ARCHAEOLOGICAL TESTING AT ALLENBROOK (9FU286), CHATTAHOOCHEE RIVER NATIONAL RECREATION AREA, ROSWELL, GEORGIA



Chicora Research Contribution 547

ARCHAEOLOGICAL TESTING AT ALLENBROOK (9FU286), CHATTAHOOCHEE RIVER NATIONAL RECREATION AREA, ROSWELL, GEORGIA

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Prepared For:



National Park Service Chattahoochee River National Recreation Area 1978 Island Ford Parkway Atlanta, Georgia 30350

Contract No. P11PC50748 ARPA Permit No. CHAT 2012-001

CHICORA RESEARCH CONTRIBUTION 547



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MANAGEMENT SUMMARY

The investigations were conducted in compliance with ARPA Permit CHAT 2012-001 under contract with the National Park Service to examine archaeological features that may be associated with the foundation wall of the Allenbrook House (9FU286, CHAT-98) and determine if archaeological evidence of a previous porch on the south façade of the structure could be identified.

The work was conducted by Dr. Michael Trinkley, RPA (who was on-site during the entire project), Ms. Debi Hacker, and Mr. Dennis Forest beginning Monday, August 20 through Thursday, August 23. A total of 66 person hours were spent in the field, with an additional 8 person hours spent out of the field conducting research.

In compliance with the ARPA permit, one 2x2 m test unit was excavated along the S (front) elevation of the Allenbrook House. Excavation levels were a combination of arbitrary levels and natural soil levels. This was achieved by, in so far as possible, using natural soil levels, but where these exceeded approximately 10cm, breaking them into levels. The goal of this was to prevent intermixing of artifacts that may relate to different cultural events.

Excavation was by hand. Screening was through 1/4" (0.635cm) with all material collected except for brick or mortar rubble (of which there was very little). Where present, this material was collected, weighed, and discarded in the field.

Excavations found about 7cm of a reddish brown (5YR 4/3) loam at the surface, designated Level 1. Approximately 60% of this was screened. All materials recovered were modern, primarily related to recent renovations of the structure, such as dry wall screws, aluminum screen parts, etc.

Underlying this modern humic layer was a very compact mottled red (2.5YR 4/4) clay and

saprolite rock that was designated Level 2 and extended from 0.07 to 0.17m bs. This zone represented fill and no artifacts were identified.

Level 3 was slightly deeper, extending from 0.17 to 0.35m and consisted of identical compact mottled red (2.5YR 4/4) clay and saprolite rock that graded into a red clay (2.5YR 4/6) and saprolite rock. This fill was also sterile.

Level 4 extended from 0.35 to 0.48m and consisted of red clay (2.5YR 4/6) and saprolite rock.

Level 5 extended from 0.48 to 0.53m and consisted of red clay (2.5YR4/6), but lacked the saprolite rock found in the upper levels. In addition, this level produced a small quantity of artifacts that appear consistent with those found in association with original site humus. There was no clear evidence of mixing with underlying cultural levels. One possible explanation is that this level came from elsewhere in the Allenbrook yard, perhaps from the rear which was at one time terraced.

Level 6 represents the original site humus, consisting of a reddish brown (2.5YR 5/3) sandy loam. Artifacts were plentiful including nails, window glass, and pearlware and whiteware ceramics. Of special interest were a relatively large number of buttons recovered. This level extended from 0.53 to 0.58m.

The excavations identified one square post mold at the base of Level 6. Upon excavation it was found to be shallow (5cm) and to measure about 4 by 5cm. It was likely associated with scantling erected to lay the brick structure. Also identified was a relatively narrow builder's trench (Feature 1) parallel to the stone wall. This trench did not extend to the base of the wall, suggesting that the wall was constructed primarily from the interior basement. This feature measured about 0.2 to 0.3m in width and was a maximum of 0.27m in depth. Artifacts, including window glass and ceramics were recovered.

No evidence of porch piers was identified and the old humus thinned away from the house. This suggests that piers were set shallowly and were completely removed by the infill of the yard. We did, however, identify very good indirect evidence of the porch.

The unit was fortuitously placed to expose an iron grounding rod that still contained about 0.2m of attached copper grounding wire. We believe this was likely associated with lightening protection originally installed on the house. The location of the grounding rod, about 1.7m south of the structure wall and 1.4m west of the structure corner, identifies the SE corner of the original porch. This grounding rod is in almost perfect alignment with the porch ghosting on the south wall. This would make the porch about 1.6m in width (about 5 feet). Given the disturbance to the yard, this is likely the best evidence that will be identified of the original porch.

At the conclusion of the hand excavations, a mini-excavator with a grading bar welded to the teeth was used to open a trench beginning at the SE corner of the hand excavation southward for 4.5m. This trench was 1.2 meters in width, tapering to 0.6m at its southern end. The trench was opened to expose Level 6, which was found intact throughout the trench, although it became increasingly shallow to the north. This suggests deposition under the porch and erosion beyond the porch.

No features were identified in this trench and no further evidence of the porch was encountered. The yard, however, appears to remain relatively level. There is no indication of a gradual decline to the existing road, suggesting that the house yard was always elevated above the roadway.

The artifacts are curated by NPS under Accession No. SEAC-02582.

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Introduction

The Project

This investigation was conducted by Dr. Michael Trinkley of Chicora Foundation, Inc. for the National Park Service, Chattahoochee River National Recreation Area under NPS Contract No. P11PC50748 and Archaeological Resources

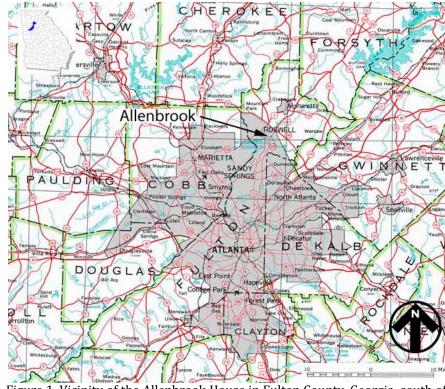


Figure 1. Vicinity of the Allenbrook House in Fulton County, Georgia, south of Roswell.

Protection Act (ARPA) Permit No. CHAT 2012-001. The work was conducted to examine and explore the stratigraphy along the basement wall of the Allenbrook House and to determine if conclusions could be drawn concerning the location of the structure's original porch.

The project site is situated in northern Fulton County, Georgia about 1.6 km south of Roswell and 30.6 km miles north of downtown Atlanta (Figure 1). The Chattahoochee River National Recreation Area (CRNRA) consists of about 9,000 acres spread along 47 miles of the Chattahoochee River from Lake Sidney Lanier to

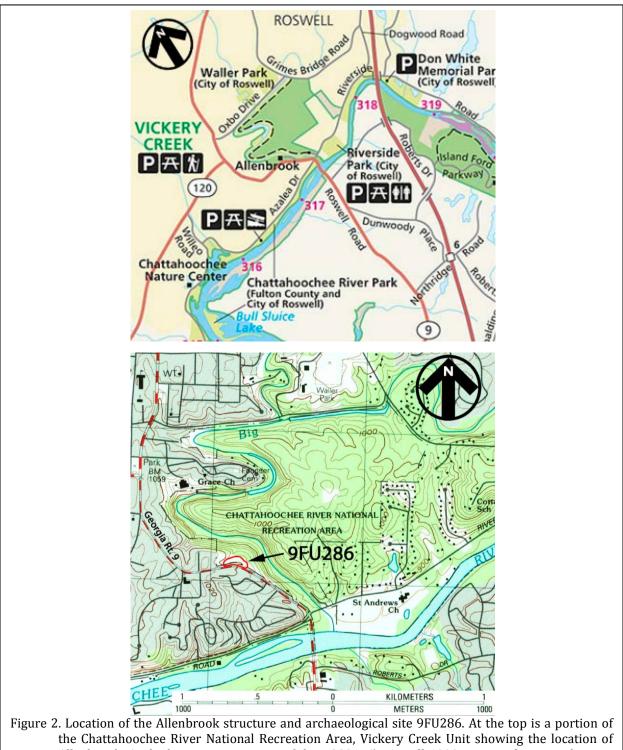
Peachtree Creek in southern Fulton County. Established in 1978, CRNRA is a series of urban parklands. The CRNRA provides access to the Chattahoochee River through parking areas and trails along its banks.

The Allenbrook House is situated in the Vickery Unit immediately north of Roswell Road (GA 9) on the bluff overlooking Big (or Vickery) Creek (Figure 2). The Vickery Creek Unit is 254 acres and is characterized by steep rock bluffs and rugged terrain along the creek, a tributary on the western bank of the Chattahoochee

The site was identified as Georgia archaeological site 9FU286 in 1997 (Gantt 1997), although the historic

structure was well known in the Roswell community, being recorded by an historic area study in 1973 (Kidd and Associates 1973). The site was determined eligible for inclusion on the National Register of Historic Places as a result of

INTRODUCTION



the Chattahoochee River National Recreation Area, Vickery Creek Unit showing the location of Allenbrook. At the bottom is a portion of the USGS 7.5' Roswell 1992 topographic map showing the extent of the identified archaeological site and surrounding topography.



Figure 3. View of the Allenbrook House, looking north-northwest.

1977 work. Additional investigations were conducted in 2004 (Jordan 2004:100, 103-105). This work suggested that the archaeological resources had the potential to contribute to the site's interpretation. In addition, the authors speculate that "the area closer to the house could contain buried artifact deposits and possibly, structural features" (Jordan 2004:105).

Allenbrook (Figure 3) was likely built by James R. King between 1851 and 1856 to provide ready access to his nearby Ivy Mill, built in 1857 (Bass et al. 2004). The property passed out of the King family after the Civil War and was eventually purchased by the Bell family in 1932. It was acquired by the National Park Service in 1978 (Bass et al. 2004:2).

Topography slopes dramatically to Big Creek in the south and the structure is found on a ridge that has been cut by the highway to the south. Access today is by way of a gravel drive that slopes up to the parking area about 200 feet east of the house. Vegetation includes grassed yard, a few cultivated shrubs, and woods surrounding the yard opening.

The site topography, however, has been

altered not only by highway modifications. but also by the various occupants of Allenbook. The structure itself has also undergone а number of transformincluding the ations. removal of the original porch shown in а painting in the early 1930s. The replacement was itself porch removed and a new porch was installed in 1940s. Most recently the NPS conducted renovations in 2010.

After renovations it was found that

water was entering the structure along the southeast corner. NPS determined that foundation work would be necessary to prevent additional damage. In addition, there was an interest in attempting to generate information concerning the nature and dimensions of the original porch.

Chicora Foundation was contacted by NPS representative Mr. Charlie Jackson with a request for a proposal to examine the southeast corner of the structure and determine if the original porch could be identified. A proposal for the work was submitted in August 2011 and an agreement, covering both work at nearby Scribner Cemetery and Allenbrook, was completed in November 2011.

By early February 2012 NPS determined that an ARPA permit would be required for the work and the permit documents were submitted by the end of February. The permit was issued in August 2012 and the work was conducted the week of August 20, 2012. The permit and associated methods will be more fully discussed in a following section, but briefly the work would entail the excavation of a single test unit adjacent to the structure in order to examine site stratigraphy and evaluate the potential of foundation work to impact archaeological resources, as well as mechanical stripping to determine if additional information could be obtained about the original porch. This report provides the details of this work as well as the associated conclusions and recommendations.

Curation

The field notes and artifacts from Chicora's investigations at 9FU286 (CHAT-98) will be curated by the NPS as Accession No. SEAC-02582. The artifacts have been cleaned and provisionally cataloged following the NPS provenience system. All original records and duplicate records will be provided to the curatorial facility on pH neutral, alkaline buffered paper. Photographic documentation is entirely digital. Copies of all photographs will be provided as tiff images to the NPS.

Natural Environment

Physiography

The project area is situated in northern Fulton County, Georgia about 1.6 km south of Roswell and 30.6 km north of downtown Atlanta. It is bordered by Cherokee and Forsyth counties to the north; Gwinnett, DeKalb and Clayton counties to the east; Coweta and Fayette counties are found along the southern border; and Carroll, Cobb, and Douglas counties border to the west.

Fulton and the surrounding nine counties form what is known as the Atlanta Regional Commission and Fulton was fully urbanized by 1990. Twenty-eight counties form the Metropolitan Statistical Area (MSA) and 33 counties form the Atlanta Combined Statistical Area (CSA), a larger trade area that has a population approaching six million and is the largest in the Southeast.

Fulton is situated in the Piedmont Province, characterized by a dendritic drainage pattern where the terrain has been extensively dissected and degraded. Physiographically, the Piedmont is a thoroughly dissected plain. The relief ranges from nearly level to steep. Fulton contains four distinct districts: the Central Uplands in the northwestern corner, the Gainesville Ridges in the central area, the Winder Slope in the lower half, and the Greenville Slope in the southern corner (Hodler and Schretter 1986).

Allenbrook is found in the area of the Gainesville Ridges, a series of northeast-tending, low, parallel ridges separated by narrow valleys and rolling topography. The district's ridges, with elevations between 210 to 490 m above mean sea level (AMSL), control the flow of the Chattahoochee and its tributaries. Topography is generally rolling to hilly. Elevations in northern

Fulton County range from 365 m above mean sea level in the upper portion to 275 m at the Chattahoochee River. As the Chattahoochee travels about 120 km to exit Fulton County, its elevation drops to approximately 210 m.

Areas with the most severe slopes are situated along the banks of the Chattahoochee River and the various streams that feed into the river, such as Big Creek. In the vicinity of the Allenbrook House the elevation is about 300 m AMSL.

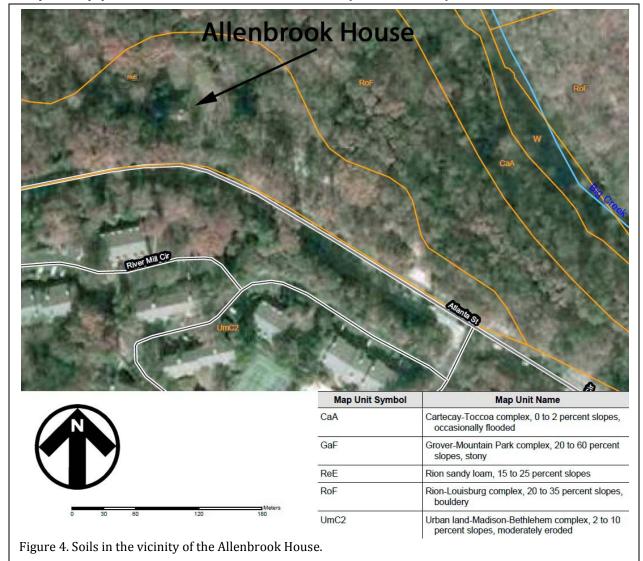
Geology and Soils

The ridges are composed of quartzite and gneiss, while the valleys are underlain by phyllonite and schist (Georgia Environmental Protection Division 1997). The courses of the Chattahoochee River and its tributaries are strongly controlled by the ridges in the Gainesville Ridges district. This ridge crest is the drainage divide between southwest flowing streams and those streams draining to the south. The northeastern and central portions of the Central Upland District immediately to the north contains a series of low, linear ridges, separated by broad, open valleys. Streams flowing through these areas are generally transverse to the structure and occupy valleys 45 to 60 m below the ridge crests.

The Chattahoochee River Basin is underlain by Precambrian and Paleozoic crystalline rocks, predominantly gneiss and schists with lesser amounts of metamorphosed volcanic rocks, metamorphosed sedimentary rocks, and granites. Fulton County contains much of the basin's granitic intrusions. The course of the river is principally guided by a zone of intensely sheared and less resistant rocks created by movement along the Brevard Fault Zone. Rock units are generally aligned to the northeast parallel to other regional structures. Parent rock is generally covered by a layer of weathered rock and soil, ranging in thickness from less than a meter to more than 45 m.

In the vicinity of Allenbrook the subsurface rocks consist of Precambrian to Paleozoic biotitic gneiss, mica schist, and amphibolite (Geologic Resources Division 2012).

The Southern Piedmont is dominated by the ultisols, which are characterized by deeply weathered sandy or loamy surface horizons and loamy or clayey subsurface horizons. Piedmont ultisols are acidic, low in nitrogen and phosphorus, and generally lack the original topsoil. Massive soil movement from historical agricultural practices resulted in sediment deposition in basin streams and water bodies (Georgia Environmental Protection Division 1997). Upland soils are typically well drained with loamy surface layers. On broad, rolling landscapes the subsoils tend to be red, dark red, and brown clays. Soils on the dissected landscapes of narrow ridgetops and steep side slopes along the Chattahoochee River and its tributaries have a loamy subsoil in shades of red and brown (Marshall 2008:1)



Most of the first bottoms of the Chattahoochee River are well drained, although they are subject to flooding several times during any given year. In many places along smaller creeks and streams, however, wash from the uplands have filled channels, altering drainage, and creating swampy or semi-swampy conditions for much of the year (Walker et al. 1958:2).

