CULTURAL RESOURCES RECONNAISSANCE
FOR PROPOSED FLOOD CONTROL MEASURES AT
CRAMERTON, GASTON COUNTY, NORTH CAROLINA

1982

Prepared for: Department of the Army
Corps of Engineers
Charleston District

Contract: DACW 60-82-C-0004

Prepared by: Fred W. Fischer
2051 Flat Rock Road
York, South Carolina
CULTURAL RESOURCES RECONNAISSANCE
FOR PROPOSED FLOOD CONTROL MEASURES AT
CRANERTON, GASTON COUNTY, NORTH CAROLINA

1982

Prepared for: Department of the Army
Corps of Engineers
Charleston District

Contract: DACW 60-82-C-0004

Prepared by: Fred W. Fischer
2051 Flat Rock Road
York, South Carolina
## CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIST OF FIGURES</td>
<td>11</td>
</tr>
<tr>
<td>ABSTRACT</td>
<td>1</td>
</tr>
<tr>
<td>INTRODUCTION</td>
<td>2</td>
</tr>
<tr>
<td>NATURAL SETTING</td>
<td>6</td>
</tr>
<tr>
<td>CULTURAL SETTING</td>
<td>10</td>
</tr>
<tr>
<td>BACKGROUND RESEARCH</td>
<td>18</td>
</tr>
<tr>
<td>FIELD RECONNAISSANCE</td>
<td>21</td>
</tr>
<tr>
<td>Method</td>
<td>21</td>
</tr>
<tr>
<td>Findings</td>
<td>24</td>
</tr>
<tr>
<td>Conclusions</td>
<td>42</td>
</tr>
<tr>
<td>ASSESSMENT</td>
<td>45</td>
</tr>
<tr>
<td>RECOMMENDATIONS</td>
<td>49</td>
</tr>
<tr>
<td>REFERENCES CITED</td>
<td>51</td>
</tr>
</tbody>
</table>
## LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Project Location</td>
<td>3</td>
</tr>
<tr>
<td>2.</td>
<td>Western Piedmont Cultural Sequence</td>
<td>12</td>
</tr>
<tr>
<td>3.</td>
<td>Cultural Resources Field Reconnaissance</td>
<td>22</td>
</tr>
<tr>
<td>4.</td>
<td>Site C-1</td>
<td>26</td>
</tr>
<tr>
<td>5.</td>
<td>Selected Cultural Material</td>
<td>28</td>
</tr>
<tr>
<td>6.</td>
<td>Site C-2</td>
<td>30</td>
</tr>
<tr>
<td>7.</td>
<td>Site C-3</td>
<td>32</td>
</tr>
<tr>
<td>8.</td>
<td>Site C-4</td>
<td>34</td>
</tr>
<tr>
<td>9.</td>
<td>Site C-5 and Test Excavation Detail</td>
<td>35</td>
</tr>
<tr>
<td>10.</td>
<td>Site C-6</td>
<td>38</td>
</tr>
<tr>
<td>11.</td>
<td>Sites C-7 and C-8</td>
<td>39</td>
</tr>
<tr>
<td>12.</td>
<td>Site C-9</td>
<td>41</td>
</tr>
<tr>
<td>13.</td>
<td>Known and Predicted Cultural Resource Loci</td>
<td>46</td>
</tr>
</tbody>
</table>
ABSTRACT

This survey was conducted in order to assess the impact of proposed flood control measures on historic and prehistoric cultural resources within the area of Cramerton, Gaston County, North Carolina. The research, consisting of a literature and records search and an archeological field reconnaissance, indicates continuous human habitation in the study area for the past 12,000 years. Nine archeological sites and several historic-period structures were documented, and recommendations are presented for mitigating possible adverse effects on these cultural resources.
INTRODUCTION

A cultural resources reconnaissance survey of Cramerton, Gaston County, North Carolina was conducted between November 17, 1981, and January 15, 1982. The objective of this investigation was to recover information on historic and prehistoric cultural resources of the Cramerton area, in order to assess the effects of flood control measures currently under study by the Department of the Army, Corps of Engineers.

The area of investigation, hereafter referred to as "the survey area", consists of an approximately 170 hectare (420 acre) tract entirely within the corporate limits of Cramerton (Figure 1). The proposed alternative flood control measures potentially affect a 4.7 kilometer serpentine corridor along the South Fork Catawba River, between the route U.S. 74 bridge to the north and Upper Armstrong Bridge to the south (U.S.G.S. 1:24,000, Belmont, N.C.-S.C., 1973). The proposed flood control measures directly affect the area within the 500 year flood hazard zone (below c. 585 feet elevation). Investigation efforts were directed primarily toward the examination of this flood zone and adjacent lower slopes.

