

The Ravensford Tract Archeological Project

by

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BACKGROUND

The archeological research conducted on the Ravensford Tract over the last 6 years has been the largest single research project ever conducted in Cherokee archeology in North Carolina. More than 30 acres of land has been stripped and over a hundred structures have been investigated. Although we predicted the tract to be rich in archeological data, it has exceeded our most liberal expectations.

I have served as the principal archeologist for the National Park Service (NPS) since the very beginning of this undertaking based on my alleged expertise (Keel 1976) and it has been one of the most rewarding experiences of my career. I have been fortunate to have worked with an outstanding group of people¹ to insure that as much information as possible, about the archeological resources present on the tract that would be adversely affected by the construction of the educational complex by the Eastern Band of Cherokee Indians, would be recovered.

In 1999 the Eastern Band of Cherokee Indians (EBCI) requested that the National Park Service exchange a tract of Great Smoky Mountains National Park (GRSM) lands for the purposes of building an educational complex and providing unimpeded access from the town of Cherokee to the Big Cove community. In exchange, NPS would receive land of equal value contiguous to a National Park somewhere in North Carolina.

NPS Director Robert Stanton, agreed that NPS would consider the request and directed the Southeast Region and GRSM to undertake the preparation of an Environmental Impact Study (EIS) to determine if the exchange of lands was appropriate. The necessary natural science, economic and cultural studies would be paid for by EBCI and conducted under a memorandum of agreement between EBCI and NPS. Several meetings were held in cities and towns in North Carolina and Tennessee to acquire public input about the land exchange. The necessary studies for the EIS were completed, or well on the way to completion, when Congressman Charles Taylor of North Carolina's 11th Congressional District introduced

legislation that became law on November 10, 2003 directing

The Secretary of the Interior ('Secretary') shall exchange the Ravensford tract, currently in the Great Smoky Mountains National Park and the Blue Ridge Parkway, for the Yellow Face tract adjacent to the Waterrock Knob Visitor Center on the Blue Ridge Parkway.

The Ravensford Tract contains four of the seven Native American sites in Oconaluftee Archeological District listed on the National Register of Historic Places in 1981. In addition, the mill and the company town, Ravensford, and several other historic sites were known to be present.

COMPLIANCE WITH SECTION 106

In order to meet Section 106 requirements of the National Historic Preservation Act of 1966, as amended, I, in consultation with the North Carolina State Historic Preservation Office, the EBCI Tribal Preservation Office, and GRSM park archeologist developed a scope of work to conduct the necessary cultural resources inventory. EBCI, as the tribe was paying for the study, chose to obtain the services of TRC Garrow Associates, Inc. (TRC), to conduct the study. TRC had recently conducted an outstanding study of the Big Cove Sewer line project for the tribe so the firm had firsthand familiarity of the project area and had developed expertise in Cherokee archeology.

The cultural resources survey conducted by TRC in 2001 included historic background research, surface examination, and subsurface testing. Subsurface examination included the excavation of 4,394 shovel tests (small tests measuring about 30 cm or 1 foot in diameter), which were placed on a 10 m grid across the terrace, colluvial fans, and uplands in the project area. No shovel tests were excavated on most of the low floodplain, which dates to the recent historic period and is constantly being reworked by the river. A total of 649 shovel tests (14.8 percent) produced prehistoric Native American or Historic Cherokee (Qualla) artifacts; and 798 shovel tests (18.2

¹EBCI – The late Chief Leon Jones, Chief Michell Hicks, David Nash, James Bird, Russell Townsend and Carmaleta Monteith; NPS-GRSM–Philip Francis, Pei Lin Yu, Larry Hartmann, David Chapman, Eric Kreusch, Dale Ditmanson, Dr. Becky Nichols, Keith Langdon; SEAC–John Ehrenhard, George Smith; SERO–Anita Johnson Barnett; BLRI–David Anderson, Bambi Teague, Gary Johnson; NCSHPO–Linda Hall, Steven Claggett; TRC-Garrow–Paul Webb, Tasha Benyshek, Larry McKee, Dr. David Leigh and our archeological colleagues Drs. Charles Cleland, Trawick Ward, Brett Riggs, Steve Davis, Larry Kimball, David Moore, Gerald Schroedl and Mr. Scott Shumate. This report has been compiled from the author's observation and materials provided by Russell Townsend and TRC Garrow.

percent) produced nineteenth or twentieth century Euro-American artifacts. Additionally, geomorphic investigations were conducted to provide an understanding of the history of the land forms present and to provide the data needed to determine where buried archeological resources might reasonably be expected to be present.

The shovel test data were used to construct distribution maps showing the density of various artifact types across the entire tract. In conjunction with the preliminary geomorphic assessment the distribution maps were used to determine locations for formal test unit excavations.

Following completion of the shovel testing, 82 m² of test units were excavated to investigate

specific landforms and/or artifact distributions encountered during the shovel testing. Once the analysis of this data was completed it became clear that the tract contained much more archeological data than we knew in 1999. Ten additional sites, which were determined to be eligible for the National Register of Historic Places in 2002, were added to the inventory bringing the total to 14 sites with a total of 27 distinct components on the tract. But, only two sites, 31SW78 and 31SW136 were impacted by construction. These sites combined covered about 34 acres and contained 16 components (Figure 1).