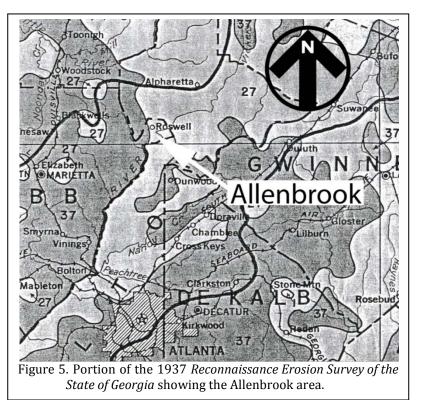
In the vicinity of Allenbrook the Madison-Louisa Soil Association is found. This association is characteristic of the heavily dissected uplands. Underlying rock is primarily mica schist with considerable quartz in some areas (Walker et al. 1958:55).

Five soil series are found around Allenbrook (Figure 4), although the structure and associated grounds consist

exclusively of Rion sandy loams. These are well drained clay soils found on slopes and are formed from residuum weathered from granite and gneiss. The typical profile consists of an A horizon up to 18 cm in depth consisting of a strong brown (7.5YR 4/6) sandy loam that may contain both cobbles and gravel. It sits on a B1t horizon of yellowish red (5YR 4/6) sandy clay loam that is strongly acidic, but contains fewer cobbles and gravel. It extends to a depth of 50 cm. The Bt2 horizon, to a depth of 90 cm consists of yellowish red (5YR 4/6) sandy loam or sandy clay loam may be found between the A and Bt horizons.

To the north of the structure, toward Big Creek, where the topography is steeper, Rion-Louisburg complex soils are found. South of the highway Urban Land-Madison-Bethlehem soils are common. These areas have been extensively altered by urbanization, although remnant areas of both Madison and Bethlehem soils are present.

Fulton County has lost up to 18 cm of soil



through erosion in the nineteenth and early twentieth centuries (Trimble 1974:3). It is part of the area classified by Trimble as having low antebellum erosive land use increasing to high levels by 1920 and belonging to his Region IV – General Farming and Cotton Area (Trimble 1974:15).

The 1937 Soil Conservation Service Reconnaissance Erosion Survey (Figure 5) found extensive areas of severe sheet erosion with occasional gullies, although the immediate vicinity of the Allenbrook House was classified as having moderate sheet erosion with occasional gullies. Nevertheless, this reveals the potential for agricultural erosion to affect archaeological sites.

Within recent times this area has been logged, likely increasing soil loss originating during earlier agricultural activities. The United States Forest Service has determined that logging accounts for upwards of 0.36 tons of soil erosion per acre per year in this region, while areas of skid trails have erosion rates of about 9.91 tons per acre per year (U.S. Department of Agriculture 1980:25).

Floristics

The original vegetation that covered the county was predominantly oak-pine forest. In the third quarter of the nineteenth century Janes noted that,

> The timber supply of this county consists of Red Oak, White Oak, Post Oak, Black Jack Oak, Hickory, Chestnut, Poplar, Dogwood, Sassafras, Beech, Maple, and Red Elm (Janes 1878:49).

The present tree growth is similar to the original, but it is less extensive. The largest forests are now confined to hilly and steep lands that border the Chattahoochee River and its larger tributaries. The most common trees in Fulton County include shortleaf pine and loblolly pine which represent successional growth after earlier agriculture and logging. Mixed hardwoods consist of mainly white oak, northern red oak, hickory, and yellow-poplar. Common plants in the undergrowth are flowering dogwood, greenbrier, wild rose, blackberry, and privet. Abandoned fields are covered with broom sedge and other invader species, such as blackberry (Walker et al. 1958).

Within the Chattahoochee National Recreation Area, the predominant regional vegetative cover is secondary oak/pine forest. Due to the intensive land use in the area, the cover is a mixed patchwork of fields, forest stands, and planted trees surrounding residential and commercial development. Common forest species include sweetgum (Liquidambar styraciflua), sycamore (Platanus occidentalis), blackgum (Nyssa sylvatica) ash (Fraxinus spp.), water oak (Quercus nigra), white oak (Q. alba), black oak (Q. velutina), and red oak (Q. rubra); red maple (Acer rubrum), yellow poplar (Liriodendron tulipifera), elm (Ulmus spp.), hickory (Carya ovata), willow (Salix spp.), alders (Alnus spp.), and dogwood (Cornus *florida*); loblolly pine (*Pinus taeda*), Virginia pine (*P. virginiana*), and shortleaf pine (*P. echinata*).

Heiman (2000) completed a comprehensive survey of the vascular flora of designated land units in the Chattahoochee National Wildlife Recreation Area in 2000. The survey documented 108 vascular plant species in the Vickery Creek Unit. This unit was especially noted for its unique cliff features providing habitat for heartleaf goldenrod (*Solidago sphacelata*) and lobed spleenwort (*Asplenium pinnatifidum*). Forests are either chestnut oak dominated or mixed oak-pine.

Vegetation in the immediate area of Allenbrook consists predominately of yard plants, including oak leaf hydrangea, elaeagnus, holly, and redbud. Several invasive species were also present. Cedars along the roadway were likely planted for screening. Native trees found scattered near the house include turkey oak and ash.

Climate

Fulton County's weather is largely controlled by the movement of areas of high and low barometric pressure and the accompanying winds. The climate is classified as humid and continental. As a result, the winters are mild, but they have changeable temperatures with frequent alteration of warm moist southerly winds and cold dry northerly winds. The summers are warm and humid, but outside of urban areas are relatively free of oppressive heat because of the altitude and latitude of the county.

Annual average air temperature is about 16°C in the project area. Average daily temperatures vary from about 6°C in January to about 27°C in July. Average afternoon high temperatures in the summer vary from the high 20s°c to around 32°C. Measurable amounts of rain fall about 120 days each year, producing annual average precipitation between 120 and 130 cm.

Rainfall in the amount of about 129 cm is good for a broad range of crops. About 93 cm inches (or 72% of the total) occurs during the growing season, although heavy rains caused excess foliage in cotton and heavier boll weevil infestations in the past. Drought can occur every 10-15 years. Particularly severe droughts occurred in 1756-1760, 1762-1764, 1897-1802, 1855-1857, 1896-1899, 1925-1927, and 1954-1956. Thus, Georgia experiences a significant drought lasting three or more years about once every 40 years. Less significant droughts occurred in 1839-1840, 1844-1845, and 1914-1915 (Stooksbury 2003).

Flooding is no less a significant threat, although along the Chattahoochee hydroelectric dams built between 1899 and 1924 at North Highlands, Goat Rock, and Bartlett's Ferry convinced much of the population that damming rivers was the solution to the flooding problem. The Morgan Falls Dam is a small hydroelectric dam located on the Chattahoochee south of Roswell. The dam was originally constructed in 1904 by Georgia Power to provide electricity for Atlanta's streetcars, but the flood pool was increased in the early 1960s.

The average growing season is about 224 days, although early freezes in the fall and late frosts in the spring can reduce this period by as much as 30 or more days (Walker et al. 1958:2). Consequently, most cotton planting, for example, did not take place until early May, avoiding the possibility that a late frost would damage the young seedlings.

NATURAL ENVIRONMENT

Prehistoric and Historic Overview

Prehistoric Archaeology

Since no prehistoric remains were encountered in this research, the background information will be brief. Figure 6 offers a generalized view of Georgia's cultural periods.

Overviews for Georgia's prehistory, while of differing lengths and complexity, are available in virtually every compliance report. These can be supplemented with a handful of recent local synthetic statements, such as that offered by Anderson and Sassaman (1996) for the Early Archaic, Sassaman and Anderson (1994) for the Middle and Late Archaic, and Anderson et al. (1990) for the Paleoindian. Only a few of the many available sources are included in this study, but these should be adequate to give the reader a "feel" for the area. For those desiring a more general synthesis, perhaps the most readable and well balanced is that offered by Judith Bense (1994), Archaeology of the Southeastern United States: Paleoindian to World War I.

Paleo-Indian

The Paleoindian Period is most commonly dated from about 12,000 to 10,000 B.P., although it has been suggested by some archaeologists that the beginning date for the Paleoindian Period be pushed to as early as 14,000 B.P. (Oliver 1981). with the Paleoindian Lithic tools associated Period include basally thinned, side-notched projectile points, fluted, lanceolate projectile points, side scrapers, end scrapers, and drills (Coe 1964; Michie 1977; Williams 1968). Non-fluted points such as the Hardaway Side-Notched and Palmer Corner-Notched types, usually accepted as Early Archaic, are occasionally seen as representatives of the terminal phase of the Paleoindian Period. This view, verbally suggested by Coe for a number of years, has considerable technological appeal. For the North Carolina area Oliver suggests a continuity from the Hardaway Blade through the Hardaway-Dalton to the Hardaway Side-Notched, eventually to the Palmer Corner-Notched (Oliver 1985:199-200). While convincingly argued, this approach is not universally accepted and there appears to be no such continuum in Georgia.

The Paleoindian occupation, while widespread, does not appear to have been intensive. Artifacts are most frequently found along major river drainages, which Michie interprets to support the concept of an economy "oriented toward the exploitation of now extinct mega-fauna" (Michie 1977:124). Distinctive projectile points include lanceolates such as Clovis, Dalton, Suwannee, and perhaps the Hardaway (Anderson 1990:7-9). Survey data for Paleoindian tools, most notably fluted points, is rather sparse for Georgia (Ledbetter et al. 1996). In spite of this, the distribution offered by Anderson (1992:Figure 5.1) reveals a rather general, and widespread, occurrence throughout the region.

Unfortunately, relatively little is known Paleoindian subsistence strategies. about settlement systems, or social organization (see, however, Anderson 1992 for an excellent overview and synthesis of what is known). Generally, archaeologists agree that the Paleoindian groups were at a band level of society, were nomadic, and were both hunters and foragers. While population density, based on isolated finds, is thought to have been low, Walthall suggests that toward the end of the period, "there was an increase in population density and in territoriality and that a number of new resource areas were beginning to be exploited" (Walthall 1980:30).

| | | | | Regional Phases | Phases | |
|---|------------|----------------|---|---|--|-----------------------------------|
| Dates Pe | Period | Sub- Period | COASTAL | MIDDLE SAVANNAH VALLEY | GEORGIA COASTAL PLAIN PINE BARRENS | NORTH GEORGIA |
| 1715 - | 'IS⊮ | | Attarmaha / Sutherland Bluff | | Square Ground Lamar | |
| 1500 | + 'SS | LATE | Irene / Pine Harbor | Rembert Hollywood | Early Lamar Irene? | Lamar |
| 1100 | SIM | EARLY - ATC | Savannah St Catherines / Swith Creek | Lawton Savannah | Ocmulgee II Swift Creek | Savannah Etowah Woodstock |
| | ŀ | i | Wilmington | Sand Tempered Willmington? | | Swift Creek |
| B.C. 20 | שראמס | MIDDLE | Deptford | Deptford | Ocmutgee i & II | Early Swift Creek Cattersville |
| | MOC | EARLY | Refuge | - | ~ | Durriap / Cartersville |
| 2000 - 200 | | LATE | | Thom's Creek Stallings / St Simons Savannah River Gary | | Savannah River |
| r | | MIDDLE | | Guifford Morrow Mountain Stanly | | |
| | ADAA | EARLY | | Kirk | | |
| | | | | Paimer Bolen Merchanner | | |
| 000 | OJ. NAI | | | alton | Beaver Lake | |
| 12,000 | IND | | Cu | | Simpson | |

PREHISTORIC AND HISTORIC OVERVIEW

Archaic

The Archaic Period, which dates from 10,000 to 3,000 B.P., does not form a sharp break with the Paleoindian Period, but is a slow transition characterized by a modern climate and an increase in the diversity of material culture. Associated with this is a reliance on a broad spectrum of small mammals, although the white tailed deer was likely the most commonly exploited animal. Archaic period assemblages, exemplified bv corner-notched and broad-stemmed projectile points, are fairly common, perhaps because the swamps and drainages offered especially attractive ecotones.

Diagnostic Early Archaic artifacts include the Kirk Corner Notched point. Palmer and Bolen points may be included with either the Paleoindian or Archaic period, depending on theoretical perspective. As the climate became hotter and drier than the previous Paleoindian period, resulting in vegetational changes, it also affected settlement patterning as evidenced by a long-term Kirk phase midden deposit at the Hardaway site (Coe 1964:60). This is believed to have been the result of a change in subsistence strategies. Other hallmarks of the Early Archaic are often considered to include a continued reliance on high quality lithic raw materials, a highly curated tool kit, high geographic mobility, and periodic aggregation of band-sized groups (see Anderson and Hanson 1988; Daniel 1992).

Settlements during the Early Archaic suggest the presence of a few very large, and apparently intensively occupied, sites which can best be considered base camps. Hardaway might be one such site. In addition, there were numerous small sites which produce only a few artifacts these are the "network of tracks" mentioned by Ward (1983:65). The base camps produce a wide range of artifact types and raw materials which has suggested to many researchers long-term, perhaps seasonal or multi-seasonal, occupation. In contrast, the smaller sites may be thought of as special purpose or foraging sites.

Middle Archaic (8,000 to 6,000 B.P.)

diagnostic artifacts include Morrow Mountain, Guilford, Halifax and Stanly projectile points. Ledbetter remarks that a possible regional variant includes the side-notched or corner-notched points similar to Halifax, as well as an elongated point known as the Brier Creek Lanceolate (Ledbetter 1995:12; Michie 1968; Sassaman and Anderson 1994:27). Also observed during this period is the MALA (Middle Archaic-Late Archaic) point, which are typically made from heat-treated chert and considered by some to be a regional variant of the Benton type (see Sassaman 1985; see also Sassaman and Anderson 1994:27-29 for a more updated discussion).

There is good evidence that Middle Archaic lithic technologies changed dramatically. End scrapers, at times associated with Paleoindian traditions, are discontinued, raw materials tend to reflect the greater use of locally available materials, and mortars are initially introduced. Curated tools are less common. Associated with these technological changes there seem to also be some significant cultural modifications. Prepared burials begin to more commonly occur and storage pits are identified. The work at Middle Archaic river valley sites, with their evidence of a diverse floral and faunal subsistence base, seems to stand in stark contrast to Caldwell's Middle Archaic "Old Quartz Industry" of Georgia and the Carolinas, where axes, choppers, and ground and polished stone tools are very rare.

The Late Archaic, usually dated from 6,000 to 3,000 or 4,000 B.P., is characterized by the appearance of large, square stemmed Savannah River projectile points (Coe 1964). These Late Archaic people continued to intensively exploit the uplands although sites are spread over a variety of environmental zones with no obvious patterning. In addition to the presence of Savannah River points, the Late Archaic also witnessed the introduction of steatite vessels (see Sassaman 1993), polished and pecked stone artifacts, and grinding stones. Some also include the introduction of fiber-tempered pottery about 4000 B.P. in the Late Archaic (for a discussion see Sassaman and Anderson 1994:38-44; Sassaman 1993:16-41).

There is evidence that during the Late Archaic the climate began to approximate modern climatic conditions. Rainfall increased resulting in a more lush vegetation pattern. The pollen record indicates an increase in pine which reduced the oak-hickory nut masts which previously were so widespread. This change probably affected settlement patterning since nut masts were now more isolated and concentrated. From research in the Savannah River valley near Aiken, South Carolina, Sassaman has found considerable diversity in Late Archaic site types with sites occurring in virtually every upland environmental zone (Sassaman et al. 1990:280-300). He suggests that this more complex settlement pattern evolved from an increasingly complex socio-economic system.

Woodland

Sassaman (1993:55) recalls the cautions of Joseph Caldwell, who found "the regional landscape of the Early Woodland ceramic traditions" a "fascinating array of local developments and diverse extralocal influences." As a consequence, the Early Woodland becomes quickly confused and difficult to interpret.

The Early Woodland in north Georgia is characterized by the Kellogg Phase with its Dunlap Fabric Marked pottery and medium sized triangular projectile points. Larger Savannah River points likely continued into at least into early Kellogg times. Wood and Bowen (1995:8) suggest that the cord marked and simple stamped sherds that are thought to be Early Woodland and called Mossy Oak are found in only restricted areas. More recent research suggests they are Late Woodland (Espenshade 2008:122). Cartersville Check Stamped and Simple Stamped, also initially thought to be Early Woodland are now placed in the Middle Woodland. Nevertheless, there are simple stamped wares during the Early Woodland and Espenshade suggests that Dunlap Simple Stamped should be used as the type for these wares. The Kellogg Phase dates from about 2,600 to 2,100 B.P.

While domestic agriculture is not clear, the presence of storage pits and weed seeds

suggests that the Kellogg Phase people collected and stored plant foods. Both large, sedentary, year-round occupations and small, seasonally occupied loci have been identified.

While there may be a transitional phase between Kellogg and the following Cartersville, it is not clearly defined. Regardless, the Middle Woodland begins with the introduction of Hopewellian influences about 2,000 B.P. The Cartersville Phase, however, appears to date between about 2,000 B.P. and 1,350 B.P. and may be divided into an earlier period characterized by the exclusive occurrence of check stamped ceramics and a later period distinguished by the addition of simple stamped wares. Espenshade (2008:230) also notes that Swift Creek Complicated Stamped is first found during the Middle Woodland.

While there are occasional reports of corn in Cartersville villages, these are uncertain and weedy seeds such as maygrass, knotweed, and goosefoot are far more common. Corn, however, was likely present long before it became a major crop (Espenshade 2008:232).

It is during this phase that elaborate mortuary practices associated with the Hopewellian Interaction Sphere first appear (Jefferies 1975 and 1976). Earthen mounds appear, as does evidence of extensive trading.

