be

intrusive traditions indicative of a cultural discontinuity with the Stanly point tradition. Coe determined that a majority of Morrow Mountain II points occurred stratigraphically lower than the Guilford Lanceolate points, indicating that Morrow Mountain II points were earlier. Coe (1964:118) also reported the presence of a Guilford occupation at the Gaston site on Roanoke River where a radiocarbon date for the overlying Halifax occupation indicated a Guilford age of at least 6,000 years ago.

Coe's sequence of projectile point traditions within the Uwharrie area of North Carolina recognized the beginning of the Late Archaic period (ca. 3,000–1,000 BC) with the appearance of the Savannah River Stemmed point type. Points of this type were identified in stratified contexts at the Doerschuk and Gaston sites. Throughout the Piedmont, this point type is used as an index fossil for the Late Archaic period.

At the Lowder's Ferry site, Coe (1964:21) reported an intensive Guilford occupation overlain with flood deposits (Figure 3). Resting above the flood deposits, he reported the presence of a well-defined Savannah River occupation, which in turn was overlain by deposits containing Uwharrie, Pee Dee, and Caraway artifacts of the Late Woodland period.

However, the results of the current analysis do not concur fully with Coe's interpretation. An inconsistency was found between the stratigraphy as reported in the 1949 field notes and Coe's explanation of a clear stratigraphic separation between the Guilford and Savannah River horizons. After reconstructing and interpreting the site structure, a natural separation between strata containing Guilford and Savannah River projectile points could not be found. In fact, those deposits originally recognized as uncontaminated zones or strata usually contained Morrow Mountain II, Guilford, *and* Savannah River points. And, these points often were not typologically distinct from one another. Several of the specimens are variant forms of the Morrow Mountain II, Guilford, and Savannah River types and appear to represent transitional forms. If so, they may be seen as indicative of continuity, rather than discontinuity, in projectile point evolution during the Archaic period.

Site Location

Lowder's Ferry is located in Morrow Mountain State Park on the west bank of the Yadkin-Pee Dee River (Figure 1). The region features a conglomeration of small, rounded mountains divided by a dendritic pattern of three main river branches. This area, known as the Uwharrie

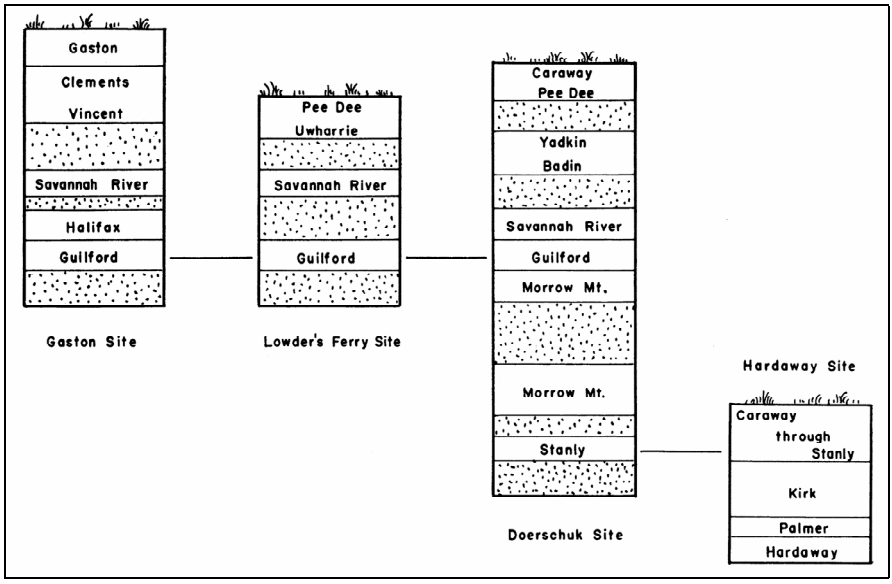

Figure 3. Joffre Coe's synoptic profiles of the Gaston, Lowder's Ferry, Doerschuk, and Hardaway sites (from Coe 1964:123).

Mountain region, consists of a series of peneplains vertically eroded over time by southeastern-flowing river systems. Today, the small mountains are a range of monadnocks, with the tallest being Morrow Mountain.

Years ago, at the base of Morrow Mountain, a ferry operated which crossed the Yadkin-Pee Dee River to the eastern bank. There, the Yadkin-Pee Dee River converged with Uwharrie River. Opposite the confluence with Uwharrie River, the Lowder's Ferry site is situated just north of the old ferry landing.

The Doerschuk site lies only two miles upstream on the opposite bank. According to Coe (1964), both sites are located on an alluvial floodplain and show extreme similarities in artifact assemblages and stratigraphy. In 1926, the Carolina Electric and Power Company constructed the Falls Dam across the Yadkin-Pee Dee River. The dam formed a lake 70 ft deep. Stratified alluvial sites in the area were covered except for those sites located on the floodplains below the dam. The Doerschuk and Lowder's Ferry sites lie just below Falls Dam (Figure 1).

The Uwharrie region is known by the local population for its richness in prehistoric artifacts. Numerous artifact discoveries here, including

those made by Herbert M. Doerschuk of Badin, and natural characteristics of the alluvial valley, prompted Coe's search for stratified archaeological sites in the region. The Uwharrie Mountains would have provided prehistoric peoples with a large supply of necessary resources. Not only were the river systems a magnet for trade and communication, but more importantly, the mountain region provided an abundance of superior knappable stone for tool manufacture.

During the Paleozoic period, volcanic activity forged the Carolina Slate Belt, which includes the Uwharrie region and covers areas between Granville County in the north and Anson County to the south. Cooling lava and falling ash were deposited as sediments and metamorphosed into a fine-grained, blue-gray stone called rhyolite. Rhyolite outcrops are found throughout the region and vary from extremely fine-grained stone to coarse-grained porphyries. During the Early Archaic period, the fine-grained (aphyric) rhyolite on Morrow Mountain was the principal source of material used to manufacture stone tools found at the Hardaway site and elsewhere in the region (Daniel 1994:59). However, during the Middle Archaic and Late Archaic periods, the tool kits from Doerschuk and Lowder's Ferry sites show the predominate use of porphyritic rhyolite. The transition in stone preference is usually considered a sign of increasing sedentism (i.e., more localized resource use) during the Middle Archaic and Late Archaic periods.

Excavation History

In late winter, 1948, Joffre Coe began developing an extensive archaeological program in the North Carolina Piedmont with the help of funds from the North Carolina Division of State Parks (Coe 1949b). At that time, the restoration of Town Creek Indian Mound in Montgomery County constituted the most significant part of the program. However, a number of known sites along the uplands and alluvial floodplains of the Uwharrie Mountain region would soon be excavated under the direction of Coe. Lowder's Ferry, on the west bank of the Yadkin River, was one of the first of these sites to be excavated. Paul Strieff, who had been a graduate student with Coe at the University of Michigan, was given the task of reexamining the known sites of the Uwharrie area to identify those with stratified cultural deposits. Strieff found the first such evidence after excavating 15 test pits at Lowder's Ferry, where he identified the presence of buried Archaic-period deposits.

The Lowder's Ferry site was first discovered during mechanical stripping for a parking lot "near the boat ramp at Lake Tillery in Morrow Mountain State Park" (Coe 1995:25; see also Coe 1949a). During the initial stage of grading north of the ramp, workers unearthed five Late Woodland human burials and a number of refuse pits. Construction was halted for two days while six university students and Coe salvaged the exposed archaeological remains (Figures 4 and 5). The salvage operation also identified substantial Archaic-period deposits which further delayed construction, and Coe recommended that further excavations be undertaken at the site. The following summer, Coe assigned James Wood to continue the salvage work. Wood worked at Lowder's Ferry during July and August of 1949, when excavation was temporarily halted so that he could return to his graduate studies at the University of North Carolina (Wood n.d.).

Coe then assigned Barton Wright, a graduate student from the University of Arizona, to finish the excavations. Wright had originally been hired to excavate at Town Creek Indian Mound. At the end of October, 1949, Wright returned to his original position after completing work at Lowder's Ferry (Coe 1995:24–25).

Fieldwork During July and August, 1949

This discussion of excavation at Lowder's Ferry during the summer of 1949, of which the first 16 days were not reported, is based entirely on James Wood's field notes. Because of Paul Strieff's previous work at the site, at least two major occupations were known and there was a possibility of two more.

Apparently, grading of the parking lot area had removed the upper sandy river deposits, which allowed the lowest levels of occupation to be revealed. According to Wood, "A dark hard surface level was left clearly visible. The graded area was surrounded by a bank which had been left by the bulldozer" (Figure 4). The bank of soil to which Wood referred held the later material of the Uwharrie, Pee Dee, and Caraway cultures (after A.D. 800). Since no clear stratigraphy was found in the bank, the scraped area became the primary focus of excavation.

Initially, Coe and Wood planned four trenches “running parallel to the river” (Wood n.d.). The trenches were to connect perpendicularly with the surrounding bank. According to Wood, “the first of these trenches began at the south end of the [parking] lot. We immediately began to run into material of the Guilford focus. This was surprising. We

Figure 4. View of the graded parking lot during salvage work in March, 1949 (facing east). The bank containing evidence of a Late Woodland occupation can be seen where the two men are standing in the background.

Figure 5. General view of the mechanically graded area (facing northwest).

Table 1. Correlation of trench designations.

Map	Wood	Wright
Trench I	Trench I	Trench I
Trench II	Trench IV	–
Trench III	–	Trench III
Trench IV	Trench III	Trench IV
Trench V	Trench II	Trench V
Trench VI	Trench V	Trench VI
Trench VII	–	Trench VII

had thought that this level would yield material from the well known Savannah River culture."

Eleven 5x5-ft squares were excavated in Trench I (Figure 6; see Table 1 for a correlation of the trench designations used by Wood and Wright). Excavation depth reached up to 48 inches below the scraped surface. Wood commented that the "dark soil level contains early material and the two overlapping it contain later material. . . . The soil lines are very irregular and wavy."

The second trench which Wood excavated was situated about 140 feet north of Trench I and proved to have a much more shallow depth. Wood's Trench II consisted of 16 5x5-ft squares laid out in a straight line.

After completing Trench II, Wood planned a third trench to be located 125 feet north of Trench I, between Trenches I and II (Figure 7). Wood's Trench III contained 14 5x5-ft squares. Wood excavated all of these squares down to a sterile yellow sand just above the water table.

A fourth trench (Wood's Trench IV) was also placed between Trenches I and II. A total of 11 5x5-ft squares were removed in this trench. Wood reported that the "top level of Trench IV is, as with the others, the dark hard soil level which had been uncovered earlier by the bulldozer."

Coe and Wood planned a fifth trench in hopes of uncovering another burial, several of which were exposed during bulldozing. This trench (Wood's Trench V) was placed approximately 15 ft away from Wood's Trench II at the far north edge of the site. Wood reported that "it runs along the bank left by the bulldozer. . .and was put in along the bank perpendicular to the other trenches. This put us in the undisturbed area of the lot." Wood's Trench V contained the occupation level of the

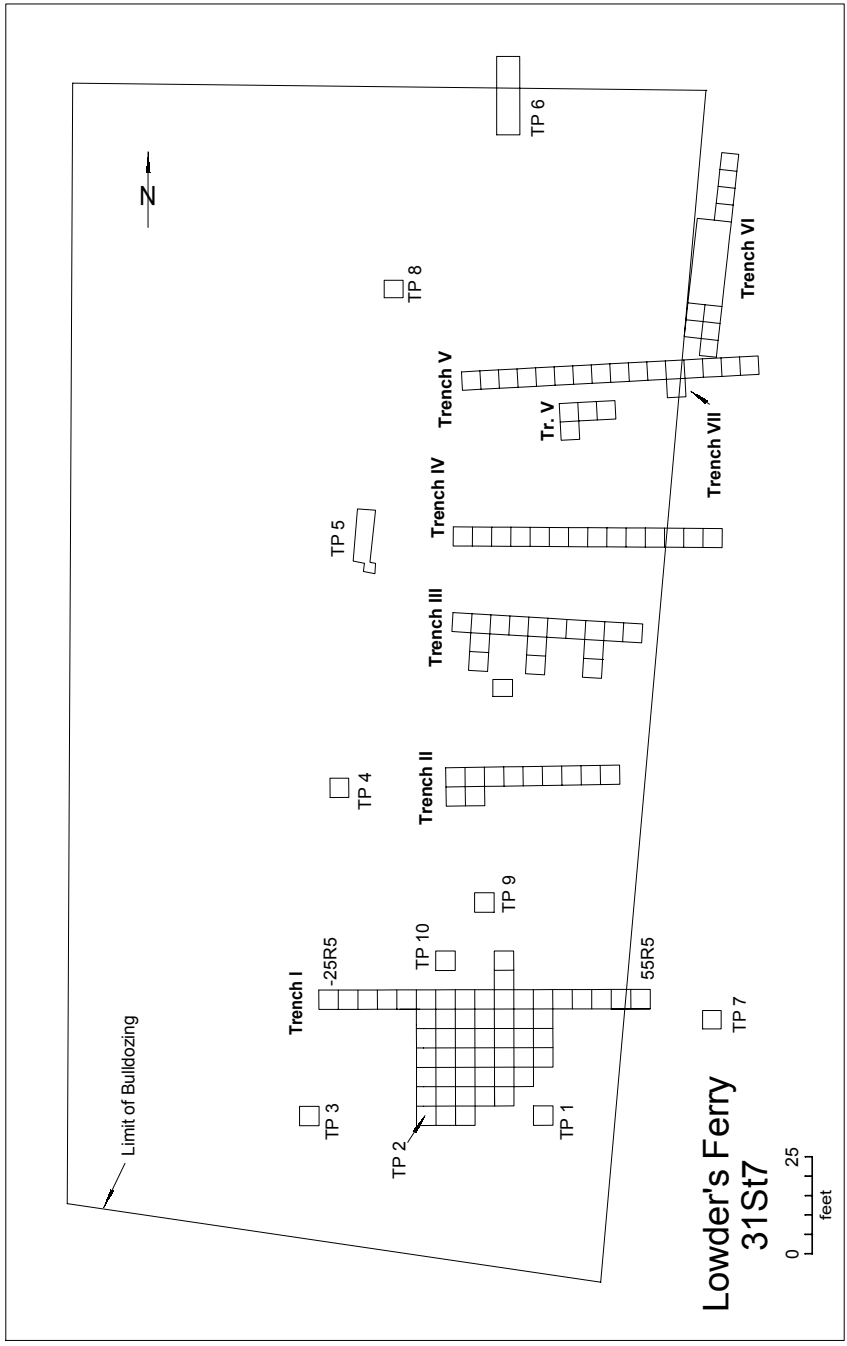

Figure 6. Map of Lowder's Ferry showing all excavation units.

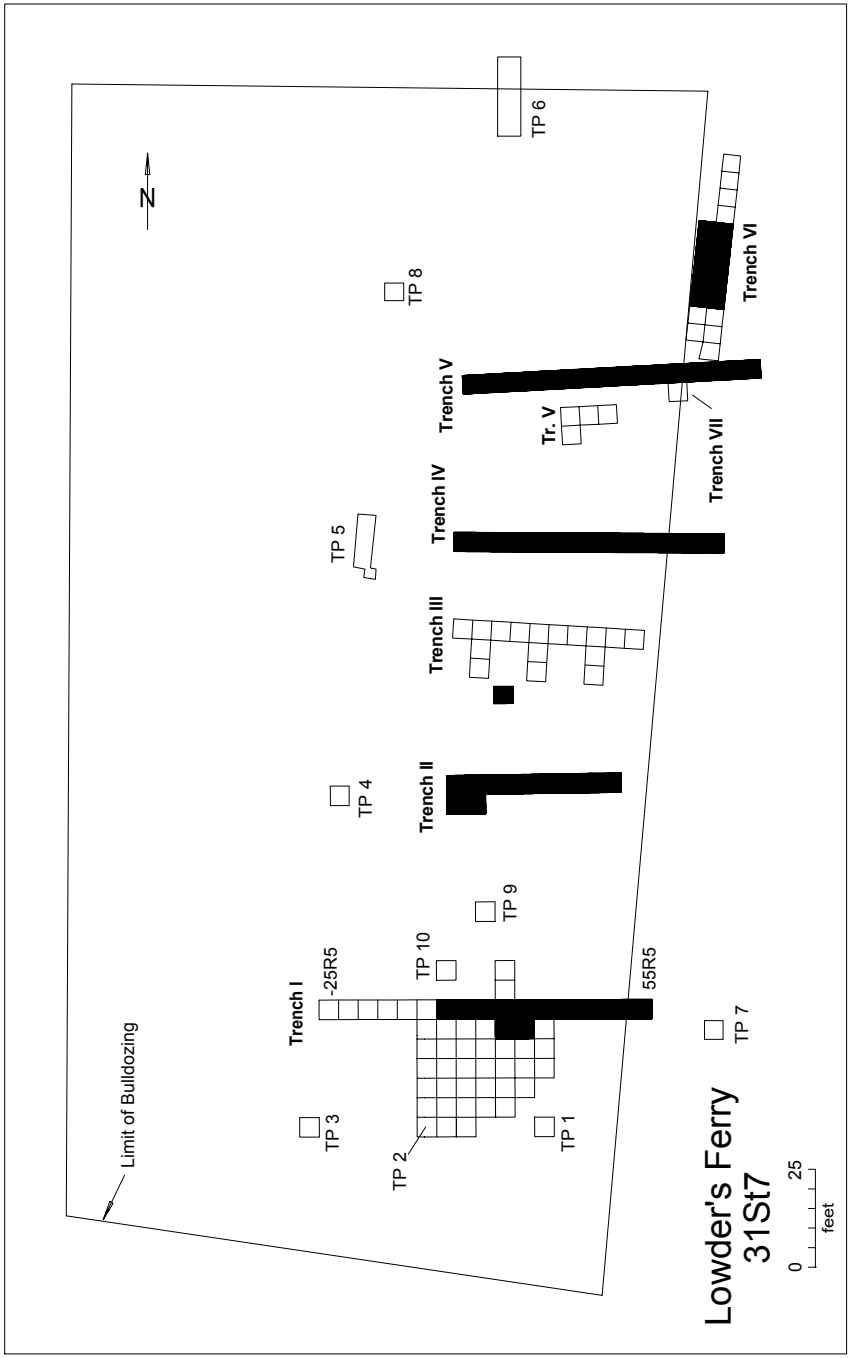

Figure 7. Map of Lowder's Ferry showing James Wood's excavation (in black).

Uwharrie, Pee Dee, and Caraway cultures. Wood discovered "a number of post holes just under the tops of the second level which seem to be in a straight line." A significant amount of pottery was also found in this trench, along with Uwharrie, Pee Dee, and Caraway projectile points.

Because the first four trenches were dug in the graded parking lot area, only earlier, Archaic-period artifacts were identified in an undisturbed stratigraphic context. Wood excavated each trench according to the following levels: Level I (0–6 inches), Level II (6–12 inches), Level III (12–18 inches), Level IV (18–24 inches), Level V (24–30 inches), Level VI (30–36 inches), Level VII (36–42 inches), and Level VIII (42–48 inches).

Three feet below the surface in Trench I, Wood identified an apparent buried Guilford occupation. This occupation level was identified within three squares: 40R5 (Level VII), 35R5 (Level VIII), and 30R5 (Level VII). Wood concluded that "it seems quite clear that the major occupation of this site was a variation of the Guilford culture. Most of the material fitted into this classification and after it has all been examined we shall find this is true."

Fieldwork During September and October, 1949

When Barton Wright arrived at Lowder's Ferry in September 1949, he excavated 10 small test pits across the site. Since James Wood had identified a Guilford occupation approximately three feet below the surface in Trench I, further excavation was deemed necessary in this area of the site. Wright opened a block adjacent to the south side of Wood's Trench I. This block consisted of 40 5x5-ft squares (Figure 8). Within this block, Wright identified a primary Guilford occupation 30 inches below the surface in squares 30R10 and 30R15. Wright (n.d.) reported that this "brown occupation layer was rich in Guilford and Savannah River artifacts."