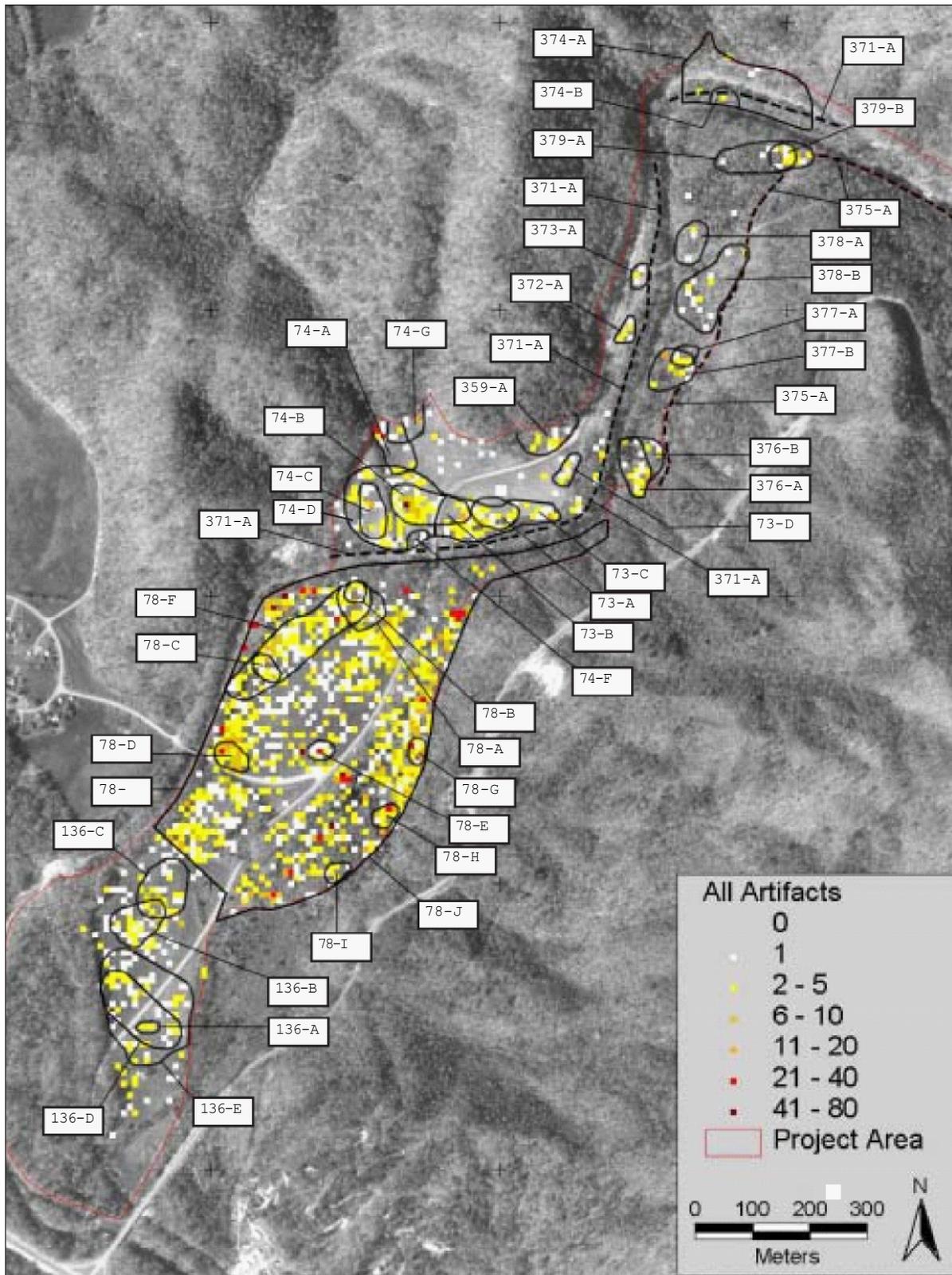


Figure 1. Location of archaeological components on the Ravensford Tract.

HISTORIC PROPERTIES PRESERVATION PLAN (HPPP)

As noted earlier, before the EIS was completed the Secretary of the Interior was directed to move forward with the land exchange. Consequently, a plan had to be developed to assure that the twelve sites outside this zone were protected and the adverse impacts of construction on two sites within the impact zone were mitigated. The HPPP (Keel 2003) would also serve as the basis of a Memorandum of Agreement between the NPS, EBCI, NC SHPO and the Advisory Council on Historic Preservation (NPS 2003).

In addition to the archeological sites, other historic properties including buildings and other structures, traditional cultural properties and historic landscapes were included in the HPPP. The treatment adopted for any Native American human remains that might be discovered was avoidance. No graves or suspected graves would be excavated. They would remain undisturbed and procedures have been developed to assure that they will not be impacted by construction activity.

Analysis of the data recovered during the survey phase of the project concluded that the 14 sites were represented by a minimum of 41 spatially recognizable archeological components. Diagnostic artifacts recovered from earlier limited investigations, and the testing program conducted by TRC, indicated that the sites contained remains representing human occupation from 7000 B.C. to A.D. 1950 or so. Fortunately, 12 of the 14 sites were situated beyond the construction zone. The future management of these properties was formalized in the HPPP to assure that they are protected and conserved for the future.

The data recovery plans generated to assure adequate mitigation were based on the need to understand the geomorphic and environmental history of the tract and what archeologically important research questions could be asked of the components identified at the Ravensford Town, 31SW78/78** (GRSM-52) and Big Cove Road, 31SW136/136**, (GRSM-113) sites. The testing program had produced diagnostic artifacts repre-

senting the following temporal periods at these two sites: Early Archaic, Middle Archaic, Late Archaic, Early Woodland, Middle Woodland, Late Woodland, Mississippian, Historic Cherokee, and Historic Euro-American and together comprised 27 spatially distinct components. A working group² developed a draft preservation plan. This plan was reviewed by the consulting parties and was completed with the assistance of Dr. Patricia Parker, American Indian Liaison Office, National Park Service and two consultants, Dr. Charles Cleland, Michigan State University, and Dr. H. Trawick Ward, University of North Carolina at Chapel Hill.

We arranged the 27 known components into the temporal periods listed above and developed a series of research questions that the remains and data contained in these components had more than a reasonable chance of contributing some answers. The research questions covered broad areas of archeological interest including:

- Chronology and Material Culture
- Subsistence Practices
- Land Use, Site Function, Architecture, and Settlement Plans
- Social Organization and Intra-/Inter-regional Relationships

EBCI used the HPPP as the scope of work to solicit bids to conduct the data recovery program; TRC was selected among the three organizations that submitted proposals. All of the bids submitted included some assumptions and estimates of the nature and number of archeological deposits that would be encountered. Based on the environmental setting and the results of the testing program I believed that the Ravensford tract was very rich in archeological deposits and expected that something like 10 to 12 Native American structures would be discovered along with 15–20 graves, a comparable number of features, and several hundred post holes. In conversations with several Cherokee specialists I found that they generally agreed with my view. As Table 1 demonstrates, I was substantially off the mark.

²Bennie C. Keel, Southeast Archeological Center, Erik S. Kreuzsch, GRSM Archeologist, Russell Townsend, EBCI Archeologist/Tribal Preservation Officer, Paul Webb EBCI consultant, and Linda Hall, Archeologist, NC SHPO.

Table 1. Projected Effort and Actual Results.

Effort	Projected Number	Actual Number
Hand Excavated 1x1m test	1328	1170
Hand Excavated 1x1m in Continuous blocks	380	710
Total Hand excavations (sq. m)	1708	1880
Acres Mechanically Stripped	42	30.7

Occurrence	Projected Number	Actual Number
Large features	500	830
Small features	1200	1250
Post holes	2500	12,540
Rock clusters (hearths?)	—	407
Structure patterns	6–10	106
Other features	—	39
Graves	—	99

DATA RECOVERY

TRC started fieldwork on April 5, 2004 that continued uninterrupted until April 6, 2006. Except for portions of Big Cove Road, which covered known important archeological deposits, the tract was cleared for construction of the school complex at that time. Construction of a rerouted Big Cove Road in a corridor along the Ravensfork River where data recovery efforts had been completed was initiated in 2005 and completed in 2006. A section of Big Cove Road covering part of a Middle Woodland component was removed and data recovery here was completed in August 2006. The remaining portion of the old road will be used for access during construction of the school complex. Once construction of the school buildings is completed the road will be removed and at least two Qualla phase houses will be investigated. This work is scheduled to take place in the summer of 2007.

The field crew ranged in size from 35 at peak levels in the spring, summer, and fall to a smaller crew of 6 during the most severe winter months. Fortunately, the 2004 and 2005 winters were mild for the mountains of western North Carolina, and little time was lost to inclement weather.

The HPPP contract called for hand excavated dispersed 1x1 m units to better understand the context of the archeological deposits discovered by the testing program and hand excavation of continuous block excavations covering 710 sq m to investigate a Late Archaic and Historic Cherokee components, and mechanical stripping and data recovery of all revealed archeological remains of an area of 42 acres. Subsequently, the consulting parties agreed to reduce the area to be stripped to about 31 acres (Figure 2) when it became apparent from the geomorphological investigations and on-going archeological work that there was a low probability that important archeological remains were present in some parts of the area of impact, and when redesign of the school complex reduced the area of impact. TRC’s field recovery techniques and procedures will not be described here, but they met or exceeded the standards for archeological field research set in the HPPP.