The most widely recognized archaeological phase of the Late Woodland period is Swift Creek, although there is evidence that it perhaps began during the Middle Woodland (Wood and Bowen 1995:13). The elaborately decorated Swift Creek pottery doesn't fully replace Cartersville wares in northern Georgia until about 1,550 B.P. Moreover, there is evidence that in some areas, such as the Russell Reservoir, Cartersville Plain wares may continue through the Late Woodland (Anderson and Schuldenrein 1985 and Anderson and Joseph 1988). Napier pottery with its rectilinear designs may represent a late ceramic that post-dates the curvilinear Swift Creek motifs.

Swift Creek sites tend to be found on large floodplains on major rivers, although some researchers appear to have found Swift Creek-like sites in the uplands and on ridge tops. Corn, squash, sunflowers, and weedy plants are found in excavations. While corn is found in Middle and Late Woodland settlements, it seems unlikely that it provided a significant food source until the following Mississippian Period.

Mississippian

Hally and Rudolph explain that the distinction between the Mississippi period and Mississippian culture (Wauchope 1966:15-17) is useful in this area since, "the extent to which particular late prehistoric cultures were 'Mississippianized' ranges from minimal to complete" (Hally and Rudolph 1986:19). For example. the Woodstock culture, while contemporary with early Mississippian cultures in adjoining states, shows few Mississippian characteristics. In contrast, the Macon Plateau culture is fully "Mississippianized." Thus, while many classify Woodstock as Early Mississippian (such as Espenshade 2008:137) with dates of 1,050 to 950 B.P., its transitional characteristics might fit just as well in the Late Woodland. It's placement in the Early Mississippian is based largely on the presence of fortified villages and at least one platform mound.

The Woodstock pottery is sand tempered and primarily complicated stamped (oval, diamond, line block, herringbone, and concentric circle motifs), although check stamping, simple stamping, and incising is found. Although corn has been found, like at Woodland sites it is rather sparse. Espenshade places the Woodstock in the Late Woodland rather than Early Mississippian (Espenshade 2008:138).

Following Woodstock in north Georgia is the Etowah culture, although at times both Etowah and Woodstock ceramics co-occur. At least three phases of Etowah culture have been identified, although what has been called Etowah I seems poorly defined (Hally and Rudolph 1986:37) and may exist primarily in the upper piedmont, dating about 950 to 900 B.P. The Etowah II components include Etowah Complicated Stamped, Etowah Plain, Etowah Red Filmed, and Etowah Polished Plain. The pottery differs from Hiawassee only in temper with the latter shell tempered and Etowah wares sand tempered. Wattle and daub structures with circular hearths are well documented and date from about 800 to 500 B.P. It is during the following Etowah III phase that major public architecture is found, including mounds and earthlodges.

The Middle Mississippian period in the piedmont lasts from about 750 to 600 B.P. and consists of the Savannah culture. Defined mainly based on pottery, Savannah sites produce Savannah Complicated Stamped, Etowah Complicated Stamped, Savannah Check Stamped, and Savannah Plain (Hally and Rudolph 1986:51). It was early thought that there was a influx of coastal people with new pottery styles into the piedmont. Hally and Rudolph (1986:57) suggest instead that the Savannah wares gradually developed from the early Etowah pottery.

The Late Mississippian extends from about 600 to 500 B.P. and begins with the transition from Savannah to Lamar pottery styles. It is considered to end with the de Soto and de Luna expeditions. It is characterized by three pottery types - Lamar Complicated Stamped, Lamar Incised, and Lamar Plain. Maize agriculture was widely, and intensively, practiced by this time with corn constituting the major plant food in the Lamar diet. Deer appears to be the primary terrestrial animal in the diet, although sites along the shoals of the Oconee River are dominated by fish and reptiles. Structures were square with depressed floors. Open air sheds were used for some domestic activities. Mounds were common and all possessed square temples with central fire pits. The mound sites were likely political and religious sites for the chiefdoms, drawing participation from surrounding smaller villages.

Protohistoric

The Protohistoric Period begins with the explorations of Hernando de Soto in the spring of 1540, although it is possible that European artifacts spread into the piedmont from the coast far earlier. While there is still disagreement regarding the specific route, Hudson and his colleagues (Hudson et al. 1984) suggest de Soto reached the Fall Line around Flint River, then traveled over to the Ocmulgee River area. From there he continued east to the Oconee Valley. Leaving Georgia he set into South Carolina where there is still disagreement regarding the location of Cofitachequi. After marching through South Carolina, North Carolina, and Tennessee, de Soto continued down the Great Valley and entered northwestern Georgia late in the summer of 1540. It is thought he traveled through Murray County, then south eventually reaching the Etowah site near Carterville, Georgia. Turning west he then passed through the Rome, Georgia area, following the Coosa River downstream into Alabama.

Although searching for gold, de Soto and his men likely distributed various trinkets to native groups, including "iron implements," beads, and clothing.

In July 1560 it is thought that a small group of men from the de Luna expedition struck out from Alabama and again visited northwest Georgia. Additional trade goods likely entered the Native American sphere during this visit.

Substantive evidence of sixteenth century European contact seems limited to northwest Georgia, where a number of artifacts have been in good contexts. Elsewhere remains are both sparse and questionable. While a number of regional phases are present, all of the sixteenth century pottery from north Georgia can be considered variants of the Lamar tradition (Smith 1992:56).

Seventeenth century European activity in northern Georgia was limited. The Spanish sent out periodic excursions from their coastal enclaves, primarily to ensure that no other Europeans were present in the interior, but no attempt was made to settle the piedmont. It was the settlement of Charles Town in 1670 that dramatically affected aboriginal life. Trade patterns were established and extended well into Georgia, altering the native economy. The trade of guns altered the native balance of power

Seventeenth century ceramics continued to be within the Lamar tradition, but complicated stamped pottery is almost completely replaced by plain and incised wares.

At the close of the seventeenth century, English traders initiated contact with the Lower Cherokee near the headwaters of the Savannah River. Creek groups also moved for better proximity to English trading partners. In fact, by the early eighteenth century Apalachees, Savannah, Shawnee, and Yuchi Indians were present in the area around Augusta, all brought together for trade access. More accurate maps show locations of both Creek and Cherokee towns during the eighteenth century, including locations on the Chattahoochee for the Lower Creeks (Smith 1992:36).

With the settlement of Georgia pressure increased on native groups. Both Cherokee and Creeks ceded lands and had towns burned by Europeans. By the end of the eighteenth century most of Georgia's Indians were confined to the Cherokee lands in northwestern Georgia or the Creek country on the Chattahoochee.

Eighteenth century pottery combines complicated stamping and rim treatments typically seen on Cherokee sites with plain or brushed wares typical of Creek sites. Both grit and shell tempering occurs. For example, Creek towns produce both Chattahoochee Brushed, a grit or sand tempered type, and Walnut Roughened, the shell tempered equivalent.

Historic Period

Syntheses of Georgia history are as common as archaeological overviews (for example, the recent summary by Joseph et al. 2004:17-36) and there are several readily available histories of the state (e.g., Coulter 1960 and Coleman 1991).

Early Settlement

The charter for the Georgia colony was

granted in July of 1732, and by November James Oglethorpe set sail from England with the first shipload of colonists (Coleman 1960:5). South Carolina had relinquished territory to create Georgia and the new colony's original western boundary was the "South Seas," or the Pacific Ocean. By 1763, the boundary became the Mississippi River and, in 1802, Georgia ceded to the United States what would become Mississippi and Alabama and assumed its present form (Hodler and Schretter 1986:71).

The original settlers, numbering from 114 to 125 souls, established a settlement 29 km from the coast along the Savannah River on Yamacraw Bluff on February 12, 1733 (Coleman 1960:5).

Oglethorpe attempted to establish the Georgia Colony in a more philanthropic manner than its neighboring colony of Carolina (Coleman 1960:8). Oglethorpe's philanthropic views may have been in direct response to problems encountered by the Carolina Proprietors. The trade in deer skins and the use of Native Americans as slaves during the early colonial period had caused personal and political problems for South Carolina's elite rulers (Weir 1983). Oglethorpe hoped to eliminate this and problems associated with the ownership of African American slaves within the Georgia colony.

While South Carolina became quickly dominated by large plantations, primarily indigo and rice, which operated under the forced labor of thousands of African Americans, Oglethorpe envisioned a colony of small land owners growing a broad range of crops. He foresaw land granted in small parcels and ensured that both slavery and rum were outlawed in 1736 (DePratter and Howard 1980:43).

Unfortunately Georgia was unable to retain its vision as a colony of sober men living off their own labor and rewards contributed through the working of small farms. Changes within the colony's structure were already evident when, in 1743, Oglethorpe was replaced by the Board of Trustees for the colony with William Stephens. As early as 1740 maximum land holdings were increased to 800 ha, allowing the formation of small plantations (DePratter and Howard 1980:44). By 1750 the ban on the importation of slaves was dropped. Elite land owners and investors from South Carolina began to purchase lands along the Savannah River (Rowland 1987), and the timbre of Georgia society began to change. By 1750 African Americans constituted perhaps one third of Georgia's 3,000 residents (Coleman 1960:11).

In 1752 the Royal trusteeship charter expired and Georgia became a crown colony. In 1758 the Georgia Assembly established a governmental framework as part of the official church act. The province was divided into eight parishes (W.P.A. Writers' Program 1990:39), none of which extended as far inland as today's Fulton County.

The 1740s and 1750s were a period of growth in Georgia. Under the influence of Carolina, large plantations began to dot the landscape. The introduction of upland and intertidal rice agriculture, the advent of indigo production, and the naval stores industry, were brought on by worldwide military and economic events. By 1776, Georgia retained very little of its pre-colonial concepts and contained a population of 40,000 to 50,000 people. Approximately half of that number were African American slaves (Coleman 1960:13).

Revolutionary War

Within the southern colonies the War for American Independence was similar to that of the American Civil War. Quite often family loyalties were divided by class and family (Coleman 1960:17). Other than the capture of major population centers such as Charles Town, Savannah, and Augusta by the British, much of the war was a series of small, local engagements fought between loyalist troops and their patriot counterparts (Coakley 1989; DePratter and Howard 1980:44-45).

For most of 1779 the British held Savannah and the surrounding ground. In early fall of 1779 American and French troops made an abortive attempt to take Savannah, but it was not until July of 1782 that the British abandoned Savannah, ending British occupation of Georgia (Coulter 1960:146-147). One of the few upcountry battles, at Wilkes Creek, was fought in Wilkes County. About 600 Loyalists camped along Kettle Creek in preparation of a planned attack of the Patriot-held Fort Heard in present-day Washington, Georgia. The American troops attacked the Loyalists on February 14, 1779. After suffering an initial set-back the much smaller American force rallied and soundly defeated the Loyalists (Coleman 1958). While the victory was a small one for the Patriots, it is noteworthy for the small number of loval southerners that the British were able to assemble as part of their army. While the British failed to realize that it would be impossible to assemble loyal southerners as part of their army, the relatively few Loyalists in the upcountry may have begun to realize that the effort was futile.

The end of the American Revolution brought freedom to many enslaved African Americans in Georgia. Many Loyalists left the state – and their slaves – and others had their lands confiscated. Some African Americans left with the British, while others formed free communities in the larger cities, such as Savannah and Augusta (Joseph et al. 2004:21).

With the war's conclusion, major treaties and concessions from the Cherokee and Creek Indian tribes (1782-1804) allowed the full scale development of lands within central and eastern Georgia.

Antebellum

By 1820, 60% of upland farmers were growing cotton, and slavery played an ever increasing role in that growth, despite bans on slave importation during the last decades of the eighteenth century. By 1820, 44% of Georgia's population was black (DePratter and Howard 1980:45).

During the antebellum Georgia began to increase its economic share of the American

export market. The various forced removals of Native Americans from the state accelerated the settlement of interior lands (DePratter and Howard 1980:45).

The removal of Native Americans opened the creation of a number of counties that would eventually form Fulton. Gwinnett County was created by the acts of December 15 and 19, 1818, with 1.129 km² acquired by Cherokee cession of July 18, 1817 and Creek cession of January 22, 1818. Henry County was created on May 15, 1821 with 857 km² acquired by Creek cession of January 8, 1821. Fayette County was created at the same time with an additional 515 km² obtained from the same Creek cession. Finally, DeKalb County was created on December 9, 1822 with 696 km² taken from Fayette, Gwinnett and Henry counties.

Already established river and road transportation networks were augmented by railroads which connected Georgia's major port city, Savannah, with other major urban centers within the state and region. By the time of the Civil War, railroads connected Savannah to Augusta, Macon, and Waycross. Waycross provided access to coastal Brunswick and Atlanta was accessed by both Augusta and Macon. Branch lines tied together Athens, Columbus, and Albany, and Dalton in the northwest corner of Georgia.

With the advent of industrialization Georgia's economic base began to diversify. Textile mills, tanneries, lumber mills, and turpentine distilleries became established throughout the state.

Construction of one of the first cotton mills, the Georgia Factory, began in 1827. Other well-known mills from the period included the Augusta Cotton Factory, the Eagle Mills of Columbus, and the Mills at Roswell (Meadows 1951).

Among the early mills was the Roswell Manufacturing Company (Figure 7) organized by Roswell King in 1839 and the company produced duck cloth, rope, and woolens. Over time a cotton

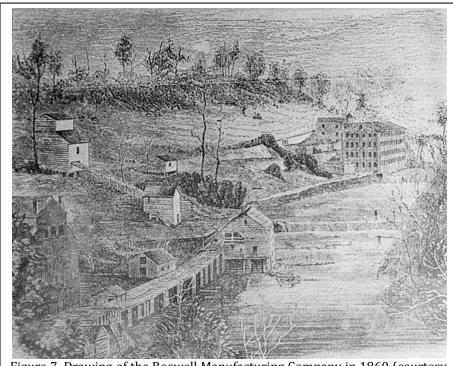


Figure 7. Drawing of the Roswell Manufacturing Company in 1860 (courtesy Georgia Division of Archives and History).

factory, a wool factory, a corn mill, a shoe shop, two blacksmith shops and a retail store were added to the mill.

By 1850 DeKalb County had a population of 11,372 whites, 32 free persons of color, and 2,924 enslaved African Americans (about 20% of the total). The population increased by nearly 4,000 since the 1840 census. The county had 1,987 dwellings. The 441 farms in DeKalb contained 18,404 improved ha and 80,925 unimproved ha. There were over 25,000 swine and nearly that many cattle.

While the farms produced cotton (2,397 bales), subsistence crops were far more abundant. The county produced 15,238 m³ of corn and 2,616 m³ of potatoes. Rye and oat production exceed 1,978 m³. Small quantities of upland rice and tobacco were also produced by the area's farmers (DeBow 1854:2121-217).

Joseph and his colleagues point out the differences resulting from cotton production.

Where marketing was easier, such as in Elbert County, nearly four times as much cotton was harvested and African American slaves accounted for 48% of the population (DeBow 1854:216, Joseph et al. 2004:23).

 $\begin{array}{c} & \text{On December 20,}\\ 1853 \ \text{Fulton County was}\\ \text{created using } 1.354 \ \text{km}^2\\ \text{taken from part of DeKalb}\\ \text{County.} \end{array}$

The Civil War

The advent of the Civil War and its after effects would haunt the state of Georgia for years. Seceding from the Union on January 19, 1861, Georgia followed South Carolina, Mississippi,

Florida, and Alabama into the folds of the confederacy. Georgia's Alexander Stephens became Vice President of the new Confederacy and Robert Toombs was made Secretary of State.

The war began easily for Georgia. In January 1861 a band of Georgia volunteers sailed down the Savannah River to capture Fort Pulaski. At the same time Atlanta began to increase in importance. In the 1850s the town was described as a "sorry-looking place, always associated in my mind with rain and super abundance of red-clay mud" (quoted in Lane 1993b:x). The population increased from about 2,500 in 1847 to over 11,000 in 1860 to more than 16,000 before the war's end. The Confederates also easily seized the Union arsenal at Augusta and the mint at Dahlonega (DePratter and Howard 1980:46). Additional arsenals were established in Atlanta, Savannah, Macon, August, and Columbus. The state penitentiary at Milledgeville was converted into a rifle factory and the Athens Foundry became a cannon factory.

These gains were quickly offset by the Union blockade along the coast in late 1861 and the fall of Georgia's coastal island fortifications in March of 1862. The loss of Fort Pulaski effectively closed the port of Savannah to all those but the hardiest blockade runner. Cut off from the sea, new batteries were thrown up around the cities and paving stones were ripped up from the streets to serve as ballast to sink obstructions in the river. It wasn't, however, until early 1864 when Confederate troops began to build obstructions above Savannah that the city's citizens began to realize both that they were being abandoned and also that the war was lost.

In May 1864 the interior of Georgia felt brunt of the war (Lane 1993b:xi). the full That spring, General Sherman left Chattanooga and began his long fight to the sea with an army of 100,000 Union troops. Following the route of Western and Atlantic Railroad, Sherman faced Confederate forces of about 41.000 troops commanded by General Joseph E. Johnston and later by General John B. Hood. While initially stymied, Sherman managed to outflank the Confederate positions, forcing them into Atlanta's trenches. After forty days of bombardment, part of the Union forces swung south of the city, threatening Confederate supply lines to Macon. At that point, on September 1, Hood evacuated Atlanta. From May to September, 4,988 Union soldiers and 3,044 Confederates were killed in Georgia. Those hospitalized from diseases accounted for an additional 46,000 Confederate troops and nearly 63,000 Union soldiers.