Additional progress was made when Wright encountered a natural separation of soil zones extending over 20 inches below the surface. The following squares were excavated according to these natural zones: 30R20, 25R20, 20R15, 20R20, 15R10, 15Rl5, 15R25, 15R30, 10R10, 10R15, 10R20, 10R30, 10R35, 5R10, 5Rl5, 5R20, 5R25, 5R30, 20L5, 20, and 5L5. The natural soil zones consisted of a layer of six-inch thick light brown sand that was underlain by a red soil. Wright commented that, "points appear to be located on top of the red layer. . .with a few

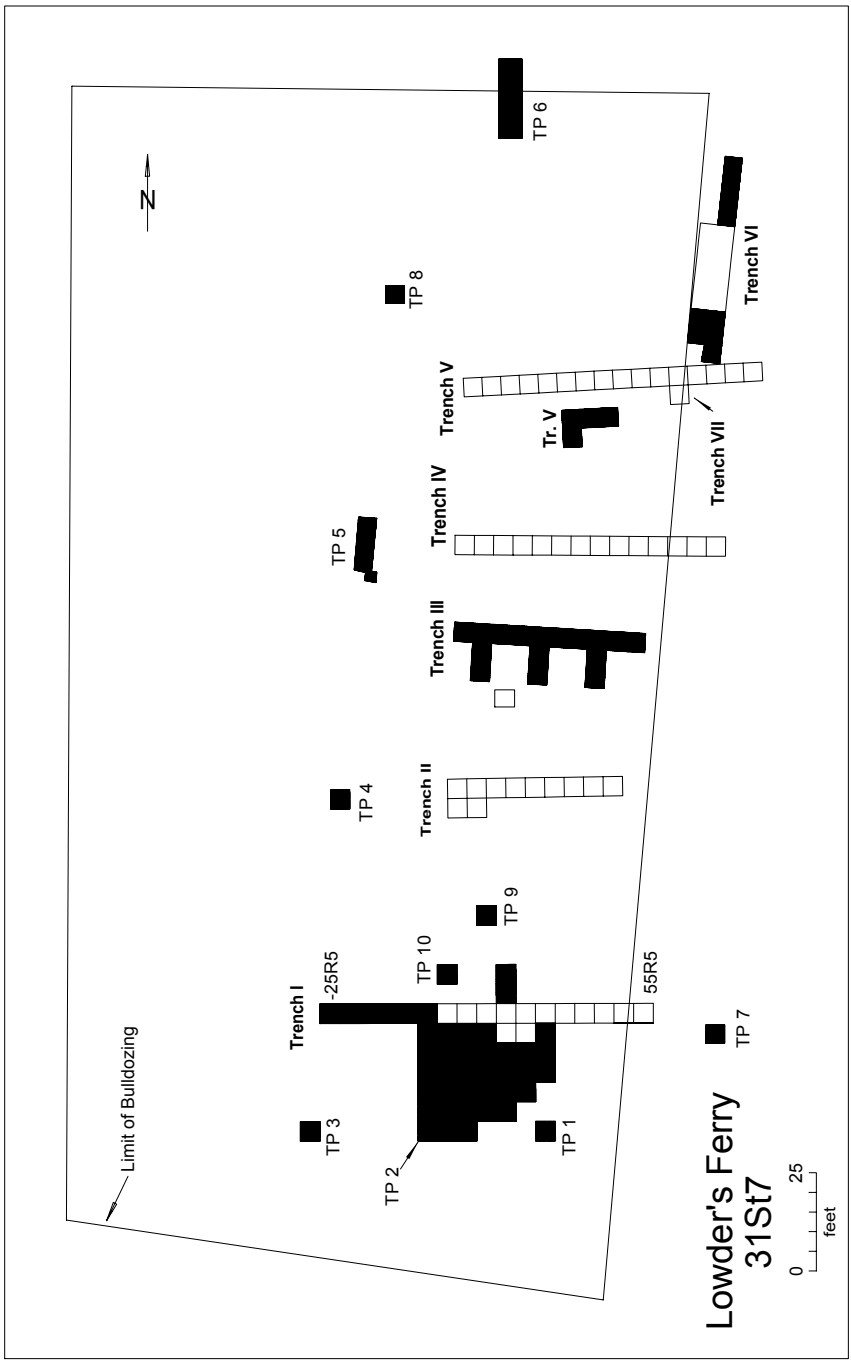

Figure 8. Map of Lowder's Ferry showing Barton Wright's excavation (in black).

extending into the sandy and red layers. The greatest majority of points are located at the division point between the two zones."

Wright opened another trench (Wright's Trench III) located almost 100 ft north of Trench I (see Table 1 for a correlation of the trench designations used by Wood and Wright). This new trench consisted of 16 5x5-ft squares (Figure 8).

Wright also reported that "an extension of Trench V to the North was begun and for easy identification while working was labeled Trench VI." The extension connected to the fifth trench (Wood's Trench V) excavated by James Wood. Wright added nine squares to this trench which was located in an undisturbed area of the site.

A small area, which Wright labeled Trench VII, was excavated adjacent to the southern edge of Wright's Trench V (Figure 8). Wright reported that this area was excavated in order to "check Coe's theories after examination of the material."

By the middle of October, Wright had identified both Guilford and Savannah River occupations. He reported that throughout most of the site "either leaf shaped [Guilford] or triangular stemmed and heavy [Savannah River] projectile points were found within 4 inches of the surface. In the majority of the grids, the material was similar quantities of Guilford or near Guilford point with an occasional anomaly."

Discussion

After reviewing the field notes from James Wood and Barton Wright, it became clear that an obvious and extensive Guilford occupation was identified at Lowder's Ferry. Wood had discovered an undisturbed Guilford occupation zone three feet below the surface within three adjacent squares in Trench I (Figure 7). Wright also identified the same type of deposit approximately 30 inches below the surface in two Trench I squares (Figure 8). In all, there were five squares in this trench which contained a stratified Guilford occupation three feet below the graded area. All five of these squares were adjacent to one another.

As mentioned earlier, these five squares were excavated according to arbitrary levels. Wright, however, excavated 22 squares in Trench I according to natural soil zones. Within these 22 squares Wright reported the presence of Guilford Lanceolate and Savannah River Stemmed point types primarily in a red soil zone 20 inches below the surface.

Interestingly, neither Wood nor Wright reported an area with a definite stratigraphic division between zones containing Middle Archaic

Guilford and Late Archaic Savannah River points. Although a Guilford occupation was discovered three feet below the surface, they did not report a zone containing primarily Savannah River points. In the red soil zone excavated by Wright, Guilford Lanceolate and Savannah River Stemmed projectile points were found together.

The fact that the field notes do not report a well-defined separation between Guilford and Savannah River occupations raises questions regarding Coe's assertion of cultural stratigraphy at the site. Coe (1964:21) stated that the Savannah River occupation level occurred 18 inches above the Guilford occupation (Figure 3). Although Wood's and Wright's field notes regarding a buried Guilford component appear to support Coe's argument, a reconstruction of site structure at Lowder's Ferry is needed before a firm judgment can be reached.

Interpreting Site Structure

The following discussion focuses on the Middle Archaic and Late Archaic period occupations at Lowder's Ferry. The primary occupations of these periods consisted of the Guilford and Savannah River cultures. According to Coe (1964:21),

> a Guilford occupation was found buried nearly 3 feet below the surface. This old land surface had been covered subsequently by 18 inches of flood deposited sand, after which it was reoccupied by people who have been identified with the Savannah River type culture. This level, in turn, was buried by 10 more inches of flood deposits before the site was again occupied. The final occupations were components of the Uwharrie, Pee Dee, and Caraway cultures [see Figure 3].

This provided a primary starting point for locating stratified areas within the site.

An inventory of the artifacts found and their associated soil depths was used to locate potential areas of uncontaminated stratigraphy. Three of the six excavated trenches—Trenches I, II, and VI (as shown in Figures 6, 7, and 8, and as correlated with Wood's and Wright's trench designations in Table 1)—were chosen for study on the basis of soil depth and the quantity of projectile points recovered. The field notes reported that all trenches were initially excavated in arbitrary levels until natural zones were identified. In addition, overall soil depth varied between trenches. The deepest level reached throughout the site consisted of sterile yellow sand located just above the water table (Figure 9).

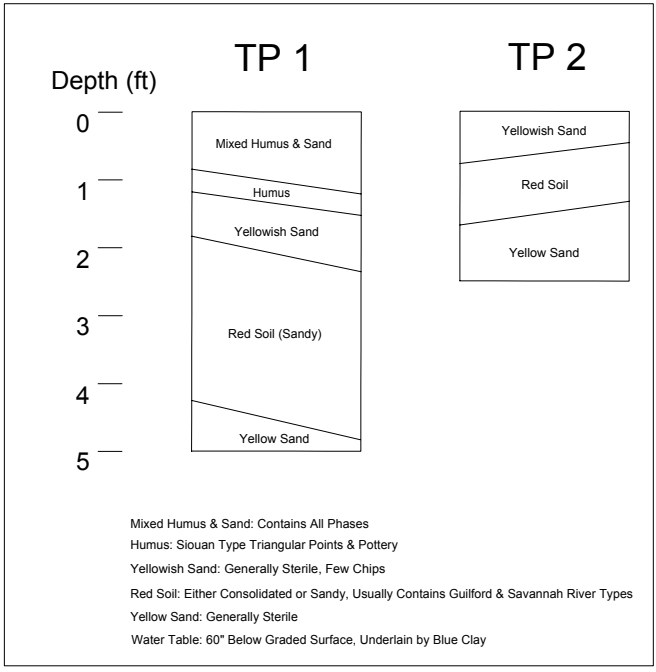

Figure 9. Profiles of Test Pits 1 and 2 (in the vicinity of Trench I) showing the natural stratigraphy as recorded by Barton Wright.

In Trench I, the deepest level was 48 inches below the graded surface. Barton Wright excavated according to natural soil zones only in Trench I, and the arbitrary six-inch levels removed by James Wood were deepest in this trench.

The remaining six trenches (Trenches II through VII) were excavated to a maximum depth of three feet in some areas. Trench II produced projectile points in levels up to 24 inches below the surface, and Level IV (18–24 inches) yielded numerous such artifacts. Barton Wright reported that Trench VI was planned for excavation due to its location in an undisturbed area of the site (Figures 6 and 8). Projectile points were located as deep as Level IV in this trench. Wright removed soil levels in six-inch increments, finding no natural divisions between soil zones. Although Trench VI did not show a potential for cultural stratigraphy, it contained a large number of projectile points which could be used to describe the artifact types found at the site.

Organizing the Field Data

Trenches were labeled according to the corresponding grid numbers in the artifact inventory. The original maps drawn by Wood and Wright often did not correspond with each other or with the provenience information in the inventory; however, trench size, trench configuration, and the number of associated squares matched. For an unknown reason, all trench numbers (except for Trench I) were rearranged on the maps drawn by Barton Wright. The confusion concerning trench labeling proved difficult when reviewing the 1949 field notes. For this reason, the current analysis labels all excavated contexts at the site according to the designations used in the artifact inventory (see Table 1 and Figures 6, 7, and 8).

After a definite arrangement of the trenches was established, the next step consisted of arranging the recovered projectile points on a table by the levels and squares in which the points were found. This procedure provided an overview of the cultural stratigraphy throughout the site. It also helped to locate the uncontaminated, stratified deposits to which Coe referred. In addition, Wright observed that a definite Guilford occupation was found within a thick, red soil zone (Figure 9).

After establishing the exact location of all projectile points within Trenches I, II, and VI, the next task was to classify each point according to Coe's (1964:121) projectile point typology (Figure 2). It seemed probable that most of the points recovered would match Coe's sequence. However, the analysis revealed many variations of established point types. In many instances, slightly stemmed Guilford points resembled Savannah River Stemmed points. Also, the Morrow Mountain II Stemmed points resembled many of the Guilford points found within the same soil zone. At times, it was hard to classify projectile points on the basis of established morphological types.

As previously mentioned, the major Archaic occupation of the Lowder's Ferry site was during the Guilford phase. Savannah River points encompassed the second largest percentage of projectile points found. Morrow Mountain II points, while present, were not as numerous as the Guilford or Savannah River points.

After classifying each projectile point according to Coe's typological sequence, two distribution tables were constructed. Table 2 shows the percentage of point types according to the six-inch levels in which each type was recovered. Construction of Table 3 followed the same

Table 2. Percentage distribution of projectile points by arbitrary excavation level (based on 245 of 383 points from Trenches I, II, and VI).

Level	N	Woodland Period	Savannah River	Guilford	Morrow Mountain	Early Archaic	Total
0–6" Level	103	47	8	41	3	1	100
6–12" Level	62	48	7	40	2	3	100
12–18" Level	28	29	7	46	11	7	100
18–24" Level	20	15	30	45	5	5	100
24–30" Level	13	–	8	84	8	–	100
30–36" Level	13	–	8	92	–	–	100
36–42" Level	4	–	–	100	–	–	100
42–48" Level	2	–	–	100	–	–	100

Table 3. Percentage distribution of projectile points by natural soil zone (based on 116 of 141 points from the light brown sand and red soil zones).

Zone	N	Woodland Period	Savannah River	Guilford	Morrow Mountain	Early Archaic	Total
Light Brown Sand (0–6")	33	0	12	80	8	0	100
Red Soil (6–20")	83	0	8	84	4	4	100

procedure; however, in this table the distribution of projectile points is shown by natural soil zones instead of six-inch levels. The distributions of Morrow Mountain II, Guilford, and Savannah River points by arbitrary level and natural zone for selected areas of Trench I are also illustrated in Figures 10 and 11.

These distribution tables provide the primary evidence of cultural stratigraphy at Lowder's Ferry, and they show an inconsistency between the 1949 field notes and Coe's assertion of a sealed, stratified Guilford occupation located 18 inches below a Savannah River occupation (Figure 3). Indeed, a Guilford occupation was discovered three feet below the surface within five squares of Trench I, supporting the reports by Wood (n.d.) and Wright (n.d.). However, Table 2 shows that Guilford point types encompassed a majority of the points found in all levels. In

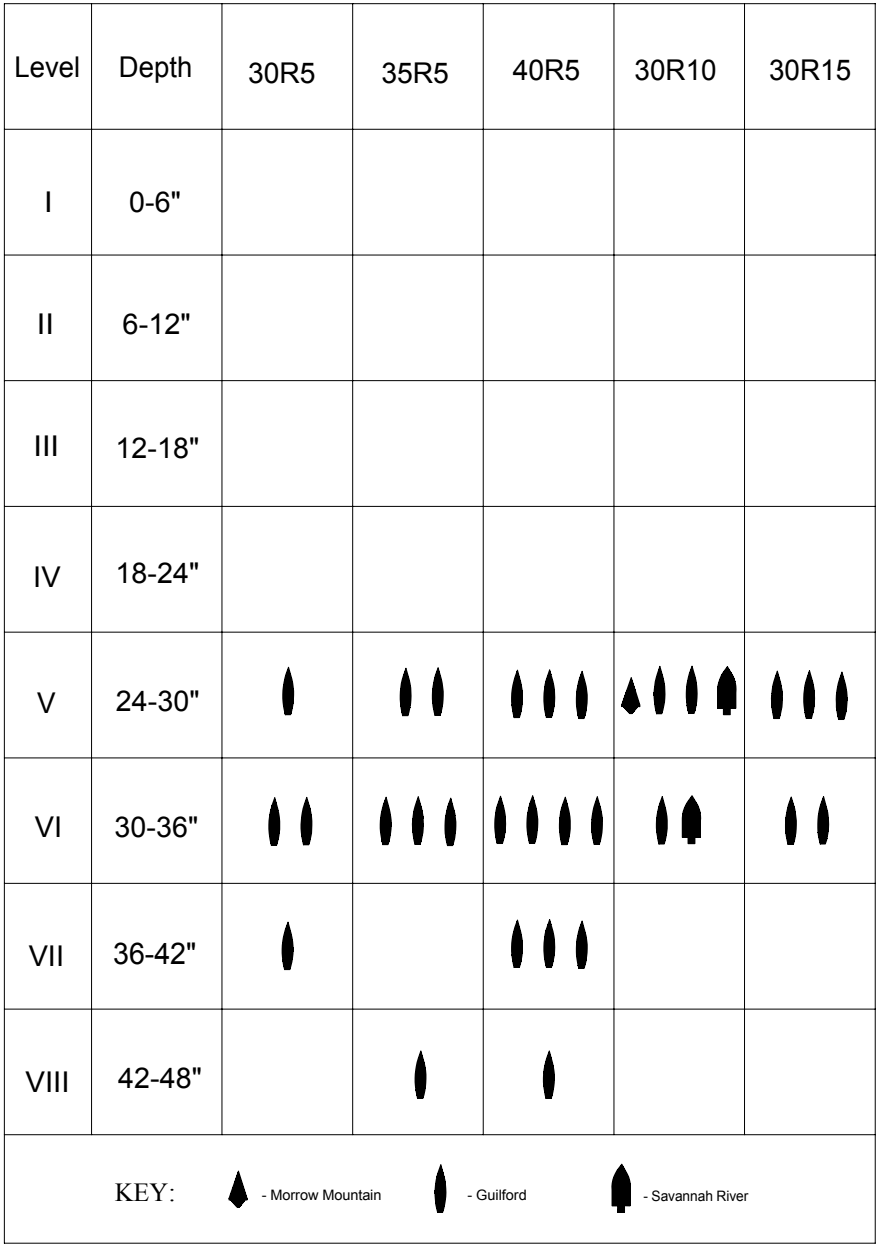

Figure 10. The distribution of Morrow Mountain II Stemmed, Guilford Lanceolate, and Savannah River Stemmed projectile points by arbitrary levels in the five squares containing a three-feet-deep Guilford occupation.

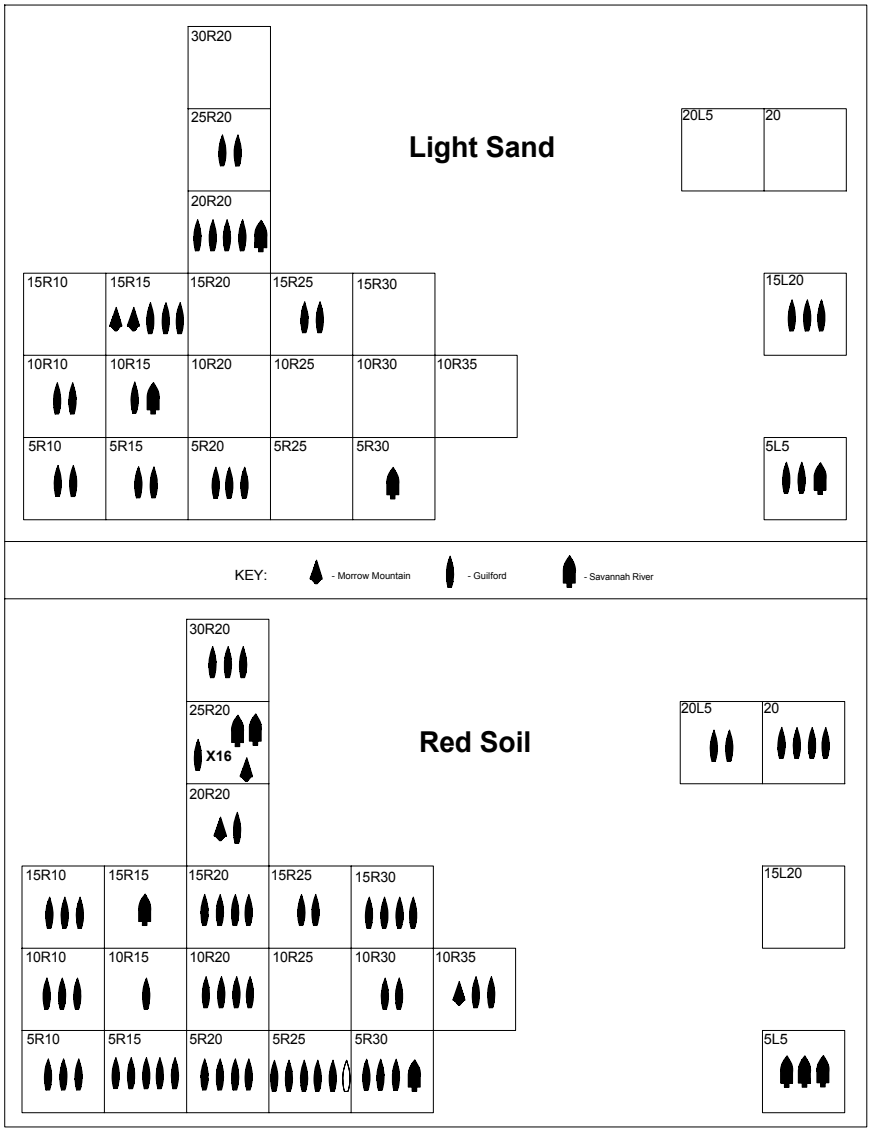

Figure 11. The distribution of Morrow Mountain II Stemmed, Guilford Lanceolate, and Savannah River Stemmed projectile points contained in the 22 squares excavated by natural soil zones.

addition, within the five squares containing a three-feet-deep Guilford occupation, a distinct Savannah River occupation located 18 inches above that of the Guilford occupation could not be found. Although the largest percentage of Savannah River points was found in Level IV (18–24 inches), Guilford points still comprised the largest percentage of points found in Level IV, as well as Level V (24–30 inches) and Level III (12–18 inches).

