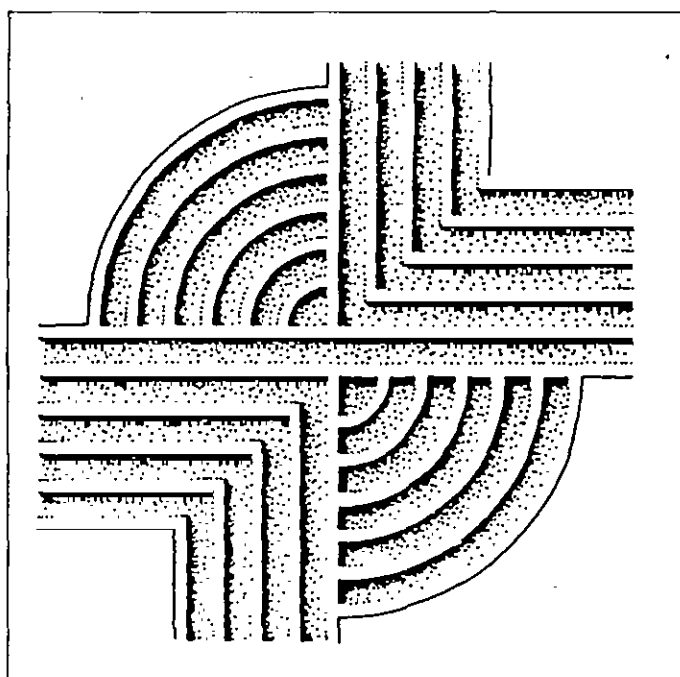


**AN ARCHAEOLOGICAL RECONNAISSANCE
OF THE LOXCREEN TRACT,
LEXINGTON COUNTY, SOUTH CAROLINA**



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**AN ARCHAEOLOGICAL RECONNAISSANCE OF THE
LOXCREEN TRACT, LEXINGTON COUNTY,
SOUTH CAROLINA**

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Chicora Research Contribution 237

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ABSTRACT

This study represents a reconnaissance level archaeological survey of a 90 acre tract southeast of the Columbia Metropolitan Airport in northeast Lexington County, South Carolina. The study was conducted the week of December 15, 1996 and is being done in order to fulfill compliance with the National Historic Preservation Act (Public Law 89-665, as amended by Public Law 96-515).

The project area is situated on a low bluff overlooking Savannah Branch and, further south, Congaree Creek. It is bounded to north, east, and west by existing development and several sections of woods, while to the south are lowlands, cultivated in some areas and wooded in others.

The investigations included a review of the site files at the S.C. Institute of Archaeology and Anthropology and a request for information on historical surveys and NRHP properties from the S.C. Department of Archives and History. Additional historic research focused on extant maps of the project area, reviewed in order to evaluate the potential for historic sites. The study incorporated a combination of intuitive shovel testing and pedestrian survey focusing on open areas such as cultivated fields, dirt roads, tree throws, and erosional areas.

The field survey found that much of the project area is low and poorly drained, exhibiting a relatively low archaeological potential. In fact, it appears that the land with the highest archaeological potential in this general area has already been developed. In spite of this, one archaeological site, 38LX412, was identified during the field survey. This site represents a historic house, probably dating from the early twentieth century. The site area has been heavily impacted, but this reconnaissance level investigation is not suitable for providing an assessment of the site's eligibility for inclusion on the National Register of Historic Places.

Although this reconnaissance level investigation found one site, the area is not anticipated to exhibit a high archaeological potential. It is anticipated, but cannot be conclusively demonstrated without an intensive survey, that other archaeological sites will be uncommon on the property.

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We would also like to thank Mr. Keith Derting of the S.C. Institute of Archaeology and Anthropology for their assistance with the state site

files and the use of the Institute's library. Dr. Tracy Power of the S.C. Department of Archives and History graciously assisted us in the review of that agency's files for NRHP properties and previous historical surveys.

The Field Director for this work was Mr. William B. Barr and Ms. Debi Hacker prepared the graphics and conducted the laboratory work on the collections. Both are to be thanked for their dedication and attention to detail.

INTRODUCTION

Survey Background

This investigation was conducted by Dr. Michael Trinkley and Mr. William B. Barr of Chicora Foundation, Inc. for Mr. Thomas Ballou of ARM Environmental Services. The project, which involves a reconnaissance level investigation of a 90 acre tract, is situated in Lexington County, southeast of the Columbia Metropolitan Airport and southwest of Cayce and West Columbia (Figures 1 and 2).

Chicora received a request for a budgetary proposal on October 27, 1996. A proposal was submitted on November 9, 1997. This proposal was accepted on December 15, 1997, with the field investigations conducted December 18, 1997. The laboratory processing of collections, preparation of necessary graphics and site forms, and completion of this report took place between December 18 and December 23, although it was not possible to obtain a site number for the identified historic remains until after the University of South Carolina returned from Christmas break, on January 5, 1998.

The project involves a 90 acre parcel bordered by S-72 to the north, industrial development to the east and west, and the Congaree Creek swamp to the south. The tract has a boot shape, with the "toe" stretching out to the east-northeast along the Congaree Creek (Figure 2). Most of the parcel is either wooded (Figure 3) or is old field (Figure 4), with much of the land being rather low and poorly drained (Figure 5).

This study is intended to provide an overview of the reconnaissance level archaeological survey of the project area and our findings. The statewide archaeological site files held by the South Carolina Institute of Archaeology and Anthropology were examined for information pertinent to the project area. In addition, the South Carolina Department of Archives & History was consulted about National Register properties

in the area, as well as previous historical studies. No National Register properties were found to be located in or around the project area (Dr. Tracy Power, personal communication, December 16, 1997).

Because only a reconnaissance level study was conducted, all portions of the survey tract were not examined and, in fact, our work was confined to intuitive shovel tests and a pedestrian survey of the higher probability areas of the tract. One archaeological site was encountered in the work. It is likely that additional sites were not found because of the generally poor drainage and the gradually sloping topography. There were relatively few areas suitable for prehistoric or historic occupation and the bluff overlooking the creek fails to present a clear demarcation. There are no high sandy terraces overlooking the swamp in this particular area.

Although there are a number of archaeological sites associated with Congaree Creek and found in the general area of this project, they are typically on well drained, sandy terrace soils overlooking swamp or lowlands. Alternatively, they are found on ridge crests or noses, using within close proximity to a water source. Historic sites, especially from the nineteenth century on, are associated with historic roadways.

Curation

An archaeological site form for the one site identified in this study has been filed with the South Carolina Institute of Archaeology and Anthropology (SCIAA). The field notes, artifact catalogs, and artifacts resulting from these investigations have been curated at SCIAA using their accessioning and cataloging system. All records and duplicate copies have been provided to SCIAA and will be maintained by that institution in perpetuity. The only photographic materials associated with this project are color prints, which

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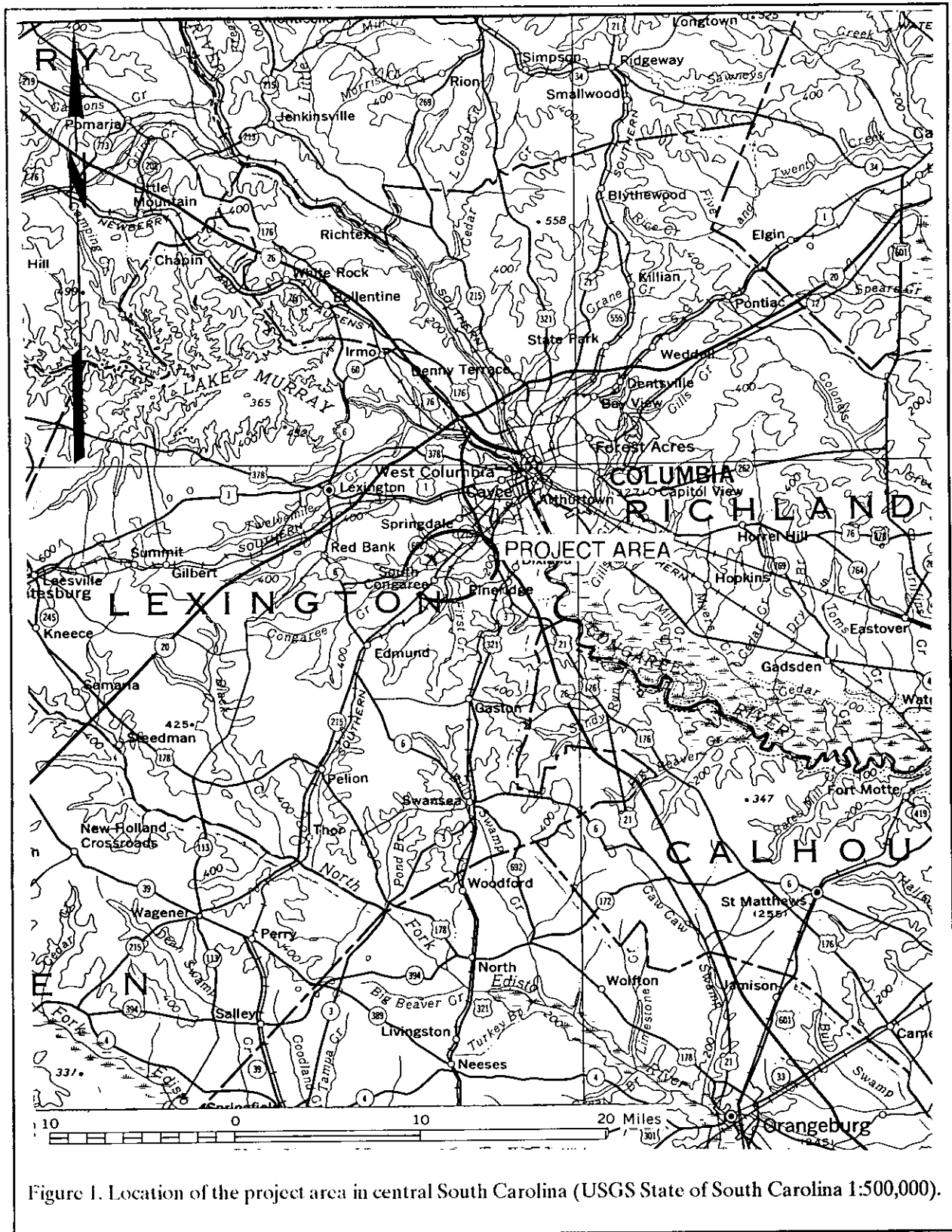