After taking Atlanta in September 1864, Sherman's route to Savannah lay open. He wrote his wife, "We have devoured the land. All the people retire before us and desolation is behind. To realize what war is one should follow our tracks" (Lane 1993b:xiv). By November 16th, Sherman was done with Atlanta and he left the city with 60,000 infantry and 5,500 cavalry. He would lose less than 850 men during his operations within central Georgia and the capture of Savannah. His troops covered an area approximately 96 km wide and 400 km long throughout the Georgia countryside (Nevins 1971:158). Union troops lived off the land, fulfilling Sherman's goal to destroy as much food, munitions, and infrastructure as he could.

By November 22 Sherman's army had captured the state capital in Milledgeville and had crossed the Ogeechee by the end of November. Sherman faced little resistance and finally captured Savannah from the west on December 21, one day after the city was abandoned by the Confederacy.

The damage done by Sherman's armies (as well as retreating Confederate forces) to Georgia's agriculture and industrial infrastructure in thirty-four short days would take decades to overcome. Between Howard's right wing and Slocum's left wing, the Union army, during the campaign from Atlanta to Savannah, set free over 3,000 African American slaves, confiscated over 26,500 head of cattle, 6,171 horses and mules, 10.5 million pounds of grain and corn. 4.7 million kg of fodder, over 43,000 bales of cotton, and destroyed over 500 km of railroad to where "scarcely a tie or rail, a bridge or culvert," remained in central Georgia (Guernsey and Alden 1977:692 [1866]; Nevins 1971:159). Various strategic support industries were also destroyed. These included "machine shops, turn-tables, depots, water-tanks, cotton gins and presses" (Guernsey and Alden 1977:692 [1866]). Brigadier-General Kilpatrick's operations would add 14,000 bales of cotton, 455 m³ of corn and 72,600 kg of fodder to Howard's and Slocum's totals.

By April of 1865 the war would be over but, because of the war's destruction, life as it had been known to the residents of Georgia, ended in December 1864. As Sherman marched through Georgia, many slaves deserted their plantations and sought refuge with the Union forces. As a result, Sherman issued his famous Field Order Number 15, which set aside almost a half-million acres of captured Confederate land, dividing it into small plots for freed slaves. Although this approach satisfied the needs of the immediate political situation, as Willie Lee Rose discusses at length, the North would eventually turn their back on Southern blacks and relatively little of this acreage would actually be distributed (Rose 1964:328ff).

Reconstruction

The postbellum period within Georgia was difficult for the state and its residents. Economic recovery from a devastated industrial and agricultural base, as well as inter-related transportation systems, would affect Georgia's recovery until the 1890s. The problem was compounded by nationwide depressions that lasted from 1873 to 1878 (DePratter and Howard 1980:46).

In May 1865 President Andrew Johnson proclaimed James Johnson, a lawyer from Columbus, the provisional governor of Georgia. A convention of loyal Georgians repealed the secession ordinance, abolished slavery, and repudiated the Confederate debt in October 1865. A new governor, Charles Jenkins, was elected and the new legislature ratified the Thirteenth Amendment and passed additional laws to guarantee the liberty of the freedmen.

Congress, however, reacted angrily to Southern excesses and passed a military reconstruction act in March 1867. Georgia's new government was abolished and the state returned to military rule. State government was again reorganized, only this time there were even more blacks and fewer whites in the legislature.

In April 1868 Rufus Bullock was elected governor and in July a new legislature ratified the Fourteenth Amendment. The state capital was moved from Milledgeville to Atlanta. But by December 1869 Congress once again became outraged by the excesses of the Ku Klux Klan and re-established military rule, again "re-organizing" the state government. Under this third government, the Fifteenth Amendment was ratified and Georgia was finally readmitted to the United States in July 1870.

Economic and Political Reorganization

While the political future of Georgia was in upheaval, an effort was made to restore some degree of the state's agricultural prosperity. Freedmen often returned to the plantations to work under white bosses rather than white owners, and were still tied to a task system. Owning no land, freedmen and landless whites formed the nucleus of a relatively new labor system of tenancy. This new labor system grew dramatically, rising from about 53% in 1890 to over 65% in 1910 and peaking at about 68% in 1930 (Coleman 1991:259). While there were a variety of systems, tenants usually paid either a cash rental or became sharecroppers who divided their crop with the landlord in return for the ability to work a portion of the plantation.

Cotton continued to be the major focus of agricultural efforts — offering white land owners with their only hope for economic revival. Just as "King Cotton" drove the South to the Civil War, it served to nearly ruin any chance the South had to revitalize itself after the war. Although over half of the total value of Georgia's agricultural production was wrapped up in this one product, in the pine lands only corn production (by 30%) exceeded the values of cotton (Harper 1922:341).

The overall dependence on cotton was the result of a number of different factors. Kenneth Coleman, for example, notes that force of habit keep many farmers growing cotton. Many, he observes, didn't have either the education or financial resources to diversify (Coleman 1991:257). Of equal importance was that with small, and concentrated, urban populations, markets for fresh produce were limited. This, coupled with the very poor transportation network crippled efforts to engage in truck farming until the Second World War. Even as late as 1930 only 6% of Georgia's farmers lived near paved roads.

The reliance on cotton, combined with the debilitating effects of the Civil War, created an intricate web of dependency between tenants,

land owners, and merchants. After the Civil War the crop lien system emerged as the only viable source of short-term credit. By the 1890s the system had expanded to the point to trapping between 80 and 90% of Georgia's farmers. In order to obtain credit for planting, or sometimes for even living, a farmer obtained a lien on his ungrown crop from the furnishing merchant. These merchants, themselves living on very little hard cash, undertook to finance what were often risky farming efforts. Consequently they typically charged from 25% to as much as 75% interest on their loans under the crop lien system.

Although the freedmen did exercise their voting rights in 1867 and 1868, they never dominated the Georgia political scene during Reconstruction. Threats of violence by the Ku Klux Klan eliminated any real black influence and by December 1870 the Democrats won overwhelming control of the state legislature. By 1873 this white legislature effectively eliminated virtually all of the advances made by the black electorate by extending residency requirements for state and county elections.

In spite of the improvements seen in the urban areas, Georgia remained rural and poor. In 1900, 85% of the state's population still lived on farms or in small villages and 60% continued to work in agriculture. Further, the state's per capita income showed no increase between 1880 and 1900 (Lane 1993a:xiii).

Cotton production on late nineteenth century tenant farms was little different from that practiced on antebellum plantations. The planting, cultivation, and picking was labor intensive, with the entire family, and often a mule, devoting their entire energies to this single minded pursuit. Yields were low and debt continued to be heavy. Cotton prices did not increase significantly until the early twentieth century, when there was a twenty year period of relative prosperity. Farmers turned their backs on diversification and returned to "King Cotton." The 3.5 million acres planted in cotton in 1900 were increased to over 5 million acres in 1916. Immediately before the First World War, Georgians in general had greater prosperity than they had seen since before the Civil War. The expansion of Rural Free Delivery and the increase in automobiles and telephones contributed to this appearance of prosperity and well-being (Coleman 1991:261). Also contributing was the development of inexpensive fertilizer which began to make the worn piedmont soils again profitable.

The introduction of the boll weevil between 1915 and 1917 (Hodler and Schretter 1986:86), coupled with increasing competition further north and even outside the United States, sent prices plummeting. Cotton prices dropped from 35¢ a pound to 17¢ in a single season. Cotton yields fell by a third to nearly a half (Coleman 1991:263).

What industrial improvement the state saw focused on very basic extractive industries cotton, lumber, and paper mills — which plundered the natural environment and paid very low wages. One enterprise in particular cotton mills — was Georgia's leading industry throughout the half-century from 1890 to 1940.

The Depression and the Modern Era

The New Deal agricultural policies of the 1930s to some degree helped large farms, but small farmers and especially tenants continued to suffer. Farms were abandoned as the migration to the cities continued.

One of more successful programs for Georgians was the establishment of the Federal Land Bank system, which served to undermine the crop lien system by providing affordable credit (Coleman 1991:265). Another major change in the lives of the ordinary Georgia farmer was the creation of the Rural Electrification Administration in 1937. Prior to this 97% of the state's farmers lacked electrical service. By 1950 forty-three cooperatives had been created and most of the farms in Georgia were electrified. While causing much hardship on tenants and sharecroppers, the Depression and the associated government programs also served to break "King Cotton's" monopoly. Tobacco, which was already the state's second most important crop by 1927, doubled in acreage by 1939. The 1930s also saw Georgia assume the lead in national peanut production. Pecan production increased and there was also a steady increase in the commercial production of tomatoes, beans, cabbage, cantaloupes, and other truck crops.

It was World War II, as much as any New Deal program, which dragged America, and Georgia, out of the Depression. Military bases pumped federal dollars into the state and war production expenditures encouraged even further economic development (Coleman 1991:339). Per capita income would jump from about \$350 in 1940 to more than \$1,000 in 1950. Most of this growth was directly attributable to the rapid growth of industry and manufacturing.

At the beginning of 1932, as an austerity measure to save money during the Great Depression, Milton County to the north and Campbell County to the southwest became part of Fulton County.

Allenbrook

The history of Allenbrook has been explored by Bass et al. (2004) and this overview relies on this previous work. No additional historical research was anticipated by this contract.

The Early Years

Roswell King moved to coastal Georgia from Connecticut and became manager of Major Pierce Butler's rice and cotton plantations on Butler and St. Simons islands, Georgia, working there until 1820. He also had his own plantation – and enslaved African Americans –in Darien, Georgia where he was known as an abusive owner (Bell 1987). He was also a commission merchant, as well as surveyor. By 1830 he was commissioned by Bank of Darien to establish a branch in Auroria, Georgia where gold had been discovered and was traveling in the upcountry of Georgia. In 1832 when the Georgia State Legislature organized Cobb County from the larger Cherokee County and opened a land lottery, King acquired lots along Vickery Creek (today Big Creek). By 1836 other members of his family had moved to the area, although Bass et al. (2004:8) doubt that Roswell King did so until after his wife, Catherine Barrington, still living in Darien, died in 1839.

King family members that moved to the new community included Roswell's two sons, Ralph and Barrington, as well as his widowed daughter, Eliza Hand. Also moved were between 30 and 40 enslaved African Americans. Bass indicates that the original intent of this upland compound was to provide a summer retreat in order to avoid the coast's sickly season. Roswell built Primrose Cottage and his son. Barrington. built Barrington Hall between 1840 and 1842. They also used their slave labor to build a road down the bluff to Vickery Creek, as well as a dam of cedar logs and rocks. A sawmill was constructed that produced lumber for additional construction projects. While Roswell was in his 70s by this time, his early training in construction was no doubt critical. A brick kiln was also built.

Using their sawmill and brick kiln, the Kings next built a cotton mill on the northwest bank of Vickery Creek in 1839 that was incorporated as the Roswell Manufacturing Company. The goal was to create a cotton mill in the immediate vicinity of cotton plantations in order to reduce transportation costs.

Much of the mill's operation was overseen by Barrington King, who reportedly hired the first superintendent of the mill, Henry Merrell, a northern textile engineer and operator. The original mill building, 15 by 27 m, was expanded to 16 by 43 m. Eventually there were six different structures, including the cotton factory, a store, a gin, a wool factory, and two apartment-style buildings known as The Bricks, in which mill employees were housed. Merrell found his lot at Roswell not entirely satisfying. It was impossible to keep adequate overseers, the first two dying shortly after their arrival and the third accidently starting a small fire at the mill. Merrell found his job duties expanded to cover those tasks as well and while he received a more impressive title, he obtained no raise in pay, even while the company was paying stockholders significant dividends. Merrell left at the end of 1844, purchasing the Mars Hill factory in Clarke County, Georgia and moving to Athens. He was replaced by his cousin, George H. Camp, whom Merrell had previously hired to operate the store.

According to the 1850 Slave Schedules, the three "founding families" of Roswell, together with the next three largest planters, held 192 slaves, 51% of the total 378 slaves reported in the district.

By 1856 James and Thomas King purchased land from Barrington King at the mouth of Vickery Creek to establish their own mill, which they called Ivy Mill (Bass et al. 2004:11). It was apparently around this time that Allenbrook was constructed. After considering, and rejecting, a broad range of options, they conclude that the most likely candidate to have initially built and occupied Allenbrook is James R. King, son of Barrington King, his wife, Francis, his three daughters, and one son. He was listed in the 1860 census as "Woollen Mfcture," indicating his ownership of the Ivy Mill. He had married Francis in 1851, likely necessitating his leaving his father's house and beginning a home of his own (Bass 2004:12). It is also convincingly argued that the construction and detailing of Allenbrook are such that it was owned by a prominent, and prosperous, individual.

The Civil War Years

Shortly after the Civil War began, Roswell's mills began producing war supplies. The Ivy Mill produced a wool-cotton blend known as Roswell Gray that did not shrink and was warmer than flannel, while the Roswell Manufacturing Company produced other military supplies. While James R. King remained in Roswell to manage Ivy Mill, Barrington King and three of his sons enlisted in the Confederate service.

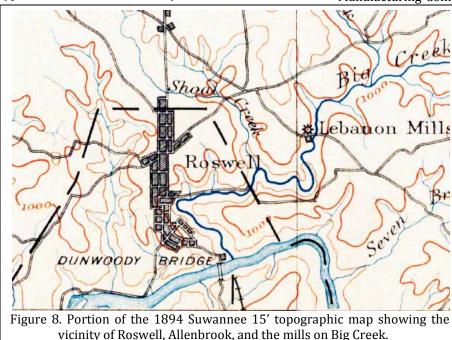
Eventually a unit of the Confederate army worked in the Roswell Mills under an agreement with the Confederate government (Bass et al. 2004:13), further unifying the ties between the mills and the Confederacy.

In the Spring of 1864 Union forces under Sherman invaded Georgia. Two weeks before Sherman arrived in Roswell, Barrington King took the books of both the Roswell Manufacturing Company and Ivy Mills to Savannah. James King, however, remained in Roswell as Captain of the Roswell Battalion (Company C of the Georgia Cavalry). The battalion was formed of mill hands and the stated purpose was "for home defense to protect the portion of the state of Georgia lying north of Atlanta to the Alabama and Tennessee lines . . . not to be called upon except to repel a raid of the Yankees and not to be kept on service longer than is necessary for that special purpose" (quote in Bass et al. 2004:13). Composed of men and boys, it was ordered to retreat south of the Chattahoochee River and burn the bridge if Federal forces advanced to Roswell.

Before leaving, James King apparently took two actions. He instructed his workers to remain at the mill or in their homes until driven off by Union forces. He also assigned an interest in the mill to a Frenchman, Theophile Rochè, who began work in 1863. Bass and his colleagues suggest that the intention was to make it appear that a citizen of a foreign, neutral power owned the mill. Union forces, respecting the property of a foreign citizen, would consequently spare the mill.

The ruse almost worked, but it was noted that workers were busily producing goods clearly marked with the letters "C.S.A." The mill hands were forcibly removed, books and papers seized, some products of use to the Union forces were confiscated, and the remainder, including contents, machinery, and stock were burned. Portions of Ivy Mill were removed and used to create a bridge across the Chattahoochee to replace the one burned by the retreating Confederates (Bass et al. 2004:14-15). The workers, primarily women, were arrested and shipped to Chattanooga, Tennessee. From there they were sent to other refugee camps, some as far away as Jeffersonville, Indiana. It appears that none returned to Georgia. Rochè made his way to New York and from there returned to France, apparently with a large quantity of Confederate bonds and money entrusted to him by the widow of Thomas E. King.

While the mill structures were destroyed, apparently little damage was done to the homes of citizens. This likely includes Allenbrook, which might have been occupied by some other party in King's absence. Much effort has been expanded in attempting to discern who lived at Allenbrook during the last years of the Civil War (Bass et al. 2004:16-17). Perhaps more to the point was the comment of the Rev. Nathaniel Pratt, writing to Barrington S. King and providing details on damages to the community's houses. He notes that most of the damage was done not by Union forces, but rather by Confederate troops, many of whom were deserters. He commented that, "the families living in them do not keep them very neatly" (quoted in Bass et al. 2004:17).