PRELIMINARY RESULTS OF THE FIELDWORK

The following section is based on field observations and very limited artifact analysis, but provides information that demonstrates the contribution this project will make to Cherokee and historic archeology.



Figure 2. Ravensford, plowzone stripped.

Once the analysis of the material and data is completed the statements contained here will most likely need some modification. The information presented in this section is based on a presentation (Webb, et al. 2005) made at the annual meeting of the Southeastern Archaeological Conference in Columbia, South Carolina.

The Early Archaic Period

An Early Archaic period component is represented by the three evenly-spaced rock clusters, each including several large flat stones (Figure 2). Low density scatter of chert debitage, tool fragments, and tools are associated with these rock clusters and in one case a Kirk projectile point. There was no associated carbon, but an OSL (optically stimu-

lated luminescence) date of 7797 B.C. fits well with the known age of the Kirk phase.

A slightly later Early Archaic occupation is associated with the bifurcate point tradition, as a concentration of worked chert fragments found in association with two bifurcate-based tools was unearthed.

Middle Archaic Period

Middle and Late Archaic occupations occur in the upper 50 cm of terrace sediments, especially in the northwest part of the site. Middle Archaic occupations are associated with both Morrow Mountain and Guilford projectile points; these components are generally visible as moderate density scatters

of fire cracked rock, and quartz and quartzite tools and debitage.

Late Archaic Period

Late Archaic components are associated with both Savannah River and more generalized large stemmed projectile points. Little soapstone was present, although one sizeable bowl fragment was recovered. Subsistence remains were generally lacking from the Middle and Late Archaic components, but were preserved in a few features located in the southern part of the site, east of Big Cove Road. One rock-filled pit in that area contained abundant hickory nut fragments, and produced an AMS (accelerator mass spectrometry) date of 2351 B.C. One surprising aspect of the Late Archaic occupations is the presence of fragments of a Stallings fiber-tempered vessel which is the earliest type of pottery made in the Southeastern U.S. Such ceramics are very rare outside the Coastal Plain and lower Piedmont.

Woodland Period

A number of pit features uncovered are likely associated with this period. These include a large post pit, as well as numerous refuse-filled pits. These and other pits have produced quantities of both Pigeon and Connestee ceramics; the latter materials are associated with an AMS date of A.D. 368. These materials will expand our knowledge regarding subsistence, internal chronology and perhaps settlement structure of this period once they are analyzed.

Mississippian and Historic Cherokee Periods

The major contribution of the project lies in information obtained on the last 700 years of the site's American Indian occupations. The stripping has resulted in the identification of at least 106 structures and several hundred pit features, most of which date to the late prehistoric through Historic Cherokee periods. Many of the structures are concentrated in distinct homesteads or communities, while others are dispersed across the site.

Specific phase associations have not yet been assigned to over one-half of the excavated structures; nonetheless, a general understanding based

on ceramic and other artifact assemblages from dated contexts and on comparisons with other assemblages has emerged. Fortunately, there is good spatial separation between components, which facilitates recognition of both structure patterns and associated features. The overall structure density was about three structures per acre.

Early Qualla Period

There is a large number of structures and features that appear to represent multiple Early Qualla Phase occupations. One group, part of component 78-D, of six structures and associated features located within a 40 x 40 m area along the river in the north-central part of the site, may be associated with, or at least appears contemporaneous with, two outlying structures and a set of pit features. These structures are relatively typical Southern Appalachian Mississippian buildings; i.e., square with rounded corners measuring about 4.5 to 5 m across; most have a wall-trench entry visible midway along one side. One of these structures was semi-subterranean and the only one of these buildings that was clearly rebuilt. This is the only early structure that has intact floor deposits and structural members. Unfortunately, the earlier house floor had been intentionally cleaned prior to deposition of fill and construction of the second building.

A second compact group of structures (component 78-J7) is located some 80 m to the southeast, and is represented by about nine to 11 structures within a 60 x 60 m area, including what may have been a large public building. Four additional structures that may be associated with this component are located a short distance to the southwest.

We consider these buildings to be Early Qualla due to the nature of the associated ceramic assemblage, which bears marked similarities to Early Qualla phase assemblages described by Riggs and Rodning (2002). Ten radiometric dates on this component are derived from pit features, wall posts, and hearth contents. Nine of the ten dates are compatible with an occupation in the early to mid fifteenth century. Given the normal vagaries of radiocarbon dating, this is a pretty good

grouping, placing this assemblage to the early to mid 1400s.

Several other structure types are present as well. These are constructed of smaller, close set posts and may be circular, square, or rectangular; a few are also of a somewhat bizarre form with straight walls and curved ends. They vary widely in size—the large ones measuring up to 9 m square and the circular ones measuring over 7 m in diameter. These structures may be contemporaneous with or slightly predate the Early Qualla structures in this area as suggested by a single AMS date of A.D. 1370.

These dates are associated with a diverse ceramic assemblage that one might classify as four different ceramic series or phases. These ceramics are found together in various numbers and configurations in features and within the intact structure. First, the assemblage includes a number of Pisgah or Pisgah-like rims—thickened rims with incising and/or slash marks, and occasionally punctations; these are sometimes noded, and may



Figure 3. Pisgah ceramics.

be slightly castellated (Figure 3). A few of these seem to be “classic Pisgah” forms, while others are less so. These sherds usually feature a compact, micaceous and frequently buff-colored paste with some crushed quartz or grit inclusions. Both jars and bowls are represented. The lower portions of some vessels are stamped with fine rectilinear motifs present on a variety of body sherds.

The assemblage includes some grit or crushed quartz tempered sherds with pinched or notched appliqué rim strips (Figure 4). These rim strips are narrow, measuring a maximum of about 15 mm in height. Vessel forms include tall and short-necked jars with complicated stamped bodies. Taken as a whole, this group of ceramics is quite similar to what Riggs and Rodning (2002) define as Early Qualla based on materials from the Coweeta Creek and Magic Waters sites elsewhere in western North Carolina. The principal similarity consists of the co-occurrence of Pisgah or Pisgah-like rims, Savannah/Wilbanks like vessel and rim forms and stamped motifs, and the appliqué rims that appear to represent Early Qualla forms. In addition, at least one of the rim strips has a saw-tooth notching



Figure 4. Early Qualla ceramics.

that Riggs and Rodning consider an early trait. This assemblage represents what could be expected as ceramic styles evolving from one formally defined ceramic series to another. The presence of the Savannah/Wilbanks like materials from the south as well as the shell tempered ceramics from the west are clear indications that the fifteenth century residents of Ravensford were not isolated from their neighbors.

The assemblage includes some sherds that are highly reminiscent of Savannah or Wilbanks material from the south (Figure 5). These include tall-necked jars with unmodified or very slightly rolled rims, which generally exhibit curvilinear stamping, including the cross-in-circle (or quartered circle) motif. Lands and grooves are usually relatively wide. The paste is generally compact and sandy.

