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A "NEW" ACCOUNT OF MOUND AND VILLAGE SITES IN WESTERN NORTH CAROLINA: THE TRAVELS OF CAPTAIN R. D. WAINWRIGHT

by

Benjamin A. Steere, Paul A. Webb, and Bruce S. Idol

Abstract

In the first two decades of the twentieth century, Captain Robert D. Wainwright, an amateur archaeologist from Virginia, carried out archaeological surveys and excavations in the western piedmont and mountains of North Carolina. Wainwright operated on the fringe of the nascent community of early twentieth-century professional archaeologists, and published written accounts and photographs of his fieldwork in an obscure archaeological journal, The Archaeological Bulletin. Until recently, the written accounts of his fieldwork, which contain descriptions of some of the most significant archaeological sites in western North Carolina, have gone unnoticed. In this article, we provide a brief biography of this littleknown amateur archaeologist, and place his fieldwork in the broader historical context of early twentieth-century archaeology in North Carolina. We then present the complete text of his account, originally published in three issues of The Archaeological Bulletin. In closing, we discuss the significance of his narrative in the context of current archaeological research in the western part of the state. Wainwright's work and reporting have all the problems typical of the archaeology of his era, but given the paucity of contemporaneous documentation for sites in the western piedmont and mountains of North Carolina, his account provides important archaeological and historical information.

In May of 1913, Robert Dewar Wainwright boarded a train in Roanoke, Virginia, bound for Winston-Salem, North Carolina. Wainwright, a retired captain of the United States Marine Corps, was an amateur archaeologist and artifact collector who spent his summers "hunting for camp sites, exploring mounds and looking for specimens of stone art" (Wainwright 1913b:111). In the following months he would visit and describe some of the most significant archaeological sites in western North Carolina, including the Donnaha site (31YD9), the Cullowhee mound (31JK2), the Andrews mound (31CE3), and the Kituhwa mound (31SW1/2) (Figure 1). At some locations he carried out surface collections and excavations. His narrative also includes



Figure 1. Map of sites mentioned in the text.

descriptions of purported mounds near Andrews and Brevard, North Carolina, which, to our knowledge, are not recorded in other early archaeological accounts of the region. Wainwright published an account of his travels, "A Summer's Archaeological Research," in an obscure journal, *The Archaeological Bulletin* (Wainwright 1913b, 1914a, 1914b).

The Archaeological Bulletin was published by the International Society of Archaeologists, a group of amateur archaeologists and collectors, some of whom, including Wainwright, had ties with the Smithsonian Institution, the Bureau of American Ethnology. or the American Museum of Natural History. The Bulletin only ran for 10 vears (1909–1918), with limited circulation. The publication is typical of pre-professional, early-twentieth century American archaeology. Short reports of excavations, some rigorous for their time, run side-by-side with advertisements for artifact auctions. Until the journal was recently digitized and published online by Google Books, it could only be found in a few libraries (WorldCat 2012). As a result, Wainwright's narrative appears to have gone unnoticed by North Carolina archaeologists. His account is not cited in the standard reference texts for the archaeology of western North Carolina, and his name does not appear in discussions of the first archaeological expeditions in the region (see for example Dickens 1976; Keel 1976; Ward and Davis 1999; Woodall 1990). While Wainwright's work in other states has occasionally been cited (see for

example Holland 1970; MacCord 1989; Marquardt 2008), to our knowledge, the only published reference to Wainwright's work in North Carolina appears in David Bushnell's *Native Cemeteries and Forms of Burial East of the Mississippi River*, a 1920 publication of the Bureau of American Ethnology (Bushnell 1920:134).

In this article, we place Wainwright's fieldwork in the broader historical context of early twentieth-century archaeology in North Carolina, and provide a brief biography of this little-known amateur archaeologist. We then present the complete text of his account, originally published in three issues of *The Archaeological Bulletin*. In closing, we discuss the significance of his narrative in the context of current archaeological research in the western part of the state. Wainwright's work and reporting have all the problems typical of the fieldwork of his era, but given the paucity of contemporaneous documentation for sites in the western piedmont and mountains of North Carolina, his account provides important archaeological and historical information.

Archaeological Research in Western North Carolina between the 1870s and 1933

As in much of the eastern United States, the earliest archaeological studies in western North Carolina were sponsored by museums. From the 1870s through the early 1930s, archaeological fieldwork was carried out primarily by museum personnel and local hired laborers, with the goal of obtaining artifacts for display (Ward and Davis 1999:6). The 1933 excavation of the Peachtree mound and village site (31CE1) near Murphy (Setzler and Jennings 1941) is generally taken to mark the beginning of professional archaeology in the western part of the state (Keel 2002; Ward and Davis 1999).

The first of these early excavations in western North Carolina were sponsored by the Valentine Museum of Richmond, Virginia. In the late 1870s and early 1880s, Mann S. Valentine and his sons, E. E. and B. B. Valentine, directed expeditions in Haywood, Jackson, Cherokee, and Swain Counties, sometimes with the help of local residents, including A. J. Osborne of Haywood County and R. D. McCombs of Cherokee County (Valentine et al. 1889; Ward and Davis 1999:6–7). The Valentines and their associates "opened" the Peachtree mound (31CE1), the Garden Creek mound No. 2 (31HW2), the Wells mound (one of a

group of mounds on the West Fork Pigeon River, west of Waynesville), the Jasper Allen mound (located on Scotts Creek, east of Sylva), the Kituwha mound (31SW2), the Nununyi mound (31SW3), the Birdtown mound (31SW6), and the Cullowhee mound (31JK2) (Steere 2011; Valentine et al. 1889; Ward and Davis 1999:6–7). These investigations were not carried out to modern standards and were highly destructive.

In addition to conducting mound investigations, representatives of the Valentine Museum purchased artifacts from local residents. In the mid-1880s, some individuals took advantage of this new market opportunity, producing carved soapstone figurines which Mann Valentine purchased and publicized as genuine artifacts (Keane 1883; Ward and Davis 1999:6–7). Disillusioned by this experience, the Valentines abandoned their research in western North Carolina. None of their excavations were adequately reported, but the Research Laboratories of Archaeology (RLA) at the University of North Carolina, Chapel Hill, maintain an indexed record of notes and correspondence from the excavations, and a collection of artifacts from the excavated mounds.

The Smithsonian Institution also carried out research in western North Carolina in the 1880s, under the direction of Cyrus Thomas. In 1883, John P. Rogan reported the excavation of two mounds in Caldwell County, among other explorations in the upper Yadkin River valley (Powell 1886; Rogan 1883; Spainhour 1886; Thomas 1894). John W. Emmert recorded and excavated several mounds in Buncombe, Haywood, and Madison counties (Thomas 1887, 1891, 1894). The results of this work were published in the annual reports of the Bureau of American Ethnology (Thomas 1887, 1891, 1894) and are also mentioned in at least one Peabody Museum report (Putnam 1884). Thomas's reports were adequate for their time, but provide little more than an approximate location for each recorded mound and a brief description of the stratigraphy and contents of excavated mounds.

Many of the mounds recorded in the Thomas reports were submitted by James Mooney. In fact, while Mooney is most famous for his role as an ethnographer (see Mooney 1900), Thomas (1891:151–159) credits him with recording over two-thirds of the mounds in western North Carolina. In addition to providing written descriptions of mound locations, Mooney mapped the locations of mounds and other important Cherokee places on a series of annotated 1886 and 1892 USGS 30-

minute series quadrangle maps. These maps have recently been stabilized, scanned, and made available online through the Smithsonian Institution's website (http://siris-archives.si.edu).

The next excavations in western North Carolina were carried out in Haywood County by the Museum of the American Indian, Heye Foundation (Heye 1919). In 1915, George Heye directed excavations at the Garden Creek sites (31HW1, 2, 7, and 8) near Canton, and he also excavated a mound on the Singleton property (31HW4) near Bethel (Heye 1919). Heye's 1919 report of his work in Haywood County contains more detail than most of Thomas's reports, but it still falls short of standards for archaeological reporting to be established during the 1930s.

At the close of the era, in 1926, Charles O. Turbyfill, a Waynesville native who assisted Heye with logistics in western North Carolina, completely excavated the Notley mound (31CE5) in Cherokee County (Turbyfill 1927). Turbyfill devotes only a single paragraph to the excavation of the Notley mound in a short paper on file at the National Museum of the American Indian (Turbyfill 1927).

As readers will see in the reprinted text that follows, Wainwright's descriptions of archaeological sites are similar in content and style to the brief site descriptions presented in the mound exploration reports of the Bureau of American Ethnology (Thomas 1887, 1891, 1894). Wainwright identifies archaeological sites using the names of landowners, and sometimes locates sites with distances relative to nearby towns, railroads, and rivers. He provides dimensions for mounds, cursory descriptions of stratigraphy in the case of excavations, and more detailed descriptions of excavated graves and associated artifacts. Wainwright took some photographs of his excavations, and his published accounts are presumably based on more extensive field notes.

Keel (2002:136–137) rightly expresses frustration with the field methods and records from this pre-professional period of research, observing that during a span of six decades, "a few sites had been rudely excavated and poorly reported. No theoretical framework was available to the researchers of those times to study or interpret their data. Techniques for defining and recording proveniences were crude at best. Field notes documenting this work, at least the ones seen by me, are practically useless."

To some extent, this critique applies to Wainwright's work. By present-day standards, his excavations of graves and mounds would be characterized as looting. However, by the standards of his time, Wainwright's reporting can be characterized as better than average. His site locations, most often defined by landowner names, were probably adequate for his day. In a few instances he provides descriptions of artifact scatters that compare favorably with survey records from later decades (see for example Wainwright 1913a). Wainwright's descriptions of mound and burial excavations, while single-mindedly focused on unearthing artifacts, are generally consistent in detail from site to site, and in some cases, his artifact descriptions are detailed enough to assign an approximate range of dates to his excavated sites. Moreover, as readers will see in the reprinted text that follows, Wainwright makes notes about site formation processes and offers some discussion of culture history in his narratives, suggesting that his interest in archaeology surpassed a desire to collect curios.

Captain R. D. Wainwright as Archaeologist

Robert Dewar Wainwright was born in Augusta, Maine, on August 23, 1849, into a family with a long history of military service (Figure 2). His grandfather, Major R. D. Wainwright, was a United States Marine who stood down 283 armed inmates with a party of only 30 Marines during a riot at the Massachusetts State Prison in 1824 (Buckingham 1920:138–142). Wainwright's father, Robert M. A. Wainwright, was a lieutenant in the United States Army, and served in the Mexican War from 1846 to 1848; and his uncle Richard was a Commander in the U.S. Navy during the Civil War (North 1870; Robarts 1887). Wainwright followed in his father's and grandfather's footsteps, and joined the United States Marine Corps. He served from 1869 until 1893, when he retired due to injuries sustained during military service; he was deafened in one ear when a cannon was fired next to him while onboard a ship, and he suffered severely from asthma in later life (Susan Bush, personal communication 2012; Hamersly 1890; Stone 1920).

Wainwright was initially stationed in Massachusetts, but traveled extensively during his years of military service. He was involved in the rescue of a steamer stranded on a reef off the coast of Brazil in 1872. In 1888, while on duty with the U.S.S. Essex, he marched from the harbor of Inchon to Seoul, Korea, to guard the Unites States Consulate during a



Figure 2. Portrait of Captain Robert Dewar Wainwright. Courtesy of the Wainwright family.

period of political unrest (Daugherty 2009:28). Wainwright retired from the Marine Corps in 1893, and spent the last years of his life in Roanoke, Virginia. Wainwright died in the Naval Hospital in Norfolk, Virginia, on October, 21, 1920. He was buried two days later in Arlington National Cemetery (Stone 1920).

According to an interview published by the *Roanoke Times* (RT) in 1917, Wainwright developed an interest in archaeology as "a small child.... For a number of years his father, also an army officer, was detailed on Indian duty in the then undeveloped West. During this period Captain Wainwright acquired invaluable knowledge of Indian craft and habits and an insight into their lives and customs which has contributed much towards his success as an archaeologist" (RT, 21 September 1917:6).

Wainwright never lost his interest in Native American material culture, and he devoted much of his retirement to archaeological pursuits. In January, 1894, Wainwright excavated several groups of graves at Burial Ridge in the Tottenville section of Staten Island, New York. George H. Pepper, a better-known early American archaeologist, was also working at Burial Ridge at the time, and it seems likely that the two men may have been in communication (see Skinner 1909:11–12). Wainwright presented a paper on this fieldwork at the Proceedings of the Natural Science Association of Staten Island in 1897. Excerpts from this paper are reproduced in the third volume of the Anthropological Papers of the American Museum of Natural History (Skinner 1909:12–14), and his work in New York is also cited in the "Archeologic Notes and News" of the tenth volume of *The American Anthropologist* (Anonymous 1897:55).

From at least 1904 to 1917, Wainwright carried out surface collections and excavations in North Carolina, Virginia, Kentucky, and Florida, primarily during the summer months. It is not certain when Wainwright first collected in North Carolina, but by 1900 a stone pipe in his collection from the state was illustrated by Warren K. Moorehead in his *Prehistoric Stone Implements*. In 1904 Wainwright discovered a projectile point cache near "Spier's Ferry," North Carolina (Wainwright 1913a), and in the summer of 1913 he worked in the western piedmont and mountains of North Carolina (Wainwright 1913b, 1914a, 1914b). In 1914 and 1915 he carried out surveys and mound excavations in western Virginia and eastern Kentucky, and from 1916 to 1917 he worked in southern Florida and returned to work in western Virginia (Wainwright 1914c, 1916b, 1917, 1918a, 1918b).

Based on accounts of his work published in *The Archaeological Bulletin* and a single survey report submitted to the Bureau of American Ethnology (Wainwright 1914c), Wainwright had a standard methodology

for making collections. He traveled by railroad from Roanoke to locations with known archaeological sites, especially mounds and prehistoric Native American graves. He would ask local residents for information about nearby archaeological sites, recording his informants' names in his notes. In some cases he seems to have carried out smallscale pedestrian surveys, writing short site descriptions and making small surface collections (see for example Wainwright 1914c). For his excavations he often hired or otherwise persuaded local farmers and laborers to assist him, and in some cases he claims to have trained his assistants in excavation methods (Wainwright 1913b:114).

Wainwright also appears to have had a working knowledge of regional artifact typologies and a system for tracking the provenience of the artifacts he collected and purchased. A reporter from the *Roanoke Times* (RT) newspaper stated that "when shown a specimen of Indian craft, Captain Wainwright can locate with precision the locality in which, and the condition in which it was found," and that Wainwright's collection was "cataloged and indexed in such a manner that it contains a detailed account of the discovery of each relic" (RT, 21 September 1917:6).

The reporter's claims are supported by one of Wainwright's submissions to *The Archaeological Bulletin*, "Captain Wainwright's Pipes" (Wainwright 1913c:120–121). In this short entry, a single plate illustrates 20 pipes from the Eastern United States, and the accompanying text provides a location of origin and brief description for each pipe. In the photograph it appears that each pipe has been marked with one or two small white paper labels.

Wainwright apparently had a large and well-organized artifact collection. According to his interviewer:

A number of museums of various institutions have made bids for this collection, notable among them the Smithsonian Institute at Washington. Captain Wainwright, however, prefers that it should go to a smaller institution, on account of the fact that in such the collection would be intact and retain its identity as a whole. He is negotiating with one of the State universities in reference to this matter. [RT, 21 September 1917:6]

Wainwright's concern about the disposition of his collection also sets him apart from many of his contemporaries. Two short notices printed in the *Richmond Times-Dispatch* (RTD) indicate that Wainwright arranged to donate his collection to Washington and Lee University in

1917 (RTD, 14 October 1917), and that the university received the collection in 1919 (RTD, 8 May, 1919). There is an unattributed "donated prehistoric collection" of artifacts at the Anthropology Laboratory at Washington and Lee University that may contain some of Wainwright's collected material (Sean Devlin, personal communication 2012). The collection includes at least two Qualla phase rim sherds, an incised sherd marked "Florida" with a small paper tag, and at least one black-and-white sherd from the American Southwest. This collection would appear to be consistent with the collection described in the *Roanoke Times* interview with Wainwright, but there is no definitive documentary evidence linking the unlabeled boxes of artifacts curated at Washington and Lee to Wainwright. Moreover, if this is Wainwright's collection, the pipes, copper artifacts, and complete projectile points appear to have been removed.

Wainwright's archaeological activities were not guided by a welldefined theoretical framework, and his primary "research goal" was to obtain artifacts. However, his narratives suggest that his intellectual perspective was not unlike that of contemporary scholars. Like many of the ethnographers and archaeologists of his era, Wainwright seems to have viewed Native Americans as members of "vanishing" societies (Thomas 2000:44–47). He may have envisioned Native American grave goods and other artifacts as remains of those societies that needed to be preserved for the sake of posterity (Wainwright 1913b:111). Some of his writings suggest that he was sympathetic to the suffering of nineteenthand twentieth-century Native American societies, and that he was interested in basic questions of culture history, such as the differences between the material culture of historically known Native American groups and Mississippian societies (Wainwright 1913b:111, 1914a:6–8).

Below, we present Wainwright's accounts of his work in the western piedmont and mountains of western North Carolina, originally printed in the fourth and fifth volumes of *The Archaeological Bulletin*. We include reproductions of his figures, with the exception of Plate XV, which depicts an excavated Native American grave from the Yadkin River valley. Typographic and grammatical errors original to the text have been left unaltered, but we present corrections in brackets when important details, such as place names, appear to have been incorrectly transcribed by the journal editors. Following the reprinted text, we offer a brief interpretation of Wainwright's travels and fieldwork.

Wainwright's Narratives

A Cache (Wainwright 1913a:63)

On August 16, 1904, I left Rival Hall, N.C. for Spiers Ferry on the Toakin River, five miles distant [probably Rural Hall, for Speas Ferry on the Yadkin River]. On arrival I found a long elevation running parallel to the river. Between this ridge and the river is a floor of hardpan about an eighth of a mile wide, caused by many freshets. At the river's edge and running with it for about a mile is a sand ridge some four feet high, at the upper end of which I found quantities of flakings, pieces of pottery, and numerous arrow points. Midway on the ridge I unearthed with my fingers eight large spears four and five inches in length. These flints were ready for the last chipping. As many of these had been found at the same place, there is no doubt that it was a cache of these implements, all of which were of slate. Human and animal bones in several places protruded from the ridge. Indian fire places are still seen containing refuse of mussel shells, bones, broken pottery, etc.

A Summer's Archaeological Research (Wainwright 1913b:111–114)

About the first of May, 1913, I started on my usual summer tripwhich time of the year I devote to Indian archaeology-hunting for camp sites, exploring mounds and looking for specimens of stone art of the almost forgotten race which roamed this fair land, ere the white people intruded to the sad detriment of the red man. Leaving Roanoke, Va., I proceeded to Winston-Salem, N.C., thence across the Yadkin river into Yadkin county, North Carolina. After a day or so stay at East Bend, N.C., I visited the farm of Mr. Geo. Steelman, which property lies a great part along the Yadkin river, Yadkin county, North Carolina. At this place, and also at others along the river, are sand ridges, made by the overflow of the river. At some places the river has again risen to a great extent and has washed away parts of these ridges down to what must have been the original surface of the land. This particular ridge on the property aforesaid is about four feet high, extends about five-eighths of a mile along the river and is about fifteen feet in diameter. The section at the northern end has been washed by freshets of the river for about 150 feet in a semi-circular direction towards the west. Many graves of Indian occupancy have been washed bare, exposing the skeletons. Excavated this section as thoroughly as possible, handicapped by want of laborers, all of whom were busy on their farms. Found all the skeletons except

one in perfect condition, and in nearly all cases the knees showed by their position that the Indian had been buried with his knees drawn up, and afterwards, by weight of material, probably, had been capsized to the left – the Indian lying on his back, face uppermost, and in one or two cases face turned to the side. These skeletons were found within a few feet of each other and all nearly on the same level, that is about four feet down from original surface. In nearly every case—at the same level as the burial and very close to it—were the remains of a fire. In these remains I found tortoise shell, deer bones and often large sections of pottery, discolored by the fire. These fires, I judged, showed that funeral feasts were held at the grave.

Doing surface work first on the washed ridge, I found quantities of [page 112] broken pottery rims, etc., showing fine ornamentations in nearly every case. Many very fine arrow points, though no spears, except one or two of rough stone, several celts, or tomahawks, one or two stone axes of fair workmanship, many stems of pipes, mostly of pottery, beads of shell of different sizes and workmanship, also some of other material, and in every direction calcined stones were plentiful. A number of copper beads, a pendant of same material, shaped hook like, drilled at top, and tubes wrapped to a point, were also found; no doubt washed from graves—all these badly corroded.

In regard to the arrows, they were made mostly of two or three materials—a dull black flint, and of a material I think chert, yellowish clay color, specked with russet brown spots. A number were of yellowish clay color, seemingly very old, as they were covered with a patina and were worn smooth, seemingly more or less finished. Shells of the tortoise, mussel and periwinkle were also strewn over the ground.

Plate XV – One of Capt. Wainwright's excavations. (This plate shows an excavated grave and is not reproduced here.)

In the first graves excavated, found skeleton as above described, as regards position; very small beads around neck of shell and copper, a disc of copper four inches in diameter and center drilled lay on its chest. All copper articles badly corroded.

In another grave, some material like sinew was found along side of [page 113] head; two articles, celt like, of iron, and one stone tomahawk lay close to the skeleton; also a fine stone pipe, monitor shape.

On May 8, excavated two skeletons; position the same as others. First skeleton had lumps of red ochre under chin; no other articles found with it. The second skeleton was buried with mouth open; no articles with it.

On May 9, exhumed a large male skeleton; mouth open, left side of skull very much flattened, remains buried as others; a stone tomahawk rested on his left forearm, another on right side of head touching jaw. Shell beads, large, round and tubular, chalk-like and soft, also quantities of small shells around neck, drilled as beads, claws of some animal in front of chin, not drilled. Seven or eight lumps or plumbago slightly larger than a walnut lay between his lower left arm and side of body. On the right side of head were quantities of the small bones of tortoise. Fingers of left hand in mouth, body buried as already described for others.



Figure 3. Plate XVI - Along the Yadkin River.

May 10 – Exhumed skeleton, position as before described, found on either side of head a small quantity of large and medium size tubes of copper, one eighth inch in diameter, coloring the skull a greenish color; mouth wide open.

May 11 – Excavated and exhumed skeleton; mouth open, reclining as before described; small beads of shell and copper around neck.

Copper disc, four inches in diameter, drilled at top and center, lay on chest, some beads adhering to it. Also a piece of coarse matting of vegetable material was with the beads. Medium size tube pipe of pottery, bowl turned up, was found with the remains.

May 12 – Exhumed skeletons of a female and child, face of child and [page 114] female faced downward, body doubled up; large leg bones on chest, a few beads, blue colored ones, small shell disc, not drilled, with child; child seems buried kneeling as though its face was downward; its legs were under the body.

On account of not having help, was forced to stop my excavations here, and also as the remainder of the ridge, not river-washed was in wheat.

May 13 – Mr. Tom Taylor, an employee of Mr. Steelman, and whom I had instructed in excavation, exhumed a skeleton on same property as before and found remains 1½ feet under ground, position of skeleton as usual. Articles found: Broken pipe of pottery—I think broken in excavation—small beads and shells drilled as beads. Visited several sites on Yadkin river, same county as before.

First – Across the road from Mr. Steelman's property, due west, found a low hill in field, close to a creek. Found on it chippings of chert and quartz, a few broken arrow points and some broken pottery.

Secondly – Found on property of Mr. J. D. Flynn, broken pottery, flakings of flint, a few arrow points—property ³/₄ mile from road, due south on sand ridge along Yadkin river, Yadkin Co, N.C.

Thirdly – Found on property of Mr. Davis, 2 ½ miles north of Mr. Steelman's property, a ridge of sand one-half mile long, extending nearly north on the Yadkin river, Yadkin county, N.C. This ridge is about three feet high and about 250 feet in width, is strewn with broken pottery and flakings of flint and quartz. A few arrow points found. Mussel shells are numerous, as well as deer bones and tortoise shells, also calcined stones.

Lastly – Found on property of the late Mr. Poindexter, at Poindexter ferry, opposite Donaha, N.C., on Yadkin river, Yadkin county, N.C, a sand ridge about $\frac{1}{2}$ mile long and 150 feet wide. Ridge covered with broken pottery, mussel shells, flakings of flint and quartz. No excavation

could be made, as ridge was in wheat. Along side of the road which cuts through the ridge, going down to the ferry, I saw the skeleton remains of an Indian, and where it had been taken out of the side of the cutting. (To be continued)

Capt. R. D. Wainwright's Pipes (Wainwright 1913c:120-121)

Plate XX shows Capt R. D. Wainwright's collection of pipes, showing them one-sixth natural size.



Figure 4. Plate XX.

1 – Found on Blackwater river, estate of Tim Holland, six miles from Wirtz, Va. Soapstone.

2 – Found on the sand ridge at Poindexter's ferry, opposite and across Yadkin river from Donaha, N.C.

3 - Found on the estate of S. T. Conley, two miles east of Andrews, N.C.

4 – Found near Valley River, N.C, by J. McWhitaker.

5 - Found by Mr. Pullium on property of W. P. Walker, two miles west of Andrews, N.C.

6 – Found near mound along Tuckaseegee river at Governor's Isle, N.C., property of Kape [Kope] Elias.

7 - From Canada; presented

8 – Found by myself at Morganton, N.C.

9 - Found near Valley River, N.C. by McWhitaker.

10 – Found on Miller's creek, one mile northeast of East Bend, N.C., by F. P. Presnel; material, sandstone.

11 - Found on Borden property, three miles west of Donaha, N.C.; pottery. [page 121]

12 – Excavated with Indian skeleton, Richmond county, New York, by myself. A North Carolina type of pipe; broken by the Indian who drilled it, and probably fastened it together with sinew.

13 – Excavated with Indian skeleton on property of George Steelman on Yadkin river, Yadkin county, N.C. Pottery.

14 – Found near lumber mill along Valley river, just east of Andrews, N.C., by Mr. Fisher.

15 – From grave near San Juan river, Utah; owned originally by Jake Gold, an old collector of the southwest; presented.