Postbellum

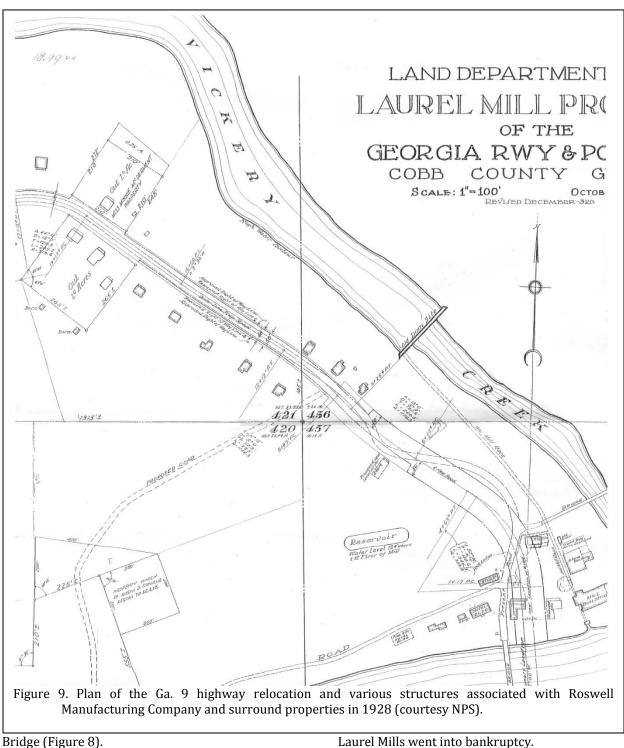
Barrington King returned to Roswell and began rebuilding the second mill, known as New Mill in June 1865, but died in 1866. The work was taken over by George H. Camp, elected President of the company by the shareholders. He completed the work by October 1867 and resigned in spite of inducements to remain. The shareholders then elected Andrew J. Hansell president of the Roswell Manufacturing Company (Bass et al. 2004:18).

James R. King did not return immediately after the war, but instead traveled north to New Jersey, where he purchased new machinery for the mill. Even upon returned to Georgia in 1868, he lived in Marietta, not at Allenbrook, according to the 1870 census. By 1880 he returned to Roswell, purchasing an estate known as Holly Hill. Ivy Mill was apparently rebuilt about 1871. His interests then turned to railroads.

James R. King acquired the interest in Ivy Mill from his brother, Thomas King, as well as the Allenbrook house in 1874. Only two weeks later he sold those properties to the Empire Manufacturing Company. By 1875 the mill was in

> debt and the Roswell Manufacturing Company eventually acquired the property, moving the machinery to their own plant. In 1877 the Laurel Mills Manufacturing Company purchased the Ivy Mill property and converted it back into a wool mill producing the "Roswell Gray" material for uniforms.

> An 1894 map of the area fails to show Allenbrook, although it does indicate the mill developments at the mouth of Vickery Creek (by this time labeled Big Creek) at Dunwoody



Bridge (Figure 8).

The mill ceased operation in 1911 when

By 1923, Georgia Power Company



Figure 10. Allenbrook, ca. 1932 showing the porch across the front of the structure (adapted from Bass et al. 2004:Figure 6).

purchased the Laurel Mills property, including Allenbrook, probably for the hydroelectric

capacity of Vickery Creek. A severe drought caused the company to abandon its plans, but much of the timber from Ivy Mills was used by locals and the Roswell facility (Bass et al. 2004:19).

Bass and his colleagues report the research of an unknown individual who "apparently" conducted oral interviews of additional unknown individuals to reconstruct occupants of Allenbrook. This research seems tenuous, at best, and is not repeated here, but can be reviewed in Bass et al.

(2004:19).

By 1928 a plan was prepared showing the relocation of Ga. 9, as well as many of the structures. It is reproduced in Figure 9 and shows that Allenbrook was identified as being owned by Miss Minnie McDerment. The drawing reveals a porch extending across the front façade and a porch that covers much of the rear.

What is known with certainty is that in 1932 Allenbrook was purchased by Barnett Allen Bell (Bass et al. 2004:20). Bell was apparently employed by Georgia Power Company, from which he acquired the property. The anonymous researcher previously mentioned. reported an interview with

Bell who explained the house originally had only



Figure 11. Shadow line (shown by blue arrows) of the original porch visible on the Allenbrook brick work.



Figure 12. The replacement porch, ca. 1940 (adapted from Bass et al. 2004:Figure 10).

four rooms, two on either side of a wide hallway, plus an attic loft. The house was remodeled by the

"1932 watercolor painted by Barnett Bell" and later state that the watercolor was "likely painted by Bell from memory some time after the renovations" (Bass et al. 2004:29). The authors note errors in windows to support creation of the watercolor after the fact; we are not certain why earlier the painting was attributed to 1932.

Regardless, the painting (Figure 10) shows a hipped roof porch extending across nearly the full façade. A series of three wooden steps lead up to the porch and the topography suggests erosion around the steps and porch in the front yard. It is worth noting that this appears similar to the 1928 plan drawing (Figure 9). The shadow line of this original porch is still clearly visible on the brick work (Figure 11).

om Bass The NPS reports that the porch and its roof were removed by the Bells during their renovation, replacing it with "a small porch with a gabled roof" (Bass et al. 2004:30). It was

Bells, who added a bath downstairs and two bedrooms and a bath upstairs.

The modifications are extensively detailed by Bass and his colleagues (2004:23-28), but need not concern us here. What is important in the scope of this project are exterior modifications of the porch and the yard. Unfortunately, the review of the structure's history is confusing on this point.

Bass and his colleagues first describe a



Figure 13. Allenbrook's third porch, ca. 1950 (adapted from Bass et al. 2004:Figure 14).

supported by square posts and pilasters (Figure 12). The shadow lines of the porch roof and supports are also evident on the brickwork today.

This photo is also of importance since it suggests that the yard had been extensively infilled and graded. Not only is the erosional area no longer present, but the porch, originally 3 steps above grade, is now at grade. Assuming a typical riser or step height of 20 cm, this suggests that the yard received approximately 60+ cm of fill. One source of this fill may have been the terraces they created in the rear yard (Bass et al. 2004:31).

By the 1950s this small porch had been removed and replaced by a full-length, full height porch, with a flat roof without a finished ceiling, and supported by square columns and a brick floor (Figure 13). It was, however, also at the same grade as the ca. 1940s porch. A shadow line of this porch also remains on the brick work, beneath the cornice on the south elevation of the house.

Upon acquisition by the NPS in 1978 the porch was removed and a brick pad was installed at the front entrance. One of the problems noted early was poor drainage around the structure (Bass et al. 2004:31) and it is reported that the yard was regraded to divert water (Bass et al. 2004:32). PREHISTORIC AND HISTORIC OVERVIEW

Excavations

Project Goals

As previously discussed, the project had two primary goals, one related to management activities at the Allenbrook House and the other to the structure's interpretation.



determine the possible impact of the action.

While this activity might be construed as mitigation of the proposed work, that is not the case. Our proposal sought only to identify the soil strata present, explore the quantity and quality of artifacts present, and provide recommendations

that might be useful in conducting the proposed construction activities.

The second goal was interconnected. The examination of soil strata would assist in determining how much fill had been brought onto the site by the Bells during their renovations of the structure, as well as perhaps provide some clues regarding where the soil was obtained. The work would also provide an opportunity to determine if evidence of the original porch remained.

re 14. Evidence of moisture intrusion in the southeast corner of the Allenbrook House.

NPS had discovered that in spite of the regrading of the lot to improve drainage away from the structure, there continued to be water intrusion in the southeast corner of the house, evidenced by an increase in moisture-loving insects, failing paint, and plaster damage (Figure 14). It was determined that the exterior foundation would be exposed and waterproofing treatment applied in an effort to control this damage. However, the excavation to expose the foundation might impact archaeological remains and the Park Superintendent desired to explore what materials might be present to help This goal has far broader implications in terms

of site interpretation. During this work, the Parks Education Coordinator, Ranger Marjorie Thomas visited the work and obtained first-hand insight on the archaeological methods and interpretation of findings.

Methods

This field research was conducted under an ARPA (Archaeological Resources Protection Act) Permit issued by the Southeast Archaeological Center in Tallahassee, Florida (Permit No. CHAT 2012-001).

EXCAVATIONS

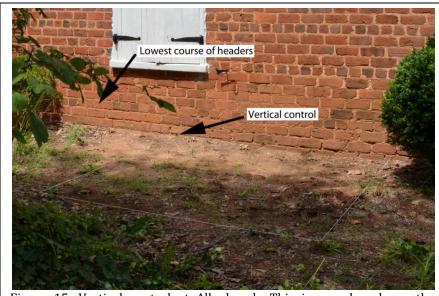


Figure 15. Vertical control at Allenbrook. This image also shows the placement of the test unit. View is to the northwest.

The excavations were conducted using metric measurements (meters and centimeters principally).

We initially proposed a single vertical control point to be used for the excavations at Allenbrook (9FU286). This would be a nail or chiseled point in the brickwork of the structure. This, however, would have damaged the facade and upon reflection we decided that it was unnecessary. Our control point for the excavations was the mortar joint at ground surface. Since ground surface can change, this mortar joint is the base of the second brick below the course of headers about 20 cm from the present ground surface. Since the ground surface can change, this is the first course of headers below the window sill (the next row of headers is bisected by the sill). This approach allowed for control of excavation depths without any permanent alteration of the structure.

The absolute elevation of this point was not determined and elevations were taken as a distance below this point, generally referred to as bs (below surface).

Since only one excavation unit was

permitted, no grid controls were established. The unit was placed 50 cm west of the structure's southeast corner. The northern unit wall was the structure's southern brick face. This placement allowed us to center the excavation under the shadow of the original porch in an effort to identify the southeast corner of the porch. It also allowed us to minimize damage or disturbance to plantings (such as boxwood the immediately to the east, see Figure 15).

Formal excavation at the site was conducted by hand, using a hand sifter

fitted with a .63 cm screen for standardized recovery of artifacts. We initially proposed to screen only undisturbed soils, beginning with the original A horizon. Thus, fill zones would not be screened. This was modified in the field to include sample screening of all levels in order to recover small samples of material that might assist in determining where the fill soils originated.

We also initially intended to conduct excavations by natural soil zone. The permit stipulated 10 cm excavations. To prevent, as much as possible, the intermingling of natural zones, we chose to excavate them in levels no greater than 10 cm. This blended both approaches and resulted in good stratigraphic control.

All materials except brick and mortar were retained by provenience. Rubble would be weighed and discarded on-site.

The unit was troweled and photographed using a digital camera at the base of the excavations, as well as different levels where photo documentation was appropriate. The unit was also drawn at the base of excavations. The digital photography was conducted in compliance with the standards established by the Keeper of the Register (National Register Photography Policy; http://www.nps.gov/nr/publications/guidance/P hoto Policy final.pdf).

Features found during excavation, depending on the evaluation of the field director, would either completely excavated, or bisected (i.e., partially excavated). Feature fill would be screened through .63 cm mesh and features, upon completion of their excavation, were also photographed. Soil samples for further analysis would be obtained if there was a significant potential for the recovery of additional data.

As a result of this work, 4 $\ensuremath{m^2}\xspace$ were opened and examined.

At the conclusion of the hand excavations we mechanically stripped an area extending southward from the unit, exposing an additional 3.48 m². This cut was made by a mini excavator with a cutting bar welded to the bucket teeth. The equipment size allowed easy movement of the soil and roots and the cutting bar allowed a relatively smooth floor to be created, minimizing the need for shovel scraping afterwards.

These cuts were designed to explore the area further south of the structure for any additional yard features, especially any that might be related to the structure's original porch. Our stripping sought to minimize damage to yard vegetation.

We also proposed to prepare a map of immediate area showing the yard, excavations, and plantings. The results of this effort are shown in Figure 16.

Results of Excavations

Excavations found about 7 cm of a reddish brown (5YR 4/3) loam at the surface, designated Level 1. Approximately 60% of this was screened. All materials recovered were

modern, primarily related to recent renovations of the structure, such as dry wall screws, aluminum screen parts, etc.

Underlying this modern humic layer was a very compact mottled red (2.5YR 4/4) clay and saprolite rock that was designated Level 2 and extended from 7 to 17 cm. This zone represented fill and no artifacts were identified (see Figure 17 for profile photograph and drawing).

Level 3 was slightly deeper, extending from 17 to 35 cm, and consisted of identical compact mottled red (2.5YR 4/4) clay and saprolite rock that graded into a red clay (2.5YR 4/6) and saprolite rock. This fill was also sterile.

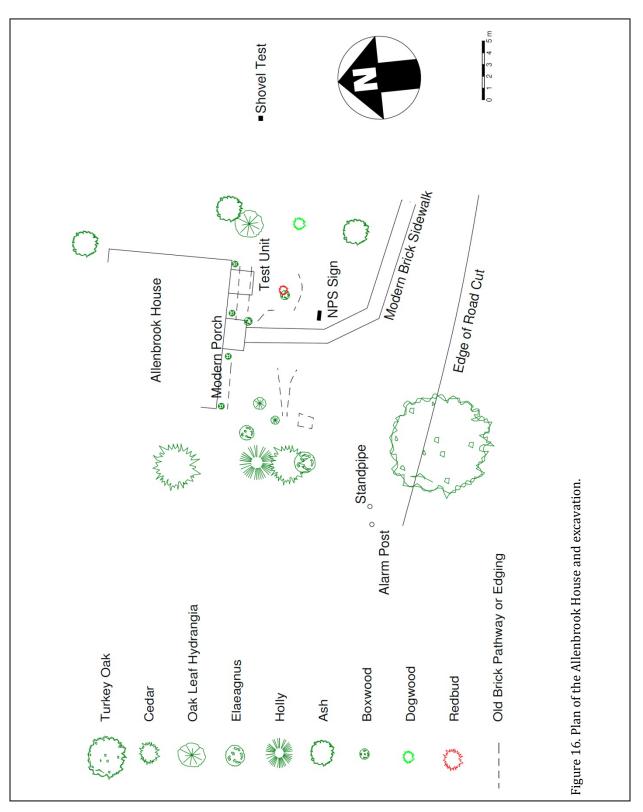
Level 4, which was sterile, extended from 35 to 48 cm and consisted of red clay (2.5YR 4/6) and saprolite rock.

Level 5 extended from 48 to 53 cm and consisted of red clay (2.5YR4/6), but lacked the saprolite rock found in the upper levels. In addition, this level produced a small quantity of artifacts that appear consistent with those found in association with original site humus (discussed below). There was no clear evidence of mixing with underlying cultural levels. One possible explanation is that this level came from elsewhere in the Allenbrook yard, perhaps from the rear which was at one time terraced.

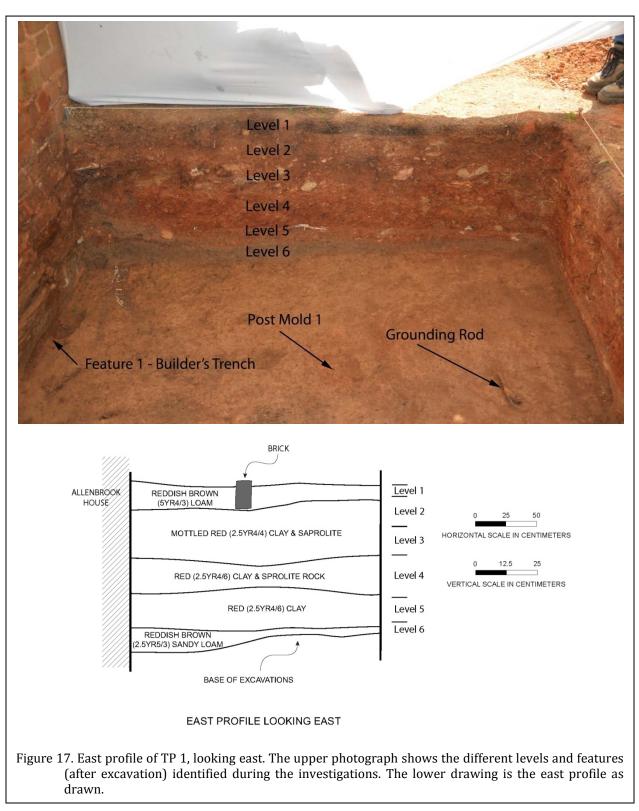
Level 6 represents the original site humus, consisting of a reddish brown (2.5YR 5/3) sandy loam. Artifacts were plentiful including nails, window glass, and pearlware and whiteware ceramics. Of special interest were a relatively large number of buttons recovered. This level extended from 53 to 58 cm.

The excavations identified one square post mold at the base of Level 6 (Figure 18). Upon excavation it was found to be shallow (5 cm) and to measure about 4 by 5 cm. It was likely associated with scantling erected to lay the brick structure.

Also identified was a relatively narrow



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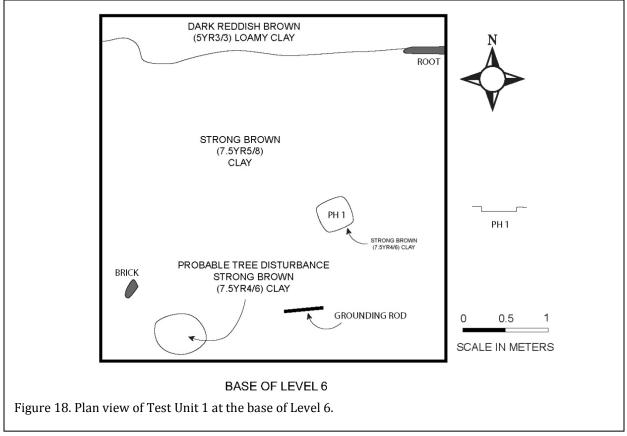
builder's trench (designated Feature 1; see Figures 18 and 19) parallel to the stone wall. This trench did not extend to the base of the wall, suggesting that the wall was constructed primarily from the interior basement (or that the wall was built directly against the exterior face of the footer excavation). This feature measured about 20 to 30 cm in width and was a maximum of 27 cm in depth. Artifacts, including window glass and ceramics, were recovered (Figure 20).