The investigation consists of a literature and records search, consultation with persons knowledgeable of the cultural resources within and around the survey area, and an archaeological field reconnaissance. A framework of the region's prehistoric cultural history is based largely on archeological investigations in the central Piedmont and the Appalachian
Figure 1. Project Location. South Fork Catawba River Flood Hazard Zone at Cramerton, North Carolina.
Province. A limited number of formal archeological investigations have been conducted in Gaston County, and no work was reported for the survey area itself prior to the current study; no prehistoric or historic sites were recorded here before this investigation.

The accounts of Spanish explorers and Colonial traders and travelers provide important historical data for the general region as early as 1539 A.D. The earliest historic documentation available specifically for the survey area dates from the late Seventeen-forties. An archeological field reconnaissance of the area to be affected by the proposed project located nine aboriginal sites and provides information on the probable location of other prehistoric and historic materials. Recovered site data indicate that the survey area has been more or less continuously inhabited for ten to twelve thousand years.

The sites and recovered cultural material are described herein. Conclusions drawn from the archeological data are consistent with the general models of cultural development in the Carolinas, and with the paleo-anthropological interpretations derived from previous investigations in Gaston and surrounding Counties.

Single- and multi-element sites are present on most of the topographic prominences around the South Fork Catawba River floodplain. All of these sites are disturbed to some extent, but undisturbed cultural deposit remnants are indicated at two of the examined sites. Some evidence of
patterned behavior is seen at all of the sites. Practically no cultural material is found in the floodplain, but allu-
viation and partial inundation limit the reliability of any assessment for this zone.

Most of the homes built during the 1906–07 mill develop-
ment and mid-Nineteen-twenties expansion of Cramerton are in good condition, as are several of the other early company buildings. One or more of the proposed physical alterna-
tives could adversely affect certain of these cultural re-
sources. Specific recommendations for the mitigation of adverse effects are provided in this report.
NATURAL SETTING

Cramerton is in the western portion of the Piedmont Province of the eastern Appalachian Highlands (Clay and Crr:40). Sedimentary country rock deposited during Precambrian and Cambrian marine transgressions have been folded and faulted by repeated episodes of late Paleozoic tectonic and volcanic activity. The injection of magma into variously broken country rock has resulted in the formation of a series of northeast-southwest geological belts along the uplifted Piedmont peneplain (Ibid.:43-4).

Cramerton is near the western margin of the Charlotte Belt in a zone of diorite and granite rock that extends east across the Catawba River into western Mecklenburg County (LeGrand and Mundorff:47-57). Varied hornblend and feldspar diorites and gabbros are interspersed with granite. The granite is composed primarily of feldspar and quartz. All of these stones degrade readily, and exposures are covered with feldspar, hornblend, and quartz aggregate. Quartz has filled many of the smaller fractures, and thin veins of the material are exposed on a number of slopes and spurs in the survey area. Larger veins of this resistant mineral outcrop to form the higher ridges and promontories of the region. More massive quartzite dike and vein remnants mark the King's Mountain Belt west of Cramerton. The metamorphosed lavas and tuffs of the Carolina Slate Belt flank the Charlotte Belt to the east.

The study area is drained by the South Fork of the
I. Catawba River. The South Fork is a major upper tributary of the Santee drainage system. It rises in the eastern slopes of the South Mountains of Burke County. It joins the Catawba River 34.4 river kilometers below Cramerton. The South Fork Catawba River and the larger Catawba and Broad Rivers, to the north and south respectively, have cut a series of broad, southeast-sloping basins into the uplifted and tilted Piedmont.

Duharts Creek, a third order stream, drains the eastern Gastonia upland and enters the South Fork at the southwest edge of Cramerton. An unnamed second order stream joins the river from the northeast immediately above the highway bridge at Cramerton. The remainder of the streams in the survey area are first order tributaries. Several of the smaller streams are not depicted on the 1:24,000 topographic sheet.

The South Fork meanders through a relatively narrow valley north and south of the survey area. The floodplain, now largely inundated by the waters of Lake Wylie and a check dam at Upper Armstrong Bridge, broadens to a width of nearly 450 meters immediately north of Cramerton and 400 meters at the mouth of Duharts Creek. Old meander scars have been flooded, leaving extensive areas of the floodplain cut off from the mainland. The existing bottom land is low and wet.

Hayesworth (Cramerton) was originally confined to a narrow peninsula formed by a meander of the South Fork and the lower valley of Duharts Creek. The peninsula slopes up gently to the upland summit 2700 meters northwest of and 51 meters above the river. Elsewhere the land slopes up abruptly beyond the
floodplain. Two promontories, Cramer Mountain and Berry Mountain, stand 88 meters and 110 meters above the river south of Cramerton.