Table 3 shows that Guilford Lanceolate points comprised the greatest percentage of all projectile points from both the light (yellow or brown) sand and red soil zones (Figure 9). More importantly, Savannah River points were present in both zones. The two natural soil zones, found in 22 squares, seemed to represent sealed, stratified contexts since no Woodland-period point types were discovered in either zone (Figure 11).

Besides the problem of interpreting site structure because of inconsistencies between field notes and Coe's interpretation, another difficult situation was encountered when classifying point types of the Middle and Late Archaic periods. This problem is addressed below.

Projectile Point Analysis

Nine hundred and fifty projectile points were recovered from the Lowder's Ferry site. The number of points from Trenches I, II, and VI totaled 516, of which 397 were used for this analysis. Unfinished points and points with broken bases were excluded, as were points which had been broken in half during manufacture. In addition, 4% of the 397 points used in the analysis were typologically anomalous and could not be classified. These specimens were not found in a stratified context, but rather were scattered throughout the site in shallow levels. The fact that these anomalous points were not included in the distribution tables explains the differing totals of points used for the tables and the totals used overall in the final analysis.

Guilford Lanceolate, Savannah River Stemmed, and Morrow Mountain II Stemmed type projectile points encompassed the entirety of the Middle and Late Archaic period point assemblage, except for two points found on the surface which were equivalents of the late Middle Archaic Halifax Side-Notched point type. A small number of points were classified into the Early Archaic Kirk Corner-Notched and Palmer Corner-Notched types. The percentage of the Early Archaic points is included in the distribution tables, as are the points from later Woodland cultures.

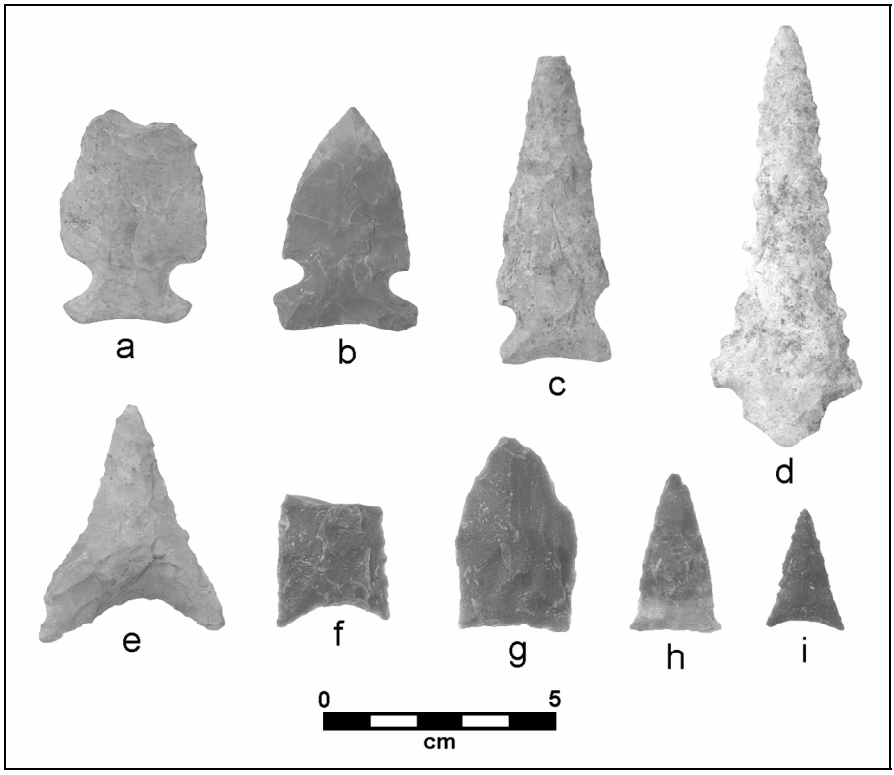

Figure 12. Early Archaic (*a–d*) and Woodland projectile points (*e–i*) found in Trenches I, II, and VI.

The projectile points not dating to the Middle Archaic and Late Archaic periods proved useful in identifying contaminated stratified contexts (Figure 12). However, due to their extreme morphological and temporal differences from Middle Archaic and Late Archaic period points, they are not addressed in the following projectile point descriptions.

Morrow Mountain I Stemmed

Coe has described this point type as having a broad, triangular blade with a 22–45 mm range in width, being widest at the shoulder. This point type has an average length of 45 mm. The stem is short and tapers into a pointed base. There is usually no defined break between the shoulder and stem (Coe 1964:37). Only one Morrow Mountain I point was found in the

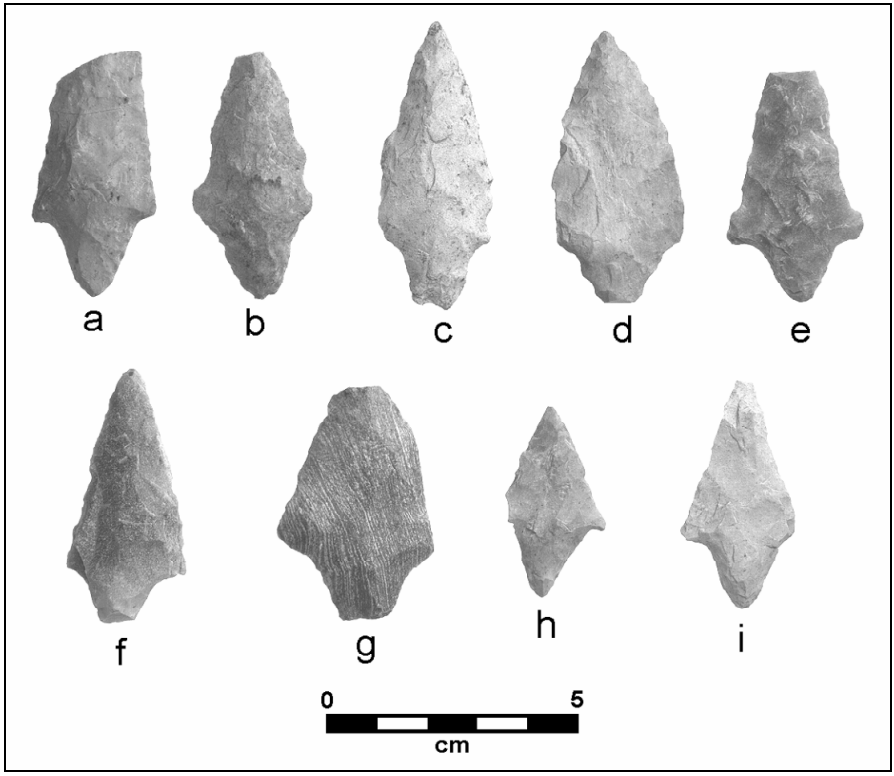

Figure 13. Morrow Mountain II Stemmed projectile points found in Trench I.

three analyzed trenches. It occurred within the red soil zone of Trench I along with Morrow Mountain II, Guilford, and Savannah River points. At the Doerschuk site, this point type was found stratigraphically lower than a Guilford occupation and is generally considered to date earlier throughout the North Carolina Piedmont.

Morrow Mountain II Stemmed (Figure 13)

This point type greatly resembles the Morrow Mountain I Stemmed type in regards to the technique of manufacture: direct percussion and subsequent pressure flaking. However, the blade of the Morrow Mountain II point type is much narrower and longer. The stem, although still tapered, is also longer with a more defined break from the shoulder. A

total of 15 points of this type was recovered from the Trenches I, II, and VI. Six were found in the natural soil zones of Trench I (Figure 11). The other nine were scattered in Levels I, II, and III. Therefore, a well-defined and stratified Morrow Mountain II occupation could not be proven.

Guilford Lanceolate (Figure 14)

Coe (1964:43) described this point type as having "a long, slender, but thick blade with straight, rounded, or concave base." The long, narrow blade usually exhibits "slightly rounded and smoothly contoured sides" (Coe 1964:43). The average length for points of this type is 69 mm (Table 4). Average width is 24 mm and average thickness is 10 mm. Coe reported that the point type was made by direct percussion along both edges of the blade, along with using pressure flaking for retouching. According to Coe (1964:43), pressure flaking "resulted in a general reduction in width, but not in thickness and gave to these specimens their general almond-shape cross section."

The variation in base shape may have been due to a hafting preference. At Lowder's Ferry, 42% of the bases were straight, 14% were rounded or ovate, and 44% were concave. Many similarities in basal shape were found between Morrow Mountain II points (Figure 13) and the Guilford points with ovate bases (Figure 14). Also, some of the Guilford points appeared to be stemmed. The shoulders on these points were not well-defined, but a noticeable difference could be seen due to the relative thickness above the shoulder compared to the much thinner stem. An important point that must be made concerning the sequence of Middle Archaic point traditions in the Carolina Piedmont is that many of the Guilford Lanceolate projectile points with stems showed a tapering similar to that of the Morrow Mountain II Stemmed point type. Although this variation of the Guilford type was morphologically similar to the Morrow Mountain II form, distinguishable differences were evident. These differences consisted of a lack of "ears" along the shoulder of the Guilford variant. Also, the relative size of Guilford points was larger than Morrow Mountain points. However, the similarities between the Guilford points with tapered stems and the Morrow Mountain II points suggest both morphological and cultural continuity.

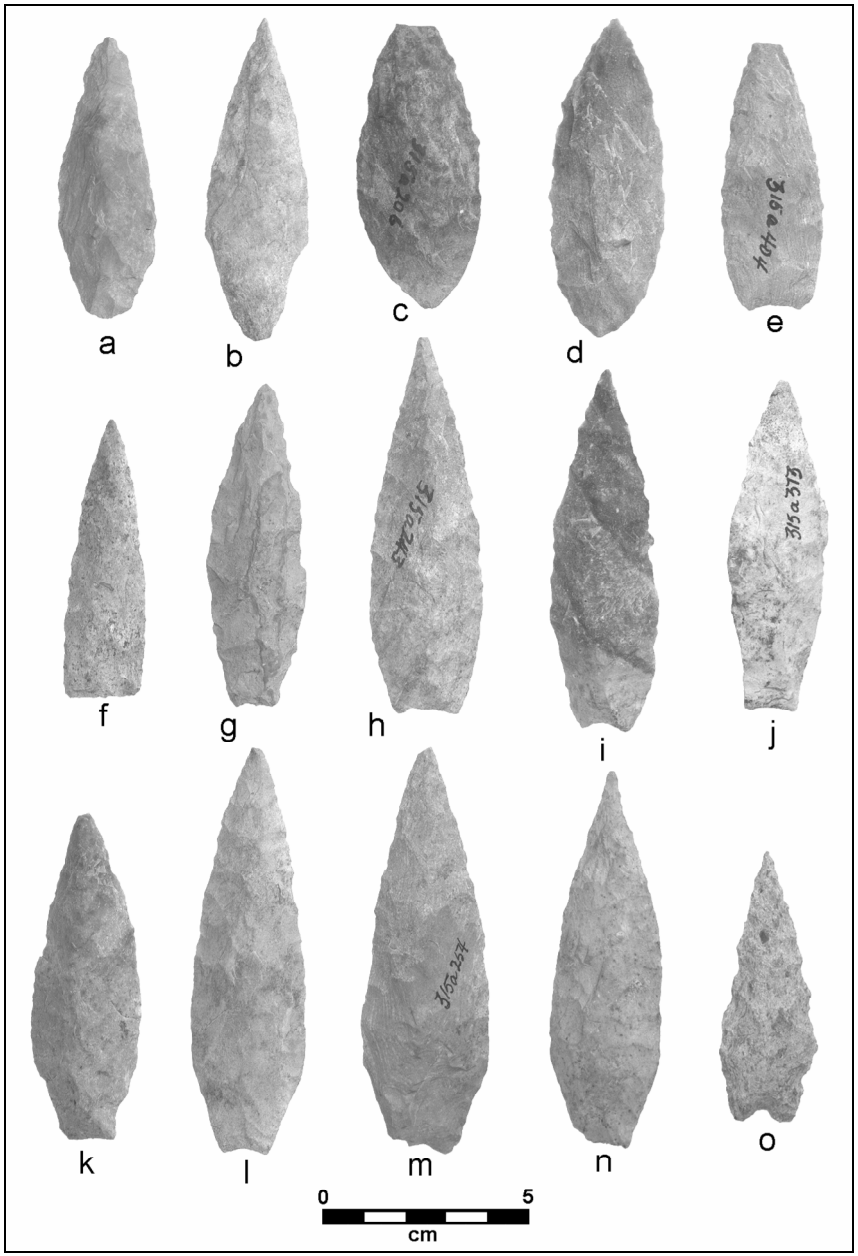

Figure 14. Guilford Lanceolate projectile points found within a stratified context in Trench I: points with ovate bases (*a–d*); points with concave bases (*e, h–o*); points with straight bases (*f–g*); inferred transitional point between Morrow Mountain II Stemmed and Guilford Lanceolate (*b*); and inferred transitional points between Guilford Lanceolate and Savannah River Stemmed (*j–o*).

Table 4. Measurements of Morrow Mountain II Stemmed, Guilford Lanceolate, and Savannah River Stemmed projectile points from Trenches I, II, and VI.

Measurement	Savannah River Stemmed	Guilford Lanceolate	Morrow Mountain II Stemmed
Length			
Count	7	105	7
Mean	66 mm	69 mm	45 mm
Range	48–89 mm	47–101 mm	33–53 mm
Width			
Count	14	169	14
Mean	37 mm	24 mm	24 mm
Range	22–53 mm	8–41 mm	19–30 mm
Thickness			
Count	14	169	14
Mean	9 mm	10 mm	8 mm
Range	7–13 mm	7–15 mm	6–10 mm
Base Height			
Count	14	–	14
Mean	13 mm	–	12 mm
Range	9–17 mm	–	8–16 mm
Base Width			
Count	14	–	14
Mean	18 mm	–	13 mm
Range	11–25 mm	–	11–16 mm
Total Count	14	169	14

Savannah River Stemmed (Figure 15)

The Savannah River Stemmed point type is considered throughout the Southeast as the hallmark of the Late Archaic period. It is described from numerous sites as having broad shoulders, a broad stem, and a large triangular blade. According to Oliver (1981:203), "the shift to a larger, broader, and heavier projectile point may reflect an emphasis on percussion flaking as the primary method of manufacture, but also may

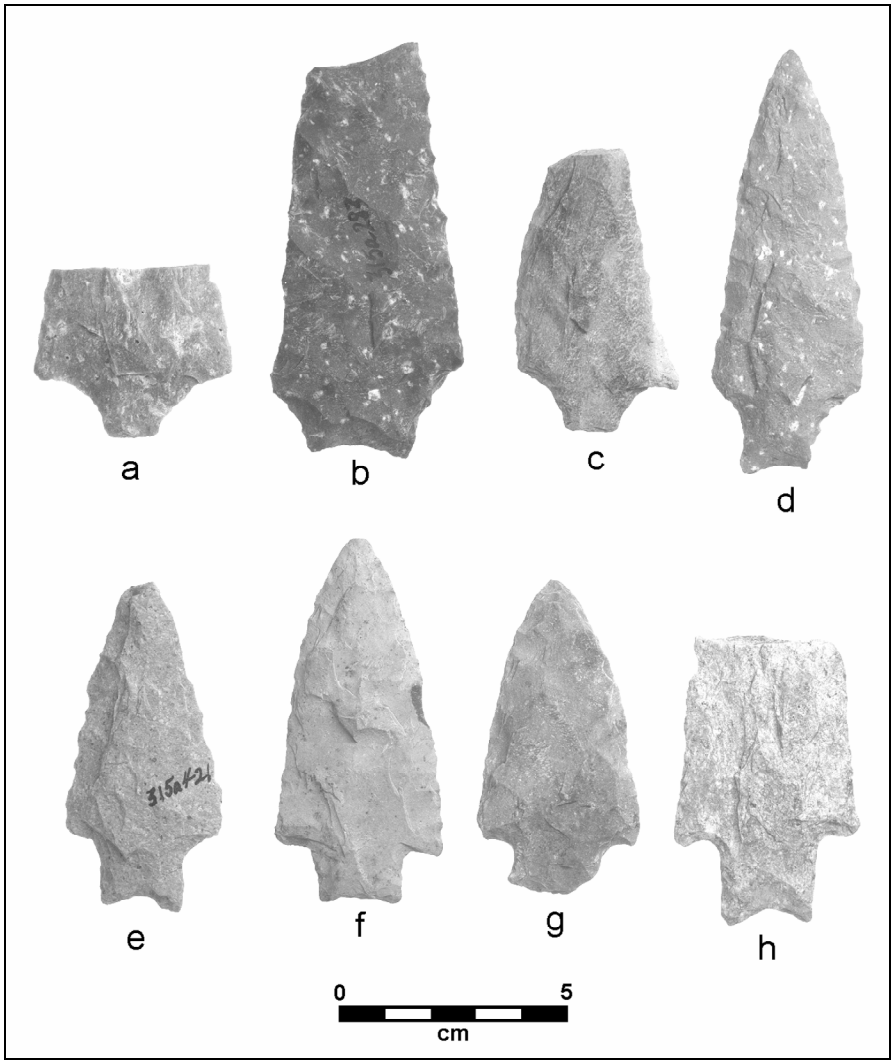

Figure 15. Savannah River Stemmed projectile points found in the stratified contexts of Trench I which also contain Morrow Mountain II and Guilford point types.

indicate a technological modification to a particular type of spear or spear thrower."

Coe (1964:44) reported for Savannah River Stemmed points in the Doerschuk assemblage that "frequently the sides ran parallel for 1/3 to 1/2 of the length of the blade before curving to the point." At the Doerschuk site, the length of the Savannah River points averaged 100 mm and the width averaged 50 mm. Coe (1964:44) argued that Savannah River points could be distinguished by their technique of manufacture: "These points were made almost entirely by percussion flaking. Retouching and pressure flaking was relatively insignificant."

The base of the Savannah River point type has been described as straight or concave. The stem is either square or rectangular. The readily distinguishable shoulder and stem allow these points to be one of the most easily recognized types in the Southeast. The shoulder is usually at a right angle to the stem. However, Coe classified many points as Savannah River which do not exhibit a well-defined shoulder and stem (Coe 1964:45, 1995:198–199). In fact, at Lowder's Ferry, many of the Guilford points exhibited a defined shoulder with a stem that resembled the Savannah River points (Figure 14). Morphological similarities again provide evidence for cultural and typological continuity. The points which were difficult to classify as either Guilford or Savannah River were found alongside the typical Savannah River Stemmed and typical Guilford Lanceolate types in the red soil zone (Figure 11).

Transitional Forms

As stated earlier, it was often difficult to classify variants of the Guilford Lanceolate and Savannah River Stemmed point types according to established typologies. These typological variants were not very numerous, encompassing only 4% out of the 383 projectile points analyzed. In general, these variants of Guilford and Savannah River points were found in almost all levels of Trenches I, II, and VI. However, the significance of the variants was recognized after discovering their presence within the undisturbed, stratified, red soil zone containing Morrow Mountain, Guilford, and Savannah River projectile points (Figure 11).