16 – Found on Miller's creek, one mile northeast of East Bend, N.C., by F. P. Presnel; sandstone.

17 – Excavated with Indian skeleton on property of George Steelman in Yadkin county, N.C.

18 – Found on estate of H. S. Martin, about one-fourth mile north of Poindexter's ferry, Yadkin river, opposite and across river from Donaha, N.C ; soapstone.

19 - Found near Valley River, N.C, by J. McWhitaker; very old pipe.

20 - Found in West Virginia; presented by W. K. Moorehead.

A Summer's Archaeological Research (Wainwright 1914a:6–9)

In June, I arrived at Cullowhee, Jackson county, North Carolina. A short distance from Mr. White's store, southwest direction in bottom land, is a mound about one hundred feet in diameter and five feet high. It has been very much higher, but now somewhat plowed down. It has been excavated long ago. No history as regards it. Field now in corn, so it could not be examined by excavation.

As one arrives at the wooden bridge, as he approaches Cullowhee from the west, the road cuts through an elevation; on one side about three feet down I discovered fire place containing calcined stones. On the elevation on right side of road, broken pottery is common; flakings are not common of any material; found two or three fine arrow points, one seemingly patinated. This place has been thoroughly searched many times and numerous articles are in the hands of a few, not to be parted with at any price.

My next visit was to Andrews, N.C., on the Murphy division of the Southern railroad. In the bottom land alongside of Valley river, southwest of town and about half a mile distant is a very large mound, property of Mr. McLane Walker, on which is the dwelling of the property owner. The residence is a large one. The mound's dimensions are as follows: Length 148 1/2 feet, width 107 1/4 feet, height 10 feet; it was five feet higher, but was leveled for building. Mound is in fine condition; has been tunneled from side many years ago, though no trace of tunnel now exists. Bones, pipes, etc., reported found. A photo of the mound is in my possession. In a field adjoining the mound to the west, I found two beads, fairly large size, of glass, probably traders' beads; flakings of flint and quartz and sections of pottery are very numerous. Much material has been gathered here, especially these so-called traders' beads. Evidently the Cherokees camped on the old Mound Builders' fields very often. No knowledge as to who were the builders of these mounds can be obtained, the Cherokees informing me that they were there when their people came to this section of the state.

Excavated a mound in front of Byson Hatrel [Bryson Hotel] at Andrews. N.C., on Mr. Walker's property and to the right of his residence. Mound is five feet high and about thirty-five feet in diameter. Excavated it thoroughly, and though said to have been excavated before, which I doubt, as the soil, yellow clay, was firm but not loose. I found no signs at all of any occupancy of any material except the yellow clay. Visited the property of Mr. W. P. Walker, at this time in corn, said property being two miles west of Andrews and situated on left side of railroad as one goes towards Murphy, N.C., and near a creek, is what looks like a mound, now very much plowed down; on its immediate vicinity, quite a number of Indian [page 7] remains have been plowed up and now several portions of skeletons are on the surface. The bones of one, the skull being carried off, are in fine condition, though the remains were buried in the bottom land. Pottery of large and small pieces is

abundant over the surface, but particularly so where the skeletons have been plowed up; beads (glass) and arrow points have been numerous, so it is reported. Flakings of any material are very scarce. So I judge this field to be one for burial and not a camp site. Pottery I believe to have been buried with remains in whole condition and broken by the plow in most instances. No excavation was possible on account of field being planted.



Figure 5. Plate III - Representative Spears of the Yadkin.

On the property of S. T. Conley, which is about two miles east of Andrews, N.C., and situated close to the Southern railroad, on a slight rise from the river and in bottom land, excavated a place which had been [page 8] a mound several feet high, but now almost plowed down, but Mr. Conley remembered it as quite a mound many years ago. About three and a half feet down, came to two large slabs of stone, about one and a half feet square, stones lying side by side and touching each other. Stones were lying on edge, which was about three inches thick. Found remains of a skeleton close to stones, some teeth, a small piece of a rib and two small sections of wrist bones of what was the right arm. On these bones were very large beads, made of the column of conch shells. On the rib was a shell disc 8 ³/₄ inches in diameter and engraved; also several small pieces of shell, perforated and scalloped on edge. The shells, beads and disc were very soft and extremely hard to excavate, and when dried were like chalk. At the right of where the skull should have been and close to that place was a small bowl, having about a pint capacity; bowl was of a vellow clay and not ornamented, bottom of bowl towards the place of skull. The bowl contained a lump of red hematite, stone knife and two shells-one mussel and one clam. The back teeth having no roots. I took them to a dentist who said they were first teeth and the person must have been eleven or twelve years of age.

On the hills back of the power house at Andrews, N.C., in many places are what is left of stone graves, the stones having been carted away for road repairs. Mr. Everett, who resides on one of these hills, remembers these stone graves as being about fifty in number and about four or five feet high. Had several places dug where stone piles had been but found nothing, though one had been dug a few days before by Mr. Everett's boys and a few bones and a lot of traders' beads were found. I picked up two from the grave. A Mr. Taylor had excavated many of these graves many years ago. I believe, after careful thought, that the grave I dug at Conley's was of the time of the mound builders. Those plowed up remains on the Walker property, two miles west of Andrews, N.C., were graves of Cherokee Indians of about the time of the first arrival of the traders, as shown by the glass beads, and those graves on the hill were Cherokee also. Knowing that the white man was now cultivating the bottom lands, the Indians buried on the hills in graves about two feet deep, piling on rocks and small stones to keep the wild animals from the remains.

June 18th. Visited Governor's Island, N.C. on the Murphy branch of the Southern railroad, and inspected an Indian mound one fourth mile east from the railroad station and close to the Tuckasegee River. The dimensions of the mound, actual measurement, are 110 feet in diameter, height six feet. Was informed by an old settler that he remembered it when it was ten feet high. It is on the property of Mr. Kope Elias, who informed me that it had been thoroughly excavated many years ago. Around the mound and in the adjoining field, now all covered with growing corn, I found many small pieces of pottery, some hammer stones and sinkers of various sizes. No arrows or flaked articles, or flakings whatever. The question why no flakings bothers me quite a lot. Visited [page 9] Rosman, N.C., on Murphy division of Southern railroad; found along French Broad river at the village, some pieces of pottery and flakings of flint and quartz. Mr. Glazener, an old man of the village, informed me Indian articles had been plentiful where the post office now stands; now and then an arrow point is found in the fields nearby. All other Indian articles disappeared long ago. (To be continued)

A Summer's Archaeological Research (Wainwright 1914b: 29–30)

August 9th. Visited Calvert, on the Brevard division of the Southern railroad. One-half mile from the station is the home of Mrs. Galloway, and one-half mile southeast from her home is a long ridge near a spring and creek. Part of the ridge is covered with very thick grass and the rest is in corn. In the corn field can be found an abundance of broken pottery, quartz and flint flakings—a number of rough arrow points were found.

One mile northwest of Pisgah Forest and on an elevation on which is Mr. T. L. Gash's residence, I found signs of quite a camp site. Procured from Mr. Gash quite a number of arrow and spear points, mostly made of quartz and quartzite and very rough. A few fine flint points, some flakings of quartz, a little broken pottery and one muller in fair condition, well formed and flattened on one side, was all that I found.

On August 11th, I located a camp site near the bridge over Dav-[page 30] idson's river, not far from Pisgah Forest. Here I found many pieces of pottery, calcined stones, quartz and flint flakings, and one fair arrow point.

August 14th. Visited Mr. Shipman's property, one mile northwest of Brevard. East of but close to the residence is an elevation not far from a creek, where quite a number of artifacts have been found in the past. In addition to the usual flakings and pottery fragments I found a piece of a soapstone pot.

At a point near the bridge over the Southern railroad out a short distance from Brevard, I examined what is left of a mound that at one time was about 30 feet in diameter. Height unknown as the mound had been "opened" years ago. It is said that bones, pipes and flint implements were found in the mound.

On the property of Mrs. M. M. Wilson, one and one-half miles from Brevard, I excavated a mound that, owing to years of cultivation, is now only two feet high. It consists of yellow clay with a burnt strata 19 inches below the surface. No artifacts were found.

The following list indicates the result of my summer's collecting:

5 axes, different types. 9 celts, two of Iron. 2 long pestles, 17 mullers of various sizes. 3 stone cups. 1 large pitted stone. 1 lap and cup stone. 1 stone sinker. 8 gorgets and ornaments. 12 stone pipes, 1 pottery pipe and one unfinished stone pipe. 1 hoe. 1 bone bead and one bone needle. 3 shell disks. Many shell beads. Glass beads. 2 pottery vessels, and numerous pot sherds. Matting from grave with skeleton.

Red ochre and plumbago including one lump of red ore found in bowl with stone knife and shells.

Copper-drilled disks, long tubes, beads and rolled specimens.

Soapstone—one large bead, and one oval dish.

Three unclassified articles—one small figure of woman that seems to be the front of a pipe: one fish head, and one soapstone slab with notches on the sides.

Many flaked articles such as arrow and spear heads, bunts, scrapers, etc.

Notes on Wainwright's Travels

In this section we provide a brief interpretation of Wainwright's narrative, identifying correlations with known archaeological sites and discussing his references to archaeological sites that appear to have been destroyed in the years between his travels and the first systematic surveys of the region.

In "A Cache," Wainwright provides a brief, but fairly detailed description of a cache of bifaces he excavated in 1904. He writes that he "left Rival Hall, N.C. for Spier's Ferry on the Toakin river, five miles distant" and then identified the cache on a sand ridge near the river. We interpret Wainwright's location to be Speas Ferry, west of Rural Hall, on the Yadkin River, and suggest that the spurious place names here (and elsewhere) are the result of transcription errors. Wainwright would return to the Yadkin River to carry out excavations in 1913, and his description of the archaeological site at this location seems consistent with findings from more recent archaeological surveys from the Yadkin River (Woodall 1975, 1990; Woodall and Claggett 1974).

During the first weeks of May, 1913, Wainwright visits the farm of George Steelman on the Yadkin River near East Bend, North Carolina. Wainwright observes prehistoric Native American graves washing out of the levee near the river, and spends at least five days excavating these features. He describes graves containing flexed or semi-flexed individuals with fire pits or hearths nearby. Most of the graves contain shell and copper beads. Other artifacts removed from the Steelman farm graves include: two celt-like iron pieces, a stone ax or celt, a stone pipe, red ochre, animal claws, shell beads, tubular copper beads, "lumps of plumbago slightly larger than a walnut" (probably graphite or hematite), blue (presumably glass) beads, a complete bowl, and tortoise bones.

After completing excavations in the river levee on the Steelman property, Wainwright visits four archaeological sites, which he identifies with landowner names. He makes surface collections at these locations, but does not carry out excavations. The last of these sites, located on the Poindexter property at Poindexter Ferry, is in the vicinity of the Donnaha site (31YD9). Wainwright reports seeing an Indian grave in a road cut on this property.

The site commonly known as Steelman's Bottom (or Steelman's Place) was revisited by Douglas L. Rights, who made an extensive surface collection (now housed at RLA). Although the site is not described in Rights's 1924 or 1947 works, his 1947 publication includes a 1926 photograph of the "Indian Village Site at Steelman's Place. Yadkin River" (Rights 1947:Plate 45) and an accompanying photographic plate depicting a large, reconstructed jar "found at Steelman's Place" (Rights 1947:Plate 46). There are no references to Wainwright's work in the sources examined, and it is possible that Rights was unaware of Wainwright's prior visit. Much later, Woodall (1990:8) reported that the large site at Steelman's Bottom was "badly pillaged" during the 20th century, and had been damaged by earthmoving. Wainwright's report of blue (presumably glass) beads at Steelman's Farm, along with later reports by Rights (1947:272) of trade (presumably glass) beads at or near Donnaha, are the only archaeological evidence for late-seventeenth to early-eighteenth century settlement on the upper Yadkin.

From Yadkin County, Wainwright travels west to Cullowhee, in Jackson County, arriving in June. He offers a very short description of the Cullowhee, or Rogers Mound (31JK2). This mound, located on the campus of Western Carolina University, was leveled in 1956 (Keel 1964). According to Wainwright, the mound measured approximately 100 feet in diameter and five feet high at the time of his site visit. He did not attempt to excavate the mound because it was planted in corn. Wainwright notes that the mound had been plowed down, and had been previously excavated. This is most likely a reference to the excavations by the Valentine Museum.

Wainwright's estimated dimensions for the Cullowhee Mound seem reasonable, based on observations made before and after his visit. In December of 1881, A. J. Osborne wrote to B. B. Valentine, stating that the mound at Cullowhee was "such a size mound as the one your Father and myself was on in Haywood on Plott's farm" (Osborne 1881). During a 1937 visit to the mound, Hiram Wilburn, a surveyor and historian for the National Park Service, estimated that the mound was only one foot tall. Wilburn's site photograph seems to support this claim (Figure 6).

After departing Cullowhee, Wainwright travels to Andrews, North Carolina, where he describes the Andrews Mound (31CE3). The



Figure 6. The Cullowhee Mound (31JK2), photographed by Hiram Wilburn in 1937. Courtesy of the National Park Service.

Andrews Mound was located on the east bank of the Valley River, just below the Valley River Bridge in Andrews. The mound was partially intact in 1972 when Joffre Coe nominated the mound for the National Register of Historic Places (form on file, RLA). A house, later used as an inn, was constructed on top of the mound in the first half of the nineteenth century. This construction damaged the mound but prevented it from being completely demolished. Coe suggested that the mound represented a Cherokee townhouse with a uselife dating to approximately A.D. 1600 to 1800. The mound was bulldozed by the landowner in 1975 to build a shopping center.

Wainwright estimated that the Andrews Mound measured 148.5 feet long by 107.25 feet wide by 10 feet high, but that the mound was five feet higher before it was leveled for building. This estimate seems to be supported by photographs of the mound taken during the 1960s during the Cherokee Project, on file at the Research Laboratories of Archaeology at the University of North Carolina, Chapel Hill (Figure 7).

Wainwright then states that he excavated a mound "in front of Byson Hatrel in Andrews, N.C., on Mr. Walker's property and to the



Figure 7. The Andrews Mound (31CE3) and the ruins of Walker residence, photographed ca. 1971. Courtesy of The Research Laboratories of Archaeology, The University of North Carolina at Chapel Hill.

right of his residence." It seems probable that "Byson Hatrel" is a typographical error, and Wainwright was referring to the "Bryson Hotel." According to a 1916 Sanborn map, this building was located at the corner of Cherry Street and First Street in Andrews, approximately 0.9 miles east of the Andrews Mound. Wainwright claims the mound was five feet high and 35 feet in diameter, contained no artifacts, and was composed entirely of yellow clay. No mounds or other archaeological sites have previously been recorded in this location, and there are no accounts of a mound in this vicinity in the Valentine records or Thomas's mound reports. (This is one of at least two supposed mounds investigated by Wainwright in which he did not find evidence of occupation; the other was located on the Wilson property near Brevard. It is not possible to determine if these were in fact mounds.)

Wainwright next visits the property of Mr. W. P. Walker, two miles west of Andrews, and reports a possible plowed-down mound near a creek. He reports that many Indian graves and artifacts, including numerous beads and arrowheads, have been encountered in the immediate vicinity of the mound. He was not able to excavate the mound because the field was planted. This may be a reference to a mound near the site of the Western Carolina Regional Airport (formerly

the Andrews-Murphy Airport), sometimes also referred to as the Bead Mound (see Browder 1980; Croy 1975:272–278; Freel 1956:35). The Andrews Airport mound has never been identified archaeologically, but according to the written accounts by Browder (1980), Croy (1975), and Freel (1956), and local oral history, the mound was excavated by Arthur Palmer in 1936, and its contents were put on display in his roadside museum (Duncan and Riggs 2003:187).

Following his work on the Walker property, Wainwright carries out an excavation on the property of S. T. Conley, two miles east of Andrews, close to the Southern railroad, on a slight rise in the floodplain of the Valley River. According to the landowner, the location was once a mound several feet high, but had been plowed down. There are no previous records of a mound in this vicinity. Current site file records indicate that the closest known site, 31CE55, was recorded during the Cherokee Project, and there was no obvious evidence of a mound at this location in the 1960s. However, Wainwright's discovery of stone slabs, an apparent shell gorget, and columella beads suggests that he may have indeed encountered the remnant of a previously-excavated Mississippian-period mound.

In closing remarks about his trip to Andrews, Wainwright reports seeing the remains of stone graves "on the hills back of the power house." He reports that as many as 50 graves were there at one time, but suggests that by 1913 they had been looted, and the stones taken away for road repairs.

Wainwright leaves Andrews and heads east to Governor's Island, where he provides a useful description of the Kituhwa Mound and associated village (31SW1/2). He estimates that the mound measures 110 feet in diameter and six feet high, and states that an old settler remembered it being 10 feet high. The property owner, Mr. Kope Elias, told Wainwright that the mound had been excavated years before. This is a likely reference to the Valentine expedition. Wainwright reports finding pottery and hammerstones in the field near the mound. Hiram Wilburn recorded an estimated diameter of 140 feet and a height of nine feet for the mound during his visit to the site in 1937, which suggests that Wainwright's size estimate is reasonable (Figure 8).

Wainwright continues east, and ends his "summer's research" in Transylvania County, recording sites near Calvert, Pisgah, and Brevard.



Figure 8. The Kituhwa Mound (31SW2), photographed by Hiram Wilburn in 1937. Courtesy of the National Park Service.

Wainwright's notes on these sites are quite pithy, but in the few lines he devotes to Transylvania County, he claims to identify a previously excavated mound near a bridge over the Southern Railroad outside of Brevard. He also states that he excavates a low mound remnant on the property of Mrs. M. M. Wilson, located one and a half miles from Brevard.

Only two possible mound sites, 31TV5 and 31TV6, have ever been recorded in Transylvania County. Both were recorded by Joffre Coe while he was a student at Brevard College in the 1930s. 31TV5 is a natural knoll above the Puette site (31TV1), which was later determined not to be a mound (Holden 1966). 31TV6, "the Main St. Mound," was apparently located on Main Street in Brevard, and is documented in an early-twentieth century will (Steere 2011:98), but attempts to relocate this site or find convincing archaeological evidence for its existence have proven unsuccessful (Holden 1966; Steere 2011). Other historical references to mounds near Brevard can be found in a recently published history of the Brevard Rosenwald School (Reed 2004:44, 80), and in an 1883 edition of *The Overland Monthly Magazine* (Boyle 1883:536–539). Research into these accounts is ongoing.

Conclusion: The Significance of Wainwright's Travels in Western North Carolina

R. D. Wainwright's account is significant both as a primary source of archaeological and historical information and for the light it sheds on the murky early decades of archaeological research in North Carolina.

His narrative provides useful details for four known sites, Donnaha (31YD9), the Cullowhee Mound (31JK2), the Andrews Mound (31CE3), and Kituhwa (31SW1/2). Wainwright offers a brief snapshot of each site in 1913, after these places had been damaged by several decades of plowing and looting, but before the Cullowhee and Andrews mounds had been completely destroyed.

The Cullowhee Mound and Andrews Mound may have been the remains of Cherokee townhouses, rebuilt in place over several generations, as was the mound at the Coweeta Creek site (31MA34) (Rodning 2002, 2010). The townhouse at Coweeta Creek had at least six construction stages, measured approximately 50 ft by 52 ft at its maximum size, and may have reached a maximum height of four feet (Rodning 2002:12–15, 2010:66–67). Rodning (2002, 2010) estimates that the townhouse was first built in the 1600s and occupied until the early 1700s.

Wainwright's size estimates suggest that the Cullowhee Mound, with a height of five feet in 1913, may have represented the remains of a townhouse similar to the one at Coweeta Creek in terms of size, scale, and uselife. Standing 10 to 15 feet high, the Andrews Mound may have represented a townhouse mound that was larger and occupied for a longer time than the townhouse at Coweeta Creek, or, like the Peachtree Mound, it may have been a Mississippian platform mound that was later used as the base for a townhouse by a Cherokee community.

In contrast to the Cullowhee and Andrews mounds, the mound at Kituhwa has been the focus of systematic archaeological research (Riggs and Shumate 2003). In this case, Wainwright's size estimate and description support our understanding of the Kituhwa Mound as a large townhouse mound severely truncated by plowing.

Wainwright's descriptions of archaeological sites that may represent unrecorded mounds in Cherokee and Transylvania counties are also compelling. His narrative offers additional anecdotal evidence for a Mississippian mound or Cherokee townhouse in the vicinity of the Western Carolina Regional Airport in Cherokee County.

Wainwright's descriptions of two possible mounds near Brevard are vague, but the two sites appear to have been located in the floodplain of the French Broad River. If he encountered actual prehistoric mounds in Transvlvania County, as opposed to cultural features located on a natural topographic rise, he may have been describing the remnants of Woodland period platform mounds, similar to the Biltmore Mound (31BN174) (Kimball and Shumate 2003; Kimball et al. 2010), or burial mounds, such as the mound on the Alexander farm excavated by J. W. Emmert in southern Buncombe County (Thomas 1887:75). The French Broad and Pigeon River drainages in nearby Buncombe and Haywood counties were the locus of at least two major Woodland period ceremonial sites, centered on the Biltmore Mound and the Garden Creek site (Keel 1976; Kimball et al. 2010). Woodland-period platform mounds in the Southern Appalachian rarely exceeded two meters in height, and would have been more easily plowed away and damaged than their Mississippian and Cherokee counterparts (Anderson and Mainfort 2002; Jefferies 1976, 1994; Kimball et al. 2010). Woodland-period burial mounds were frequently targeted by looters, and many were likely destroyed by the early twentieth century.

In addition to providing new details about particular archaeological sites, Wainwright's narrative serves as an important, understudied example of archaeological research in North Carolina at the turn of the twentieth century. From the 1870s into the first decades of the twentieth century, basic archaeological methodologies and professional standards were yet to be established, and avocational archaeological sites with impunity (Keel 2002; see also Thomas 2000:133–138). As an amateur engaging in archaeological fieldwork as a retirement pastime, Wainwright seems to have operated on the fringe of the nascent community of early twentieth-century professional anthropologists. However, the inclusion of his 1897 report on the burials at Tottenville suggests that he was considered a reliable source by Alanson Skinner and Clark Wissler of the American Museum of Natural History (Skinner 1909). Wainwright's field methods, though unacceptable by current standards, were in many ways

on par with those of John Emmert and Warren K. Moorehead of the Bureau of American Ethnology (see Thomas 1894). One can only imagine how many of Wainwright's contemporaries carried out similar expeditions with coarser methods, and without setting a word in print.

Wainwright's references to his mode of travel also merit discussion. Like the Valentine brothers and the representatives of Smithsonian and Heye Museums, Wainwright traveled to archaeological sites primarily by rail, and then presumably by foot, horse, and automobile. By 1900 the Southern Railway had stations in Winston-Salem, Asheville, Brevard, Waynesville, Bryson City, and Murphy, and by 1910, three years prior to Wainwright's trip to western North Carolina, there were additional stations in Ela, Cherokee, and Andrews (Lewis 2007).

Given the shortage of flat terrain and easily navigable passes in western North Carolina, it comes as no surprise that late-nineteenth and early twentieth-century rail lines passed very close to (and in some cases, through) some of the largest and most significant archaeological sites in the region. Major mound and village sites located within three miles of the Western North Carolina Railroad or the Southern Railway include the Biltmore Mound, the Garden Creek sites, the Jasper Allen Mound, Kituhwa Mound and village, and the Andrews Mound. The Donnaha site is also located within one mile of the railroad. The proximity of these sites to the railroad helps explain why an amateur archaeologist from Roanoke, Virginia would be aware of an archaeological site with exposed graves along the Yadkin River, and how he could easily locate sites like the Kituhwa and Andrews mounds. In addition to spreading through print media, news of these sites would have traveled quickly by word of mouth along the rail lines. In some cases, ground-disturbing rail construction would have exposed archaeological features and artifacts, catching the attention of artifact collectors.

Wainwright's account is a vivid reminder of how many archaeological sites in the river valleys of the western piedmont and mountains of North Carolina have been destroyed by development, erosion, and digging. Moreover, Wainwright's narrative reminds us that many of these sites had already been destroyed by the early twentieth century, decades before the first attempts at systematic regional archaeological surveys. As we attempt to reconstruct the long-term settlement history of western North Carolina, we must keep this site destruction in mind. In many cases, we may be missing key nodes in

past settlement systems (e.g., Cherokee townhouses, Mississippianperiod platform mounds, and Woodland-period platform and burial mounds), and we must make some effort to address these missing data points in our analyses.

In closing, we would also suggest that our "discovery" of Wainwright's long-ignored narrative is an important reminder that more and more examples of early twentieth-century gray literature are now readily accessible as searchable, online electronic documents. Additional data may be present in newspapers (now increasingly searchable online), correspondence, and other sources. These materials are helping to generate more robust histories of early archaeologists and the development of the discipline (see for example Christenson 2011; HAIG 2011–2012).

While archaeological accounts written by amateur archaeologists and collectors prior to the 1930s should certainly be read with caution, they can also provide useful archaeological and historical information. In this case, Wainwright's accounts offer new insight into several very important but poorly understood archaeological sites in western North Carolina. We and others are continuing to research Wainwright's work in North Carolina and adjacent states, and are attempting to locate his artifact collection. We encourage other researchers in North Carolina and farther afield to delve more deeply into the work of Wainwright and other early archaeologists and collectors whose records, while imperfect, may contain archaeological and historical information that has yet to be examined.

Notes

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References Cited

Anderson, David G., and Robert C. Mainfort, Jr.

2002 An Introduction to Woodland Archaeology in the Southeast. In *The Woodland Southeast*, edited by D. G. Anderson and R. C. Mainfort, Jr., pp. 1–19. University of Alabama Press, Tuscaloosa.

Anonymous

1897 Archeologic Notes and News. The American Anthropologist 10(2):54-56.

Boyle, Esmeralda

1883 The Mountain Slopes and River-Banks of North Carolina. *The Overland Monthly Magazine* 1(1):536–540.

Browder, Nathaniel C.

1980 The Cherokee Indians and Those Who Came After: Notes for a History of the People Who Settled Western North Carolina. Hayesville, NC.