The soil classifications used by Herr, Brinkly and Crane in their 1911 study of Gaston County are still in use. Most of the Congaree Pine Sandy Loam alluvium in the South Fork bottom has been inundated, as has the loam "meadow" land along lower Duharts Creek. Adjacent slopes and most of the upland in the study area are covered by Cecil Clay Loam. Heavy red Cecil Clay soil underlays most of the town of Cramerton and caps several of the upland summits. Iredell Clay Loam, a prominent soil type north of the survey area, occurs on the upland slope south of Upper Armstrong Bridge.

Gaston County is in the Humid Subtropical climatic zone (Clay and Orr:25-43). Warm summers, mild winters, and moderate precipitation are characteristic. Statistical climatic information is interpolated for the survey area from data compiled by U.S. Weather Bureau stations at Gastonia and Charlotte. The average mean temperature is about 79°F. in July and 44°F. in January. There is an average of 213 consecutive freeze-free days at Cramerton. The mean annual precipitation is about 43 inches. Monthly rainfall averages are slightly higher during the winter and spring. Seven to ten mile per hour prevailing winds are out of the northeast during the late fall, shift to the southeast through the winter and are southerly through the rest of the year.

The western Carolina Piedmont is in the Oak-Hickory-Pine
Zone of the Eastern Broad and Needleleaf Forest (National Atlas:89). Approximately 60% of the survey area is currently wooded; several stages of succession are represented, from old field to submature oak-hickory forest. Commercial pine plantings are reaching maturity in the southeastern portion of the survey area, and the hardwoods are currently being removed from the northwest sector. Firewood cutting is evident in the more accessible wooded areas.

Coarse grasses, blackberry, honeysuckle and pine, cedar, sweetgum and oak saplings are the pioneer plants in the old fields of the area. A variety of herbaceous plants, fox grape, grape, and Virginia creeper appear with dogwood, holly, sassafras, cedar, pine and several young hardwood species at the wood's edge. Beyond the edge and in more mature forests oak, hickory and occasionally pine dominate; the smaller tree species, vines, and many of the herbaceous plants diminish, presenting an open understory of tall, thin, saplings.
CULTURAL SETTING

Humans have inhabited the western Piedmont more or less continuously for the past twelve millennia. Three major periods are examined here. The Prehistoric period dates from about 10,000 B.C. to 1539 A.D., and reconstruction is based on archeological evidence. The Early Historic period begins with the appearance of Europeans in the region and is known from the accounts of the voyageurs, early traders, and from the earliest settlers on the late seventeenth century frontier. Archeological data supplement the scanty ethnohistoric record of this period. The Late Historic period begins around 1750 with effective Colonial control of the region. The continuous and systematic collection of administrative information provides a more precise framework for the study of cultural process in the late historic period. Books, periodicals, personal accounts, and industrial and commercial inventories complement official records. Archeological evidence is more useful for authentication than for the generation and testing of propositions in this final period.

Prehistoric Period

At least three major prehistoric cultural periods are generally identified in the archeological remains of eastern North America (Sears; Willey). While basic differences are noted in the technological, economic and demographic characteristics of these periods, processual change and continuity are evident when the extinct cultural systems are closely examined. Work at stratified sites in the central Piedmont (Joe)
and the Appalachian Summit (Dickens; Keel) provides a detailed chronological framework for the survey area (Figure 2). Although the temporal distinctions are based primarily on changes in projectile point and ceramic forms, considerable information is available for certain phases.

**Paleo** period materials (≈10,000-7500 B.C.) are associated with the remains of mammoth, horse, giant bison and other late Pleistocene fauna at camp and kill sites in the arid western Plains. Distinctive lanceolate fluted points, dart foreshafts of bone, and uniface flake knives and scrapers are characteristic implements of Paleo Indian assemblages over most of North America east of the Rocky Mountains and south of the Wisconsin glacial ice fronts. An economy based on the hunting of large game by highly mobile communities is indicated.

The gradual extinction of transhumant Pleistocene megafauna and an increasing population density led to a decline in mobility. The appearance of several side- and corner-notched point forms between about 8,500 and 7,500 B.C. marks the emergence of regionally differentiated groups.