There are morphological similarities between the tapered stem of the Morrow Mountain II points and the tapered stems found on three of the Guilford points. Similarities in the morphology of these point types, which occur in the Uwharrie area and within a chronologically close time

span, suggest the presence of transitional forms for these point types. The potential of transitional points found at Lowder's Ferry is based on the idea that

> techniques of point manufacture were often evolutionary processes and later cultures were not likely to digress to techniques abandoned in the past. . .along the continuum of point types, point style can become morphologically distinct from previous products. However, there are often points that exhibit characteristics from both "ends" of the continuum, characteristics which are "transitional" [Henry 1991:38–39].

This analysis also suggests a transitional form between the Guilford Lanceolate and Savannah River Stemmed point types (Figure 14). Within the red soil zone there occurred a type of point with a long, narrow blade typical of the Guilford point type. However, a defined shoulder could be seen which is not typical of the established Guilford type. The shoulder is slightly tapered into a straight or concave-based stem, similar to the stem of a typical Savannah River point. In addition, projectile points of this transitional form have lengths that range between those of slightly earlier Guilford and slightly later Savannah River points (Table 4). Similar patterns also were observed with width, thickness, base height, and base width measurements.

After completing his excavations at the Hardaway, Doerschuk, Lowder's Ferry, and Gaston sites, Coe concluded, based on the morphology of the stem and shoulder, that the Late Archaic Savannah River tradition was a continuation of the Stanly point tradition (ca. 5,500 BC). In reference to excavations at the Doerschuk site, Coe (1964:55) noted that "the projectile point style of this Savannah River period is basically similar to the earlier Stanly and Kirk types, and it appears to be a re-emergence of the same tradition after an absence from this site of over 2,000 years."

The Morrow Mountain and Guilford traditions have been viewed by Coe (1964:121) and Oliver (1981:210) as "intrusive traditions," originating from Western North America. Coe not only viewed Morrow Mountain and Guilford point types as discontinuous with the Stanly and Savannah River traditions, but also as a representation of distinctly different cultural groups moving into the Uwharrie area. However, variant Guilford points recovered from several sites in the southern Piedmont, excavated under the direction of Coe, greatly resemble some specimens that he classifies as Savannah River (for example, compare Coe 1995:196–199 and Coe 1964:39–45). This also holds true for the

suggested transitional form between the Morrow Mountain II Stemmed and Guilford Lanceolate types.

Discussion and Conclusion

The analysis of site structure and the Middle Archaic and Late Archaic projectile point assemblages at Lowder's Ferry revealed a Guilford occupation three feet deep (Coe 1964:21) and an uncontaminated red soil layer that contained Morrow Mountain II Stemmed, Guilford Lanceolate, and Savannah River Stemmed projectile points. The presence of these three types, located in the same undisturbed red soil zone, provides potential evidence for cultural continuity throughout the Archaic period.

The most logical site to compare with Lowder's Ferry is the nearby Doerschuk site. According to Coe, Doerschuk contained separate, stratified zones of Guilford and Savannah River occupation.

> In general, it appeared that almost every zone was occupied by a distinctly different cultural group after what must have been long periods of disuse. . . . In areas where the excavation was controlled by natural zones, all Guilford points were found in Zone VI. . . . All the Savannah River points were found in Zone V [Coe 1964:34–35].

However, the uncontaminated stratigraphy at Lowder's Ferry reveals a different picture. In areas which were excavated according to natural soil zones, there was no defined separation between Guilford and Savannah River points, nor was there a separation of strata containing Morrow Mountain II and Guilford points.

When Coe constructed his sequence of Archaic projectile point types for the North Carolina Piedmont, he presented a theory of cultural discontinuity between the Middle Archaic Stanly, Morrow Mountain, and Guilford point traditions. At that time, the Late Archaic Savannah River Stemmed type was viewed as morphologically and culturally continuous with the Stanly Stemmed type. Guilford and Morrow Mountain forms were viewed as having a different cultural origin than Stanly and Savannah River points (Coe 1964:121; Oliver 1981:210). However, the definition of morphologically distinct types does not, in and of itself, offer definite proof that peoples of different cultural origins occupied the Uwharrie area in sequential intervals during the Middle Archaic and Late Archaic periods. Even at Doerschuk, "Coe suggests that Morrow

Mountain II comprises a temporal span since they were found throughout several strata at Doerschuk" (Egloff and McAvoy 1990:73).

In addition to the combined presence of Morrow Mountain II, Guilford, and Savannah River points in the same stratified context, variant forms of these points offer further evidence of cultural continuity. The transitional forms between the Morrow Mountain II Stemmed and Guilford Lanceolate types, and the transitional forms between the Guilford Lanceolate and Savannah River Stemmed types, suggest the gradual evolution of a single Archaic point-making tradition that over time incorporated the influx of new ideas.

According to Trawick Ward (personal communication 1997),

> Initially, archaeologists believed that the differences between Stanly spear points, Morrow Mountain, and Guilford reflected the sequential arrival of groups with different cultural traditions. . . . [However,] there appear to be more similarities than differences. . . . Even at the Doerschuk site, which contained deeply buried strata, the various Middle Archaic types were found mixed together throughout most of the deposits, suggesting some stylistic overlap and a degree of contemporaneity.

The morphological similarities of the transitional forms with the Morrow Mountain II, Guilford, and Savannah River types, and the fact that all of these were found in the same uncontaminated stratigraphic context, suggest that the old theories of cultural discontinuity should be re-evaluated in light of current knowledge concerning cultural concepts.

Acknowledgments

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"ALL THE RUSTLE AND BUSTLE IS GONE:" A LANDSCAPE HISTORY OF THE BEAM FAMILY PROPERTY, CLEVELAND COUNTY, NORTH CAROLINA

by
Thomas E. Beaman, Jr., John J. Mintz, and Kenneth W. Robinson

Abstract

This study describes the layout and growth of the Beam Family Property, an early farmstead located in what is today Cleveland County in the western Piedmont region of North Carolina. Viewed from an archaeological and geographical perspective, the physical elements of the Beam Family Property (i.e., archaeological remains, industrial ruins, and standing structures) illustrate one pattern of rural adaptation to the Piedmont landscape.

One type of archaeological resource that has rarely been investigated in North Carolina is the rural farmstead of the Piedmont, despite its being one of the essential elements of the Carolina landscape. This study presents information about the Beam Family Property, a well-preserved example of a western Piedmont farmstead located in what is today Cleveland County, North Carolina (Figure 1). By examining this historic property, which is comprised of archaeological, architectural, and industrial features, plus a church and cemetery, it is possible to better understand the structure and layout of the Piedmont farmstead and its relationship to the landscape.

The Beam Family Property offers an unusual opportunity for archaeological documentation. Members of the Beam family occupied the property for over 100 years, and historic records document many aspects of the evolution of this farmstead. Indeed, this well-preserved historic property has left an indelible footprint on the rural Carolina landscape. The significance of this historic property was recognized in 1980 when the Joshua Beam house and surrounding 30 acres were placed on the National Register of Historic Places. Other significant components of the historic property were recognized in 1996 during an archaeological survey conducted by archaeologists with the North Carolina Department of Transportation (Beaman et al. 1996). These features, along with the house and property already listed on the National Register, were determined to comprise a significant historic district. Additional archaeological survey

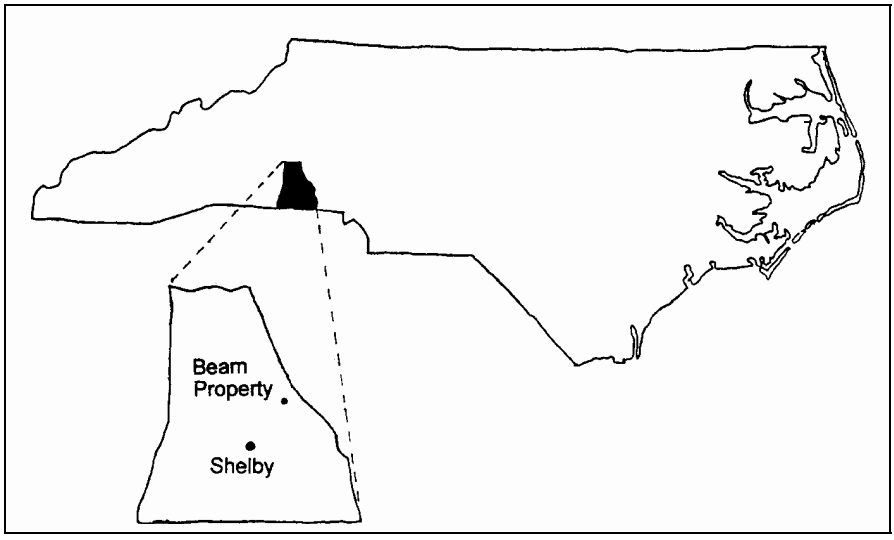

Figure 1. Map of North Carolina showing the location of the Beam Family Property in Cleveland County.

and historical research was undertaken in March of 1998 to further document the history, physical configuration, and significance of the property. In this article, we describe the various archaeological and architectural features of the site, examine how the farmstead was situated on the landscape, and briefly describe how the farm changed over time.

A Brief History of the Beam Family

John Teeter Beam was born in Hamburg, Germany in 1732. With the exception of his training as a weaver in Genaria, Switzerland, very little is known of his early life. In November of 1767, John Beam, his first wife Sara Rudolph, and their two sons John and David arrived in Charleston, South Carolina. Unable to pay for their passage, they contracted with Mr. Christy Eaker of Lincoln County, North Carolina, for a seven-year indenture. At the end of his indenture, John Beam continued to work for Eaker. Apparently the work was profitable, and Beam began to buy property in Lincoln County. By 1790, he owned a considerable amount of farmland on Beaver Creek (Beam 1898:1).

In 1794, John Beam purchased a tract of land from William Killian along Buffalo Creek in what was then Lincoln County (now Cleveland

County) (Lincoln County Deed Book 24:130). He built a home on this property, situated on a terrace west of Buffalo Creek. Over the next few years, Beam added a corn and saw mill to the property, and he helped found the New Prospect Church on the eastern side of Buffalo Creek. A cemetery was also begun in the early nineteenth century near the church. As John Beam's land holdings and wealth grew, he, like many other plantation owners, began to acquire slaves. His first slave was a 12-year-old African boy bought in 1800 in Charleston (Beam 1898:1–2).

John Teeter Beam died in 1807. He was survived by his second wife Elizabeth, 10 sons, and five daughters. His ninth son, Joshua Beam (born in 1800), lived at "the old homestead" with younger brother Aaron and his mother Elizabeth until it burned in 1841 (Beam 1898:2, 9; Morris 1982:97). Both John and Elizabeth Beam are buried in the New Prospect Church cemetery.

Sometime soon after 1833, Joshua Beam acquired his father's homestead and the corn and saw mill from his mother. Beam family tradition states that on September 22, 1836, Joshua hosted at the "old Teeter Beam place" the first meeting of citizens of Lincoln and Rutherford Counties who wished to form a new county. When Cleveland County was formed in 1841, Joshua Beam was one of the first Justices of the Peace. That same year, Joshua also built a new home for himself several hundred yards to the west of his father's house, a home which is still standing and occupied today (Beam 1898:10).

Joshua continued to operate the mill on Buffalo Creek, and in the early 1840s he constructed an iron forge on the property (Beam 1898:10). In his 1859 work on ironworks, J. P. Lesley provided a description of the Buffalo Shoals Bloomary Forge:

> . . . on Buffalo creek, two miles above Froneberger's Forge, nine miles east-northeast of Shelby, owned and managed by Joshua Beam, Shelby P.O., Cleveland County North Carolina, has 1 fire and 1 hammer driven by water and makes annually about 25 tons of wagon tyre, bar and plough moulds for home market, from Ormond's magnetic ore [Lesley, cited in Ferguson and Cowan 1987:34].

Aaron Beam, Joshua's younger brother who remembered the forge and authored a family history in 1898, wrote: "At 4 o'clock every morning the sound of the forge hammer, the rattle of the wagon, [and] the blowing of the blast aroused us fresh for a new day" (Beam 1898:11). The Industrial Schedule of the 1850 Census of North Carolina records that the Buffalo Shoals Bloomery Forge was producing 60,000 pounds of hammered iron

valued at $2400 (1850 Industrial Census: 612). The census also shows that the forge employed six male and four female workers. However, by 1860 the iron-making industry was declining, and Joshua Beam turned his attention to the production of tobacco (Cappon 1932; Morris 1982:97).

Joshua Beam also was involved in many activities away from his family home. By the late 1830s, Joshua and Jacob Anthony, a business associate, formed Joshua Beam and Company, a merchant trading company. Business was conducted through the port at Charleston, and Joshua began to purchase land there and in Alabama. In 1846–1847, he also served a term in the North Carolina State Legislature (Beam 1898:10–11).

Joshua Beam died on February 12, 1869. His widow, Susan, lived in the Joshua Beam house until her death in 1902. Both are buried in the New Prospect Church cemetery. The property was then rented to a series of tenants who primarily grew cotton. In 1943, Brevard Lattimore and Matilda Lattimore Morris, the great-granddaughter of Joshua Beam, purchased a 150-acre portion of the original property (Cleveland County Deed Book 5H:102). They restored and did some minor renovations to the Joshua Beam home, and in 1952 Morris and her husband Roy moved in. Roy owned the property until his death in 1973, when he jointly willed it to his second wife, Beatrice, and his daughter Sue Brevard Morris Hopper (Cleveland County Deed Book 13I:124). Hopper later purchased Beatrice's portion, and in 1987 the Joshua Beam house was acquired by Gordon Hamrick, who currently maintains the property (Cleveland County Deed Book 170:477, 988:288).

The Joshua Beam house and the surrounding 30 acres were listed on the National Register of Historic Places in 1980. It was nominated because of its association with Joshua Beam, as well as its being a significant and well-preserved example of vernacular Greek Revival architecture in a rural setting (Cross and Southern 1979). In 1996, archaeological and architectural surveys were conducted to identify any properties that could potentially be impacted by the replacement of the bridge over Buffalo Creek through the Beam Family Property (Beaman et al. 1996; Griffith 1996). The John Teeter Beam house site, the Beam Mill/Forge, the New Prospect Church and Cemetery, and a number of late nineteenth and early twentieth century agricultural buildings were identified and documented. As a result of these surveys, these sites, along with the Joshua Beam House National Register site, are now considered eligible for listing on the National Register of Historic Places as a historic

district. With the permission of landowner Gordon Hamrick, additional archaeological investigations were undertaken by Tom Beaman and Christina Roberts in March of 1998 to further document the evolution of the original 150-acre tract.

Landscape Elements of the Beam Family Property

In *Discovering the Vernacular Landscape*, Jackson (1984:28) wrote that the most basic element in a rural landscape is where a family lives and works, and the remainder of a rural landscape is either a modification or an extension of it. While considering the archaeology of rural sites, William Adams observed that the concept of a domestic site has most often been a house lot, encompassing only the house, yard, and outbuildings. Adams attributes this focus primarily to the attention early archaeologists gave urban sites and monuments, but notes this practice is not especially applicable to rural settings. In a rural setting, the house lot is but one small subsystem of the farm or plantation, which is the larger system. Therefore, it is actually the farmstead or plantation that is the site, and the site must be studied in its entirety as a system to be fully understood (Adams 1990:92–93). In this study, we consider the greater Beam Family Property to be the site, with the site being comprised of various material elements (or components) that have had a place on the landscape (Figure 2). Today, these elements survive in various conditions: some architectural elements are still standing, while other elements are archaeological and consist of the remains of former structures or features. Still other elements (e.g., the mill race or the shoals in the creek) survive only as cultural or natural landscape features. Some of these elements, such as the residences, have changed over time as the farmstead has been adapted to changing economic or social conditions. The major elements of the Beam Family Property and how these changed over time are described below.

Residences

The initial occupation of the Beam tract began in 1794 when John Teeter Beam purchased the property, constructed a house, and moved his family there. The site of this early residence is on a sloping hillside approximately 200 ft to the west side of Buffalo Creek (Figure 2) (Beaman et al. 1996:36–41). The hillside has been altered by the

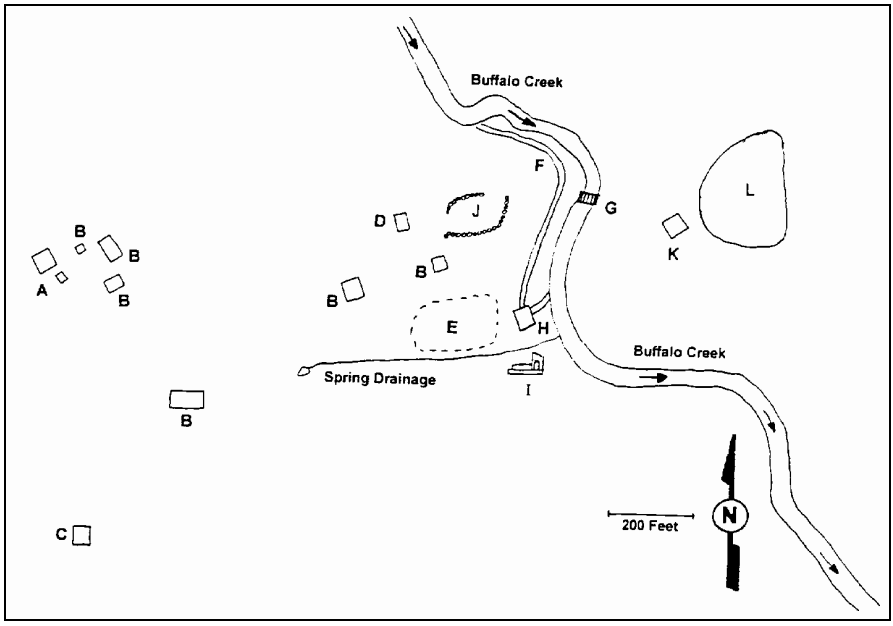

Figure 2. Landscape elements of the Beam Family Property: (A) Joshua Beam house and kitchen; (B) barns and agricultural buildings; (C) tenant house; (D) store; (E) suspected location of Columbus Beam's house; (F) mill race; (G) mill dam; (H) mill; (I) subterranean cavernous feature; (J) stone-walled terrace and site of John Teeter Beam house; (K) New Prospect Baptist Church; and (L) cemetery.

construction of a terrace approximately 170 ft in diameter. The terrace is defined by two large semi-circular, dry laid, dressed field-stone retaining walls, and the John T. Beam house site is contained within the terrace walls (Figure 3). A drive extends around the base of the retaining walls, and stone steps incorporated into the wall ascend from the drive to the former level of the house. Limited archaeological testing within the center of the terrace revealed a large rectangular feature (measuring less than 40 ft by 25 ft) which contained large amounts of brick, loose trace mortar, cut nails, window glass, and several domestic artifacts which date from the early to mid nineteenth century (Beaman et al. 1996:39). This is likely the remains of the house foundation or subfloor. Charcoal was noted within this rectangular feature, probably debris from the burning of the house around 1841 (Beaman et al 1996:40; Morris 1982:97). The yard around the house locale does not appear to contain many artifacts. It is possible the house had a cleared or swept yard, a common feature of both Euro-American and African-American residences in the nineteenth- and

Figure 3. Southern stone retaining wall of the terrace. Before it burned in 1841, the John Teeter Beam house stood on this terrace.

twentieth-century South (Lounsbury 1994:413–414; Westmacott 1992:79–80). Growing on the terrace are traces of English Ivy (*Hedera helix*), an ornamental plant that is often associated with domestic occupations (Beaman et al. 1996:36).

The siting of the first Beam house was obviously intended to relate to the nearby creek and to the road leading to the creek. The construction of a rather substantial stone retaining wall around the house locale is the most notable feature of the residence. The wall functions not only to level the locale for the house, but it also provides well-defined limits to the yard area around the house. The raised stone-edged terrace is a feature observed on other late-eighteenth-century and nineteenth-century residential sites of the region, such as the Mount Tirzah site in neighboring Lincoln County (Robinson 1994). In 1841, the John Teeter Beam house was destroyed by fire (Morris 1982:97). The presence of a shallow plowzone suggests that the residential site was cultivated subsequent to the demise of the structure. The house locale may have been later used as a garden area.