Buckingham, J. T.

1920 Rebellion in Massachusetts State Prison. In *McGuffey's Fifth Eclectic Reader*, edited by William Holmes McGuffey, pp. 138–142. Wiley and Sons, Inc., New York.

Bushnell, David I., Jr.

1920 Native Cemeteries and Forms of Burial East of the Mississippi River. Bureau of American Ethnology Bulletin 71, Washington, D.C.

Christenson, Andrew L.

2011 Who Were the Professional North American Archaeologists of 1900? Clues from the Work of Warren K. Moorehead. *Bulletin of the History of Archaeology* 21(1): 4–22.

Coe, Joffre L.

1972 National Register of Historic Places Nomination Form for the Andrews Mound (31CE3). Form on file, Research Laboratories at the University of North Carolina, Chapel Hill.

Croy, Eugene

1975 Silent Wings. Cummings, GA.

Daugherty, Leo J.

2009 The Marine Corps and the State Department: Enduring Partners in United States Foreign Policy. McFarland and Company, Inc., Jefferson, NC.

Dickens, Roy S., Jr.

1976 Cherokee Prehistory: The Pisgah Phase in the Appalachian Summit Region. The University of Tennessee Press, Knoxville.

Duncan, Barbara R., and Brett H. Riggs

2003 *Cherokee Heritage Trails Guidebook*. The University of North Carolina Press, Chapel Hill.

Freel, Barbara

1956 Our Heritage: The People of Cherokee County, North Carolina 1540–1955. The Miller Printing Company, Asheville.

Hamersly, Lewis Randolph

1890 *The Records of Living Officers of the U. S. Navy and Marine Corps.* Fourth Edition. Hamersly and Co., Philadelphia.

Heye, George C.

1919 Certain Mounds in Haywood County, North Carolina. *Contributions from the Museum of the American Indian, Heye Foundation* 5(3):35–43.

History of Archaeology Interest Group [HAIG]

2011-2012 Newsletters. Electronic document.

http://www.saa.org/HistoryofArchaeologyInterestGroup/tabid/1434/ Default.aspx. Accessed June 1, 2012.

Holden, Patricia P.

1966 An Archaeological Survey of Transylvania County, North Carolina. Unpublished M.A. thesis. Department of Anthropology, University of North Carolina, Chapel Hill.

Holland, C. G.

1970 An Archaeological Survey of Southwest Virginia. Smithsonian Contributions to Anthropology No. 12. Smithsonian Institution Press, Washington, DC.

Jefferies, Richard W.

- 1976 The Tunnacunnhee Site: Evidence of Hopewell Interaction in Northwest Georgia. Anthropological Papers of the University of Georgia No. 1. Athens.
- 1994 The Swift Creek Site and Woodland Platform Mounds in the Southeastern United States. In *Ocmulgee Archaeology: 1936–1986*, edited by David J. Hally, pp. 71–83. The University of Georgia Press, Athens.

Keane, A. H.

1883 On North Carolina Stone Carvings. *The Journal of the Anthropological Institute of Great Britain and Ireland* 12:281–288.

Keel, Bennie C.

1964 Destruction of the Mound at Cullowhee, N.C. Manuscript on file, Research Laboratories at the University of North Carolina, Chapel Hill.
- 1976 Cherokee Archaeology: A Study of the Appalachian Summit. University of Tennessee Press, Knoxville.
- 2002 North Carolina Archaeology in Historical Perspective. In *Histories of Southeastern Archaeology*, edited by Shannon Tushingham, Jane Hill, and Charles H. McNutt, pp. 137–144. The University of Alabama Press, Tuscaloosa.

Kimball, Larry R., and Scott M. Shumate

2003 2002 Archaeological Excavations at the Biltmore Mound, Biltmore Estate, North Carolina. Report submitted to Committee for Research and Exploration. National Geographic Society, Washington, DC. Copies available from the North Carolina Office of State Archaeology.

Kimball, Larry R., Thomas R. Whyte, and Gary D. Crites

2010 The Biltmore Mound and Hopewellian Mound Use in the Southern Appalachians. *Southeastern Archaeology* 29(1):44–58.

Lewis, J. D.

2007 North Carolina Railroads. Electronic document. www.carolana.com/NC/ Transporation/railroads/home.html. Accessed June 5, 2012.

MacCord, Howard A.

1989 The Intermontane Culture: A Middle Appalachian Late Woodland Cultural Manifestation. *Archaeology of Eastern North America* 17:89–108.

Marquardt, William H.

2008 Recent History of the Pineland Community. *Friends of the Randell Research Center Newsletter* 8(3):2–4.

Mooney, James

1900 Myths of the Cherokee. *Nineteenth Annual Report of the Bureau of American Ethnology, 1897–1898, Pt. 1.* Smithsonian Institution, Washington.

Moorehead, Warren K.

1900 Prehistoric Implements: A Reference Book. Robert Clarke Co, Cincinnati.

North, James W.

1870 The History of Augusta, from the Earliest Settlement to the Present Time: With Notices of the Plymouth Company, and Settlements of the Kennebec; together with Biographical Sketches and Genealogical Register. Clapp and North, Augusta, ME.

Osborne, A. J.

1881 Letter to B. B. Valentine regarding the Cullowhee and Jasper Allen mounds. Letter on file, Research Laboratories of Archaeology, University of North Carolina, Chapel Hill.

Powell, J. W.

1886 Fourth Annual Report of the Bureau of Ethnology. Government Printing Office, Washington.

THE TRAVELS OF CAPTAIN WAINWRIGHT

Putnam, F. W.

1884 Seventeenth Report. *Reports of the Peabody Museum of American* Archaeology and Ethnology 3:339–384.

Reed, Betty Jamerson

2004 The Brevard Rosenwald School: Black Education and Community Building in a Southern Appalachian Towns, 1920–1966. McFarland and Company, Inc., Jefferson, NC.

Richmond Times-Dispatch (RTD)

- 1917 Collection of Relics for Washington and Lee. 14 October, 1917. Richmond.
- 1919 Receive Indian Relics. 8 May, 1919. Richmond, VA.

Riggs, Brett H., and M. Scott Shumate

2003 Archaeological Testing at Kituhwa. 2001 Investigations at Sites 31SW1, 31SW2, 31SW287, 31SW316, 31SW317, 31SW318, and 31SW320. Submitted to the Eastern Band of Cherokee Indians. Copies available from the North Carolina Office of State Archaeology.

Rights, Douglas L.

- 1924 Traces of the Indian in Piedmont North Carolina. North Carolina Historical Review 1(3):277–288.
- 1947 The American Indian in North Carolina. Duke University Press, Durham.

Roanoke Times (RT)

1917 Rare Collection of Indian Relics Here: Captain Wainwright is Life Long Student of Archaeology of the Red Man. 21 September 1917, pg. 6. Roanoke, VA.

Robarts, William Hugh

1887 Mexican War Veterans: A Complete Roster of the Regular and Volunteer Troops in the War Between the United States and Mexico, from 1846 to 1848.
A. S. Witherbee and Co., Washington, DC.

Rodning, Christopher B.

- 2002 The Townhouse at Coweeta Creek. Southeastern Archaeology 21(1):10-20.
- 2010 Architectural Symbolism and Cherokee Townhouses. *Southeastern Archaeology* 29(1):59–80.

Rogan, John P.

1883 Letter to Cyrus Thomas, May 31. Letter on file, Smithsonian Institution Archives, Washington, DC.

Setzler, Frank M., and Jesse D. Jennings

1941 Peachtree Mound and Village Site, Cherokee County, North Carolina. Bureau of American Ethnology Bulletin 131. Smithsonian Institution, Washington, DC.

Skinner, Alanson

1909 The Lenape Indians of Staten Island. In *The Indians of Greater New York and the Lower Hudson*, edited by Clark Wissler, pp. 3–64. Anthropological Papers Vol. 3, American Museum of Natural History, New York.

Spainhour, James Mason

1886 Indian Antiquities of Caldwell County. *Journal of the Elisha Mitchell Scientific Society* 3:45–47. Raleigh, NC.

Steere, Benjamin A.

2011 Preliminary Results of Archival Research for the Western North Carolina Mounds and Towns Project: Documentary Evidence for Known and Potential Mound Sites in Buncombe, Cherokee, Clay, Graham, Haywood, Henderson, Jackson, Macon, Madison, Swain, and Transylvania Counties, North Carolina. Submitted to the Eastern Band of Cherokee Indians. Copies available from the North Carolina Office of State Archaeology.

Stone, William C.

1920 Robert Dewar Wainwright. American Philatelist 34(1):75.

Thomas, Cyrus

- 1887 Work in Mound Exploration of the of the Bureau of Ethnology. Bureau of American Ethnology Bulletin 4. Smithsonian Institution, Washington, DC.
- 1891 Catalogue of Prehistoric Works East of the Rocky Mountains. Bureau of American Ethnology Bulletin 12. Smithsonian Institution, Washington, DC.
- 1894 *Reports on the Mound Explorations of the Bureau of American Ethnology.* Twelfth Annual Report of the Bureau of Ethnology, 1890–1891. Smithsonian Institution, Washington, DC.

Thomas, David Hurst

2000 Skull Wars: Kennewick Man, Archaeology, and the Battle for Native Identity. Basic Books, New York.

Turbyfill, Charles O.

1927 Work Done in Western North Carolina during the Summer of 1926. Manuscript on file, Archives of the National Museum of the American Indian, Washington, DC.

Valentine, G. G., B. B. Valentine, and E. P. Valentine

1889 Catalogue of Objects. In *The Valentine Museum* [Museum handbook]. Richmond, VA. On file at the Research Laboratories of Archaeology, The University of North Carolina, Chapel Hill.

Wainwright, Robert D.

1913a A Cache. The Archaeological Bulletin 4(3):63.

1913b A Summer's Archaeological Research. *The Archaeological Bulletin* 4(5):111–114.

THE TRAVELS OF CAPTAIN WAINWRIGHT

- 1913c Capt. R. D. Wainwright's Pipes. The Archaeological Bulletin 4(5):120– 121.
- 1914a A Summer's Archaeological Research. The Archaeological Bulletin 5(1):6– 9.
- 1914b A Summer's Archaeological Research. *The Archaeological Bulletin* 5(2):29–30.
- 1914c Report of Reconnaissance of Indian Camp Sites, Mounds, Etc., in Western Virginia, with List of Specimens Collected, During the Summer of 1914. BAE file no. 4094, Smithsonian Institution, Washington, DC.
- 1916a Summers' Archaeological Work, 1915. *The Archaeological Bulletin* 7(1):1–4.
- 1916b Two Month's Research in the Sand and Shell Mounds of Florida. *The Archaeological Bulletin* 7(6):139–144.
- 1917 Archaeological Work on New River and Vicinity, Virginia, During Summer of 1916. *The Archaeological Bulletin* 8(5):76–81.
- 1918a Further Archaeological Exploration in Southern Florida, Winter of 1917, Paper I. *The Archaeological Bulletin* 9(3):28–32.
- 1918b Further Archaeological Exploration in Southern Florida, Winter of 1917, Paper II. *The Archaeological Bulletin* 9(4):43–47.

Ward, H. Trawick, and R. P. Stephen Davis, Jr.

1999 *Time Before History: The Archaeology of North Carolina*. The University of North Carolina Press, Chapel Hill.

Woodall, J. Ned

- 1975 Second Archeological Survey of the Great Bend Area, Yadkin River Valley, North Carolina. Report submitted to the North Carolina Department of Cultural Resources, Division of Archives and History, Raleigh. Copies available from the North Carolina Office of State Archaeology.
- 1990 Archaeological Investigations in the Yadkin River Valley, 1984–1987. Publication Number 25. North Carolina Archaeological Council, Raleigh.

Woodall, J. Ned, and Stephen R. Claggett

1974 An Archeological Survey of the Great Bend Area, Yadkin River Valley, North Carolina. Report submitted to the North Carolina Department of Cultural Resources, Division of Archives and History, Raleigh. Copies available from the North Carolina Office of State Archaeology.

WorldCat

2012 *The Archaeological Bulletin*. Electronic document. http://www.worldcat.org/title/archaeological-bulletin/oclc/2444905. Accessed June 1, 2012.

YOU CAN GO HOME AGAIN: A NEW LOOK HOMEWARD INTO THE EXCAVATED CISTERN OF THOMAS WOLFE'S "DIXIELAND"

by

Thomas E. Beaman, Jr.

Abstract

In 1929, author Thomas Wolfe published his now famous autobiographical novel titled *Look Homeward, Angel*, in which he referred to his homeplace as "Dixieland." This structure exists today as part of the Thomas Wolfe Memorial State Historic Site, and is commonly called the "Old Kentucky Home." In 1975 and 1978, archaeological excavations of the subterranean cistern under the rear porch yielded a combined total of 45,661 artifacts. Thirty years later, as part of a cooperative project between the Office of State Archaeology Research Center (OSARC) and the North Carolina Division of Historic Sites and Properties, a comprehensive artifact inventory of this feature's contents was finally completed. From coconut husks to 1,464 bottles of varying purposes, this study presents a functionally descriptive overview of the material life experienced by the young Wolfe as he grew up in his mother's Asheville boardinghouse during the early twentieth century.

And all of it is as it has always been: again, again, I turn, and find again the things that I have always known: the cool sweet magic of starred mountain nights, the huge attentiveness of dark, the slope, the street, the trees, the living silences of the houses waiting.... And again, again, in the old house I feel beneath my tread the creak of the old stairs, the worn rail, the whitewashed walls, the feel of the darkness and the house asleep, and I think, "I was a child here; here the stairs, and here was darkness; this was I, and here is Time." [Thomas Wolfe 1937]

Noted early twentieth century American author Thomas Wolfe was born the youngest of eight children in the urbanized uplands of Asheville, North Carolina, on October 3, 1900 (Figure 1). His mother Julia's boardinghouse, his childhood home and now a North Carolina State Historic Site, has become one of his literature's most famous landmarks (Figure 2). Named "The Old Kentucky Home" by a previous owner, Wolfe immortalized the rambling Victorian household as "Dixieland" in his epic autobiographical novel, *Look Homeward, Angel*. The architectural details of this standing house have been described by



Figure 1. The Thomas Wolfe Memorial State Historic Site, which contains the Old Kentucky Home, is located in Asheville, North Carolina.

local historians for decades and the furnishing have also been thoroughly researched and documented for authenticity.

Cisterns are traditionally defined as a receptacle made of wood or masonry designed to catch and store rainwater, most often funneled and filtered off roofs and through gutters. Their liquid contents were primarily used for fire protection of wooden structures, cooking, washing, irrigation, or for use by livestock. In rare historical instances, cisterns with lead liners were used to store water specifically for human use, but the vast majority of cisterns were not due to concerns over water quality. Cisterns were most often differentiated from wells, where water for human consumption was usually drawn, by their waterproof linings (Lounsbury 1994:80).

But for the archaeologist, cisterns, wells, and privies associated with houses of this period can often become time capsules containing "small things forgotten," objects either accidentally lost or intentionally discarded by the former occupants of a site. The cistern of the Old Kentucky Home has proven to be no exception. This large cistern was approximately 5.5 ft in diameter and 10 ft in depth, with masonry-lined sides and floor of "cement mortar...mixed with crushed granite gravel" (Baroody 1978:13). It was located under the rear porch of the residence



Figure 2. The Old Kentucky Home Boarding House, as it appears today at the Thomas Wolfe Memorial State Historic Site.

(Figure 3). Based on the artifacts it contained, it appears to have gone out of use when the boardinghouse was connected to Asheville's water supply in the first decade of the twentieth century. No longer needed, the uncapped, empty cistern began to be filled with items discarded by its residents and visitors. It was excavated in two phases during the 1970s by archaeologists as part of the interpretive redevelopment of the structure and property into a public State Historic Site.

This study compiles the results of the recently completed catalog of artifacts recovered from the cistern excavations. When organized into functional groups and classes, these artifacts tell a story of early twentieth-century consumerism in the Old Kentucky Home through goods obtained and used by the permanent and temporary residents of the boardinghouse. Wolfe noted many of these goods in his writings as well as through family reminiscences of growing up in the household. While the artifact classes described will be briefly abstracted and reviewed, the household bottles and ceramics, in addition to four unique artifacts, will be highlighted to illustrate behavioral activities and consumer consumption patterns in this early twentieth-century uplands setting.



Figure 3. The location of the cistern under the rear porch of the Old Kentucky Home.

History and Archaeology of the Old Kentucky Home

The historic Old Kentucky Home boardinghouse at 48 Spruce Street, run by Wolfe's mother Julia, was home to young Thomas from ages six to sixteen. Originally constructed in 1883 by prosperous Asheville banker, Erwin E. Sluder, the Queen Anne-style house had only six or seven rooms with a front and rear porch. By 1889, additions had more than doubled the size of the original structure. Thomas Wolfe (1929:127) remembered the house he moved into in 1906 as a "big cheaply constructed frame house of eighteen or twenty drafty, highceilinged rooms: it had a rambling, unplanned gabular appearance, and was painted a dirty yellow." In 1916, Wolfe's mother enlarged and modernized the house, adding electricity, additional indoor plumbing, and 11 more rooms. His boyhood in this residence unquestionably

shaped his future literary works, especially as the basis of the Dixieland household in Wolfe's first and arguably most famous novel, *Look Homeward, Angel.*

Though Thomas Wolfe died of tubercular meningitis on September 15, 1938, 18 days short of his thirty-eighth birthday, his mother Julia continued to live in the Old Kentucky Home until her death in 1945. In 1949, her remaining children sold the residence to the Thomas Wolfe Memorial Organization, a private organization that opened it to the public as a memorial to the author. It was acquired by the State of North Carolina in January 1975 and has since operated as a State Historic Site, preserved almost intact with original furnishings the way it appeared when Thomas Wolfe lived there. Ironically, Wolfe (1935:348) himself foresaw the future of his mother's boarding house in 1935 when he wrote, "[the] old dilapidated house had now become a fit museum."

Historically, archaeology has played a pivotal role in the development and interpretation at many of North Carolina's state-owned historic sites, such as Town Creek Indian Mound, Halifax, Bath, and Brunswick Town/Fort Anderson. The Thomas Wolfe Memorial State Historic Site is no exception, though because it consists of an extant structure on a landscaped yard it did not require or receive the breadth of investigations that some sites did. The main residence and grounds are designated as archaeological site 31BN147**1, and to date a total of six archaeological investigations have been conducted at the site. Each project was primarily geared toward the restoration and maintenance of the main house and its original landscape, and all have yielded artifacts from the late nineteenth and early twentieth centuries. In 1975, Timothy Thompson and Kent Schneider, staff archaeologists with the Archaeology Branch, North Carolina Division of Archives and History, conducted limited test investigations in the basement of the residence and excavated the top portion of the cistern. John C. Baroody (1978), with the newly formed Historic Sites Archaeology Branch, excavated the lower strata in the cistern (Baroody 1978). Historic Sites archaeologist Jack Wilson provided clearance for a newly constructed Wolfe children's playhouse in 1987. Historic Sites archaeologist Terry Harper conducted limited clearance work for the installation of underground French drains (Harper 1996). Local Forest Service archaeologist Bob Noel (1996) inspected a mechanically dug trench for construction of a new Visitor Center as requested by Historic Sites archaeologists. Finally, excavations in and near the basement of the main house as part of the restoration that

followed the 1998 fire were conducted by Historic Sites Archaeology Supervisor Linda Carnes-McNaughton (2002). These excavations were required for restoration of the structure and installation of new sprinkler and alarm systems. Reports, fieldwork summaries, and/or field notes exist for all projects except Thompson and Schneider's, as well as Wilson's, which could not be located. Through the recovery of data and artifacts pertinent to the Wolfe family's ownership and occupation, these projects demonstrate the need for more systematic archaeological investigations around historic structures and their surrounding landscape.

As previously discussed, this study focuses on the archaeological excavation of a specialized feature, the subterranean cistern. Due to the in-depth investigation of this feature, it was given a separate and unique loci component designation of the site number (31BN147**2). The first excavation of the Wolfe cistern was conducted by Thompson and Schneider in August 1975. Thompson excavated approximately 5.5 ft of fill in stratigraphic layers, a little more than half the depth of the cistern. Because of the unique nature of the cistern, the fill was placed into buckets and then lifted to the surface. Laboratory assistants took the fill and used water to screen the material and maximize recovery of all artifacts. Excavations at the cistern were ceased prior to completion because of logistical issues, inadequate funding, the vast amounts of artifacts recovered, lack of structural knowledge, and priority changes. A reported total of over 30,000 artifacts were returned to Raleigh and cataloged by laboratory technician Sarah Goodnight (1975) in October and November of that year.

To assist then Historic Sites Section archaeologist Tom Funk in finishing partially completed field projects, John C. Baroody excavated the remaining fill from the cistern in August 1978 (Figures 4 and 5). Using a three-person crew and volunteers, a similar procedure of removing the fill by bucket, spreading it out on 3/8-inch hardware cloth, then wet screened over the mesh for artifacts, was employed. While over 8,000 additional artifacts were recovered, Baroody (1987:7) made an elective decision to discard plain glass fragments (while retaining diagnostic whole bottles, necks, bases, and embossed fragments), bricks, and ceramic drain tile fragments. Baroody also initiated a different cataloging system for the recovered artifacts. This allowed modern archaeological technicians the ability to easily recognize material from Baroody's excavation versus the earlier investigation by Thompson. In total, this cistern was excavated in 11 distinct stratigraphic layers and



Figure 4. The top of the cistern during excavation in August, 1978.

contained a total of 45,661 artifacts. Unfortunately, a comprehensive completed artifact catalog and final report were never created which detailed both cistern excavations.

In 2001, following an administrative reorganization, the Archaeology Branch of the Historic Sites Section became part of the North Carolina Office of State Archaeology, a move designed to compress resources and practices. As part of this reorganization, the archaeological artifacts from all State Historic Sites were similarly transferred to the Office of State Archaeology Research Center, the state's centralized curation repository. A total of 1,042 Hollinger artifact boxes, totaling 1146.2 cu ft, as well as the accompanying documentation



Figure 5. The profile of the lower strata of the cistern as excavated by Baroody.

of field notes, photographs, maps, and reports, were transferred. The collections, having been assembled over a period of 40+ years by many archaeologists using various methodologies and standards, were not comparable to today's modern curation guidelines.

At the request of and funded by the Historic Sites and Properties Division, in Spring 2006 the artifacts and records from the Thomas Wolfe Memorial were inventoried and repackaged to meet modern archival standards. As part of this recataloging process, all identifiable artifacts were assigned to specific categories based on their assumed original function. Appropriate artifact groups and classes were selected from the Laboratory Manual of the now defunct Historic Sites Section Archaeology Branch that used a modified and expanded version of Stanley South's (1977) Carolina Artifact Pattern groups and classes (cf. Carnes-McNaughton 1992a). Sprague's (1981) proposed functional groups and classes for nineteenth and twentieth-century sites, as well as the comprehensive catalog of the National Park Service's Southeastern Archaeological Center, were also consulted for appropriate categories. Additionally, functional artifact groups and classes were reconsidered in the preparation of this article based on South's (2010a:2-4; 2010b:4-5) publication of his ATTIC ("Archaeological Techniques to Inventory Collections") and BASEMENT ("Basement Artifacts Speak, Explaining Meaning Embedding Numerous Technologies") studies that center around nineteenth and twentieth-century material culture. It is from the 2006 project that this data was originally generated and distilled, and recently reevaluated for this study.

The Cistern Artifacts

The combined excavations yielded over 45,000 artifacts of all types: broken ceramic dishes; household construction materials such as nails, window pane fragments, linoleum, painted pieces of wood, and slate roofing tiles; evidence of food remains, from animal bones to peach and cherry pits; and items of a more personal nature, such as the cover of a pocket watch, a toothbrush, and a child's porcelain doll. An abstracted artifact profile of the materials recovered from the cistern by excavation is presented in Table 1. While this study is not designed to present a complete interpretation of all artifact groups or classes, the many recovered bottles, ceramics, and four specific and unique artifacts will be discussed.

Artifact	Artifact	1975	1978		
Group	Class	Excavation	Excavation	Total	Percentage
Kitchen		•		14,487	31.73 %
	Ceramics	1,244	2,091	3,335	7.30 %
	Containers	7,921	2,449	10,370	22.71 %
	Glassware	357	141	498	1.09 %
	Tableware	10	4	14	0.03 %
	Kitchenware	183	87	270	0.59 %
Biological				3,446	7.55 %
_	Faunal	1,883	1,060	2,943	6.45 %
	Ethnobotanical	412	91	503	1.10 %
Architecture				13,845	30.32 %
	Fasteners	5,804	146	5,950	13.03 %
	Building	7,350	193	7,543	16.52 %
	Materials				
	Construction	176	21	197	0.43 %
	Hardware				
	Plumbing	100	34	134	0.29 %
	Electrical	20	1	21	0.05 %
Furniture				295	0.65 %
	Furniture	31	15	46	0.10 %
	Hardware				
	Furnishings	220	29	249	0.55 %
Arms				2	< 0.01 %
	Ammunition	2	0	2	< 0.01 %
Clothing				764	1.67 %
	Glass Beads	28	8	36	0.08 %
	Fasteners	149	25	174	0.38 %
	Cloth/Fabric	82	55	137	0.30 %
	Shoes	340	77	417	0.91 %
Personal				463	1.01 %
	Coins	2	0	2	< 0.01 %
	Grooming	78	40	118	0.26 %
	Hygiene	178	125	303	0.66 %
	Personal Items	26	14	40	0.09 %
Smoking				3	< 0.01 %
	Pipe	1	1	2	< 0.01 %
	Cigarette	0	1	1	< 0.01 %
Activities				1523	3.34 %
	Automotive	8	0	8	0.02 %
	Fuel	708	142	850	1.86 %
	Horticulture	61	33	94	0.21 %
	Literacy	84	72	156	0.34 %
	Medical	2	3	5	0.01 %
	Miscellaneous Hardware	113	25	138	0.30 %

Table 1. Abstracted Total Artifact Profile of the Cistern Excavations.

