PATTERNS
OF PREHISTORIC SITE DISTRIBUTION IN
EFFINGHAM AND SCREVEN COUNTIES, GA.

PAUL ROBERT FISH
PATTERNS OF PREHISTORIC SITE DISTRIBUTION IN EFFINGHAM AND SCREVEN COUNTIES, GEORGIA: RESULTS OF AN ARCHAEOLOGICAL SURVEY FOR THE U.S.D.A. SOIL CONSERVATION SERVICE IN THE EBENEZER CREEK WATERSHED

BY

PAUL ROBERT FISH
RESEARCH ASSOCIATE
DEPARTMENT OF ANTHROPOLOGY
UNIVERSITY OF GEORGIA

ATHENS
1976
Reprinted in 1979
TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>1</td>
</tr>
<tr>
<td>Environmental Setting</td>
<td>2</td>
</tr>
<tr>
<td>The Archaeological Background to the Survey Project</td>
<td>6</td>
</tr>
<tr>
<td>Survey Methods</td>
<td>7</td>
</tr>
<tr>
<td>Archaeological Results of the Project</td>
<td>10</td>
</tr>
<tr>
<td>Impacts of the Proposed Project on Archaeological and Historical Remains</td>
<td>38</td>
</tr>
<tr>
<td>Recommendations</td>
<td>40</td>
</tr>
<tr>
<td>Acknowledgements</td>
<td>44</td>
</tr>
<tr>
<td>Bibliography</td>
<td>45</td>
</tr>
<tr>
<td>Appendix I. Areas Surveyed and Location of Identified Sites</td>
<td>47</td>
</tr>
<tr>
<td>Appendix II. Site Descriptions</td>
<td>66</td>
</tr>
<tr>
<td>Appendix III. Palynological Investigations at 9Ef56 and 38Jal</td>
<td>122</td>
</tr>
</tbody>
</table>
ABSTRACT: A total of 108 prehistoric and historic archaeological sites were identified during this survey and 81 of these occurred within areas benefited by the proposed Soil Conservation Service channels. Only four of the identified sites appear to be in direct danger from construction. Secondary impacts, however, will undoubtedly affect additional sites. Evaluations of significance and recommendations for the mitigation of adverse impacts are provided in this report. Recommendations include avoidance, additional survey at the time of construction, and excavation prior to the implementation of the channel project.

INTRODUCTION

This report summarizes the results of an archaeological survey of proposed Soil Conservation Service drainage channels in the Ebenezer Creek Watershed, Effingham and Screven Counties, Georgia. The structural measures surveyed consist of approximately 561,725 linear feet of multiple purpose channel improvement. The proposed channels have a drainage area of approximately 93 square miles. Slightly over ten percent of the channel structures are in the south-easternmost portion of Screven County, while the remainder are widely distributed throughout the northern half of Effingham County.

The field survey was conducted by the University of Georgia archaeologists Paul R. Fish and Paul Efland. Field work was started February 1, 1976 and was completed in early April, 1976. In addition, a test excavation program to evaluate sites which may be directly affected by proposed construction was designed by the University archaeologists in consultation with the Soil Conservation Service. The test excavations were undertaken in July, 1976. The field survey and test excavations required 120 man days to complete. An additional 195 man days were allotted to laboratory analysis and report preparation. Dr. Paul R. Fish and Dr. David J. Hally acted as Co-Principal
Investigators for this project.

The primary purpose of this report is to provide planning information to the Soil Conservation Service for use in the Ebenezer Creek Watershed Protection and Flood Prevention Project. Our studies, however, were not without archaeological objectives. These objectives revolve around the establishment of a baseline from which archaeological remains and research designs can be evaluated by future investigators in the watershed. This goal is closely related to our primary obligation to the Soil Conservation Service—to identify and evaluate the significance of archaeological remains located in the rights-of-way of proposed channels within the watershed. A background or baseline which provides a setting of archaeological problems and questions is essential for the required evaluation of significance.

ENVIRONMENTAL SETTING

The Ebenezer Creek Watershed is located within the pine barrens section of the Coastal Plain physiographic province of Southern Georgia. The drainage area of Ebenezer Creek defines the limits of the watershed. Ebenezer Creek flows into the Savannah River which forms the eastern border of the district. The Ogeechee River lies five to ten miles from the western boundary but does not influence drainage within the watershed. See Figure 1.

Channel development in the watershed is largely restricted to the lower reaches of the major branches and creeks. The upper reaches are nearly flat with very little channel development. Flooding in the upper reaches occurs from three to five times annually with the most frequent occurrences in the early summer. There are a few large round ponds or Carolina bays in the watershed, some with water standing the year round but most of them holding
Figure 1. Ebenezer Creek Watershed. The dashed line indicates watershed boundary.
water only during the wet season.

The most outstanding physiographic characteristic of the watershed is its low relief. The topography ranges from very flat in the southern portion of the district to gently rolling in the north. In certain areas, the Penholloway and Okefenokee marine terraces are conspicuous features on the otherwise flat landscape. In the southeastern corner of the watershed, the remains of old offshore sand bars are evident and these appear to have affected the drainage pattern of Ebenezer Creek. Elevation extremes vary from 22 feet mean sea level at the mouth of Ebenezer Creek in the south to 145 feet in the northernmost sections.

Soils throughout the watershed are sandy and/or clayey loams. Many of these soils are considered poor in terms of agricultural productivity due to excessive drainage (droughty) or wetness. However, approximately six percent of the watershed area is Lakeland sandy loam and this soil type is considered to have good natural productivity when compared with soils in the state as a whole (Georgia Department of Natural Resources 1974:68). This soil type is dominant in certain areas adjacent to the Savannah River, Ebenezer Creek, Runs Branch, Little Ebenezer Creek, Turkey Branch and Cowpen Branch.

Due to the generally great depth of overlying beds of sands and clays, no exposures of underlying rock formation are visible in the watershed. With the exception of scattered occurrences of petrified wood in the Ebenezer Creek and Savannah River drainages, there are no available rock resources for aboriginal exploitation. The closest sources of material suitable for stone tool manufacture are near Briar Creek, approximately 30 miles north of the watershed.

The climate of the watershed can be characterized as "humid subtropical"
(Koppen 1931). The mean annual temperature is 66.5 degrees Fahrenheit, ranging from an average of 51 degrees in December to 81 degrees in July. The growing season is approximately 270 days, with the last spring freezes occurring near the end of February and the first fall freezes near the end of November. The average annual rainfall is 45 inches, with the major portion falling during the summer months.

Wildlife resources which would have been of value to aboriginal occupants are rated as moderate to low. These consist of rabbit, raccoon, fox, deer, dove, turkey, squirrel, muskrat, mink and otter in order of their relative abundance today (Ogeechee River Soil and Conservation District 1966). In this context, it is important to note that the Georgia Wildlife Commission (1948) considers intense hunting pressure to be responsible for the lack of abundant game and that the actual carrying capacity is much greater than present animal numbers would indicate. Good stream fishing exists on the major creeks and branches throughout the watershed during the summer months with adequate rainfall. In dry years, however, Ebenezer Creek and its tributaries stop running as far downstream as the city of Springfield. The Savannah River and its floodplain streams also have abundant fish resources. Good catches are made today of bass, crappie, bream, redbreast, jack, catfish, and mudfish.

Potential vegetal resources available for aboriginal exploitation are very difficult to evaluate. Nearly 250 years of European manipulation for farming and commercial purposes has overwhelmingly influenced the nature of vegetation currently present. An attempt by botanist Gayther Plummer (1975) to reconstruct original forest types from witness tree records proved unsuccessful. The early settlement of the watershed precluded systematic survey records for areas of significant size, and the records that do exist are widely scattered. As a
very general statement, human resources would tend to be fewer in the inter-
drainage flats where a more homogeneous forest type with a higher percentage
of pine would be found. Swamp vegetation and the more mixed species along
drainages would have offered a wider range of useful products.

THE ARCHAEOLOGICAL BACKGROUND TO THE
SURVEY PROJECT

Archaeological literature pertaining to the pine barrens section of the
Georgia Coastal Plain is very limited in extent, as is the amount of scientific
investigation producing it. Previously, archaeological research in the state
has concentrated on the narrow coastal strand and the piedmont areas near the
fall line. In fact, the area of the Ebenezer Creek Watershed was almost
totally unrecorded for archaeological remains prior to this study. Examination
of the State Archaeological Survey files revealed that only a single site had
been recorded for those portions of Effingham and Screven Counties falling
within the watershed.

Two other localities of archaeological interest in the watershed were
reported by Clarence B. Moore (1899:169-171) in his survey of aboriginal
mounds along the Savannah River. These are two burial mounds situated on
bluffs overlooking the Savannah River near Hudson's Ferry in Screven County.
Four burials were recovered at one mound and a single skeleton was exposed
at the second locality. Two pipes with styles diagnostic of the Mississippian
(Savannah or Irene Phases) accompanied one of the burials at the first mound.

At the present itme, the general consensus on prehistoric use of the
longleaf pine forest zones on the Coastal Plain emphasizes a restricted
subsistence and settlement pattern in response to limited resources of the
pine barrens. This position is reflected by the following statement regarding the Mississippian time period:

People may have entered the sector from time to time to fish, a suggestion stemming from the presence of fish in amounts possibly attractive enough for exploitation. There were, perhaps, even attempts to settle on the river flood-plains during periods when population pressures in other sectors combined with long periods of drought in the interior made floods on the Coastal Plain rare... On the basis of the present environmental, archaeological, and ethnohistorical data, however, it appears that the Pine Barrens Sector was not occupied by any except small, scattered and probably seasonal groups of fishermen exploiting the floodplain (Larson 1961:111).

Prior to the present survey, most settlements on the interior Coastal Plain were thought to occur along major rivers and their primary tributaries with transitory camping stations for particular procurement activities sparsely distributed elsewhere.

SURVEY METHODS

As indicated by the previous section, the Ebenezer Creek Watershed was almost totally unexplored for archaeological remains at the time our survey was initiated. Our first task, then, was to obtain some insight into the kinds and spatial distributions of archaeological remains which might be encountered during the field survey. This aspect of investigation was accomplished by contacting individuals known by the Soil Conservation Service field representatives in Effingham County to have an active interest in the local history and prehistory.

As each local amateur archaeologist was contacted, his collection was examined and as much information as possible was elicited concerning artifact proveniences. In those cases where good data was available, the collections were systematically photographed. If possible, the site
producing the artifacts was also visited and recorded.

The overview, gained through numerous conversations and many on-site inspections of archaeological localities, demonstrated the existence of a long sequence of aboriginal exploitation of watershed resources. A perspective on a complex and widely dispersed pattern of land use was thereby obtained prior to actual survey of the drainage channels. This stage of study also provided a background from which to evaluate the nature and importance of remains which might be found during later field survey.

Surface reconnaissance and limited subsurface testing at sites identified during the overview established that little alluviation has taken place in the watershed and that undetectable archaeological remains due to alluviation would be unlikely. Identification of dark, organic midden deposits by usual subsurface testing methods involving use of shovel and posthole tests was not possible because of excessive leaching of the soils. Sites displayed relatively sparse distributions of artifacts and subsurface tests of the above types only rarely augmented surface collections.

The research plan developed for the next phase of field investigation called for intensive survey of all areas with visible ground surface in the project benefit areas. Since subsurface tests at known sites strongly suggested that the chances of locating unexposed archaeological remains with usual testing methods were remote, it was concluded that the most efficient and productive method of survey was by means of surface reconnaissance and careful inspection of artifact scatters.

Recent ground disturbance resulting from plowing and logging operations were responsible for the open areas selected for study in the benefit areas.
Such open areas were generally lacking in the rights-of-way. Despite knowledge that the likelihood of identifying archaeological sites was extremely small in many cases, survey representative of all types of channel situations was considered important for adequate coverage.

Survey of the rights-of-way was accomplished by transects following the proposed channels as indicated on aerial photographs provided by the Soil Conservation Service. Transect locations were governed by access and absence of standing water. Approximately 25 percent of the channel rights-of-way were surveyed in this manner. Maps provided in Appendix I of this report show locations and types of survey conducted in the vicinity of the proposed channels.

When a site was encountered, a systematic collection of all artifacts was made. Estimates of site size, artifact density, relationship to topographic and other environmental features, and evaluation in terms of potential for future research were all described as part of the site record. Location of the site was plotted on aerial photographs and on U.S.G.S. topographic maps. For the purposes of this survey, any occurrence of artifactual material was designated a site.

After completion of this reconnaissance, a test excavation program was developed in order to more thoroughly evaluate several identified archaeological sites which may be directly affected by the proposed construction. Limitations in terms of time, funding and high summer water table prevented extensive excavations at any one locality. The testing procedure involved the excavation of from one to three squares measuring two meters on a side. In order to insure systematic recovery of artifacts, fill removed from the squares was passed through one-quarter inch mesh screen. The tests were
excavated in arbitrary 20 centimeter levels until sterile soil or the water table was reached.

ARCHAEOLOGICAL RESULTS OF THE PROJECT

Introduction

Even at the somewhat preliminary stage in the analysis of survey data, the Ebenezer Creek Watershed project has contributed significantly to understanding the archaeological configurations of southeast Georgia. Not only was the intensive aboriginal use of an inland coastal pine barren undocumented and unsuspected, but prior to this reconnaissance, regional summaries had suggested that such areas never offered resources to attract prehistoric inhabitants. A major contribution to the archaeology of the state by the survey is the demonstration of remains spanning the total range of known human occupation from Paleo-Indian (around 11,000 years ago) to historical times.

A total of 108 prehistoric and historic archaeological sites were identified during this investigation and 81 of these occurred within areas benefitted by the proposed channels. Detailed descriptions for 100 sites are provided in Appendix II. The remaining sites are not described since they represent twentieth century historic occupations. The undescribed sites are 9Sn26, 9Ef85, 9Ef86, 9Ef87, 9Ef88, 9Ef89, 9Ef90, 9Ef91 and 9Ef92. All artifacts found during the survey were processed and analyzed in the Laboratory of Archaeology, Department of Anthropology, University of Georgia. Artifacts were cleaned, entered in the Laboratory's catalogue and subsequent to analysis integrated into the Laboratory's site survey collections.
Aboriginal and historic ceramic analysis was accomplished by Sharon Goad, a graduate student in the Department of Anthropology, University of Georgia. Historic artifacts were assigned to types described by Hume (1969). Aboriginal ceramics were classified according to traditional types as defined by Wauchope (1966), Caldwell and Waring (1939) and Stoltman (1974). Projectile points were classified according to approximate temporal position using criteria provided in Cambron and Hulse (1969) and Coe (1964). Debitage was divided into three broad, descriptive categories: flakes of bifacial retouch, normal percussion and formless debris. Formless debris was used as a catchall category and included all unidentified broken flakes as well as shatter. Intentional retouch or grinding were required criteria before a specimen could be considered for placement into a tool category. A specimen meeting these criteria was then placed into one of 16 broad descriptive types.

Research Goals and Constraints

In the course of this study, large amounts of descriptive data have been assembled. The approaches to this data attempted in the report have been selected in some ignorance since the present state of interior Coastal Plain archaeology does not provide a large body of similar descriptive information from which to recognize the most meaningful questions. The result of the effort has been the generation of hypotheses which could not have been anticipated prior to assembling the descriptive material. It is hoped that the greatest impact of this presentation will be the stimulation of further cultural hypotheses about the behavior of Coastal Plain groups.
The project operated within the contexts of several additional constraints other than an absence of previous archaeological investigation. Sites in the Ebenezer impact area require a broader background of regional archaeology for proper interpretation. Fulfillment of our contract obligations, however, prevented implementation of a sampling design (e.g. Binford 1964; Matson and Lipe 1975; Thomas 1970; 1973) which could most satisfactorily provide the desired baseline of regional archaeology for the entire watershed. Survey was limited to the nonrandom placement of proposed drainage channels and their associated benefit areas within the watershed. For the purposes of immediate analysis, the cautious assumption has been made that sites located in the survey areas are basically representative of sites in the region as a whole.

On the level of the site, several additional factors which bias our data must be explored. Much of the watershed and many of the proposed channel rights-of-way are covered by heavy vegetation. Since identification of sites was based on the occurrence of artifacts, undoubtedly many localities were completely missed and others could not be systematically evaluated within the time available. At the present time, it is not possible to analyze the distorting effect this has on our assessment of the distribution of sites in the watershed.

Since much interpretation depends on recovery of a representative sample of artifacts from the surface of a site, conditions which bias the configuration of these materials must also be discussed. One such factor is the obvious presence of numerous artifact collectors in the watershed. Although some amateurs collect only the more formal artifact categories, others systematically remove all artifacts from the surface.
For example, the landowners of one site (9Ef37) have a collection from the locality which includes several hundred projectile points and thousands of pieces of debitage, tools and sherds. Our artifact inventory from the site includes only a small amount of debitage and a dozen sherds.