After the burning of the John Teeter Beam house, Joshua ordered a new residence to be built. This was located farther upslope, several yards

west of where his father's house originally stood (Figures 2 and 4). The Joshua Beam house was constructed as a symmetrical two-story house, with four rooms on each floor and a central passage. It is considered to be a predominantly Greek Revival style structure (Cross and Southern 1979). A detached kitchen was also constructed near the house. It is possible other dependency buildings were built during this time as well, but to date none have been defined archaeologically. The occupation of the Joshua Beam house in 1841 saw the seat of the property shift farther from the creek. Rather than facing the creek, the new residence fronted onto the road. After Joshua Beam died in 1869, his widow Susan continued to live in the house until her death in 1902. The Joshua Beam residence was remodeled in the mid twentieth century, which resulted in the addition of a room, the joining of the kitchen building to the house, and construction of a detached garage.

At some point during the latter part of the nineteenth century, one of Joshua's sons, Columbus, built another residence on the property and began managing the day-to-day farm operation. The suspected site of Columbus Beam's residence was recently identified (Figure 2). In 1898, Aaron Beam (1898:10) noted that Columbus had "built a large and beautiful house on an eminence a few hundred yards below his father's old mansion, near the mill." No structural remains are visible on this landform, and it has not yet been tested archaeologically. However, it is one of the only landforms in this area that could have accommodated a large residence.

A tenant house, which likely dates to the early twentieth century, was located to the south of the Joshua Beam house complex (Figure 2). The structure is still visible, but it is partially collapsed and overgrown. The residence was used when tenants grew cotton on the property. An overgrown but visible path, probably a former driveway, extends from the house to New Prospect Church Road (SR 1908).

Mill and Buffalo Shoals Bloomery Forge

Soon after moving to this property in the 1790s, John T. Beam constructed a corn and saw mill (Beam 1898:1). Located south of the house site, next to the creek, the mill structure had a foundation constructed of finely dressed, dry-laid field stones (Figure 2). Remnants of the four cellar walls are still visible (Figure 5). A curvilinear stone retaining wall is situated about 15 ft southeast of the mill structure, and

Figure 4. The front of the Joshua Beam house, looking southwest.

may represent either a supporting wall for a wing of the mill or part of an undefined structure (Beaman et al. 1996:45, 47). The mill race leading to the mill structure is still prominent on the landscape. It is a ditch about 3 ft to 4 ft deep, and it extends north of the mill, paralleling the run of the creek (Beaman et al. 1996:45). Remnants of the timber crib-style dam for the mill are visible in Buffalo Creek (Beaman et al. 1996:46).

Though the mill continued to produce corn meal and saw timber, in the early 1840s Joshua Beam began an iron manufacturing operation in the facility (Beam 1898:10). In 1859, J. P. Lesley noted that "the poverty and distance of the ore will cause the forge to be soon abandoned" (Lesley, cited in Ferguson and Cowan 1987:34). The absence of the Buffalo Shoals Bloomery Forge in the 1860 Industrial Census likely indicates the forge operation had ceased by that year. Joshua Beam then turned to the production of tobacco as a major source of income (Morris 1982:97).

Aaron Beam (1898:10) wrote that Columbus was associated with the operation of the mill, store, and farm. The mill continued to operate following the close of the forge, and large metal gears and parts can be

Figure 5. The remnants of the mill building, looking southeast. Metal gearing is visible in the left foreground. The iron forge is believed to have operated in this facility from the early 1840s until ca. 1860.

observed today within the mill cellar. This is similar to other gearing noted on late-nineteenth-century and early-twentieth-century mill sites (cf. Mintz and Beaman 1996). It is not known when the mill finally ceased its operation, but the excellent condition of the mill race and structural ruins indicate that the mill and its surrounding area were not reused following its closure.

Subterranean Cavernous Feature

South of the mill site and across a small spring drainage is a subterranean cavernous feature (Figure 2). Built into the side of the hill, the subterranean feature is accessed via a stone-walled trench entryway approximately 25 ft in length. The walls of the entrance rise with the slope of the hill. An arched entryway made of stone leads to a small stone-walled anteroom with an arched ceiling (Figure 6). At the back side of the anteroom is a trabeated entrance with a cut stone lintel and vertical side supports. This was likely fitted with a wooden door. Passing through

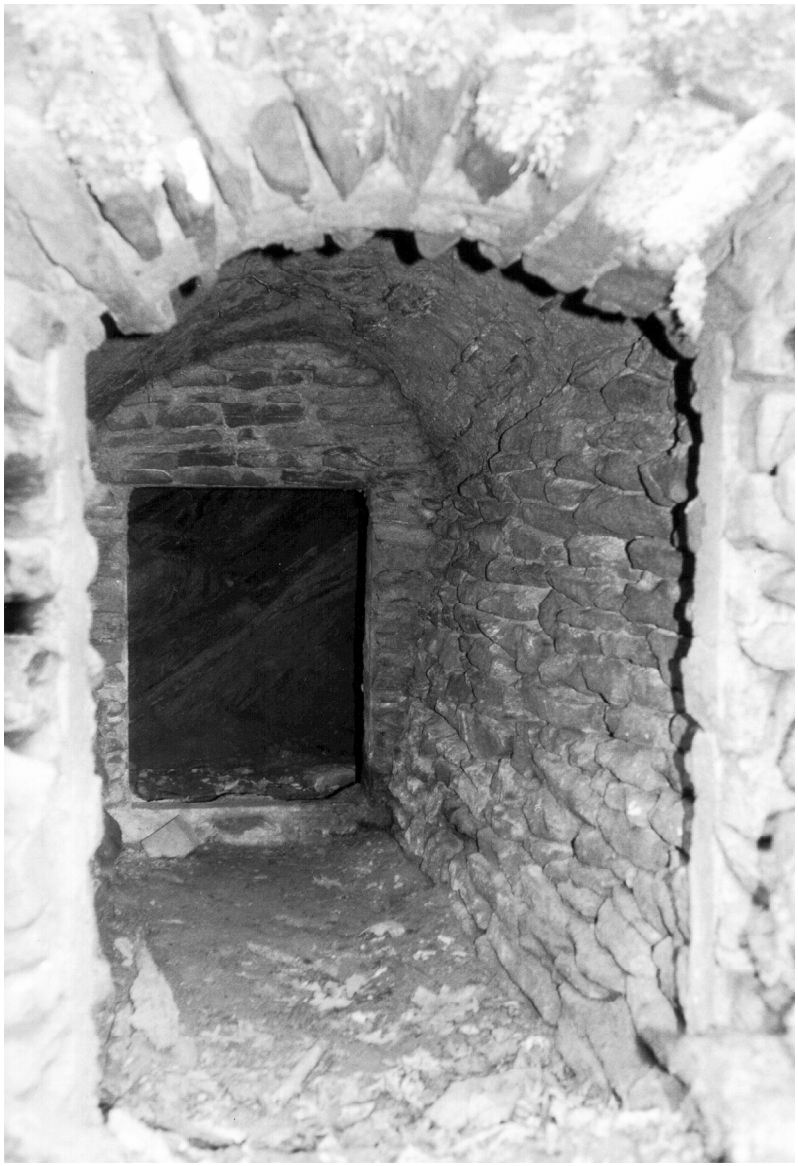

Figure 6. View through the stone arched entryway into the anteroom of the subterranean cavernous feature. Beyond the trabeated doorway of the anteroom is a large dug cavern that extends approximately 30 ft into the hillside.

this doorway, one enters a large, earthen-walled, cavernous chamber, approximately 8 ft wide and 4 to 6 ft in height. The chamber extends some 30 ft into the side of the hill. No evidence of lighting, ventilation, or artifacts is visible (Beaman et al. 1996:49). Though the exact function of this feature is not known, it is suspected to have been utilized for cold storage or as an ice house (cf. Kimmel 1993). The dry-laid stone construction of this feature appears to be of the same period as the terrace wall of the John Beam house site and the mill building, and is for that reason believed to date from the late eighteenth century.

New Prospect Church and Cemetery

On a ridgetop east of Buffalo Creek, John Beam founded a Lutheran church that evolved into what is now the New Prospect Baptist Church. Very little is known about the early history of this church. The tradition of the church states that Beam established the church in 1801 and that the modern sanctuary was constructed on the same site of the original brush-arbor church (Chad Harvey, personal communication 1996). In 1855, the church deacons purchased the small tract of land containing the church from Joshua Beam (Cleveland County Deed Book HH:424). Additional land for the church was purchased from the Beam family in 1902 (Cleveland County Deed Book NN:185). In the 1930s, a wood-frame structure built sometime during the nineteenth century was replaced with the present sanctuary (Chad Harvey, personal communication 1996). The present educational building, which adjoins the sanctuary, was built in the 1950s. Since the construction of the new sanctuary and educational building, the Deacons of the New Prospect Church have twice purchased land from the owners of the former Beam property, once in 1978 (Cleveland County Deed Book 16K:567) and again in 1990 (Cleveland County Deed Book 1081:491). A cemetery was begun on this site soon after the church was founded. John Teeter Beam and his second wife Elizabeth, Joshua Beam and his wife, and many Beam siblings and children are buried in this cemetery.

Store

A store building (Figures 2 and 7), still standing, is located immediately upslope from the terrace that contained the John Beam house (Beaman et al. 1996; Griffith 1996). This structure is believed to have

Figure 7. The front of the store, looking northwest.

been built in the late nineteenth century or early twentieth century. Long counters and shelves are still present inside the building. Additionally, the names "C. C. Beam" and "Aaron Beam" are carved on one of the interior posts. Archaeological testing indicated that the ground around the store was extremely eroded (Beaman et al. 1996:31).

Agricultural Outbuildings and Fields

After the 1860s, two large storage barns and a tack barn were constructed east of the Joshua Beam residence (Figure 2). Also, two agricultural outbuildings are located in the vicinity of the store (Figure 2). One is a wooden corn crib, best described as a drive-in, double-crib barn (cf. Noble and Cleek 1995:62). Southwest of the store is a large two-crib barn (cf. Noble and Cleek 1995:69–70). Also in this area is a privy house. A recent survey of both standing and archaeologically-recorded privies in North Carolina noted that, with its slat-board construction and slanted, flat tin roof, this structure is considered to be a typical example of late-nineteenth-century and early-twentieth-century farm privies (Carnes-McNaughton and Harper 1997). South of the Joshua Beam house is

another barn (Figure 2). Though it is difficult to estimate the precise age of these farm structures, they appear to date from the late nineteenth or early twentieth century, though later twentieth-century repairs and renovations are extensive. These buildings were presumably part of the agricultural operations of both Columbus Beam and the later tenant farmers.

Without extensive archaeological testing, it is difficult to know exactly where the fields for growing tobacco and cotton were on the property. It is supposed that much of the ridge on which the Joshua Beam house complex and the later tenant house rest were used as agricultural fields, as was the area to the west of the Joshua Beam house. Due to the severe erosion of the soil, no large-scale agricultural activities have been conducted on the property in recent years (Gordon Hamrick, personal communication 1996).

Conclusions

In this article we have endeavored to present a brief overview of the physical configuration and major types of features and elements that comprised the Beam Family Property over time. While not all elements are yet accounted for, and not all of the interrelationships between these farmstead elements are apparent from the archaeological and historic records, it is possible to summarize general patterns of this farm settlement.

It is apparent that Buffalo Creek was important to the original layout of the Beam farmstead. The main house (i.e., the John Teeter Beam House) was situated above the creek on a specially constructed platform terrace. Over time, with the construction of new houses, the focus of the residential elements changed somewhat, first moving away from the creek and then, with the addition of the houses of later generations, expanding back toward the creek. From its early years, the Beam farmstead also included an industrial element in the form of the grist and lumber mill, and later an iron forge. Relying on the creek for power, the industrial focus of the property remained close to the creek. In the nineteenth century, commercial elements were added to the site with the construction of the store. The nearby church and cemetery comprise another dimension to this rural farmstead complex. Situated on the opposite side of the creek from the residential area, the church can be considered a public or social activity area within the Beam property.

The Beam family achieved economic and social status in the region and the Beam Family Property is representative of this social level, being best characterized as a middle to upper class Piedmont farm. Although the elements of the Beam Family Property functioned in many different ways, these elements have remained tightly nucleated on the landscape over time. In general, we have found that the configuration of the rural farmstead created in the late eighteenth century has remained consistent through time despite use of the property by at three successive generations of Beam family members and subsequent owners. As archaeologists, we must recognize that the changes that occur on rural landscapes are not isolated but tied to other portions of the physical and socio-cultural landscape as well. While foremost a residence and farmstead, the Beam Family Property also was the focal point for the surrounding rural population, offering commercial services (store), industrial processing (mill and forge), and periodic social and cultural activities (political gatherings and church).

Future research on the property may identify other landscape elements that have not yet been recorded, such as slave quarters, other tenant houses, and additional agricultural outbuildings. Such research may help further refine the history of this farmstead. Current evidence illustrates that though changes certainly occur to farmsteads over time, the general configuration of some Piedmont farms persists. Writing a century ago, Aaron Beam (1898:11) recognized change occurring on the Beam property: "A short while ago I passed over these hills. I looked at the beautiful old mansion, all the rustle and bustle is gone; it seemed as if I had been dreaming."

Notes

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31DH614: A PREHISTORIC LITHIC WORKSHOP IN DURHAM COUNTY, NORTH CAROLINA

by
Jane M. Eastman, Loretta Lautzenheiser, Mary Ann Holm, and Thomas J. Padgett

The South Fork of the Little River crosses two prominent geological formations of the North Carolina Piedmont. The river rises in the Carolina Slate Belt and flows eastward, joining the North Fork in western Durham County to pour into the Triassic Basin as the Little River, one of the major headwaters of the Neuse. Just before the two forks of the Little River join, the South Fork squeezes through a small ridge formed from metavolcanic rocks (Figure 1). In recent times this setting provided an ideal location for a dam to operate a water-powered grist mill; but the area had been well known and used for other purposes by Native Americans for thousands of years before the first Europeans entered the Piedmont.

The prehistoric occupants had discovered a rock outcrop on the slopes of the ridge above the river. This rock material was a metavolcanic deposit of thin, bedded tuff. Native Americans could easily quarry and chip this stone into a variety of tools, and the floodplain and terraces along both sides of the river became littered with the debris from this activity. The site of this prehistoric lithic industry was recorded in 1992 in an archaeological survey conducted by Deborah Joy and Joseph Herbert, two archaeologists working for the North Carolina Department of Transportation (Herbert 1992). The site was designated by the number 31DH614.

The archaeological survey had been carried out in anticipation of a highway project to replace the bridge on Secondary Road 1461 in Durham County. Built in 1952 of timber decking on wooden piers, the old bridge spanning the South Fork of the Little River (Bridge #57) was due to be replaced by a modern concrete structure. Testing of the prehistoric site revealed that modern artifacts were mixed throughout the prehistoric deposits, indicating that modern farming and land alterations, combined with natural flood scouring and re-deposition, had greatly disturbed the cultural deposits in the immediate vicinity of the bridge (Padgett 1993).

The original design plan called for the bridge to be replaced at the same location, possibly with a temporary detour to carry traffic during construction. The temporary detour was dropped in favor of routing

Figure 1. Outcrop of metasedimentary rock upstream from site 31DH614.

traffic around the area using existing roads. That would confine the construction impacts along the already existing right-of-way, where the cultural deposits were known to be highly disturbed from previous road construction, cultivation of the land, and natural flood scouring. Therefore, initially no additional archaeological work was recommended. However, when the bridge designs were modified to expand the highway right-of-way to accommodate lateral drainage ditches, additional archaeological testing was conducted. These tests revealed that, although the prehistoric cultural deposits throughout the site were disturbed and no stratigraphically separated deposits or prehistoric features were likely to be found, the large quantity of lithic material present at the site had the potential to contribute significant information about prehistoric stone-working activities. Therefore, plans were made to conduct excavations in the impacted area of the site to recover as much information as possible.

The North Carolina Department of Transportation (NCDOT) initiated test excavations at the site in August, 1994, after consultations with the Office of State Archaeology (representing the State Historic Preservation

Office). The data recovery excavations were begun by a team of archaeologists from the NCDOT, and after a consultant contract was authorized, the excavations were continued by Coastal Carolina Research, Inc. of Tarboro, North Carolina. The major part of the fieldwork was conducted in October and November of 1994, and a report was issued by the North Carolina Department of Transportation the following September (Eastman et al. 1995). This article is a brief summary of that report. Anyone interested in learning more details about the site and the analysis of the recovered artifacts should consult the original report.

Previous Lithic Studies in the Region

Prior to this research, several other quarry and lithic workshop sites had been studied in the Piedmont, the most well-known being the Hardaway site in Stanly County (Coe 1964). The Hardaway site has continued to provide data for a number of researchers (cf. Daniel 1986, 1994a; Hall 1983). Baker examined two quarry sites in Chatham County (Baker 1980). Hargrove (1989; see also Baker 1989) conducted test excavations at Morrow Mountain State Park, at the quarry site previously investigated by Coe (1964). At the edge of the Piedmont, Lautzenheiser and Eastman (1993) reported both a quarry site and a workshop site that gave evidence of prehistoric exploitation of a chert outcrop in Lee County. Finally, Abbott (1987) looked at material from Three Hat Mountain in Davidson County, attempting to model the distribution of raw material from that site to other sites in the area.

In the Little River Drainage, several archaeological surveys conducted in the last two decades have recorded a number of sites, including some which appear to be quarry or lithic workshop sites (Daniel 1994b; Hargrove 1987; Thomas et al. 1981; Ward 1976). The original report (Eastman et al. 1995) contains more detail on these studies, and Daniel (1994b) reviews most of these in his survey of portions of Orange County.

Excavations

In order to construct the new bridge to modern standards and include lateral drainage ditches and catch basins, an additional 40 feet of right-of-way on each side of the existing roadway was obtained by NCDOT. The archaeological excavations were confined to this area, a small portion of

the 4.5 acre site (Figure 2). A backhoe was used during the first phase of the work to check for the presence of buried cultural deposits on the floodplain. This confirmed that the floodplain next to the river had been subject to episodes of flood scouring and re-deposition, with no deep cultural strata surviving. The backhoe was also used in this early stage to put in a series of units where the plowzone was scraped away to check for the presence of archaeological features. These tests helped confirm that there was little chance of finding any truncated features below the upper soil levels.

With the primary goal of the study to learn more about prehistoric lithic technology in this region, field investigations focused on the recovery of a sample of artifacts adequate for technological and spatial analyses. A combination of 1 x 1 meter and 1 x 2 meter units were excavated, for a total of 80 square meters of excavated area in 48 different excavation units (Figure 3). The units were placed to sample both the floodplain and the terrace in all four quadrants of the project area, centered around the bridge. Since previous testing at the site indicated that it probably lacked preserved subsurface features, deeply buried cultural deposits, vertically stratified cultural deposits, or other complex site structures, most of the units were excavated to subsoil as a single stratigraphic unit.

All of the soil was dry screened through quarter-inch mesh hardware cloth. Standard samples were taken from each unit for water screening through fine mesh to recover a representative sample of small artifacts that would otherwise be missed in the quarter-inch screen. Much of the excavated soil was hauled away from the site to a nearby NCDOT maintenance yard, where it was stockpiled and screened off site. This served to expedite the actual excavation phase of the project and allowed more of the work to be completed out of the construction area. It also afforded an area where water-screening could be done in a safe and environmentally sound way with no runoff entering the stream.

In all of the main excavation units, as with the earlier test units, the backhoe-scraped areas, and the deep trenches, no prehistoric features were found below the disturbed, upper soil levels. It is possible that features do exist in other, less disturbed parts of the site, but the current investigations were limited to the land that would be affected by the highway improvements, and much of this area had been previously altered.

Another aspect of the field investigations was the sampling of local lithic source areas. Samples of stone were taken from the rock outcrops,

Figure 2. Estimated boundaries of 31DH614 and limits of investigations.