There are a few shell tempered sherds, including at least one cord-marked jar fragment exhibiting a pinched appliqué rim in the collection. There are also a number of plain shell-tempered sherds, including this modeled sherd that may be from a



Figure 5. Ceramics resembling Savannah and Wilbanks types found in Georgia. These may represent trade between contemporary tribes.

frog effigy vessel. Shell tempered ceramics are a distinct minority in the assemblage. Given the site's location at the east edge of the Appalachian Summit, it seems reasonable to look to eastern Tennessee for the source of this material.

Middle Qualla Period

The Middle Qualla period dates from ca. A.D. 1500 and 1650. This part of the sequence is virtually absent from the Ravensford Tract being represented only by materials from a handful of pit features, with what may be two or three Middle Qualla house patterns. Since we know that Qualla and other late prehistoric populations would frequently shift residential locations within a single drainage to establish new fields and facilitate raw material procurement, it is quite possible that significant Middle Qualla remains are present in bottom lands of the Oconaluftee Unit of Great Smoky Mountains National Park on the other side of the river.

Late Qualla Period

The last known Cherokee occupations at Ravensford fall at the boundary between Middle and Late Qualla periods as defined by Riggs and Rodning (2002) about A.D. 1700. They are represented by at least 17 structures. Sixteen of those structures consist of eight pairs of the rectangular, somewhat lightly built summer houses and circular, more substantial, better insulated winter houses, similar to those that were observed in the 1700s by Timberlake and others, and have been discovered archaeologically in the Overhills region of East Tennessee and at the Alarka Site, about 25 miles southwest of Ravensford, and Mountain Park on the headwaters of the Hiwassee River (Cable 2001; Cable and Reed 2001). These eight pairs of structures at Ravensford are situated in four loci spaced from 150 to 220 m apart. One locus has three pairs of buildings, two loci have two pairs of buildings, and one locus has a single pair. Based on the even spacing of these components, as well as similarities in the architectural forms and artifact assemblages, it seems that these four loci were occupied contemporaneously for at least part of their existence. Assuming typical life spans for the structures, each locus probably represents an

occupation of from 5 to 25 or 30 years.

The rectangular summer houses at Ravensford are from 6 to 7.5 m long and from 3.5 to 4 m wide; most are of wall trench construction (Figure 6 right). The adjacent round to octagonal winter houses measure 6 to 7 m across (Figure 6, left). At least four of the winter houses, in each case the last one at each locus, were built in distinct basins and at least two of them are clearly octagonal. In each case, the latter structures at each locus are slightly larger than the earlier buildings. In all eight cases, the summer house is north or east of the winter house; each winter house was accessed via a wall-trench entryway from the south or west end of the adjacent summer house.

In addition to structures, each locus includes a number of pit features, some of which contain moderate quantities of ceramics and other refuse. These feature are basin-shaped pits that may have originally served as borrow pits; there are no signs of formal storage pits, or the “pit with posts,” facilities that are found on some eighteenth century Cherokee sites.

The best hope in dating the latest components is probably provided by the Euro-American artifact assemblage, which at present consists solely of

glass beads. The bead assemblage is dominated by small embroidery or seed beads, with turquoise and white being the most common colors. There are only a few larger necklace beads, including only about four or five striped examples. Marvin Smith, based on preliminary examination of the part of the collection, suggests a time range between about 1690–1730. Other Euro-American artifact types such as any brass or copper alloy artifacts, as well as gunflints or other evidence of firearms, are noticeably absent. The residents of all four loci were still making and using small triangular-shaped chert arrow points. At this time no detailed analysis of the associated ceramic assemblage has been completed, but based on a cursory examination of the ceramics from one of these components the following observations are offered.

The Late Qualla vessel assemblages seem to be dominated by short or squat necked, globular bodied jars, almost all of which feature thick, pinched or notched appliqué rim strips. These jars have the grit-tempered paste and burnished interiors that are typical of Late Qualla assemblages. The assemblage also includes a few cazuela or carinated bowls, some of which have the typical Qualla style incised decoration below the rim and



Figure 6. A winter (left) and summer (right) house pair.

stamping on the lower body. The stamped surfaces consist of either curvilinear or rectilinear motifs. Rectilinear motifs seem to predominate. Minority surface treatments on jars include corn-cob impressions and fine cord-marking

Euro-American Period

A detailed history of the Euro-American period is provided by Webb, Leigh, and Benyshek (2002). White settlement on the area apparently did not occur until the 1790s and until the construction of the lumber mill (Figure 7), and at the time of the establishment of the town of Ravensford in 1918 the tract was occupied by a number of small family farms. The following description of the work on this period is taken from a paper (Barrett, et al 2005) made at the 2005 meeting of the Southeastern Archaeological Conference at Columbia, South Carolina and additional information supplied by Jared Barrett and Josh Tuschl (personal communication 2006).

The vast majority of the historic archeological data recovery focused on the town of Ravensford. Some were historic components, but because of

their location were examined during the investigation of the Native American components (Figure 8). Most of the level land was occupied by the mill and wood yard. Residences and other structures were situated on the lower reaches of the mountain sides. The HPPP called for the excavation of samples sufficient to provide data for answering research questions from ten components of the town (Table 2). This data was collected for the most part in 2004.

DOCUMENTARY/ORAL HISTORY

In conjunction with excavations, the documentary history of Ravensford was examined to garner additional information about the people who lived and worked there. Documentary research included the 1930s census data (unavailable during the Phase I investigations), court records of the litigation between Ravensford Lumber Company and the National Park Service, historic photographs, and other sources. In addition to examining the documentary record, interviews were recorded with people who either lived or worked at Ravens-



Figure 7. Ravensford. Lumber mill in foreground, town on mountain side.