Artifact	Artifact	1975	1978		
Group	Class	Excavation	Excavation	Total	Percentage
Activities	Stable & Barn	8	1	9	0.02 %
(continued)	Storage Items	105	110	215	0.47 %
	Tools	7	9	16	0.04 %
	Toys	20	12	32	0.07 %
Miscellaneous				10,833	23.72 %
	Unidentified	9,426	935	10,361	22.69 %
	Other	245	227	472	1.03 %
TOTAL		37,384	8277	45,661	100.00 %

Table 1 continued.

Bottles

Perhaps the most impressive artifacts recovered from the Wolfe cistern excavations were the thousands of whole and broken bottles that once contained everything from medicines, ginger ale, alcoholic beverages, cooking sauces, writing ink, perfumes, and colognes. This large and diverse assemblage of glass containers recovered within this sealed, tightly dated historical and archaeological context makes it one of the premier collections of late nineteenth and early twentieth-century historic-period bottles in North Carolina.

This study was not the first to attempt a compilation of information on these bottles. In 1980, the late Rob Worrell, a laboratory technician working for State Historic Sites, removed the whole bottles from both the 1975 and 1978 artifact collections for his detailed study. His unpublished report not only quantified the whole bottles based largely upon functional categories as defined in Switzer (1974), but also focused on the process by which many of the bottles were manufactured, and where possible, provided cursory information on many of the known manufacturers. Worrell's (1981) report and notes served as a solid, comparative basis by which to consider the numerous bottles, and especially bottle fragments, that were contained in this collection.

Building on the type groupings established by Switzer (1974) and used by Worrell (1981), the bottle functional categories were expanded further. Wine and whiskey (liquor) bottles were split into two separate categories. Milk and dairy bottles were defined as unique from culinary bottles, and were given their own category as well. Pharmaceutical bottles that contained specific liquid or powered medicine were designated separately from chemical bottles, which were defined as



Figure 6. A round-bottom, "torpedo-shaped" bottle fragment with remnant of a ginger ale label still affixed. (cat. no. 78150a639)

containing ammonia and other cleaning products. As seen in Figure 6, "torpedo-shaped" round-bottom bottles generally carried carbonated soda water or ginger ale (Munsey 1970:105) and were designated as soda bottles, whereas the water bottle category was reserved for natural spring water. If it was possible to determine from embossed letters or a label fragment, the function of a bottle was the first and primary designation during this inventory. Whereas Worrell only focused upon whole bottles, this study provides a new total of the bottles, both whole and fragmentary, that could be assigned to functional categories (Table 2). These totals do not include the undetermined fragments of bottles (n=8,051) or jars (n=278), nor any of the associated corks, caps, or bottle stoppers recovered from the cistern.

Following their designation within a functional category or identification simply as a bottle, as much information was recorded as could be determined. Following the criteria established by Newman (1970) and expanded into flow-chart form in Madden and Hardison (2004), an attempt to determine a manufacturing technique for each bottle (or bottle fragment) was made. Given the on-going changes in bottle manufacturing technology in the late nineteenth and early twentieth centuries, bottles manufactured by different techniques would be valuable in determining a *terminus post quem* (or "date after which") for the 11 stratigraphic levels excavated from the cistern. Bottle neck

Artifact		1975	1978		
Group/Class	Bottle Type	Excavation	Excavation	Total	Percentage
Kitchen				1,397	95.42 %
Container	Beer	38	76	114	7.79 %
	Chemical	1	7	8	0.55 %
	Culinary	39	62	101	6.90 %
	Liquor	121	127	248	16.94 %
	Milk	106	1	107	7.31 %
	Pharmaceutical	382	223	605	41.33 %
	Soda	44	55	99	6.76 %
	Water	0	21	21	1.43 %
	Wine	58	36	94	6.42 %
Personal				63	4.30 %
Grooming	Toiletry	33	30	63	4.30 %
Activities				4	0.27 %
Literacy	Ink	0	4	4	0.27 %
TOTAL		822	642	1,464	100.00 %

Table 2. Whole and Fragmentary Bottle Types Recovered from theWolfe Cistern.

and lip shapes and finishes, as well as base profiles of different shapes, were described by type from drawings in Fike (1987:Figures 2 and 3). Measurable dimensions of height, base diameter, and lip diameter were recorded where possible. At minimum, the general color and bottle portion of each fragment was noted. Detailed information regarding embossed logos, manufacturer, and product content, as well as all information from surviving label fragments, also was recorded.

From the perspective of a consumer living in the urban uplands, one of the most interesting aspects of the bottle assemblage was noting the distance to manufacturing sources: milk bottles from Long Island, New York, medicine bottles from Baltimore, and liquor bottles from many different locations. The high percentage of liquor bottles is interesting as well, given North Carolina's early prohibition towards alcohol. Perhaps the cistern was used as a discrete place to dispose of contraband containers for beer, wine, and liquor, or maybe it reflected the secretive location of "under the porch" drinkers. Given this era as the first for national advertising campaigns and distribution networks, largely by Southern railroad into the Asheville area, it is impossible to speculate whether these bottles belonged to the residents of the Wolfe homestead or were brought by different travelers who boarded there.



Figure 7. A pharmaceutical bottle embossed with the logo of the Carolina Pharmacy in Asheville. (cat. no. 78150a14)

There were quite a few local bottles as well, including milk bottle fragments from the local Biltmore Dairy. As shown in Table 2, the most prevalent bottle type contained pharmaceutical and medicinal goods, which included numerous ones from The Carolina Pharmacy (Figure 7), Druggist C.A. Raysor, Seawell's Pharmacy, Mac Kay's Pharmacy, and Grant's Pharmacy, all of which had embossed letters or labels that reflect their origins in Asheville. In this era, historical records indicate Asheville was a popular destination as a health resort, for those who could afford to relocate there, and offered a chance to take in the mountain airs and sunshine, as well as obtain treatment of tuberculosis. Perhaps some of the pharmaceutical bottles are from boarders in the Wolfe household who sought such cures. Wolfe (1929:183) described the pungent smell of pharmaceutical bottles in Dixieland—"every shelf was loaded with gummed, labeled half-filled medicine bottles. There was a smell in the air of mentholatum, Vick's Pneumonia Cure, and

sweet glycerine"—perhaps a clue to their profuse quantity in the Old Kentucky Home during his childhood.

Ceramics

In her autobiographical account of the Wolfe family, Thomas' older sister Mabel fondly recalled within her childhood memories the importance of food in the Wolfe household. She highly praised her mother's cooking and her father and siblings as ones who loved to eat. The rituals of family dining appear to have been well observed in the Wolfe household, including the use of fine ceramics. Mabel recalled:

He [Papa] would positively lose his appetite if a cracked dish or a handleless cup appeared on the table. He would use such an occasion for giving Mama an eloquent "dressing down" for this evidenced lapse in her housekeeping, and I have known him to go out on the back porch with such a piece of china and sail it across the back yard as far as it would go. Papa bought handsome dishes for Mama and he wanted her to use them regularly, not just for special occasions.

She further describes other aspects of the table settings, from large soup terrines to a complete set of pressed glass fruit cups (Wheaton and Blythe 1961:57).

For the archaeologist, ceramics represent one of the more studied aspects of past material culture of the historic era. This is largely due to the amount of historical records for pottery manufacture and distribution, their durability of survival, and their recovery as fragments from most every imaginable environmental setting, as well as the important and varied functions ceramics served within households. At the dawn of the twentieth century, ceramic distribution and consumption were as widespread as ever, with different decorative patterns and highly specialized vessel forms equally available to urban and rural consumers through mail order catalogs.

In considering the ceramics recovered from the Wolfe cistern, primary identification began with a determination of material composition as either earthenware, stoneware, or porcelain. This was based on the type of clay used in the vessel and the temperature at which the kiln was fired. Next followed a determination of ceramic types, which included some confusing terminology for which not all analysts agree. Ironstone, Granite, and China differ in name and type based upon their use by manufacturers, distributors, advertisements, and period

consumers. For example, some analysts consider molded fragments of refined earthenwares to be Ironstone; some consider Ironstone to be made from a feldspathic clay that is fired at stoneware temperatures; and others even describe the glaze within a range of a cold, bluish-grey color. To alleviate this confusion among a number of archaeological technicians and volunteers, this inventory considered all white, refined earthenwares as Whitewares, and recorded any descriptive elements that accompanied the fragment (e.g., molded form, bluish glaze, scalloped edges, etc.). Though a minimum vessel count was outside the scope of this project, vessel forms were identified when possible and used to segregate kitchen ceramics from chamber sets. Mended vessels were counted as one fragment for the purposes of the inventory, but the total number of fragments that comprise the mended vessel was also noted.

Glaze and/or decorative patterns were heavily documented and researched, especially specific patterns and decorative elements, including all imaged or named maker's marks and batch marks. A variety of decorative techniques were noted in the cistern collection, including transfer printing in various colors, "flow blue" and "flow black" transfer printing, decalcomania transfers, cut-sponge application in several colors, gold gilding, and hand-painted accents. Each of these decorative techniques has a shorter interval of usage within the larger period of manufactured ware, and is usually helpful in dating the archaeological deposit that contained it.

Table 3 summarizes the ceramics from the Wolfe cistern that were used in food preparation, consumption, and storage. Refined earthenwares dominate the assemblage at 72.23%, followed by porcelains (21.98%) and stonewares (4.86%). Not shown on this table are the 292 fragments of basins and ewers that comprise chamber sets, which were almost exclusively made of whitewares (n=289) over porcelains (n=3).

A number of observations were made of this ceramic collection as it was being inventoried. First, as with the majority of mass-produced refined earthenwares of this period, dishes had become very specialized in function. A number of different vessel forms in the assemblage served specific purposes, such as soup terrines and asparagus plates. The majority of vessel types appeared to be tablewares; however, several items in the collection appeared to be geared toward individual use, such as butter plates and the Rockingham tea or coffee pot illustrated in Figure

Ceramic	Ceramic	1975	1978		
Material	Туре	Excavation	Excavation	Total	Percentage
Refined				2,409	72.23 %
Earthenwares	Whitewares	961	1,443	2,404	72.08 %
	Yellowware	4	1	5	0.15 %
Stonewares					4.86 %
	Albany	9	40	49	1.47 %
	Albany-Bristol	2	23	25	0.75 %
	Alkaline	1	29	30	0.90 %
	Bristol	8	18	26	0.78 %
	Rockingham /	4	1	5	0.15 %
	Bennington				
	Salt Glazed	8	19	27	0.81 %
Porcelain				733	21.98 %
	Porcelain	236	497	733	21.98 %
Unidentified				31	0.93 %
	Unidentified	11	20	31	0.93 %
TOTALS:		1,244	2,091	3,335	100.00 %

Table 3. Kitchen Ceramics Types excavated from the Wolfe Cistern.

8. This was not unexpected, as many boarders took smaller, group meals at private tables or in their rooms. The general absence of many large food preparation dishes may be a result of the presence and use of enameled vessels, a number of fragments (n=231) of which were counted separately as part of the Kitchenware artifact group.

The ceramic makers' marks on different vessels revealed that the refined earthenwares were primarily manufactured in the United Kingdom, America, and Prussia. Different porcelains originated in Hungary, America, and the Orient. All of the stonewares could have been, and likely were, domestically made, perhaps even by local potters active at this time in Buncombe County and western North Carolina (cf. Carnes-McNaughton 1995). An example of such a ceramic from the cistern is the alkaline-glazed stoneware jug illustrated in Figure 9. Jugs were used for storage of bulk liquids such as vinegar, cider, syrup, and distilled spirits.

Finally, most of the decorative patterns, regardless of vessel type, decorative technique, or place of manufacture, centered on flowers or floral designs. One such example was the Haviland pattern, shown with its catalog advertisement in Figures 10 and 11. This pattern name was specifically recalled by Wolfe's sister, who described it as "the pretty little pink-rose pattern" (Wheaton and Blythe 1961:57). When the



Figure 8. A small Rockingham tea or coffee pot, sized for an individual serving. (cat. no. 75002p285)

Haviland pattern and other households ceramics are considered in Martin's (1996:93) general consumer choice model, a preference for floral designs may have been an active consumer choice (i.e., desirability) or based on affordability, as its availability through mail order catalogs would not have been a factor.

Unique Artifacts of Interest

During the processing of the over 45,000 artifacts excavated from the cistern, archaeological technicians and volunteers identified several specific examples of particularly interesting remnants of material life in early twentieth-century Asheville. These unique artifacts are rarely recovered from archaeological sites, especially not from contexts with such local and historical significance. While these few artifacts hold no more intrinsic or interpretive value for the cistern than the other thousands of ceramics, bottles, buttons, or architectural fragments, each were singled out as ones that offer insight into the residents of the Wolfe household as well as to an era of mass production and consumerism.

Coconuts. While the waterlogged and sealed environment of the cistern preserved paper labels from a number of the bottles, it similarly preserved organic materials as well. A number of ethnobotanical items



Figure 9. An almost complete, alkaline-glazed stoneware jug was recovered from the lower half of the cistern in Baroody's excavation. It was likely made in the western Piedmont, or perhaps even more locally in Buncombe County.

were recovered, including numerous black walnut shells, peach pits, and cherry stems. Eight fragments of coconut shells were also found within the cistern. One fragment was found in from the east half of Thompson's level 6 strata and seven came from Baroody's Level 4, layer 9.

Wolfe (1935:348), in his second novel, *Of Time and the River*, specifically mentions "cocoanuts" [sic] as an item his protagonist's mother saved. But fresh coconut more readily appears to have been a desired commodity for use by the Wolfe family, as Thomas' sister Mabel fondly remembered the family effort to produce a coconut cake:

Papa helped with the coconut cakes; he always grated the coconut. There was no prepared coconut in that day. You bought whole coconuts, and with a hammer drove a big nail through the eye of the coconut and drained out the water, which was later used in moistening the cake batter, then with the hammer broke the coconut into pieces from which you prized (sic) off the white meat. Then laboriously you grated the coconut, often grating a finger if you weren't particularly careful. [Wheaton and Blythe 1961:63]



Figure 10. A tea cup with the decalcomania "Haviland" pattern. (cat. no. 75002p956)



Figure 11. Period advertisement from the 1897 Sears, Roebuck and Company mail order catalog for sets of Haviland ceramics.

The presence of this tropical fruit in early twentieth-century Asheville may have appeared to be a luxury item or souvenir from an exotic vacation, but thanks to larger product distribution networks with more rapid transit (such as the railroad), its presence and memory of use in the Wolfe household certainly speaks to its apparently relative availability in the mountains of North Carolina.

Coca-Cola and Gay-Ola Cola Bottles. As one of the modern world's most valuable and widely recognized brands, the soft drink known as Coca-Cola originated in Atlanta, Georgia, in 1884, a mere 200 miles from the "Old Kentucky Home" in Asheville. Like many soda water beverages of the nineteenth century, this drink was originally believed to have medicinal properties, but quickly gained more widespread popularity as a "temperance drink;" by the end of Prohibition, it had established itself as a "delicious and refreshing" soda (Standage 2005:225–240). Eleven fragments of early Coca-Cola soft drink bottles were recovered from the cistern, 10 of which were embossed as bottled in Asheville and one from Brunswick, Georgia. Figure 12 (left) illustrates one of these early Coke bottle forms recovered from the cistern.

The recent *History of the World in 6 Glasses* cites Coca-Cola as one of the six drinks that shaped human history. Standage (2005:225) asserts Coca-Cola, that "brown, sweet, and fizzy beverage," is a metaphorical embodiment of America and its values: "For those who approve of the United States, that means economy and political freedom of choice, consumerism and democracy, the American dream; for those who disapprove, it stands for ruthless global capitalism, the hegemony of global corporations and brands, the dilution of local cultures and values homogenized and Americanized mediocrity." America's rise to global preeminence is viewed as a parallel to the successful story of Coca-Cola in a manner similar to the role tea had in the rise of the global British empire of the eighteenth and nineteenth centuries (Standage 2005:115).

It is certainly true that Coca-Cola could not have reached its position of global prominence and recognition without the elimination of its competition along its way. A material reminder of one such unfortunate competitor, Gay-Ola Cola, was also recovered within the cistern. Figure 12 (right) shows a single soda bottle, recovered from Thompson's level 4, that was embossed with both the logo of Gay-Ola Cola and as bottled in Spartanburg, South Carolina. Based on the similarity of the Gay-Ola Cola logo to that of Coke, The Coca-Cola Company sued Gay-Ola Cola Company in 1912 fearing that it negatively impacted its sales. The court ruled that it was an infringement upon Coca-Cola's trademarks, and Gay-Ola could no longer use any mark or logo that might be found to resemble that of Coca-Cola (*220 F 720, 6th Circuit 1912*). Bottles are all that remain of the now defunct Gay-Ola Cola, but they serve as a dark reminder in this period of national



Figure 12. An early Coca-Cola soda-style bottle recovered from the cistern (cat. no. 75002a302) (at left), and a Gay-Ola Cola soda-style bottle excavated from cistern level 4 by Thompson and Schneider (cat. no. 75002a284) (at right).

advertisements that consumerism had negative impacts on regional and local competitors.

Early Hygienic Devices. Gender is a major consideration in the social structure of North Carolina's past and present societies. Historical archaeologists are just beginning to consider how to interpret the behavioral presence of females within artifact assemblages. To date, very few archaeological studies for historic sites in North Carolina have attempted to broach this topic or to offer insight. One uniquely female



Figure 13. A personal irrigation device that, when used with a hot water bottle similar to that shown in Figure 16, functioned as an early method of vaginal cleansing. (cat. no. 78150a2377)

artifact made of celluloid or Bakelite was recovered by Baroody from level 5, near the bottom of the cistern, and was identified as a vaginal irrigator (Figure 13). As seen in period catalog advertisements (Figure 14), this artifact would have been hooked to a hot water bottle by a thin rubber hose for use. This artifact, as well as a number of rubber tube fragments found within the cistern and fragments of a hot water bottle found during basement investigations by Carnes-McNaughton in 2002 (Figure 15), could have behaviorally functioned with a douche, a method of vaginal cleansing. A number of other potential artifacts of gender recovered from the cistern, including garter belt buckles and clips with pieces of stockings, may make this architectural feature a potentially rich source of insight into future gender studies on historic-period sites.

Incandescent Light Bulbs. Finally, the development of the electric incandescent light bulb has a long and storied history throughout the nineteenth century. The credit for the invention of the bulb in the United States went to Thomas Edison, who patented the carbon filament bulb that ran on electrical current in 1880. Edison and his company also marketed these and future bulbs with a threaded copper base which adapted into existing gaslight fixtures. The presence of 16 incandescent light bulb fragments in the upper stratum of the cistern suggests a turnof-the-century time period. These fragments were found in levels 3 (n=3), 5 East (n=1), 6 East (n=10), and 6 West (n=2). One of the most unusual bulbs was complete and unbroken. As seen in Figure 16, this particular bulb has frosted letters, though faded, which read "Westinghouse" and "MAZDA." Its form is referred to as a Mazda style, which was patented by Edison in 1904. Its presence within the cistern at certain levels is a potentially important date indicator as to when the Wolfe household may have been wired for electricity, and likewise a temporal indicator for those stratigraphic levels within the cistern.



Figure 14. Advertisement from the 1895 Montgomery Ward mail order catalog for personal fountain style irrigators.

Conclusions: Cisterns and Dispelled Myths

Cisterns are relatively common architectural features in large wooden houses built between the 1880s and the early 1900s. However, few have been archaeologically documented in North Carolina. Beyond the one at the Old Kentucky Home, site files at the Office of State Archaeology reveal that only six cisterns have been investigated. A late eighteenth to early nineteenth-century cistern was excavated near the



Figure 15. A hot water bottle recovered from the basement of the Wolfe household. (cat. no. 220568a206)



Figure 16. A complete incandescent light bulb recovered from the Wolfe cistern. Frosted letters on the bulb read "Westinghouse" and "MAZDA", a style of bulb patented in 1904. (cat. no. 75002a976)

Joel Lane House in Raleigh (Olson and Webb 2007). In Edenton, two late nineteenth-century cisterns at the Ziegler House and a late nineteenth-early twentieth-century one at the Wessington House were explored (Carnes-McNaughton 1992b, 1992c). Finally, two early-to-mid nineteenth-century cisterns were investigated in an archaeological assessment of properties at 8 and 10 Church Street, located within the Historic District of Wilmington (Southerly and Southerly 2006). However, none of these six, individually or collectively, produced the sheer quantity or diversity of artifacts found in the Wolfe cistern, because they were not subsequently used as trash receptacles. It is hoped this study has at minimum revealed how much can be learned about a historic household through the investigation of its cistern contents, and will spawn additional archaeological explorations of these features in the future. Perhaps the data from the Old Kentucky Home cistern can also form part of the basis for a comparative artifact pattern for future cistern analyses.

Author Thomas Wolfe has been the subject of a number of historical studies. Similarly, his writings, as the focus of many analyses and critiques, have revealed personal experience told through literary sources. With the excavation and analysis of the cistern and other investigations, no matter how limited or seemingly insignificant, at the Old Kentucky Home, archaeology can be added as a method to help weave a rich tapestry of life in the Wolfe household, as "material culture may be the most objective source of information... It is certainly the most immediate" (Deetz 1977:259).

The complete inventory of this excavated cistern will also serve to help dispel two notions of folklore regarding this feature and the Wolfe household. The first was reported by archaeologists Thompson and Schneider in 1975, who were told that local tradition held that the cistern was filled in one episode as the basement was cleared following the death of Julia Wolfe in 1945 (Thompson, personal communication 2006). By assigning all datable artifacts a *terminus post quem* (TPQ) date and considering each of the 11 stratigraphic levels individually, this does not appear to be the case. Based on the dates of ceramics, bottle types, and other datable artifacts, each level of the cistern can be given a TPQ, which indicates the earliest date of an artifact within the level, and a *terminus ante quem* (TAQ) date which suggests the latest date of artifact deposition (Table 4). However, TAQs are much more difficult to apply and must be considered with caution, as some artifacts tend to have

Table 4. *Terminus Post Quems* (TPQ) and *Terminus Ante Quems* (TAQ) for Levels within the Wolfe Cistern.

Cistern Level	Excavator	Excavator Level	TPQ	TAQ
1		1	N/A^1	1975
2	Thompson and	2	1927	1932
3	Schneider	3	1916	1932
4	(1975)	4	1916	1929
5		5	1910	1920
6		6	1907	1930
7		1	1962^{2}	1978
8	Baroody	2	1910	1932
9	(1978)	3	1910	1930
10		4	1910	1933
11		5	1909	1920

¹ The TPQ for Level 1, or Thompson and Schneider's Level 1, could not be accurately calculated because of previous mixing in the lab of cistern proveniences with test units in the basement area. This collection did contain modern items that may have been discarded by visitors to the site, presumably within the cistern.

² Level 7, or Baroody's Level 1, was used as a control level and contained very few artifacts. As noted in Figure 5, excavation revealed a very different soil profile of this stratum, as Baroody (1978:15) noted the other layers were more concentrated in the center with heavier objects (e.g., bottles) rolled to the sides. Baroody (1978:16) interpreted this layer as having been contaminated by more recent activity, such as previously screened fill from Thompson and Schneider's earlier excavation.

longer use lives or are retained as keepsakes, which can skew the TAQ of the level by the inclusion of a single artifact (Deetz 1977:24). Based on these measures, the cistern appears to have been filled gradually. If it was filled slowly over several decades, then the artifacts contained within it were most likely intentional and deliberate discards as secondary refuse (cf. Lewis 1985:85; Schiffer 1976:30–31), perhaps by members of the Wolfe family or boarders staying at the Old Kentucky Home. This cistern would have certainly provided a secretive location to deliberately discard unwanted or illicit items, such as liquor bottles during legalized prohibition. In either case, if it was filled gradually after its use life, the cistern is a potentially rich source of undisturbed information about the early twentieth-century household, as well as its patterns and methods of refuse disposal.

The second myth that has arisen, and is unfortunately repeated all too often, involves the number of culinary bottles recovered from the cistern, specifically bottles of Worcestershire sauce made by Lea and Perrins (Figure 17). During this project, and several other occasions observed by the author, it was erroneously suggested the presence of



Figure 17. A culinary-style bottle of Lea and Perrin's Worcestershire sauce. (cat. no. 75002a324)

these and other flavorings was a result of the Wolfe family purchasing older meats to feed boarders, and Worcestershire sauce was necessary to mask its age. Based upon descriptions within Wheaton's autobiography and fictionalized descriptions of the household in Wolfe's writings, this suggestion is highly speculative. Wheaton herself describes her father's practice of buying fresh beef and pork regularly and the family's rapid consumption of it (Wheaton and Blythe 1961:54–56). Though Lea and Perrins has produced Worcestershire sauce since the early nineteenth century, making it the oldest commercially bottled condiment in the United States (Lea and Perrins, Inc. 2012), it was likely used historically as it is by many individuals today, as a flavored sauce that can be added to meat prior to or after cooking. Given the presence of only 12 Worcestershire bottles among the 101 various culinary sauce bottles distributed throughout the cistern, the results of this study will hopefully serve to dispel this piece of uninformed and erroneous folklore.

Archaeologist James Deetz (1977:259) observed that, "When an archaeologist carefully removes the earth from the jumbled artifacts at the bottom of a trash pit, he or she is the first person to confront those objects since they were placed there centuries before." For the artifacts recovered from the cistern, many individuals who were part of the two archaeological investigations, the associated laboratory work, or Worrell's (1981) bottle study have previously confronted selected artifacts from portions of the total collection. However, since the complete reevaluation and comprehensive inventory of this and other archaeological projects at the Thomas Wolfe Memorial in 2006, valuable data has just begun to yield greater insight into behavior at this early twentieth-century, upland, urban household. Thanks to the cooperative efforts of the Office of State Archaeology Research Center and the Division of Historic Sites and Properties, the upgraded archival packaging, conservation, and inventorying of artifact collections from each project will insure their continued safety and preservation. It may also increase the usability of these collections by allowing future researchers to confront more readily these artifacts from the material life familiar to young Thomas Wolfe as he grew up in the Old Kentucky Home

Notes

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Previous co-authored versions of this study were presented by the author and Dr. Oliver at the 2008 Uplands Archaeology in the East Symposium X, Radford University, Radford, Virginia, and at the 2008 Annual Meeting of the Southeastern Archaeological Conference, Charlotte, North Carolina. Though Dr. Oliver was invited and encouraged to co-author this article, he politely declined due to other commitments. While the basic content of these papers has not changed, these earlier versions have been expanded and sections elaborated for its reproduction in print.