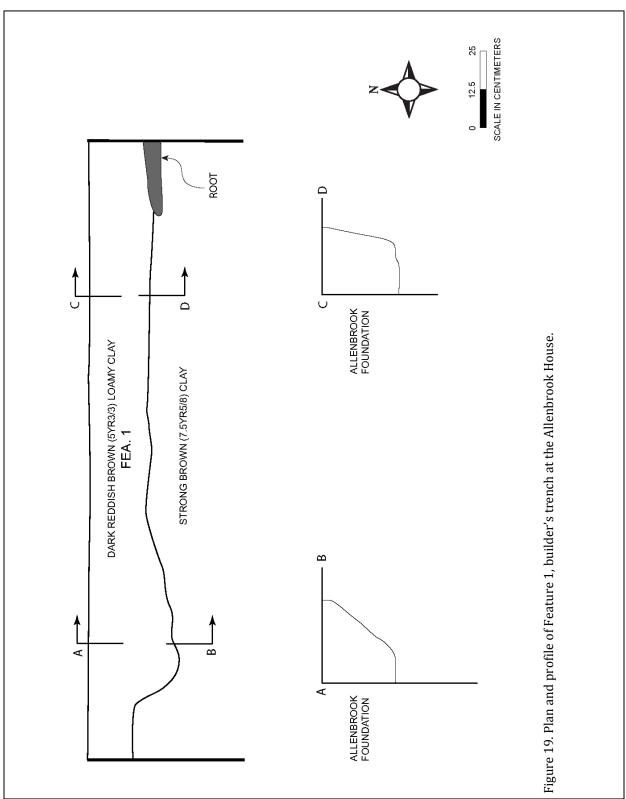
The fill of this wall trench consisted of a dark reddish brown (5YR 3/3) loamy clay, but did not exhibit any indication of dark, organic fill. The recovery of organic remains was not thought high and no flotation sample was retained.

No evidence of porch piers was identified and the old humus thinned away from the house. This suggests that piers were set shallowly and were completely removed by the infill of the yard. An alternative, especially considering Bell's painting that shows a deep wash around the porch, is that the yard eroded over time, exposing the piers. Soil collected only under the porch.

In spite of the absence of piers, we were, however, able to identify very good indirect evidence of the porch.

The unit was fortuitously placed to expose an iron grounding rod that still contained about 0.2m of attached copper grounding wire. We believe this was likely associated with lightening protection originally installed on the house. The location of the grounding rod, about 1.7 m south of the structure wall and 1.4 m west of the structure corner, likely identifies the southeast corner of the original porch. This grounding rod is in almost perfect alignment with the porch ghosting on the south wall. This would make the porch about 1.6 m in width (about 5 feet). Given the disturbance to the yard, this is likely the best evidence that will be identified of the original porch.





EXCAVATIONS



At the conclusion of the work the trench was backfilled. The 2x2m excavation had clear plastic laid down to mark its base and walls, and was also backfilled. The ground was contoured to approximate what was found originally.

Figure 20. Excavation of the post hole. The darker soil of the builder's trench is visible against the brick wall.

At the conclusion of the hand excavations, a mini-excavator with a grading bar welded to the teeth was used to open a trench beginning at the SE corner of the hand excavation southward for 4.5 m. This trench was 1.2 m in width, tapering to 60 cm at its southern end (Figure 21). The trench was opened to expose Level 6, which was found intact throughout the trench, although it became shallower the further we progressed from the house – documenting the erosion that the yard area suffered during occupation.

No features were identified in this trench and no evidence of the porch was encountered. The yard, however, appears to remain level. There is no indication of a gradual decline to the existing road, suggesting that the house yard was always elevated above the roadway.

No additional trenches were opened since we saw no reason to cause additional damage to the yard, the existing vegetation, or the existing brick walkways. The first 1 m of the Level 6 old humus in the trench was excavated in order to expand the existing collection that could be firmly associated with the structure.



Figure 21. Screening of Level 6 in the opened trench.

Analysis

Methods

Processing

Processing was conducted at Chicora's labs in Columbia. During the washing, artifacts were sorted by broad categories – pottery, lithics, bone, ceramics, glass, iron, and other materials. Upon drying, the artifacts were temporarily bagged by these categories, pending cataloging.

The materials will be further processed by the Chattahoochee River National Recreation Area's staff curator for ultimate curation by the Southeast Archaeological Center in Tallahassee, Florida as archaeological site 9FU286. The collection has been provisionally cataloged using field specimen numbers and an Excel data sheet was completed for the collection. Specimens were packed in plastic bags and boxed. Field notes were prepared on pH neutral, alkaline-buffered paper photographic materials were and digital processed to NPS National Register standards. All original field notes, with archival copies, are also curated at this facility. All materials have been delivered to the curatorial facility.

Analytical Methods

Analysis of the collections followed professionally accepted standards with a level of intensity suitable to the quantity and quality of the remains recovered from the excavations.

The temporal, cultural, and typological classifications of the historic remains follow such authors as Cushion (1976), Godden (1964, 1985), Miller (1980, 1991), Noël Hume (1978), Norman-Wilcox (1965), Peirce (1988), Price (1979), South (1977), and Walton (1976). Glass artifacts were identified using sources such as

Jones (1986), Jones and Sullivan (1985), McKearin and McKearin (1972), McNally (1982), Smith (1981), Vose (1975), and Warren (1970). Additional references, where appropriate, will be discussed in the following sections.

The analysis system used South's (1977) functional groups as an effort to subdivide historic assemblages into groups that could reflect behavioral categories. Initially developed for eighteenth-century British colonial assemblages, this approach appears to be a reasonable choice for even late nineteenth century materials since it allows ready comparison to other collections. The functional categories of Kitchen, Architecture, Furniture, Personal, Clothing, Arms, Tobacco, and Activities provide not only the range necessary for describing and characterizing most collections, but also allow typically consistent comparison with other collections.

Minimum Vessel Counts

Another important analytical technique used in this study is the minimum vessel count, as both an alternative to the more traditional count of ceramics and also as a prerequisite to the application of Miller's cost indices. The most common approach for the calculation of minimum number of vessels (MNV) is to lay out all of the ceramics from a particular analytic unit (such as a feature), grouping the sherds by ware, type, and variety (e.g., floral motif vs. pastoral). All possible mends are then made. Body sherds are, from this point on, considered residual and not further considered. Remaining rim sherds, which fail to provide mends, are examined for matches in design, rim form, colors, and other attributes that would indicate matches with previously defined vessels. Those that fail to match either mended vessels or other rims are counted as additional vessels. Since there were no closed features with

ceramics, such as wells or privies, suitable for this level of analysis, the analytic unit used was all of the levels from Unit 1, combined with other proveniences from that area. These were combined for this analysis, using a minimum distinction method for the MNV, which tends to provide a relatively conservative count.

Although no cross mend analyses were conducted on the glass artifacts, these materials were examined in a similar fashion to the ceramics to define minimum number of vessel counts where possible, with the number of vessel bases in a given assemblage being used to define the MNV. Attempts were made to mend and match vessel bases in order to ensure the accuracy of the count. If a glass artifact exhibited a different color and/or form not represented by the counted bases, then it was designated a separate vessel or container.

These techniques were of minimal use given the very small collection present from these investigations.

Dating Techniques

Mean dates rely on South's (1977) mean ceramic dating technique, using primarily the mean dates that he has developed. Another approach is that by Carlson (1983) who observes that a drawback to South's technique is that it gives the same weight to ceramics manufactured for long periods (say from 1700 to 1800, yielding a mean date of 1750) as it does to those produced for only short periods (say from 1740 to 1760, with the same mean date of 1750). While of understandable concern, it seems that relatively few investigators have chosen to implement the changes proposed by Carlson.

Of considerable interest at the Allenbrook House is the occupation span reflected by ceramics. One method used to determine the occupation span of the excavations is South's (1977) bracketing technique. This method consists of creating a time line where the manufacturing spans of the various ceramics are placed. Determining where at least half of the ceramic type bars touch places the left bracket. The right bracket is placed the same way, however, it is placed far enough to the right to touch at least the beginning of the latest type present (South 1977:214). We have chosen to alter South's bracketing technique slightly by placing the left bar at the earliest ending date when that ending date does not overlap with the rest of the ceramic type bars.

Since South's method only uses ceramic types to determine approximate period of occupation, Salwen and Bridges (1977) argue that ceramic types that have high counts are poorly represented in the ceramic assemblage. Because of this valid complaint, a second method - a ceramic probability contribution chart - was used to determine occupation spans. Albert Bartovics (1981) advocates the calculation of probability distributions for ceramic types within an assemblage. Using this technique, an approximation of the probability of a ceramic type contribution to the site's occupation is derived. This formula is expressed:

Pj = partial probability contribution fj = number of sherds in type j F = number of sherds in sample Dj = duration in range of years.

Artifact Patterns

Most historic archaeologists make extensive use of South's artifact groups and classes - sometimes as simply a convenient and logical means of ordering data. Often these functional categories are used for an "artifact pattern analysis" developed by South (1977), who believes that the patterns identified in the archaeological record will reflect cultural processes and will assist in delimiting distinct site types. South has succinctly stated that, "we can have no science without pattern recognition, and pattern cannot be refined without quantification" (South 1977:25). The identification (and occasionally creation) of patterns in historical archaeology is not an end in and of itself, but rather is one of a series of techniques useful for

comparing different sites with the ultimate goal of distinguishing cultural processes at work in the archaeological record.

There can be no denying that the technique has problems, some of which are serious, but no more effective technique than South's has been proposed. Garrow (1982:57-66) offers some extensive revisions of South's original patterns, which will be incorporated in this study. Even at the level of a fairly simple heuristic devise, pattern analysis has revealed five, and possibly seven, "archaeological signatures" - the Revised Carolina Artifact Pattern (Garrow 1982, South 1977) associated with colonial English refuse disposal; the Revised Frontier Pattern (Garrow 1977), 1982: South associated with British-American refuse disposal on rural sites; the Carolina Slave Artifact Pattern (Garrow 1982; Wheaton et al. 1983), representative of nineteenth century slavery; the Georgia Slave Artifact Pattern (Singleton 1980; Zierden and Calhoun 1983), found in association with eighteenth century slave settlements; and the Public Interaction Artifact Pattern (Garrow 1982); as well as the less well developed or tested Tenant/Yeoman Farmer Artifact Pattern (Drucker et al.1984) and the Washington Civic Center Pattern (Garrow 1982), which Cheek et al. (1983:90) suggest might be better termed a "Nineteenth Century White Urban Pattern."

A careful inspection of these patterns surprisingly reveals no overlap in the major categories of Kitchen and Architecture which suggests that these two categories are particularly sensitive indicators of either site function (including intra-site functional differences) or "cultural differences" (see Cheek et al. 1983:90; South 1977:146-154).

Analysis

Unit 1, Levels 1 Through 4

The upper levels in Unit 1 represented mixed deposits, largely dominated by repairs. Examples of materials recovered included 164 window fragments, as well as window glazer's putty and a recent drywall screw. Both machine cut and wire nails were identified. The presence of a whiteware ceramic in Level 1 and a fragment of a stove part in Level 2 indicate mixing with earlier deposits, but in general these levels revealed only recent or mixed assemblages and are likely the result of recent work at the house by NPS.

The terminus post quem (TPQ), which is the date or after which the layer was deposited, is ca. 1960, based on the presence of the dry wall screw. Since these screws have changed little since their initial marking as ITW/Buildex Hi-Lo slotted point Type S drywall screws, no better TPQ is possible.

Levels 3 and 4 were sterile and no artifacts were collected.

Unit 1, Level 5

This level consists of a broad range of materials thought to be redeposited during the Bells' renovation efforts and raising of the structure's front yard in the 1930s.

The assemblage is dominated by architectural remains, including 219 window glass fragments and 61 nails or nail fragments. The latter are primarily machine cut (57%), although one hand wrought nail is also present.

This level also contains the largest collection of Activities Group remains (34), many of which are electrical in nature (wire and light bulb fragments). In fact, it is a medium screw base for an incandescent light bulb that provides the 1882 TPQ for Level 5 (Myers 2010).

The Kitchen Artifact Group includes 54 glass fragments, most of which (n=25 or 46%) are clear glass, and 36 ceramics, most of which are undecorated whiteware (n=24 or two-thirds of the ceramic assemblage).

Included in the glass assemblage are at least three bottles: one black, one brown, and one clear. Also present are at least two clear tumblers, one with a starburst design on the base and another with molded floral designs on the body.

| ANAL | YSIS. |
|------|-------|
|------|-------|

| Artifacts | s Recove | ered fr | Table om the | | brook | Excavation | S | | | |
|--|----------|---------|-----------------|-------|-------|---------------------|--------|-------------|-----|------|
| | Lv. 1 | Lv. 2 | Lv. 5 | Lv. 6 | PH 1 | Tree Disturbance | Fea. 1 | Trench 1 | | |
| Kitchen Group | | | | | | | | - | 230 | 23.2 |
| White porcelain, undecorated | | | | 1 | | | | | | |
| White porcelain, poly HPOG | | | | 1 | | | | | | |
| White porcelain, molded | | | | 2 | | | | | | |
| Pearlware, poly stamped | | | | 1 | | | | | | |
| Whiteware, undecorated | 1 | | 24 | 18 | | | | 11 | | |
| Whiteware, poly hand painted | | | | 1 | | | | | | |
| Whiteware, annular | | | 2 | 1 | | | | | | |
| Whiteware, gilt edge | | | 1 | | | | | | | |
| Whiteware, brown transfer printed | | | | | | | | 1 | | |
| Yellow ware, undecorated | | | 2 | | | | | 1 | | |
| Refined earthenware, UID | | | | 2 | | | | | | |
| Ginger beer SW | | | 1 | | | | | | | |
| Albany slip SW | | | 1 | | | | | | | |
| Alkaline glazed stoneware | | | 3 | | | | | | | |
| Burnt refined earthenware | | | 2 | | | | | | | |
| Glass, black | | | 1 | | | | | 1 | | |
| Glass, aqua | | | 3 | 2 | | | | | | |
| Glass, green | | | 1 | | | | | | | |
| Glass, light green | | | 6 | 13 | | | | 2 | | |
| Glass, brown | | | 10 | 31 | | | 1 | 2 | | |
| Glass, clear | | | 25 | 33 | | | | 8 | | |
| Glass, milk | | | 8 | 3 | | | | | | |
| Glass, manganese | | | | 2 | | | | | | |
| Utensil | | | | | | | | 1 | (00 | (0.(|
| Architecture Group Window glass | 164 | | 219 | 130 | 1 | | 1 | 33 | 690 | 69.6 |
| 0 | 104 | | 219 | 150 | 1 | | 1 | 33 | | |
| Window glass caulk | 11 | | 1 | 1 | | | | | | |
| Hinge fragments Nails, hand wrought | | | 1 | 1 | | | | | | |
| Nails, wire | 1 | | 9 | 2 | | 1 | | 3 | | |
| Nails, machine cut | 4 | | 35 | 15 | | 1 | | 4 | | |
| Nails, UID | 4 | | 16 | 13 | | | | 14 | | |
| Slate fragment | | | 10 | 4 | | | | 14 | | |
| Furniture Group | | | - | | | | | | 3 | 0.3 |
| Stove part | | 1 | 1 | | | | | | 0 | 0.0 |
| Lamp chimney | | | 1 | | | | | | | |
| Arms Group | | | | | | | | | 3 | 0.3 |
| Gun flint fragment | | | 1 | | | | | | | |
| .22 caliber shell | | | | | | | | 1 | | |
| Minie ball, distorted | | | | | | | | 1 | | |
| Tobacco Group | | | | | | | | | 0 | 0.0 |
| Clathing Crown | | | | | | | | | 8 | 0.0 |
| Clothing Group Buttons | | | 7 | 1 | | | | | δ | 0.8 |
| Personal Group | | | , | | | | | | 4 | 0.4 |
| Mirror glass | | | | 1 | | | | | | |
| Drawing compass point | | | 1 | | | | | | | |
| Slate pencil | | | 1 | | | | | | | |
| Jewelry | | | | 1 | | | | | | |
| Activities Group | | | | | | | | | 54 | 5.4 |
| Brass nail fragment | | | 1 | | | | | | | |
| Flower pot fragments | | | 9 | 1 | 1 | | | | | |
| Misc. hardware | 6 | | 2 | 4 | | | | 2 | | |
| Electrical misc. | | | 19 | 1 | | | | | | |
| Mica sheet fragment | | | 1 | | | | | | | |
| Brass fragments | | | 2 | | | | | | | |
| Plastic | | | | | | | | 1 | | |
| | | | | | | | | 4 | | |
| Bisque doll parts | | | | | | | | • | | |

| Table 2. Buttons Recovered in Level 5 | | | | | | | | |
|--|-----------------------------|--------|----------------------|--|--|--|--|--|
| South's Type | Description | Number | Measurements (in mm) | | | | | |
| 23 | Porcelain, convex 4-hole | 3 | 2-11, 1-17 | | | | | |
| 28 | Stamped brass, concave back | 1 | 1-17 | | | | | |
| - | Glass, black, globular | 1 | 1-12 | | | | | |
| - | Glass, black, conical | 1 | 1-7 | | | | | |
| - | Rubber, blue, 2-hole | 1 | 1-15 | | | | | |

Also present in the collection are two decorative items. One is a milk glass bowl and the other is a green glass fragment with gilt decoration.