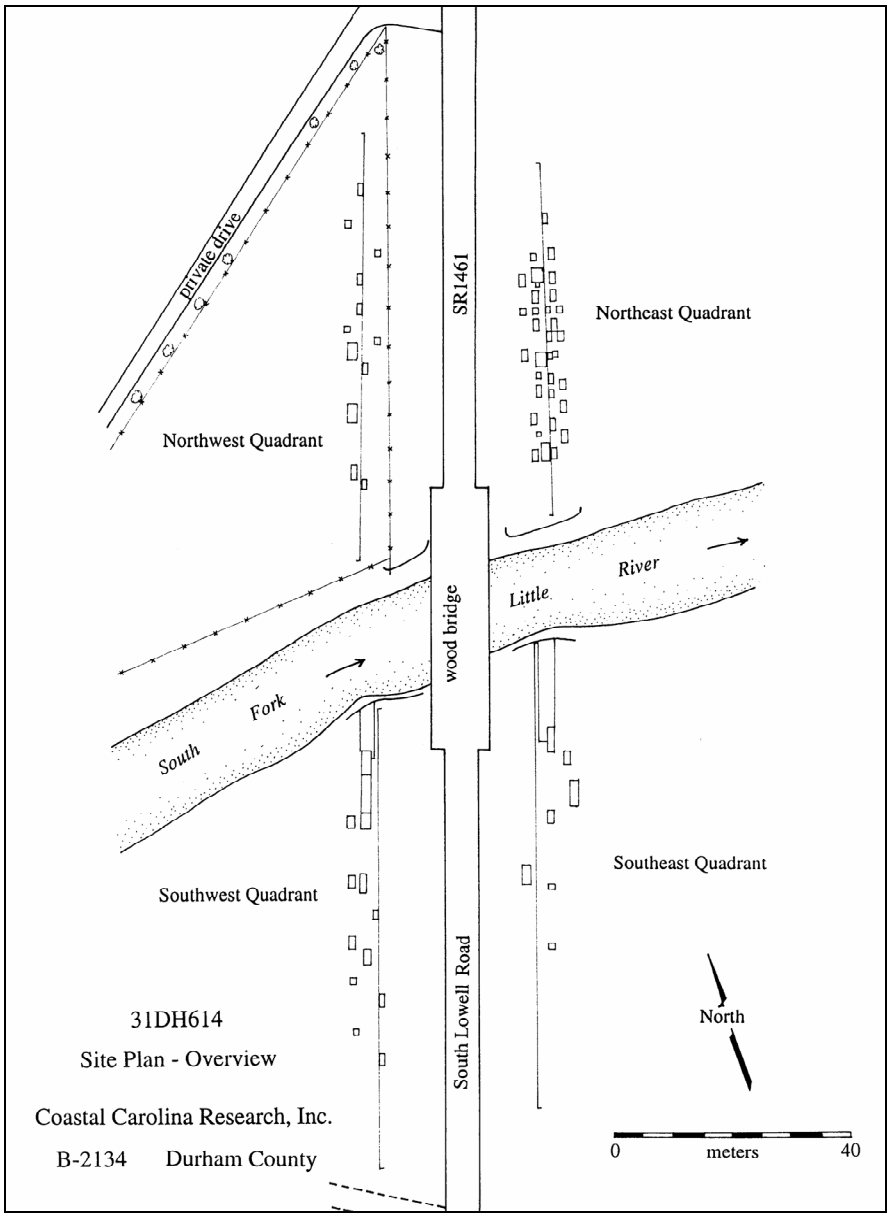

Figure 3. 31DH614 site plan overview.

boulders in the riverbed of the South Fork River, and other local sources. These samples were appropriately labeled as to their origin and analyzed. A quarry site, 31DH617, just upriver from 31DH614, was found and recorded, and samples were obtained for comparison with site materials.

All the material collected was processed for accession into the North Carolina artifact curation facility maintained by the Office of State Archaeology. Examination of the prehistoric artifacts during the analysis was aided by use of a 10x power hand lens. Thin-sections were made of selected artifacts, raw materials, and lithic debris.

Analysis

With no features, and no apparent cultural stratigraphy, the analysis focused on the artifacts, and, since only a small handful of prehistoric ceramics were found, the study concentrated almost exclusively on lithic artifacts.

According to geologic mapping available for the area (Wright 1974), the site is located within a six mile long, one mile wide geological unit of intermediate and felsic volcanic rocks, lapilli tuff, and thin bedded tuff. Examination of the thin sections made of the various lithic samples confirmed that the local outcrop of thin bedded tuff was the likely source of almost all of the artifacts at 31DH614.

This bedded tuff is very fine to sugary in texture. Fresh surfaces appear dark green and weather to a light greenish-gray color. The tuff is composed primarily of quartz and feldspar, with epidote, chlorite, actinolite, and calcite crystals. Some samples exhibited large clusters of epidote visible without magnification, especially on weathered surfaces. Similar outcrops of tuff are found in other areas of the Eastern Slate Belt and the Carolina Slate Belt. This outcrop is located at the eastern end of a band of volcaniclastic rock that extends as far west as Guilford County. Unfortunately, the mineralogical composition of the outcrop at 31DH614 does not appear to be distinctive enough to separate it from rocks originating in these other sources.

Artifact Analysis

The stone artifacts were analyzed using an attribute classification model employed by the Research Laboratories of Archaeology at the University of North Carolina at Chapel Hill (see McManus 1985). Use of

this standard model for the analysis allowed for easier comparison with materials from other sites in the region. The lithic artifacts were divided into three basic categories: the general reduction process (i.e., whether the stone was ground or flaked), type of tool blank (i.e., cobble, flake, uniface, biface, etc.), and the working edge form (i.e., hammerstone, end scraper, triangular projectile point, unmodified, etc.). The raw material type was recorded for each artifact. Diagnostic artifacts (primarily projectile points) were classified based on the typology presented in Coe (1964) and refined by others (Davis and Daniel 1990; Oliver 1985).

Seventeen thousand stone artifacts were recovered and analyzed. Of these, only one was classified as ground stone. This small fragment of chloritic schist may represent a fragment of a ground stone pipe or atlatl weight. All the other lithic artifacts were some form of chipped or flaked stone.

Projectile Points. Four of the 34 projectile points recovered date to the Middle Archaic period. Two were Morrow Mountain I Stemmed, one was Morrow Mountain II Stemmed, and one was a Guilford Lanceolate base fragment. Two Late Archaic period Small Savannah River Stemmed points (Oliver 1985) also were found. Triangular points were the most common type in the collection and comprise almost 65 percent (n=22) of all points. Included in the triangular points was one classified as a Badin Crude Triangular and two classified as Yadkin Large Triangular points. One pentagonal point, with a broken tip that may represent a re-sharpened triangular point, was classified as a Pee Dee Pentagonal type. Twelve small triangular points, none of which is complete, made up the most common projectile point type in the assemblage. Six of the projectile points analyzed were tip or blade fragments which could not be classified. One final triangular point did not fit easily into any described point or biface category. It was a large, well-made triangular biface that may have functioned as a knife.

Bifaces. The 48 other bifacially flaked tools from 31DH614 fit into four categories: (1) quarry blades (n=11); (2) preforms (n=5); (3) bifacial knives (n=3); and (4) undifferentiated biface fragments (n=29). Quarry blades were rather large (>60 cm in length), thick, oval forms with flakes removed probably by percussion on both faces of the implement (Figures 4 and 5). All quarry blades from the site were made from local tuff and probably represent unfinished tool blanks that were lost, broken, or

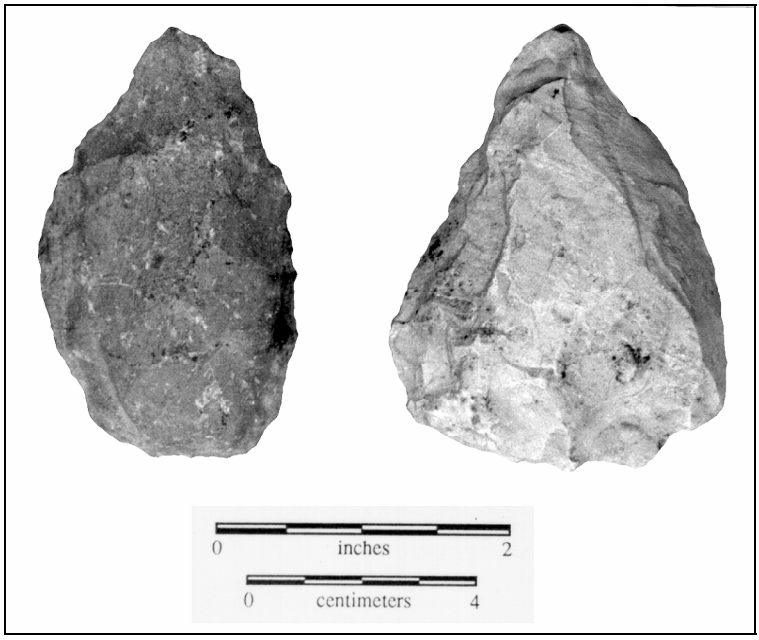

Figure 4. Quarry blades from 31DH614.

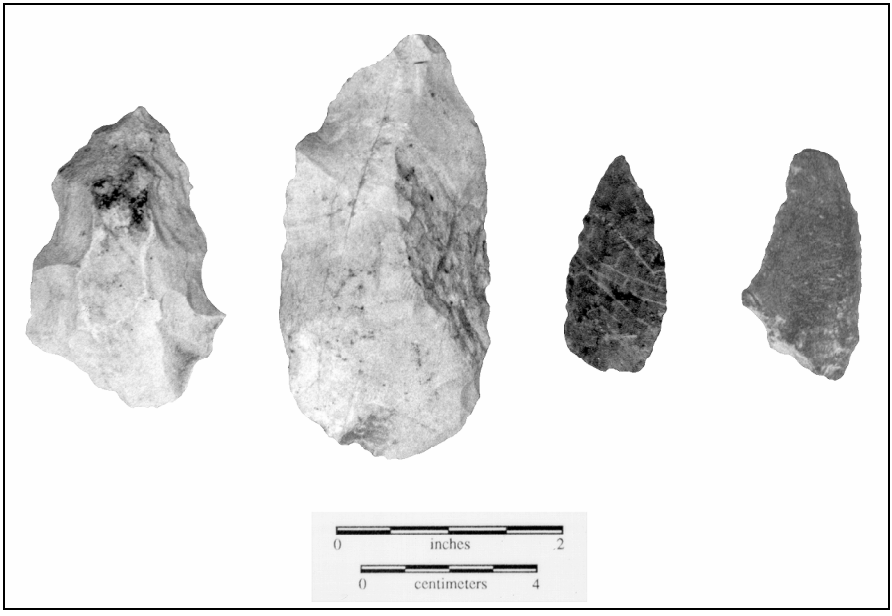

Figure 5. Quarry blades and flake tools from 31DH614.

abandoned during manufacture due to imperfections in the raw material. Preforms were differentiated from quarry blades by their smaller size and more advanced stage of manufacture. Preforms exhibited finer retouch and were more regular in shape than quarry blades. Three of the preforms were triangular and two had an elongated teardrop shape. Imperfections in the raw material which impaired further reduction were apparent in three of the five specimens. The three bifacial knives were made from interior flake blanks and exhibited regular, bifacial retouch along one or more margins. The two unbroken specimens were manufactured from long, narrow flakes, and both exceeded 60 mm in length. One broken drill bit is present in the assemblage. The remaining 28 undifferentiated bifaces are small, and many are fragmentary.

Unifaces. Fourteen unifacially flaked tools were recovered from 31DH614. Unifacial scrapers have a working edge characterized by steep, regular retouch and fine step fractures. Four of these unifacial tools are end scrapers, and four are side scrapers. These are made from interior/tertiary flakes (n=4), shatter fragments (n=2), and decortication flakes (n=2). Most of the scrapers are between 30 mm and 60 mm in size, but one end scraper was fashioned from a small secondary decortication flake less than 14 mm wide. The form and workmanship on one side scraper (Figure 6) is consistent with the pointed scrapers recovered from the Hardaway site (Coe 1964:79). This specimen from 31DH614 was consistent with an exhausted type II side scraper (Daniel 1986:31), and its raw material appears to be aphyric rhyolite like that common in the southern Piedmont. This type of scraper was found in association with Palmer and Hardaway components at the Hardaway site. This artifact was also the only scraper to exhibit evidence of sustained use.

Two small, unifacially flaked tools, a *pièce esquillée* made from an interior/tertiary quartzite flake, and a small shatter fragment with a natural projection that was retouched to form a perforator appeared to represent expedient or *ad hoc* tools and did not appear to have been used extensively.

Two large, thick, teardrop-shaped implements with large flake scars around the margin may have been cores or preforms. These were between 60 mm and 70 mm long and 18 mm thick. The remaining three unifaces simply represent flakes or shatter fragments with unifacial retouch extending across one face of the implement (i.e., the blank was thinned on one side only).

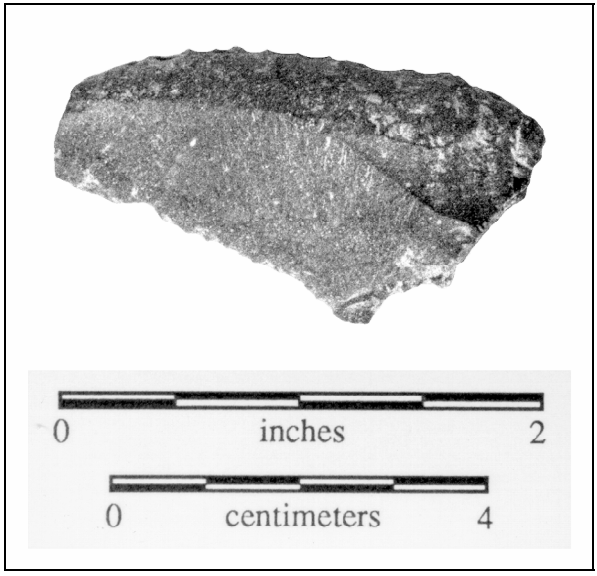

Figure 6. Side scraper from 31DH614.

Large Chipped Stone and Cobble Tools. Six large, bifacially worked choppers were found. Five of these are D-shaped with a curved working edge, while one is triangular with a straighter working edge. The working edges were formed by percussion flaking and large flake scars are evident on the choppers. The working edges show evidence of step fractures and crushing, probably as a result of heavy chopping activity.

Three large shatter fragments and one decortication flake with minimal edge retouch also appear to have been used as choppers. These tools are very crude and appear to represent expedient use of appropriately shaped pieces of stone for heavy chopping. The working edges of these implements exhibit many step fractures.

Six crescent-shaped tools had concave working edges similar to spokeshaves. However, given their large size, crudely flaked working edges, and lack of consistent use-wear, it seems unlikely that they were used as spokeshaves. Two of these are cobble tools, while the others were made from flakes and large shatter fragments. The edges of the larger cobble and shatter fragment tools show evidence of crushing, while the smaller flake tools have finer flake scars along the tool edge.

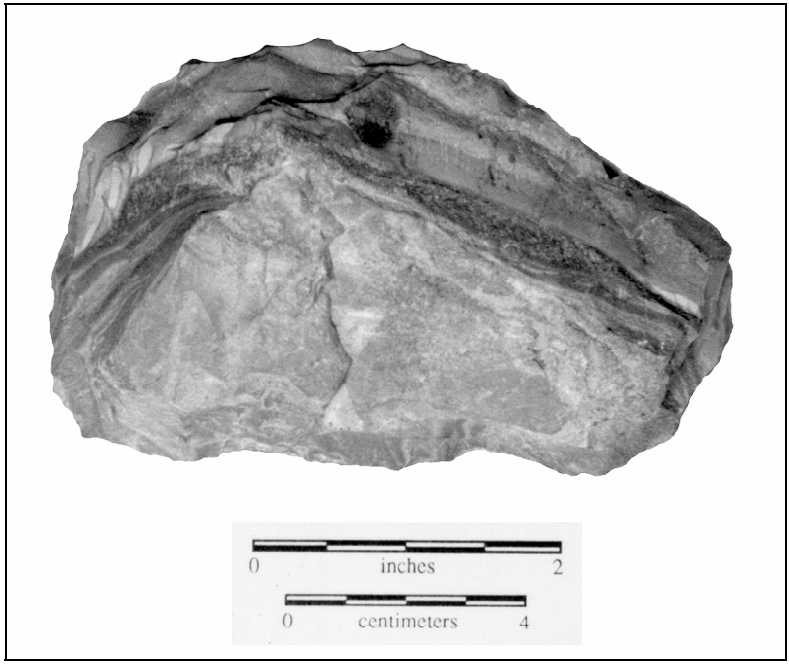

Figure 7. Chipped stone ax from 31DH614.

One chipped-stone ax was found (Figure 7). It was made from a large tabular fragment with water-worn cortex on both sides. One side of the ax was tapered naturally, while the other edge and the ends were bifacially flaked. The tool showed no evidence of wear.

Only one hammerstone, an elongated cobble with a battered end, was recovered from the excavations, leading the investigators to suggest that the readily accessible supply of cobbles from the riverbed may have made it less likely that any given hammerstone would have been used repeatedly. This would have resulted in less wear on hammerstones, and make them less identifiable as such.

Cores. Ninety-two percent of the 168 cores recovered from 31DH614 were random or amorphous cores in which flake removals were irregular. Ten cores were identified as bifacial cores, in which flakes were removed from both faces of a tabular piece of stone. Direct percussion was the primary, if not exclusive, method of flake production, as no

evidence of bipolar reduction (knocking flakes or blades off a core resting on an anvil stone) was identified.

As might be expected, eighty-seven percent of the raw material for cores was tuff, with vein quartz a distant second (about 10%). Two small, crystal quartz cores were present, as were one core of chert and one of an unidentified metavolcanic material. Tuff and vein quartz were available close to the site, but a local source for the other raw material types has not been identified.

Sixteen artifacts appear to be quarry waste or blocky cobble fragments that were apparently tested for use as a source of flakes and rejected. Besides cobbles, one tabular block and one shatter fragment appear to have been tested and discarded. All of these artifacts were of the tuff material.

Debitage. The debitage category (i.e., flakes and shatter), representing the waste products of lithic reduction, comprises more than 92% of the artifacts recovered from 31DH614 (n=16,791). Flakes were classified according to the presence or absence of cortex on the flake's dorsal surface. Flakes with cortex (i.e., decortication flakes) were further divided into primary and secondary decortication flakes based on the amount of cortex present. These represent the early stages of core reduction and were probably struck from the core with a hammerstone or baton. Interior or tertiary flakes lack cortex and have flake scars on their dorsal surface from the earlier phases of core reduction. Bifacial thinning flakes result from the shaping and thinning of bifaces. The Block Reduction Flake category was added to account for flakes that appeared to represent efforts to reduce tabular blocks of tuff. Block reduction flakes share attributes of both decortication flakes and bifacial thinning flakes. The frequency occurrence of each debitage category is summarized in Table 1.

Inferences Drawn from the Debitage Analysis

The production of stone tools results in large quantities of waste flakes. Researchers such as Hayden (1979) have noted that since large amounts of very sharp flakes are undesirable in habitation sites because of the risk of injury, many of the tasks of lithic reduction tend to be carried out at quarry sites or special workshop areas (e.g., lithic reduction sites). Also noted was the tendency to discard exhausted tools at quarry or

Table 1. Distribution of Debitage from 31DH614.

Debitage Category	Frequency	Percent
Primary Decortication Flake	481	2.9
Secondary Decortication Flake	1,615	9.6
Block Reduction Flake	290	1.7
Interior/Tertiary Flake	11,310	67.4
Bifacial Thinning Flake	647	3.9
Shatter Fragment	2,441	14.5
Other Flakes	7	0
Total	16,791	100.0

workshop sites as new tools are produced to replace the old. Therefore, examination of the artifact assemblage at quarry/workshop sites should yield the most complete information for reconstructing lithic reduction strategies.

The problem faced at 31DH614 is that we know from the diagnostic artifacts that the site was used for several thousand years, and there is no reason to believe that methods of working stone did not change during that time. However, examination of the materials from the site allows some inferences to be made.

The distribution of flake categories shows a preponderance of decortication flakes, block reduction flakes, and especially interior/tertiary flakes. These mark the initial and intermediate steps in tool production. This distribution holds up even in the artifacts recovered in the fine-screen samples, which would be more likely to recover a greater number of bifacial thinning flakes since they tend to be smaller in size and thus more likely to be missed in the quarter-inch screen. The relatively small percentage of bifacial thinning flakes (less than 4% in all samples) suggests that production of finished, bifacially flaked tools or preforms was not common at the site, although some finished-tool production did take place.