Other biasing factors relate to the small sample size as a result of low surface densities of artifacts recovered from Ebenezer Creek Watershed sites. Some of the more interesting questions concerning site function could best be explored by examining proportional representations of artifact categories in a complete assemblage. Other problems require correct identification of the temporal components at a site and hence adequate recovery of stylistically diagnostic artifacts.

Although every effort was made to systematically collect all artifacts from a site's surface, two studies show these collections to be inadequate for some purposes. Several of the largest sites were revisited and recollected at the end of our survey. All sites under consideration were originally collected during conditions of good surface exposure and were revisited after the soil had been freshly cultivated. In each case, recollection provided new categories of artifactual information, omitted old ones and displayed differing proportions of types within each assemblage. Table 1 presents the results of this study.

During test pit excavation, it was observed that more small triangular "Mississippian" and Woodland style projectile points were recovered from subsurface contexts than during the entire surface reconnaissance (see Table 2). Furthermore, the test pits were excavated at sites thought to have only a preceramic component (9Ef57 and 9Ef68) or a primary Archaic component and a minor ceramic one (9Ef16). The test pits at these sites
also produced at least several sherds when no or very few sherds had been recovered on the surface. The small size of the triangular points and the thumb-nail size of sherds reduced by 200 years of plowing may prevent systematic detection during surface reconnaissance. In any case, this evidence does suggest that Woodland remains are significantly under represented in our survey data.
Table 1  A Comparison of Assemblages from First and Second Survey Collections

<table>
<thead>
<tr>
<th></th>
<th>Core Tool</th>
<th>Thick Biface</th>
<th>Thin Biface</th>
<th>Projectile Point</th>
<th>Graver</th>
<th>Bifacial Sidescraper</th>
<th>Unifacial Sidescraper</th>
<th>Endscaper</th>
<th>Serrate Sidescraper</th>
<th>Discoidal Scrapers</th>
<th>Notch</th>
<th>Hammerstone</th>
<th>Anvil</th>
<th>Nutstone</th>
<th>Mortar</th>
<th>Handstone</th>
<th>Index of Diversity</th>
</tr>
</thead>
<tbody>
<tr>
<td>9Ef22 Collection 1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>5</td>
<td>1</td>
<td>0</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>.43</td>
</tr>
<tr>
<td>Collection 2</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>.38</td>
</tr>
<tr>
<td>9Ef35 Collection 1</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>7</td>
<td>1</td>
<td>0</td>
<td>4</td>
<td>1</td>
<td>0</td>
<td>7</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>.50</td>
</tr>
<tr>
<td>Collection 2</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>8</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>.63</td>
</tr>
<tr>
<td>9Ef76 Collection 1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>.31</td>
</tr>
<tr>
<td>Collection 2</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>6</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>.31</td>
</tr>
<tr>
<td>9Ef78 Collection 1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>5</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>.38</td>
</tr>
<tr>
<td>Collection 2</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>6</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>.31</td>
</tr>
</tbody>
</table>
Table 2. Distribution of Projectile Point Styles by Provenience Type.

<table>
<thead>
<tr>
<th>Context</th>
<th>Woodland</th>
<th>Archaic</th>
<th>Unidentified</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surface</td>
<td>4</td>
<td>46</td>
<td>22</td>
</tr>
<tr>
<td>Test Pits</td>
<td>6</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>
Chronology and Intensity of Aboriginal Occupation in the Ebenezer Creek Watershed

Most problems of interest to the archaeologist require reference to time. In the case of the Ebenezer Creek Watershed survey, it is possible at present to only cross-date archaeological remains by comparing artifact styles observed in the surface collections with established sequences of styles from neighboring areas. The precision with which cross-dating can be applied depends on a host of factors—for example, presence of trade items from neighboring areas, reliability of the regional sequence and the artifactual medium expressing style.

The dependability of cross-dating in the Ebenezer Creek Watershed varies greatly at different points during the prehistoric sequence. It is possible to recognize Archaic manifestations and broad temporal segments within this period by variation in projectile point styles. However, since neighboring sequences are as far afield as North Carolina (Coe 1964) and West Virginia (Broyles 1971) and because projectile point styles are somewhat less sensitive chronological indicators than some other artifact types, only a very relative sequence can be established and actual occupations within time segments may be several thousand years apart. Ceramic bearing sites, on the other hand, are susceptible to finer chronological division with much greater accuracy. Neighboring sequences are close at hand and ceramics, a more plastic medium than stone, are apt to express greater stylistic variation within short periods of time.
Sequence of Watershed Occupation

A single fluted "Clovis" style projectile point found near the confluence of Ebenezer Creek and the Savannah River suggests the presence of man in the watershed by 11,000 years ago. A number of highly patinated pentagon and lanceolate shaped points which were observed in collections suggest antiquity but cannot be assigned to any particular time period with certainty. After this earliest time period, sites representing sequential chronological units are almost equally represented until the later prehistoric Irene phase (A.D. 1300 to 1500). Although several sherds of Irene Complicated Stamped, the hallmark of this time period, were observed in collections, only a single sherd is present in our survey materials. Table 3 presents temporal subdivisions in our analysis and the artifact types considered diagnostic of each subdivision.

Intensity of Watershed Utilization through Time

The one artifact type that is chronologically diagnostic throughout the range of watershed occupation is the projectile point. In order to achieve the goal of estimating intensity of use of the Ebenezer district through time, a particular effort was made to assemble all possible information concerning the presence of different point styles and their frequency of occurrence. To this end, a photographic record was made of all projectile points in local collections for which provenience information assured an origin within the watershed. To the 1207 complete and typologically identifiable projectile points recorded in this manner, an additional 58 points from survey collections were added to produce the subtotals of points per period seen in Table 4. An additional 278 complete
<table>
<thead>
<tr>
<th>Time Period</th>
<th>Dates</th>
<th>Ceramic Types</th>
<th>Projectile Point Types</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mississippian</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Late Woodland</td>
<td>A.D. 1700</td>
<td>Irene Incised. Irene Complicated Stamped, Savannah Complicated Stamped,</td>
<td>Fee Dee, Caroway, Uwherrie, Clements</td>
</tr>
<tr>
<td></td>
<td>to A.D. 800</td>
<td>Savannah Cord Marked, Savannah Check Stamped, Savannah Burnished Plain, Red</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Slipped</td>
<td></td>
</tr>
<tr>
<td>Early and Middle</td>
<td>A.D. 800</td>
<td>Wilmington Cord Marked, Deptford Bold Check Stamped, Deptford Linear Check</td>
<td>Yadkin, Badin, Vincent</td>
</tr>
<tr>
<td>Woodland</td>
<td>to A.D. 1</td>
<td>Stamped, Deptford Simple Stamped</td>
<td></td>
</tr>
<tr>
<td>Late Archaic</td>
<td>A.D. 1 to</td>
<td>Stallings Plain, Stallings Punctate</td>
<td>Savannah River, Halifax</td>
</tr>
<tr>
<td></td>
<td>2500 B.C.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Middle Archaic</td>
<td>2500 B.C.</td>
<td></td>
<td>Kirk, Stanley, Morrow Mountain, Palmer</td>
</tr>
<tr>
<td></td>
<td>to 6000 B.C.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Early Archaic</td>
<td>6000 B.C.</td>
<td></td>
<td>Dalton, Hardaway</td>
</tr>
<tr>
<td></td>
<td>to 8000 B.C.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 4. Typological Placement of Projectile Points from the Ebenezer Creek Watershed

<table>
<thead>
<tr>
<th>Period</th>
<th>Dates</th>
<th>Number of Projectile Points</th>
<th>Projectile Point Density Per Century</th>
<th>Diagnostic Point Styles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Late Woodland and Mississippian</td>
<td>A. D. 1700 to A. D. 800</td>
<td>148</td>
<td>16.4</td>
<td>Pee Dee, Caroway, Uwherrie, Clements</td>
</tr>
<tr>
<td>Early and Middle Woodland</td>
<td>A. D. 800 to A. D. 1</td>
<td>112</td>
<td>14.0</td>
<td>Yadkin, Badin, Vincent</td>
</tr>
<tr>
<td>Late Archaic</td>
<td>A. D. 1 to 2500 B. C.</td>
<td>261</td>
<td>10.4</td>
<td>Savannah River, Halifax</td>
</tr>
<tr>
<td>Middle Archaic</td>
<td>2500 B. C. to 6000 B. C.</td>
<td>453</td>
<td>12.9</td>
<td>Kirk, Stanley, Morrow Mountain, Palmer</td>
</tr>
<tr>
<td>Early Archaic</td>
<td>6000 B. C. to 8000 B. C.</td>
<td>113</td>
<td>5.7</td>
<td>Dalton, Hardaway</td>
</tr>
</tbody>
</table>
points were photographically recorded or collected during survey but could not be satisfactorily fitted into any typological category.

Numbers of projectile points per period were not alone considered to be the best gauge of intensity of occupation for each period. While periods were represented by greater or lesser numbers of diagnostic points, the time span per period was divided by the appropriate number of centuries to give a more standardized estimate of number of points per century.

When the figures in Table 4 are examined, it becomes clear that, with the exception of the Early Archaic, there are not large differences in the numbers of projectile points for comparable time increments from one archaeological period to the next. It could be hypothesized that starting with a somewhat lower intensity in the Early Archaic, use of the watershed in succeeding broad periods was of relatively equal intensity. Intensity of use measured by this scale must be thought of as involving those activities in which projectile points are employed. It might be appropriate to suggest that hunting more than some other extractive activity was rather equally pursued during the periods in question. It would furthermore be reasonable to expect that within any one broad period intensity of watershed use could have varied significantly. During the 3500 years of the Middle Archaic, for example, the watershed may have been occupied substantially at some points and not at all at others. The precision of chronological control presently available does not lend itself to fine internal subdivisions, and such distinctions must await further investigation.
Settlement Patterns

Distributions of Sites within the Watershed

It is difficult to arrive at meaningful statements concerning site distributions in the Ebenezer Watershed for a number of reasons already mentioned in the introduction of this section. Sites recorded by the survey constitute a biased set in response to conditions of heavy vegetation and the necessity to concentrate on areas adjacent to a limited number of drainages. In addition, some of the sites included in most phases of analysis were ones reported by local amateurs or landowners and thus controlled by no systematic method of discovery. If it had been possible to survey large area blocks or to statistically sample a stratified universe, there is little doubt that more detailed patterns of distribution could have been discerned than the several very tentatively offered here.

There are few indications of strikingly different site distributions through time (See Figure 2, a, b, and c). Many of the larger sites with numerous artifacts are multicomponent showing repeated use in the Archaic and Woodland periods. Such sites are not restricted to any one portion of the watershed. Although the areas surveyed would tend to overemphasize the presence of sites along minor tributaries and upper reaches of the major branches, the largest sites known occur generally along the Savannah River and those next in magnitude along or in close proximity to major tributaries. In addition, those sites both on the river and on major tributaries are often found at the confluence of the larger drainage and a secondary one leading into it. Sites located near confluences of two watercourses of differing size would have ready access to the resources of each. Presumably, the aquatic and associated
Figure 2a. Archaeological Sites Dating to the Early and Middle Archaic
Figure 2b. Archaeological Sites Dating to the Late Archaic and Early and Middle Woodland.
Late Woodland & Mississippian

Figure 2c. Archaeological Sites Dating to the Late Woodland and Mississippian.
terrestrial resources of rivers, creeks and smaller ephemeral drainages would present differing opportunities for exploitation.

Perhaps more tentative than the above site correlates are two suggestions for localized associations of sites and geographic features. One area of sand hills within the Savannah River swamp was visited and showed intense utilization within a single ceramic phase. Other similar sand hill sites with more varied components were verbally reported by local residents. These sites are largely accessible by boat. James Stoltman (1974: 35-88) reports a similar multi-component intense utilization of a sand hill area within a swamp along the Savannah River, approximately 40 miles to the north of the watershed. Despite difficulties of access, swamp resources must have offered specialized resources for aboriginal harvesting. A second suggestion of a feature attracting substantial utilization during various periods is the Carolina bay, again presumably offering specialized resources. All five bays visited had one or more sites along the edges.

One very positive correlation between sites and a geomorphological feature in the Ebenezer Creek Watershed can be demonstrated. The correlation was discovered by reference to the distribution of soil types as defined by the Georgia Department of Natural Resources (1974: 68). Lakeland sandy loam constitutes only six percent of the soil in the watershed and a similarly small proportion in the area surveyed. It is the single soil type considered to have good agricultural productivity when compared to soils in the state as a whole.

When it was noticed that nearly 60 percent of all sites were situated on Lakeland sandy loam, it was first assumed that the correlation was due to preference for this soil in aboriginal agriculture. A breakdown
of components of sites associated with Lakeland sandy loam, shown in Table 5, suggests that the correlation is more complex. Archaic components are as strongly associated with the soil type as are later Woodland ones which are known to possess agricultural technology. While agriculture may indeed be a consideration in the placement of later sites, Lakeland sandy loam also can be hypothesized to have supported a vegetation type with very high exploitation potential for nonagricultural strategies as well.
Table 5. Soil Type and Archaeological Site Association in the Ebenezer Creek Watershed

<table>
<thead>
<tr>
<th>Archaic Components</th>
<th>Lakeland Sandy/Loam Association</th>
<th>Other Soil Type Association</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>33</td>
<td>9</td>
<td>42</td>
</tr>
<tr>
<td>Woodland Components</td>
<td>30</td>
<td>7</td>
<td>37</td>
</tr>
<tr>
<td>Undetermined</td>
<td>33</td>
<td>24</td>
<td>57</td>
</tr>
</tbody>
</table>
Definition of Site Type

During our survey, it became apparent that several different types of prehistoric utilization and habitation were represented by sites in the watershed. This impression was based on a subjective evaluation of a number of factors. The criteria contributing to the evaluation of differential site types included site size, surface artifact densities, number of temporal components, an impression of artifact assemblage variability and the presence of exotic artifact types in the collections of local amateurs.

The largest, most substantial sites in the region appeared to occur along the bluffs of the Savannah River to the east and along the Ogeechee River beyond the western limits of the watershed. These sites had a wide variety of artifact types, including numbers of large objects such as grinding stones; exotic artifacts such as ornaments in the collections of local amateurs; and high densities of cultural remains on the surface. An interpretation of permanent habitation and/or base camp for these sites seemed applicable.

A second class of sites was localized near the larger streams and branches, at a distance of three miles or more from the Savannah or Ogeechee Rivers. These sites appeared to contain a more restricted variety of artifact types and lower surface densities. Exotic artifact types were never observed in local collections, but at the largest of these sites, a wide range of temporal components was always present. These sites may represent temporary campsites and/or short term base camps for each of several occupations. Contrasting with the first two classes of sites is a third, consisting of one or a few types of artifacts occurring in small numbers. This category of site seemed to
reflect a specific, nonrepetitive activity and was found in all parts of the watershed.

An original goal of laboratory analysis was to test the validity of this hierarchy of site types by a rigorous comparison of differential frequencies of artifact types in total assemblages. On examination of our recollection studies, it was found that while proportions of artifact types varied widely in different collections from the same site, numbers of types represented in each collection remained relatively constant (See Table 1). Therefore, it was decided that the most reliable index for comparison should be based on the diversity of types present rather than on the differing frequencies of particular artifacts from site to site.

For this purpose, a simple index of diversity was calculated. This measure of diversity deals with observed artifact categories within the entire assemblage. The categories used in this study include 20 variables consisting of ceramics, three types of debitage and 16 varieties of flaked and groundstone tools. In cases where artifacts on a presence and absence basis are widely distributed among categories, the result is a high diversity index and involves an assumption of a wide range of activities. When the bulk of the artifacts occurs in a few categories, the index of diversity is low and the assumption is a restricted number of activities.

Indices of diversity were not computed for the following sites: 9Ef13, 14, 24, 28, 32, 37, 43, and 79. In some cases, vegetation obscured the site surface so that adequate collections could not be made. Elsewhere, heavy collecting by amateurs had obviously biased the artifact types present, and in one case the lithic debris collected in the field proved during laboratory analysis to be of natural origin.
Figure 3 shows the number of sites exhibiting given values for index of diversity. Three classes were defined by inspection, using apparent natural breaks in the distribution. A comparison was then made between the three classes of sites based on artifact diversity and the three kinds of sites previously described using nonquantified variables. In general, the three clusters of sites defined by either method would contain the same members. It might be assumed then, that the diversity of artifacts present is a reasonable reflection of the nature of a site as a whole. Class I sites would correspond to special activity sites, Class II to temporary campsites/short term base camps and Class III to permanent habitation/base camps.