Figures. Figure 1 was created by Matthew Nisbet. Figure 2 is from the files of the Division of Historic Sites and Properties. Figures 3 and 5 are from Baroody's (1978) Plate I and Figure 1, respectively. All images of artifacts (in Figures 6–9, 11–13, and 15–17) were taken by Gary Knight at OSARC during the 2006 reinventory of the collection, and are now part of the Thomas Wolfe State Historic Site Archaeology Files, OSARC, Raleigh, as is Figure 4. Figure 10 from Israel (1968) and Figure 14 from Montgomery Ward (1969) are in public domain, and appear royalty free. All other images reproduced in this study are used with appropriate permissions.

Disclaimer. Even with the tremendous support and assistance of the individuals acknowledged above, the author assumes full responsibility for any factual errors and the interpretations presented in this article.

References Cited

Baroody, John C.

1978 The 1978 Excavation of the Cistern at the Thomas Wolfe Memorial. Report on file, Historic Sites Archaeology Files, North Carolina Office of State Archaeology, Raleigh.

Beaman, Thomas E., Jr., and Billy L. Oliver

2006 Looking Homeward: Archaeology and Artifacts from The Thomas Wolfe Memorial State Historic Site. A Synthesis of Artifact Collections at the North Carolina Office of State Archaeology Research Center, Raleigh. OSARC Research Report 1. Office of State Archaeology Research Center, Division of Historic Resources, Raleigh.

Carnes-McNaughton, Linda F.

- 1992a Laboratory Manual. Archaeology Branch, Historic Sites Section, Division of Archives and History, North Carolina Department of Cultural Resources. Copy on file, Office of State Archaeology Research Center, Raleigh.
- 1992b Archaeological and Historical Research at the Ziegler House Cisterns, Historic Edenton. Historic Sites Section, Division of Archives and History, North Carolina Department of Cultural Resources, Raleigh.
- 1992c A Brief History of Cistern Use in Edenton. In *Edenton, An Architectural Portrait*, by Thomas R. Butchko, pp. 267–269. Edenton Woman's Club and Chowan County Government, Edenton.

- 1995 The Mountain Potters of Buncombe County, North Carolina: An Archaeological and Historical Study. North Carolina Archaeological Council Publication 26.
- 2002 Field Notes for Clearance Prior to Restoration at the Thomas Wolfe House. On file, Historic Sites Archaeology Files, Office of State Archaeology Research Center, Division of Historic Resources, Raleigh.

Deetz, James

1977 In Small Things Forgotten: An Archaeology of Early American Life. Expanded and Revised edition (1996). Anchor Books, New York.

Fike, Richard E.

1987 The Bottle Book: A Comprehensive Guide to Historic, Embossed Medicine Bottles. Gibbs M. Smith, Inc., Peregrine Smith Books, Salt Lake City.

Goodnight, Sarah

1975 Laboratory Processing Report: Thomas Wolfe House and Grounds Testing Project, November 13, 1975. Memorandum on file, Historic Sites Archaeology Files, Office of State Archaeology Research Center, Raleigh.

Harper, Terry M.

1996 Installation of Underground Gutters at the Thomas Wolfe House (31Bn147). Fieldwork summary on file, Historic Sites Archaeology Files, Office of State Archaeology Research Center, Raleigh.

Israel, Fred L. (editor)

1968 *The 1897 Edition of the Sears, Roebuck and Company Catalog.* Chelsea House Publishers, New York.

Lea and Perrins, Inc.

2012 http://www.leaperrins.com/history.aspx. Accessed September 2, 2012.

Lewis, Kenneth E.

1985 Discard and Abandonment: A Study of Two Formation Processes on Historic Sites. In *Indians, Colonists, and Slaves: Essays in Memory of Charles H. Fairbanks*, edited by Kenneth W. Johnson, Jonathan M. Leader, and Robert C. Wilson, pp. 85–93. Florida Journal of Anthropology Special Publication No. 4.

Lounsbury, Carl R.

1994 An Illustrated Glossary of Early Southern Architecture and Landscape. Oxford University Press, New York.

Madden, Michael J., and Joel C. Hardison

2004 An Easy Identification Guide and Typology for Eighteenth, Nineteenth, and Twentieth Century Bottles. 2nd edition. Special Publication Number 42. Archaeological Society of Virginia, Richmond.

Martin, Ann Smart

1996 Frontier Boys and Country Cousins: The Context for Choice in Eighteenth-Century Consumerism. In *Historical Archaeology and the Study of American*

Culture, edited by Lu Ann De Cunzo and Bernard L. Herman, pp. 71–102. Published by The Henry Francis du Pont Winterthur Museum, Inc., Winterthur, Delaware, and the University of Tennessee Press, Knoxville.

Montgomery Ward and Company

1969 Montgomery Ward and Company Catalogue No 57: Catalogue and Buyers' Guide, Spring and Summer 1895. Unabridged facsimile. Dover Publications, Inc., New York.

Munsey, Cecil

1970 *The Illustrated Guide to Collecting Bottles*. Hawthorn Books, Inc., New York.

Newman, T. Snell

1970 A Dating Key for Post-Eighteenth Century Bottles. *Historical Archaeology* 4:70–75.

Noel, Bob

1996 Inspection of New Visitor Center Construction at the Thomas Wolfe House (31Bn147). Fieldwork summary on file, Historic Sites Archaeology Files, Office of State Archaeology Research Center, Raleigh.

Olson, Heather, and Paul Webb

2007 Archaeological Testing at the Bloomsbury Estates Site (31WA1614), Raleigh, Wake County, North Carolina. Report submitted to City of Raleigh Planning Department, Raleigh, by TRC, Chapel Hill.

Schiffer, Michael B.

1976 Behavioral Archaeology. Academic Press, New York.

South, Stanley

- 1977 Method and Theory in Historical Archaeology. Academic Press, New York.
- 2010a Twentieth Century Artifact Function. South Carolina Institute of Archaeology and Anthropology, Columbia.
- 2010b *Talking Artifacts: The 20th Century Legacy*. South Carolina Institute of Archaeology and Anthropology, Columbia.

Southerly, Chris and Kathy A. W. Southerly

2006 Archaeological Assessment for Proposed Development, 8–10 Church Street, Wilmington, New Hanover County, North Carolina. Report on file, North Carolina State Historic Preservation Office, Office of State Archaeology, Raleigh.

Sprague, Roderick

1981 A Functional Classification for Artifacts from 19th and 20th Century Historical Sites. *North American Archaeologist* 2(3):251–261.

Standage, Tom

2005 A History of the World in 6 Glasses. Walker and Company, New York.
Switzer, Ronald R.

1974 The Bertrand Bottles: A Study of 19th-Century Glass and Ceramic Containers. National Park Service, United States Department of the Interior, Washington, DC.

Wheaton, Mabel Wolfe, with LeGette Blythe

1961 *Thomas Wolfe and His Family*. Doubleday and Company, Inc., Garden City, New York.

Worrell, Rob

1981 Thomas Wolfe Cistern Bottle Analysis. Report and Laboratory Notes on file, Historic Sites Archaeology Files, North Carolina Office of State Archaeology Research Center, Raleigh.

Wolfe, Thomas

- 1929 Look Homeward, Angel: A Story of the Buried Life. Grosset and Dunlap, New York.
- 1935 Of Time and the River: A Legend of Man's Hunger in His Youth. Charles Scribner's Sons, New York.
- 1937 Return. The Asheville Citizen-Times, May 16, 1937.

NEW DATA, OLD METHODS: THE REDISCOVERY, DEFINITION, AND FUNCTIONAL ANALYSIS OF THE GEORGE MOORE HOUSE AT COLONIAL BRUNSWICK TOWN

by

Jennifer L. Gabriel

Abstract

Archaeological feature N29 at Brunswick Town/Fort Anderson State Historic Site was originally located by Stanley South in the late 1950s. Historical documents and limited testing led South to interpret N29 as a colonial-era feature. Further archaeological investigations during the 2009 and 2011 William Peace University field schools confirmed N29 to be a colonial-era dwelling as South hypothesized. This study concludes, through quantitative pattern analysis and qualitative assessment of artifacts, that the occupants of this dwelling were of high socioeconomic status. The structure is then given the name of the "George Moore House" for one of its former owners.

In 2009, William Peace University launched the first systematic, scientific excavations in the northern area of Brunswick Town/Fort Anderson State Site (31BW376**12) since Stanley South finished his research there in the late 1960s. While the research design of the field school was primarily aimed at Civil War barrack features that lie on top of the colonial-era ruins, a significant amount of colonial-era artifacts were recovered. Many of these artifacts were found to correlate with the location of feature N29 that South had previously documented, but minimally tested (Beaman and Melomo 2011:32). In 2011, additional excavations successfully relocated architectural evidence of structure N29 on colonial town lot 346 and also recovered more artifactual data.

This study, based on the author's Master's thesis (Gabriel 2012), analyzes the colonial artifacts recovered from feature N29, located in the minimally researched northwestern portion of Brunswick Town, during excavations by the 2009 and 2011 archaeological field schools from William Peace University. Hypotheses for this study were derived from historical documents and Stanley South's (1959) excavation reports of N29 from the late 1950s. South originally interpreted the feature to be a dwelling of colonial origin, as his investigations correlated with a house

depicted on the 1769 map of the town by C. J. Sauthier, as shown in Figure 1 (South 1962). An effort to identify this feature was undertaken with the use of the Carolina Artifact Pattern as developed by South (1977). It is argued that when recovered artifact frequencies are compared against the normative frequencies established for eighteenthcentury colonial British homes, the function of the associated structures will be revealed. Status was also considered with the recovered artifact assemblage. Quantitative methods used include Thomas Beaman, Jr.'s (2001) Carolina Elite Pattern, as well as qualitative analysis of artifacts, architectural evidence, and archival information to assess the status of the occupants who once dwelled in the structure.

Historical and Archaeological Background of Brunswick Town

Brunswick Town, an eighteenth-century port town, is located along the western banks of the Cape Fear River just south of present-day Wilmington, North Carolina. Maurice Moore, a prominent South Carolinian from the Goose Creek area, founded the town in 1725. With him came several prominent members of society, including his brother Roger and his nephew George, who sought to further develop their social, financial, and political positions. Together, these and other men owned many of the first residences at Brunswick Town, and helped establish the town as the major transatlantic deep-water port, in conjunction with Wilmington, that was heavily involved with the export of naval stores to the developing colonies, England, and the British West Indies (Lee 1951).

Brunswick Town's success was relatively short-lived, as a series of unfortunate events befell the town. As a result of a long-standing trade rivalry between England and Spain, Brunswick was attacked by Spanish privateers in 1748, which resulted in major damage to the town (Lee 1952:237). Afterwards, Brunswick recovered somewhat until 1769 when a terrible hurricane swept through the region, which resulted in even more damage to the already declining town (Beaman and McKee 2011). British armies raided Brunswick early in the American Revolution and burned several of the town's structures. Most individuals who fled to the safety of nearby Wilmington never returned. By 1776, the town was mostly deserted of residents and was stripped of all political power (Lee 1952:244–245).



Figure 1. Excerpt from *Plan of the Town and Port of Brunswick* by Claude J. Sauthier (1769), commissioned by Royal Governor William Tryon and illustrating the colonial port town as it appeared in 1769. The lots associated with this study are marked.

The ruins of Brunswick Town lay forgotten until 1862, when Confederate military officials scouted the area in search of an ideal location to build an earthen-works fort to help aid in the protection of the Cape Fear River. Construction of Fort Anderson began in March 1862, and the fort eventually covered many of the colonial ruins of Brunswick Town. Fort Anderson later came under attack by Union forces, and fell on February 18, 1865 (Fonvielle 1999:9, 20, 82).

After the Civil War, Brunswick Town again was largely forgotten until the late nineteenth century. Local historian James Sprunt (1916:105) investigated the ruins at Russellborough and noted the archaeological potential that the site held. However, it would be nearly 50 years before Brunswick Town was explored more fully and documented. The wealth of archaeological information that is available today is largely owed to the efforts of three individuals: E. Lawrence Lee, William S. Tarlton, and Stanley A. South. Lee's work began in 1951 with his Master's thesis, which focused on the undocumented history and physical aspects of the colonial port town. In 1955, the Superintendent of Historic Sites in North Carolina, William S. Tarlton, also realized how important Brunswick Town was archaeologically. With the help of Tarlton, Lee began the first systematic, scientific

explorations of the town. Their goal was to identify and map as many ruins as possible, as well as develop a portion of the site for public visitation (Lee 1958:2–3).

These investigations continued until Lee returned to The Citadel, where he taught history, and before the site was completed for public visitation. Tarlton then hired Stanley South, who began work at Brunswick Town on August 1, 1958 (Beaman et al. 1998:5). Over the next 10 years, South identified and mapped 60 colonial-era ruins, and excavated 23 of them. The majority of these excavated ruins were located in the central and southern portions of the town that were being developed for visitation. However, South only minimally explored the northern and northwestern section of the town (Beaman et al. 1998:10; South 2010). Since South's departure from the site in 1968, with the exception of select artifact studies from previously excavated collections, no other colonial-era households had been archaeologically investigated.

Feature N29, Rediscovered

When South minimally explored the northwestern portion of Brunswick Town in the barracks area, he used the map drawn in 1769 by Swiss cartographer C. J. Sauthier as a guide. Investigations in this area focused primarily on the initial identification of structures beneath the ground surface with a steel probe. While some of these features were minimally excavated, others were left undisturbed and simply mapped with a transit upon positive correlation with Sauthier's map (South 2010:191–195, personal communication 2012).

One of the features in this area, N29, corresponded with a fourcolumned colonial-period house on Sauthier's map on town lot 346, shown in Figure 2. This lot is adjacent to lots 344 and 345, and located just west of a street referred to as both "Upper Street" and "The Alley." As shown in Figure 3, these lots were historically sold as a group to various owners, and then later split up and sold individually. The first historical record of these lots is from the original land grant to Maurice Moore in 1725. These lots, along with others in the northwestern part of the town, were then sold to Roger Moore, Maurice's brother, on September 14, 1728. Roger deeded these lots in his will to his son George, who acquired them in 1748 just prior to his father's death in 1751. George later sold the lots to John Chalkhill, purser of the merchant ship *Scorpion*, on April 14, 1753. Afterwards, the lots were



Figure 2. Excerpt from South's 1960 Archaeological Base Map showing the study area at the northern end of Brunswick Town. The circles represent Civil War-era barracks, while N29 is visible at the upper left.

sold to merchants Tomas Shubrick and Daniel Crawford, and finally to John Payne in 1761 (South 1959:25; South 2010:196, New Hanover County Deeds Book D:43).

At an unknown point in time, sailmaker Christopher Wooten obtained the lots and split them up for sale on July 19, 1764. Here, he sold lot 344 to Jonathan Caulkins, a carpenter, but the lot was returned a short time later. The lot was then sold for the final time to mariner Thomas Marnan on January 27, 1766. It is after these last two owners that Stanley South named lot 344 the Wooten-Marnan Lot. As for lots 345 and 346, they were sold to Alex Gibson for the final time on December 22, 1774, by John Payne and Christopher Wooten. By 1776, Brunswick Town was nearly completely abandoned (South 1959:25; South 2010:196, New Hanover County Deeds Book D:43). There is no evidence these lots were reoccupied following their abandonment, but this tract of land was later used as a location for soldier's barracks, perhaps as temporary quarters for an overflow of Confederate soldiers from other Cape Fear fortifications, just prior to the battle of Fort Anderson in 1865 (Beaman and Melomo 2011:58-59). These lots, along with the remainder of the town, were sold and incorporated into the



Figure 3. A timeline graphically depicting the changing ownership of town lots 344, 345, and 346 at Brunswick Town.

neighboring Orton Plantation, and were apparently never used or occupied again.

In 2009, following South's initial exploration and documentation of this undeveloped tract within the larger historic site. William Peace University held an archaeological field school on the Civil War barracks area behind Battery A of Fort Anderson. While the main focus of this field school was on the barracks, a number of colonial-period artifacts associated with the minimally explored ruins in the northwestern portion of the town were recovered (Beaman and Melomo 2011:2). The discovery of these artifacts prompted the expansion of the subsequent William Peace University field school in the barracks area that was held in 2011. The expanded research design now included the goals of identifying the structures associated with the colonial-period artifacts from the previous field season (Beaman 2011:6-7). Throughout the 2011 field season with students in the William Peace archaeological field school, high school students from the 2011 Summer Ventures in Science and Math Program from UNC-Wilmington, and numerous volunteers, architectural features of N29 were unearthed and many associated artifacts recovered (Figure 4). Of specific importance to this study are test units from both seasons of investigations associated with South's previously identified feature N29, specifically units 5, 6, 12, 22, 31, 34, 35, 36, 38, 39, 42, 43, and 48, the locations of which are shown in Figure 5. To maximize recovery of data, these test units were excavated by hand, and all soil was sifted for artifacts through 1/4-inch mesh in both



Figure 4. Excavation of test units 34, 42, 43, and 48 revealed a single layer of ballast stone within a colonial-era stratum. This feature matched the location of a colonial residence on Sauthier's map and N29 on South's Archaeological Base Map.

field seasons. It is from these excavations and these specific test units that the data for this study was generated.

The Artifact Assemblage of N29

A total of 5,993 colonial-period artifacts were recovered from the units selected for analysis of feature N29. These were organized into the functional artifact groups and classes of South's (1977) Carolina Artifact Pattern. As shown in Table 1, the two groups that comprise the highest percentage of artifacts from the total assemblage are the Kitchen Group, at 59.3%, and the Architectural Group, at 36.3%. The next largest group is the Tobacco Pipe Group, with 3.3%, followed by the Clothing, Arms, and Activities groups, at 0.3% each. The final groups, Furniture and Personal, make up 0.2% and 0.1% of the total assemblage, respectively.

Within the Kitchen Group, the Ceramics Class contains the largest percentage of the assemblage. Table 2 shows the distribution by type and variety of the 2,701 coarse earthenware, refined earthenware, stoneware, and porcelain sherds recovered during the investigation. Coarse earthenwares comprised the largest majority of the ceramic



Figure 5. Map of the excavation units associated with the architectural features of the dwelling associated with N29.

assemblage (n=970, 35.9%), with Delftware (n=557, 20.6%) as the primary variety recovered. Stonewares were the next most common at 29% (n=782). Of the stonewares, the most common type was white saltglazed (n=629, 23.3%). Refined earthenwares constituted 22.9% (n=619), with creamware (n=350) having the largest percentage at 13.0%. Porcelain contributed the smallest total amount to the ceramics group with 330 fragments (12.2%); the majority of these were Oriental types (n=319, 11.8%).

A mean ceramic date of 1746 was calculated from the ceramic assemblage. Although 2,701 total sherds were recovered, only 2,370 were used to calculate this date. Because many varieties of lead-glazed earthenwares have been in continuous production that could potentially skew the results, plain, slipware, and Borderware varieties were omitted from the calculation.

The next largest class in the Kitchen Group was Wine Bottles at 9.1% (n=546). The remaining classes in this group include Case Bottles (n=5), Pharmaceutical-type bottles (n=125), Tumblers (n=37), Glassware (n=142), and Kitchenware (n=1). The majority of the Glassware Class was comprised of Decanter shards (n=88) and Stemmed Wares (n=35).

		% of			% of
Artifact Category	Count	Total	Artifact Category	Count	Total
Kitchen Group	3,557	59.3	Clothing Group	19	0.3
1. Ceramics	2,701	45.1	19. Buckles	2	< 0.1
2. Wine Bottle	546	9.1	20. Thimbles	0	0.0
3. Case Bottle	5	0.1	21. Buttons	15	0.3
4. Tumbler	37	0.6	22. Scissors	0	0.0
5. Pharmaceutical Bottle	125	2.1	23. Straight Pins	0	0.0
6. Glassware	142	2.4	24. Hook & Eye Fasteners	0	0.0
7. Tableware	0	0.0	25. Bale Seals	0	0.0
8. Kitchenware	1	< 0.1	26. Glass Beads	2	< 0.1
Bone Group	800	N/A	Personal Group	5	0.1
9. Bone Fragments	800	N/A	27. Coins	2	< 0.1
			28. Keys	0	0.0
Architecture Group	2,173	36.3	29. Personal Items	2	< 0.1
10. Window Glass	1,512	25.2			
11. Nails	596	9.9	Tobacco Pipe Group	198	3.3
12. Spikes	43	0.7	30. Tobacco Pipes	198	3.3
13. Construction Hardware	19	0.3			
14. Door Lock Parts	3	0.1	Activities Group	16	0.3
			31. Construction Tools	0	0.0
Furniture Group	11	0.2	32. Farm Tools	0	0.0
15. Furniture Hardware	11	0.2	33. Toys	0	0.0
			34. Fishing Gear	0	0.0
Arms Group	15	0.3	35. Stub-Stemmed Pipes	2	< 0.1
16. Musket Ball, Shot,	15	0.3	36. Colonoware	2	< 0.1
Sprue					
17. Gunflints, Gunspalls	0	0.0	37. Storage Items	11	0.2
18. Gun Parts	0	0.0	38. Ethnobotanical	0	0.0
			39. Stable and Barn	0	0.0
			40. Miscellaneous	0	0.0
			Hardware		
			41. Other	1	< 0.1
			42. Military Objects	0	0
			Total	5,993	100.0
			(minus Bone Group)		

Table 1. The Artifact Assemblage from Feature N29 in Stanley South's (1977) Pattern Format.

At 36.3%, the Architectural Group contains a total of 2,173 artifacts. Not surprisingly, the majority of these artifacts were window glass (n=1,512, 25.2%) and wrought nails (n=596, 9.9%). Forty-three wrought spikes (0.7%), which are defined as nails longer than six inches, were also recovered. All but one artifact in the Construction Hardware

			Total	% of Total
Material	Type Variety		Count	Count
Coarse Earthenwar	970	35.9		
	Lead Glazed Borderware			
		Buckley	1	< 0.1
		Plain	299	11.1
		Slipware	27	1.0
		Staffordshire	53	2.0
		Sgraffito	2	0.1
	Tin Enameled	Delftware	557	20.6
	Olive Jar		26	20.6
Refined Earthenwa	619	22.9		
	Agateware	1	< 0.1	
	Astburyware	1	< 0.1	
	Creamware	350	13.0	
	Green Glazed Creamwa	37	1.4	
	Jackfield		18	0.7
	Whieldonware	212	7.8	
Stoneware	782	29.0		
	52	1.9		
	Gray Saltglazed (Germ	8	0.3	
	Nottingham	8	0.3	
	Rhenish Blue and Gray	51	1.9	
	Rhenish Brown	4	0.1	
	Scratch Blue Saltglazed	30	1.1	
	White Saltglazed	629	23.3	
Porcelain	330	12.2		
	European		11	0.4
	Oriental	319	11.8	
Total			2,701	100.0

Table 2	The Kitchen	Group	Ceramic	Assemblage	from	Feature	N29
1 4010 2.	The Knehen	Oroup	Coranne .	issemblage	nom	i cature	112/.

class were blue hand-painted delftware chimney tile fragments (n=18) commonly associated with other higher status households within the town (Beaman 1997:16, personal communication 2012). The remaining artifact in the Construction Hardware class was a single lead window came. Three door lock parts were recovered (0.1%); one of these was a partial lock plate.

The Tobacco Pipe Group, made up of only kaolin/ball clay tobacco pipe fragments, represented 3.3% of the total assemblage. This class includes both bowl and stem fragments. The bore diameter of each pipe stem was measured using Harrington's (1954) standard method to the 64th inch. The bore diameter measurements for the 130 pipe stems are as follows: 8/64 (n=1), 6/64 (n=4), 5/64 (n=63), and 4/64 (n=62). Sixty-

eight pipe bowl fragments also were recovered. The pipe stem assemblage was used to calculate dates based on Binford's (1962), Hanson's (1971), and Heighton and Deagon's (1972) methodologies, which produced dates of 1756, 1756, and 1758, respectively.

The Clothing Group is composed of 19 artifacts, or 0.3% of the assemblage. Of this, buttons (n=15) made up the majority of the group. The class is split nearly evenly between South's (1964) button Types 3 (n=3), 4 (n=3), and 12 (n=4), and 5 fragments of sleeve links. South's Type 3 buttons are the most predominant found at Brunswick Town, and have an embossed face with a wooden or bone backing. Type 4 buttons also have an embossed face and bone back, but have an additional brass wire eye for attachment to clothing. Buttons that are one-piece cast steel with a soft metal core and iron oxide coating are categorized as South Type 12 (Noël Hume 1969:91; South 1964). In addition to buttons, two buckle fragments were recovered. One is a clothing buckle fragment, and the other belonged to a shoe. Two glass beads, likely used for clothing, were also recovered. One of these is blue and the other has a carved vine design.

The Arms Group represents 0.3% of the artifact assemblage with 15 total artifacts. All of these belong to the Musket Ball, Shot, and Sprue Class. Five are pieces of lead shot (.27, .32, .29, .35, and .32 calibers), and 10 are fragments of sprue. No gunflints, gunspalls, or gun parts were found as part of this assemblage.

The Activities Group also represents 0.3% of the total assemblage (n=16). The majority of this group is comprised of barrel bands (n=11, 0.2%). Two fragments of Brunswick Burnished colonoware were also found, as well as two fragments of stub-stemmed pipes. Most interestingly, what has been identified as a fragment of a wooden spinning wheel whorl was also recovered.

The next to smallest group in the assemblage is the Furniture Group at 0.2%. It is represented by a single class, Furniture Hardware, and brass furniture tacks (n=6) were the most common artifact recovered. An escutcheon plate, two fragments of furniture handles, and two unidentified piece of hardware also were found.

The Personal Group was the smallest group, comprising just 0.1% of the total assemblage. Two coins—one Silver Real, which dates to the

reign of Ferdinand VI (1746–1755), and one jetton, a flat metal disk of non-precious metal used for a variety of local purposes such as mathematical calculation aids or ferry tokens—were recovered (Deagan 2002:257–288; Hume 1969:171–173). Also found was a piece of a brass book latch and a black glass bead similar to those found in Catholic rosaries (Deagan 2002:69).