Figure 1. Location of the project area in central South Carolina (USGS State of South Carolina 1:500,000).

INTRODUCTION

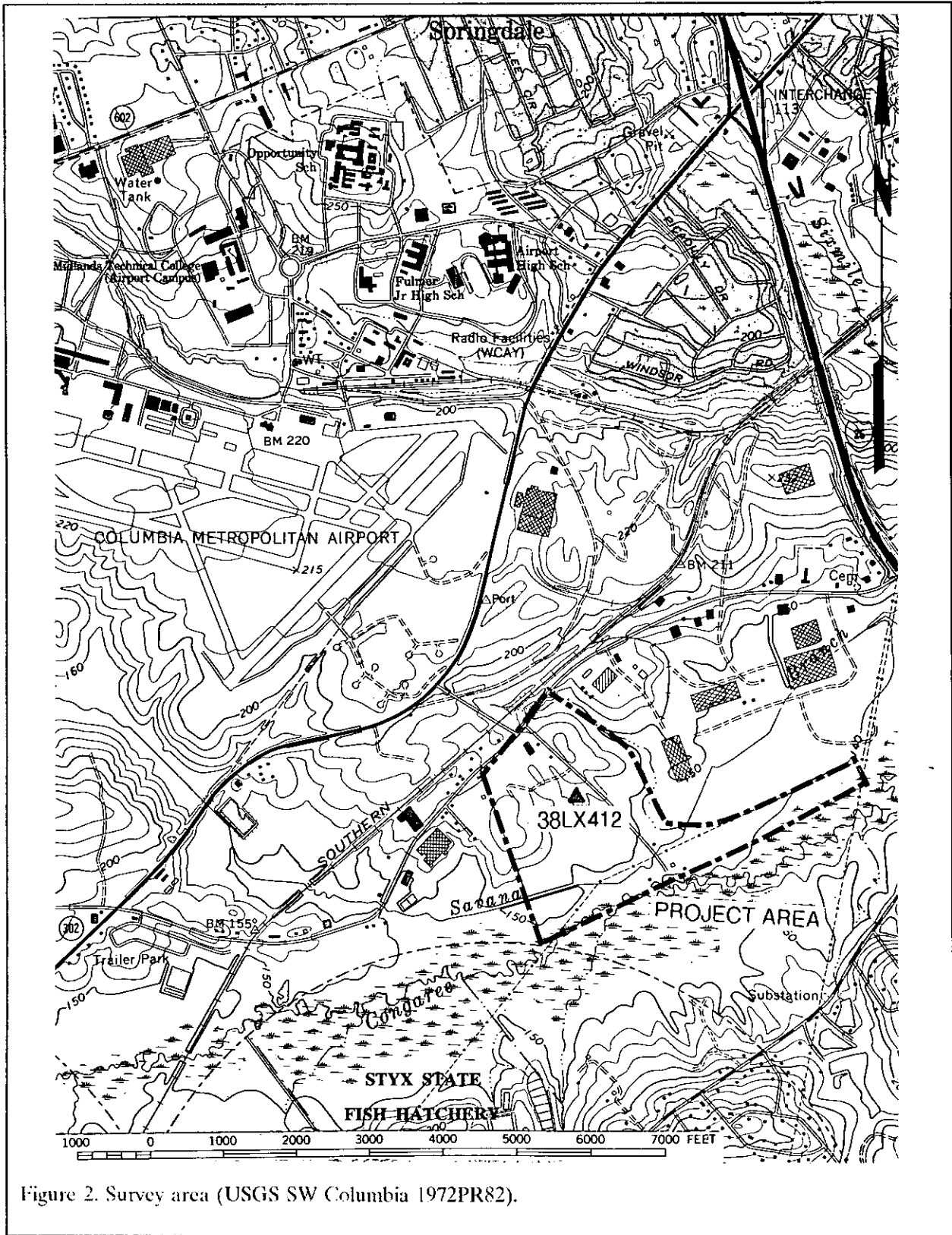


Figure 2. Survey area (USGS SW Columbia 1972PR82).



Figure 3. Old field tract at the southern edge of the project area, view to the west.



Figure 4. Dense wooded tract typical of the project area.



Figure 5. Example of wet, poorly drained area with standing water in the survey tract.

are not archival. The negatives and prints for these photographs are retained by Chicora Foundation.

Natural Setting

The project area is located in Lexington County, which is situated in central South Carolina. Lexington is bounded to the north by Newberry County, to the east by Richland and Calhoun counties, to the south by Orangeburg County, and to the west by Aiken and Saluda counties.

The Saluda and Congaree rivers drain the eastern portion of the county, and the north fork of the Edisto River drains the western portion. Numerous smaller streams (such as Congaree Creek) are found throughout the county and generally flow either northward into the Saluda or eastward into the Congaree.

The county lays in two physiographic provinces: the Piedmont Plateau to the northwest of the "fall line" and the Sandhills to the southeast (Figure 1). In the vicinity of the Fall Line,

dividing the Piedmont and Coastal Plain, major physiographic and geologic subdivisions occur which likely influenced human occupation. On major drainages, such as the Congaree River, the occurrence of rapids could interfere with water travel and the location of early historic occupation on the Fall Line reflects this concern (Jones 1971; Mills 1972 [1826]:157). The Fall Line also strongly influenced prehistoric occupation since its location between two major ecotones could allow exploitation of a greater diversity of resources.

The project, however, falls within the Sandhills region. The geology of the Sandhills is characterized by unconsolidated marine-deposited sediments and the project area is characterized by Blaney, Goldsboro, Lumbee, Lynn Haven, and Wahee soils (Lawrence 1976: Maps 26 and 33). Blaney sands are well drained and are normally found on toe slopes in the Sandhills region. In many settings, including some areas of the project, they are found on slopes up to 10%. The Goldsboro sandy loams are found on stream terraces and are generally well drained. The Lumbee sandy loams are poorly drained and are

formed from stream and marine sediments, often in association with drainages. The Lynn Haven loamy sands, also formed in marine sediments, are found in upland depressions and are also very poorly drained. The Wahee sands are nearly level to very gently sloping and tend to be formed in clayey marine sediments, usually on stream terraces. The soils are poorly drained and often water can be found within a foot of the surface (Lawrence 1976).

Relief is gently rolling and slopes in the 2 to 15% range are common. Like the Piedmont, there are a number of small streams which dissect the Sandhills and their floodplains are generally narrow. Elevations may range from about 200 feet along the streams to upwards of 400 feet in the broad plains and rolling hills.

Vegetation in the Sandhills region is characterized by two major forest types: the longleaf and loblolly pine communities (Frothingham and Nelson 1944:19-21). These communities consist primarily of pine with several species of hardwoods including gum and oak (Braun 1950: 285-286). Currently, the vegetation in the surrounding area consists of mixed pine/hardwood with a light to moderate understory of vegetation. In 1826 Robert Mills stated that the quality of lumber in the district was excellent:

It is no uncommon thing to find trees of this description girthing six or seven feet. Besides the poplar, walnut, maple, and various species of the oak, there are the mock-orange, evergreen, elm, hickory, ash, gum, &c. Of the fruit trees there are, the peach, plum, cherry, pear, quince, and apple; besides the native grapes, and various nuts and melons (Mills 1972 [1826]:617).

Currently, the project area includes pines on the higher elevations (primarily in the central area), oaks to the west, and a forest typical of narrow floodplains, dominated by hickories, winged elm, sycamore, and sweetgum. Boxelder maple and hackberry are principal understory species.

Immediately adjacent to the creek, such as in the area of the survey corridor, there is often very dense ground cover, aided in its development by the opening in the canopy over the creek. Vines included greenbrier, trumpet vine, Virginia creeper, and poison ivy. Many areas had also been invaded by dense stands of briars. This vegetation was particularly troublesome during the survey, offering relatively few areas of open ground.