Class I sites contained one and occasionally two tool types. Less than 25 percent of such sites contained any tools at all, the rest being represented by flaking debris. The overall total of tools from Class I sites is too small to produce any detailed observations on relative abundance of particular tool types. There does seem to be some emphasis, however, on projectile points, endscrapers and sidescrapers. Class II and III sites have a much wider range of tool types, but it is difficult to differentiate the two classes on the basis of non-overlapping distributions of particular types. Projectile points appear to be somewhat less frequent in Class III sites, but these are the largest and most obvious sites to attract collectors who may have selectively removed this category tool.

The Ebenezer watershed is very poor in lithic resources required to produce stone tools. Scattered occurrences of petrified wood in the southern portion of the watershed are the only known local sources of raw material, and the rare utilization of this stone at sites suggests that it is of marginal quality. The majority of stone for tools would
Figure 3. Indices of Artifact Diversity
have had to be brought in from more distant sources. This situation of suitable lithic materials as a scarce resource provides an interesting background for interpretation of the distribution of debitage.

Class I sites usually contain only lithic debris (73.6%) and no tools. If special activity is represented, with modification or manufacture of a tool involved, it is noteworthy that the tool is not left behind at the activity locus. The scarcity of stone in the area might explain the economy of resource use.

It might be assumed that the primary materials for further manufacture would be first brought to the base camps or permanent habitation sites when transported into the watershed. Large tabular pieces of chert recovered at 9Ef37 suggest that importation was sometimes in the form of unmodified pieces rather than as preforms, ready-made cores, tools, etc. In addition, it would be likely that initial tool manufacture would also take place here, with finished tools often carried out to sites of specialized activity.

In support of the above hypothesized behavior is the frequency of cortical flakes in overall debitage. Cortical flakes would be associated with the first steps in tool manufacture, the removal of the outer weathered portion. At Class III sites, 13.1 percent of the stone debris is made up of cortical or partial flakes, at Class II sites the frequency is 11.3 percent; and at Class I sites only 5.2 percent is cortical. The percentage of flakes of bifacial retouch at Class I sites is 76.2 percent as compared with 56.1 and 54.1 percent for Classes II and III. This also would bear out the inference that modification of an existing tool is the more dominant form of lithic manipulation at Class I sites, and that tools were often carried from base camps for a specific activity as well as
A Tentative Model of Watershed Utilization

The spatial patterning of the three types of sites defined in the previous section can be fitted into a tentative model of watershed occupation and utilization. Table 6 contains the information on which this model is based. Class III sites would include larger and more permanent zones of occupation located either along the two rivers at either edge of the watershed or along a major branch. These sites possess the highest indices of artifact diversity, indicating the widest variety of activities of all sites. In addition, large cumbersome items such as grinding stones and exotic objects such as pipes and ornaments are known exclusively from such sites. Archaic components of Class III sites are about as likely to be on a major branch as on the rivers. It is clear, however, that later ceramic components at Class III sites on the river are larger and diagnostic remains are more densely represented than on the major branches. The reason for later period preference for the river location of Class III is unknown, and could involve the importance of trade, travel, and communication along the river, an emphasis on riverine resources, or the suitability of the river environs for agricultural activities.

Class II sites, again tending to be found along the rivers or major branches, also occasionally occur elsewhere in the watershed. A secondary level of tool diversity is present, probably denoting a more restricted range of activities, and artifacts are only those with a utilitarian function and more portable nature. If not along the river, Class II sites are located three or more miles inland. If
Table 6. Classification of Sites by Indices of Diversity

<table>
<thead>
<tr>
<th>Class</th>
<th>Number of Sites</th>
<th>Sites included Within each Division</th>
<th>River Association</th>
<th>Major Branch Association</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class I</td>
<td>0 to .15</td>
<td>Ef11, Ef13, Ef17, Ef19, Ef20, Ef23, Ef31, Ef33, Ef34, Ef38, Ef40, Ef42, Ef44, Ef45, Ef46, Ef47, Ef49, Ef50, Ef51, Ef52, Ef53, Ef54, Ef55, Ef58, Ef59, Ef60, Ef62, Ef64, Ef65, Ef66, Ef67, Ef69, Ef74, Ef75, Ef77, Ef81, Ef82, Sn8, Sn9, Sn10, Sn11, Sn12, Sn13, Sn14, Sn15, Sn16, Sn19, Sn21, Sn22, Sn24, Sn25</td>
<td>10</td>
<td>16</td>
<td>25</td>
</tr>
<tr>
<td>Class II</td>
<td>.20 to .55</td>
<td>Ef8, Ef10, Ef12, Ef15, Ef16, Ef18, Ef22, Ef25, Ef26, Ef29, Ef36, Ef39, Ef41, Ef48, Ef56, Ef57, Ef61, Ef68, Ef70, Ef72, Ef73, Ef76, Ef78, Ef80, Ef83, Ef84, Sn17, Sn18, Sn20, 38Ja2</td>
<td>9</td>
<td>18</td>
<td>4</td>
</tr>
<tr>
<td>Class III</td>
<td>.55 to .80</td>
<td>Ef9, Ef27, Ef80, Ef71, Ef35, 38Ja1, 38Hml</td>
<td>4</td>
<td>3</td>
<td>0</td>
</tr>
</tbody>
</table>
taken to represent temporary camps used on trips out from a major
habitation site, this distance of Class II sites from the river may
approximate the distance at which it was practical to remain overnight
rather than to return to a longer term habitation site. If more
complete areal coverage by survey were available, it would be useful
to further test this idea by observing the spacing between equivalent
components of Class III and Class II sites along the river itself or
along major branches. Of course, a major problem in such a test would
be the current lack of precision in chronological control.

A second reason for the assumed camping at Class II sites might
be found in the nature of the resources exploited by the people using
the sites. Resources associated with such sites might be found in
sufficient abundance to warrant a stay of several days up to short
seasonal occupations before depletion. Such a relation of sites to
resources would contrast to that postulated for Class I sites.

Class I sites appear to be randomly distributed throughout all
portions of the watershed surveyed. They are small, with only chipping
debris and one or two tool types represented. Each Class I site is
the probable locus of a single exploitative activity at one given
moment in time. It is not expected that the activity involved as much
as a whole day, and that the performer or performers of the activity
were currently inhabiting a Class II or Class III site. Class I sites
are rarely datable, but there is no reason to believe that the
inhabitants of the watershed during any particular time period would
account for a disproportional number of Class I sites.

No picture of prehistoric utilization of the Ebenezer Creek
Watershed would be complete without the information provided by each
kind of site. Class I sites, while tiny and containing few artifacts, give an insight into aspects of aboriginal life not otherwise available. The more complex II and III sites afford a glimpse of aboriginal community patterns that could be elaborated greatly by intensive field investigations. It remains an open question whether the Ebenezer district at any given prehistoric period was part of a greater or lesser social universe. Did the inhabitants spend the majority of every year within the watershed or did they participate in a seasonal round of activities which included the coast or the piedmont? These questions and others raised by this study remain to be answered by future research.
IMPACTS OF THE PROPOSED PROJECT ON ARCHAEOLOGICAL AND HISTORICAL REMAINS

It is our opinion that direct impacts due to the proposed project can be minimal if several precautionary measures are taken during and before construction. No known standing or archaeological historic sites are located in areas subject to direct impacts. The Office of the State Archaeologist and the National Historic Preservation officer have been contacted and no archaeological or historic site, located in proposed channel rights-of-way or in the related benefit areas, is on or currently proposed for nomination to the National Register of Historic Places. Our survey revealed that the following prehistoric archaeological sites are located within or in close proximity to the proposed drainages: 9Ef12, 9Ef13, 9Ef15, 9Ef16, 9Ef56, 9Ef57, 9Ef70, 9Ef71, 9Ef78, and 9Ef81. These sites will all require some kind of mitigative action on the part of project sponsors. In each case, our primary recommendation is one which will not commit the resource to scientific study. However, if the primary recommendations prove infeasible in terms of proposed construction plans, then large-scale excavation programs will be necessary.

Although secondary impacts will undoubtedly be more extensive, they are difficult to precisely identify and the responsibility of the Soil Conservation Service in reference to these matters awaits definition. The purpose of the proposed project is to increase land productivity and it is reasonable to assume that more intensive land use will result in or quicken the destruction of at least some archaeological sites. Increased timber operations, deeper plowing and construction of privately sponsored channels were all identified by affected landowners during the archaeological survey as potential
consequences of the proposed project. Since specific archaeological sites cannot be associated with definite indirect impacts, no recommendations concerning their alleviation have been made in this report. Furthermore, it is our belief that because archaeological remains which may be subject to secondary impacts have been identified in this report, the Soil Conservation Service has largely fulfilled its obligations with respect to this area of concern.
RECOMMENDATIONS

1) It is concluded from this investigation that construction of proposed structural measures could be undertaken without impact to known archaeological sites in the following localities:

- Construction Unit 1
- Construction Unit 2
- Construction Unit 3
- Construction Unit 4
- Construction Unit 5
- Construction Unit 6
- Construction Unit 7
- Construction Unit 9
- Construction Unit 10
- Construction Unit 11
- Construction Unit 12
- Construction Unit 13

- Structural Measure C4a
- Structural Measure C13
- Structural Measure C18
- Structural Measure D10
- Structural Measure J
- Structural Measure J4a
- Structural Measure J9
- Structural Measure J12
- Structural Measure J15
- Structural Measure LE6
- Structural Measure R1
- Structural Measure R13a
- Structural Measure R25
- Structural Measure R32
- Structural Measure S11
- Structural Measure T
- Structural Measure T21

2) We recommend that the Soil Conservation Service seek a determination of eligibility for the National Register of Historic Places for those sites which may be directly affected by proposed constructions. The following localities are affected: Construction Unit 8, Construction Unit 14, Structural Measure C21 and Structural Measure T7.

Specific sites under consideration are 9Ef12, 9Ef13, 9Ef15, 9Ef16, 9Ef56, 9Ef57, 9Ef70, 9Ef73, 9Ef78, and 9Ef81. In the case of sites
in Construction Unit 14 and Structural Measure T7, such a determination could be accomplished either in terms of an archaeological district or in terms of the above listed specific sites. The argument for considering these sites as a district rests on the assumption that they reflect particular aspects of adaptation in the Ebenezer Creek Watershed and future research at these localities could provide important information pertaining to questions raised in the section "Archaeological Results of the Project" in this report.

3) Flagging of Sites: We recommend that the edges of all sites which may be directly affected by proposed construction be flagged just prior to construction. With the exception of sites 9Ef56 and 9Ef57, it should be possible to avoid all sites without modifying construction plans. The flagging should be done by a professional archaeologist in the company of a construction foreman or a Soil Conservation Service representative. It is expected that this work would require two man/days. Using the cost schedule employed by the University of Georgia, costs for this would be approximately $160.00 plus mileage and overhead.

4) This recommendation may require minor modification of present construction plans in order to avoid sites 9Ef56 and 9Ef57. It has been demonstrated that these sites contain archaeological deposits which have not been disturbed by plowing or other recent land manipulation practices and that they represent particularly important resources in terms of archaeological research of the types outlined in the previous sections of this report. These sites are located on the east edge of proposed Structural Measure T7. It is recommended that drainage excavation and construction disturbance be confined
between the existing channel and the paved highway to the west. These areas have already been extensively disturbed and if construction can be limited to them, direct impacts on the two sites will be negligible. If this plan is not feasible, we recommend that an intensive excavation program be undertaken at both sites. A precise cost estimate for such a program is not possible at this time since it would depend on extent of disturbance at both sites and the types of excavation procedures required. Large scale excavations at both sites would require approximately 10 weeks in the field using a five man labor force supervised by a professional archaeologist and one assistant. Approximately 30 weeks of laboratory analysis and report preparation would be necessary in addition to the time spent in the field. Again using the University of Georgia cost schedule, this type of research would involve the expenditure of approximately $25,000 plus institutional overhead.

5) We recommend on-site inspection by a professional archaeologist during construction of Construction Unit 8, Construction Unit 14, Structural Measure C21 and Structural Measure T7. These areas represent known concentrations of archaeological remains and the potential for direct impacts on presently unidentified archaeological resources is significantly greater than in other portions of the watershed. Although it is recognized that the primary purpose of this inspection is to record previously unidentified remains, it is further recommended that the professional archaeologist have the authority to stop construction for periods up to three hours if remains requiring additional exploration are encountered. One
archaeologist for the extent of construction in these areas should provide sufficient personnel to accomplish the proposed work. Using the University of Georgia cost schedule, the services of one professional archaeologist would be approximately $80.00 per day plus institutional overhead and mileage.
ACKNOWLEDGEMENTS

David Bozeman, the Soil Conservationist for Effingham County, provided much needed information and other forms of aid throughout the field project. Although many different local people in Effingham and Screven Counties furnished assistance, certain individuals can be singled out in this respect. These are Edward Gnann, Bowers Gnann, Frank Zoller, Walter Zoller, A. C. Barnhill and Frank Dasher. Particular gratitude is extended to Mr. Barnhill. His well documented collections from the project area serve as a tribute to the valuable archaeological work which can be performed by amateurs and furnished us with a much needed overview to the archaeology of the watershed. Mike Baker and Ernest Seckinger, graduate students at the University of Georgia, read and commented on several sections of the report. Finally, my wife, Suzanne K. Fish, provided much needed criticism involving both content and form of the report. Many of the ideas in this manuscript result from discussions with her.
REFERENCES CITED

Binford, L. F.

Broyles, B. J.

Caldwell, J. R. and A. J. Waring, Jr.
1939 Pottery Type Descriptions. Southeastern Archaeological Conference Newsletter 1:4-12.

Cambron, J. W. and D. C. Hulse

Coe, J. L.

Georgia Department of Natural Resources

Hume, I. N.

Larson, L. H.

Matson, R. G. and W. D. Lipe

Moore, C. B.
Plummer, G. L.

Stoltman, J. B.

Thomas, D. H.

Wauchope, R.
APPENDIX I

Legend:

- Proposed Drainages
- Intensive Areal Survey
- Transect Survey in Right-of-Way
- Archaeological Site
Construction Units 1 and 2

Sn 14
Sn 15
Sn 22
Sn 23
Sn 24
Sn 25
Sn 99

R42 17+25
R39 14+50

N

0 500 m
0 1800 ft
Construction Unit 3 and Structural Measure D10
Construction Unit 4
Construction Unit 6

T16b 105+00

T16a 105+00

T16 93+50

0 500 m
0 1800 ft
Construction Unit 7

Construction Unit 8 and Structural Measure S11
Construction Unit 9

0 500 m
0 1800 ft

Ef 39  Ef 87
Ef 40  Ef 41  Ef 88
Ef 42  Ef 46  Ef 47
Ef 48  Ef 49  Ef 50
Ef 51  Ef 52  Ef 53
Construction Unit 10

Ef 45

Ef 38

500 m

1800 ft
Construction Unit 13
Construction Unit 14
Structural Measure LE6

Structural Measure T7
Structural Measure R9

Structural Measures C4a and RI3f
Structural Measures J, J12 and J15
Structural Measures R25 and R32
Structural Measure J4

Structural Measures CI3, CI8 and T21
Structural Measure RI

Structural Measures R35 and R34a
Structural Measure R13a

Structural Measure T
APPENDIX II

Narrative Site Descriptions

9Ef8 (Ebenezer Site 1)

1) Universal Transverse Mercator Location: N359150;E471300.

2) Location: The site is located on a low ridge overlooking an unnamed tributary of Ebenezer Creek. The locality is approximately 900 feet northwest of Structural Measure 13a. Ebenezer Creek is approximately one-half mile to the east and Runs Branch is about the same distance to the north.

3) Site Description: The site extends 50 meters east-west and 25 meters north-south. The westernmost portion of the site is the locus of a small family graveyard and this area also corresponds with the greatest density of aboriginal artifacts. A local amateur archaeologist, A. G. Barnhill, has intensively collected at this site during the past few years and, despite recent plowing, relatively few artifacts were obtained during our visits. Stylistically diagnostic apecimens in Barnhill's and our collections suggest that aboriginal occupation occurred during the Middle Archaic and the Late Woodland. The presence of numerous pieces of pearlware suggest that the site was occupied sometime between A.D. 1780 and 1820. The two grave markers in the family plot date to the 1890's. No evidence of historic structural foundations or 1890's construction materials were observed.