This discussion of artifact data includes a quantitative analysis of the assemblage recovered from feature N29. However, as noted by Ewen (1997:89) it is important that archaeologists realize that processual and descriptive techniques are not the only methodologies that should be used. Archaeologists instead should strive to place those artifacts within their respective contexts, coupled with processual methodologies, in order to have a better understanding of the past people who utilized them. As such, qualitative contextual interpretations, as well as qualitative analysis of specific artifacts, architecture, and archival information, are presented below.

Quantitative Analyses: Carolina Artifact and Carolina Elite Patterns

Very little is known about the structure that stood on lot 346 outside of the chain of land deeds. However, recent archaeological investigations by William Peace University in the 2009 and 2011 field seasons have begun to construct a picture of this colonial home and the material lives of the individuals who dwelled there. This study was focused on the analysis and identification of functional artifact patterns from the groups of test units near feature N29 that were excavated by William Peace University. The primary hypothesis tested was that N29 represented a colonial-period household. The potential status of the occupants of this home was also assessed.

Hypothesis testing was primarily accomplished using two quantitative methodologies: Stanley South's (1977:83–139) Carolina Artifact Pattern that he developed while working on historic sites such as Brunswick Town, and Thomas Beaman's (2001) Carolina Elite Pattern. Qualitative analyses also were performed to: (1) examine the presence of high-status items such as delftware tiles, etched glassware, hand-painted ceramics and glassware; and (2) compare architectural aspects of the home to other excavated dwellings at Brunswick Town.

To develop the Carolina Artifact Pattern, South began by classifying artifacts typically found on eighteenth-century British colonial sites into functional groups and classes. He then extrapolated from his research the normative frequencies that artifact groups should exhibit for a typical middle-class British colonial dwelling. By sorting an artifact assemblage into South's proposed groups and determining their frequency, the researcher can begin to understand the function of the structure being studied. If there are deviations from the normative pattern, the researcher can potentially gain insight into any type of specialized activity that may have taken place (South 1977:83–139).

Beaman's Carolina Elite Pattern, which is based on South's Carolina Artifact Pattern, functions in a similar way and allows for deviations against South's normative frequencies in middle-class colonial households. Through Beaman's studies, he noted that there were consistent, statistically significant deviations in the Architecture, Kitchen, Clothing, and Activities groups from South's proposed normative frequencies. While the Architecture Group was greater than South's values, the Kitchen, Clothing, and Activities groups were lower. These deviations can be explained by the behavioral, material, and structural differences found in elite households versus those of normative households of the colonial period (Beaman 2001:89–92).

Prior to discussing the results of this qualitative analyses, it is important to note that Brunswick Town/Fort Anderson is an extremely dynamic archaeological site with multiple occupations ranging from the late Paleo-Indian era to the Civil War period. Because of this, artifacts selected for this study include only those that definitively date to the Colonial period. Most artifacts that were recovered by the field schools were primarily from Level B, which has been determined to be associated with the colonial-era occupation of the town lots. However, due to the dynamic transformational processes found in the area of study, all colonial-period artifacts from each layer have been included to get as accurate a picture of N29 as possible (Gabriel 2012:56–57).

From the 13 test units associated with feature N29, a total of 5,993 colonial artifacts were recovered and analyzed. As previously shown in Table 1, these artifacts have been separated into the functional groups and classes defined in South's Carolina Artifact Pattern and their percentages calculated. As revealed in Table 3, the artifacts patterns

Table 3. Artifact Assemblage from Excavated Units Associated with
Feature N29 as compared with South's (1977) Carolina Artifact Pattern
and Beaman's 2001) Carolina Elite Pattern.

	N29 A	rtifact	Carolir	na Artifact	Carolina Elite		
Functional	Assemblage		Pa	ttern	Pattern		
Artifact	Total	% of Total	Mean Predictive		Mean	Predictive	
Group	o Number Number		(%)	Range (%)	(%)	Range (%)	
Kitchen	3,557	59.3	63.1	51.8 - 69.2	51.7	42.1 - 64.2	
Architecture	2,173	36.3	25.5	19.7 – 31.4	40.6	26.5 - 55.8	
Furniture	11	0.2	0.2	0.1 - 0.6	0.7	0.1 - 0.8	
Arms	15	0.2	0.5	0.1 - 1.2	0.4	0.1 - 1.0	
Clothing	18	0.3	3.0	0.6 - 5.4	0.2	0.1 - 0.3	
Personal	5	0.1	0.2	0.1 - 0.5	0.3	0.1 – 1.1	
Tobacco Pipe	198	3.3	5.8	1.8 - 13.9	5.3	0.2 - 4.7	
Activities	16	0.3	1.7	0.9 - 2.7	0.8	0.2 - 1.6	
Total	5,993 100.0		100.0		100.0		

closely match what is expected for an eighteenth-century, middle-class British colonial household.

The categories in which artifact frequencies deviate from the Carolina Artifact Pattern are in the Architecture, Clothing, and Activities groups. At this juncture, it was imperative to consider why these deviations existed. Due to the social standing of the original owners of the house, the status of the occupants was explored as an explanation as to why these categories fell outside of South's predicted normative ranges. Looking to the Carolina Elite Pattern, also shown in Table 3, this pattern takes into account the variations in the Carolina Artifact Pattern for households of higher status. The artifact patterns associated with N29 more closely resemble the Carolina Elite Pattern and are more quantitatively indicative of a higher-status dwelling.

Qualitative Analyses: Archival, Architectural, and High-Status Artifacts

As with any archaeological study, it is important to consider multiple lines of evidence prior to making interpretations. Thus far, Feature N29 has been discussed in the framework of various pattern methodologies that are designed to reveal the functional nature of archaeological sites. However, there are other lines of qualitative and contextual evidence that can be used to support the hypothesis that feature N29 was a colonial dwelling of elite status. Such lines of contextual evidence include the consideration of the socioeconomic

status of past owners of the dwelling, qualitative analysis of high-status artifacts, and other architectural evidence.

Based on the historical record of the original owners of town lot 346, it is not surprising that the dwelling fits into the Carolina Elite Pattern. As mentioned previously, lot 346 was first owned by Maurice Moore, and then sold to his brother Roger Moore in 1728. The lot and home were later deeded in 1748 to his son George Moore. These gentlemen were among the first wealthy, elite individuals to found and develop Brunswick as a thriving colonial port town in the region. It follows that they would construct and furnish town homes for themselves that reflect their upper economic and social status. The early dwellings constructed by these and similar men seem to have served as temporary residences or seasonal urban homes, while their larger plantations were being built in other regional locations (Wood 2004:80–81).

Qualitative analysis of various artifacts also supports the notion that the dwelling associated with N29 is of elite status. A total of 18 blue hand-painted delftware tile fragments with pastoral scenes were identified in the archaeological assemblage. These coarse earthenware tiles, likely imported from England, were commonly used around fireplaces and chimneys as decoration in homes of higher-status individuals during the colonial period. As observed by Beaman (1997:16–34, personal communication 2012), delftware tiles have only been found in four other high-status structures within Brunswick Town: Russellborough, Prospect Hall, the Public House, and the Richard Quince House. The presence of these tiles provides qualitative support to the argument that this home was of higher socioeconomic status.

While the assemblage contains a great number of plain ceramic sherds, glassware, and tumbler shards, several fragments of hand-painted and etched varieties of these items also are present. The plain varieties of these items are generally ubiquitous in Brunswick Town households and many other colonial-period sites. However, the hand-painted and etched varieties are less common. Several sherds of hand-painted creamware, with a burgundy decorative motif along the rim, were recovered. Also present were shards of stemmed glassware and tumblers (Figure 6) that had engraved decorations on them. These hand-painted and etched items would have been more costly than their corresponding plain varieties, and their presence in the archaeological assemblage around feature N29 also supports the idea that this was an elite residence.



Figure 6. A colorless glass tumbler fragment with an engraved design.

Additionally, it is important to look at feature N29 in a broader archaeological context and incorporate the physical features found in the vicinity that suggests it was indeed a dwelling. In Layer B of test units 34, 42, 43, and 48, a large feature comprised of partially articulated ballast stone was revealed. As seen in Figure 5, the ballast stones are strongly articulated in the eastern corner of test unit 34; however, they become progressively dispersed toward the east, until articulation is completely lost in test units 43 and 48. This loss of feature integrity is likely due to the heavy bombing this area received for three days in February 1865 during the Civil War (Fonvielle 1999:57–85). It is also plausible that ballast stones from the foundation were repurposed by Confederate soldiers during the Civil War to build their temporary encampment in 1865 over the northern portion of Brunswick Town. This behavior has been observed by South (2010:191, 231), as well as Beaman and Melomo (2011:40) during their investigations in this area.

The large feature present at N29 was originally interpreted as the basal portion of a house foundation. However, upon further study, it appears that it is the actual cobble floor of the house associated with



Figure 7. Excavation photo of the eastern basement room of the Hepburn-Reonalds House illustrating a floor made from ballast stones. This room and its floor are the same approximate size as the ballast feature at N29.

feature N29. Other dwelling structures at Brunswick Town also exhibited this type of cobblestone flooring. As visible in Figure 7, the Hepburn-Reonalds house, originally excavated by South in 1959, had a room in the east part of the house with a floor constructed from ballast stone. The house flooring at Hepburn-Reonalds is remarkably similar in



Figure 8. Stratum B in test unit 34 contained oyster shell mortar and horse hair plaster fragments consistent and well distributed through the unit. The top of the southwestern corner of the ballast feature is partially visible in the lower right corner of the unit.

size and construction to that exhibited at the George Moore House (South 2010:65).

A dense layer of oyster shell mortar and horse hair plaster also was encountered in Level B of test unit 34. As shown in Figure 8, this mortar and plaster layer was consistent throughout the entire unit. The concentration of mortar and plaster is most likely the remnants of the collapsed colonial structure on lot 346. Similar plaster in structures at Brunswick Town is not uncommon, as South (2010:66, 142, 155) notes the archaeologically occurrence of plaster in the Leach-Jobson, Roger Moore, and Hepburn-Reonalds houses.

Another line of contextual evidence within the vicinity of feature N29 are two collapsed brick column supports in test units 31 and 39, one of which is shown in Figure 9. These columns are within measurable distance of the foundation feature, and they line up approximately with the columns depicted on South's 1960 base map that he located by probe during his investigations. These columns were likely used as brick supports for a wooden porch structure that was once in front of the elite



Figure 9. A collapsed brick pier within the colonial stratum of test unit 31. Brick piers of this size supported posts for porches at many other residences at Brunswick Town.

dwelling. This type of brick pier support for porches was common at many other households in Brunswick Town (South 2010).

Conclusions

Based on the evidence presented above in the quantitative pattern, qualitative descriptive, and contextual analyses, it appears that the hypothesis that N29 was a colonial dwelling is true. Also, based on the quantitative artifact group comparison with the Carolina Elite Pattern and other qualitative evidence, it is suggested further that the inhabitants of the dwelling were of elite status. These analyses place this household among the very few at Brunswick Town, such as Russellborough and Prospect Hall, that have been documented in archaeological and historical records as having truly elite occupants.

Following in the naming convention set forth by Stanley South at Brunswick Town, it is appropriate to associate this home with an owner and give it a proper name. Due to its elite occupants and calculated mean ceramic date of 1746, it is suggested that this domestic dwelling ruin, formerly N29, now be referred to as the George Moore House. While there are other houses at Brunswick Town named after other

members of the Moore Family, including Judge Maurice, Roger, and Nathaniel ("Nath"), George is not represented. Because the occupations held by individuals who owned the home after George Moore are associated with crafts and trade, it is felt that the George Moore House best reflects the elite status of this home and its former occupants.

Notes

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Figure Credits. Excerpt from the Sauthier Map of Brunswick in Figure 1 is from the North Carolina State Archives. Figures 2 and 7 are from the Brunswick Town/Fort

Anderson photographic collection in the Historic Sites Archaeology Files, Office of State Archaeology Research Center, Raleigh. Bryan Wiggins digitally created Figures 3 and 4 for use in my thesis (Gabriel 2012). Figures 4, 5, 6, 8, and 9 are from the 2011 Archaeological Field School photographic collection at the Department of Anthropology, William Peace University, Raleigh. Additional thanks go to Matthew Nisbet for his edits on Figures 1 and 3.

References Cited

Beaman Jr., Thomas E.

- 1997 "Some fragments of blue Dutch tiling" at Brunswick Town; Decorative Delftware Tiles from Russellborough, Prospect Hall, and the Public House. *North Carolina Archaeology* 46:16–34.
- 2001 The "Castle" and the "Palace": Comparing Artifact Patterns at Russellborough and Tryon Palace, Two Elite Residences of Colonial North Carolina. Unpublished Master's thesis, Department of Anthropology, East Carolina University, Greenville.
- 2011 Research Design for Peace 2011 Archaeological Field School at Brunswick Town/Fort Anderson State Historic Site, May 17 – June 11, 2011. Manuscript on file, Department of Anthropology, William Peace University, Raleigh.

Beaman Jr., Thomas E. and Jim McKee

2011 "To Describe the Horrors of this Hurricane is Beyond the Art of My Pen": Archaeological Evidence of the September 1769 Hurricane That Blew North Carolinians Off Their Tar Heels. *North Carolina Archaeology* 60:90–115.

Beaman, Thomas E., Jr., and Vincent H. Melomo

2011 Exploratory Excavations at Brunswick Town / Fort Anderson State Historic Site (31BW376**12): Barracks West of Battery A. Prepared for Brunswick Town/Fort Anderson State Historic Site, Winnabow, North Carolina, by William Peace University, Department of Anthropology, Raleigh.

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

1998 Archaeological History and Historical Archaeology: Revisiting the Excavations at Brunswick Town, 1958–1968. North Carolina Archaeology 47:1–33.

Binford, Lewis R.

1962 A New Method of Calculating Dates from Kaolin Pipe Stem Fragments. Southeastern Archaeological Conference Newsletter 9(1):19–21.

Deagan, Kathleen A.

2002 Artifacts of the Spanish Colonies of Florida and the Caribbean, 1500–1800, Volume 2: Portable Personal Possessions. Smithsonian Institution Press, Washington, DC.

Ewen, Charles R.

1997 The Once and Future Research Project: The Role of Brunswick Town in Historical Archaeology. *North Carolina Archaeology* 46:84–90.

Fonvielle, Chris E.

1999 Fort Anderson: The Battle for Wilmington. Savas Publishing Company, Mason City, IA.

Gabriel, Jennifer Lynn

2012 New Data, Old Methods: A Functional Analysis of Colonial Era Structures on the "Wooten-Marnan Lots" at Brunswick Town, North Carolina. Unpublished Master's thesis, Department of Anthropology, East Carolina University, Greenville.

Hanson, Lee

1971 Kaolin Pipe Stems-Boring on a Fallacy. *The Conference on Historic Site* Archaeology Papers, 1969, 4 (part I):2–15.

Harrington, J. C.

1954 Dating Stem Fragments of Seventeenth and Eighteenth Century Clay Tobacco Pipes. *Quarterly Bulletin of the Archeological Society of Virginia* 9(1):10–14. Reprinted 1978 in *Historical Archaeology: A Guide to Substantive and Theoretical Contributions*, edited by Robert Schuyler, pp. 63–65. Baywood Publishing Company, Farmingdale, NY.

Heighton, Robert F., and Kathleen Deagan

1972 A New Formula for Dating Kaolin Clay Pipe Stems. *The Conference on Historic Site Archaeology Papers*, 1971, 6:220–229.

Lee, E. Lawrence, Jr.

- 1951 *The History of Brunswick in North Carolina: The Political and Economic Development of a Colonial Town.* Unpublished Master's thesis, Department of History, University of North Carolina, Chapel Hill.
- 1952 Old Brunswick, The Story of a Colonial Town. *The North Carolina Historical Review* 29(2):230–245.
- 1958 Brunswick Town State Historical Site Project, Summer 1958. Copy on file, Historic Sites Archaeology Files, Office of State Archaeology Research Center, Raleigh.

New Hanover County Deeds

n.d. On file, Office of the Registrar of Deeds, Wilmington. Microfilm copy on file, North Carolina State Archives, Raleigh.

Melomo, Vincent H., and Thomas E. Beaman, Jr.

2012 Further Exploratory Excavations of the Fort Anderson Barracks Area West of Battery A (31BW376**12) and Metal Detector Survey of a Suspected Barracks Area West of Battery B (31BW376**7) at Brunswick Town / Fort Anderson State Historic Site. Preliminary Field Report. Prepared for

Brunswick Town / Fort Anderson State Historic Site, Winnabow, North Carolina, by William Peace University, Department of Anthropology, Raleigh.

Noël Hume, Ivor

1969 A Guide to Artifacts of Colonial America. Sixth Printing (1980). Alfred A. Knopf, New York.

Sauthier, Claude Joseph

1769 Plan of the Town and Port of Brunswick in Brunswick County, North Carolina, surveyed and drawn in April 1769. Original on file, King's Map Collection, Reference Number CXXII 55, King George III's Topographic Collection, British Library, London. Copy on file, North Carolina State Archives, Raleigh.

South, Stanley

- 1959 Excavation Report The Wooten-Marnan Lot, Excavation Unit N26 & N27, Lot 344. Copy on file, Historic Sites Archaeology Files, Office of State Archaeology Research Center, Raleigh.
- 1962 Locating the Excavation Units at Brunswick Town State Historic Site. Report on file, North Carolina Office of State Archaeology Research Center, Department of Cultural Resources, Raleigh.
- 1964 Analysis of the Buttons from Brunswick Town and Fort Fisher. *Florida Anthropologist* 17(2):113–133.
- 1977 Method and Theory in Historical Archaeology. Academic Press, New York.
- 2010 Archaeology at Colonial Brunswick. Historical Publications Section, North Carolina Division of Archives and History, Department of Cultural Resources, Raleigh.

Sprunt, James

1916 *Chronicles of the Cape Fear River 1660 – 1916*. Second Edition. Edwards and Broughton Publishing Company, Raleigh.

Wood, Bradford J.

2004 This Remote Part of the World: Regional Formation in Lower Cape Fear, North Carolina, 1725–1775. University of South Carolina Press, Columbia.

NAGPRA'S IMPACT ON ACADEMIC RESEARCH IN NORTH CAROLINA AND THE SOUTHEAST

by

William C. Broughton

Abstract

The Native American Graves Protection and Repatriation Act (NAGPRA) of 1990 forever changed archaeological research practices regarding Native American skeletal remains, artifacts, and ceremonial sites. As required by the law, museums and universities across the United States conducted mandatory inventories of the tens-of-thousands of skeletal remains and associated burial artifacts held in their collections, repatriating many to the appropriate federally recognized Native American group. These actions led to contention between indigenous and scientific communities over access to these items. While not the first repatriation legislation passed in the United States, NAGPRA has had the widest impact upon the country by far. This article quantifies the effects of NAGPRA on the amount of bioarchaeological research conducted in the Southeast and North Carolina. Scholarly journals, conference bulletins, and dissertations were evaluated to determine if there have been any shifts in the amount of research conducted since the law was passed. The percentage of bioarchaeological studies for each year between 1970 and 2009 was calculated and analyzed for any changes over time. Through examining trends in percentages, the data indicate that NAGPRA has had no long-term impact upon the amount of bioarchaeological research involving Native American skeletal remains throughout North Carolina and the Southeast

There has been and continues to be conflict over NAGPRA's impact on archaeology in the United States. However, to keep the discussion constructive and to move future archaeological research forward, the effects of the law must be determined in a quantifiable manner. Understanding the consequences of the law is necessary to avoid arguments becoming stagnant and caught up in the events of the past. Research investigating the impact of NAGPRA is vital to the field of archaeology and necessary to continue improving the relationship between Native Americans and archaeologists, advance scholarly work, and craft better repatriation legislation in the future. It is clear that the law has led to the repatriation of Native American remains and artifacts as well as increased communication between Native Americans and archaeologists. These outcomes were some of the key objectives of the

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law when it was passed in 1990. Nevertheless, what have been the unintended consequences of the law?

A handful of studies have examined NAGPRA's effects on the archaeology and bioarchaeology of Native American skeletal remains and burial artifacts at the national and regional level (Kakaliouras 2008; Kintigh 2008; Loring 2008; Rose et al. 1996; Stapp 2008), but none have quantified its effect in the southeastern United States or at the state level. The lack of NAGPRA research in the region could be the result of little funding. Between 1994 when the first NAGPRA grants were given out and 2008, 490 grants totaling 30 million dollars had been awarded for consultation and documentation (Chari and Trice 2009:10). However, North Carolina and other states in the Southeast had only received up to 500 thousand dollars per state, with South Carolina, Virginia, and Tennessee having received none to date (Chari and Trice 2009:10). Since there is limited funding for the completion of inventories and the consultation process, researchers might simply be avoiding the region and focusing on others where there is more money and greater opportunities. Therefore, to provide a better understanding of NAGPRA's impact in the region, this article quantifies the effects of NAGPRA on Southeast and North Carolina bioarchaeology.

Research Methods

Under NAGPRA, anthropological research involving Native American history, culture, and human remains is still possible. The law's direct purpose was never to prevent the study of Native American skeletal remains. In fact, the law encourages the use of readily available information on the remains and the use of common analytical methods to assess cultural affiliation in order to return the remains to their proper caretakers (Ousley et al. 2005:4). Nevertheless, one must ask whether this primary objective of NAGPRA has indirectly decreased access to Native American skeletal remains and therefore decreased the amount of skeletal research undertaken and published. To investigate whether repatriation has influenced bioarchaeological research in the Southeast, and specifically North Carolina, this study examined several data sources to establish if changes in the amount of Native American skeletal research can be detected between the years 1970 and 2009.

If NAGPRA has actually influenced the amount of research on Native American skeletal remains, the trend ought to be evident in the

total amount of research produced each year. The yearly proportion of bioarchaeology studies relative to the total amount of archaeological research should increase or decrease from a pre-NAGPRA level to a post-NAGPRA level if the law actually affected research in some way. If there has been no change, then the proportion should remain relatively consistent over time. However, a complete literature review of all the published articles and abstracts regarding Native American bioarchaeology is outside the realm of possibility for this project. Therefore, the pool of potential data sources was narrowed to those relevant to North Carolina archaeology, which allows the research to focus on the state but will also provide a snapshot of any trends in the Southeast.

To trace NAGPRA's effects on the state of North Carolina and the Southeast, the amount of Native American bioarchaeological research was compared to the total amount of archaeological research from several different academic sources. The journals *Southeastern Archaeology* and *North Carolina Archaeology* (formally *Southern Indian Studies*), doctoral dissertations from the University of North Carolina at Chapel Hill (UNC-CH) Department of Anthropology, and bulletins from the Southeastern Archaeological Conference (SEAC) were all reviewed. Data were collected from the sources for the years 1970 through 2009.

Southeastern Archaeology and North Carolina Archaeology were selected as data sources for two reasons. First, it is important to review articles published in scholarly journals because they represent current trends in research. If there is any fluctuation in the amount bioarchaeological research conducted each year, then it is logical to think that the shifts would be represented in the topics of journal articles. Second, articles submitted to Southeastern Archaeology and North Carolina Archaeology are geographically relevant for this study. The journals publish archaeological studies conducted in North Carolina and the southeastern United States. Doctoral dissertations from the anthropology department at UNC-CH were also chosen because the affiliated Research Laboratories of Archaeology has been a substantial source of archaeological research in North Carolina (University of North Carolina-Chapel Hill 2010).

However, one problem arises with only examining research trends occurring only in journals and dissertations. These resources only represent a small and selective amount of research conducted because not

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all research is presented in these ways (Kakaliouras 2008:116). Often, archaeological and bioarchaeological work conducted by undergraduates, graduate students, and academics is only presented at conferences in the form of posters and papers. These studies may never be published, but they still represent a substantial amount of research in the field (Kakaliouras 2008:116). To account for this bias, abstracts from the bulletins of SEAC were included in this study.

The year 1970 was selected as the year to begin examining possible trends in research because the repatriation movement started to have a major voice in the United States around this period (Fine-Dare 2002:74-75). In addition, the 1960s ushered in the era of "New Archaeology," where scholars such as Lewis Binford pushed to make archaeology an empirical science to explain human history, employing the scientific method in excavations (Binford 1962). It is from this processual archaeology that the concept of "bioarchaeology" arose, a term first mentioned in a symposium at the Southern Anthropological Society meeting in 1976 (Buikstra 2006:xvii). Buikstra (1977) and her fellow colleagues stressed the importance of skeletal analysis and the valuable information that can come from the various techniques when combined with other archaeological data (Blakely 1977:5–7). Lastly, choosing 1970 as a starting date allows for an examination of bioarchaeological research from 20 years before and 20 years after NAGPRA went into effect. If NAGPRA did have an effect on research, 20 years should be long enough to discern its impact in the data.

Data were collected by reviewing each source, year by year, and determining if each article or abstract within that source could be classified as "bioarchaeological." For the purpose of this study, bioarchaeology was defined as research involving the analyzing of human skeletal remains to increase the understanding of the population's health and lifeways (Peason and Buikstra 2006:207). In order for a study to qualify as "bioarchaeological" under this definition, three main criteria had to be satisfied. First, the main focus of the research had to be the bioarchaeological analysis of Native American skeletal remains from the southeastern United States. Second, the skeletal evidence gathered had to be a significant component of the study's conclusions. For example, archeological reports summarizing excavations at a site containing skeletal remains but lacking analysis of the remains were not included in the study. Third, the article had to present new analysis or data, not merely review and summarize past skeletal investigations.

Once an article was identified as "bioarchaeological," seven attributes of the research were recorded. These attributes were source, volume number, year of publication, author, general type of analysis, specific type of analysis, and state from which the skeletal material originated. Within the attributes of "general analysis," the studies were classified as utilizing destructive or nondestructive methods. The attribute of "specific analysis" refers to the type of either destructive or nondestructive methods used. Nondestructive methods include creating a biological profile, pathological analysis, and osteometrics. For this study, a biological profile consists of assessing an individual's sex, age, stature, or ethnicity, and pathological analysis refers to any assessment of disease, trauma, health, or stress. Osteometrics refers to any skeletal measurements outside of those necessary to create a biological profile. Destructive methods include trace element analysis, DNA analysis, histological samples, and chemical dating of the bones.