Hunting ranges continued to diminish throughout the long **Archaic** period (c. 7500 - 1000 B.C.), as population continued to increase. The situation required greater economic and technical efficiency. The resource base was generalized, and procurement tools and techniques were specialized. Large and small game, fish, fowl and a variety of wild plant foods were included in the Archaic diet. Bifacially flaked stone tools gradually replaced the uniface flake tools of the earlier
<table>
<thead>
<tr>
<th>DATE</th>
<th>PERIOD</th>
<th>PHASE</th>
<th>ARCHEOLOGICAL COMPONENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>C-1</td>
</tr>
<tr>
<td>1,500</td>
<td>WOODLAND MISSISSIPPIAN HIST.</td>
<td>Randolph</td>
<td>Caraway</td>
</tr>
<tr>
<td>1,000</td>
<td>L</td>
<td>Pee Dee</td>
<td>Uwharrie</td>
</tr>
<tr>
<td>1,000</td>
<td>M</td>
<td>Yadkin</td>
<td>Badin</td>
</tr>
<tr>
<td>1,000</td>
<td>E</td>
<td>Pigeon</td>
<td>Plott</td>
</tr>
<tr>
<td>1,000</td>
<td>E</td>
<td>Swannanoa</td>
<td></td>
</tr>
<tr>
<td>2,000</td>
<td>L</td>
<td>Otarre</td>
<td>Savannah River</td>
</tr>
<tr>
<td>3,000</td>
<td>M</td>
<td>Halifax</td>
<td>Guilford</td>
</tr>
<tr>
<td>4,000</td>
<td>M</td>
<td>Morrow Mountain</td>
<td>2</td>
</tr>
<tr>
<td>5,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6,000</td>
<td>E</td>
<td>Stanley</td>
<td>Lecroy</td>
</tr>
<tr>
<td>7,000</td>
<td>E</td>
<td></td>
<td>Palmer</td>
</tr>
<tr>
<td>8,000</td>
<td>L</td>
<td>Hardaway</td>
<td></td>
</tr>
<tr>
<td>9,000</td>
<td>L</td>
<td></td>
<td>Clovis</td>
</tr>
<tr>
<td>10,000</td>
<td>E</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 2. Western Piedmont Cultural Sequence (after Coe:120-4; Keel:16-9) and Cultural Components of Aboriginal Sites in the Survey Area.
period. A number of specialized bone implements were developed, along with a ground stone tool industry. A weaving industry that included bags, baskets, nets and mats was essential for the collection, transport, and storage of plant foods in quantity. Burdened by the accoutrements necessary to obtain and process diverse resources, the Archaic communities became more sedentary. The appearance of a woodworking industry in this period was probably a response to the need for more permanent shelters. By the middle of the Archaic period, seasonal villages were probably present throughout most of eastern North America.

Gourd, squash and maize, all domesticated by about 5,000 B.C. in the Mesoamerican highlands, diffused north into the South and Midwest by middle or late Archaic times. Several indigenous plants had also been domesticated, or had at least undergone heavy genetic selection, by the close of the period.

The demographic, economic and logistical factors that stimulated cultural heterogeneity during the Late Paleo period intensified through the long Archaic period. By about 1,000 B.C., even earlier in some areas, Woodland period people had begun to establish year-around settlements. Horticulture increased in importance, but hunting and plant collecting probably remained the primary subsistence activity throughout the prehistoric era. Clay pottery, first seen at Late Archaic sites along the southern Atlantic coast, came into widespread use in Woodland times. The bow and arrow replaced the spear-thrower during this period. There is markedly increased evidence
of ritual activity, trade and status differentiation among some Woodland groups.

States, supported by intensified food production, had developed in Mexico by 1000 B.C. Between about 500 to 1000 A.D., a number of Mesoamerican symbolic and technical elements diffused northeast into the Mississippi Valley. Regional chiefdoms, supported by intensified horticulture and sanctioned by supernatural belief, were present throughout most of central and southeastern North America by 1400 A.D. Extensive trade in ritual and status-validating materials fostered common stylistic and symbolic forms among the regional redistributional systems. Archeological and ethnohistorical data indicate that elite, ramaging family organizations controlled these societies. Several descent-reckoning systems seem to have been in use in the Southeast at the time of European contact.

The Early Historic period begins with the Spanish exploration of the Southeastern hinterland (Hudson: 37-119; Baker). DeSoto penetrated the Southern Piedmont before turning southwest toward the Mississippi Valley in 1539. In 1566 Juan Pardo visited the Essaw (Issa) residing near the mouth of Sugar Creek just south of the survey area. Spanish efforts to establish garrisons and settlements in the interior were sporadic and largely unsuccessful. The western Piedmont remained on the periphery of European influence until the third quarter of the Seventeenth century.
Virginia traders, following the Occoneechee Path southwest from the James River, began to visit Catawba towns (Ushery and Essaw) along Sugar Creek and the Catawba River in 1670. Within three years, traders from the newly established port of Charles Town were plying the Catawba Path up the Santee River to the eastern end of the Cherokee Path near the mouth of the Sugar Creek (Cumming; Lawson; Brickell). The northern extent of Catawba territory during and prior to this period is uncertain, but it probably encompassed the lower South Fork Catawba Valley.