4) Artifacts:

Debitage
- Flakes of Bifacial Retouch 7
- Normal Percussion Flakes 6
- Formless Debris 9

Tools
- Projectile Point 2
- Unifacial Sidescraper 3
- Serrated Sidescraper 1
- Hammerstone 1
- Grinding Slab 1

Aboriginal Ceramics
- Savannah Cord Marked 2
- Untyped Cord Marked 3
- Plain Sand Tempered 1

Historic Ceramics
- Pearlware/Blue Shell Edged 8
- Salt Glaze Stoneware 2
- Unidentified Whiteware 7
5) Test Excavations: Four postholes were excavated to subsoil (ca. 40 to 50 cm.). These tests were spaced approximately 15 meters apart along the east-west axis crossing the center of the site. No evidence of midden and no artifacts were found in these excavations.

9Ef9 (Ebenezer Site 2)

1) Universal Transverse Mercator Location: N3592250; E471650.

2) Location: The site is located on a low ridge overlooking Runs Branch near its confluence with Ebenezer Creek. The locality is approximately 3500 feet north of Structural Measure R13a.

3) Site Description: The site extends 75 meters north-south and 35 meters east-west. Although artifacts were continuously scattered across the site, two major concentrations were noted—one of these was near the north end of the site and the other was near the south end. An old cemetery dating to the late 1700's and early 1800's is located near the northeast corner of the site according to the land owner. We could find no traces of this, however, during our survey.

At the time we visited this locality, the field had not yet been plowed and surface visibility was only fair. The landowner told us that he had found hundreds of projectile points and many grinding stones at the site in the last 50 years but had given them all away. The small sample of stylistically diagnostic artifacts collected during our survey suggest several components are present at this site. The two projectile points are of Middle and Late Archaic styles and the ceramics indicate early and late Woodland occupations.

4) Artifacts:

Debitage
- Flakes of Bifacial Retouch 35
- Normal Percussion Flakes 24
- Formless Debris 54

Tools
- Thin Biface 1
- Projectile Point 2
- Graver 1
- Bifacial Scraper 1
- Unifacial Scraper 2
- Endscraper 3
- Serrated Sidescraper 5
- Notch 2
- Hammerstone 1
- Anvil/Nutstone 2
Aboriginal Ceramics
Savannah Cord Marked 1
Savannah Burnished Plain 2
Deptford Linear Check Stamped 2
Plain Sand Tempered 10

Historic Ceramics
Pearlware, Green Shell Edged 1
Unidentified Whiteware 2

5) Test Excavations: None were conducted at the request of the land owner.

9Ef10 (Ebenezer Site 3)

1) Universal Transverse Mercator Location: N3591650; E471600.

2) Location: This site is located approximately 100 meters northwest of 9Ef9.

3) Site Description: This site and 9Ef9 are separated by only a small patch of woods and a road. Although no artifacts were found in the road, this site may be simply a continuation of 9Ef9. 9Ef10 extends over an area approximately 100 meters in diameter. Artifacts are sparsely distributed over the surface of the site and no stylistically diagnostic specimens were found.

4) Artifacts:

Debitage
Flakes of Bifacial Retouch 11
Normal Percussion Flakes 6
Formless Debris 4

Tools
Endscraper 1
Serrated Sidescraper 1

Historic Ceramics
Pearlware, Blue Shell Edged 1
Unidentified Whiteware 5

5) Test Excavations: None were conducted at the request of the landowner.

9Ef11 (Ebenezer Site 4)

1) Universal Transverse Mercator Location: N3576850; E473250.

2) Location: The site is located on a slight knoll overlooking an unnamed tributary of Little Ebenezer Creek. The locality is approximately 1200 feet southeast of Structural Measure LE6.
3) Site Description: The site consists of six pieces of debitage found within an area 50 meters in diameter. All six specimens appear as if they could have been struck from the same nucleus. The landowner knew of no artifacts coming from this area.

4) Artifacts:

Debitage
- Flakes of Bifacial Retouch: 2
- Normal Percussion Flakes: 1
- Formless Debris: 1

5) Test Excavations: Two posthole tests were excavated to subsoil (ca. 40 cm.). These tests were spaced approximately 20 meters apart and near the center of the area producing the artifacts. No evidence of midden and no artifacts were found in these tests.

9Ef12 (Ebenezer Site 5)

1) Universal Transverse Mercator Location: N3575200; E471900.

2) Location: The site is situated on a slight rise overlooking Little Ebenezer Branch. This site is located within a proposed drainage right-of-way in Construction Unit 14.

3) Site Description: Although the artifact density at this site is low (never greater than three artifacts per square meter), cultural remains are found continuously over a broad area measuring 120 meters north-south and 50 meters east-west. When contacted, the landowner stated that she was not aware of any Indian artifacts ever being found at this locality. At the time of collection, the field had been freshly plowed and surface visibility was excellent. Diagnostic artifacts suggest that occupation of the site was during the Middle Archaic and Woodland time periods.

4) Artifacts:

Debitage:
- Flakes of Bifacial Retouch: 90
- Normal Percussion Flakes: 21
- Formless Debris: 39

Tools
- Core Tool: 1
- Projectile Point: 3
- Bifacial Sidescraper: 1
- Unifacial Sidescraper: 2
Aboriginal Ceramics
Plain Sand Tempered

Historic Ceramics
Pearlware, Blue Shell Edged
Unidentified Whiteware

5) Test Excavations: Seven postholes were excavated to a depth of 60 centimeters. These tests were spaced approximately 20 meters apart along a north-south axis through the center of the site. Only one test produced an artifact and this came from the plowzone. The tests produced no evidence of midden.

9Ef13 (Ebenezer Site 6)

1) Universal Transverse Mercator Location: N3573750; E471250.

2) Location: This site is situated on a low ridge overlooking Little Ebenezer Creek. The locality is approximately 600 feet south of a proposed drainage channel in Construction Unit 14.

3) Site Description: Heavy ground cover at the time this site was visited prevented extensive surface collection and a determination of site extent. Although only two artifacts were found during our surface reconnaissance, the landowner has a large collection of projectile points from this locality. Projectile point styles in this collection suggest that the site was occupied during the Late Archaic and late Woodland time periods.

4) Artifacts:

Debitage
Flake of Bifacial Retouch 1

Tools
Core Tool 1

5) Test Excavations: Two posthole tests were excavated in the area producing the two artifacts located during surface reconnaissance. No evidence of midden and no artifacts were found in these tests.

9Ef14 (Ebenezer Site 7)

1) Universal Transverse Mercator Location: N3582370; E477720.

2) Location: The site is on a low bluff overlooking Ebenezer Creek. The locality is approximately one-half mile east of Stillwell and is not in the benefit area of any proposed channel.
3) Site Description: Heavy ground cover at the time this site was visited prevented surface collection and determination of site extent. The landowner has a collection of projectile points from this site which includes Middle and Late Archaic and early and late Woodland styles.

4) Artifacts: No artifacts collected.

5) Test Excavations: No test excavations were conducted.

9Ef15 (Ebenezer Site 8)

1) Universal Transverse Mercator Location: N3574500; E471450.

2) Location: The site is situated on a low rise above Little Ebenezer Branch. The site is located on the north side of the Branch which is also a proposed drainage channel in Construction Unit 14. The southern portion of the site extends into the drainage right-of-way at approximately LE12 1355+00.

3) Site Description: Artifacts were thinly distributed over an area approximately 100 meters in diameter. Heavy ground cover due to pasture prevented determination of the locality's western boundary.

Projectile point styles attest to a Middle Archaic occupation and the presence of a single spurred endscraper suggests an even earlier presence of man. Two undiagnostic sand tempered sherds also indicate site utilization during the Woodland time period. Although no evidence of structural foundations were observed, some 19th century ceramic fragments were collected. The landowner told us of a slave cemetery which is located in the site area but we could find no surface evidence of it.

4) Artifacts:

Debitage
- Flakes of Bifacial Retouch: 2
- Normal Percussion Flakes: 2
- Formless Debris: 10

Tools
- Projectile Points: 4
- Endscraper: 1
- Nutstone: 1

Aboriginal Ceramics
- Plain Sand Tempered: 3

Historic Ceramics
- Unidentified Whiteware: 11
- Unidentified Whiteware, Scalloped Rim: 1
- Unidentified Whiteware, Red and Green Interior Bands: 1
Stoneware, Cream Interior, Green Glazed Exterior

5) Test Excavations: A single two by one meter test pit was excavated near the center of the site. The test was dug only to a depth of 20 centimeters (plowzone) before reaching sterile subsoil. No artifactual material was found during removal of the fill. Six postholes were evenly spaced along an east-west axis through the center of the site. These were as unproductive as the test pit.

9Ef16 (Ebenezer Site 9)

1) Universal Transverse Mercator Location: N3574300; E471400.

2) Location: This site is on the south side of Little Ebenezer Branch and immediately opposite 9Ef15. The northern boundary of the site extends into the drainage right-of-way at approximately LE12 1355+00.

3) Site Description: Artifacts were distributed over an area approximately 125 meters in diameter. Ceramic and projectile point styles indicate Late Archaic and Late Woodland occupations. The owner of this property has a large collection of artifacts from this site and 9Ef15. Projectile points in this collection suggest that these localities were most intensively utilized during the Middle and Late Archaic.

4) Artifacts:

Debitage
- Normal Percussion Flakes 4
- Formless Debris 3

Tools
- Projectile Point 1
- Bifacial Sidescraper 1
- Unifacial Sidescraper 1
- Serrated Sidescraper 1

Aboriginal Ceramics
- Savannah Cord Marked 2
- Stallings Plain 1
- Plain Sand Tempered 5

Historic Ceramics
- Annular Ware 1
- Blue Transfer, Chinese Print 1
- Blue Spongeware 1
- Red Transfer, House Print 1
- Unidentified Whiteware, Scalloped Rim 1
- Unidentified Whiteware 5
5) Test Excavations: Test excavations here were limited to a single square two meters on a side and seven postholes. These tests showed that immediately below the plowzone over the entire site is a rocky, sterile subsoil. Although only one posthole produced any artifacts (a single flake), the test square was relatively productive. The following artifacts were recovered:

Debitage

- Flakes of Bifacial Retouch: 2
- Normal Percussion Flakes: 1
- Formless Debris: 5

Tools

- Projectile Point: 1
- Serrated Sidescraper: 1

Aboriginal Ceramics

- Plain Sand Tempered: 3

9Ef17 (Ebenezer Site 10)

1) Universal Transverse Mercator Location: N3580759; E472325.

2) Location: The site is situated on a relatively high bluff overlooking Ebenezer Creek. The locality is approximately .8 miles east of Springfield and is not within the benefit area of any proposed drainage channel.

3) Site Description: Cultural material is sparse and widely scattered over an area approximately 100 meters in diameter. Although the field had been freshly plowed and surface collecting conditions were excellent, no stylistically diagnostic artifacts were found.

4) Artifacts:

Debitage

- Flakes of Bifacial Retouch: 5
- Formless Debris: 3

5) Test Excavations: No test excavations were conducted.

9Ef18 (Ebenezer Site 11)

1) Universal Transverse Mercator Location: N3591400; E4593251.

2) Location: The site is a diffuse scatter of lithic material over an area with a radius of approximately 100 meters. Although the field had been recently plowed and surface visibility was excellent, no stylistically diagnostic artifacts were found. The landowner told us that he had
found a number of projectile points in the site area but that they had been lost in a recent house fire.

4) Artifacts:

Debitage
- Flakes of Bifacial Retouch 3
- Normal Percussion Flakes 2
- Formless Debris 3

Tools
- Thin Biface 1
- Unifacial Sidescraper 1

5) Test Excavations: No test excavations were conducted.

9Ef19 (Ebenezer Site 12)

1) Universal Transverse Mercator Location: N3491350; E457750.

2) Location: The site is situated at the edge of a former Carolina bay which has been drained in the recent past. The site is approximately 300 feet south of Turkey Creek and Structural Measure T.

3) Site Description: Three flakes found in area approximately 45 meters in diameter. All three flakes appear to have come from different cores.

4) Artifacts:

Debitage
- Flakes of Bifacial Retouch 1
- Formless Debris 2

5) Test Excavations: No test excavations were conducted.

9Ef20 (Ebenezer Site 13)

1) Universal Transverse Mercator Location: N3591300; E458100.

2) Location: The site is approximately 150 feet east of 9Ef19 and situated on the opposite edge of the drained Carolina Bay.

3) Site Description: The site consists of two flakes found about 15 meters apart. Both flakes appear to have come from the same nucleus.
4) Artifacts:

Debitage
Flakes of Bifacial Retouch 2

5) Test Excavations: No test excavations were conducted.

9Ef21 (Ebenezer Site 14)

1) Universal Transverse Mercator Location: N3591250; E459050.

2) Location: The site is located on nearly level land approximately 350 feet south of Turkey Creek and Structural Measure T.

3) Site Description: The site consists of two artifacts separated by approximately 35 meters.

4) Artifacts:

Debitage
Flakes of Bifacial Retouch 1

Tools
Endscraper 1

5) Test Excavations: No test excavations were conducted.

9Ef22 (Ebenezer Site 15)

1) Universal Transverse Mercator Location: N3578950; E468375.

2) Location: The site is located on a low ridge overlooking White Deep Branch. The site is approximately 175 feet east of a proposed drainage channel in Construction Unit 13.

3) Site Description: A small scatter of lithic artifacts found within an area 35 meters in diameter. No stylistically diagnostic artifacts. The landowner told us that he did not recall ever finding any artifacts at this locality.

4) Artifacts:

Debitage
Flakes of Bifacial Retouch 8
Formless Debris 7

Tools
Endscraper 2
Serrated Sidescraper 1

5) Test Excavations: No test excavations were conducted.
9Ef23 (Ebenezer Site 16)

1) Universal Transverse Mercator Location: N3579250; E468500.

2) Location: The site is located on a low ridge overlooking White Deep Branch. The site is approximately 450 north-east of a proposed drainage channel in Construction Unit 13.

3) Site Description: A small scatter of lithic artifacts found in an area approximately 25 meters in diameter. Although only four flakes were found at the site, each flake appears to have been struck from a different nucleus.

4) Artifacts:

Debitage

| Flakes of Bifacial Retouch | 3 |
| Normal Percussion Flakes   | 1 |

5) Test Excavations: No test excavations were conducted.

9Ef24 (Ebenezer Site 17)

9Ef25 (Ebenezer Site 18)

Although these sites were identified during this survey, they are located a short distance outside the Ebenezer Creek Watershed. The sites are situated on bluffs overlooking the Ogeechee River approximately five miles west of Egypt, and are separated by only a small, unnamed branch. Both sites appear to cover an area over 150 meters in diameter. At the time we visited these localities, a dense ground cover of weeds prevented extensive surface collection. Only a few undiagnostic sand tempered sherds and a few flakes were found. The landowner, however, has a large collection of material from the two sites. This collection includes projectile points with styles ranging from the Early Archaic through late Woodland time periods and a wide variety of artifacts including grinding slabs, drills, nutstones, pipes and ornaments. A collection of several thousand sherds contained the following types: Stallings Punctate, Stallings Plain, Deptford Linear Check Stamped, Deptford Bold Check Stamped, Wilmington Cord Marked, Savannah Check Stamped and Savannah Cord Marked. No Test excavations at these sites were attempted.

9Ef26 (Ebenezer Site 19)

1) Universal Transverse Mercator Location: N358330; E482620.

2) Location: The site is located on a high bluff overlooking the Savannah River near its confluence with Ebenezer Creek. The site is not located within the benefit area of any proposed drainage.
3) Site Description: The site is situated on a gentle east facing slope which leads to the edge of the bluff. The site covers an area at least 150 meters north-south and 50 meters east-west. According to local collectors, a small heap was located in the northwest corner of the site prior to the placement of a house trailer here. Collecting conditions were poor when this site was visited and probably our collections do not reflect the density of artifacts which are actually present. Artifacts collected during our survey represent occupations during the early and late Woodland time periods. A wide range of Archaic artifacts have been collected by local amateurs. This material includes Dalton through Savannah River projectile point styles. A single fluted point was found at the site by A. G. Barnhill.

4) Artifacts:

Debitage
- Flakes of Bifacial Retouch 5
- Normal Percussion Flakes 6
- Formless Debris 4

Tools
- Projectile Point 1
- Unifacial Sidescraper 1
- Hammerstone 1
- Mortar 2

Aboriginal Ceramics
- Savannah Cord Marked 4
- Savannah Burnished Plain 2
- Wilmington Cord Marked 2
- Stallings Punctate 1
- Plain Sand Temper 1
- Unidentified Cord Marked 3

5) Test Excavations: Two postholes were excavated near the center of the site. Both contained flakes below the plowzone and at a depth of 30 to 40 centimeters.