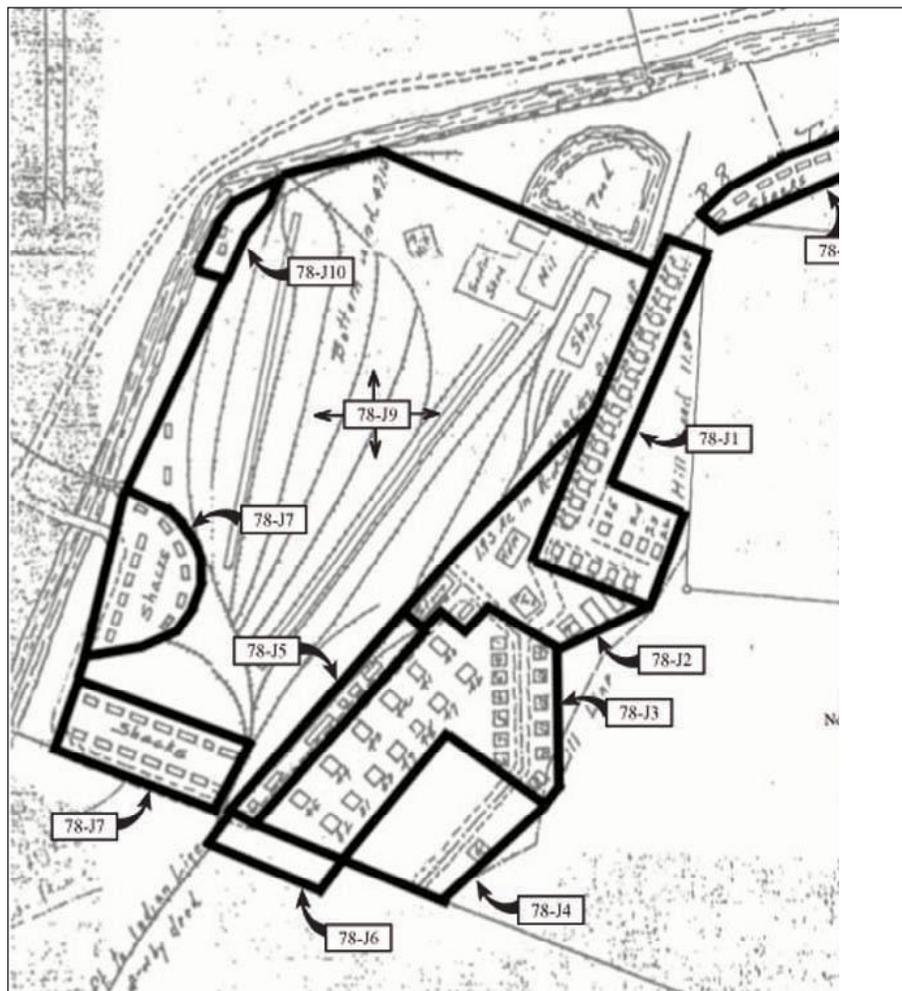


Figure 8. Euro-American archeological components overlaid on a plan of Ravensford.

ford. These interviewees included the daughter of the town doctor, the son of the man who ran the McDonald Store, the son and daughter of the mill supervisor, other children of workers at the mill, and local Cherokee who lived in the area and remember Ravensford.

Hand excavations and mechanical stripping revealed a total of 449 historic features including structural and tramway foundations, railroad ties, pipe trenches, ditches, refuse-filled pits, artifact concentrations, roadbeds, prepared cement building pads, trash dumps, stone embankments, collapsed walls, privies, and cellars. All features were recorded but not all were excavated. Features were chosen for excavation based on their potential to provide relevant information to the research ques-

tions developed for the project.

The 200,000 or so artifacts recovered from the Euro-American features are currently being analyzed. So far, approximately 2,500 unique glass vessels and 1,000 unique ceramic vessels have been identified. These items are being further researched to provide important information on the Ravensford community.

The collection of artifacts contains many interesting items such as:

- A Nicholas Power Cameragraph, an early movie projector, was identified from 31SW78-J1. Several people who were interviewed recall the Ravensford School had a movie projector.
- The doctor's office excavations produced hundreds of bottles of medicine and an

Table 2. Data Recover Efforts at Euro-American Components.

Component	Description	Data Recovery Effort
31SW78-J1	domestic area on the hillside east of the mill and Big Cove Road	Six houses sampled
31SW78-J2	Seven business and public buildings along the road in the center of the community	All excavated or sampled
31SW78-J3	expanse of homes located along the north-south street located south of the commissary	Six houses sampled
31SW78-J4	area southeast of 78-J3, including the apparent infirmary location	All sampled
31SW78-J5	row of apparent industrial structures along the road south of the commissary/office	All sampled
31SW78-J6	area surrounding McDonald's store and the associated house	Both sampled
31SW78-J7	domestic area of "shack houses" west of Big Cove Road	All sampled
31SW78-J8	domestic area of "shack houses" east of Big Cove Road and north of 78-J1	All sampled
31SW78-J9	mill/shop complex	Stripped and features excavated/recorded
31SW78-J10	town dump on the floodplain west of the terrace	Sampled

assortment of medical tools.

- Electricity was a new source of energy introduced by the Parsons Pulp and Lumber Company and it became a major part of life at Ravensford. Artifacts such as electrical wiring, batteries, radio pieces, and light bulbs have been recovered from every area excavated at Ravensford.

House Lot 48, where 24 1 m² units were hand excavated, was one of six house lots investigated in 31SW78-J3 (Figure 9). The lot was mechanically stripped to uncover subsurface features after the hand excavations were completed. Most of the 40 features were attributed to the Park Service Nursery but a few of the features date to the lumber town and include a subterranean cellar, a

sewer connection, and a sheet midden. Most of the 2,779 artifacts recovered here date to the lumber town residence but a small number is associated with the nursery.

The majority of the assemblage consists of glass artifacts; the remainder is composed of construction hardware (such as nails, bolts, screws), of historic ceramics (dominated by white refined earthenware) and some interesting items such as buttons, doll parts, flatware, shoes, and a carpenter's crayon.

The root cellar measured 2.4 by 2.1 m and 91 cm deep was excavated into the subsoil with an entrance along the south wall of the cellar and an earthen ledge along the east wall to store items off the floor. At some point after the house was auctioned off in the mid-1930s, discarded lumber



Figure 9. Cellar, House Lot #48.

and cut foundation stones were tossed in to the cellar to fill it.

Excavators found a silver ring made from an 1895 half-dollar at the base of the cellar deposits (Figure 10).

Excavations in the sheet midden, measuring 5 x 6.5 m and 16 cm deep, produced white refined earthenware, bottle glass, and such furnishings and personal items as carbon battery rods, jar lid liners, and a light bulb base.

Much more will be learned about the mill and town when the analysis of the data and collected materials is finished. We expect to learn much more about the lives of the various social groups that lived at the site, gain a better understanding of both local and national commerce and other matters.

The Ravensford project has included an oral history component, directed by Dr. Michael Ann Williams of the Folklife Program at Western Ken-

tucky University. Dr. Williams and her students interviewed former residents of Ravensford and the surrounding area, and have also gathered historic photos and other information concerning life at Ravensford. This information will be presented in a separate report, and will also be used by archaeologists to flesh out the story of life at Ravensford. Information has provided source material for an interactive CD, *Remembering Ravensford*, which presents these interviews, photographs, and other documentation in easily accessible form. *Remembering Ravensford* is currently being revised and updated with additional information. When it is completed copies will be provided to NPS for interpretation and documentation of the town and its citizens.

During the course of field investigations a number of public presentations were made in the Cherokee community to inform tribal members

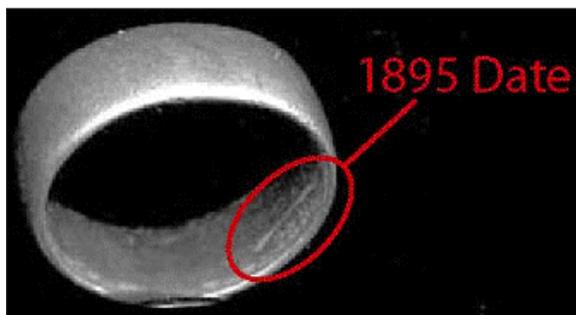


Figure 10. Silver ring made from an 1895 half-dollar.

about the project and its relevance to Cherokee cultural knowledge. For example, PowerPoint presentations about the project and its implications for the classroom have been given to all the teachers in the tribal school system. Presentations have been made at Tsali Manor (Elder Care). As outgrowth of the project, WKU produced a short film “Ravensford: The Story of Our Land” for EBCI CCS, which was shown on tribal cable to all CCS students prior to dedication ceremonies in April 2006. Information coming from the project has been available to the professional community by papers presented at the Qualla Ceramic Workshop (Webb 2005) and the Southeast Archaeological Conference (Webb et al 2005 and McKee et al 2005). TRC prepared a tri-panel poster on the Ravensford work for display during Archaeology Days at the North Carolina Natural History Museum in October, 2006 (Figures 11–13). TRC will provide a pdf file of this poster on request.