These various attributes regarding types of analysis were collected to help trace any shifts in types of methodology employed for bioarchaeological analysis over time. Specifically, I was most interested in seeing if, after the passage of NAGPRA, there was a decrease in studies using destructive analysis techniques. The state of origin for the skeletal remains analyzed was also recorded to compare the amount of research conducted in North Carolina to the amounts conducted in other states in the Southeast.

Quantitative Results

From the four data sources examined, a total of 6,330 articles, abstracts, and dissertations were reviewed, evaluated, and recorded. Of these, 237 qualified as "bioarchaeological studies" as defined for this study. The vast majority of data were collected from the SEAC bulletins. These bulletins represent a substantial portion of the data because of the large number of papers and posters given at the conference each year as compared to the small number of articles published in the average journal. It is important to note that there are no data for *North Carolina Archaeology* between the years 1981 and 1983 and for 1987 because no volumes were published in these years. In addition, there is no information for 2009 because at the time of this study, volume 58 of *North Carolina Archaeology* had not been published.

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For the *Southeastern Archaeology* data set there is no information from the journal prior to 1982, the first year the journal was officially published. Before 1982, papers presented at SEAC were submitted by the authors for publication in the bulletins after being given at the meeting, sometimes years after the meeting itself occurred. For instance, Bulletins 20 and 21, which contain papers from the meetings in 1976 and 1977, were not published until 1983 in a joint volume (Marquardt 1983). It is likely because of this great delay that Bulletin 16 was never published. For this study, the year recorded for each SEAC bulletin corresponds to the year that the conference was held, not the year it was published. It should also be noted that a bulletin for the 38th SEAC meeting in 1981 could not be located, possibly because it was never created. Bulletin 24 contains papers from the 37th SEAC meeting in 1980, and Bulletin 25 contains abstracts from the 39th SEAC meeting in 1982.

Regional Results

The hypothesis regarding the effects of NAGPRA was that there will be a steady growth of bioarchaeological research until the early 1990s, which will be followed by a rapid decline. To test this hypothesis, comparisons were made through time among the data collected. Counts were standardized by converting them to percentages, adjusting for the varying total number of studies from each year (Table 1). Percentages were calculated by dividing the number of bioarchaeological articles for each year by the total number of articles examined for that year. A graphic representation of these data by year (Figure 1) shows extreme variation in percentages between 1970 and 2009. Such results indicate that there have been changes in the amount of bioarchaeological research over time. The question then becomes whether these changes are significant and whether they can be attributed to NAGPRA.

To firmly establish correlation between trends in the data and NAGPRA, the sectioning point of six percent was chosen to distinguish between years with a low percentage of bioarchaeological studies and years with high percentages. This division is based on breaks in the distribution of the data as shown in a histogram (Figure 2). A histogram shows the distribution of a quantitative variable (Baldi and Moore 1996:13). My interpretation of this distribution is that there are three clusters present in the data. The first cluster in the graph represents all

	NC Southeastern		UNC								
	Archaeology Archaeology		SEAC Bulletin		Dissertations						
									Total		Percent
Year	Bioarch	Total	Bioarch	Total	Bioarch	Total	Bioarch	Total	Bioarch	Total	Bioarch
1970	-	3	nd	nd	-	35	-	1	-	39	0.0
1971	-	2	nd	nd	-	1	-	1	-	4	0.0
1972	-	2	nd	nd	-	20	-	-	-	22	0.0
1973	-	1	nd	nd	1	7	-	1	1	9	11.1
1974	-	1	nd	nd	3	39	-	-	3	40	7.5
1975	-	1	nd	nd	-	28	-	2	-	31	0.0
1976	-	2	nd	nd	1	25	-	1	1	28	3.6
1977	-	1	nd	nd	-	7	-	1	-	9	0.0
1978	1	2	nd	nd	-	30	-	-	1	32	3.1
1979	1	1	nd	nd	-	12	-	-	1	13	7.7
1980	-	1	nd	nd	1	39	-	2	1	42	2.4
1981	nd	nd	nd	nd	nd	nd	-	-	-	-	0.0
1982	nd	nd	-	11	2	113	-	3	2	127	1.6
1983	nd	nd	-	11	2	126	-	1	2	138	1.4
1984	-	1	-	15	6	109	-	-	6	125	4.8
1985	-	1	-	8	8	102	-	1	8	112	7.1
1986	-	1	-	11	5	145	-	2	5	159	3.1
1987	nd	nd	-	13	2	125	-	1	2	139	1.4
1988	-	2	-	7	5	183	1	1	6	193	3.1
1989	-	4	1	10	6	130	-	1	7	145	4.8
1990	-	3	1	11	3	126	-	-	4	140	2.9
1991	-	2	-	7	5	113	-	-	5	122	4.1
1992	-	1	-	8	9	160	-	2	9	171	5.3
1993	-	1	1	9	15	174	-	2	16	186	8.6
1994	-	1	-	12	16	328	-	2	16	343	4.7
1995	-	2	2	8	5	170	-	1	7	181	3.9
1996	1	3	1	7	10	189	-	1	12	200	6.0
1997	-	9	-	6	5	198	-	2	5	215	2.3
1998	-	4	1	7	3	212	-	-	4	223	1.8
1999	-	8	-	5	7	260	-	2	7	275	2.5
2000	-	5	1	9	10	234	-	-	11	248	4.4
2001	-	3	1	14	11	234	1	1	13	252	5.2
2002	-	5	1	24	6	228	-	-	7	257	2.7
2003	-	4	-	14	10	233	1	2	11	253	4.3
2004	-	4	1	19	2	348	-	2	3	373	0.8
2005	-	4	3	15	12	273	-	3	15	295	5.1
2006	-	4	2	16	4	204	-	-	6	224	2.7
2007	-	3	4	18	9	272	-	-	13	293	4.4
2008	-	5	-	17	15	355	-	-	15	377	4
2009	nd	nd	1	7	11	285	-	3	12	295	4.1
Totals	3	97	21	319	210	5872	3	42	237	6330	

Table 1. Number of Bioarchaeological Studies Compared to TotalNumber of Archaeological Studies.

Note: nd = no data

the years in which the percent of bioarchaeological research is below six percent, which includes most of the data set. The second cluster consists of the percentages above six percent, which contains the five years of 1974, 1979, 1985, 1993, and 1996. The third cluster consists of the one datum point for 1973. At 11.1 percent, it is the highest overall



Figure 1. Yearly percentages of bioarchaeological studies.



Figure 2. Histogram of the bioarchaeological data.

percentage for the years studied. However, this datum point is an outlier due to its extremely small sample size, artificially inflating the percentage. For the 1973 outlier, there was one bioarchaeology study out of only nine total studies for the entire year.

As for the other data points above six percent, there are several possible explanations for why the second cluster of five data points is above six percent. Similar to 1973, the percentages from 1974 and 1979 are likely higher than expected due to very small sample sizes. There were only three bioarchaeology studies out of 40 in 1974 and only one out of 13 total studies in 1979. Overall in this study, the years between 1970 and 1981 have a problem with small sample size. This stems from the fact that before 1982, the SEAC bulletins contained only a select number of articles presented at the conference. After 1982, the SEAC bulletin contained an abstract for every paper presented at the conference, and the journal *Southeastern Archaeology* was created for the publication of articles.

The peak at 1985 is important in helping to explain the steady growth in bioarchaeological research on Native American skeletal remains between 1985 and 1993. At the SEAC meeting in 1985, there was a symposium organized by Mary Lucas Powell, Patricia S. Bridges,

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and Ann Marie Wagner titled "What Mean these Bones? The Dynamic Integration of Physical Anthropology and Archaeology in the Southeast" (Powell et al. 1991:1). This symposium was important for two reasons. First, its organization at SEAC brought more Native American bioarchaeological studies to the meeting than any other year before examined in this study, explaining the mode in Figure 1. The symposium was organized to foster communication between physical anthropologists and archaeologists and to help both groups understand the valuable information that could be gathered from skeletal remains in archaeological contexts by stressing a bioarchaeological view (Powell et al. 1991:1). Such consultation between archaeologists and physical anthropologists was severely lacking in previous years (Powell et al. 1991:1). Second, the "What Mean These Bones" symposium was important because it was later published as a book by the same title (Powell et al. 1991). The book again stresses the importance of skeletal data in archaeology for a more holistic interpretation of everything from cultural behaviors to subsistence (Powell et al. 1991:2).

Additional unique circumstances such as low sample size or the presence of certain symposia likely explain the modes in 1993 and 1996, but these circumstances are less evident than the other four peaks above six percent. Two symposia at SEAC are likely influencing the high percentage for the 1993 data. One was titled "Interpreting Skeletal Trauma in Archaeological Context" and the other was "The East Okeechobee Area of Southeast Florida- Fact or Fantasy?" (Steponaitis 1993). The first symposium focused on the use of skeletal trauma analysis in reconstructing the lifeways of prehistoric Native Americans in the Southeast (Steponaitis 1993:8). The second was a collection of papers using artifact, faunal, and human skeletal analysis to investigate the cultural areas in south Florida (Steponaitis 1993:10). For the 1996 peak, there is no clear link between the bioarchaeology studies and symposia presented at SEAC. Nevertheless, one wonders if the presence of the two symposia in 1993 independently caused the high percentage for that year. Alternatively, the two symposia may have been necessary because of increased Native American research associated with NAGPRA and inventories for cultural affiliation

To create a clearer picture of the percentages, the data were grouped into five-year and 10-year intervals. Grouping the data corrects for the bias from the very small sample sizes between the years 1970–1981 and provides a clearer picture of any trends. For the 10-year intervals the



Figure 3. Percentage distribution of bioarchaeological studies in 10-year intervals.

data show a steady increase in studies from 1970–1989, then a dramatic increase with the mode for the data being between 1990 and 1999 (Figure 3). This decade corresponds to the passing and implementation of NAGPRA and clearly shows that Southeastern bioarchaeological research of Native American remains increased in the 1990s in comparison to the previous two decades. The 10-year intervals also show that after 1999, the percentage of research decreases slightly for the 2000–2009 interval. To offer a more detailed view of this pattern, data were grouped into five-year intervals (Figure 4).

In five-year intervals, the data show an overall shape that echoes the yearly data (Figure 1). There is a decrease in the percentage of bioarchaeological research between 1970 and 1984. Then, between 1985 and 1989, there is a sharp increase in Native American skeletal research. In addition, between the years 1995 and 2004, research levels off at percentages similar to those before 1990, with another slight increase in

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Figure 4. Percentage distribution of bioarchaeological studies in five-year intervals.

the 2005–2009 interval. Such an increase around 1985 is likely linked with the "What Mean These Bones" symposium at the SEAC meeting in 1985 and its effects in the field. The symposium and the volume (Powell et al. 1991) later published were very influential in illustrating the importance of skeletal analysis in the interpretation of archaeological sites. The mode at the interval of 1990–1994 indicates a larger percentage of Native American bioarchaeological research in these years than any other five-year period examined in this study. This five-year period corresponds with the passage and implementation of NAGPRA, as well as with the deadline for inventory completion of skeletal remains held in institutions.


Figure 5. Boxplots comparing percents from the five-year intervals.

While the five-year intervals illustrate a change in amount of research in correlation with NAGPRA being passed, when the 1990–1994 interval is excluded the range of the data before 1990 is similar to the range of the data after 1994. Before 1990, the range is between 2.5 percent and 3.7 percent compared to the range of 3.2 percent to 4.1 percent after 1994. When graphed as notched boxplots, there is no statically significant difference between these ranges (Figure 5). A boxplot graphically summarizes a set of data, showing its minimum value, lower quartile, median, upper quartile, and maximum value. The box marks the upper and lower quartiles and the line in the box marks the median. Lines that extend from the box illustrate the maximum and minimum values (Baldi and Moore 1996:46). The notches in a notched boxplot show the 95 percent confidence interval for the data, which gives the probability that the interval will contain the true range of the data in repeated samples (Baldi and Moore 1996:357). The 95 percent

confidence interval from the pre-1990 data and post-1994 data overlap, suggesting that there is no statistically significant difference between the ranges. This similar variation between the pre-1990 and post-1994 intervals indicates that the amount of bioarchaeological research in comparison to archaeological research has not changed in the long term.

Overall, the data clearly indicate that after the increase in the percentage of Southeastern Native American skeletal research in the early 1990s, research returned to levels similar to past decades prior to the passage of NAGPRA. These trends do not indicate that the actual number of studies has not increased over time. Instead, the trend indicates that in relation to the total amount of archaeological research conducted, the percentage of bioarchaeology research has changed little over time in comparison to the whole.

Additional evidence supporting the interpretation that NAGPRA has had little long-term impact on the amount of Native American bioarchaeological research in the Southeast exists in the positive correlation between the number of bioarchaeological studies and the overall number of archaeological studies. The Pearson correlation coefficient (r) measures the direction and strength of the linear relationship between two quantitative variables (Baldi and Moore 1996:75). Always between positive one and negative one, a positive rvalue indicates a positive relationship between an independent and dependent variable while a negative r-value indicates a negative relationship (Baldi and Moore 1996:77). The closer the r-value is to either positive or negative one, the stronger the correlation between the two variables (Baldi and Moore 1996:77). A scatterplot (Figure 6) of the total number of archaeological studies against the number of bioarchaeological studies conducted on Native American skeletal remains shows that these variables are positively correlated (r = 0.788). The positive correlation is a notable finding because it illustrates that as the number of overall archaeological studies has increased over time, the number of bioarchaeological studies also has increased. This relationship again suggests that NAGPRA has not impacted the amount of bioarchaeological research in the long term. The positive correlation has been generally constant over the 40-year period between 1970 and 2009. If the percentages of bioarchaeological studies were changing in relation to the total number of studies over time, there would not be such a strong positive relationship. Instead, there would be clusters of data



Figure 6. Scatterplot of total yearly number of archaeological studies against the number of bioarchaeology studies in those years.

from multiple years in the scatterplot where the number of bioarchaeological studies was over-represented or under-represented.

Two data points—for the years 1993 and 2004—deviate from the pattern. As noted earlier, the presence of two bioarchaeology symposia at SEAC is a likely reason for the high percentage of bioarchaeological studies in comparison to the total number of archaeological studies for 1993. The low percentage of bioarchaeological studies in comparison to the total number of archaeological studies for 2004 is possibly explained by NAGPRA having a negative impact on research. However, the overall trend dictated by the data is that bioarchaeological studies increased as a function of an increase in overall archaeological research.

Thus far, the data suggest that NAGPRA has had no noticeable long-term effect on the amount of Native American bioarchaeological research conducted in the Southeast. With such a conclusion, it is necessary to ask if the same can be said about the types of analytical techniques used in bioarchaeological research, particularly destructive analysis. Under NAGPRA, readily available information and data collection methods, not destructive analysis, ought to be used in the inventory process to assess cultural affiliation of Native American skeletal remains (Ousley et al. 2005:4). Because destructive analysis is not part of the regular NAGPRA inventory process when assigning cultural affiliation, one would expect the use of destructive analysis to decrease after 1990. To address this question, the general type of analysis, either nondestructive or destructive, was noted for each bioarchaeology study examined between 1970 and 2009 in the data collection process (Table 2). Studies using destructive analysis were grouped into five-year intervals and graphed to illustrate any changes over time.

As expected, there was a rapid decrease in the percentage of studies using destructive analysis in the years directly following NAGPRA's enactment (Figure 7). While there were no studies using destructive analysis before 1980, there was considerable increase in the percentage of destructive analysis from 1980 to 1989. After 1994, the percentage again climbed steadily over time. The increase in destructive analysis prior to 1990 is likely related to the new development and increasing popularity of destructive analytical techniques, such as stable isotope analysis, which were first used in an archaeological setting in 1977 (Vogel and van der Merwe 1977). The sharp decrease seen between 1990 and 1994 is what one would expect to see as physical anthropologists published and presented data collected from the inventories using protocols dictated by NAGPRA. These inventories would be unlikely to include any destructive analysis of Native American remains, thereby explaining the lowering of the overall percentage of bioarchaeological studies using destructive analysis in these years. However, as with the overall percentage of bioarchaeology research data over time, this decrease is followed by a gradual increase back to levels seen before NAGPRA by 2009. This increase is likely linked to the increased communication and consultation between archaeologists and Native Americans regarding the development of future research projects. When taken in consideration with earlier results, the data on destructive analysis once again support the conclusion that NAGPRA has had little

Year	Number of Bioarchaeology Studies Using Destructive Analysis	Total Number of Bioarchaeology Studies	Percent
1970	-	-	-
1971	-	-	-
1972	-	-	-
1973	-	1	-
1974	-	3	-
1975	-	-	-
1976	-	1	-
1977	-	-	-
1978	-	1	-
1979	-	1	-
1980	1	1	100.0
1981	-	-	-
1982	-	2	-
1983	-	2	-
1984	1	6	16.7
1985	4	8	50.0
1986	-	5	-
1987	1	2	50.0
1988	1	6	16.7
1989	2	7	28.6
1990	2	4	50.0
1991	1	5	20.0
1992	1	9	11.1
1993	1	16	6.3
1994	2	16	12.5
1995	3	7	42.9
1996	-	12	-
1997	-	5	-
1998	1	4	25.0
1999	2	7	28.6
2000	3	11	27.3
2001	1	13	7.7
2002	-	7	-
2003	3	11	27.3
2004	1	3	33.3
2005	6	15	40.0
2006	3	6	50.0
2007	3	13	23.1
2008	4	15	26.7
2009	-	12	-
Total	47	237	

Table 2. Number and Percent by Year of Bioarchaeological Studies Using Destructive Analysis.



Figure 7. Percent of bioarchaeology studies using destructive analysis, grouped in fiveyear intervals.

long-term impact on bioarchaeological research of Native American skeletal remains in the Southeast.

North Carolina Results

In the Southeast, the evidence suggests that NAGPRA only had a short-term effect on amounts of bioarchaeological research on Native American remains with research returning to pre-NAGPRA levels. The same trend of returning to pre-NAGPRA levels after a peak in the percentages demonstrated by the Southeastern data is also apparent in the North Carolina data. From the 237 bioarchaeological studies examined,



Figure 8. Number of North Carolina bioarchaeological studies grouped in five-year intervals.

18 make use of Native American skeletal remains from North Carolina. Analysis of the data in five-year intervals (Figure 8) shows that the data for North Carolina have a unimodal distribution over time with the highest percentage of bioarchaeology studies for the state having occurred between 2000 and 2004. However, while the mode for the Southeastern data corresponds to the interval between 1990 and 1994, in North Carolina the mode is between 2000 and 2004.

These results for North Carolina raise several questions. Why do the highest percentages occur during different years for North Carolina than

for the rest of the Southeast? Why was there no bioarchaeological analysis of North Carolina's Native Americans before 1988? One possible explanation of these results is that, once again, the data are skewed by small sample size with only 18 studies from the state. In addition, skeletal data could have been presented in sources other than those considered in this study. However, I believe the results are an accurate representation of the trend in North Carolina. Levy (1986:vi) notes that as of 1986, while abundant archaeological research had been conducted in the Southeast, little had been published on bioarchaeological analysis of Native American skeletal remains. In addition, Levy (1986:vvi) states that this trend was even more evident in North Carolina and South Carolina.

Examining a breakdown of the bioarchaeology data sorted by state from which the remains came supports Levy's (1986:vvi) claim (Figure 9, Table 3). Based on the data, North Carolina's Native American skeletal remains have received much less study than other states, such as Florida, Georgia, and Tennessee. The difference is likely even greater between North Carolina and the Southeast because this research was designed towards collecting the maximum number of North Carolina skeletal studies possible, skewing the data towards North Carolina. One explanation for the little Native American skeletal research in North Carolina stems from the small number of culturally unaffiliated remains from the state. Ousley et al. (2005:13) suggests that while culturally affiliated remains held at institutions waiting to be repatriated are generally not available for skeletal research, the roughly 100,000 unaffiliated remains still held in institutions are more readily available for study. As of 2006, there were only 1,230 culturally unidentifiable remains in North Carolina compared to Florida with 6,877 unaffiliated remains and Tennessee with 11,510 (National Park Service 2010). When these numbers are compared to the data in Table 3, it is not surprising that these two states with the most unaffiliated remains have had the most bioarchaeology studies conducted.

The lack of bioarchaeological research prior to the 1980s in North Carolina and difference between when the peak of bioarchaeological research occurs for the state and the Southeast could be linked to the state's legislative history. In 1935, the North Carolina General Assembly enacted the Indian Antiquities Act to protect Native American sites on private and state-owned land as well as to make the destruction or selling of remains and artifacts a crime (Burke 1986:152). As the repatriation



Figure 9. Number of identified bioarchaeology studies by state between 1970 and 2009.

movement gathered strength in the state and across the nation during the late 1970s, it became clear that the Indian Antiquities Act needed to be updated and clarified. In 1974, Native Americans lodged complaints about skeletons in a mortuary house display at Town Creek Indian Mound State Historic Site (Burke 1986:152). To deal with these issues, the General Assembly passed the Unmarked Human Burial and Human Skeletal Remains Protection Act in 1981 (Burke 1986:153). The three main purposes of the law were: (1) to protect unmarked graves and human skeletal remains, both native and non-native, from vandalism' (2) to protect unmarked graves and skeletal remains inadvertently uncovered during construction or excavation; and (3) to allow for the analysis of recovered remains if it would yield important scientific information (Burke 1986:153). Under the law, when possible Native American

	Number of
State	Bioarchaeology Studies
Alabama	31
Arkansas	11
Florida	35
Georgia	30
Indiana	9
Illinois	2
Kentucky	10
Louisiana	2
Maryland	1
Mississippi	35
Missouri	1
North Carolina	18
Ohio	5
Oklahoma	2
South Carolina	3
Tennessee	38
Virginia	8
Total	241

Table 3. Total Number of BioarchaeologicalStudies by State.

skeletal remains are located, the Executive Director of the North Carolina Commission of Indian Affairs (NCCIA) and the Chief Archaeologist for the state are notified, and they make any decisions regarding skeletal analysis.

Burke (1986:157) states that since the enactment of the Unmarked Burial Act in 1981, the NCCIA has been very flexible in allowing skeletal analysis. The first uncovered skeletal remains to test the new law were found in 1982. In that case, the NCCIA granted researchers three years to conduct skeletal analysis on five burials, including keeping 20 grams of bone fragments for future analysis (Burke 1986:158). The NCCIA did not oppose any destructive analysis for the 11 total cases

between the enactment of the law and 1985. Their only rejection was one request to retain a sample of bone (Burke 1986:158). In 1984, the NCCIA granted 10 years for the curation of one skeletal collection (Burke 1986:158). Such a history of flexibility regarding skeletal analysis, and not NAGPRA, likely explains why skeletal analysis in North Carolina has increased steadily over time starting in the late 1980s.

Conclusion

Data from this study suggest that NAGPRA has had little longlasting impact on the amount of Native American bioarchaeological research conducted in academic settings in the Southeastern United States. This conclusion was derived by comparing the percentages of academic bioarchaeological research before NAGPRA to the percentages after the law was passed, which indicated little change in the amount of research over time. There was a peak in research directly around the years of NAGPRA's passage, indicating a short-term influence in the amount of research. It is important to note that while likely associated with NAGPRA, it is unclear what specific aspects of the law caused this short-term increase and why these effects were not sustained over time. There are many aspects of NAGPRA's impact that cannot be addressed in a quantitative study. The data collected here only point to a correlation between these two variables, not direct causation.

The completion of NAGPRA inventories is one confounding variable that I suspect helps explain this pattern. NAGPRA requires an inventory of geographic origins and cultural affiliation of all Native American skeletal remains and associated funerary objects held by institutions (Ousley et al. 2005:4). When first passed, these inventories were required to be completed by November 16, 1995 (Ousley et al. 2005:4). It is possible that the short-term peak in skeletal research could be explained by anthropologists rushing to complete these inventories and then publishing the results. Then, as the backlog of Native American remains held in universities and museums was completed, the research levels stabilized to pre-NAGPRA levels once again. But such questions and hypotheses require further research and extrapolation regarding the process of inventory completion in order to be supported.

North Carolina has seen a similar short-term increase in the amount of academic bioarchaeological data from NAGPRA, but little longlasting impact. Results show that the peak in the percentages for North

Carolina was followed by a return to normal percentages shortly thereafter. The only difference between the North Carolina and the regional data was that the short-term peak for the state occurred 10 years later than the peak seen in the Southeast. I attribute this delay to lack of funding for NAGPRA inventories and the state's unique legislative history regarding human graves and burial. Again, the direct causes of the peak have yet to be determined, with the data here only pointing towards a correlation, not causation. While likely attributed to NAGPRA, future research is needed to establish what specific characteristics of NAGPRA led to the fluctuation.

In addition to NAGPRA not appearing to affect the amount of academic bioarchaeological research in the Southeast and North Carolina over time, NAGPRA has not affected the analytical techniques used by bioarchaeologists. There was a drastic decrease in the number of studies using destructive analysis in 1990, but this was followed by a slow and steady increase over the next 20 years. I attribute the initial decrease to archaeologists and physical anthropologists halting all attempts to perform destructive analysis on Native American skeletal remains when the law passed. This overreaction likely stems from the negative stigma surrounding NAGPRA at the time it was passed. I believe that consultation with Native Americans regarding research and repatriation, as dictated by NAGPRA, eventually led anthropologists back to the use of destructive analysis. Archaeologists are doing a better job explaining what can be gained from such analysis while Native Americans are becoming more interested in what the information can offer to them about their heritage. Individuals working together, overcoming personal convictions, have kept the field moving forward and prevented the disaster predicted by so many archaeologists.

However, a major change is on the horizon for NAGPRA. On March 15, 2010, the Department of Interior issued new regulations on the treatment of culturally unidentifiable Native American skeletal remains. Having gone into effect on May 14, 2010, the new regulations removed the indefinite hold keeping culturally unidentifiable remains stored in museums and universities across the country (National Park Service 2010). If the remains can be determined to be Native American but not affiliated with a federally recognized group, institutions holding the remains are required to initiate consultation with the tribes from whose tribal land the remains were originally excavated (National Park

Serivce 2010). Consultation must be initiated within 90 days of any request from tribes for repatriation (National Park Service 2010).