The soils vary greatly depending on the precise location. Very poorly to poorly soils, such as Lumbree and Lynn Haven dominate the southern third of the project area and along the creek edge. These soils typically have a black sand or loamy sand A horizon overlying gray sands and are formed in marine sediments. All have seasonal high water tables within the upper foot of the surface (Lawrence 1976). Further north, toward S-72, the better drained soils have A horizon soils of dark gray sand overlying pale brown to yellow B horizon sands.

During the South Carolina Erosion Survey, the Piedmont to the northwest of the project area exhibited moderate sheet erosion with occasional gullies (Lowry 1934). The Sandhills, while exhibiting some steep slopes were not as severely damaged.

The climate is temperate and is usually characterized by mild winters and warm summers. Rainfall measures from 46 to 48 inches a year. The annual distribution indicates that July is the wettest month with October and November are the driest. Summers are warm and long with temperatures reaching 90° or higher on an average of 49 days, and they reach 100° or more two or three days a year. Portions of this survey were conducted during such a heat wave, when the heat index hovered between 101 and 110°. Winters are mild and temperatures are as low as 32 degrees on 60% of the days. In 1826 Mills describes the climate as:

mild and salubrious, except immediately bordering on the water-courses; what few diseases prevail are mostly confined to the bilious remittent fevers (Mills 1972 [1826]:621).

PREHISTORIC AND HISTORIC OVERVIEW

Previous Archaeological Investigations

Previous archaeological investigations in Lexington County include studies by Anderson (1974, 1974b, 1979), Anderson et al. (1974), Drucker (1977), Goodyear (1975), Harnion (1980), Michie (1970; 1971), Trinkley (1974, 1980) and Wogaman et al. (1976). The vast majority of these studies are associated with surveys of the Twelfth Street extension project or the Southeastern Beltway, although a number of sewer surveys have also been conducted. Others have focussed on testing or excavation at sites such as the Manning site and the Thom's Creek site. Michie's work identifying Fort Congaree stands as a major research contribution for the area (Michie 1989). In addition, a number of smaller highway department surveys (a number of which are referenced in Derting et al. 211:309-310, 315,317-319), transmission line right of way surveys (see, for example Adams 1994a and 1994b) and small parcel surveys (for example, Adams and Trinkley 1991) have been performed in the area. Drucker (1977) examined a 100-foot wide corridor on the north side of Twelvemile Creek, followed in an additional survey by Chicora Foundation in 1996 (Trinkley 1996).

During an archaeological survey of the Southeastern Beltway, Anderson et al. (1974) found that prehistoric sites occurring near the confluence of Congaree Creek and the Congaree River occurred on slightly elevated dry knolls or ridges within broad, flat, low-lying fields which overlook swamps (Anderson et al. 1974:4-5). Wogaman and his colleagues, based on additional highway survey in this same area, suggest that most sites will be found in the floodplain terraces and upland terraces associated with the floodplains, with relatively few sites being found in the Sandhills (Wogaman et al. 1976). Drucker's work on Twelvemile Creek found that while Early Archaic sites were found on the terraces adjacent to the creek, Middle and Late Archaic sites were

not only found on the terraces, but also on the adjacent side slopes. Woodland occupation was found on alluvial terraces (Drucker 1977:48-50).

Very little historical archaeology has been performed in the Sandhills region of the state. However, work by Brooks and Crass (1991) at the Savannah River site provide some guidance to potential locations for historic sites in the region. During the colonial period, settlement was concentrated along major water courses on well drained elevated soils. However, during the late eighteenth century settlement had progressed up larger creeks. This pattern continued up through the mid-nineteenth century. During the postbellum and modern periods, settlement had shifted away from water-courses and became more road oriented.

The portion of the project area located in the low bottoms, immediately adjacent to either Savanna Branch or Congaree Creek, is thought to have a low potential for prehistoric or historic remains. These areas are low, poorly drained, exhibit little level ground, have high seasonal water tables, and are frequently flooded. The combination of limited space for occupation coupled with generally unfavorable conditions likely accounts for the low use of these areas. In addition, the frequent flooding is likely to have scoured many areas, limiting the deposition necessary to preserve sites.

The portion of the project at higher elevations and on better drained soils was thought to have a higher archaeological potential, although the topography did not appear to represent high archaeological potential, since there was no distinct bluff edge.

An examination of the site files housed by the South Carolina Institute of Archaeology and Anthropology revealed a number of sites in the general area, although no sites were identified

within the survey tract.

We were informed that the South Carolina Department of Archives and History identified no National Register sites the project corridor, with the nearest ones being listed as the Manning Archaeological Site, the Congarees Site, and the Sam Site (Tracy Power, personal communication 1996). No architectural sites in the area are recorded by the South Carolina Department of Archives and History, although Lexington County has not conducted an architectural survey so information on the county is meager.

Brief Prehistoric Synopsis

Overviews for South Carolina's prehistory, while of differing lengths and complexity, are available in virtually every compliance report prepared. There are, in addition, some "classic" sources well worth attention, such as Joffre Coe's *Formative Cultures* (Coe 1964), as well as some new general overviews (such as Anderson 1994 and Sassaman 1993). Also extremely helpful, perhaps even essential, are a handful of recent local synthetic statements, such as that offered by Sassaman and Anderson (1994) for the Middle and Late Archaic. Only a few of the many sources are included in this study, but they should be adequate to give the reader a "feel" for the area and help establish a context for the various sites identified in the project 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*. Figure 6 offers a generalized view of South Carolina's cultural periods.

Paleoindian Period

The Paleoindian Period, most commonly dated from about 12,000 to 10,000 B.P., is evidenced by basally thinned, side-notch projectile points; fluted, lanceolate projectile points, side scrapers, end scrapers; and drills (Coe 1964; Michie 1977; Williams 1968). Oliver (1981, 1985) has proposed to extend the Paleoindian dating in the North Carolina Piedmont to perhaps as early as 14,000 B.P., incorporating the Hardaway Side-

Notched and Palmer Corner-Notched types, usually accepted as Early Archaic, as representatives of the terminal phase. This view, verbally suggested by Coe for a number of years, has considerable technological appeal.¹ Oliver suggests a continuity from the Hardaway Blade through the Hardaway-Dalton to the Hardaway Side-Notched, eventually to the Palmer Side-Notched (Oliver 1985:199-200). While convincingly argued, this approach is not universally accepted.

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). The distribution of Paleoindian tools offered by Anderson (1992:Figure 5.1) reveals a rather general, and widespread, occurrence throughout the region. Phelps (1983:21) states that settlement patterning in the Coastal Plain is impossible to meaningfully discuss since there have been so few recorded sites, but speculates on the presence of base camps along major streams, with special activity sites in the uplands. An alternative is the model tracking the replacement of a high technology forager (or HTF) adaptation by a "progressively more generalized band/microband foraging adaption" accompanied by increasingly distinct regional traditions (perhaps reflecting movement either along or perhaps even between river drainages) (Anderson 1992b:46).

Distinctive projectile points include lanceolates such as Clovis, Dalton, perhaps the Hardaway, and Big Sandy (Coe 1964; Phelps 1983; Oliver 1985). A temporal sequence of Paleoindian

¹ While never discussed by Coe at length, he did observe that many of the Hardaway points, especially from the lowest contexts, had facial fluting or thinning which, "in cases where the side-notches or basal portions were missing, . . . could be mistaken for fluted points of the Paleo-Indian period" (Coe 1964:64). While not an especially strong statement, it does reveal the formation of the concept. Further insight is offered by Ward's (1983:63) all too brief comments on the more recent investigations at the Hardaway site (see also Daniel 1992).

PREHISTORIC AND HISTORIC OVERVIEW

Dates	Period	Sub-Period	Regional Phases		
			COASTAL	MIDDLE SAVANNAH VALLEY	CENTRAL CAROLINA PIEDMONT
1715	HIST.	EARLY	Altamaha		Caraway
1650		LATE	Irene / Pee Dee	Rembert Hollywood	Dan River
1100	MISS.	EARLY	Savannah	Lawton Savannah	
800		LATE	St. Catherine's / Swift Creek		Uwharrie
A.D.		WOODLAND	MIDDLE	Wilmington Deptford	Sand Tempered Wilmington? Deptford
B.C.	EARLY			Refuge	Badin
1000	ARCHAIC	LATE		Thom's Creek Stallings	
2000				Savannah River Halifax	
3000		MIDDLE			Guilford Morrow Mountain Starky
5000	EARLY			Kirk Palmer	
8000				Hardaway	
10,000	PALEOINDIAN			Hardaway - Dalton	
12,000			Cumberland	Clovis	Simpson

Figure 6. A generalized cultural sequence for South Carolina.

projectile points was proposed by Williams (1965:24-51), but according to Phelps (1983:18) there is little stratigraphic or chronometric evidence for it. While this is certainly true, a number of authors, such as Anderson (1992a) and Oliver (1985) have assembled impressive data sets. We are inclined to believe that while often not conclusively proven by stratigraphic excavations (and such proof may be an unreasonable expectation), there is a large body of circumstantial evidence. The weight of this evidence tends to provide considerable support.