The analysis indicates that flake blanks were the primary product of the stone-working activities at the site. The large number of interior flakes remaining at the site is indicative of this technology. Studies of Australian Aborigine quarries (Gould et al. 1971) have shown that large numbers of interior flakes are left on site for every flake blank selected

and removed. The chronologically diagnostic artifacts from 31DH614 indicate the most intensive use of the site was during the Late Prehistoric period. Thirty-four percent of the projectile points recovered were Late Prehistoric triangular points, and all of the prehistoric ceramics were from that period (i.e., Haw River series). This conforms with several studies of lithic assemblages from other Late Prehistoric and Contact period sites in the region where the tool technologies focused on production of flake blanks (Eastman 1993; McManus 1985).

As noted earlier, some tool production did take place at the site. Some of the projectile points present in the assemblage were made from non-local raw materials, and most of these were broken. These points likely represent either spent tools manufactured elsewhere and discarded when replacements were made using the local stone, or discarded point fragments broken in manufacture at the site. An exhausted side scraper of a non-local raw material was also present. These implements may all represent broken and spent tools left at the site. Infrequent tool production, especially projectile point manufacture and retooling, may have occurred at 31DH614 during any time period, but appears to have peaked during the Late Prehistoric period.

Intrasite Variability

One of the goals of the study was to determine if, within the portion of the site sampled, differences could be noted that would indicate specific use areas. In other words, were some areas habitually used as discrete lithic workshop areas, or were areas abandoned after a period of time in favor of different, perhaps less littered areas (i.e., horizontal stratigraphy)? And, did activities other than stone-working take place in part of the site? The analysis compared material from the two sides of the river, between the four quadrants separated by the river and the highway, and between individual excavation units. Artifacts from the previous testing at the site were not used in this analysis for the sake of maintaining comparable sample volumes.

Table 2 represents the general distribution of artifacts in the different areas of the site. It shows that there was very little variability in the type of material found across the site. The only exception is the higher percentage of cores found on the south side of the river (almost double the number on the north side). However, this finding is not considered significant, given the sample size and the constraints of the study.

Table 2. Percentage of Artifact Classes by Quadrant and by Location Relative to the River.

Artifact Class	NE Quad	NW Quad	North Side	SE Quad	SW Quad	South Side
Chipped Stone Tools	0.68% (n=75)	0.73% (n=16)	0.68% (n=91)	0.79% (n=2)	0.65% (n=20)	0.67% (n=22)
Cores	0.66% (n=73)	0.51% (n=11)	0.64% (n=84)	3.95% (n=10)	1.19% (n=36)	1.40% (n=46)
Util. Or Ret. Debitage	0.39% (n=43)	0.28% (n=6)	0.37% (n=49)	0.79% (n=2)	0.73% (n=22)	0.73% (n=24)
Unmodified Debitage	98.27% (n=10,840)	98.48% (n=2,145)	98.27% (n=12,985)	94.47% (n=239)	97.43% (n=2,958)	97.20% (n=3,197)
Total	11,031	2,178	13,209	253	3,036	3,289

A finer analysis was possible using comparisons between the test units themselves. Only the 1-x-2-m test units (33 units) were used in this analysis to maintain consistency in the comparisons. A statistical analysis of these units was accomplished using *Systat 5.03* (Wilkinson 1990) to produce a Pearson correlation matrix based upon the frequency of artifact classes in each unit (Table 3). This showed that four artifact classes have strong positive correlations: decortication flakes, interior flakes, bifacial thinning flakes, and shatter fragments. These artifacts have similar distributions across all parts of the site.

A lesser correlation shows a tendency for cores and utilized and retouched flakes to occur in the same units as decortication flakes, biface thinning flakes, and shatter fragments. The matrix reveals only very slight positive correlations between these debitage classes and more formalized tools, projectile points, and bifaces, with the exception of a somewhat stronger association between biface thinning flakes and bifaces. These trends in the distribution of stone artifacts suggest that early stages of lithic reduction and bifacial blank reduction may have been responsible for creating most of the artifact deposits at 31DH614 and that retooling activities may have taken place in different parts of the site.

Table 3. Pearson Correlation Matrix for Artifact Class Frequency by Test Units.

	Decort. Flakes	Interior Flakes	Bif. Thin. Flakes	Cores	Shatter	Util./Ret. Flakes	Other Tools	Proj. Points	Bifaces
Decort. Flakes	1.00								
Interior Flakes	**0.92**	1.00							
Bif. Thin. Flakes	**0.91**	**0.91**	1.00						
Cores	**0.59**	0.49	**0.54**	1.00					
Shatter	**0.79**	**0.70**	**0.68**	**0.63**	1.00				
Util./Ret. Flakes	**0.56**	0.50	**0.52**	**0.69**	**0.58**	1.00			
Other Tools	0.17	0.14	0.24	0.34	0.09	0.40	1.00		
Proj. Points	0.26	0.30	0.24	0.04	0.14	0.02	0.17	1.00	
Bifaces	0.46	0.38	0.48	0.06	0.24	0.15	-0.14	0.10	1.00

Note: strongest positive correlations (>0.5) are shown in bold and underlined.

To gain further insight into the spatial variability, the investigators examined the locations of the test units across the site to see if there is further evidence that the artifact associations revealed in the Pearson correlation matrix point to different activity areas in the site. Frequencies of the nine artifact classes within each test unit were examined. The mean and standard deviation of each artifact class per test unit were calculated and compared to the frequency of artifacts within each unit. In the discussion below, test units described as having high frequencies of a particular artifact class have frequencies exceeding one standard deviation above the mean. Similarly, test units that are described as having low frequencies of artifacts have frequencies more than one standard deviation below the mean.

The strong correlation between decortication flakes, interior flakes, biface thinning flakes, and shatter fragments appears to be a general pattern across the site. There are, however, two areas within the site that deviate from this pattern. The first area is centered on Test Units 4 and 5 in the Southwest Quadrant (Figure 8). This area is characterized by high

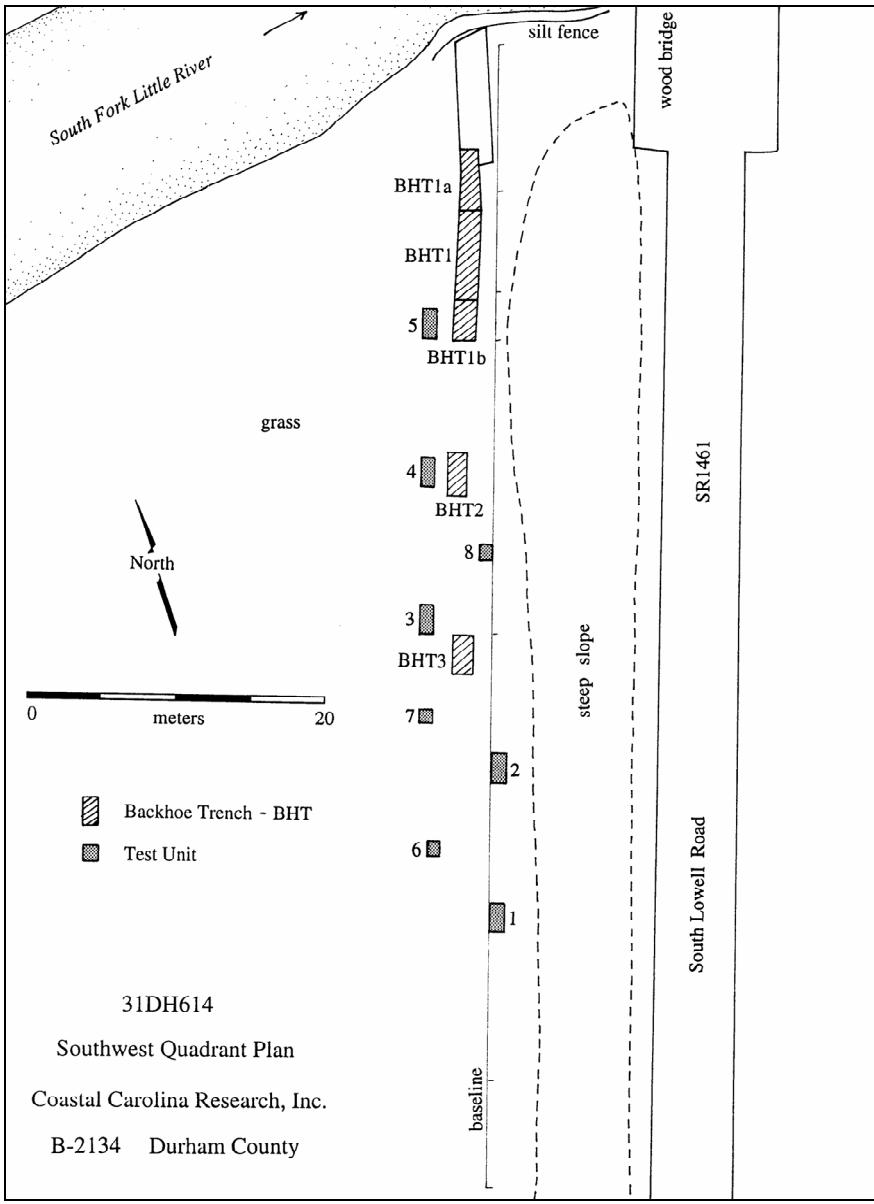

Figure 8. Plan view of the southwest site quadrant.

frequencies of decortication flakes and shatter fragments, but relatively low frequencies of interior flakes and biface thinning flakes. These test units also contained high frequencies of cores, but low frequencies of bifaces and projectile points, suggesting that this may have been an activity area focused on the early stages of core reduction.

The second area, which may also represent an early-stage reduction activity area, includes Test Units Northeast 2 and 12 (Figure 9). This area is characterized by a high frequency of decortication flakes, but only average numbers of interior flakes, biface thinning flakes, and shatter fragments. Test Unit Northeast 2 also contained an especially high number of cores.

One other section of the site appears to represent an area where later stages of lithic reduction and biface manufacture occurred. This area is concentrated around Test Units 14, 15, and 16 within the Northeast Quadrant of the site. These units contained high frequencies of all artifact classes except chipped-stone tools and projectile points. The high frequencies of bifacial thinning flakes and bifaces in these units probably contribute to their positive association noted in the Pearson correlation matrix.

Relationship of 31DH614 to Other Sites in the Region

Site 31DH614 is one of several sites in this part of the Piedmont where outcrops of dark green tuff were quarried and worked. Three such outcrops have been identified within 6 km of the outcrop of bedded tuff at 31DH614. The tuffs vary somewhat in texture. Epidote, although a common constituent of all these rocks, is not found in large clusters except in the material from 31DH614. Because of the lack of distinctive mineralogical properties, it is impossible to state with certainty that a particular sample of tuff originated at a given outcrop. However, even though only a small number of artifacts recovered from 31DH614 had evidence of the epidote clusters, this trait was distinctive enough that, for this study, tuff with visible epidote was assumed to come from 31DH614.

Artifacts from sites recorded in several surveys in the Orange-Durham-Person counties region were examined for examples of the tuff material (Figure 10). Artifacts made from dark green tuff were common in collections from the sites in Durham and Person counties but only one artifact with visible epidote was found. It came from a site along the main channel of the Little River. Only one fourth of the sites recorded by

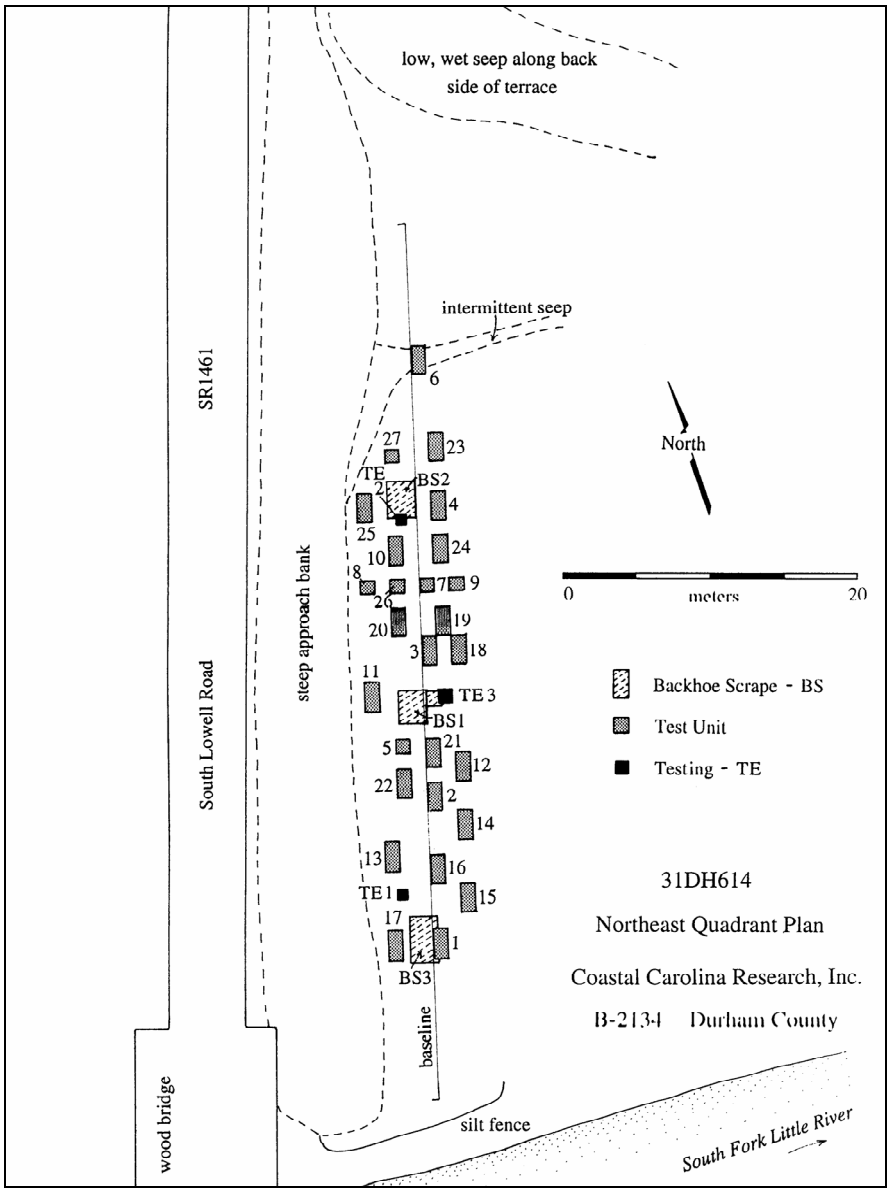

Figure 9. Plan view of the northeast site quadrant.

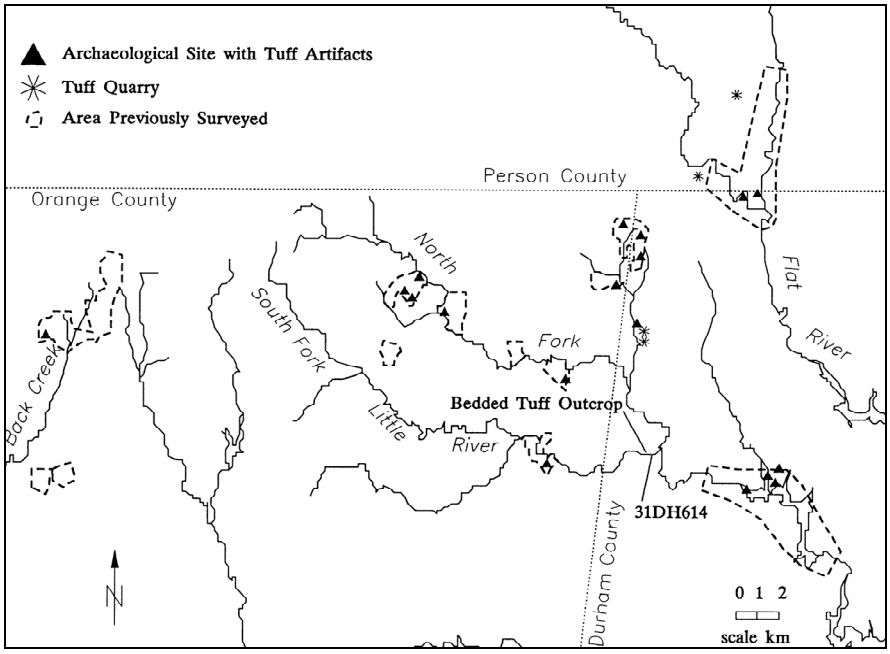

Figure 10. Distribution of survey areas, sites, and quarries near 31DH614.

Daniel (1994b) in northern Orange County contained stone artifacts of the dark green tuff, but tuff material with visible epidote was much more common, particularly on sites in the Little River drainage. It is therefore likely that the inhabitants of those upstream sites were using raw material obtained from 31DH614.

Ericson's model of lithic production defines three types of systems (Ericson 1984). Terminal Production systems are characterized by production of finished tools at the quarry site or nearby; Sequential Production systems refer to those in which partially worked materials are taken from the quarry site to be completed at or near the site where they will be used; and Irregular Production systems are characterized by production that is irregular and can occur throughout the region. As discussed earlier, the material from 31DH614 appears to have been worked into flake blanks which were taken off site to complete the production process, conforming to Ericson's model for Sequential Production systems. Under this model, the sites in Orange County would mark the sites where material from 31DH614 was finished and used.

One of the Orange County sites (31OR354) is a late prehistoric site located about 5 km upstream from 31DH614. Several artifacts from this site were of dark green tuff with visible epidote. Small triangular projectile points, indicative of the Late Prehistoric period, were the dominant point type found at 31DH614, and Haw River ceramics were present at both 31DH614 and 31OR354. It seems logical to conclude that the occupants of the village site at 31OR354 traveled downstream to 31DH614 to acquire stone for their lithic tools.

Summary

The results of the data recovery excavations conducted for the North Carolina Department of Transportation at site 31DH614 indicate that it was a lithic workshop for the stone quarried from the metavolcanic tuff outcrop (31DH617) located nearby. The site was first used intensively during the Middle Archaic period and was apparently used sporadically thereafter until the Late Prehistoric period when it was again used intensively.

Daniel (1994a) has argued that previous to the Middle Archaic period, lithic procurement focused upon high-quality stone such as Allendale Chert in South Carolina and Morrow Mountain rhyolite in North Carolina (Daniel and Butler 1991). The settlement patterns for these early cultures may have been highly influenced by access to the restricted areas where outcrops of these highly desirable lithic materials could be quarried. Other researchers, including Claggett and Cable (1982), Abbott (1987), and Blanton (1985), have noted evidence for a shift in the Middle Archaic occupations of the Carolina Piedmont as populations increased and technological changes seem to have led to use of a wider variety of lithic sources such as the tuff found in the Little River drainage.

The examination of artifact collections from the Little River vicinity has reinforced the functional and temporal interpretations of site 31DH614. This study has enhanced our knowledge of the prehistoric lithic procurement system of the region. Site 31DH614 served primarily as a workshop, or lithic reduction site, where large cores quarried from the stone outcrop were worked into smaller flake blanks. Some biface blanks and preforms were produced, as were some finished tools; however, for the most part the lithic material left the site as flake blanks, to be worked into finished tools elsewhere. The source of the material appears to have

been the bedded tuff outcrops just upstream from the site rather than the boulders or cobbles in the stream bed. The site was used throughout the Archaic and Woodland periods, but its greatest use seems to be during the Middle Archaic and Late Prehistoric periods, with the latter being the time when the site saw the most activity. There are indications that certain areas of the site were used for different aspects of lithic reduction or possibly were used at different times during the site's history.

The study demonstrated that, at least in some instances, a large enough sample obtained from even a relatively small portion of a site with highly disturbed deposits can offer archaeologically interesting and potentially significant information. These findings, of course, need confirmation from other studies. The majority of site 31DH614 was left unaffected by the highway project and should be available to future researchers. Other important sites in the region, such as 31OR354, remain unexcavated and also await future study. It will be interesting to see if the findings proposed in this study can be expanded or corrected by our successors.

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BOOK REVIEWS

Excavating Occaneechi Town: Archaeology of an Eighteenth-Century Indian Village in North Carolina, edited by R. P. Stephen Davis, Jr., Patrick C. Livingood, H. Trawick Ward, and Vincas P. Steponaitis. CD-ROM. University of North Carolina Press, Chapel Hill and London, $39.95.