Such a change in the inventory process will no doubt have an effect on bioarchaeological research since the majority of research currently conducted utilizes culturally unidentifiable remains (Ousley et al. 2005:13). Nevertheless, I do not see the amount of bioarchaeological studies on Native American skeletal remains decreasing over time. I do predict that the manner in which remains are studied will change as a result of the new regulations. With NAGPRA's passage, bioarchaeological research shifted from having all Native American skeletal remains held in collections readily available for study to only having culturally unidentifiable remains available. These culturally unidentifiable remains filled the research gap left by the remains repatriated under NAGPRA. But under these new regulations with culturally unidentifiable remains being repatriated, such action will shrink the amount of skeletal remains available for research drastically. Such a decrease in available skeletal material has the potential to constrain bioarchaeological research. However, I do not see this limitation stopping research on Native American skeletal remains completely. Anthropologists will have to shift from studying skeletal collections to conducting research from already existing data on repatriated skeletal remains. Therefore, it is increasing important that when allowed to study Native American skeletal remains, for assessing cultural affiliation of long-held remains or newly excavated remains, researchers must make use of modern technologies to capture all possible information. Though not without its limitations, this approach will allow future research to continue as new techniques and methods are developed in the field of bioarchaeology.

The goal of this project was to uncover any NAGPRA-related trends in bioarchaeological research for the Southeast and North Carolina. It is clear that this goal has been accomplished and that NAGPRA has had much less of an impact on bioarchaeological research than would be indicated by past academic opinion. To help strengthen the argument put forth in this article, future research should focus on analyzing archaeological data from cultural resource management (CRM) research projects across the Southeast. In addition, data from the North Carolina Office of State Archaeology would help flesh out NAGPRA's impact on the state. Lastly, it must be stressed that this quantitative study is only one way to evaluate the impact of NAGPRA. The law has influenced

bioarchaeology in ways that are not captured by simply looking at changes in the amount of research overtime. Moving forward, both quantitative and qualitative research is necessary to gain a complete picture of NAGPRA's influence in the field of bioarchaeology across North Carolina, the Southeast, and the United States.

References Cited

Baldi, Brigitte, and David S. Moore

2009 *The Practice of Statistics in the Life Sciences.* W. H. Freeman and Company, New York.

Binford, Lewis R.

1962 Archaeology as Anthropology. American Antiquity 28(2):217-225.

Blakely, Robert L.

1977 Introduction: Changing Strategies for the Biological Anthropologists. In *Biocultural Adaptation in Prehistoric America*, edited by Robert L. Blakely, pp. 1–9. Southern Anthropological Society Proceedings No. 11, University of Georgia Press, Athens.

Buikstra, Jane E.

- 1997 Biocultural Dimensions of Archaeological Study: A Regional Perspective. In *Biocultural Adaptation in Prehistoric America*, edited by Robert L. Blakely, pp. 67–84. Southern Anthropological Society Proceedings No. 11, University of Georgia Press, Athens.
- 2006 Preface. In *Bioarchaeology: The Contextual Analysis of Human Remains,* edited by Jane E. Buikstra and Lane A. Beck, pp. xvii–xx. Elsevier, Inc, San Diego.

Burke, Thomas D.

1986 North Carolina's Burial Law: Reconcilable Differences. In *Skeletal Analysis in Southeastern Archaeology,* edited by Janet E. Levy, pp. 151–165. North Carolina Archaeological Council Publication 24.

Chari, Sangita, and Lauren A. Trice

 2009 Journey to Repatriation: 15 Years of NAGPRA Grants (1994–2008).
National NAGPRA Program, National Park Service, United States Department of the Interior.

Fine-Dare, Kathleen S.

2002 *Grave Injustice: The American Indian Repatriation Movement and NAGPRA*. University of Nebraska Press, Lincoln.

Kakaliouras, Ann M.

2008 Toward a "New and Different" Osteology: A Reflexive Critique of Physical Anthropology in the United States Since the Passage of NAGPRA. In *Opening*

Archaeology: Repatriation's Impact on Contemporary Research and Practice, edited by Thomas W. Killion, pp. 109–132. School for Advanced Research Press, Santa Fe.

Kintigh, Keith W.

2008 Repatriation as a Force of Change in Southwestern Archaeology. In *Opening Archaeology: Repatriation's Impact on Contemporary Research and Practice*, edited by Thomas W. Killion, pp. 195–208. School for Advanced Research Press, Santa Fe.

Levy, Janet E.

Loring, Stephen

2008 The Wind Blows Everything off the Ground: New Provisions and New Directions in Archaeological Research in the North. In *Opening Archaeology: Repatriation's Impact on Contemporary Research and Practice,* edited by Thomas W. Killion, pp. 181–194. School for Advanced Research Press, Santa Fe.

Marquardt, William H. (editor)

1983 Southeastern Archaeological Conference Bulletin 20 and 21. Abstracts of the 33rd and 34th Meeting of the Southeastern Archaeological Conference, Tuscaloosa, Alabama and Lafayette, LA.

National Park Service

2010 National NAGPRA. Electronic document. http://www.nps.gov/nagpra/. Accessed February 7, 2010.

Ousley, Stephen D., William T. Billeck, and R. E. Hollinger

2005 Federal Repatriation Legislation and the Role of Physical Anthropology in Repatriation. *Yearbook of Physical Anthropology* 48:2–32.

Pearson, Osbjorn M., and Jane E. Buikstra

2006 Behavior and the Bones. In *Bioarchaeology: The Contextual Analysis of Human Remains*, edited by Jane E. Buikstra and Lane A. Beck, pp. 207–226. Academic Press, Burlington, MA.

Powell, Mary L., Patricia S. Bridges, and Ann M. W. Mires

1991 Introduction. In *What Mean These Bones?*, edited by Mary L. Powell, Patricia S. Bridges and Ann M. W. Mires, pp. 1–6. University of Alabama Press, Tuscaloosa.

Rose, Jerome C., Thomas J. Green, and Victoria D. Green 1996 NAGPRA IS FOREVER: Osteology and the Repatriation of Skeletons. Annual Review of Anthropology 25:81–101.

Stapp, Darby C.

2008 The Impact of NAGPRA on Anthropology: A View from Cultural Resource Management in the Pacific Northwest. In *Opening Archaeology*:

¹⁹⁸⁶ Preface. In *Skeletal Analysis in Southeastern Archaeology*, edited by Janet E. Levy, pp. vii–ix. North Carolina Archaeological Council Publication 24.

Repatriation's Impact on Contemporary Research and Practice, edited by Thomas W. Killion, pp. 209–226. School for Advanced Research Press, Santa Fe.

Steponaitis, Vincas P. (editor)

1993 Southeastern Archaeological Conference Bulletin 36. Abstracts at the 50th Annual Meeting of the Southeastern Archaeological Conference, Raleigh, NC.

University of North Carolina-Chapel Hill

2010 *Research Laboratories of Archaeology*. Electronic document. http://rla.unc.edu/. Accessed March 21, 2010.

Vogel, J. C., and Nikolaas J. van der Merwe

1977 Isotopic Evidence for Early Maize Cultivation in New York State. *American Antiquity* 42:238–242.

RESEARCH NOTE INDIAN ROCK ON THE DAN RIVER

by

Christopher T. Espenshade

This brief report documents the recordation of Indian Rock, a petroglyph-bearing outcrop in the Dan River. It would be improper to speak of the discovery of the rock. Prior to its recordation by this archaeologist, the local community had already christened the rock "Indian Rock."

As background, I was fortunate enough to have been involved with Jannie Loubser and Scott Ashcraft in the 2010 petroglyph survey of several miles of the Hiwassee River in western North Carolina (Espenshade and Loubser 2010. See also Ashcraft et al. 2012; Espenshade 2011). The survey quickly honed my skills at recognizing petroglyphs, and I made a note to keep my eyes open when on recreational canoeing/kayaking trips. Jannie had alerted me to a common pattern where petroglyphs (especially cupules) seem to occur just upstream of where bottomlands widen and Indian communities were common. Based on data in North Carolina Rock Art Survey (Hansen 2009), cupules are the most common form of prehistoric petroglyphs in the state. A cupule is a cup-shaped, circular to oval hole, reminiscent of a three-dimensional bell-shaped curve. Cupules were created through intentional pecking and grinding.

April 10, 2011 found me kayaking on the Dan River. I should say that I had paddled this section probably a dozen times before this trip without noticing anything cultural about the rock in question. As I was approaching a location where a broad floodplain started on river right, I saw an outcrop in mid-channel that seemed to be covered with cupules. Unfortunately, the river was running fairly high that day, and I was paddling alone. I did not have the luxury of stopping or working against the current, lest I find myself swimming in high water.

Two weeks later, I was back with a GPS and a camera. Dale Swanson of the Dan River Basin Association, and my son, Andy

INDIAN ROCK ON DAN RIVER

Espenshade, joined me on this trip. The Dan River Company kindly provided us access through their private put-in. In addition to recording the petroglyph, we were going to search for others on this stretch of river. In the end, Indian Rock was the only petroglyph-bearing outcrop we found.

Description

The outcrop is located left of river center. The outcrop is apparently a remnant of a granitic dike that formerly crossed the river in this location. It is an attached exposure of bedrock with a mildly sloping top (Figures 1–6). The top measures approximately 180 x 80 cm. There are approximately 50 cupules on the top. No effort was made to dislodge silt and vegetation from the cupules, to avoid inadvertent damage of the carvings (accordingly, the cupules can be difficult to see in the photographs). The cupules are typically 5–10 centimeters in diameter, and reach a maximum depth of 1–2 centimeters below the original rock surface. The site has been recorded as 31SK223.

Significance

At this point, we do not really know the significance of Indian Rock. It is currently the easternmost example of river cupules in North Carolina. This may reflect the actual archaeological record, or it may reflect the lack of effort to find petroglyphs in this part of the state. More elaborate petroglyphs (i.e., creatures, spirals, etc.) are not known in this area, and there has not been any systematic search for petroglyphs. The point of this note is simply to increase awareness and to encourage the canoeists, kayakers, and fishers among us to pay a little attention when we are out on the rivers of North Carolina. Until we start to look in earnest, we will not know what we are possibly missing. If the patterns seen in the western part of the state hold, petroglyphs may be expected either in proximity to fish weirs or just upstream of broad floodplains.

The recording of this petroglyph also serves as an example of educating and recruiting other river users in petroglyph recognition. Dale Swanson has shared his newfound knowledge of petroglyphs with members of his watershed association, and they will be on the alert for similar occurrences on other stretches of the Dan River and other rivers. Because rivers are typically omitted from the Section 106 process (i.e., most of our Areas of Potential Effects are terrestrial), it makes sense to



Figure 1. Site 31SK223, view facing river right. Photo by author.



Figure 2. Site 31SK223, oblique view, facing river right. Photo by author.

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Figure 3. Site 31SK223, detail of cupules. Strap is 0.25 inch wide. Photo courtesy of Dale Swanson.



Figure 4. Same images as Figure 3, with cupule borders added.



Figure 5. 31SK223, facing slightly upstream and river right. Photo by author.



Figure 6. Same image as Figure 5, with arrows pointing to obvious cupules.

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increase the number of people on the rivers who can recognize and report petroglyphs.

References Cited

Ashcraft, Scott, Chris Espenshade, and Jannie Loubser

2012 Hiwassee River Petroglyphs. Paper presented at the Seventy-seventh Annual Meeting of the Society for American Archaeology, Memphis, TN.

Espenshade, Christopher T.

2011 The Sacred Hiwassee Riverscape. Paper presented at the Forty-first Annual Meeting of the Middle Atlantic Archaeological Conference, Ocean City, MD.

Espenshade, Christopher T., and Johannes H.N. Loubser

2010 Petroglyph Survey of a Portion of the Hiwassee River Near the Mission Hydroelectric Project, Cherokee and Clay Counties, North Carolina. New South Associates, Stone Mountain, GA. Submitted to Duke Energy, Charlotte, NC.

Hansen, Lorie

2009 Rock Art in North Carolina. North Carolina Rock Art Survey, Asheville.

BOOK REVIEWS

Archaeology at Colonial Brunswick, Stanley South. Office of Archives and History, North Carolina Department of Cultural Resources, Raleigh, 2010. 308 pp., illus., biblio., index. \$20.00 (paper).

Reviewed by Alexander J. Keown

In Archaeology at Colonial Brunswick, eminent historical archaeologist Stanley South provides a personal recount of his excavations and work at the site of colonial-era Brunswick Town and the Civil War earthworks of Fort Anderson. South, who spent 10 years as resident archaeologist at the state historic site, crafts a compelling tale of the small coastal town told through historical records and archaeological research. His narrative carries the reader through key points of the town's history in an engaging manner that makes it easy for nonarchaeologists to follow, but provides plenty of scientific detail for the professionals.

The 2010 edition of *Archaeology at Colonial Brunswick* builds on a manuscript South submitted to the Department of Archives and History in 1960. The initial manuscript, "Colonial Brunswick," was rejected, wanting more information from further excavation. Fifty years later South delivers in his work that includes eight additional chapters. South's archaeological work at Brunswick Town built on the foundations of historian E. Lawrence Lee Jr., who originally investigated the site in 1952. When South began his work at Brunswick Town he felt it was important not only to document what he was discovering, but to interpret what he discovered for the general public. His goal of reaching the public was the reason for his 1960 manuscript.

For South, archaeology plays a strong role in telling the story of colonial Brunswick. In 23 chapters he lays out the archaeological excavations of some of the buildings and compares the findings with Lee's initial studies. As South notes in the book's Preface, "...historical archaeology adds a broader perspective to the understanding of documented history. It explores the relationships that existed in time and space between people, events, and their things—clues to which they left behind" (p. xxiv).

BOOK REVIEWS

Interestingly, some of South's archaeological excavations of the approximately 60 structures of the town countered some of the written historical records, particularly the layout of the buildings. Excavations revealed that the foundations for some of the houses encroached into the streets, although that did not mesh with the historical record. How the lots were laid out was important not only to understand where important town residents lived, but also furthered the understanding of how it financially impacted the town's developers.

Additionally, some of the artifacts unearthed in the excavations revealed that although Brunswick was a small town, it was quite cosmopolitan given the presence of Chinese porcelain in many of the houses as well as a knife with Arabic writing discovered in the ruins of the Public House. The discovery of the folding knife, possibly dropped by a sailor in port, indicated that although small, the coastal town played a vital role in global trade. For a period of time the town was of key importance to Britain's naval and merchant might by providing essential tar and pitch, which were necessary for ship building.

During his discussion of the excavations, South explained how archaeologists could infer building use from found artifacts, such as the thousands of buttons, thimbles, and pins unearthed in the Public House ruin, which caused him to infer that some sections were also used as a tailor shop. He notes that where objects are found is just as important as the objects themselves.

Not only does he discuss the English founding of the town, but also explores the influence from invasions, including the Spanish capture of the town during King George's War, a devastating hurricane in 1769 which blew down the courthouse, and the erection of Fort Anderson during the American Civil War.

South's narrative provides not only information about the objects discovered, but also provides tales of the rowdy nature of some of the town's residents, including the violent protests of town founder Cornelius Harnett, Sr. against Proprietary Governor Richard Everard, and a duel between Royal Navy officers Alex Simpson and Thomas Whitehurst of the *HMS Viper*, which ended with Simpson beating his foe to death with his pistol butt. Honing in on the personalities of those key individuals provides a richness to the history of the town and helps ease the reader, particularly one not versed in an archaeological background,

into the book. In addition to South's easy-reading style, the book is peppered throughout with nearly 200 photographs, maps, and illustrations to enhance the story.

While South spent 10 years excavating Brunswick Town, he said his intention was that historical archaeology would play a continuing part in Brunswick Town's mission. However, when he wrote the book in 2009, South said there was still plenty of archaeological work to be done to tell the history of Brunswick Town.

Archaeologists as Activists: Can Archaeologists Change the World?. M. Jay Stottman (editor). University of Alabama Press, Tuscaloosa, 2010. viii+207 pp., 13 figs., 2 tables, index. \$29.95 (paperback), ISBN 0-8173-5622-3.

Reviewed by Hannah P. Smith

A product of "Can Archaeology Save the World?," a session at the 2004 Society for Historical Archaeology conference in St. Louis, Missouri, M. Jay Stottman collects chapters from other authors to advocate for changes in the way that archaeology is conducted today in *Archaeologists as Activists: Can Archaeologists Change the World?*. The authors call for an increase in "activist archaeology," pushing for research to be conducted with greater community involvement and the intent to use the process of archaeology and its results to change society today and in the future. This theme is discussed through case studies from across the United States that demonstrate how activism can be moved from the periphery to the center of archaeological research. The authors of each chapter, as well as Stottman as editor, rely heavily on critical theory, self-reflexivity, and other aspects of post-processual theory, as well as direct action to support their viewpoints.

Stottman has divided the work into two parts. The first section reflects how archaeologists are changing the way that they view their work and activism, and how the two areas theoretically can be combined. The second part describes several attempts to apply "activist archaeology," using examples of projects in Kentucky.

Covering a range of geographical, temporal, and theoretical landscapes, the case studies in the first section, "Reconceptualizing

Archaeology for Activism," require summarizing to show the continuity within the volume. In "Archaeology and Activism of the Past and Present," Kim Christensen addresses the history of activism and the archaeological record through theoretical approaches to show how the past was and how we see it today. By showing the differences, we can see how today's conditions arose, as well as ways to change them. Christensen points out that one needs to be aware of what archaeologists are getting into when they begin work, because archaeological research possesses an inherently political nature. Therefore, one must consider carefully what position one's research supports. Carol McDavid examines several projects with an emphasis on critical theory and critical race theory in order to acknowledge, confront, and challenge racism in "Public Archaeology, Activism, and Racism: Rethinking the Heritage 'Product'." By studying the past, this author suggests that public archaeology can be used to help end racism today. David A. Gadsby's and Jodi A. Barnes's "Activism as Archaeological Praxis" approaches historical archaeology through Marxist and Neo-Marxist thought, as well as critical theory and other portions of postmodern or post-processual theory to question the power structures that exist in the modern world and how they arose. Patrice L. Jeppson addresses the role of education and schools in archaeology in her chapter "Doing Our Homework: Reconsidering What Archaeology Has to Offer Schools." She sees the possibility of working with schools to change national culture to include valuing the past and encouraging its preservation while still critically analyzing it, possibly leading to change in the world. In "Movement Archaeology: Promoting the Labor Movement in Maryland," Robert C. Chidester discusses his attempts to bring greater attention to the history and contributions of organized labor on the state of Maryland. He also discusses the obstacles facing those who wish to challenge the status quo through their work. It can be difficult to overcome these obstacles and cause change, as historical preservation still possesses a politically conservative nature.

All of the authors stress that community involvement is at the core of doing work that possesses an "activist" nature. At the very least, they push for seeking out other opinions on the work archaeologists intend to do. Ideally, the authors would like to see archaeological research that is driven by the community, with archaeologists facilitating the acquisition of knowledge by and for the public itself. This knowledge can then be used for empowerment and internal change, which can then change the views of outsiders. In each chapter, the authors explain how

communities can be involved in archaeological projects, but they focus mainly on how archaeologists need to change the way they view the role of archaeology as a means to change society.

The second section of the book, "Becoming Archaeology Activists: Perspectives on Community Archaeology," consists of case studies of several sites in Kentucky in order to discuss how and why "activist archaeology" has been applied, as well as how effective its application has been. Lori C. Stahlgren addresses "unsilencing" the African American past in "Negotiating History, Slavery, and the Present: Archaeology at Farmington Plantation." She discusses how the archaeology at the plantation has changed the interpretation of slavery in Kentucky, and how the material culture of the site has been used to convey that information. Stahlgren also discusses how the site's Interpretation Committee, comprised of community individuals, has helped affect changes in the site's message, as well as facilitate discussions about slavery and the resulting racial tensions that still exist. In "Archaeology and the Creation of a Civil War Park: Experiences from Camp Nelson, Kentucky," W. Stephen McBride and Kim A. McBride describe the historical importance of Camp Nelson and how the potential impact of infrastructure expansion led to the area's study and development into a park. The involvement of community members in creating and funding the site, as well as plans to make all stages of archaeology accessible to the public on-site, are important to the authors. They also discuss how the site helps individuals connect to their own past by working with re-enactors and others who wish to understand their ancestors' connections to the area. The McBrides also bring in students and other volunteers to assist with archaeological investigations, helping to create a tangible link to the past for the public, as well as encouraging them to connect with their community and push for change. "Reconnecting Community: Archaeology and Activism at Portland Wharf" by Matthew E. Prybylski and M. Jay Stottman traces a project to study a site that was important to the residents of Portland, KY, but had been cut off by infrastructure changes. The community was involved in the planning process for the park, and engaged civic and political entities helped to get the project off the ground. It was very important to the group that children be involved. As a result, there was recognition of a greater connection to and significance of their community. The authors also point out that traditional ethnographic work had to be conducted to

understand the community and its needs, as well as how to make an active archaeological site sustainable in a moderately trafficked urban

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area. While the project is not complete, the goal is to use the past as a means to make the area a destination and strengthen the community. The last case study is presented in "The Saratoga of the South Will Rise (Or Be Razed) Again: Archaeologists Collaborating with Communities" by Sarah E. Miller and A. Gwynn Henderson. This study showcases how community-based archaeology can teach something to all involved, and how a project can become "activist archaeology," even if that was not the intended outcome. Even though the Crab Orchard Springs Hotel site was heavily disturbed and seemed to be of no archaeological value to the archaeologists from the Kentucky Archaeology Survey, the authors did learn something. They learned how to see a site and the past through the community's eyes, the value of research-challenged sites as well as their education potential, and how perceptions of context can influence the research conducted. By working with teachers to create a lesson plan based around archaeological method and theory, the students learned about how archaeological investigation is conducted, were more engaged in the learning process, and learned to value their community as well.

In these case studies, the authors emphasize how community involvement is central to the work completed. They also address how these projects have led to change within, through greater understanding of their past and how individuals can relate to it. The authors stress the need for archaeologists to consider how and why they are working on a given project, and what the benefits will be to the community when the project is completed.

At first glance, the individual chapters seem to lack continuity. However, this disappears when one considers the themes that thread throughout the sections: questioning the past, using archaeology to affect social change, and community involvement. Each chapter presents a slightly different view of the theory and application of "activist archaeology" today. This multiplicity of viewpoints is critical to the post-processual approach employed by the volume's contributors. It allows the reader to see that there are multiple ways to achieve the goals that these authors want the archaeological community to seek. Although the two sections of the volume could stand on their own if expanded further—one as a theoretical discussion of the role of activism in archaeology today and the other on application of community-directed archaeology in one section of the United States—they present a stronger argument when combined. Without the more detailed descriptions of projects where activism played a larger role in the archaeological

investigations and a thorough discussion of the outcomes of these projects in the second section, the theoretical approaches discussed in the first section have less apparent applicability.

It is important to note that topics discussed in several of the chapters in the first section apply to chapters in the second section. This indicates how multiple approaches are necessary to achieve archaeology that involves the community and teaches in a way that encourages social change. For example, in the chapter by Stahlgren, questions of power structures, racism, and how to involve the community are addressed. The chapter by McBride and McBride addresses these same issues, while adding how education, both formal and informal, can be affected by archaeology.

The book concludes with an epilogue written by Barbara J. Little, an author whose recent work has been at the forefront of the "activist archaeology" movement. This chapter attempts to put the information contained within the preceding chapters back into the larger context of the field of archaeology today. As such, Little restates the goals of these authors and again urges the reader to look at what archaeology's role is as it moves into the future.

Overall, the volume presents a strong case for making archaeology more applicable in today's world. Understanding the past and its effects on the present are critical to understanding how to move forward. History on its own cannot provide all of the necessary information to make informed decisions because important information can be omitted from the historical record accidentally or intentionally. Studying the past through archaeology can shed light on the subjects left out of the historical record, and conceivably lead to change. Community involvement is necessary to maintain archaeology in several ways. Without this involvement, archaeology loses sources of funding and labor in today's economic environment. Individuals and groups will only be involved if they feel that their needs and wishes are being respected, so understanding what these are is essential for archaeologists to be able to do their jobs. Part of this understanding of communities comes from archaeologists understanding their own motivations. By linking contributors' motivations, a project stands a greater chance to succeed in having practical applicability, not just existing as a means to learn.

There are a few ways that this book falls short of its intended goal. It does not prove that archaeology can lead to far-reaching change. At best, it proves that archaeology can be used to change perceptions at the local or regional level. If greater social change was occurring as the result of these archaeological investigations, one would expect greater discussion of them on the regional or national stage, or at least within academia at some level. This limited scope is indicated by the case studies that are discussed in detail. They are limited to sites within Kentucky, mostly centered on the Louisville area. To make a stronger case for change, the volume would benefit from case studies from a wider area. After the theoretical discussions drew referenced examples from all over the world, narrowing the application down to one state seems to weaken the authors' argument. Perhaps regional change will ultimately lead to national and global change, but it will occur more quickly if multiple locations use the same techniques and show how they spread over multiple regions. This would also help the reader figure out how to apply the lessons of this volume to their own work if it occurs outside the region focused on in this book.

While the organization of the volume overall is good and the message clear, some of the chapters themselves are less so. In some of the more theoretical chapters, the connection between theory and examples are not as evident. An example of this is Christensen's chapter. Although the theoretical approaches and discussion of the Matilda Joslyn Gage house's history and archaeological investigations are logical, the author's discussion of connections to modern issues is confusing. How material culture connects to feminism and then to the modern issue of abortion seems tenuous at times. Additionally, without the introduction by Stottman, the overarching themes of "activist archaeology" and how the chapters are interconnected would be less apparent. The different approaches of each of the authors would be harder to connect without the framework and definitions that the editor provides at the beginning.

Archaeologists as Activists shows how archaeology can provide a strong, community-based approach to affect positive social change. The evidence presented within suggests that change may be assisted, at the local level, by information provided by archaeological investigations, but is not likely to be caused by archaeology alone. Information from one small site is less likely to change conditions at the national or

international level. Perhaps greater social changes can result from combining the results of work at many smaller sites.

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