LABORATORY WORK— NATIVE AMERICAN ARTIFACTS

The Ravensford laboratory analysis and reporting are proceeding on schedule. Prehistoric and Historic Cherokee materials recovered from the excavations have been washed and sorted, and the provenience data doubled checked. Specimens have been separated into basic categories (ceramics, lithic tools, debitage, etc.) for future study. More than 24,000 bag numbers have been used to track the progress of approximately a quarter of a million specimens through the analysis process.

STONE

Lithic analysis is being conducted under the direction of Tasha Benyshek and Bryan Jackson in the Asheville office. The initial analysis is focusing on the debitage; all chipped and ground stone tools are being set aside for more detailed analyses. TRC is pursuing a three-tiered analysis procedure for the debitage. Debitage from key contexts (block excavations and most features) is being analyzed according to raw material type (using a type collection assembled from site materials), size (using nested screens), cortex percentage, and category (generally following Sullivan and Rozen [1985]). In addition, debitage (and tools) from Cherokee structure contexts is undergoing more intensive technological analysis under the direction of Charlie Cobb at the University of Binghamton. Finally, debitage from remaining contexts (dispersed test units, data recovery shovel tests, and surface contexts) has been analyzed only by raw material.

The data from these analyses will be entered into an MSAccess® database, which will be linked with the electronic bag list and other data.

POTTERY

Ceramic analysis is being conducted under the direction of Tasha Benyshek in the Asheville office in 2007. Initially, the ceramics will be divided into > 2 cm and < 2 cm categories; the < 2 cm materials will be scanned for pipe fragments or unusual items that will be then set aside for detailed examination. The remaining body sherds will be analyzed by surface treatment and temper categories. All sherds with unusual surface treatments, or exhibiting potentially recognizable motifs, will be set aside for more detailed analyses. Rim sherds will also be analyzed in a similar fashion, and additional metric and non-metric traits will be recorded for each.

Once the initial analyses are complete, individual vessels will be identified (based on sizeable rim sherds only), and further categorized by size and form. As part of this analysis, TRC will search for cross-mends within and among feature and structure contexts, as well as examine similarities and differences in vessel assemblages and mo-

SETTING AND SITE HISTORY: 8000 B.C. – A.D. 1927

The Ravensford site is situated along the Raven Fork of the Oconaluftee River, just north of the town of Cherokee in Swain County, North Carolina. The area was acquired by the Eastern Band of Cherokee Indians from Great Smoky Mountains National Park in 2003, and will soon be used for a new K-12 school complex being built by the Cherokee Central Schools. Large-scale excavations were necessary to explore the archaeological remains on the property before the school construction could begin.



The work at Ravensford covered over 40 acres, and investigated traces of American Indian, Historic Cherokee, and European-American occupations dating from 8000 B.C. to about A.D. 1927. The work began with hand-excavation of small test squares and larger blocks; a trackhoe was then used to remove the disturbed topsoil and old roads and search for intact deposits. No human graves were excavated.

The earliest occupants of Ravensford were small bands of people who moved from place to place with the seasons. Some of these groups camped on the sandy levees along the river, and left behind clusters of rock that had served as cooking hearths, as well as stone tools and the waste debris from making and repairing other tools (right).



The permanent settlement of Ravensford began about 600 years ago, when ancestral Cherokee Indians built two settlements, each containing up to 12 houses. Although these houses are now long gone, their traces survive as patterns of round post holes filled with dark soil, which represent the walls and roof supports of these buildings (below). Inside are the remains of central hearths (below right).



Figure 11. Left panel of the Ravensford poster.

RAVENSFORD

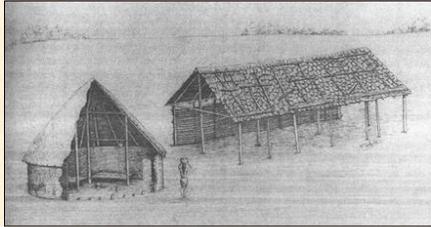
10,000 Years of Life in the North Carolina Mountains

HISTORIC CHEROKEE SUMMER AND WINTER HOUSES: A.D. 1680–1720

Many early European travelers in Cherokee country reported that eighteenth-century Cherokee families had two different types of houses: rectangular and lightly-built “summer houses,” which were the main dwellings, and circular to octagonal and tightly-insulated “winter houses” or “hot houses,” which were used during the colder winter months.

There are no known contemporary drawings of such Cherokee houses, but this cut-away drawing gives an idea of how they probably looked.

“Every family has besides the Dwelling House still a smaller Hothouse. This has but a very small Opening to creep into it, & this is their Abode in cold weather.... Their Couches of Cane fixed round about are their Sleeping Places The Old People having but little & the Children, till they are 10 years old, no Cloathes at all, they could not hold it out in cold Weather without such Houses.”
Martin Schneider, 1783–1784



Ravensford contains the remains of four Cherokee homesteads dating between about 1680 and 1720, each with one or more pairs of summer and winter houses (left). The former summer houses are now visible only as rows of post holes (below left), but the attached winter houses survive as dark, filled-in depressions in the subsoil. Several of these contains the remains of the central hearths, as well as of the burned roof and wall timbers that collapsed on the floors after the buildings were destroyed (below).

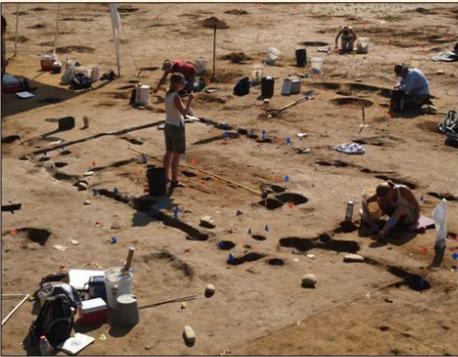
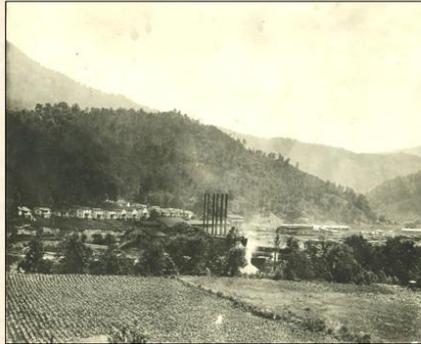


Figure 12. Center panel of the Ravensford poster.

THE RAVENSFORD LUMBER TOWN: 1918–1927

In 1918 the Parsons Pulp and Lumber Company established a lumber mill and town at Ravensford. The company planned to cut spruce from some 30,000 acres of the nearby mountains to supply wood for use in World War I fighter planes.



Despite the written records available, we still have many questions about the lives of workers at Ravensford and other early 20th century mill towns in North Carolina. For this reason, the Ravensford project included excavations of selected house lots and trash deposits dating to this period.

The new town of Ravensford included a large sawmill and associated industrial buildings and rail lines as well as over 70 houses, two stores, a hotel, a doctor's office/barber shop, an infirmary, and a clubhouse. Although the mill at Ravensford was never very profitable, the town survived until late 1927, when the lumber company went bankrupt. The land was acquired for Great Smoky Mountains National Park in 1931, and most of the surviving buildings were dismantled.