European diseases and the depredations of the deerhide, slave and rum trades had reduced aboriginal Piedmont population dramatically by the close of the Early Historic Period (Puett:15; Hudson:4, 105). Sometime before 1728, probably toward the close of the Yamassee uprising of 1715, the Catawba had withdrawn to six villages on Sugar Creek and on the Catawba River immediately above the mouth of Sugar Creek. They were joined there by the remnants of the Cheraw, the Wateree-Chickanee, the Congaree and numerous other displaced groups. Smallpox ravaged the six towns in 1738, and the epidemic of 1759-60 killed nearly half of the remaining residents (Baker). There was little to impede White settlement of the country around the lower South Fork after this period.

The earliest European settlement within the survey area has not been determined; land grants were not recorded until 1749. War, religious persecution and economic displacement swelled the Colonial population of the Carolina frontier.
by the second quarter of the eighteenth century (Puett:28-35). By 1750 there were several cabins west of Tuckasegee Ford and on the "Point" at the mouth of the South Fork (Ibid.:43-55; Cope and Wellman:9-11). Although the earliest land grants in eastern Gaston County (then part of Anson County) consisted of 300-400 acre tracts, the settlers were primarily subsistence farmers until the British blockade of Atlantic ports provided a market for cotton and grain (spirits) production (Cathey). The survey area lay below the head of navigation on the Catawba River, and agricultural surplus was being transported down river by boat and raft by 1765 (Cope and Wellman:18).

The numerous shoals and rapids along the South Fork Catawba River offered ideal locations for large mills. The first textile mill in North Carolina was built on the South Fork in Lincoln County in 1813. By 1848, there were three mills operating in Gaston County, and the area was a major producer of coarse cotton yarn, unbleached cloth and industrial sheeting (Sharpe:761-786). The industry was destroyed during the Civil War, but by the 1870's most of the plants were back in operation, and two railroads were providing cheap transportation for the raw materials and products.

A number of slaves were brought into Gaston County to work small gold mines in the second quarter of the nineteenth century, and corn whiskey was an important product in the period following the Civil War (Blanton; Sharpe). From the
late 1870's to the present, however, textile manufacturing has been the dominant industry of the county. The industry has had a profound effect on the survey area.

Stuart W. Cramer, a textile engineer and entrepreneur, built the Hayes Manufacturing Company spinning mill and the Town of Hayesworth, now Cramerton, in 1906 and 1907. Connette, Hatley and Hawley characterize the development in their 1974 sociological study of Cramerton (14-15):

The town was built as an urban fabrication, a dependant part of a system; its design and town plan is a cultural phenomenon. The spirit of the place as it has existed has been modulated by the town's physical form, a personal statement of one man's enterprise made in the particular kind of popular intellectual atmosphere that existed in the Southern states after the compromise of 1876.

By 1910, Cramer was president and chief stockholder of the mill and its 500-person community. In 1921 the Post Office name was changed to "Cramerton", and the following year Hayes Mills became "Cramerton Mills". A weaving mill was added in 1923, and the black community was moved to Brooklyn, a hamlet 900 meters south of the mills, to provide additional housing in the Woodlawn section. Cramerton Mills was sold to Burlington Industries in 1946 (Ibid.:22-31).

Pressed by Belmont to the east and by Gastonia to the west, Cramerton incorporated in 1967 (Gastonia Gazette). In 1970 the residents, many retired from the mill by this time, purchased the last of the worker housing still owned by the Burlington Corporation (Charlotte Observer, 1970). The E.F. Hutton Company purchased 1100 acres within and around the survey area in 1981 for speculation (Ibid., 1981).
BACKGROUND RESEARCH

General information on the natural and cultural setting of the survey area was obtained from collections in the North Carolina Room of the Gaston County Library and Atkins Library of the University of North Carolina - Charlotte. Additional information was found in the Archival Search Room of the North Carolina State Library, Raleigh.

The archeological site files of the Archaeology Branch, Division of Archives and History, Raleigh, and the Archeology Laboratory, University of North Carolina - Charlotte were examined. Personnel of the Historic Preservation Section of the Division of Archives and History provided information on the area sites in the National Register of Historic Places. Additional information was obtained in consultation with Mr. R. Alan Stout of the Schiele Museum, Gastonia, Dr. Bob Blanton of Gaston College, Mr. Steven McLain of the Gaston County Archeological Society, and Mr. Durward Crrell of the Piedmont Archeological Society.

Little formal archeological investigation has been conducted in Gaston County, and none is reported for the survey area. A few small Archaic and Woodland components are reported (Fischer, 1979), and the archeological site files of the Archaeology Section, North Carolina Division of Archives and History and the University of North Carolina - Charlotte contain information on a few additional Gaston County sites. Dr. Robert Blanton of Gaston College has also collected data on several area sites.
Several large artifact collections amassed by local amateurs contain materials representing the full temporal range of aboriginal occupation (Orrell; Stout). Paleo fluted points are reported from Gaston and surrounding counties, and a site near Belmont has yielded at least two fluted points (Perkinson:1971; Peck:1977, 1979; Orrell). The Gaston County Archeological Society is currently investigating a small upland site in eastern Gastonia with Kirk, Savannah River and unidentified Woodland components (McLain).