Unfortunately, relatively little is known about Paleoindian subsistence strategies, settlement systems, or social organization (see, however, Anderson 1992b for an excellent overview and synthesis of what is known). Generally, archaeologists agree that the Paleoindian groups were at a band level of society (see Service 1966), 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).

Archaic Period

The Archaic Period, which dates from 10,000 to 3,000 B.P.², does not form a sharp break

² The terminal point for the Archaic is no clearer than that for the Paleoindian and many researchers suggest a terminal date of 4,000 B.P. rather than 3,000 B.P. There is also the question of whether ceramics, such as the fiber-tempered Stallings ware, will be included as Archaic, or will be included with the Woodland. Oliver, for example, argues that the inclusion of ceramics with Late Archaic attributes "complicates and confuses classification and interpretation needlessly" (Oliver 1981:20). He comments that according to the original definition of the Archaic, it "represents a preceramic horizon" and that "the presence of ceramics provides a convenient marker for separation of the Archaic and Woodland periods (Oliver 1981:21). Others would counter that such an approach ignores cultural continuity and forces an artificial, and perhaps unrealistic, separation. Sassaman and Anderson

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 by 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. As previously discussed, Palmer 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.

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 are thought of as special purpose or foraging sites (see Ward 1983:67).

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

(1994:38-44), for example, include Stallings and Thom's Creek wares in their discussion of "Late Archaic Pottery." While this issue has been of considerable importance along the Carolina and Georgia coasts, it has never affected the Piedmont, which seems to have embraced pottery far later, well into the conventional Woodland period. The importance of the issue in the Sandhills, unfortunately, is not well known.

diagnostic artifacts include Morrow Mountain, Guilford, Stanly and Halifax projectile points. Phelps (1983:25) notes that the gradual increase from Paleoindian to Archaic in the Coastal Plain seems to peak during the Middle Archaic Morrow Mountain phase.

Much of our best information on the Middle Archaic comes from sites investigated west of the Appalachian Mountains, such as the work by Jeff Chapman and his students in the Little Tennessee River Valley (for a general overview see Chapman 1977, 1985a, 1985b). 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. 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 available information has resulted in a variety of competing settlement models. Some argue for increased sedentism and a reduction of mobility (see Goodyear et al. 1979:111). Ward argues that the most appropriate model is one which includes relatively stable and sedentary hunters and gatherers "primarily adapted to the varied and rich resource base offered by the major alluvial valleys" (Ward 1983:69). While he recognizes the presence of "inter-riverine" sites, he discounts explanations which focus on seasonal rounds, suggesting "alternative explanations . . . [including] a wide range of adaptive responses." Most importantly, he notes that:

the seasonal transhumance model and the sedentary model are opposite ends of a continuum, and in all likelihood variations on these two themes probably existed

in different regions at different times throughout the Archaic period (Ward 1983:69).

Others suggest increased mobility during the Archaic (see Cable 1982). Sassaman (1983) has suggested that the Morrow Mountain phase people had a great deal of residential mobility, based on the variety of environmental zones they are found in and the lack of site diversity. The high level of mobility, coupled with the rapid replacement of these points, may help explain the seemingly large numbers of sites with Middle Archaic assemblages. Curiously, the later Guilford phase sites are not as widely distributed, perhaps suggesting that only certain micro-environments were used (Braley 1990; cf. Ward [1983:68-69] who would likely reject the notion that substantially different environmental zones are, in fact, represented).

Recently Abbott et al. argue for a combination of these models, noting that the almost certain increase in population levels probably resulted in a contraction of local territories. With small territories there would have been significantly greater pressure to successfully exploit the limited resources by more frequent movement of camps. They discount the idea that these territories could have been exploited from a single base camp without horticultural technology. Abbott and his colleagues conclude, "increased residential mobility under such conditions may in fact represent a common stage in the development of sedentism" (Abbott et al. 1995:9).

From excavations at a Sandhills site in Chesterfield County, South Carolina Gunn and his colleague (Gunn and Wilson 1993) offer an alternative model for Middle Archaic settlement. He accepts that the uplands were desiccated from global warming, but rather than limiting occupation, this environmental change made the area more attractive for residential base camps. Gunn and Wilson suggest that the open, or fringe, habitat of the upland margins would have been attractive to a wide variety of plant and animal species.

Another point of some controversy is the idea that the groups responsible for the Middle

Archaic Morrow Mountain and Guilford points were intrusive ("without any background" in Coe's words) into the North Carolina Piedmont, from the west, and were contemporaneous with the groups producing Stanly points (Coe 1964:122-123; Phelps 1983:23). Phelps, building on Coe, refers to the Morrow Mountain and Guilford as the "Western Intrusive horizon." Sassaman (1995) has recently proposed a scenario for the Morrow Mountain groups which would support this west-to-east time-transgressive process. Abbott and his colleagues, perhaps unaware of Sassaman's data, dismiss the concept, commenting that the sheer distribution and number of these points "makes this position wholly untenable" (Abbott et al. 1995:9).

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 people continued to intensively exploit the uplands much like earlier Archaic groups.

One of the more debated issues of the Late Archaic is the typology of the Savannah River Stemmed and its various diminutive forms. Oliver, refining Coe's (1964) original Savannah River Stemmed type and a small variant from Gaston (South 1959:153-157), developed a complete sequence of stemmed points that decrease uniformly in size through time (Oliver 1981, 1985). Specifically, he sees the progression from Savannah River Stemmed to Small Savannah River Stemmed to Gypsy Stemmed to Swannanoa from about 5000 B.P. to about 1,500 B.P. He also notes that the latter two forms are associated with Woodland pottery.

This reconstruction is still debated with a number of archaeologists expressing concern with what they see as typological overlap and ambiguity. They point to a dearth of radiocarbon dates and good excavation contexts at the same time they express concern with the application of this typology outside the North Carolina Piedmont (see, for a synopsis, Sassaman and Anderson 1990:158-162, 1994:35).

In addition to the presence of Savannah River points, the Late Archaic also witnessed the

introduction of steatite vessels (see Coe 1964:112-113; 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).

Although fiber-tempered pottery has been known from South Carolina since at least the late 1950s, it remains relatively uncommon in the interior reaches of the state. Where found, the pottery is typically associated with Savannah River Stemmed points, steatite pottery or disks, and grooved axes.

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. He suggests that this more complex settlement pattern evolved from an increasingly complex socio-economic system.

Woodland Period

As previously discussed, there are those who see the Woodland beginning with the introduction of pottery. Under this scenario the Early Woodland may begin as early as 4,500 B.P. and continued to about 2,300 B.P. Diagnostics would include the small variety of the Late Archaic Savannah River Stemmed point (Oliver 1985) and pottery of the Stallings and Thoms Creek series. These sand tempered Thoms Creek wares are decorated using punctations, jab-and-drag, and incised designs (Trinkley 1976). Also potentially included are Refuge wares, also characterized by sandy paste, but often having only a plain or dentate-stamped surface (Waring 1968). Others would have the Woodland beginning about 3,000 B.P. and perhaps as late as 2,500 B.P. with

the introduction of pottery which is cord-marked or fabric-impressed and suggestive of influences from northern cultures.

Early Woodland sites in the Sandhills seem to be dominated by small collections of the Late Archaic or Early Woodland Thom's Creek pottery, although its popularity has never been subjected to the careful scrutiny of multiple radiometric dates. Little is known about possible cultural associations, although there is some limited evidence that at least some of the small variants of the Savannah River Stemmed may be found with Early Woodland materials. The large triangular Roanoke point (South 1959:146-148) is likely also associated with Early Woodland ceramics.

In spite of our near total ignorance of Early Woodland sites, many suggest that the subsistence economy was based primarily on deer hunting and fishing, with supplemental inclusions of small mammals, birds, reptiles, and shellfish. This is based on the continuation of a generalized Late Archaic pattern, which may or may not be appropriate.

Further to the west, in the Piedmont, the Early Woodland is marked by a pottery type defined by Coe (1964:27-29) as Badin.³ This pottery is identified as having very fine sand in the paste with an occasional pebble. Coe identified cord-marked, fabric-marked, net-impressed, and plain surface finishes. Beyond this pottery little more is known about the makers of the Badin pottery as is known about those who made New River wares.

Somewhat more information is available for the Middle Woodland, typically given the range of about 2,300 B.P. to 1,200 B.P. The Middle Woodland is best understood in the context of

Deptford, which has been carefully described by DePratter (1979:118-119, 123-127), who suggests two divisions with check stamping and cord marking gradually being supplemented by complicated stamping. The introduction of clay or grog tempered Wilmington wares follows on the heels of the Deptford phase.