This level also includes seven buttons itemized in Table 2. The porcelain buttons post-date 1840, the rubber button post-dates the middle of the nineteenth century.

The porcelain buttons are suggestive of use on a shirt and possibly on trousers for suspender attachment. The hard rubber button is a size suitable for securing trousers. The remaining buttons are all likely from women's clothing, with the two black buttons typical of mourning clothes (Sprague 2002:121).

The presence of a slate pencil fragment and drawing compass point, are suggestive of the technical and educational level of individuals living at the structure. The presence of several brass scraps may indicate the individual was responsible for machinery at the mill.

Unit 1, Level 6

This level, thought to represent the old humus when the house was occupied, produced fewer artifacts than the overlying fill level, but the collections are nevertheless very similar.

This level is also dominated by architectural remains. Window glass contributes 130 specimens, while nails add an additional 36 specimens. Most of these nails are machine cut and the wire nails are less common than in Level 5.

Howard notes that cut nails were commonly in use or the bulk of the nineteenth century, generally 1820 to 1890 (Howard 1989; see also Wells 1996). Wire nails became popular after about 1880 (Howard 1989). Cabak and Inkrot (1997:75)suggest that cut nails predominant from about

1850 through 1874, while cut nails and wire nails are found commonly together from about 1875 through 1899. By 1900 wire nails dominate construction except for very specialized needs.

Thus, it seems likely that the nails recovered indicate both construction and probable repair activities at the Allenbook House during the late nineteenth and early twentieth centuries.

The Kitchen Group collection consists primarily of glass (n=84) with clear and brown glass nearly evenly divided. The remains are highly fragmented, but it is probable that two light green bottles and three clear tumblers are present. Undecorated whiteware dominated the ceramics, although a single polychrome stamped pearlware ceramic is also present.

Pearlwares were generally being supplanted by whitewares by 1820, long prior to the construction of the Allenbrook House. This may represent an heirloom piece, although stamping is generally a decorative motif found on whitewares (not pearlwares) between about 1840 and 1860 (Adams 1981:536). Consequently, this may represent a ceramic transitional between pearlware and whiteware. Regardless, only one fragment was recovered.

Only one button was recovered from this level. It is a two-piece iron form measuring 13 mm in diameter. The size and utilitarian nature suggests that it was possibly a suspender or trouser button. Also present was a single opaque, molded black glass jewelry piece. It is notable since it, like the two black buttons found in Level 5, may have represented mourning jewelry.

Left in place, but still worthy of discussion is an electrical ground rod thought to have marked the corner of the porch, and a short segment of copper wire still attached. dating the construction of the house.

Trench 1

Only a small portion of the exposed Level 6 was excavated in this trench, but the artifacts it produced are nearly identical to those identified in the unit excavation. In the Kitchen Group, glass dominates and undecorated whitewares dominate

| Although |
|-----------------------------|
| Franklin's experiments |
| with electricity occurred |
| in 1751-1752, it wasn't |
| until the mid-nineteenth |
| century that the benefit of |
| lightning rods was |
| beginning to be taken |
| seriously. Moreover, it |
| wasn't until the 1850s |
| that the lightning rod |
| evolved from a |
| homemade device erected |
| by knowledgeable |
| farmers, mechanics, and |
| blacksmiths to a commodit |

. 1. 1

blacksmiths to a commodity widely used (Krider 2002, Mohun 2002). Thus, the device identified from these excavations appears to be to be consistent with the posited mid-nineteenth century construction date. Unfortunately, we have identified only the grounding rod and are unable to comment on either the air terminal or the grounding system.

Unit 1, Feature 1 and Post Hole 1

Representing the builder's trench for the Allenbrook House, Feature 1 produced only two specimens – a fragment of brown glass and a window glass fragment. Neither is suitable for dating.

Post Hole 1, thought to represent support for the scantling used to erect the structure is no more informative, producing another fragment of window glass and a clay flower pot fragment. Earthenware flower pots date at least the colonial period, so these remains are also not useful for

| Table 3. Mean Ceramic Date for the Allenbrook Collections | | | | | | | | |
|--|------------|----------------|------|---------|--|--|--|--|
| Ceramic | Date Range | Mean Date (xi) | (fi) | fi x xi | | | | |
| Whiteware, poly hand painted | 1826-1870 | 1848 | 1 | 1848 | | | | |
| Whiteware, non-blue trans printed | 1826-1875 | 1851 | 1 | 1851 | | | | |
| Whiteware, annular | 1831-1900 | 1866 | 3 | 5598 | | | | |
| Whiteware, undecorated | 1813-1900 | 1860 | 55 | 102300 | | | | |
| Yellow ware | 1826-1880 | 1853 | 3 | 5559 | | | | |
| Total | | | 63 | 117156 | | | | |
| Mean Ceramic Date | 1859.6 | | | | | | | |

the ceramics. An iron utensil handle, measuring 8.7 cm in length, was recovered.

Also recovered from these excavations was a badly distorted lead Minié ball. Caliber could not be determined (although .577/.58 is typical) and it is not possible to determine if it was Union or Confederate.

The trench also produced the only children's toy from the site – fragments of a porcelain bisque doll, forming part of the head and a shoulder. Based on size differences, these represent two different dolls.

Dating

Of the 77 ceramics recovered from these excavations, 63 (82%) are suitable for use in deriving a mean ceramic date (Table 3). The resulting date of 1860 is very early in the history of Allenbrook, a probable consequence of the long use of whitewares.

If South's bracketing technique is used to date the site, then we observe a beginning date as

early as about 1826 and an ending date about 1880. Such as early beginning date is implausible, although it is possible that there was either an earlier structure or that there were heirloom ceramics. The problem, of course, is that while whitewares begin in the second decade of the nineteenth century, this doesn't mean that they were deposited at that time (only that it is unlikely the site began earlier).

Artifact Pattern

Table 4 shows the artifact pattern from Unit 1 in comparison with a variety of archaeologically documented patterns. To refresh the reader's memory, the Revised Carolina Artifact Pattern has been developed based on colonial British settlements, but has been relatively representative of nineteenth century middling and

| | | | | ble 4. | | | | | | |
|---|-----------------------|-----------------------------------|---|-----------------------------------|---|--|---|--------------------------------|--|--|
| Artifact Pattern for Unit 1 at Allenbrook | | | | | | | | | | |
| | Allenbrook Pattern | Allenbrook without Lvs. 1-2 | Revised Carolina Artifact Pattern ¹ | Townhouse Pattern ² | Dual- Function Pattern ² | Georgia Slave Artifact Pattern ³ | Carolina Slave Artifact Pattern ¹ | Yeoman Pattern ⁴ | | |
| Kitchen Group | 23.98 | 29.28 | 51.8 - 65.0 | 58.4 | 63.1 | 20.0 - 25.8 | 70.9 - 84.2 | 40.0 - 61.2 | | |
| Architectural Group | 70.80 | 65.22 | 25.2 - 31.4 | 36.0 | 25.0 | 67.9 - 73.2 | 11.8 - 24.8 | 35.8 - 56.3 | | |
| Furniture Group | 0.31 | 0.26 | 0.2 - 0.6 | 0.2 | 0.1 | 0.0 - 0.1 | 0.1 | 0.4 | | |
| Arms Group | 0.21 | 0.26 | 0.1 - 0.3 | 0.3 | 0.2 | 0.0 - 0.2 | 0.1 - 0.3 | - | | |
| Tobacco Group | 0.00 | 0.00 | 1.9 - 13.9 | 2.8 | 6.0 | 0.3 - 9.7 | 2.4 - 5.4 | - | | |
| Clothing Group | 0.83 | 1.02 | 0.6 - 5.4 | 0.9 | 1.2 | 0.3 - 1.7 | 0.3 - 0.8 | 1.8 | | |
| Personal Group | 0.42 | 0.51 | 0.2 - 0.5 | 0.2 | 0.1 | 0.1 - 0.2 | 0.1 | 0.4 | | |
| Activities Group | 3.44 | 3.46 | 0.9 - 1.7 | 1.1 | 4.1 | 0.2 - 0.4 | 0.2 - 0.9 | 1.8 | | |
| ¹ Garrow 1982 | _ | | | | | | | | | |
| ² Zierden et al. 1988 | | | | | | | | | | |
| ³ Singleton 1980 | | | | | | | | | | |
| ⁴ Drucker et al. 1984 | | | | | | | | | | |

The Salwen and Bridges technique produces a very similar result, suggesting a solid occupation core between about 1830 and 1900.

None of these approaches can provide significant refinement to the historical data. Whitewares were so ubiquitous in the nineteenth century that they provide relatively little temporal control. As a result, the dating synthesis would make it appear that the site was occupied continuously and without interruption from at least its construction through 1900. Since the historical research suggests occupation ceased about 1905 and the structure stood empty until purchased by the Bells (Bass et al. 2008:20), the terminal date seems to confirm this historical speculation. above whites in general. The Townhouse and Dual Function patterns are derived from Charleston, South Carolina excavations and tend to represent specific urban patterns from the late eighteenth and early nineteenth centuries. The two slave patterns are characteristic of eighteenth and nineteenth century slave settlements. Finally, the Yeoman pattern is probably the least well documented, but has been found useful to characterize some tenancy period occupations.

Surprisingly, the closest approximation of the Allenbrook settlement is the nineteenth century Georgia Slave Artifact Pattern, largely because these slaves had a paucity of material possessions, resulting in their houses contributing the preponderance of the recovered collections. If we eliminate the mixed Levels 1 and 2, the pattern is still not clearly represented in any of the previous archaeological constructs.

The reason for this poor fit has been found at a variety of other sites where archaeological investigations have focused not so much on the refuse of occupation, but on the remains of the structure. For example, at excavations in the late eighteenth century Tranquil Hill plantation house, kitchen and architectural remains were nearly equal (Trinkley and Hacker 2008:107).

Perhaps another factor of greater importance is the piedmont location of the investigations. A piedmont plantation, Rosemont, investigated by Chicora, revealed a nearly identical artifact pattern. At the time we noted,

> Yet at Rosemont, the identified pattern is clearly distinct kitchen items account for too of little the collection. architectural remains represent too high a proportion, tobacco items are almost nonexistent, and activity the items appear significantly inflated. The

architectural items are certainly inflated by the destruction of the main house and our extensive excavations within the footprint of that house. Nevertheless, the artifact patterns offer little in the way of clear definition (Trinkley 2008:81).

Regardless, a pattern based on a single 2 m excavation unit placed immediately adjacent to a structure is not suitable for any intensive investigations. The results should suggest that additional piedmont archaeological investigations are warranted.

Status Indicators

Here again the very small collection limits useful analysis and conclusions. The decorative motifs found on ceramics and their indication of wealth and status can be examined. Typically edged and annular wares are indicative of inexpensive motifs, while hand painted and especially transfer printed motifs were expensive and hence often associated with owners, rather than their slaves. Plain ceramics are more difficult to evaluate. Early in the introduction of a particular ware, plain vessels tended to be expensive, becoming increasingly affordable

| Table Vessel Forms a | | ook | | | |
|-----------------------------|----------|--------|-----------|-------|--|
| | Hollow | v Ware | Flat Ware | | |
| | Cup Bowl | | Saucer | Plate | |
| Whiteware, undecorated | | | 3 | 5 | |
| Whiteware, annular | | 3 | | | |
| Whiteware, gilt edged | | | 1 | | |
| Whiteware, hand painted | | | | | |
| Whiteware, transfer printed | | | | | |
| Subtotals | 3 | | 9 | | |
| Other ceramics | | 1 | | | |
| Subtotals | | 1 | | | |
| Totals by Function | 4 | | 9 | | |
| % | 30 | .77 | 69.2 | 23 | |

through time.

At Allenbrook no transfer printed or hand painted whitewares were recovered. The most common wares were plain. Given the time period, it is unlikely these represent the introduction of whiteware, but rather appear to be very inexpensive wares (the one gilt edged excepted). On the other hand, if we examine vessel forms (Table 5), it becomes clear that flat wares, typically associated with the more elaborate dining associated with the owners, clearly dominate the collection.

Conclusions

Archaeological Findings

These investigations represent the first excavation of the Allenbrook House besides very brief shovel testing episodes (Gantt 1997:53-56. Jordan 2004:103-105). Although both excavations and the resulting artifacts produced are limited, the work addresses several significant questions concerning the site.

First, the work clearly confirms earlier observations that the site is both eligible for inclusion on the National Register of Historic Places and that it has the potential to address significant archaeological research questions. Some of these questions deal specifically with the occupants of the structure and their status in society. Other questions may have broader implications, such as research regarding typical piedmont artifact patterns.

The synthesis of Georgia's historic archaeology by Joseph and his colleagues provides an excellent overview of the archaeology associated with mills in the state (Joseph et al. 2004:97-114). Understandably almost all of this work has focused either on the industrial aspects of milling (Joseph and his colleagues even place their discussion under "industrial sites") or the archaeology of mill workers. There is little examination of the life ways of the mill owners or superintendents. Wood (1989, 1991, 1993) has provided an extensive overview of the Roswell Mills, which should help focus future research.

Second, the work provides some important information concerning specifics of the structure, its occupants, and archaeological features at the site.

For example, the research helps confirm

the historic research suggesting construction in the 1850s. It reveals that, at least in this corner, the foundation wall was constructed against the builder's trench, probably by masons standing inside the structure. The artifacts reveal the presence of women and children at the site, as well as raising the possibility that at least one woman was wearing mourning clothes during her tenure. The work also suggests that in spite of the speculated wealth of those occupying the site, the ceramics are suggestive of relatively inexpensive wares.

This research confirms that the Bells raised the front yard as much as 0.5 m and that some of the fill may have been taken from elsewhere onsite since the artifacts in the fill appear contemporaneous with the undisturbed old A horizon. This suggests the importance of a far more thorough and expansive examination of the Allenbrook front and rear yards in order to better understand nineteenth century activities at the site.

These investigations have helped the National Park Service confirm that the ca. 1930 painting of the Allenbrook house is accurate – at least as far as the general dimensions of the porch. The presence of the grounding rod, about 1.7m south of the structure wall and 1.4m west of the structure corner, likely identifies the southeast corner of the original porch. This grounding rod is in almost perfect alignment with the porch ghosting on the south wall. This would make the porch about 1.6m in width. Given the disturbance to the yard, this is likely the best evidence that will be identified of the original porch.

The National Park Service has an exceptional opportunity to incorporate the findings of this limited archaeological work into their site interpretation, expanding on current

educational programs and visitor experiences.

Management Recommendations

Although this work was not intended to fulfill Section 106 requirements, it does provide insight into the management of the Allenbrook house.

We understand from the 2004 Allenbrook Historic Structure Report (Bass et al. 2004) that the entire north wall and substantial portions of the east and west walls have been extensively modified with the placement of Portland cement footers and wall reconstruction. There is no information provided to indicate whether this work was preceded by archaeological investigations. The work, however, would have destroyed evidence of the builder's trench and associated archaeological deposits around much of the building. This dramatically increases the value of the deposits associated with the south wall and identified during these investigations.

This investigation reveals that much of Level 5 and all of Level 6 contain valuable cultural materials that can be used to interpret the Allenbrook structure. It is our professional opinion that these archaeological deposits should be preserved in place. If that is not feasible, we recommend additional archaeological investigations.

Sources Cited

- Adams, William H. (editor)
 - 1981 Waverly Plantation: Ethnoarchaeology of a Tenant Farming Community. Resource Analysists, Bloomington, Indiana.

Anderson, David G.

- 1990 A North American Paleoindian Projectile Point Database. *Current Research in the Pleistocene* 7:67-69.
- 1992 Models of Paleoindian and Early Archaic Settlement in the Lower Southeast. In *Paleoindian and Early Archaic Period Research in the Lower Southeast: A South Carolina Perspective*, edited by David G. Anderson, Kenneth G. Sassaman, and Christopher Judge, pp. 28-47. Council of South Carolina Professional Archaeologists, Columbia.

Anderson, David G. and Glen T. Hanson

1988 Early Archaic Settlement in the Southeastern United States: A Case Study from the Savannah River Valley. *American Antiquity* 53:262-286.

Anderson, David G. and J.W. Joseph

1988 Prehistory and History Along the Upper Savannah River: Technical Synthesis of Cultural Resource Investigations, Richard B. Russell Multiple Resource Area. Vol. 1. Garrow and Associates, Inc., Atlanta. Prepared for the Savannah District, U.S. Army Corps of Engineers, Savannah, Georgia. Anderson, David G. and Joseph Schuldenrein

1985 Prehistoric Human Ecology Along the Upper Savannah River: Excavations at the Rucker's Bottom, Abbeville, and Bullard Site Groups. Archeological Services Branch, National Park Service, Russell Papers. Atlanta.

Anderson, David G. and Kenneth E. Sassaman (editors)

1996 *The Paleoindian and Early Archaic Southeast.* University of Alabama Press, Tuscaloosa.

Anderson, David G., R. Jerald Ledbetter, and Lisa O'Steen

1990 Paleoindian Period Archaeology of Georgia. Georgia Archaeological Research Design Paper 6. University of Georgia Laboratory of Archaeology Series Report 28. Athens.

Bartovics, Albert

1981 The Archaeology of Daniels Village: an Experiment in Settlement Archaeology. Unpublished Ph.D. dissertation, Department of Anthropology, Brown University, Providence.