Orrell provided information on four prehistoric sites in and around the survey area. A Paleo point base was reportedly recovered from disturbed soil on the upland, north-northeast of Upper Armstrong Bridge during the development of Timberlake subdivision. Early Archaic material is reported from a site on the east bank of the South Fork above the U.S. 74 bridge. Orrell found Middle Archaic points at two locations examined during the current survey (Sites C-1 and C-3 below); one of these sites also yielded eared Yadkin Points and potsherds.

The major sources pertaining to historic research in Gaston County are cited in an earlier section. No Gaston County sites are included in the National Register of Historic Places, and none were under study when this research was conducted. Kim Withers, of the Division of Archives and History, Raleigh, has recently completed fieldwork for a survey of Gaston County historic sites and structures; unfortunately, the Cranerton Community was not included in this study. William H. and Wilma Crain of Mt. Hope, using Colonial records in the Lincoln
County Courthouse, have compiled information on early land grants and holdings in eastern Gaston County (Stout).

The work of Connette, Hatley and Manley at Cramerton has been cited above. Additional information on the textile industry of Gaston County is provided by Ragan (1968, 1975) and by Seyark.
FIELD RECONNAISSANCE

An archeological field reconnaissance was conducted on November 17 to December 8, 1981. The purpose of the reconnaissance was to locate, identify and assess the scientific and historic cultural resources of the survey area. The floodplain and lower slopes were examined by means of three longitudinal transects in the north, central, and southern portions of the survey area (Fig. 3). Additional testing was undertaken in scattered areas of the floodplain. Eroded and cultivated surfaces, road cuts, stream cut banks and other exposures were examined where accessible.

Method

Transect "A" crosses the southern portion of the survey area immediately east of the Upper Armstrong Bridge. Eroded dirt roads, borrow cut banks and riverbank profiles provide nearly continuous exposure along the transect for a distance of approximately 700 meters. Three post-hole test cuts were made along the narrow floodplain terrace on the north side of the river. Additional information is provided below (see Sites C-1 and C-2).

Transect "B" crosses the basin from northeast to southwest. A fence line along the southern edge of Burlington's William Lord Plant tract provides a nearly continuous exposure from the edge of the floodplain to the summit of the upland. River cut banks provide profiles of the floodplain along both sides of the river. Two shovel-cut test pits were
Figure 3. Cultural Resources Field Reconnaissance, Cramerton, North Carolina.
excavated in the eastern floodplain, and two post-hole test
pits were made on the disturbed western bottom southeast of
River Street. This transect is discontinuous within Cramer-
ton, but it includes eroded exposures on the slopes and summit
of the hill upon which the town's watertower is located, and
eroded and disturbed areas above Duharts Creek around the
site of the original spinning mill. Additional information
is provided below (see Site C-5).

Transect "C" crosses the northern portion of the survey
area immediately south of route U.S. 74. A maintained gas
pipeline provides a continuous exposure from river's edge
the upland summits on both sides of the river. The river
banks are rip-rapped at this transect, and the floodplain
was examined by means of post-hole testpits downstream from
the gas line.

Several additional areas in and along the floodplain were
searched for historic structural remains, and shovel-cut
test pits were made at a few of these locations. Other
examined surface and cut bank exposures are indicated on
Figure 3.

All observed cultural material was noted, and locations
yielding evidence of aboriginal activity were given site
designations. Samples were systematically collected from
each site in an effort to determine the period(s) of use,
extent, site function and condition of the remains. The
methods employed at individual sites are detailed below.
excavated in the eastern floodplain, and two post-hole test pits were made on the disturbed western bottom southeast of River Street. This transect is discontinuous within Cramer-ton, but it includes eroded exposures on the slopes and summit of the hill upon which the town's water tower is located, and eroded and disturbed areas above Duharts Creek around the site of the original spinning mill. Additional information is provided below (see Site C-5).

Transect "J" crosses the northern portion of the survey area immediately south of route U.S. 74. A maintained gas pipeline provides a continuous exposure from river's edge to the upland summits on both sides of the river. The river banks are rip-rapped at this transect, and the floodplain was examined by means of post-hole test pits downstream from the gas line.

Several additional areas in and along the floodplain were searched for historic structural remains, and shovel-cut test pits were made at a few of these locations. Other examined surface and cut bank exposures are indicated on Figure 3.