We do not, however, mean to imply that the origin of the Middle Woodland is well understood. In fact, Sassaman takes some pains to emphasize that the transition from Refuge to Deptford is not well understood:

the Refuge-Deptford problem is the result of numerous regional processes that converge in the Savannah River region between 3000 and 2000 B.P. The sociopolitical entities that existed on the coast and in the interior during the fourth millennium dissolved after about 2400 B.P., resulting in the dispersal of small populations across the region. . . Pottery designs changed from highly individualistic punctation and incision to the (seemingly) anonymous use of dowels for stamping. . . the use of a carved paddle for simple stamping should mark the "blending" of Refuge and Deptford culture, or, more accurately, reflect the subsumption of Refuge culture by the expanding Deptford complex.

To complicate matters, the tradition of cord-wrapped paddles makes its way into the South Carolina area sometime after 2500 B.P. (Sassaman 1993:118-119).

The work by Milanich (1971) and Smith (1972), coupled with the considerable additional site-specific research (see, for example, DePratter 1991; Sassaman 1993:110-125; Thomas and Larsen 1979) provides an exceptional background for this particular phase. Milanich's (1971) interpretation

³ The ceramics suggest clear regional differences during the Woodland which seem to only be magnified during the later phases. Ward (1983:71), for example, notes that there "marked distinctions" between the pottery from the Buggs Island and Gaston Reservoirs and that from the south-central Piedmont.

of a coastal-estuarine settlement model with interior occupation limited to short-term extractive activities, while still useful, has been modified through the discovery of a number of interior base camps. In fact, there seems to be evidence for a number of interior seasonal or perhaps even permanent base camps, although there is as yet no convincing evidence of horticulture. Thomas et al. (1995:111) suggest that there have been few efforts "to enhance or refine Milanich's interpretations of settlement patterns." This, of course, is not strictly correct and Anderson (1985:48) provides a brief overview of some very significant concerns. He notes that Milanich's interpretation that the interior river valleys were used by small, residentially mobile foraging groups which dispersed from large coastal villages is clearly not correct. In fact, just the opposite appears more likely, with coastal use and settlement being seasonal (Anderson 1985:48-49).

Moving to the Piedmont the dominant Middle Woodland ceramic type is typically identified as the Yadkin series (which is also frequently identified at Sandhill sites in North and South Carolina). Characterized by a crushed quartz temper the pottery includes surface treatments of cord-marked, fabric-marked, and a very few linear check-stamped sherds (Coe 1964:30-32). It is regrettable that several of the seemingly "best" Yadkin sites, such as the Trestle site (31An19) explored by Peter Cooper (Ward 1983:72-73), have never been published.

It seems that South Carolina, just like Georgia and North Carolina, is struggling to comprehend, and deal with, a broad array of Middle Woodland cord marked pottery.

Although Deptford and Yadkin pottery are usually well recognized, the associated lithic technology is not. From a broad range of sites and contexts come "medium-sized triangular" points, Yadkin-like triangular points, and even a range of small triangular points.

The Middle Woodland cannot be fully appreciated without reference to Hopewellian influences, whether the presence of coastal sand burial mounds and their evidence of status

differences (e.g., Thomas and Larsen 1979) or the presence of occasional exchange goods. Sassaman et al. note that while there is a lack of "obvious" Hopewellian influence in the Savannah area, there is nevertheless evidence of a "higher order of sociopolitical complexity" (Sassaman et al. 1990:14). They note that the broad similarities in ceramic design evidence the movement of ideas, or "interprovincial integration," not seen in the Early Woodland. The presence of coastal shells found at interior sites demonstrates the movement of goods.

In some respects the Late Woodland (1,200 B.P. to 400 B.P.) may be characterized as a continuation of previous Middle Woodland cultural assemblages. While outside the Carolinas there were major cultural changes, such as the continued development and elaboration of agriculture, the Carolina groups settled into a lifeway not appreciably different from that observed for the previous 500-700 years. From the vantage point of Middle Savannah Valley Sassaman and his colleagues note that, "the Late Woodland is difficult to delineate typologically from its antecedent or from the subsequent Mississippian period" (Sassaman et al. 1990:14). This situation would remain unchanged until the development of the South Appalachian Mississippian complex (see Ferguson 1971).

Along the coast the St. Catherines pottery is viewed by many archaeologists as an important aspect in the gradual progression from Deptford to Savannah wares. Perhaps the most succinct summary of the Georgia Late Woodland St. Catherines phase is that offered by DePratter and Howard (1980:16-17). Significantly, they note that most of the Georgia data comes from burial mound excavations, "because only limited village [and presumably shell midden] excavations have been conducted" (DePratter and Howard 1980:16). Even with burials there is a limited range of artifact types — shell beads, worked whelk shell bowls or drinking cups, bone pins, and triangular projectile points. Not only is little known about village life, nothing is known concerning residential structures and there is no good evidence of agricultural crops. Once again, the Late Woodland is presented as little more than an extension of the previous Middle Woodland lifeways.

Moving inland from the coast our understanding of the Late Woodland is uneven, giving the impression that broad expanses of the Inner Coastal Plain and perhaps even the Sandhills were largely ignored by prehistoric people. Sites, where found, appears to focus on edge areas, such as the terraces overlooking swamps or the sandy ground around Carolina bays.

Moving into the Piedmont the Late Woodland is typically associated with small triangular points such as Uwharrie, Caraway, Pec Dee, and Clarksville (Coe n.d., 1964:49; Oliver 1985; South 1959:144-146). The characteristic pottery is the Uwharrie series which contains crushed quartz (one characteristic of which is its tendency to protrude through the wall of the pottery). This series included cord-marked and net-impressed surface treatments. The ware was described by Coe in the unpublished Poole site report (Coe n.d.).⁴ This pottery appears to represent an evolution from the earlier Yadkin wares (Coe 1995:156). Of equal interest is a radiocarbon date of A.D. 1610, suggesting that this pottery lasted well into the protohistoric.

South Appalachian Mississippian

In neighboring North Carolina the Mississippian is typically identified with the Pee Dee culture, defined through the excavations of Joffre Coe at Town Creek site in central North Carolina (Coe 1995; Reid 1967). The site, generally accepted to represent a northern intrusion of a Mississippian chiefdom, was originally dated from about A.D. 1550 to 1750, although more recent analyses suggests a date more likely between A.D. 900 and 1400 (Coe 1995:159).

In Georgia the Mississippian, at its simplest, is seen as the Savannah Phase, consisting of three subphases, followed by the Irene, broken

into two subphases. This follows a simple coastal chronology based almost entirely on the results of excavations at Irene (Caldwell and McCann 1941) and the resulting synthesis by DePratter (1979:Table 30; 1991:183-193).

Anderson's (1994) research, combined with the overview edited by Williams and Shapiro (1990), reveals that these simplified views likely obscure a tremendous amount of variation. In central South Carolina researchers such as DePratter, based on research at the Camden, South Carolina mounds, have suggested a series of phases termed Belmont Neck, Adamson, Town Creek, McDowell, Mulberry, and Daniels (Williams and Shapiro 1990:56-58).

Brief Historic Synopsis

General accounts of Lexington County history are presented by Anderson (1975), Gay (1974), Goodyear (1976), Meriwether (1940), Michie (1989), and Trinkley (1974).

Lexington County was first occupied by Europeans who built a fortified military garrison (Fort Congaree) in 1718 on the site of an a former Congaree Indian village. A second fortification was established 2½ miles north after attacks by Iroquois from the Ohio Valley upon settlers in the late 1740s. These two forts were significant in the defense of the Carolina Back Country (Central Midlands Regional Planning Council 1974:132).

The first large trading post in central South Carolina was built near the old Congaree fort site in 1733. This post was an exchange center between Charles Town and the western settlements. During this year the area received political identity as Congaree District. Two years later it was renamed Saxe Gotha in an attempt to bring immigrants from Germany and Switzerland to the piedmont. Most of these early settlers were small farmers while the more prosperous ones operated stores, trading posts, saw and grist mills.

When the wagon road between the town and Augusta was opened in 1754, river traffic increased. A ferry operation began over the Congaree, and the village moved towards the ferry

⁴ This study was intended to be published under a monograph series entitled, *University of North Carolina Laboratory of American Archaeology Publications*, but was never completed. The work was conducted in 1936, although the ensuing report is undated.



Figure 7. A portion of Mouzou's 1775 map showing the project area.