9Ef27 (Ebenezer Site 20)

1) Universal Transverse Mercator Location: N3582500; E482690.

2) Location: This site is located just north or 9Ef28 and is situated on the same bluff overlooking the Savannah River. In fact, this site and 9Ef28 may actually overlap and the two should actually be considered one locality.

3) Site Description: The site extends over an area at least 200 meters north-south and 150 meters east-west. A boat ramp cuts through the eastern most edge of the site and sherds were seen eroding out at a depth of 75 centimeters.
4) Artifacts:

Debitage
- Flakes of Bifacial Retouch: 29
- Normal Percussion Flakes: 15
- Formless Debris: 24

Tools
- Core Tools: 1
- Thin Biface: 1
- Projectile Point: 1
- Bifacial Sidescraper: 1
- Unifacial Sidescraper: 5
- Endscraper: 1
- Hammerstone: 1
- Nutstone: 1
- Handstone: 1

Aboriginal Ceramics
- Irene Incised: 2
- Savannah Complicated Stamped: 2
- Savannah Cord Marked: 3
- Savannah Check Stamped: 3
- Savannah Burnished Plain: 1
- Wilmington Cord Marked: 9
- Deptford Bold Check Stamped: 2
- Deptford Linear Check Stamped: 1
- Deptford Simple Stamped: 6
- Stallings Plain: 5
- Unidentified Cord Marked: 7
- Plain Sand Tempered: 21

5) Test Excavations: No tests were conducted.

9Ef28 (Ebenezer Site 21)

1) Universal Transverse Mercator Location: N3582160; E482980.

2) Location: This site is located along the bluff overlooking the confluence of Ebenezer Creek and the Savannah River in New Ebenezer. The site is not located within the benefit area of any proposed drainage.

3) Site Description: At this time, it is not possible to comment on the extent or nature of this site. Site evident consists of six sherds found in a public picnic area. The sherds are sand tempered and temporally undiagnostic.

4) Test Excavations: No tests were conducted.
9Ef29 (Ebenezer Site 22)

1) Universal Transverse Mercator Location: N3581200; E472075.

2) Location: The site is located on a low hill overlooking an unnamed tributary of Ebenezer Creek near confluence with Runs Branch. The site is located approximately 1300 feet northeast of Structural Measure R13a.

3) Site Description: The site extends approximately 350 meters east-west and 100 meters north-south. The site has been intensively collected by a local amateur, A. G. Barnhill, over the past several years. His collection from this site is diverse in terms of artifact types. Projectile point styles include Early, Middle and Late Archaic types as well as Woodland forms.

4) Artifacts:

Debitage
- Flakes of Bifacial Retouch 93
- Normal Percussion Flakes 126
- Formless Debris 172

Tools
- Core Tools 2
- Thin Biface 1
- Projectile Point 6
- Graver 1
- Unifacial Sidescraper 6
- Endscraper 2
- Serrated Sidescraper 4
- Hammerstone 1
- Nutstone 1
- Handstone 1

Aboriginal Ceramics
- Savannah Cord Marked 1
- Savannah Check Stamped 3
- Wilmington Cord Marked 2
- Deptford Bold Check Stamped 1
- Deptford Linear Check Stamped 1
- Deptford Simple Stamped 1
- Stallings Plain 1
- Unidentified Cord Marked 3
- Plain Sand Temper 32

5) Test Excavations: Ten postholes were excavated along an east-west axis through the center of the site. All postholes contained artifacts from below the plowzone (20 to 30 cm.). Artifacts in these tests always consisted of small flakes or small, unidentifiable sand tempered sherds. Nonetheless, this site shows considerable promise for future work as undoubtedly undisturbed archaeological deposits do exist here.
9Ef30 (Ebenezer Site 23)

1) Universal Transverse Mercator Location: N3580500; E474500.

2) Location: The site is situated on a low rise overlooking an unnamed tributary of Ebenezer Creek, approximately two miles east of Springfield. The site is about 300 feet southeast of Structural Measure R9.

3) Site Description: The site consists of a plain sand tempered sherd and several (6) pieces of Depression era glass. Some construction materials present. All artifacts and construction materials were found in an area with a 15 meter radius. The field was freshly plowed and surface visibility was good.

4) Test Excavations: None were conducted.

9Ef31 (Ebenezer Site 24)

1) Universal Transverse Mercator Location: N3584260; E477900.

2) Location: The site is located on a low rise overlooking Groover Branch, a tributary of Hungleiter Branch. The site is located approximately 200 feet north of a proposed drainage in Construction Unit 12.

3) Site Description: The site consists of a single, plain sand tempered sherd in a freshly plowed field. The landowner remembered finding only a single projectile point in this area over the past 50 years.

4) Test Excavations: No tests were conducted.

9Ef32 (Ebenezer Site 25)

Two pieces of petrified wood were found at this location. During laboratory analysis, it was decided that the occurrence of this material was probably not the result of prehistoric activity.

9Ef33 (Ebenezer Site 26)

1) Universal Transverse Mercator Location: N3585910; E476650.

2) Location: The site is situated on a low rise above an unnamed branch. It is located approximately midway between two proposed drainage channels in Construction Unit 11.
3) Site Description: The site consists of widely dispersed historic and prehistoric artifacts. The cultural material is found over an area approximately 100 meters in diameter. The field has been freshly plowed and surface visibility was good when this site was visited.

4) Artifacts:

Debitage
- Normal Percussion Flake 1
- Formless Debris 1

Historic Ceramics
- Annular Ware, brown bands 4
- Blue Transfer Print 2
- Blue Shell Edged 1
- Unidentified Whiteware 17

5) Test Excavations: No tests were conducted.

9Ef34 (Ebenezer Site 27)

1) Universal Transverse Mercator Location: N3588300; E474125.

2) Location: The site is located on a gentle rise overlooking Jacks Branch. This locality is approximately 200 feet southeast of proposed Structural Measure R9.

3) Site Description: This site consists of a single normal percussion flake. Surface visibility was only fair due to numerous weeds growing in the field. An extensive search, however, failed to produce additional artifacts.

4) Test Excavations: Two postholes near the point where the flake was found provided no additional artifactual material.

9Ef35 (Ebenezer Site 28)

1) Universal Transverse Mercator Location: N3586060; E481340.

2) Location: The site is situated on a high bluff overlooking the Savannah River and on the south side of Hungleighter Branch. The site is not located within the benefit area of any proposed channel.

3) Site Description: This site covers an area approximately 200 meters in diameter and has the densest concentration of artifactual materials of any site located during the Ebenezer survey. Artifacts included several Middle and Late Archaic projectile points and ceramics date to both the early and late Woodland. The landowner recalls plowing out a large pit filled with shell approximately 20 years ago. Many projectile points and other artifacts have been found here but are now lost or given to other people. The landowner does have several large mortars found during the last several years.
4) Artifacts:

Debitage
- Flakes of Bifacial Retouch: 68
- Normal Percussion Flakes: 73
- Formless Debris: 94

Tools
- Core Tools: 5
- Projectile Points: 11
- Drill: 1
- Graver: 1
- Bifacial Sidescraper: 1
- Unifacial Sidescraper: 12
- Endscraper: 3
- Serrated Sidescraper: 8
- Notch: 2
- Hammerstone: 6
- Nutstone: 1
- Handstone: 1

Aboriginal Ceramics
- Savannah Check Stamped: 6
- Savannah Cord Marked: 9
- Savannah Burnished Plain: 2
- Wilmington: 11
- Deptford Linear Checkstamped: 21
- Deptford Simple Stamped: 2
- Stallings Plain: 7
- Weeden Island Zoned Punctate: 1
- St. Johns (diatomaceous clay - protohistoric?): 12
- Unidentified Cord Marked: 11
- Plain Sand Tempered: 76

Historic Ceramics
- Lead Glazed (possibly majolica): 1

5) Test Excavations: A two meter square test pit was excavated at this site. This work was done at the request of the landowner during a weekend. The test pit demonstrated the existence of undisturbed deposits as artifactual material remained abundant to the red clay subsoil. In fact, a number (21) of sherds were lying flat on the subsoil/sand contact zone suggesting that this area may have been exposed during prehistoric times. The test pit was excavated in two levels to a depth of 65 centimeters. Artifacts which were recovered are as follows:

Plowzone (0 to 30 cm.)

Debitage
- Flakes of Bifacial Retouch: 11
- Normal Percussion Flakes: 3
- Formless Debris: 13
Tools
- Bifacial Sidescraper: 1
- Unifacial Sidescraper: 1
- Grindingslab: 1

Aboriginal Ceramics
- Savannah Cord Marked: 2
- Wilmington Cord Marked: 1
- Plain Sand Tempers: 11

Plowzone to Subsoil (30 to 65 cm.)

Debitage
- Flakes of Bifacial Retouch: 6
- Normal Percussion Flakes: 7
- Formless Debris: 24

Tools
- Core Tools: 1
- Projectile Points: 2
- Unifacial Sidescraper: 1
- Serrated Sidescraper: 3
- Hammerstone: 1

Aboriginal Ceramics
- Savannah Cord Marked: 2
- Deptford Bold Check Stamped: 4
- Deptford Linear Check Stamped: 2
- Deptford Simple Stamped: 1
- Stallings Plain: 1
- Unidentified Cord Marked: 1
- Plain Sand Tempers: 29

9Ef36 (Ebenezer Site 29)

1) Universal Transverse Mercator Location: N3587300; E468800.

2) Location: The site is situated on a ridge overlooking Turkey Creek. It is not located in the benefit area of a proposed drainage channel.

3) Site Description: The site is now largely in pasture and it is impossible to say anything about artifact density or site extent. Considerable earth manipulation involved in the construction of a large cattle tank has reduced the value of the site for future investigation.

4) Artifacts:

Debitage
- Flakes of Bifacial Retouch: 11
- Normal Percussion Flakes: 7
- Formless Debris: 21
Tools
- Core Tool
- Serrated Scraper

Aboriginal Ceramics
- Unidentified Cord Marked
- Plain Sand Temper

Historic Ceramics
- Blue Transfer Print
- Earthen Redware
- Unidentified Whiteware

Artifacts:

Debitage
- Flakes of Bifacial Retouch
- Normal Percussion Flakes
- Formless Debris

Aboriginal Ceramics
- Irene Complicated Stamped
- Savannah Cord Marked
- Deptford Linear Check Stamped
- Deptford Simple Stamped
- Plain Sand Temper

Test Excavations: No tests were conducted.

Site Description: At the time we visited the site, it consisted of a light scatter of artifacts scattered over an area approximately 75 meters in diameter. This locality, however, has been subject to intensive collection by the landowners who pick up all artifacts. They have found thousands of tools and hundreds of projectile points. The point styles include Early, Middle and Late Archaic types as well as Woodland forms. One of the most interesting finds at this site is large tabular pieces of unmodified chert. This suggests that the actual, unmodified raw material for stone tool manufacture was being imported into the area during at least some periods of time. Ceramics include both early and late Woodland varieties.

Test Excavations: No tests were conducted.
9Ef39 (Ebenezer Site 33)

1) Universal Transverse Mercator Location: N3590200; E474725.

2) Location: The site is situated on a slight rise overlooking a small, unnamed tributary of Ebenezer Creek. The site is located approximately 100 feet west of a proposed drainage channel in Construction Unit 10.

3) Site Description: The site consists of a single flake of bifacial retouch found in conditions of good ground surface exposure. We talked with numerous landowners in this area and none remembered finding Indian artifacts.

4) Test Excavations: No tests were conducted.

9Ef39 (Ebenezer Site 34)

1) Universal Transverse Mercator Location: N3592500; E472975.

2) Location: The site is situated on a low rise approximately 150 feet south of Ebenezer Creek and a proposed drainage channel in Construction Unit 9.

3) Site Description: The site consists of a sparse scatter of flaking debris and a single sherd within an area approximately 100 meters in diameter. At the time we visited the locality, there was almost no ground cover and surface collecting conditions were good.

4) Artifacts:

Debitage
Flakes of Bifacial Retouch 16
Normal Percussion Flakes 9
Formless Debris 22

Tools
Unifacial Sidescrapers 2

Aboriginal Ceramics
Stallings Plain 1

5) Test Excavations: No tests were conducted.

9Ef40 (Ebenezer Site 35)

1) Universal Transverse Mercator Location: N3592725; E473275.

2) Location: The site is situated on a low rise approximately 200 feet south of Ebenezer Creek and a proposed drainage channel in Construction Unit 9. The site is 250 feet east of 9Ef39.
3) Site Description: The site consists of two flakes (Formless Debris) separated by approximately 25 meters. At the time the site was visited, the field was freshly plowed and surface collecting conditions were good.

4) Test Excavations: No tests were conducted.

9Ef4l IEbenezer Site 36)

1) Universal Transverse Mercator Location: N3592925; E474175.

2) Location: The site is located approximately 450 feet south of Ebenezer Creek and a proposed drainage channel in Construction Unit 9.

3) Site Description: Both historic and prehistoric components are present at this locality. Historic ceramics are interspersed with prehistoric materials scattered over an area approximately 70 meters in diameter. A house foundation and intact well are present. The historic ceramics range in time from the early 1800's to the turn of the century.

4) Artifacts:

Debitage
   Flakes of Bifacial Retouch  1
   Normal Percussion Flakes  5
   Formless Debris  5

Tools
   Core Tool  1
   Notch  2

Aboriginal Ceramics
   Plain Sand Temper  6

Historic Ceramics
   Pearlware  1
   Green Transfer Print, Flowers  2
   Red transfer Print, Flowers  1
   Hand Painted Red Flower on White  1
   Whiteware  58
   Light Purple Medicine Bottle Frags.  13
   Depression Era Glass - Blue Carnival  3

5) Test Excavations: No tests were conducted.

9Ef42 (Ebenezer Site 37)

1) Universal Transverse Mercator Location: N3593425; E476275.

2) Location: The site is situated on a slight rise overlooking an unnamed tributary of Ebenezer Creek. The locality is approximately 450 feet south of a proposed channel in
Construction Unit 9.

3) Site Description: This is a dispersed scatter of prehistoric and historic artifacts which covers an area approximately 300 meters in diameter. The presence of considerable, but scattered, construction materials suggests a former house but no evidence of a foundation could be found. Most of the historic ceramics date to the early 1800's. No stylistically diagnostic prehistoric artifacts were found.

4) Artifacts:

Debitage
   Flakes of Bifacial Retouch 5
   Normal Percussion Flakes 4
   Formless Debris 16

Historic Ceramics
   Pearlware 5
   Delftware 1
   Hand Painted Blue Flower 1
   Blue Sponge Ware 1
   Annular Ware; Light Blue with Brown Lines 1
   Whiteware 34

5) Test Excavations: No tests were conducted.

9Ef43 (Ebenezer Site 38)

1) Universal Transverse Mercator Location: N358100; E470300.

2) Location: The site is located on a high ridge overlooking the confluence of an unnamed drainage and Jacks Branch. The site is on the western edge of Springfield. It is not located in the benefit area of any proposed drainage channel.

3) Site Description: The site is now largely destroyed by a Savannah Power and Electric substation and Highway 119. Local residents told us that prior to the construction of the substation many artifacts were found at this locality.

4) Artifacts:

Debitage
   Flakes of Bifacial Retouch 2
   Normal Percussion Flakes 1
   Formless Debris 3

Tools
   Unifacial Sidescraper 1
Aboriginal Ceramics
  Wilmington Cord Marked 3
  Unidentified Complicated Stamped 1

5) Test Excavations: No tests were conducted.

9Ef44 (Ebenezer Site 39)

1) Universal Transverse Mercator Location: N3578150; E475475.

2) Location: The site is situated on a high bluff overlooking Ebenezer Creek, approximately four miles south of Springfield. The site is not located in the benefit area of any proposed channel.

3) Site Description: The site consists of a single flake (Formless Debris). An extensive search of surrounding plowed fields produced no other artifacts. The landowner has looked for Indian artifacts in these fields over the past ten years and has never found any.

4) Test Excavations: No tests were conducted.

9Ef45 (Ebenezer Site 40)

1) Universal Transverse Mercator Location: N3593125; E476375.

2) Location: The site is on a slight rise overlooking an unnamed tributary of Ebenezer Creek. The site is approximately 200 feet northwest of a proposed drainage channel in Construction Unit 10.

3) Site Description: The site consists of a scatter of prehistoric and historic artifacts distributed over an area approximately 45 meters in diameter. A single projectile point suggests that the prehistoric remains date to the Archaic and the historic remains appear to represent an early twentieth century occupation. Although no foundation could be found, scatter construction materials suggests one was present.