Bass, Robert A., Deborah Harvey, Jack Pyburn, Jacqueline Renell, Jay Carlson, and Brandy Herlinger

> 2004 Chattahoochee River National Recreation Area: Allenbrook Historic Structure Report. Cultural Resources, Southeast Region, National Park Service, Atlanta.

Bell, Malcolm

1987 Major Butler's Legacy: Five Generations of a Slaveholding Family. University of Georgia Press, Athens.

Bense, Judith A.

1994 Archaeology of the Southeastern United States: Paleoindian to World War I. Academic Press, New York.

Cabak, Melanie A. and Marie M. Inkrot

- 1997 Old Farm, New Farm. Research Paper 9. Occasional Papers of the Savannah Archaeological Research Program, Savannah River Plant, SC Institute of Archaeology and Anthropology, Aiken, South Carolina.
- Carlson, David L.
 - 1983 Computer Analysis of Dated Ceramics: Estimating Dates and Occupational Ranges. Southeastern Archaeology 2:8-20.

Cheek, Charles D., Amy Friedlander, Cheryl Holt, Charles H. LeeDecker, Teresa Ossim

> 1983 Archaeological Investigations at the National Photographic Interpretation Center Addition, Washington. D.C. Navy Yard Annex. Soils Systems, Inc., Alexandria, Virginia.

Coakley, Robert W.

1989 The American Revolution: First Phase. In *American Military History*, pp. 41-69. Center of Military History, United States Army, Washington, D.C.

Coe, Joffre L.

1964 The Formative Cultures of the Carolina Piedmont. *Transactions* of the American Philosophical Society 54(5).

Coleman, Kenneth

- 1958 *The American Revolution in Georgia, 1763-1789* University of Georgia Press, Athens.
 - 1960 *Georgia History in Outline*. University of Georgia Press, Athens.

Coleman, Kenneth, editor

- 1991 *A History of Georgia*. Second Edition. University of Georgia Press, Athens.
- Coulter, E. Merton
 - 1960 *Georgia: A Short History*. Revised Edition. University of North Carolina Press, Chapel Hill.
- Cushion, John P.
 - 1976 *Pottery and Porcelain Tablewares.* Studio Vista, London.
- Daniel, I. Randolph
 - 1992 Early Archaic Settlement in the Southeast: A North Carolina Perspective. In *Paleoindian and Early Archaic Period Research in the Lower Southeast: A South Carolina Perspective*, edited by David G. Anderson, Kenneth E. Sassaman, and Christopher Judge, pp. 68-77. South Carolina Council of Professional Archaeologists, Columbia.
- DeBow, J.D.B.
 - 1854 *Statistical View of the United States.* A.O.P. Nicholson, Washington, D.C.

DePratter, Chester B. and James D. Howard

1980 Indian Occupation and Geologic Historic of the Georgia Coast: A 5,000 Year Summary. In Excursions in Southeastern Geology: The Archaeology-Geology of the Georgia Coast, edited by James D. Howard, Chester B. DePratter, and Robert W. Frey, pp. 1-65. Georgia Department of Natural Resources, Environmental Protection Division, Atlanta.

Drucker, Lesley, Ronald Anthony, Susan Jackson, Susan Krantz, and Carl Steen

1984 An Archaeological Study of the Little River-Buffalo Creek Special Land Disposal Tract. Carolina Archaeological Services, Columbia. Submitted to U.S. Army Corps of Engineers, Savannah District, Savannah, Georgia.

Espenshade, Christopher T.

2008 Woodland Period Archaeology of Northern Georgia: Update 2008. New South and Associates, Stone Mountain, Georgia.

Gantt, Mary E.

- 1997 Archaeological Resources Survey -Proposed Improvements of State Route 9/Atlanta Street - Roswell, Fulton County, Georgia. R.S. Webb & Associates, Holly Springs, Georgia.
- Garrow, Patrick
 - 1982 Artifact Analysis. In Archaeological Investigations on the Washington, D.C. Civic Center Site, edited by Patrick Garrow, pp. 57-167. Soil Systems, Inc., n.p. Submitted to Historic Preservation Office, Government of the District of Columbia.

Geologic Resources Division

2012 Chattahoochee River National Recreation Area GRI Ancillary Map Information Document. Natural Resources Stewardship and Science Directorate, National Park Service, Washington, D.C. Georgia Environmental Protection Division

1997 Chattahoochee River Basin Management Plan 1997. Georgia Department of Natural Resources, Atlanta.

Godden, Geoffrey A.

- 1964 Encyclopaedia of British Pottery and Porcelain Marks. Schiffer Publishing, Exton, Pennsylvania.
- 1985 *English China*. Barrie and Jenkins, London.
- Guernsey, Alfred H. and Henry M. Alden (editors) 1977 [1866] Harpers Pictorial History of the Civil War. Harper and Brothers, n.p. 1977 facsimile ed. Fairfax Press, n.p.

Hally, David J. and James L. Rudolph

1986 *Mississippi Period Archaeology of the Georgia Piedmont. Georgia.* Archaeological Research Design Paper No. 2. University of Georgia Laboratory of Archaeology, Athens.

Harper, Roland M.

1922 Development of Agriculture in Lower Georgia from 1890 to 1920 with a Summary for the Whole State, 1850 to 1920. *Georgia Historical Quarterly* (6)326-354.

Heiman, K.

- 2000 Vascular flora of the Chattahoochee River National Recreation Area, Atlanta, Georgia. Prepared for the National Park Service and The Nature Conservancy.
- Holder, Thomas W. and Howard A. Schretter 1986 *The Atlas of Georgia*. University of Georgia Press, Athens.

Howard, Hugh 1989 *How Old Is This House?* The Noonday Press, New York.

Hudson, Charles, Marvin Smith, and Chester DePratter

1984 The Route of the DeSoto Expedition from Apalachee to Chiaha. *Southeastern Archaeology* 3: 65-77.

Janes, Thomas P.

1878 *Hand-Book of the State of Georgia*. Russell Brothers, New York.

Jefferies, Richard W.

- 1975 Tunacunnhee: A Hopewellian Burial Complex in Northwest Georgia. *Tennessee Archaeologist* 32(1): 13-32.
- 1976 The Tunacunnhee Site: Evidence of Hopewell Interaction in Northwest Georgia. Anthropological Papers of the University of Georgia Number 1. Department of Anthropology, Athens.

Jones, Olive R.

1986 *Cylindrical English Wine and Beer Bottles,* 1735-1850. National Historic Parks and Sites Branch, Quebec.

Jones, Olive R. and Catherine Sullivan

1985 The Parks Canada Glass Glossary for the Description of Containers, Tableware, Flat Glass, and Closures. National Historic Parks and Sites Branch, Parks Canada, Quebec.

Jordan, William R.

2004 Archaeological Survey of Proposed Fuel Reduction Areas, Chattahoochee River National Recreation Area, Cobb, Forsyth, *Fulton, and Gwinnett Counties, Georgia.* R.S. Webb & Associates, Holly Springs, Georgia.

Joseph, J.W., Theresa M. Hamby, and Catherine S. Long

2004 Historical Archaeology in Georgia. Archaeological Research Design Paper No. 14. University of Georgia Laboratory of Archaeology, Athens.

Kidd and Associates, Inc.

1973 Historic Area Study: A Plan to Preserve Roswell's Historical Character. City of Roswell, Roswell, Georgia.

Krider, E. Philip

- 2002 The Lightning Rod -"An New". Instrument So Paper presented at Taming the Electrical Fire: A Conference on the History and Cultural Meaning of the Lightning Rod. Bakken Library and Museum, Minneapolis.
- Lane, Mills
 - 1993a Standing Upon the Mouth of a Volcano: New South Georgia. Beehive Press, Savannah.
 - 1993b Times that Prove People's Principles: Civil War in Georgia. Beehive Press, Savannah.

Ledbetter, R. Jerald

1995 Archaeological Investigations at Mill Branch Sites 9WR4 and 9WR11, Warren County, Georgia. Technical Reports Number 3. Interagency Archaeological Services Division, National Park Service, Atlanta. Ledbetter, R. Jerald, David G. Anderson, Lisa D. O'Steen, and Daniel T. Elliott 1996 Paleoindian and Early Archaic

Research in Georgia. In *The Paleoindian and Early Archaic Southeast*, edited by David G. Anderson and Kenneth G. Sassaman, pp. 270-287. The University of Alabama Press, Tuscaloosa.

Marshall, Curtis G.

- 2008 Soil Survey of Fulton County, Georgia. Soil Conservation Service, USDA, Washington, D.C.
- McKearin, George L. and Helen McKearin
 - 1972 *American Glass*. Crown Publishers, New York.

McNally, Paul

- 1982 *Table Glass in Canada, 1700-1850.* Parks Canada History and Archaeology 60.
- Meadows, John C
 - 1951 *Modern Georgia*. University of Georgia Press, Athens.

Michie, James L.

- 1968 The Brier Creek Lanceolate. *The Chesopiean* 4:123.
- 1977 The Late Pleistocene Human Occupation of South Carolina. Unpublished Honor's Thesis, Department of Anthropology, University of South Carolina, Columbia.

Miller, George

- 1980 Classification and Economic Scaling of 19th Century Ceramics. *Historical Archaeology* 14:1-40.
 - 1991 A Revised Set of CC Values for Classification and Economic Scaling of English Ceramics from 1787 to 1880. *Historical*

Archaeology 25(1):1-25.

Mohun, Arwen P.

2002 Lightning Rods and the Commodification of Risk in 19th Century America. Paper presented Taming the at Electrical Fire: A Conference on the History and Cultural Meaning of the Lightning Rod. Bakken Library and Museum, Minneapolis.

Myers, Adrian T.

- 2010 Telling Time for the Electrified: An Introduction to Porcelain Insulators and the Electrification of the American Home. *Technical Briefs in Historical Archaeology* 5:31-42.
- Nevens, Allan
 - 1971 *The War for the Union*. Vol. IV. Charles Scribner's Sons, New York.
- Noël Hume, Ivor
 - 1978 *A Guide to Artifacts of Colonial America.* Alfred A. Knopf, New York.

Norman-Wilcox, Gregor

1965 Pottery and Porcelain. In *The Concise Encyclopedia of American Antiques,* edited by Helen Comstock, p.132-161. Hawthorn, New York.

Oliver, Billy L.

- 1981 The Piedmont Tradition: Refinement of the Savannah River Stemmed Point Type. Unpublished Master's thesis, Department of Anthropology, University of North Carolina, Chapel Hill.
 - 1985 Tradition and Typology: Basic Elements of the Carolina Projectile Point Sequence. In

Structure and Process in Southeastern Archaeology, edited by Roy S. Dickens and H. Trawick Ward, pp. 195-211. The University of Alabama Press, University.

Peirce, Donald C.

1988 English Ceramics: The Frances and Emory Cocke Collection. High Museum of Art, Atlanta.

Price, Cynthia

- 1979 19th Century Ceramics in the Eastern Ozark Boarder Region. Monograph Series 1. Center of Archaeological Research, Southwest Missouri University, Springfield.
- Rose, Willie Lee
 - 1964 Rehearsal for Reconstruction: The Port Royal Experiment. Oxford University Press, New York.

Rowland, Larry

1987 "Alone on the River:" The Rise and Fall of the Savannah River Rice Plantations of St. Peters Parish, South Carolina. South Carolina Historical Magazine 88(3): 121-150.

Salwen, Bert and Sarah T. Bridges

1977 Cultural Differences and the Interpretation of Archaeological Evidence, Problems with Dates. *Research and Transactions of the New York Archaeological Association* 17(1):165-173.

Sassaman, Kenneth E.

1985 A Preliminary Typological Assessment of MALA Hafted Bifaces from the Pen Point Site, Barnwell County, South Carolina. South Carolina Antiquities 17: 1-17.

- 1993 Early Woodland Settlement in the Aiken Plateau: Archaeological Investigations at 38AK157, Savannah River Site. Aiken County, South Carolina. Savannah River Archaeological Research Papers 3. South Carolina Institute Archaeology of and University Anthropology, of South Carolina, Columbia.
- Sassaman, Kenneth E. and David G. Anderson
 - 1994 Middle and Late Archaic Archaeological Records of South Carolina: A Synthesis for Research and Resource Management. of Council South Carolina Archaeologists, Professional Columbia.

Sassaman, Kenneth E., Mark J. Brooks, Glen T. Hanson, and David G. Anderson

1990 Native American Prehistory of the Middle Savannah River Valley. Savannah River Archaeological Research Papers 1. South Carolina Institute of Archaeology and Anthropology, University of South Carolina, Columbia.

Singleton, Theresa

1980 The Archaeology of Agro-American Slavery in Coastal Georgia: A Regional Perception of Slave Household and Community Patterns. Ph.D. Dissertation, University of Florida, Gainesville. University Microfilms, Ann Arbor.

Smith, E. Ann

1981 Glassware from a Reputed 1745 Siege Debris Context at the Fortress of Louisbourg. Parks Canada History and Archaeology 55:75-255.

Smith, Marvin T.

1992 Historic Period Indian Archaeology of Northern Georgia. Archaeological Research Design Paper No. 7. University of Georgia Laboratory of Archaeology, Athens.

South, Stanley

1977 Method and Theory in Historical Archaeology. Academic Press, New York.

Sprague, Roderick

2002 China or Prosser Button Identification and Dating. *Historical Archaeology* 36(2):111-127.

Stooksbury, David E.

2003 Historical Droughts in Georgia and Drought Assessment and Management. In *Proceedings of the 2003 Georgia Water Resources Conference*, edited by Kathryn J. Hatcher. Institute of Ecology, University of Georgia, Athens.

Trimble, Stanley W.

1974 *Man-Induced Soil Erosion on the Southern Piedmont, 1700-1970.* Soil Conservation Society of America, Aukey, Iowa.

Trinkley, Michael

2008 Revisiting Rosemont Plantation, Laurens County, South Carolina. Research Contribution 489. Chicora Foundation, Columbia.

Trinkley, Michael and Debi Hacker

2008 Tranquil Hill Plantation: The Most Charming Inland Place. Research Series 66. Chicora Foundation, Inc., Columbia.

U.S. Department of Agriculture

1980 Yadkin-Pee Dee River Basin, North and South Carolina – Forest Resources. U.S. Department of Agriculture, Washington, D.C. Vose, Ruth Hurst

1975 The Antique Collector's Guides: Glass. Crescent Books, New York.

Walker, J.H., J.T. Miller, T.W. Green, and R.F. Wells 1958 *Soil Survey of Fulton County, Georgia.* Soil Conservation Service, USDA, Washington, D.C.

Walthall, John A.

1980 Prehistoric Indians of the Southeast: Archaeology of Alabama. University of Alabama Press, University.

Walton, Peter

1976 Creamware and Other English Pottery at Temple Newsam House, Leeds: A Catalogue of the Leeds Collection. Manningham Press, Bradford, England.

Ward, Trawick

1983 Whites Creek: The Second Time Around. South Carolina Antiquities 15:63-65.

Warren, Phelps

1970 Irish Glass: The Age of Exuberance. Faber and Faber, London.

Wauchope, Robert

1966 Archaeological Survey of Northern Georgia with a Test of Some Cultural Hypotheses. Memoirs of the Society for American Archaeology 21.

Weir, Robert

1983 *South Carolina: A History*. KTO Press, Millwood, New York.

Wells, Tom

1996 Nail Chronology: The Use of Technologically Derived Features. *Historical Archaeology* 32(2):78-99. Wheaton, Thomas R., Amy Friedlander, and Patrick Garrow

1983 Yaughan and Curriboo Plantations: Studies in Afro-American Archaeology. Soil Systems, Inc., Marietta, Georg.la. Submitted to National Park Service, Archaeological Services Branch, Atlanta, Georgia. Contract Number C-5950(79).

Williams, Stephen B. (editor)

1968 The Waring Papers: The Collected Works of Antonio J. Waring, Jr. Papers of the Peabody Museum of Archaeology and Ethnology 58.

Wood, Karen G.

- 1989 An Archaeological Survey of the Presumed Location of the First Roswell Factory. Report prepared for the Roswell Historical Society. Southeastern Archaeological Services, Athens.
 - 1991 Archaeological Testing of the Location of the First Roswell Cotton Factory. Report prepared for the Roswell Historical Society. Southeastern Archaeological Services, Athens.
 - 1993 The Textile Mills of Roswell, Georgia. *Early Georgia* 21(1):1-23.

Wood, W. Dean and William R. Bowen

1995 Woodland Period Archaeology of Northern Georgia. Georgia Archaeological Research Design Paper No. 9. University of Georgia Laboratory of Archaeology, Athens.

WPA Writers' Program

1990 *Georgia: The WPA Guide to its Towns and Countryside*. Compiled by the Writers' Program of the Works Progress Administration. University of South Carolina Press, Columbia.

Zierden, Martha and Jeanne Calhoun

1983 An Archaeological Assessment of the Greenfield Borrow Pit. The Charleston Museum, Charleston, South Carolina.

Zierden, Martha, Kimberly Grimes, David Hudgins, and Cherie Black

1988 Charleston's First Suburb: Excavations at 66 Society Street. Archaeological Contributions 20. The Charleston Museum, Charleston, South Carolina. Archaeological Investigations

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