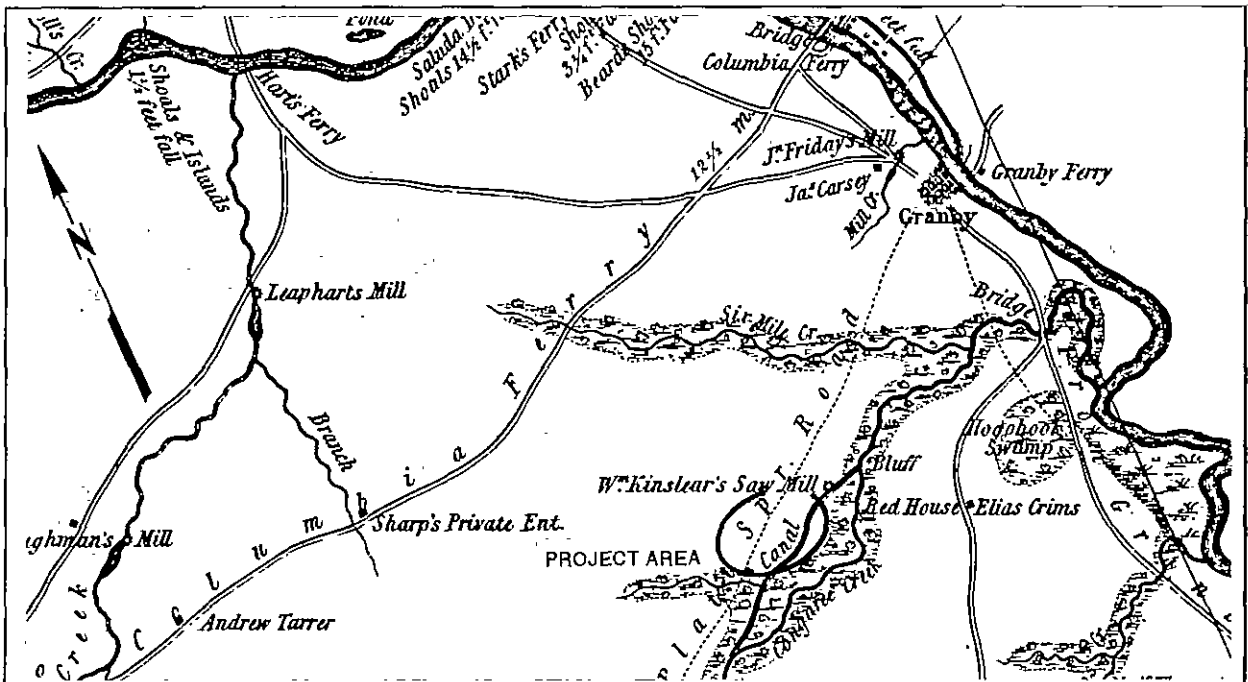


Figure 8. A portion of Mills' Atlas of 1825 showing the project area.

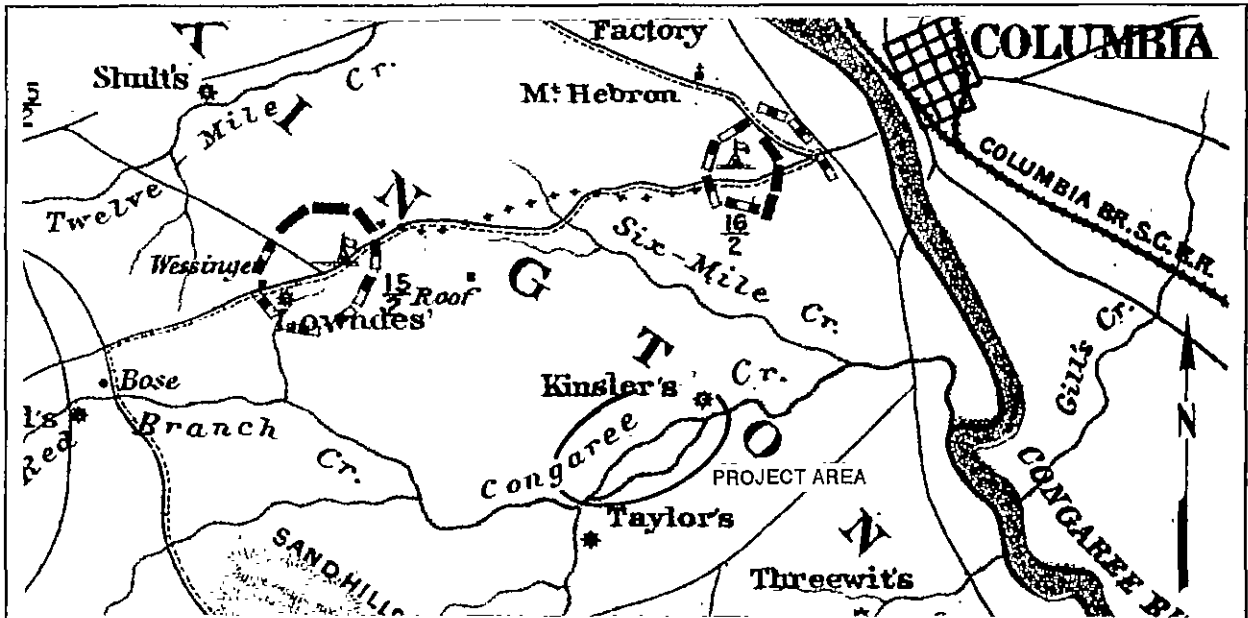


Figure 9. Portion of an 1865 map showing the Lexington area at the close of the Civil War (from the *Official Military Atlas of the Civil War*, Plate LXXX-4, reproduced at a scale of 2½ miles to the inch).

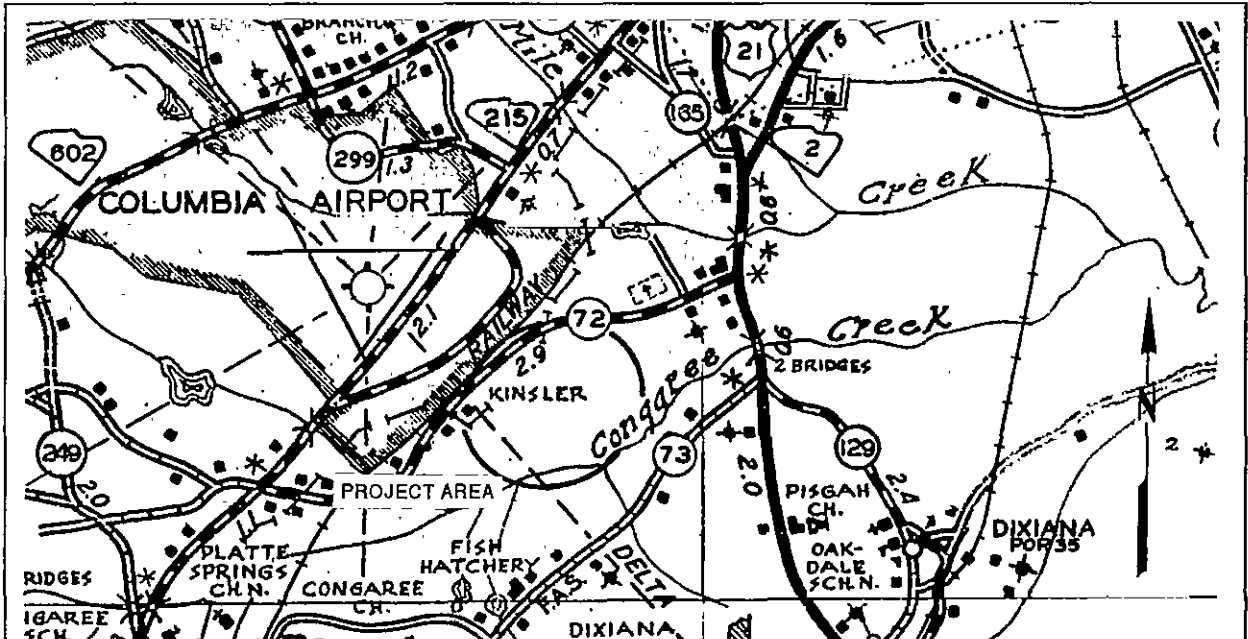


Figure 10. Portion of the 1940 General Highway and Transportation Map of Lexington County showing the project area.

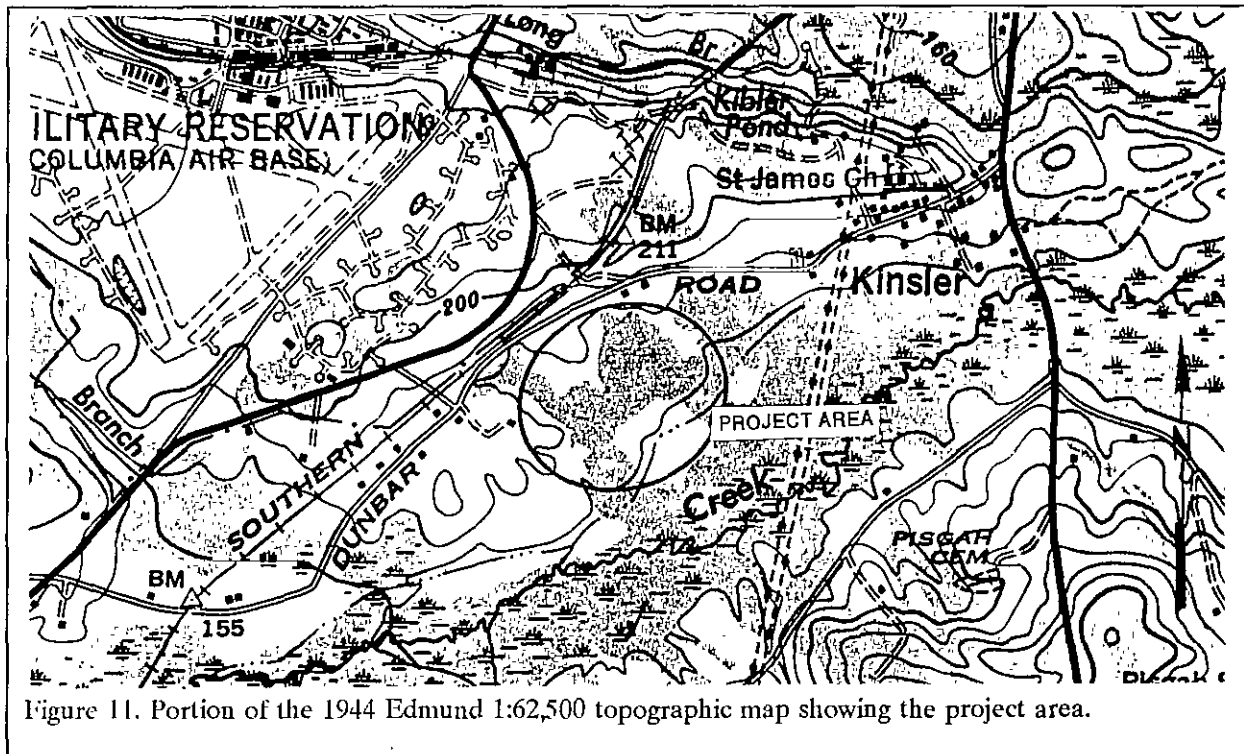


Figure 11. Portion of the 1944 Edmund 1:62,500 topographic map showing the project area.