4) Artifacts:

  Debitage
    Formless Debris 1

  Tools
    Projectile Point 1
Historic Ceramics
- Green Oven Ware: 1
- White with Red Flowers: 3
- White with Blue Bands: 1
- White Sherds: 8
- Ironstone, yellow interior and exterior: 2

5) Test Excavations: No tests were conducted.

9Ef46 (Ebenezer Site 41)

1) Universal Transverse Mercator Location: N3594200; E476050.

2) Location: The site is located on a low rise overlooking Ebenezer Creek. The site is approximately 250 feet north of a proposed drainage channel in Construction Unit 9.

3) Site Description: The site consists of prehistoric and historic remains. The prehistoric site is represented by two flakes. The historic remains included ceramics and much construction material. The site is the locality of an encampment by Sherman's army according to local residents but our survey produced no evidence to confirm this.

4) Artifacts:
   - Debitage
     - Flakes of Bifacial Retouch: 2
   - Historic Ceramics
     - Blue Shell Edged: 2
     - Whiteware: 16
     - Red Earthenware: 1

5) Test Excavations: No tests were conducted.

9Ef47 (Ebenezer Site 42)

1) Universal Transverse Mercator Location: N3593900; E475650.

2) Location: The site overlooks Ebenezer Creek and a proposed drainage channel in Construction Unit 9, approximately 250 feet to the south.

3) Site Description: The site consists of a single Normal Percussion Flake. Extensive survey under good collecting conditions failed to produce additional artifacts.

4) Test Excavations: No tests were conducted.
9Ef48 (Ebenezer Site 43)

1) Universal Transverse Mercator Location: N3595025; E476425.

2) Location: The site overlooks a small, unnamed tributary of Ebenezer Creek. The locality is approximately 60 feet east of a proposed channel location in Construction Unit 9.

3) Site Description: The site consists of a scatter of several lithic artifacts in an area approximately 20 meters in diameter. Extensive search under good surface collecting conditions failed to produce additional remains.

4) Artifacts:

Debitage
- Flakes of Bifacial Retouch 1
- Normal Percussion Flakes 3
- Formless Debris 4

Tools
- Unifacial Sidescraper 1

5) Test Excavations: No tests were conducted.

9Ef49 (Ebenezer Site 44)

1) Universal Transverse Mercator Location: N3595050; E475750.

2) Location: The site overlooks a small, unnamed tributary of Ebenezer Creek. The locality is approximately 60 feet west of a proposed drainage channel in Construction Unit 9.

3) Site Description: The site consists of both historic and prehistoric remains. The prehistoric component is represented by a single flake and the historic one by ceramics scattered over an area 30 meters in diameter. No evidence of a house foundation or construction materials could be found.

4) Artifacts:

Debitage
- Flakes of Bifacial Retouch 1

Historic Ceramics
- Pearlware 1
- Annular Ware 1
- Rhine Ware, Cobalt Blue Design 1
- Stoneware, Dark Brown Exterior and Gray Interior 1
- Whiteware 3

5) Test Excavations: No tests were conducted.
9Ef50 (Ebenezer Site 45)

1) Universal Transverse Mercator Location: N3595050; E475750.

2) Location: The site is located at the edge of a Carolina bay in Construction Unit 9. The locality is approximately 350 feet north of a proposed drainage channel.

3) Site Description: The site consists of a single flake (Flake of Bifacial Retouch) found in a freshly plowed field.

4) Test Excavations: No tests were conducted.

9Ef51 (Ebenezer Site 46)

1) Universal Transverse Mercator Location: N3596000; E475275.

2) Location: The site is situated on a small knoll overlooking an unnamed tributary of Ebenezer Creek. The locality is slightly over 600 feet from a proposed drainage channel in Construction Unit 9.

3) Site Description: The site consists of two flakes, an aboriginal sherd and a small scatter of historic ceramics found in an area approximately 20 meters in diameter. The historic material appears to date to the twentieth century and the prehistoric sherd is not temporally diagnostic within the Woodland. No evidence of a house foundation or construction materials was observed during survey.

4) Artifacts:

Debitage
Flakes of Bifacial Retouch 2

Aboriginal Ceramics
Plain Sand Tempered 1

Historic Ceramics
Whiteware 1
Purple Glass Fragments 5
Blue Glass Fragments 2

5) Test Excavations: No tests were conducted.

9Ef52 (Ebenezer Site 47)

1) Universal Transverse Mercator Location: N3596200; E475275.

2) Location: The site is situated on a low rise overlooking an unnamed tributary of Ebenezer Creek. The locality is approximately 450 feet west of a proposed drainage channel in Construction Unit 9.
3) Site Description: The site consists of a small scatter of lithic artifacts and historic ceramics in an area approximately 30 meters in diameter. The historic materials apparently date to the late eighteenth or early nineteenth century. The prehistoric artifacts are temporally undiagnostic. No evidence of a house foundation or construction materials was observed during the survey.

4) Artifacts:

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Debitage</td>
<td>Formless Debris</td>
<td>4</td>
</tr>
<tr>
<td>Historic Ceramics</td>
<td>Creamware</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>White with Blue Flowers</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Ironstone, Dark Brown Exterior, Cream Interior</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Plain Whiteware</td>
<td>5</td>
</tr>
</tbody>
</table>

5) Test Excavations: No tests were conducted.

9Ef53 (Ebenezer Site 48)

1) Universal Transverse Mercator Location: N3596650; E475000.

2) Location: The site overlooks an unnamed tributary of Ebenezer Creek and is approximately 500 feet west of a proposed drainage channel in Construction Unit 9.

3) Site Description: Three flakes found in an area approximately 20 meters in diameter.

4) Artifacts:

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Debitage</td>
<td>Flakes of Bifacial Retouch</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Formless Debris</td>
<td>2</td>
</tr>
</tbody>
</table>

5) Test Excavations: No tests were conducted.

9Ef54 (Ebenezer Site 49)

1) Universal Transverse Mercator Location: N36023300; E459775.

2) Location: The site is situated on a low rise overlooking a small, unnamed tributary of Runs Branch. The site is approximately 200 feet south of proposed Structural Measure R32.

3) Site Description: A single normal percussion flake is the only cultural material present at the site. The flake was found in a freshly plowed field with good surface collecting conditions.
4) Test Excavations: No tests were conducted.

9Ef55 (Ebenezer Site 50)

1) Universal Transverse Mercator Location: N3590800; E472050.

2) Location: The site is located on a high ridge overlooking an unnamed tributary of Ebenezer Creek. The site is located slightly outside the benefit area of Structural Measure R13a.

3) Site Description: The site consists of a diffuse scatter of lithic artifacts in an area approximately 125 meters in diameter. The landowner told us he had found several projectile points and a mortar in this area last year. Despite an extensive search under good surface collecting conditions, our inventory was extremely limited with no temporally diagnostic artifacts.

4) Artifacts:

Debitage
- Flakes of Bifacial Retouch: 1
- Formless Debris: 3

Tools
- Graver: 1

5) Test Excavations: No tests were conducted.

9Ef56 (Ebenezer Site 51)

1) Universal Transverse Mercator Location: N3589750; E466750.

2) Location: The site is situated on a low rise overlooking a shallow, unnamed tributary of Turkey Creek. The site is located on the east edge of proposed Structural Measure T7 and the western boundary of the site is well within the right-of-way of this channel.

3) Site Description: The site is approximately 120 meters north-south and 95 meters east-west. Surface collecting conditions were poor both times the site was visited. During the first visit, the site was utilized as a pasture and during the second, mature corn prevented total collection. Stylistically diagnostic artifacts were all typical of the Middle Archaic.

4) Artifacts:

Debitage
- Flakes of Bifacial Retouch: 8
- Normal Percussion Flakes: 11
- Formless Debris: 24
5) Test Excavations: Since this site falls within the right-of-way, a number of tests were conducted. The tests include 12 postholes and three two meter square test pits. The postholes were systematically excavated along both the north-south and the east-west axes through the center of the site. Five postholes produced artifacts from below the plowzone in a layer of coarse gray sand. Two additional postholes located the gray sand layer but produced no artifacts. Excavation of both test pits and postholes was hindered by a high water table. As with the postholes, undisturbed archaeological deposits were located in the gray sand layer when the test pits were excavated. These tests suggest that the gray sand layer is an undulating one and in some portions of the site the deposits have been disturbed by plowing and logging. Artifacts recovered from the test pits are as follows:

Test Pit 1

Plowzone (0 to 20 cm.)
Debitage
   Flakes of Bifacial Retouch  6
   Normal Percussion Flakes  2
   Formless Debris  11

Tan to Gray Sand (20 to 30? cm.- High water table prevented excavation beyond 30 cm.).
Debitage
   Formless Debris  3

Test Pit 2

Plowzone (0 to 20 cm.)
Debitage
   Flakes of Bifacial Retouch  9
   Normal Percussion Flakes  1
   Formless Debris  8

Tools
   Projectile Point  1

Gray Sand (20 to ? - High water table prevented excavation below plowzone.)

Test Pit 3

Plowzone (0 to 20 cm.)
Debitage
   Flakes of Bifacial Retouch  4
   Normal Percussion Flakes  1
Test Pit 3 (continued)

Formless Debris

Gray Sand (20 to 45 cm.)
Debitage
- Flakes of Bifacial Retouch 37
- Normal Percussion flakes 27
- Formless Debris 144

Tools
- Graver 1
- Endscraper 1

9Ef57 (Ebenezer Site 52)

1) Universal Transverse Mercator Location: N3589600; E466400.

2) Location: The site is situated on a low rise overlooking a shallow, unnamed tributary of Turkey Creek. The site is located on the east edge of proposed Structural Measure T7 and the western boundary of the site is well within the right-of-way of this channel. This site and 9Ef56 are almost adjacent and may, in fact, overlap.

3) Site Description: Surface indications of this site consisted of a small scatter of artifacts in an area only 20 meters in diameter. Despite its small size, it was thought that the locality might prove to be one of the most significant sites located during the survey. One of the projectile points was highly reminiscent of the fluted points characterizing the Paleo-Indian time period. Although fluted on only one side and lacking basal grinding, the similarity was striking enough to make us approach the site with caution.

4) Artifacts:

Debitage
- Formless Debris 1

Tool
- Thin Biface 1
- Projectile Points 2
- Serrated Sidescraper 1

5) Test Excavations: A single, two meter square test pit was excavated here. The test pit was located near the center of the area producing the surface artifacts. The results of this test required us to modify our original chronological evaluation. The artifacts include not only ceramics but small "Mississippian" style projectile points. Only the plowzone contained artifactual materials.
Test Pit 1 (Plowzone)

<table>
<thead>
<tr>
<th>Debitage</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Flakes of Bifacial Retouch</td>
<td>9</td>
</tr>
<tr>
<td>Normal Percussion Flakes</td>
<td>7</td>
</tr>
<tr>
<td>Formless Debris</td>
<td>17</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Tools</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Projectile Points</td>
<td>2</td>
</tr>
<tr>
<td>Hammerstone</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Aboriginal Ceramics</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Plain</td>
<td>4</td>
</tr>
</tbody>
</table>

9Ef58 (Ebenezer Site 53)

1) Universal Transverse Mercator Location: N3589600; E466400.

2) Location: The site is situated on a high hill overlooking a small, unnamed tributary of Turkey Creek. The site is approximately 250 feet from the west edge of Structural Measure T7.

3) Site Description: The site consists of a single flake and a dense scatter of historic ceramics in an area approximately 175 meters in diameter. Considerable construction debris scattered over the site area suggests a recent building demolition. Most of the historic ceramics appeared recent and were not collected.

4) Artifacts:

<table>
<thead>
<tr>
<th>Debitage</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Formless Debris</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Historic Ceramics</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Yellow Glazed Sherd</td>
<td>1</td>
</tr>
<tr>
<td>White Sherds</td>
<td>26</td>
</tr>
<tr>
<td>Ironstone</td>
<td>1</td>
</tr>
</tbody>
</table>

5) Test Excavations: No tests were conducted.

9Ef59 (Ebenezer Site 54)

1) Universal Transverse Mercator Location: N3590100; E466200.

2) Location: The site is located on a hill overlooking a small, unnamed tributary of Turkey Creek. The site is approximately 150 feet northeast of Structural Measure T7.
3) Site Description: The site consists of a single Archaic projectile point base and a plain sand tempered sherd separated by approximately 30 meters. The site area had been freshly plowed and surface collecting conditions were good when visited.

4) Test Excavations: No tests were conducted.

9Ef60 (Ebenezer Site 55)

1) Universal Transverse Mercator Location: N3591575; E467475.

2) Location: The site is situated on a slight rise overlooking a small, unnamed tributary of Ebenezer Creek. The site is approximately 200 feet east of Structural Measure R13f.

3) Site Description: This site consists of a single, isolated flake. Although we could not acquire permission to inspect areas adjacent to this field and bordering the proposed channel, landowners told us that isolated projectile points have been found. Since the survey, it has been learned that this channel has been dropped from consideration by the Soil Conservation Service.

4) Test Excavations: No tests were conducted.

9Ef61 (Ebenezer Site 70)

1) Universal Transverse Mercator Location: N3595425; E472525.

2) Location: This site is situated on a low rise overlooking an unnamed tributary of Runs Branch. The site is approximately 400 feet south of a proposed drainage channel in Construction Unit 8.

3) Site Description: This site consists of a small scatter of lithic artifacts and an undiagnostic sand tempered sherd found in an area approximately 25 meters in diameter. The site was found under good surface collecting conditions. The landowner said that he had never found any Indian artifacts in this locality.

4) Artifacts:

Debitage
- Flakes of Bifacial Retouch 1
- Normal Percussion Flakes 1
- Formless Debris 3

Tools
- Serrated Sidescraper 1
- Hammerstone 1
Aboriginal Ceramics
Plain Sand Tempered 1

5) Test Excavations: No tests were conducted.

9Ef62 (Ebenezer Site 71)

1) Universal Transverse Mercator Location: N3595100; E472400.
2) Location: The site is situated on a low rise overlooking an unnamed tributary of Runs Branch. The site is approximately 200 feet north of a proposed drainage channel in Construction Unit 8.
3) Site Description: The site consists of two flakes separated by approximately 20 meters.
4) Artifacts:
   Debitage
   Normal Percussion Flakes 1
   Formless Debris 1
5) Test Excavations: No tests were conducted.

9Ef63 (Ebenezer Site 72)

1) Universal Transverse Mercator Location: N3595100; E472600.
2) Location: The site is situated on a low rise overlooking an unnamed tributary of Runs Branch. The site is approximately 75 meters northeast of 9Ef62.
3) Site Description: The site consists of a small scatter of lithic artifacts in an area approximately 30 meters in diameter. These artifacts were found under good collecting conditions.
4) Artifacts:
   Debitage
   Normal Percussion Flakes 1
   Formless Debris 1
   Tools
   Unifacial Sidescraper 1
5) Test Excavations: No tests were conducted.
9Ef64 (Ebenezer Site 73)

1) Universal Transverse Mercator Location: N3595250; E472900.

2) Location: The site is situated on a low rise overlooking an unnamed tributary of Runs Branch. The site is approximately 100 meters west of 9Ef63.

3) Site Description: The site consists of a single unifacial sidescraper.

4) Test Excavations: No tests were conducted.

9Ef65 (Ebenezer Site 75)

1) Universal Transverse Mercator Location: N3589050; E467250.

2) Location: The site is situated on a low rise overlooking an unnamed tributary of Turkey Creek. The site is located approximately 400 feet west of Structural Measure T7.

3) Site Description: The site consists of a small scatter of lithic artifacts covering an area approximately 15 meters in diameter. A single projectile point suggests that the site dates to the Middle Archaic.

4) Artifacts:

Debitage
- Flakes of Bifacial Retouch: 2
- Formless Debris: 8

Tools
- Projectile Point: 1

5) Test Excavations: No tests were conducted.

9Ef66 (Ebenezer Site 76)

1) Universal Transverse Mercator Location: N3588850; E488450.

2) Location: The site is situated on a low rise overlooking a small unnamed tributary of Turkey Creek. The site is located approximately 400 feet west of Structural Measure T7.

3) Site Description: The site consists of two flakes and a single undiagnostic plain sand tempered sherd found in an area approximately 15 meters in diameter.
4) Artifacts:

Debitage
  Flakes of Bifacial Retouch  2

Ceramics
  Plain Sand Tempered  1

5) Test Excavations: No tests were conducted.

9Ef67 (Ebenezer Site 77)

1) Universal Transverse Mercator Location: N3588700; E467650.

2) Location: The site is situated on a low rise overlooking an unnamed tributary of Turkey Creek. The site is located approximately 400 feet southeast of Structural Measure T7.

3) Site Description: The site consists of a single Flake of Bifacial Retouch.