All observed cultural material was noted, and locations yielding evidence of aboriginal activity were given site designations. Samples were systematically collected from each site in an effort to determine the period(s) of use, extent, site function and condition of the remains. The methods employed at individual sites are detailed below.
Findings

The field reconnaissance resulted in the discovery of seven aboriginal sites and confirmation of the location and existence of two previously reported sites (Fig. 3). Except for the northwestern edge of Site C-5, all of the Amerind material is above the 500-year flood contour.
Site C-1

Site C-1 is a multiple component site on the summit of a south-southwest extending spur immediately northeast of Upper Armstrong Bridge (Fig. 4). Cultural material was collected from the eroded surface of a dirt track which extends along the narrow summit for a distance of about 375 meters. The southeastern edge of the spur has been cut away for borrow. The summit is deflated to red clay along the entire length of the track. The track exposure width varies from 0.6 to 3.5 meters.

A one meter-wide exposure was marked off along the track, and all observed cultural material was collected from 53 discontinuous five meter segments. Recognizable tools were collected from adjacent exposures as well, and the location of identified implements was recorded to the nearest meter. Cultural material was seen from the southern end of the spur summit (150 m. north of the arbitrary datum) to 65 meters north. A lower area between 65 and 115 meters north has been cut away by power line construction. Every segment between 115 and 325 meters yielded cultural material, and additional artifacts were collected between 340 and 350 meters north.

Three shovel cut test pits were excavated to a depth of c. 50 cms. in the woods adjacent to the eastern edge of the road (Fig. 4). Heavy red clay extended from the base of the thin woods humus (about 3 - 8 cm.) to the bottom of Test Pits 1 and 2. A probable plowzone (mottled brown and red soil) - subsoil (red clay) interface was seen at c.15 cms. below surface in Test Pit 3. Two quartz flakes were found just below the leaf mold in Test Pit 1. Although narrow, the spur summit was probably subjected to plow cultivation and marked erosional deflation.

Recovered cultural material includes projectile points (8 complete, 2 proximal fragments); 14 point and/or biface tool fragments; 10 preforms and preform fragments; 16 plano-convex
Figure 4. Site C-1, Gramerton Cultural Resources Reconnaissance.
disk cores, pyramidal cores, core nuclei, and fragments (all of white quartz); a quartz hammer; and 7 coarse uniface flake tools. Three single-pitted cobbled hammer-anvil stones, four small pot sherds, and a calcined bone fragment complete the tool inventory.

Debitage is abundant along the deflated track. White quartz, probably of local origin, predominates, although rhyolite flakes are present in many segments. Minority materials, in approximate order of frequency, include dacite, argillite, quartzite, andesite, and basalt.

The site was sporadically occupied from Early Archaic to Middle or Late Woodland times. Two Early Archaic components are represented by a side notched, ground-and thinned-base point similar to the Taylor Point, except not bevelled (approximately contemporaneous with the Palmer phase), and a Kirk Corner Notched Point (Michie; Coe:69-70; see Fig.5, A and B). Middle Archaic material includes two Morrow Mountain II Points (Coe:37-43; see Fig.5, C and D), two Guilford Points (Ibid.:43-5; see Fig.5, E and F), and several coarse uniface flake tools. The large triangular biface (Fig.5, K) may be of Late Archaic origin (Ibid.:51). Two large stemmed point bases (Fig.5, G and H) probably date from the Late Archaic or Early Woodland period. A thin side notched point (Fig.5, J) is similar in size and form to the Pigeon Side Notched, an Early Woodland point of the Appalachian Province (Keel:127-129). A narrow, percussion flaked, contracting-stem point (Fig.5, I) may be a variant of the historic period Randolph Point (Coe:49-50).

Two of four small body sherds have a plain exterior and two are too weathered for identification. All have a sandy, well consolidated, quartz tempered paste. Wares with similar paste characteristics were manufactured in the Appalachian Province by Early and Middle Woodland people (Keel: 254, 259 and 263). Keel found pitted hammer stones associated with these same assemblages (Ibid.,156-7).
Figure 5. Selected Cultural Material, Cramerton Cultural Resources Reconnaissance. Site C-1, A - K; Site C-2, L; Site C-6 M - O.
Although cultural material extends for at least 350 meters along the spur, the level area on the summit is less than 15 meters wide in most places. The collection transect along the summit spine probably crosses the central portion of the larger assemblages of Site C-1. At least two Early Archaic and two Middle Archaic components are represented on the southern spur summit, and Early Woodland and Historic components are suggested. Abundant debitage, cores, core nuclei, preforms and coarse flake tools indicate that some or all of these people were manufacturing points and tools from locally obtained white quartz nodules. Non-local materials, probably in the form of damaged tools and prepared cores and preforms, were also worked here.