The excavations recovered a wealth of items associated with the loggers and their families, including medicinal bottles and supplies contained within the collapsed and buried remains of the doctor's office. The ongoing analysis of these and other artifacts will tell us much about how people lived and worked at Ravensford during the 1920s, and how their lives compared to those of nearby farmers and others in western North Carolina.

ACKNOWLEDGMENTS

The Ravensford project has been a cooperative effort among many agencies and individuals. Funding was provided by the Eastern Band of Cherokee Indians. The Eastern Band's Tribal Historic Preservation Office and the National Park Service's Southeast Archeological Center provided encouragement and technical oversight throughout the work, and additional oversight and support were provided by Great Smoky Mountains National Park and the North Carolina State Historic Preservation Office.

Tasha Bernyshek directed the fieldwork on the prehistoric and Historic Cherokee components, and Jared Barrett directed work on the Ravensford lumber town. Paul Webb and Larry McKee served as Principal Investigators. Over 60 crew members participated in some or all of the fieldwork, which extended from April 2004 through April 2006.

The drawing of the reconstructed Cherokee houses is by Tom Whyte, ©McClung Museum, University of Tennessee.

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Figure 13. Right panel of the Ravensford poster.

tifs within and among various components. The ultimate goal of the analyses will be a thorough discussion of the ceramic assemblage in terms of chronology, style, and function.

EUROPEAN ARTIFACTS ASSOCIATED WITH THE NATIVE AMERICAN COMPONENTS

Analysis of the European artifacts from Cherokee contexts is proceeding. Based on preliminary counts, we have approximately 1,150 glass beads and two copper alloy tinkler cones from Cherokee contexts. In addition to examining these artifacts for chronological indicators and to establish the nature of their use by their Cherokee owners and their spatial distribution will be studied to deter-

mine possible chronological or other relationships among various Cherokee components.

SPATIAL STUDIES

TRC is preparing an overall site map, as well as individual structure and feature maps. The basic steps in this process are as follows:

1. All large format structure maps have been scanned in color or black and white, as appropriate. Structure maps have been stitched together, as appropriate (Figure 14).
2. Maps are being georeferenced and then digitized in ArcGIS®; approximately 40 of 110 maps have been digitized to date. Once the prelimi-

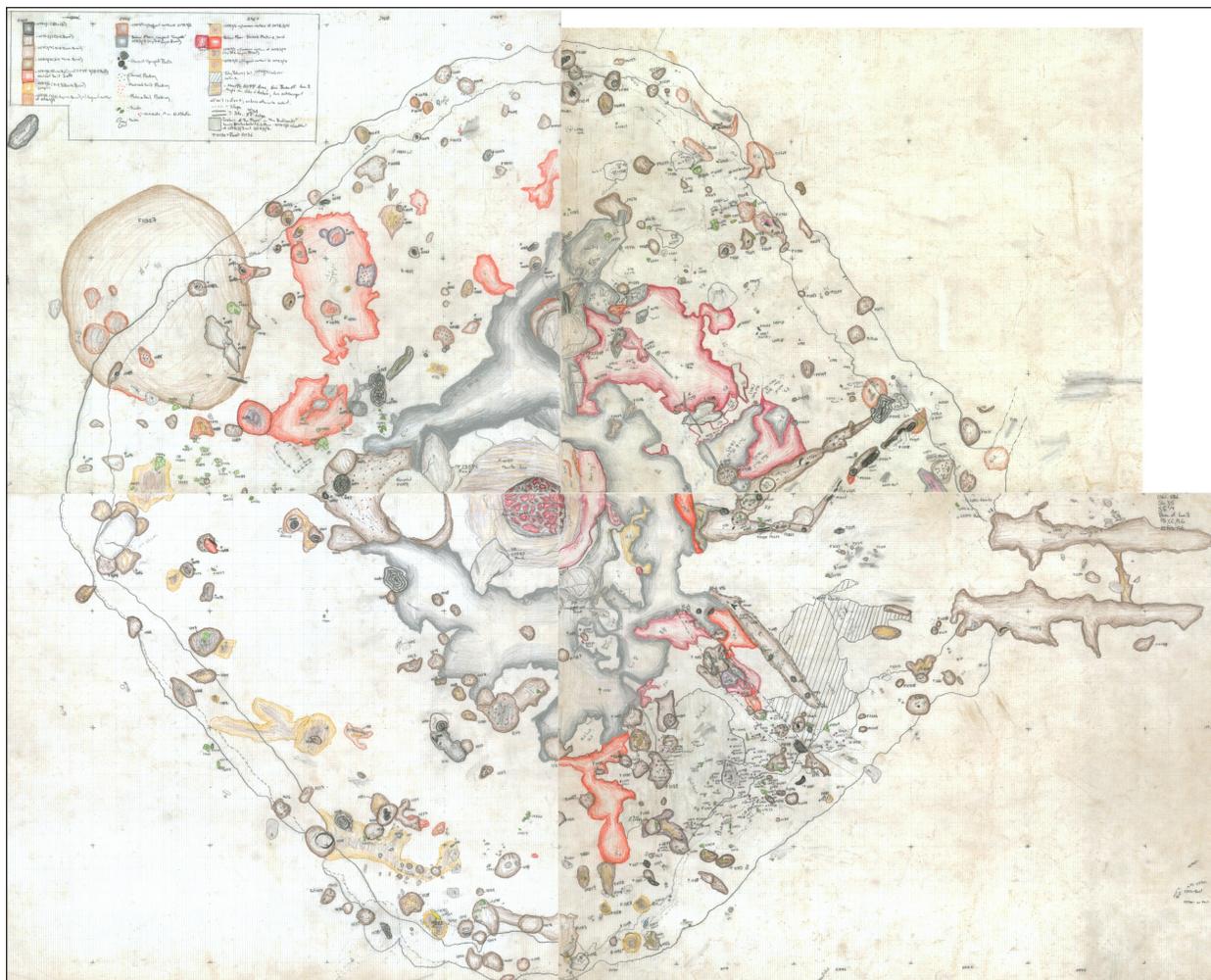


Figure 14. Composite field map, Structure 35, Level 3.

nary maps are produced, they will then be checked against the hand-drawn maps and other data. An example of this work is shown in Figure 15 which depicts single as well as clusters of structures identified in a portion of the site south of the Job Corps Road (top) and west of Big Cove Road (right).

3. These layers will then be combined with individual feature drawings, along with the total station data for other posts and landscape features, test unit locations, etc., to produce an infinitely scalable site map in ArcGIS (see preliminary example, attached). Versions of this map can be used to illustrate structure, post, and feature distribution across the site as a whole, in individual communities, or in individual structures (see examples attached); the map can also be used to compare artifact densities in shovel tests and test units with feature locations, etc. At the conclusion of the project, the map will be exported into KMS format so that the map can be viewed and manipulated using Google Earth® (available as a free download). This will allow easy viewing and use of the map by Cherokee school students and others.

TRC has also begun experimenting with other GIS analyses, such as the use of the ArcGIS® Area Solar Radiation tool to produce maps of the distribution of solar radiation at the site for potential use in determining more favorable locations for structures and agricultural fields, etc.

HISTORIC EURO-AMERICAN MATERIALS

Analysis and Reporting of the Euro-American materials, the majority of which was recovered from the lumber town, is being conducted in Nashville.