4) Test Excavations: No tests were conducted.

9Ef68 (Ebenezer Site 78)

1) Universal Transverse Mercator Location: N3588900; E468050.

2) Location: The site is located on a low ridge overlooking an unnamed tributary of Turkey Creek. The site is approximately 700 feet southeast of Structural Measure T7.

3) Site Description: This site consists of a scatter of lithic artifacts and a single undiagnostic plain sand tempered sherd found in an area approximately 30 meters in diameter. At the time the site was visited, surface collecting conditions were good.

4) Artifacts:

Debitage
  Flakes of Bifacial Retouch  12
  Normal Percussion Flakes  11
  Formless Debris  11

Tools
  Core Tool  1
  Projectile Point  2
  Unifacial Sidescraper  3
5) Test Excavations: A single two meter square test pit was excavated near the center of the surface scatter locality. All artifactual material was recovered in the plowzone and no evidence of features was found.

Test Pit 1

Debitage
- Flakes of Bifacial Retouch 2
- Normal Percussion Flakes 1
- Formless Debris 5

Aboriginal Ceramics
- Plain Sand Tempered 1

9Ef69 (Ebenezer Site 79)

1) Universal Transverse Mercator Location: N3579000; E467900.

2) Location: The site is situated on a low rise overlooking an unnamed tributary of Turkey Creek. The site is located approximately 200 feet southeast of Structural Measure T7.

3) Site Description: This site consists of a scatter of lithic debitage found in an area approximately 25 meters in diameter. At the time the site was visited, surface collecting conditions were good.

4) Artifacts:

Debitage
- Flakes of Bifacial Retouch 2
- Formless Debris 2

5) Test Excavations: No tests were conducted.

9Ef70 (Ebenezer Site 80)

1) Universal Transverse Mercator Location: N3575300; E471425.

2) Location: The site is situated on a low hill overlooking Little Ebenezer Creek. The locality is approximately 150 feet northwest of a proposed drainage channel in Construction Unit 14.

3) Site Description: This is a large site extending approximately 150 meters north-south and 85 meters east-west. It has a high density of both aboriginal and historical artifacts. The landowner has a large collection of artifacts from the site which includes projectile points of Early, Middle and Late Archaic styles, as well as early and late Woodland forms. Most of the historical ceramics suggests an occupation prior to the mid-nineteenth century. Much construction material scattered over the surface suggests the former presence of a
house but no foundation could be found.

4) **Artifacts:**

- **Debitage**
  - Flakes of Bifacial Retouch: 53
  - Normal Percussion flakes: 16
  - Formless Debris: 37

- **Tools**
  - Projectile Point: 1
  - Bifacial Sidescraper: 1
  - Sidescraper: 1
  - Serrated Sidescraper: 1

- **Aboriginal Ceramics**
  - Plain Sand Tempered: 4

- **Historic Ceramics**
  - Blue Shell Edged: 3
  - Green Shell Edged: 3
  - Creamware: 2
  - British Delftware: 4
  - Pearlware: 1
  - Annular Ware, Dark Blue Background, Black Band: 4
  - Blue Transfer: 5
  - Red Earthenware: 1
  - Salt Glazed Stoneware: 8
  - Whiteware: 37

5) **Test Excavations:** No tests were conducted.

---

**9EF71 (Ebenezer Site 81)**

1) **Universal Transverse Mercator Location:** N3575300; E471425.

2) **Location:** This site is situated on a bluff overlooking the juncture of Construction Unit 8 and Runs Branch. The site is approximately 125 feet northwest of the proposed drainage channel.

3) **Site Description:** This is an extremely large site which extends approximately 850 meters northwest-southwest and from 35 to 200 meters northeast-southwest. The landowners have collected at this locality for years and presently have a collection of several hundred stylistically diagnostic projectile points. These points suggest a roughly continuous utilization of the site area from the Early Archaic through the Mississippian time period. Most points in this collection, however, are Middle and Late Archaic and during our reconnaissance, few sherds were found on the surface. Surface collecting conditions were only fair since the locality had not yet been plowed when it was visited during the survey.
4) Artifacts:

Debitage
- Flakes of Bifacial Retouch: 255
- Normal Percussion Flakes: 98
- Formless Debris: 142

Tools
- Thin Bifaces: 1
- Projectile Points: 4
- Unifacial Sidescrapers: 10
- Endscrapers: 6
- Gravers: 2
- Serrated Sidescrapers: 1
- Notches: 2
- Hammerstones: 5
- Nutstone: 1
- Unidentified Ground Stone: 3

Aboriginal Ceramics
- Wamasee Incised: 1
- Savannah Cord Marked: 1
- Plain Sand Tempered: 1

9Ef72 (Ebenezer Site 82)

1) Universal Transverse Mercator Location: N358560; E481650.

2) Location: The site is located on a bluff overlooking the confluence of an unnamed drainage and the Savannah River. This site is not located in the benefit area of any proposed drainage channel.

3) Site Description: A scatter of historic and prehistoric artifacts covering an area approximately 75 meters in diameter. No construction material or evidence of a house foundation was observed.

4) Artifacts:

Debitage
- Flakes of Bifacial Retouch: 7
- Normal Percussion Flakes: 5
- Formless Debris: 10

Tools
- Unifacial Sidescraper: 1
- Serrated Sidescraper: 1
- Notch: 1

Aboriginal Ceramics
- Deptford Bold Check Stamped: 2
- Deptford Linear Check Stamped: 1
Aboriginal Ceramics (continued)
   Unidentified Cord Marked       1
   Plain Sand Tempered           4

Historic Ceramics
   Blue Hand Painted Chinese Ware     1
   Earthenware                     8
   Whiteware                       2

5) Test Excavations: No tests were conducted.

9Ef73 (Ebenezer Site 83)

1) Universal Transverse Mercator Location: N3589100; E467675.

2) Location: The site is situated on a low rise overlooking an
   unnamed tributary of Turkey Creek. The site is located approxi-
   mately 60 feet east of Structural Measure T7.

3) Site Description: This site consists of a wide scatter of
   flakes and other artifacts. Cultural material is distributed
   over an area approximately 75 meters north-south and 20 meters
   east-west. Stylistically diagnostic artifacts suggest that
   the site dates to the late Woodland.

4) Artifacts:

   Debitage
      Flakes of Bifacial Retouch      5
      Normal Percussion Flakes       3
      Formless Debris               11

   Tools
      Projectile Point             1
      Sidescraper                  1
      Endscraper                   1

   Aboriginal Ceramics
      Plain Sand Tempered          2

5) Test Excavations: A single two meter square test pit was
   excavated near the center of the surface concentration. Sterile
   soil was encountered at the lower limits of the plowzone.
   Artifacts recovered in the test are as follows:

Test Pit 1 (Plowzone - 0 to 20 cm.)

   Debitage
      Normal Percussion Flakes     2

   Aboriginal Ceramics
      Plain Sand Tempered         1
9Ef74 (Ebenezer Site 84)

1) Universal Transverse Mercator Location: N3589225; E467675.

2) Location: The site is situated on a low rise overlooking an unnamed tributary of Turkey Creek. The site is approximately 50 feet east of 9Ef73.

3) Site Description: The site consists of a single handstone or mano. This artifact may in fact be related to the occupation of nearby 9Ef73.

4) Test Excavations: No tests were undertaken.

9Ef75 (Ebenezer Site 85)

1) Universal Transverse Mercator Location: N3595200; E463300.

2) Location: The site is situated on a low rise overlooking a Carolina bay which currently drains into an unnamed tributary of Cowpen Branch. The site is approximately 350 feet east of Structural Measure C13.

3) Site Description: A small of lithic artifacts widely scatter over an area which 100 meters north-south and 35 meters east-west.

4) Artifacts:

   Debitage
   Flakes of Bifacial Retouch  1
   Normal Percussion Flakes   1
   Formless Debris            8

5) Test Excavations: No tests were conducted.

9Ef76 (Ebenezer Site 86)

1) Universal Transverse Mercator Location: N3594450; E463150.

2) Location: The site is situated on a low rise overlooking an unnamed tributary of Cowpen Branch. The site is approximately 150 feet northwest of Structural Measure C13.

3) Site Description: A large scatter of lithic artifacts covering an area approximately 175 meters north-south and 100 meters east-west. The main site concentration is approximately 20 meters in diameter with the remaining artifacts randomly scattered across the field. Several projectile points found on the surface are diagnostic of the Late Archaic time period. Results of the test excavations required us to modify this chronological assessment to include the late Woodland.
4) **Artifacts**

**Debitage**
- Flakes of Bifacial Retouch: 34
- Normal Percussion Flakes: 13
- Formless Debris: 54

**Tools**
- Core Tools: 2
- Projectile Points: 6
- Unifacial Sidescrapers: 3
- Endscrapers: 1
- Serrated Sidescrapers: 11
- Graver: 1
- Handstone: 1

**Aboriginal Ceramics**
- Plain Sand Tempered: 1

5) **Test Excavations:** Six postholes were excavated and systematically placed on the north-south and east-west axes in the area of artifact concentration. Two of these postholes produced artifactual materials from below plowzone. Two test pits, two meters on a side, were excavated. Test Pit 1 was placed near the center of artifact concentration and Test Pit 2 was at the point in the field nearest the proposed drainage.

**Test Pit 1**

**Plowzone (0 to 20 cm.)**
- Debitage
  - Flakes of Bifacial Retouch: 6
  - Normal Percussion Flakes: 3
  - Formless Debris: 16

- Tools
  - Thin Biface: 1
  - Projectile Point: 1

- Aboriginal Ceramics
  - Plain Sand Tempered: 3

**Below Plowzone (20 to 35 cm.)**
- Debitage
  - Flakes of Bifacial Retouch: 6
  - Normal Percussion Flakes: 3
  - Formless Debris: 11

- Tools
  - Projectile Point: 1

- Aboriginal Ceramics
  - Plain Sand Tempered: 1
Test Pit 2 (0 to 20 cm. - Plowzone)

Debitage
Formless Debris 2

Tools
Projectile Points 1

9Ef77 (Ebenezer Site 87)

1) Universal Transverse Mercator Location: N3595175; E460575.

2) Location: The site is approximately 350 feet east of an unnamed tributary of Cowpen Branch and a proposed drainage in Construction Unit 5.

2) Site Description: A single flake of bifacial retouch found in a low, poorly drained area. Surface visibility was good and despite an extensive search, no other artifacts were found.

4) Test Excavations: No tests were conducted.

9Ef78 (Ebenezer Site 88)

1) Universal Transverse Mercator Location: N3594900; E459850.

2) Location: The site is situated on a ridge overlooking the confluence of Cowpen Branch and a large unnamed drainage. The locality is approximately 150 feet north of the juncture of Structural Measures C18 and C21.

3) Site Description: The site is a large scatter of lithic and ceramic artifacts covering an area approximately 80 meters east-west and 30 meters north-south.

4) Artifacts:

Debitage
Flakes of Bifacial Retouch 64
Normal Percussion Flakes 36
Formless Debris 94

Tools
Core Tools 2
Projectile Points 9
Graver 1
Unifacial Sidescrapers 4
Endscraper 1
Serrated Sidescrapers 9
Notches 2
Hammerstone 1
Aboriginal Ceramics
Plain Sand Tempered 1

5) Test Excavations: Two posthole tests were excavated near the center of the site. Neither of these produced artifactual material nor evidence of midden.

9Ef79 (Ebenezer Site 89)

1) Universal Transverse Mercator Location: N3595450; E460175.

2) Location: A gentle rise overlooking two unnamed tributaries of Cowpen Branch. The site is located near the center of Construction Unit 5.

3) Site Description: This site is the former town of Ardmore which was largely abandoned by the turn of the century. Although most ceramics at the site date to the last half of the nineteenth century, occasional pieces indicate a much earlier occupation. Much brick and other construction material is scattered over the site. Cultural material covers an area approximately 600 meters north-south and 350 meters east-west. An intensive collection of artifacts was not made.

4) Artifacts:

<table>
<thead>
<tr>
<th>Historic Ceramics</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Creamware</td>
<td>4</td>
</tr>
<tr>
<td>Blue Shell Edged</td>
<td>2</td>
</tr>
<tr>
<td>Whiteware</td>
<td>9</td>
</tr>
<tr>
<td>Green Transfer Paint</td>
<td>11</td>
</tr>
<tr>
<td>Plate Fragments, Brown Line</td>
<td>3</td>
</tr>
</tbody>
</table>

5) Test Excavations: No tests were conducted.

9Ef80 (Ebenezer Site 90)

1) Universal Transverse Mercator Location: N3594800; E460125.

2) Location: The site is situated on a ridge overlooking the confluence of Cowpen Branch and a large unnamed drainage. The site is approximately 150 feet south of Structural Measure C20.

3) Site Description: This is a scatter of aboriginal artifacts approximately 80 meters in diameter. Stylistically diagnostic artifacts suggest both Late Archaic and Woodland occupations.
4) Artifacts:

Debitage
- Flakes of Bifacial Retouch 25
- Normal Percussion Flakes 38
- Formless Debris 73

Tools
- Projectile Points 1
- Bifacial Sidescraper 1
- Discoidal Sidescraper 1
- Serrated Sidescrapers 3
- Notches 1

Aboriginal Ceramics
- Plain Sand Tempered 1

5) Test Excavations: No tests were conducted.

9Ef81 (Ebenezer Site 91)

1) Universal Transverse Mercator Location: N3594650; E459700.

2) Location: The site is situated on a ridge overlooking the confluence of Cowpen Branch and a large unnamed drainage. The site is approximately 175 feet south of Structural Measure C18 and 150 feet north of C21.

3) Site Description: A few flakes found in a freshly plowed field. In this case, visibility was hindered by the recent plowing and lack of rain. The flakes were found in an area 75 meters in diameter. Judging from the site's location and the nature of nearby sites, it is suspected that a much more substantial occupation was present than current evidence indicates.

4) Artifacts:

Debitage
- Flakes of Bifacial Retouch 1
- Normal Percussion Flakes 2
- Formless Debris 1

5) Test Excavations: No tests were conducted.

9Ef82 (Ebenezer Site 92)

1) Universal Transverse Mercator Location: N3599050; E455450.
2) Location: The site is situated at the edge of a Carolina Bay in Construction Unit 4. The locality is approximately 700 feet southwest of a proposed drainage channel in this construction unit.

3) Site Description: The site consists of three flakes separated by approximately 80 meters. The flakes were found under good surface collecting conditions.

4) Artifacts:

Debitage
- Flakes of Bifacial Retouch 2
- Formless Debris 1

5) Test Excavations: No tests were conducted.

9Ef83 (Ebenezer Site 93)

1) Universal Transverse Mercator Location: N3599650; E455900.

2) Location: The site is situated on the edge of a Carolina Bay in Construction Unit 4. The site is approximately 150 feet east of a proposed drainage channel in this construction unit.

3) Site Description: This site is represented by a dense concentration of artifacts only 30 meters in diameter. Ceramics indicate that this site dates to the late Woodland.

4) Artifacts:

Debitage
- Flakes of Bifacial Retouch 9
- Normal Percussion Flakes 3
- Formless Debris 27

Tools
- Graver 1
- Serrated Sidescraper 1

Ceramics
- Savannah Cord Marked 3

5) Test Excavations: No tests were conducted.

9Ef84 (Ebenezer Site 97)

1) Universal Transverse Mercator Location: N3594600; E471350.

2) Location: The site is situated on a bluff overlooking the juncture of Construction Unit 8 and Runes Branch. The site is approximately 400 feet southeast of the proposed drainage channel.
3) Site Description: A scatter of artifacts in an area approximately 100 meters in diameter. Since surface collecting conditions were poor when this site was visited, a much heavier occupation may be present than our collections would indicate. A single sherd suggests that the site dates to the late Woodland.

4) Artifacts:

Debitage
- Flakes of Bifacial Retouch 5
- Formless Debris 4

Tools
- Endscraper 1
- Anvil 1

Aboriginal Ceramics
- Savannah Check Stamped 1

5) Test Excavations: No tests were conducted.

9Sn8 (Ebenezer Site 56)

1) Universal Transverse Mercator Location: N3603450; E458800.

2) Location: The site is situated on a slight rise overlooking an unnamed tributary of Runs Branch. The locality is approximately 75 feet east of Structural Measure R34.

3) Site Description: The site consists of a single flake of bifacial retouch. The artifact was found under good surface collecting conditions.

4) Test Excavations: No tests were conducted.

9Sn9 (Ebenezer Site 57)

1) Universal Transverse Mercator Location: N3603250; E458875.

2) Location: The site is situated on a slight rise overlooking an unnamed tributary of Runs Branch. The locality is approximately 400 feet east of Structural Measure R34.