Reviewed by Keith T. Egloff

Excavating Occaneechi Town is a site report on CD-ROM that "describes and interprets the buried remains of Occaneechi Town, a small but important village of the Occaneechi tribe that stood on the banks of the Eno River in North Carolina at the beginning of the eighteenth century. Also known as the Fredricks site, this village was excavated by archaeologists from the University of North Carolina at Chapel Hill in order to study how European colonization of North America affected Native Americans."

I see computers as a tool, as a means to do what I need to do. I am not particularly fond of computers. Unlike my favorite books they are hard to curl up with on an easy chair while one is sipping a cup of tea. However, *Excavating Occaneechi Town* repeatedly lured me back to the computer screen where time flew by and I forgot the pressing office work.

Excavating Occaneechi Town comes with easy-to-follow installation instructions. The CD-ROM may be installed in one of two ways: professional or instructional. Both options provide access to all of the information contained on the CD-ROM about the site, except the instructional version doesn't provide access to photographs of human burials.

Once installed, I read the instructional booklet no further and quickly started searching on the screen, encountering a myriad of drawings, color photographs, text, and data charts. I was amazed by the ease of travel, the fun of exploring. I had never been so enthralled by an archaeological report! I soon called in the lab staff and showed them the wonders of the screen and mouse. The images were so clear, the fieldwork so superb! Within days I had shown *Excavating Occaneechi Town* to fellow archaeologists, lay persons, and teachers.

After a couple of months of exploring and showing off *Excavating Occaneechi Town*, I had to sit down to write this review. I decided to read the instructional booklet and systematically go through the chapters. I

discovered that "the report contains more than 1,000 full-color photographs and maps, as well as detailed information on more than 100,000 artifacts." The booklet gives navigational tips, although I just jumped in and found the navigation to be easy. The report contains numerous hyperlinks, which are highlighted in blue. Each hyperlink (activated by a click of the mouse) will take you to another section of the report with more specific and related information.

When you first start up *Excavating Occaneechi Town*, you are presented with a Main Menu that has 10 buttons: Getting Started, Archaeological Primer, Introduction, Contents, Background, Excavations, Artifacts, Food Remains, Interpretations, and Electronic Dig.

Getting Started is a brief guide for using the CD-ROM. It was designed for three different audiences: (1) scholars who need a complete record of archaeological findings; (2) lay persons who wish to delve into the archaeology of the historic Occaneechi tribe; and (3) students who wish to know more about archaeology. To go to a specific chapter, simply click on its button in the Main Menu. Some chapters have separate articles with a series of labeled tabs across the top of the screen that can be selected by clicking.

Archaeological Primer provides a brief, 25-section, illustrated tutorial on how archaeologists went about excavating Occaneechi Town. This is an excellent chapter for introducing students to the world of archaeology. Included are video clips with sound tracks.

Introduction has the *Title Page, Foreword, Preface, and Acknowledgments*. The foreword was written by Lawrence A Dunmore III, Tribal Council Chief of the Occaneechi Band of the Saponi Nation.

Contents contains a *Table of Contents, List of Pages, List of Figures, and List of Tables*. These provide direct links to all chapters, articles, pages, figures, and tables.

The **Background** chapter provides three articles on the Occaneechi and Occaneechi Town. *Archaeological Background* gives an historical overview of the Occaneechi and their village near Hillsborough, and a general history of the archaeology in the region. *"This Western World": The Evolution of the Piedmont, 1525–1725* discusses the early history of the Occaneechi and their Siouan-speaking neighbors in North Carolina and Virginia. *Occaneechi-Saponi Descendants in the Texas Community of the North Carolina Piedmont* traces the history of the Occaneechi and their descendants after 1725.

The **Excavations** chapter provides complete information for all excavated contexts (squares, features, and structures) at Occaneechi

Town, including maps, photographs before, during, and after excavation, written descriptions, inventories of artifacts, and photographs of many artifacts. This is one fun chapter and a visual feast!

The **Artifacts** chapter provides detailed discussions of the major classes of artifacts—*Pottery, Stone Tools, Shell Ornaments,* and *European Trade Artifacts*—found at the Fredricks site. They contain detailed descriptions, illustrations, and interpretations that would be of interest to the layperson.

The **Food Remains** chapter describes the animal bones and charred plants that were found at the Fredricks site. There are six articles containing discussions, based on ethnohistoric accounts and comparative ethnography, of how the Occaneechi used their natural environment. The articles are *Animal Remains (1983–1984), Animal Remains (1985), Animal Remains (1986), Plant Remains (1983–1984), Plant Remains (1985),* and *Plant Remains (1986).*

The **Interpretations** chapter interprets the archaeological findings from Occaneechi Town in the broader context of Native American lifeways during the period between A.D. 1000 and 1700. There are five articles. *Occaneechi Town: A Summary of Archaeological Findings* provides a concise summary of the Occaneechi village. *The Evolution of Siouan Communities in the Piedmont North Carolina* examines Native American settlement patterns from A.D. 1000 to 1700. *Burial Practices* discusses the burial practices of Siouan peoples with a focus on the findings from the Occaneechi Town cemetery. *The Impact of Old World Diseases on the Native Inhabitants of the North Carolina Piedmont* uses archaeological evidence from several village sites to investigate this topic. *The Occaneechi and Their Role as Middlemen in the Seventeenth-Century Virginia-North Carolina Trade Network* brings together historical accounts and archaeological evidence to investigate the Occaneechis' pivotal role in the fur trade.

The **Electronic Dig** is a teaching tool which allows students to design their own research strategies and "re-excavate" Occaneechi Town. The students excavate by clicking on a blank grid and thereby opening squares. As they excavate, they gain access to all the information associated with those squares. Students can select three interrelated variables: hourly rate, number of squares excavated, and total budget. The computer keeps track of how much money is spent as the excavation progresses.

Since many people, particularly youngsters, learn through the sense of vision, *Excavating Occaneechi Town* is an extraordinary teaching and

learning tool. Professional archaeologists and lay persons will have fun browsing through the report, picking up interesting tidbits of information from the text, and staring at all the amazing illustrations. If you want data for comparison to include in your research, this is the place for a professional to come. Everyone who tours *Excavating Occaneechi Town* will see the very best excavation procedures. The Research Laboratories of Archaeology at Chapel Hill are renowned for their precision in excavation and recording. It is important for professionals to see good archaeology, to be reminded of what they should be striving for. But it is particularly important for students of all ages, when they are first exposed to archaeology, to see the very best work.

Note. *Excavating Occaneechi Town* requires an IBM-compatible computer with a VGA graphics display (capable of 640 x 480 pixels and 256 colors), a double-speed or faster CD-ROM drive, a 486/66 or faster processor, at least 8 MB of RAM (16 MB RAM for Windows 95), a sound card, a mouse or Windows-compatible pointing device, and 25 MB of available hard disk space. It runs equally well under Windows 3.1 and Windows 95. A demonstration version can be viewed on the world wide web at http://sunsite.unc.edu/uncpress/occaneechi/.

The Dividing Paths: Cherokees and South Carolinians Through the Era of Revolution, by M. Thomas Hatley. Oxford University Press, Oxford, 1993. xvi + 320 pp., illus., endnotes, index. $19.95 (paper).

Reviewed by Christopher B. Rodning

This excellent book reviews the history of interactions between Cherokees and South Carolinians in the eighteenth century, and it evaluates the effects of this interaction upon the southern Appalachian cultural landscape. Despite their mutual participation in the fur trade, colonial and Cherokee groups experienced these years of cultural interaction and exchange much differently. This metaphor of dividing historical paths comes from the actual trail that once led from lowcountry colonial outposts to the Cherokee homeland and, eventually, to other native communities. Cultural misunderstandings between native and colonial communities led to a series of intercultural wars that fed the flames of intertribal rivalries. After years of tumultuous interactions both

native and colonial communities regrouped and began contending with the challenging prospect of living in a dramatically different cultural landscape. Throughout this book, Tom Hatley offers insights into how the deerskin trade and colonial wars of the eighteenth century changed the lives of Cherokees and Carolinians alike, and he makes the point that the cultural distance between the colonists at Charles Town and the native people of the southern Appalachian Mountains was much greater than the geographic distance spanned by the trails between them. The author reviews a wealth of ethnohistoric evidence about the Cherokees and colonial communities of the southern Appalachians, and his descriptions of primary sources and endnotes are a valuable resource for archaeologists studying the Cherokees and their neighbors.

The book begins by reconstructing the cultural landscape and communities of southern Appalachia at the dawn of the eighteenth century. The people who became known as Cherokees were living in villages in rich mountain woodlands that surrounded verdant gardens and overgrown clearings where former villages once stood. Placenames for abandoned old fields and current settlements often described local ecology, and many reflected a history of residents who spoke both Cherokee and Muskogean languages. From the descriptions in this book, it is evident that entire Cherokee communities moved every now and then from one Appalachian locale to another, often carrying their placenames with them. Given the geographic isolation of southern Appalachia from bustling mid-Atlantic colonies of the late seventeenth century, the initial effects of cultural encounter and interaction were less severe among the Cherokees than they were for some other native groups. The interaction among Cherokees and Carolinians changed its tone, however, with the momentum of the deerskin trade in the eighteenth century and the major changes in native lifeways that followed.

Initially, the Cherokees embraced opportunities for trade and the social dimensions of this interaction. Some Cherokee groups began to selectively adopt some forms of European material culture obtained in exchange for deerskins and adapted them to their own needs and desires. Some Cherokee leaders negotiated with European colonies to enhance access to trade. Even before the establishment of a permanent European presence in the southern Appalachian province, the Cherokees had experienced some cultural changes through the deerskin trade.

The tenor of this cultural interaction changed relatively rapidly as both Cherokees and Carolinians experienced deep growing pains in their relationships with each other. Concepts of diplomatic pluralism among

Cherokees did not mesh with the Carolinians' expectations that alliances were firm and binding. Among traditional Cherokee communities, the prevalent egalitarian ethic valued decisions forged by consensus and allowed dissenters to pursue their own visions and policies as they deemed fit. Thus, one Cherokee group would not have considered itself bound by agreements made with colonists by another Cherokee group. These characteristics of political culture among the Cherokees caused significant consternation among colonial European authorities accustomed to negotiating with other European monarchies.

In the mid-eighteenth century, the Overhill Cherokees invited the South Carolinians and other colonies to build forts among their towns, but they soon began to change their minds about that decision. Cherokees often felt slighted by the demanding commanders of these outposts along the colonial frontier, and they voiced their dismay at inconsistencies in colonial trading policies and practices. Cherokees also became suspicious of colonial garrisons where only men came to live without any women and children, and where several native people were imprisoned and even killed. As colonial rivalries in the Americas simmered between France and England and their respective native allies, the Cherokees themselves became divided about allegiances to these competing colonial powers. These divisions compounded rivalries between the Cherokees and other native peoples, including the Creeks to the south and the Iroquois to the north. An irony of this swelling disenchantment between Cherokees and Carolinians for their new neighbors is that for many years, the colonial forts depended upon Cherokees for sustenance and survival. It was not long after the Cherokees had encouraged Carolinians and Virginians to build forts among their towns that they found themselves getting ready for war against both English and French forces, and their respective Amerindian allies.

Historians have widely dubbed the hostilities of the 1750s and 1760s as the French and Indian War, during which colonists and their native allies were pitted against each other throughout eastern North America. Those years of bloodshed in southern Appalachia peaked during a series of raids by South Carolina militias against Cherokee settlements along the Keowee and Little Tennessee rivers. Those campaigns against the Cherokee were driven by colonists' fears about alliances between the Cherokee and other native groups on the colonial frontier. The campaigns meanwhile reinforced the colonists' own perceptions of the status of South Carolina as a lesser counterpart of other English colonies in eastern North America where greater efforts were made by the English crown to

deflect real and perceived threats by the French and their native allies. After their homeland was burned the Cherokee were certainly devastated, but South Carolina did not win any great peace of mind from the suffering of their presumed enemies. After the wars, Cherokee communities regrouped and began to advocate isolationism, mainly to avoid the risks of such arduous struggles against South Carolina. Meanwhile, the South Carolina colony as a whole grappled with deepening social rifts between colonial elites and backcountry settlers, colonists grew fearful of the perceived threats of Cherokee and metis communities at its geographic and social borders, and they began to guard those borders much more vigorously.

Trade in deerskins and woodland herbs diminished during the 1740s and 1750s while the Cherokees battled the Creeks and then the Carolinians, but it was rekindled in new forms after the French and Indian War and won great riches for many backcountry traders in western South Carolina. As these savvy traders made landmarks out of their own trading posts, many colonists from western Pennsylvania and Virginia moved down the Appalachians to settle along the Savannah headwaters. Continuing intercultural conflicts again ignited hostilities, and South Carolina began planning another series of raids against the Cherokees with the help of Virginia, Georgia, and North Carolina militias. As the American Revolution got underway during the 1770s, the colonists renewed raids on the Cherokees. In the wake of the American Revolution against British rule in the 1780s, militias continued to punish the Cherokees for their perceived loyalty to the crown. For a variety of reasons, the Cherokees often received the brunt of colonial frustrations no matter what they did or which side they favored.

By the last quarter of the eighteenth century, deep social rifts had formed among Cherokees and reflected different perspectives about cultural conservatism. The “Chickamauga Cherokees” had moved to the Tennessee River near what is now Chattanooga to live apart from nonnative communities. The “Virginia Cherokees” had earned that nickname from more conservative Cherokee factions for their efforts at negotiation and conciliation with Virginia and other colonies whose frontiers bordered Cherokee territory. Hatley makes an insightful point that this rift between cultural conservatives and those willing to negotiate with nonnatives was basically a division between different generations of Cherokee leaders. Elders favored negotiation to avert further devastation to their communities, while younger warriors were less willing to give away their land and cultural inheritance to colonists. This book

effectively conveys the persistence of the egalitarian ethic among Cherokee communities, through which dissenters were not necessarily bound by the decisions of other groups. This tradition may have been a contributing reason for the tragic cultural devastation among Cherokees toward the end of the eighteenth century, by hampering any collective response to the colonial invasion of their homeland and their communities. The book ends before the close of the eighteenth century, with Cherokee communities drawing from deep cultural memories of kinder days and creating rituals of cultural renewal and redemption, and before the formation of the Cherokee republic and the tragic years of Cherokee removal that were to come in the early nineteenth century.

One of the most fascinating chapters of the book is entitled "Rumble Parts," which reconstructs the landscape of southern Appalachia as a cultural middle ground and the setting within which Cherokee groups and Carolina colonists interacted. Rather than describing this region as frontier wilderness, Hatley envisions it as a province well known to native peoples and the setting for interactions between native and colonial cultures, both of which changed and were changed by their neighbors. This viewpoint about the cultural landscapes of the colonial period is comparable to those of historians Francis Jennings, William Cronon, Timothy Silver, and others, who have studied the role of Native American communities in shaping the European-American colonial landscape.

That chapter leads nicely to the following, "At Peace with All Kings," which makes the point that Cherokee traditions of diplomacy and alliance were drastically different than those of their Euro-American counterparts. Colonial authorities considered agreements with the Cherokees to bind these native "sons" to their colonial "fathers" according to the European model of a patriarchal family. For many Cherokees and other native groups, maternal "uncles" were more like "fathers" in the European tradition. Thus, the Cherokees would not have associated fatherhood with subservience and allegiance the way that their colonial counterparts would have. Negotiators representing the Cherokees further interpreted many agreements with colonists in the context of native traditions of diplomatic pluralism and saw nothing wrong with pursuing negotiations with the French or Creeks or anyone else without first getting English approval. Diplomatic misunderstandings due to vast cultural differences and distances were certainly common throughout the eighteenth century and were a major reason for much of the conflict between the Cherokees and their colonial neighbors.

A significant thread that runs through the whole book is Hatley's

insights about traditional gender roles among the Cherokees and Carolinians and how they affected the ways that people experienced cultural encounters throughout the eighteenth century. Among the Cherokees, women were clan leaders and farmers, and men were warriors, traders, and diplomats. Cherokee men actively pursued the deerskin trade, and they eventually adopted horse rustling to replace raiding as a practice through which they could enhance their prestige as warriors. Cherokee women tended traditional gardens, and they sold much of their produce to trading posts and colonial forts. Gender roles were much different among the colonists. In colonial society men were farmers and merchants while most women were not active contributors to what were perceived as the male realms of politics and economic markets. Hatley offers several insights about the social differences between commoners and elites within colonial society. Hatley is somewhat less clear about how gender roles might have varied according to wealth and class status in colonial society. Nevertheless, his treatment of social differentiation by class, gender, and culture adds considerably to his reconstruction of communities and social relationships among Cherokees and Carolinians alike.

Another thread richly woven throughout the book is Hatley's thoughts about changes in the southern Appalachian landscape. His descriptions of Cherokee placenames and the multi-ethnic character of many settlements point to the fascinating phenomenon in southern Appalachia of permeable social boundaries among linguistically and historically distinct groups. His descriptions of Cherokee villages and the Cherokee countryside, covered with verdant forests and coursed by tumbling mountain streams, further note how tended gardens and orchards, and old fields where settlements once stood, all fit within this landscape. Hatley describes how cultural memories were attached to landmarks and how perceptions of those landmarks changed throughout the tragic history of the eighteenth century. Hatley describes the changing layouts of townships, gardens, and hunting grounds, and the ways that native and colonial leaders negotiated for these spaces throughout the eighteenth century. He could have drawn upon a wealth of archaeological evidence about settlement patterns in southern Appalachia from the sixteenth through the eighteenth centuries to help illustrate some of his points and the tradition of settlement mobility among Cherokee groups. He also could have drawn upon studies by archaeologists and geographers to trace major social changes among the Cherokee of the eighteenth century to establish some background for the trends visible in the historic record. Despite these omissions, I think that Hatley makes a compelling

case with the historical and ethnographic evidence alone. I would further note that Hatley based this book on his dissertation, which itself was written before many of these archaeological studies were published. Meanwhile, the relevant archaeological patterns as currently understood would only strengthen his arguments about what landscapes and communities among the Cherokees were like before the Carolinians came and afterward.

Archaeologists will find this book especially valuable for all its insights and references about Cherokee history and ethnography. There are descriptions of Cherokee towns and the surrounding countryside (see pp. 6, 9, 13, 15, 16, 126, 130, 138, 167, 195, 211, and 221), the changing roles and relationships of men and women in Cherokee communities (see pp. 8, 9, 38, 90, 96, 97, 148, 161, 214, 220, and 233), Cherokee political culture and economic strategies (see pp. 11, 67, 70, 76, 92, 93, 102, 139, 157, 158, 159, 165, and 218), Cherokee kinship and social identity (see pp. 12 and 225), Cherokee color symbolism (see pp. 12, 15, and 27), relationships between Cherokee groups and colonial traders (see pp. 39, 208, and 224), tensions between colonial patriarchy and matrilineal Cherokee societies (see p. 58), the mobility of Cherokee families and of whole villages (see pp. 82, 156, 223, and 225), multi-ethnic townships at Tugalo and elsewhere (see pp. 57, 61, 82, and 225), and the processes by which some Cherokee individuals joined other ethnic groups and by which people were adopted into Cherokee and other native societies (see pp. 57, 159, and 225). The careful reader will find a gold mine of references to primary sources in Cherokee ethnohistory. These sources are essential tools for understanding the vast archaeological datasets gathered from sites in southern Appalachia during the past century of fieldwork.

Archaeologists interested in native peoples of greater southern Appalachia should read this book for the following reasons. First, the Cherokees actively engaged in trade with traders from Charles Town but much less with outfits from the greater Chesapeake Bay region. Although the Virginians tried to establish trade relationships with the Cherokees even in the seventeenth century, it was the Carolinians who offered them viable markets for deerskins during the eighteenth century. Therefore, understanding the social history of interactions between Cherokees and Carolinians is especially significant to understanding native communities of the eighteenth century and the cultural changes that Cherokees experienced during those years. Second, the book offers a wealth of ethnohistoric details about the Cherokees and lesser named groups such as

the Yuchis, Congarees, and others. Third, the book directs readers toward gender as a meaningful dimension of past Native American and European American communities and thus as an essential component of any study of that past. Fourth, the book considers the ways that both Native American and European American cultures changed during their history of interaction, but also notes the cultural traditions that persisted throughout those years. The book reads well and offers rich insights into the history of the Carolina colonies and the Cherokee. It sets a good stage for looking forward to the years of Cherokee removal or further back in the past to the ethnogenesis of the Cherokee.

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