site where Granby Village was established sometime before 1774. As the head of navigation on the Congaree River, Granby became an important commercial center. Indigo, cotton, manufactured ropes, Indian corn, beeswax, and other goods from Saxe Gotha and the up country were transported to Charles Town where they were exchanged for salt, fabrics and other merchandise needed in the interior (Central Midlands Regional Planning Council 1974:134). Mouzon's Map of 1775 locates Saxe Gotha Township within the Orangeburg Precinct. While it shows the "Old Fort," and Twelve Mile Creek (Figure 7), it otherwise reveals that even this late, the Lexington area was a sparsely settled frontier,

During the American Revolution Fort Granby, below the present town of Cayce, was the major outpost for British regulars in the area. In 1785, Lexington County was established in the Orangeburg District. With the development of Columbia, across the river, Granby Village declined in importance. The county seat was then moved from Granby Village to the town of Lexington (Central Midlands Regional Planning

Council 1974:135-136).

Mills' Atlas (1972 [1826]) shows the project area as containing no subscribers within any of survey corridors (Figure 8). The Atlas, however, does reveal the location of William Kinslear's Saw Mill, to the northeast of the project area. By the early twentieth century was still known as "Kinsler," although there is no mention of this location on today's maps. What is today known as Savanna Branch, situated partially within the project area, is shown on Mills' map as a "canal," suggesting that it was intentionally excavated for transportation purposes. No additional research, however, has been conducted concerning this canal. Settlements on Mills' map, where present, are typically restricted to the roadways.

By 1860 the county contained 73 saw mills, one cotton and wool mill, eight carriage and wagon makers, one sash and blind factory, two boot and shoe makers, one tannery, one blacksmith, one turpentine distillery, one printing establishment, and one wooden bucket factory. Also, Guignard Brickworks, established in 1804, was a prospering

PREHISTORIC AND HISTORIC OVERVIEW

business. The largest single pre-war industry by far was the Saluda Factory on the Congaree (see Trinkley 1989).

During the Civil War Union forces invaded Lexington County and shelled the city of Columbia from the west bank of the Congaree. Figure 9 shows the Lexington area at the time of Sherman's march through the Lexington area. Kinslear's Mill has, by this time, taken on the modern spelling of "Kinsler's" and what Mills' illustrated as a canal is now shown simply as another branch of Congaree Creek, suggesting that it had already passed out of use.

After the war most families were left destitute. Economic recovery was slow, aggravated by lack of capital and heavy reliance on an unproductive agricultural economy (Central Midlands Regional Planning Council 1974:136-137). By the early twentieth century the General Highway and Transportation Map of Lexington County (Figure 10) reveals that settlement is exclusively associated with the road system, known as S-72. No structures, however, are in the immediate project area. Although a number of mills are shown on this map to still be operating in Lexington County, there were none operating in the project area. Drucker (1977) notes that local legend explains that virtually all of the mills in this area were destroyed by Sherman's troops, although it seems more likely that they were either abandoned or were destroyed by the frequent floods of the early twentieth century.

Figure 11 shows the project area in 1944. Kinsler is still indicated and what was in the nineteenth century a canal is now known as Savanna Branch. This map fails to reveal any historic settlement in the project area, which is a mixture of woods and open fields. It is likely that the soils and drainage of the area precluded settlement and the drier areas were cultivated, while the remainder was simply allowed to stay in timber.

RESEARCH STRATEGY AND METHODS

Research Strategy

The primary goal of this work was to examine the project tract and evaluate its potential to contain archaeological sites. This was to be accomplished through examination of previous studies, the culture history of the project area, analysis of the topography and land-use history, and a pedestrian survey of the study tract that incorporated examination of open ground areas and the excavation of intuitive shovel tests. As a reconnaissance study, no effort was to be made to evaluate the National Register status of identified sites.

No major analytical hypotheses were created prior to the field work and data analysis. The research design proposed for this study is, as discussed by Goodyear et al. (1979:2), fundamentally explorative and explicative.

Methods

The initially proposed field techniques for this reconnaissance level investigation involved the pedestrian survey of open ground areas, including dirt trails, erosional areas, cultivated fields, and tree throws. Shovel tests would be excavated in areas which appeared to exhibit high archaeological potential in an effort to identify archaeological remains, but the coverage would be severely restricted. Areas of low archaeological potential, based on current models of archaeological site locations, would not be explored.

Should sites be identified by surface collection and/or shovel testing, a limited number of additional tests would be used to help obtain information on the nature of the site. No effort, however, would be made to evaluate the site, determine site boundaries, artifact quantity or diversity, site integrity, or temporal affiliation. A South Carolina Institute of Archaeology and

Anthropology site form would be completed and photographs would be taken, if warranted in the opinion of the field investigator.

All soils from the intuitive shovel tests would be screened through ¼-inch mesh, with each test numbered sequentially. Each test would measure about 1 foot square and would normally be taken to a depth of at least one foot. All soil would be screened through ¼-inch mesh. All cultural remains would be collected, except for shell, mortar, and brick, which would be quantitatively noted in the field and discarded. Notes would be maintained for profiles at any sites encountered.

As a result, this study focused on several areas. The disturbed areas adjacent to the survey area were examined for evidence of archaeological sites. These areas, primarily along the northeastern and northwestern edges, contained parking areas and extant buildings. They also represent relatively high elevations and are situated on well drained soils.

To the south of these areas, the central portion of the study tract, which contained sandy soils and abundant pine, was also briefly examined, since the soils were estimated to be well drained. Five shovel tests were excavated in this area. These tests revealed brown sandy loam soils to a depth of about 0.8 foot, followed by light tan to yellow sandy clays.

The area to the east, which exhibited standing water, was only briefly explored because the soils were judged to be unsuitable for any permanent prehistoric or historic occupation. Several shovel tests were excavated in this area, revealing gray muck with water standing in the bottom of tests about 1.0 foot below the ground level.

At the southern edge of the project there

was a large field, currently grown up in waist-high grass. Areas of open ground were examined in this field, was examined by walking four east-west transects. Only one shovel test was excavated in this area, to evaluate the soils. This test revealed a brownish-gray sand A horizon about a foot in depth overlying a yellow sand. Plowing was extensive and the shovel test revealed a plow scar.

RESULTS OF SURVEY

Introduction

As a result of the archaeological survey of the Loxcreen tract, one archaeological site — 38LX412 — was recorded. The Savanna Branch was encountered and, in the project area, was found to be about 20 feet in width and about 15 feet in depth. This feature, while thought to represent the canal noted on Mills' map of the Lexington District, was not assigned an archaeological site number since sufficient information concerning the feature was not collected during this study. Since this study was undertaken at a reconnaissance level, no representation is made that this is the only site on the tract. It is simply the only site that was encountered during the study.

Identified Site

38LX412

This site consists of what appears to be mid-twentieth century structural remains situated in the north central portion of the study tract. Central UTM coordinates are E:490680 N:3754220. Situated in a wooded area south of the extant Loxcreen buildings the site is found on a slight slope to the south. Features present on the surface include what appears to be a concrete step (Figure 12), as well as a large trash pile to the east. While this

trash pile includes domestic material which may have been associated with the structure, it also includes a number of 55 gallon drums, which may be from other sources. No evidence of other structural remains, such as piers, foundation timbers, or roofing tin were encountered during the brief inspection of the site.

The site elevation is about 650 feet above mean sea level (AMSL). Vegetation is open and consists of scattered hardwoods, primarily small oaks, mixed with occasional modest sized pines. The soils are identified as Blaney sands. A series of five shovel tests were excavated in the site area (Figure 13). Two of these tests, to the west, were positive, each producing two nail fragments. A typical profile included 0.8 foot of brown sand overlying a dark yellow sandy clay to a depth of about 1.2 feet.