PRELIMINARY ARTIFACT PROCESSING/SORTING

Washing and preliminary sorting of all Euro-American artifacts has been completed. Over 170,000 historic artifacts were recovered, ranging from intact pills and a partially charred ledger to a cast iron toilet tank. As with the prehistoric/Historic Cherokee materials, the washing was followed by a preliminary sort, in which artifacts were

divided into general groups (ceramics, glass, etc.) for future analysis. The historic flotation samples (derived primarily from privy contexts) have been processed. Preliminary sorting followed the same procedures used for the prehistoric/Historic Cherokee materials.

ARTIFACT ANALYSIS

Artifacts were first separated into general groups. Artifacts in these groups within the same House Lot or Area were then laid out on tables, grouped according to similarities, and cross-mended as appropriate. For the glass and ceramics, a minimum number of individuals (MNI) count was determined. Additional research was then conducted to obtain more information on an object's function as well as chronological data. Finally, each vessel was described based upon contents, shape, type of glass, and any embossing or manufacturers marks. These descriptions formed the basis of the ceramic and glass vessel catalogs.

For the significant finds, efforts were made to identify each item, and similar items were grouped together for analysis. Individual artifacts were then researched and analyzed as appropriate, and results were then entered into the database. In addition to the basic classification, all artifact categories will be assigned a functional category, which will facilitate comparison among house lots and other proveniences.

Faunal analyses are being conducted by Judith Sichler at the University of Tennessee. Archaeobotanical analysis by Larissa Thomas of TRC is underway, and preliminary results point to the presence of a variety of wild foods (including berries and maypops) in the local diet. A variety of specialized analyses are also underway. Much of this analysis is concentrating on flotation and soil samples recovered from privy features, in an attempt to investigate research questions relating to diet and public health. The preliminary results of analyses conducted by Karl Reinhard of the University of Nebraska suggest that the Ravensford population was relatively healthy, and suffered from intestinal parasites at a fairly low rate. Gas Chromatography/Mass Spectrometry (GC/MS)



Aerial map of structures identified in a portion of the site south of the Job Corps Road (top) and west of Big Cove Road (right).

analysis is being conducted of selected intact pills from the doctor's office at Ravensford.

REPORTING

TRC is organizing data concurrently with the ongoing analyses for the Cherokee materials. All project documentation (maps, notes, and forms) has been copied, and is being stored at multiple locations. Summary databases of structures and features are in progress, and work has begun on some feature descriptions. TRC is developing the report outlines for the Cherokee and Euro-American materials which will be circulated to NPS and the Eastern Band THPO it for review this spring.

SUMMARY

The work has provided interesting data on several aspects of the occupational sequence, but it is clear that a major contribution of the Native American archeology will be the knowledge gained about the formation of Cherokee culture from about 1100 A.D. through the eighteenth century. The data will certainly refine our chronological understanding of this development and will certainly better define the economic, subsistence, social organization and community patterns in this part of the Cherokee domain. This new interpretation will be because Ravensford has provided a rich assemblage of material for study. The Early Qualla materials, briefly described here, represent the largest fifteenth century assemblage known from the Cherokee heartland. The structure, feature, ceramic, and subsistence data from these assemblages should give us very good insight into developments during this period, one in which multiple influences seem to have combined to give birth to what we consider the Qualla ceramic tradition. We hope that a better understanding of this crucial time period, coupled with the analysis of additional, and presumably earlier, materials from other parts of the site, will also help us to approach the larger question concerning the antiquity of the Cherokee people in the southern Appalachians.

The four Late Qualla components dating to ca. A.D. 1700 will provide unparalleled data on Late Cherokee architectural, material culture, subsistence, and other aspects of Cherokee life on the east flank of the Appalachians. In particular, it will be very interesting to look at the household level of similarities and differences in architecture, household organization, and material culture in these four components.

The efforts expended on the Euro-American resources will allow a better understanding of the early twentieth century timber industry and its effect on the lives of people who, by choice or economic imperative, chose to pursue making a living in this dangerous occupation in a rather isolated part of America.

The excavations conducted thus far have provided more than 400,000 specimens and documents. The precise number of objects that will need to be curation will not be known until the laboratory analyses are completed. However the approximate volume of the collection has been estimated by TRC as shown in Table 3.

Table 3. Volume of Collection.

Item	Total
Artifacts	850
Artifacts (oversized)	200
Beams/samples	60
Unprocessed Waterscreen Residue	20
Flotation Heavy Fraction	106
Flotation Light Fraction	39
Soil Samples	215
Mixed	12
Paperwork (estimated)	30
Totals	1532

The MOA calls for the collection to be curated temporarily by the TRC. At the conclusion of the work, these materials will be curated in a facility meeting the standards of 36 CFR 79, Curation of Federally Owned and Administered Archaeological Collections. The Museum of the Cherokee Indian is the tribally designated repository for archeological materials. Plans are currently in progress to enlarge the curation facilities of the museum to accommodate this and other archeo-

logical collections belonging to the tribe. In the event these facilities are not available at the time TRC completes its work and is ready to transfer the collection to the tribe the Southeast Archeological Center has offered to temporarily store the collection.

For individuals involved in cultural resource management, it is important to note that the data recovered from the initial survey which sampled the deposits at 10 m intervals (which is about two to three times more intensive than most archeological surveys) can be compared with what the stripping of the site showed was actually present on the tract. The shovel test data indicated that we could expect to find 7 or so Qualla phase components. This estimate was pretty close to what was found regarding the late Qualla phase but the survey provided very little information on the location of over 70 earlier structures as well as the earlier components that were found. The survey told almost nothing of the earlier settlements.

It is clear that even 10 m shovel testing did not provide a good indication of the presence of the intensity of the prehistoric occupation of the tract. Thus the selection of testing interval may go a long way towards explaining the relative invisibility of Early Qualla and its precedents in western North Carolina, and provides a strong caution regarding the assessment of large alluvial tracts in this region based on survey data, even that from systematic, close-order shovel testing.

The Ravensford work will provide important data to the professional community, and that will help advance our understanding of many aspects of previous lifeways in the area. Given the nature of the Ravensford data, archeologists interested in the Appalachian Summit Area will be able to address

larger issues relating to late prehistoric and early historic period Cherokee culture genesis and social relations, and perhaps even contribute to some issues of broader anthropological interest.

We archeologists who have planned and executed this project have an audience outside the professional community—one that may be more important than archeologists and historians. That audience is the people of the Eastern Band of Cherokee Indians, who live today within the heart of the remaining Cherokee territory in the East. The Ravensford research comes at a crucial time when those Cherokee are struggling to maintain and revitalize their traditions in the face of an all consuming broader American culture. They have a right to the knowledge the project has revealed, and will produce, and it is our job to assure this knowledge is provided to them in a non-technical, jargonless manner. There has been a commitment to make the information gathered available to the Cherokee public through a variety of site visits, presentations, and ultimately publications and curriculum materials. In the end, the success of this project will be measured in terms of our success in giving information back to the Cherokee students and other tribal members, and in how that information can assist the Cherokees people in understanding their past.

In the author's professional opinion the field research conducted to date by TRC on the Ravensford tract has met all the requirements of the Historic Properties Preservation Plan agreed to by the consulting parties. I am confident that the small amount of investigation yet to be accomplished will be conducted in a similar fashion when the southern part of "old" Big Cove Road is removed in 2007 or 2008.

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