3) Site Description: The site consists of a single flake of bifacial retouch. The artifact was found under good surface collecting conditions.

4) Test Excavations: No tests were conducted.
9Sn10 (Ebenezer Site 58)

1) Universal Transverse Mercator Location: N3603850; E458700.
2) Location: The site is situated on a slight rise overlooking an unnamed tributary of Runs Branch. The locality is approximately 75 feet southeast of Structural Measure 34a.
3) Site Description: The site consists of a single flake of bifacial retouch. The artifact was found under good surface collecting conditions.
4) Test Excavations: No tests were conducted.

9Sn11 (Ebenezer Site 59)

1) Universal Transverse Mercator Location: N3606950; E458875.
2) Location: The site is situated on a slight rise overlooking an unnamed tributary of Runs Branch. The site is approximately 450 feet northeast of Structural Measure R37.
3) Site Description: The site consists of an isolated, triangular "Mississippian" style projectile point. The point was found under good surface collecting conditions.
4) Test Excavations: No tests were conducted.

9Sn12 (Ebenezer Site 60)

1) Universal Transverse Mercator Location: N3607050; E459850.
2) Location: The site is situated on a slight rise overlooking an unnamed tributary of Runs Branch. The site is approximately 50 feet northwest of Structural Measure R37.
3) Site Description: The site consists of an isolated flake of bifacial retouch. The flake was found under good surface collecting conditions.
4) Test Excavations: No tests were conducted.

9Sn13 (Ebenezer Site 61)

1) Universal Transverse Mercator Location: N3606800; E459075.
2) Location: The site is located at the edge of a large Carolina Bay near Structural Measure R37. The locality is approximately 500 feet east of this drainage channel.
3) Site Description: The site consists of two lithic artifacts separated by approximately 20 meters. The artifacts were found under good surface collecting conditions.

4) Artifacts:

Debitage
Normal Percussion Flakes 1

Tools
Core Tools 1

5) Test Excavations: No tests were conducted.

9Sn14 (Ebenezer Site 62)

1) Universal Transverse Mercator Location: N3607500; E456675.

2) Location: The site is situated on a low rise overlooking an unnamed tributary of Runs Branch. The locality is approximately 175 feet southwest of a proposed drainage channel in Construction Unit 1.

3) Site Description: The site consists of an isolated core tool. The artifact was found under good surface collecting conditions.

4) Test Excavations: No tests were conducted.

9Sn15 (Ebenezer Site 63)

1) Universal Transverse Mercator Location: N3606600; E456550.

2) Location: The site is situated on a slight rise overlooking an unnamed tributary of Runs Branch. The locality is approximately 150 feet north of a proposed drainage channel in Construction Unit 2.

3) Site Description: The site consists of a small scatter of quartzite and chert flakes found in an area approximately 30 meters in diameter. It is worthwhile to note that this is the only locality where more than one quartzite item was found. Nearly half the flakes found here are of that material. The site locality was recently cleared of woods and surface collecting conditions were good at the time the site was visited.

4) Artifacts:

Debitage
Flakes of Bifacial Retouch 8
Normal Percussion Flakes 6
Formless Debris 7
5) Test Excavations: No tests were conducted.

9Sn16 (Ebenezer Site 64)

1) Universal Transverse Mercator Location: N3605600; E455350.
2) Location: The site is situated at the edge of a Carolina Bay which will be drained by a channel in Construction Unit 2. The site is approximately 75 feet east of the proposed channel.
3) Site Description: The site consists of two lithic artifacts separated by approximately 20 meters. The landowner reports that several projectile points have been found in this area but we could find no stylistically diagnostic artifacts. Good surface collecting conditions existed at the time we visited the site.
4) Artifacts:
   Debitage
   Normal Percussion Flake 1
   Tools
   Unifacial Sidescraper 1
5) Test Excavations: No tests were conducted.

9Sn17 (Ebenezer Site 65)

1) Universal Transverse Mercator Location: N3610800; E459700.
2) Location: The site is located on a high bluff overlooking the Savannah River and directly east of Blue Spring. The locality is not in the benefit area of any proposed drainage channel.
3) Site Description: We were directed to this locality by local residents who told us that this site was often dug in the past for Indian artifacts. Although we did not have the opportunity to view any of the collections, we were informed that several people had recovered large numbers of artifacts including complete pots, mortars and projectile points. Today, the site area is used for obtaining fill dirt and a public dump. Almost all the topsoil has been removed and the site is all but completely destroyed. Our reconnaissance indicates that the former dimensions of the site were approximately 250 meters east-west and 175 meters north-south. A single diagnostic sherd indicates occupation during the late Woodland.
4) Artifacts:
   Debitage
   Flakes of Bifacial Retouch 8
   Normal Percussion Flakes 21
   Formless Debris 33
Tools
  Unifacial Sidescraper  1
  Serrated Sidescraper  4
  Notch  1
  Handstone  1

Aboriginal Ceramics
  Savannah Cord Marked  1
  Plain Sand Tempered  6

5) Test Excavations: No test excavations were conducted. Profiles left by several recent fill dirt excavations, however, were cleaned. Disconformities were present in one profile which appeared to represent a floor of a structure. No daub or artifacts were associated and lack of time prevented further exploration.

9Sn18 (Ebenezer Site 66)

1) Universal Transverse Mercator Location: N3609175; E460900.

2) Location: The site is located on a high bluff overlooking the Savannah River and directly south of 9Sn17. The locality is not in the benefit area of any proposed drainage channel.

3) Site Description: The site consists of a small scatter of lithic artifacts exposed by a logging road. The scatter is approximately 20 meters east-west by north-south. Dimension could not be determined. A single Savannah River style projectile point suggests that occupation dates to the Late Archaic.

4) Artifacts:

Debitage
  Flakes of Bifacial Retouch  5
  Normal Percussion Flakes  4
  Formless Debris  12

Tools
  Projectile Point  1
  Unifacial Sidescraper  1

5) Test Excavations: No tests were conducted.

9Sn19 (Ebenezer Site 67)

1) Universal Transverse Mercator Location: N3610050; E458450.
2) Location: The site is situated on a low ridge overlooking Blue Spring. The locality is not in the benefit area of any proposed drainage channel.

3) Site Description: A small scatter of widely dispersed lithic artifacts found in an area approximately 40 meters in diameter. The artifacts were exposed by recent logging activity.

4) Artifacts:

Debitage
- Flakes of B:facial Retouch
- Formless Debris

5) Test Excavations: No tests were conducted.

9Sn20 (Ebenezer Site 60)

1) Universal Transverse Mercator Location: N3608900; E460925.

2) Location: The site is located on a narrow terrace of an unnamed tributary of the Savannah River. The site is approximately one-fourth mile from the confluence of the drainage and the Savannah River. The locality is not in the benefit area of any proposed drainage channel.

3) Site Description: The site consists of a scatter of lithic and ceramic artifacts approximately 75 meters east-west and 30 meters north-south. With the exception of a narrow road, heavy vegetation created conditions of poor ground exposure.

4) Artifacts:

Debitage
- Flakes of B:facial Retouch
- Normal Percussion Flakes
- Formless Debris

Aboriginal Ceramics
- Plain Sand tempered

Historic Ceramics
- Creamware

5) Test Excavations: No tests were conducted.

9Sn21 (Ebenezer Site 61)

1) Universal Transverse Mercator Location: N3610050; E458450.
2) Location: The site is located on the narrow terrace of an unnamed tributary of the Savannah River. The site is approximately 200 feet east of 9Sn20. The locality is not in the benefit area of any proposed drainage channel.

3) Site Description: The site consists of a single "Kirk Serrated" style projectile point which suggests a Middle Archaic date. The projectile point was found exposed in a road.

4) Test Excavations: No tests were conducted.

9Sn22 (Ebenezer Site 94)

1) Universal Transverse Mercator Location: N3606100; E455755.

2) Location: The site is situated on a slight rise overlooking an unnamed tributary of Runs Branch. The locality is approximately 100 feet west of a proposed drainage channel in Construction Unit 2.

3) Site Description: The site consists of a single flake (Formless Debris).

4) Test Excavations: No tests were conducted.

9Sn23 (Ebenezer Site 95)

1) Universal Transverse Mercator Location: N3606100; E455775.

2) Location: The site is situated on a slight rise overlooking an unnamed tributary of Runs Branch. The locality is approximately 75 feet west of a proposed drainage channel in Construction Unit 2.

3) Site Description: The site consists of a single flake (Formless Debris).

4) Test Excavations: No tests were conducted.

9Sn24 (Ebenezer Site 96)

1) Universal Transverse Mercator Location: N3605925; E455850.

2) Location: The site is situated on a slight rise overlooking an unnamed tributary of Runs Branch. The locality is approximately 100 feet south of a proposed drainage channel in Construction Unit 2.

3) Site Description: The site consists of two flakes separated by approximately 15 meters.
4) Artifacts:
   Debitage
   Flakes of Bifacial Retouch 1
   Formless Debris 1

5) Test Excavations: No tests were conducted.

9Sn25 (Ebenezer Site 98)

1) Universal Transverse Mercator Location: N3608800; E456900.

2) Location: The site is situated on a low hill overlooking Runs Branch. The locality is approximately 450 feet north of a proposed drainage channel in Construction Unit 1.

3) Site Description: The site consists of two flakes separated by approximately 45 meters.

4) Artifacts:
   Debitage
   Flakes of Bifacial Retouch 1
   Normal Percussion Flakes 1

5) Test Excavations: No tests were conducted.

The following sites are located in South Carolina. They are situated on the side of the Savannah River opposing the eastern boundary of the Ebenezer Creek Watershed. Residents of the watershed took us to these localities during our survey.

38Ja1 (Ebenezer Site 31)

1) Universal Transverse Mercator Location: N3600600; E475475.

2) Location: The site is situated on a small, sandy knoll on the Savannah River Floodplain. The site was formerly surrounded on all sides by river swamp. The locality is approximately one-fourth mile beyond the Highway 119 bridge on the South Carolina side of the river.

3) Site Description: The site is approximately 200 meters in diameter. Approximately one-half of the site has been destroyed when the area was used to obtain fill for a logging road. Ceramics suggest that the site dates to the Deptford phase of the Early Woodland. Large collections of artifacts have been obtained from the site.
4) Artifacts:

Debitage
- Flakes of Bifacial Retouch: 27
- Normal Percussion flakes: 18
- Formless Debris: 38

Tools
- Core Tools: 1
- Graver: 1
- Unifacial Sidescraper: 1
- Serrated Sidescraper: 2
- Notch: 2
- Hammerstone: 1
- Anvil: 1
- Handstone: 1

Aboriginal Ceramics
- Deptford Linear Check Stamped: 4
- Deptford Check Stamped: 1
- Deptford Simple Stamped: 3
- Wilmington Cord Marked: 1
- Unidentified Check Stamped: 2
- Plain Sand Tempered: 79

5) Test Excavations: No test excavations were conducted. Profiles left by fill dirt excavations, however, were cleaned. By cleaning these profiles, it was possible to identify an old occupation surface as a dark, charcoal flecked zone approximately 30 to 40 centimeters below the present ground surface. Extending from the old occupation surface was the outline of an aboriginal basin shaped pit. The pit was approximately two meters in diameter and extended 75 centimeters below the occupation surface. Several sherds were lying flat on the floor of the pit. A pollen sample which is discussed in Appendix III of this report was obtained from sediment secured from the floor of the feature.

38Ja2 (Ebenezer Site 74)

1) Universal Transverse Mercator Location: N3601400; E474400.

2) Location: The site is situated on a bluff overlooking the Savannah River near the Jasper and Hampton County line. The site is approximately 500 feet southeast of Stokes Bluff Landing.

3) Site Description: The main concentration of artifactual materials is approximately 90 meters east-west and 40 meters north-south. The long axis of the locality parallels the Savannah River. Aside from extensive erosion by the river, the site area is relatively undisturbed. The site appears to date to the historic period.
4) **Artifacts:**

**Debitage**
- Flakes of Bifacial Retouch: 12
- Normal Percussion Flakes: 3
- Formless Debris: 15

**Tools**
- Bifacial Sidescraper: 1
- Unifacial Sidescraper: 1
- Notches: 2
- Anvil: 1
- Grinding Slad: 1

**Aboriginal Ceramics**
- Kashita Plate Rim: 1
- Wamasee Incised: 4
- Corn Cob (?) Impressed: 1
- Burnished Plain: 1
- Plain Sand Tempered: 21

5) **Test Excavations:** No test excavations were conducted. Also, it was not possible to determine depth of midden materials from slopes caused by river erosion.

38Hal (Ebenezer Site 32)

1) **Universal Transverse Mercator Location:** N3602150; E473750.

2) **Location:** The site is located at Stokes Bluff Landing which overlooks the Savannah River and is near the Jasper and Hampton County line.

3) **Site Description:** The site extends approximately 300 meters along the bluff at the landing. It is now impossible to determine the width of the locality since it is a paved parking lot. Midden materials observed at the river edge extend at least one-half meter below the level of the parking lot. According to residents familiar with the area, the site has also suffered considerably from river erosion. Diagnostic ceramics suggest that the site was intensively occupied during the Early and Late Woodland time periods.

4) **Artifacts:**

**Debitage**
- Flakes of Bifacial Retouch: 36
- Normal Percussion Flakes: 22
- Formless Debris: 89

**Tools:**
- Core Tool: 1
- Thin Biface: 1
- Projectile Point: 2
Tools (continued)

<table>
<thead>
<tr>
<th>Tool</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graver</td>
<td>1</td>
</tr>
<tr>
<td>Bifacial Sidescraper</td>
<td>1</td>
</tr>
<tr>
<td>Unifacial Sidescraper</td>
<td>2</td>
</tr>
<tr>
<td>Serrated Sidescraper</td>
<td>8</td>
</tr>
<tr>
<td>Notch</td>
<td>3</td>
</tr>
<tr>
<td>Hammerstone</td>
<td>1</td>
</tr>
<tr>
<td>Anvil</td>
<td>1</td>
</tr>
<tr>
<td>Handstone</td>
<td>1</td>
</tr>
</tbody>
</table>

Aboriginal Ceramics

<table>
<thead>
<tr>
<th>Type</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kashita Red Filmed</td>
<td>1</td>
</tr>
<tr>
<td>St. Johns Plain</td>
<td>3</td>
</tr>
<tr>
<td>Wamasee Incised</td>
<td>3</td>
</tr>
<tr>
<td>Savannah Cord Marked</td>
<td>4</td>
</tr>
<tr>
<td>Savannah Burnished Plain</td>
<td>26</td>
</tr>
<tr>
<td>Wilmington Cord Marked</td>
<td>18</td>
</tr>
<tr>
<td>Deptford Check Stamped</td>
<td>4</td>
</tr>
<tr>
<td>Deptford Linear Check Stamped</td>
<td>2</td>
</tr>
<tr>
<td>Plain Sand Tempered</td>
<td>37</td>
</tr>
<tr>
<td>Plain Limestone Tempered</td>
<td>1</td>
</tr>
</tbody>
</table>

5) Test Excavations: No tests were conducted.
APPENDIX III

Palynological Investigations at 9Ef56 and 38Jal

by Suzanne K. Fish

Processing and examination of two soil samples for pollen content was undertaken in conjunction with the Ebenezer Creek Watershed survey project. The purpose of the analysis was to establish the feasibility of recovering sufficient pollen in good condition from soil types associated with archaeological sites in this area. No interpretation of pollen content was attempted, nor was it considered necessary in this preliminary investigation to identify all types present.

The procedure followed for extraction is that described by P. J. Mehringer (1967:137) which includes both mechanical and chemical methods for removing the soil matrix and concentrating pollen grains which may be present. The procedure proved applicable to the soil types involved in that it successfully removed most of the materials from the final extract which would obscure viewing of the pollen. Slides were prepared from the extract mounted in glycerol, and two were scanned from each site.

The sample from an aboriginal pit floor at 38Jal (see Appendix II - Site Descriptions) failed to yield pollen. No grains were encountered on two slides. Lack of preservation in this sample could be related to the chemical or structural nature of the sediment, to destructive biological or mechanical forces, or even to a very rapid depositional rate allowing the inclusion of little pollen. A single sample is not always indicative of all contexts at a site however, and if future research designs included problems answerable by palynological techniques, further attempts to extract pollen should be
attempted.

The second pollen sample, from the gray sand level at 9Ef56 (see Appendix II - Site Descriptions), yielded pollen in identifiable conditions, although in somewhat sparse quantities. Two slides were prepared and examined, and contained between twenty and thirty grains. The types in this sample proved to be predominatly arboreal. Pollen analysis at this site would be time consuming but profitable if all contexts were palynologically similar.