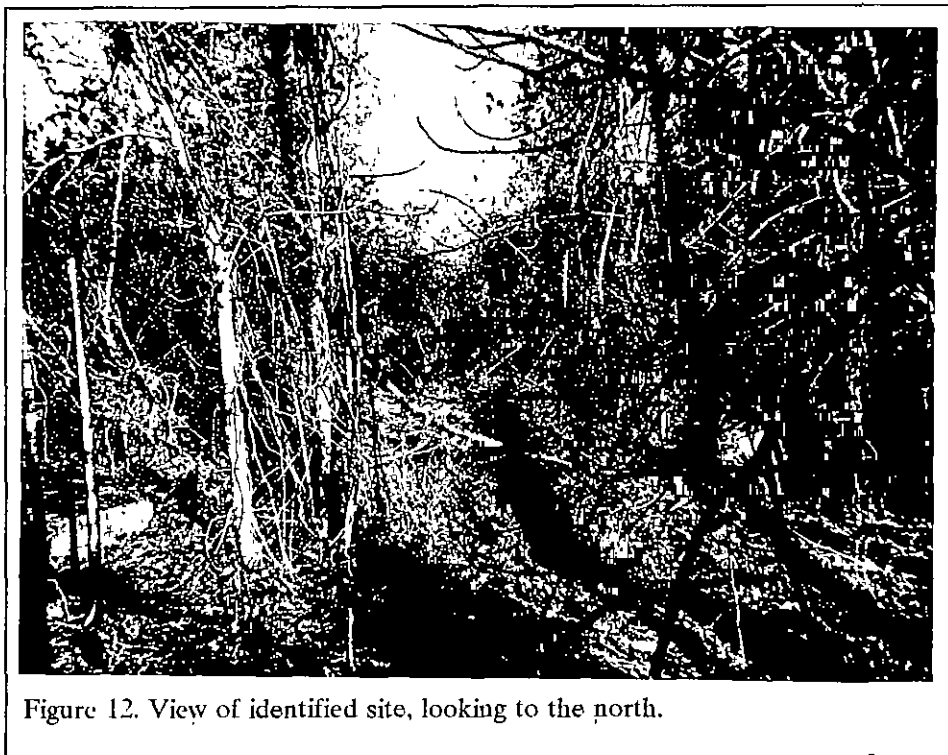


Figure 12. View of identified site, looking to the north.

ARCHAEOLOGICAL RECONNAISSANCE OF THE LOXCREEN TRACT

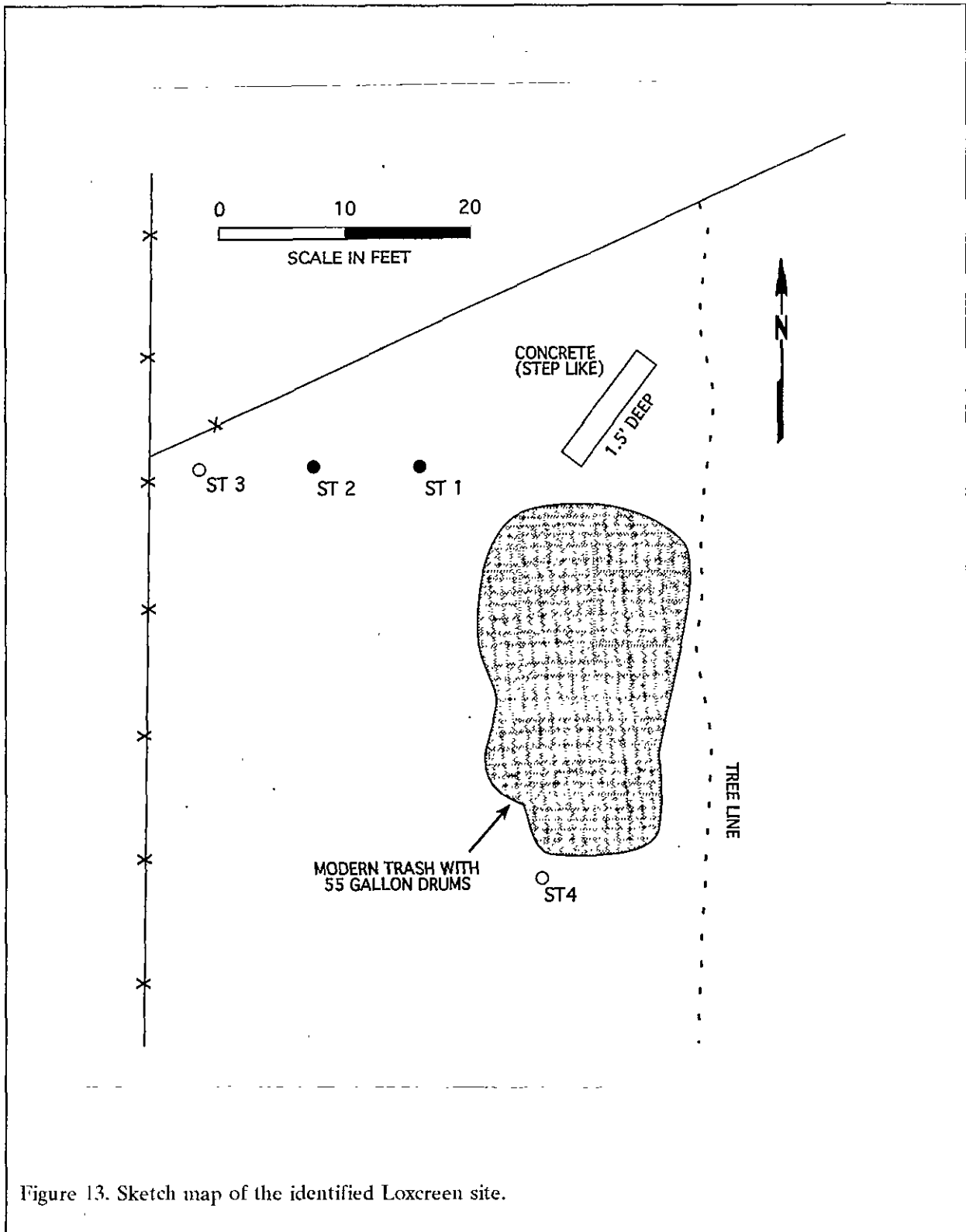


Figure 13. Sketch map of the identified Loxcreen site.

CONCLUSIONS

Introduction

The survey of the project area was conducted using a combination of intuitive shovel testing at locations which looked promising for the recovery of archaeological remains and a pedestrian survey which sought open ground areas suitable for a visual inspection. The reconnaissance focused on areas of relatively high, well drained soils, although some investigation of the lower areas was also conducted.

As a result of this investigation one archaeological site, 38LX412, was identified within the study tract. The site appears to represent a twentieth century structure, although there is some evidence that it may also include more recent debris from other activities in the area. No assessment of the site is possible, although several architectural artifacts were recovered as a result of limited shovel testing. It is possible that additional materials may be present. It is also not possible to accurately judge the age of the site. It does not appear on any of the maps of the project area, but given its distance from the road this may not be unexpected. Only additional historic research coupled with archaeological investigations is likely to provide this information.

While not assigned a site number, this study also identified what we believe to be the canal reported by Mills on his 1826 map of the district. In the survey area the canal is still about 20 feet in width and is at least 15 feet in depth. It is heavily overgrown in many areas, appearing (on the ground) to represent a drainage ditch. The significance of this feature is difficult to assess with the current limited historical and archaeological information. It is possible that the branch, if it is in fact a canal, may contain the remains of boats or barges which were used in the early nineteenth century.

No other remains were encountered, but

again, it is important to caution that this was only a reconnaissance level investigation. Not all areas of the tract were explored and the level of intensity used was very limited.

Recommendations

No specific recommendations can be offered for 38LX412 or the possible canal, since we have very limited information in hand. It is, however, possible to make some general observations regarding the potential for additional archaeological sites on at least some portions of the study tract.

This research tends to confirm the unlikelihood of archaeological sites being encountered in the low, poorly drained portions of the Loxcree tract. The Lumbee, Lynn Haven, and Wahee soils all exhibit a very low archaeological potential. In many areas we found standing water. In other areas our shovel tests revealed ground water within a foot of the surface.

Should additional archaeological investigations be undertaken on this tract, we strongly recommend that they be limited to those areas with better drained soils, specifically the Blancy and Goldsboro series. These soils, while well drained, are not found on sandy bluffs overlooking the creek. As a result, we judge their archaeological probability to be only modest — yet one site has been identified.

Should additional historical research be undertaken, it should focus on exploring the role of the canal thought to be on the study tract. When was it constructed, under what circumstances was it built, for how long was it used, was it a commercial undertaking or was it supported by local efforts — these are all appropriate initial questions that should be addressed. If plans of the canal can be identified (which seems, at least at this point, unlikely), they may provide information

on the construction of the canal and the presence of any locks. Lacking such historic documentation, it may be helpful to conduct a more detailed examination of the canal banks. It might even be useful to explore the bottom of the canal using underwater survey techniques.

While Chicora Foundation can provide information on our current findings, and can offer recommendations on where additional work might prove productive, the requirement for any additional work depends on the evaluation of the survey tract by the lead federal agency in consultation with the State Historic Preservation Office.

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