Two Middle Archaic and one or more Late Archaic or Early to Middle Woodland components occupied the central portion of the site. The sherds, pitted cobble hammer-anvils and large coarse stemmed points are all from the central portion of the site between 140 and 240 meters north. Quartz debitage, cores, core nuclei, preforms, and biface tools are again numerous, while uniface flake tools are practically absent from this portion of the site.

Aboriginal activities at Site C-1 consisted of the maintenance and refurbishing of food procurement equipment, the fabrication of flake and biface cutting and scraping tools for immediate use, and limited domestic tasks. There is surprisingly little variety in the types of tools represented, considering the density of cultural material. The site probably served small hunting and collecting parties as a temporary camp between about 8000 B.C. and 1730 A.D.

Site C-2

Site C-2 is located on the southwestern remnant of a northwest extending spur immediately southeast of Upper Armstrong Bridge (Fig. 6). A Morrow Mountain I point (Fig. 5, L) of white quartz was picked up in a badly eroded area near the slope base.
Figure 6. Site C-2, Crumerton Cultural Resources Reconnaissance.
A few quartz flakes were seen in the vicinity of the point and scattered along a cut dirt track which extends up the southwest side of the spur. At least one rhyolite flake was observed near the summit. The northwestern and southeastern flanks of the site have been cut away. There is a low density of cultural material (≤0.2 piece/1.0 square meter). Several small hunting camps and flaking areas, or a multi-element Middle Archaic camp of short duration is suggested.

Site C-3

Orrell reported finding Middle Archaic points, eared Yadkin Points, and undescribed sherds on the summit and upper slopes of a broad spur terrace about 500 meters west-southwest of Upper Armstrong Bridge (Fig. 7). The site was last under cultivation at the time of Orrell's visit in 1979. It was overgrown with grass and weeds when surveyed. Quartz and rhyolite debitage was collected from the eroded surfaces on the upper slopes of the old corn field, and from exposures along dirt tracks that dissect the summit and slopes of the terrace.

Quartz debitage is scattered along the southern terrace summit and upper eastern slope for a distance of 25 meters. Cultural material consists of rhyolite (3) and local quartz (25) debitage, three quartz biface tool or point fragments, and a large flake scraper or planer. The cultural material density for units in the old field is 0.96 piece/square meter.

Two shovel-cut test pits were excavated to a depth of 70 cms. on the southeastern terrace summit. The light brown, friable plowzone extends to a depth of 16 to 20 cms. below surface. A mottled buff-brown-red transitional zone between 3 and 6 cms. thick lies below the recent plowzone and above the reddish-brown clay subsoil. A few small charcoal flecks were seen in the transitional zone in the southernmost test.
Figure 7. Site C-3, Cramerton Cultural Resources Reconnaissance.
This zone is thought to be a remnant of less disturbed cultural deposit. No cultural material was recovered in either cut.

The relatively low cultural material density is, in part, due to the less deflated character of the terrace summit. If Orrell's observations are correct, site C-3 was used as a camp and tool fabrication site during the Archaic and Middle Woodland periods; a multi-element Yadkin component may be present.

Site C-4

Two crude white quartz flake tools, a quartz core nucleus, seven flakes (4 quartz, 2 quartzite, 1 rhyolite), and a light gray glazed stoneware sherd were found on the upland, 860 meters north of Upper Armstrong Bridge (Fig. 8). Material was found along the periphery of a shallow cut bank at the end of an unimproved 4.5 meter road cut. A single quartz flake was found 27 meters east-northeast of the above concentration.

At least two local quartz nodules were reduced for the production of coarse flake tools. One or more transitory butchering or camp sites are suggested. No culturally definitive prehistoric items were recovered. A search of the wooded area surrounding the road clearing yielded no further evidence of a post-colonial component.

Site C-5

Site C-5 is on the southwestern toe of a west-extending spur at the northwest end of the Burlington fence line transect (Fig. 9). Quartz debitage is scattered over the gentle slope for a distance of 60 meters. The northwestern edge of the site is 25 meters from the edge of the low eastern floodplain; it stands from 2.7 to 7.5 meters above the bottom along the transect. The site extends for an undetermined distance up the spur toe to the northeast, and the southwestern portion
Figure 8. Site C-4, Cramerton Cultural Resources Reconnaissance.
Figure 9. Site C-5 and Test Excavation Detail, Cramerton Cultural Resources Reconnaissance.
is cut away by subdivision street construction.

Two cleared profiles along the highest portion of the scraped exposure show a sterile red clay at 20 cms. below the surface, overlain by the disturbed plowzone and a 6 cm. woods humus. A quartz preform fragment and several spalls were clustered near the highest area examined. The plowzone was removed from the surrounding area to reveal a series of east-west plow scars and two circular postmolds (Fig. 3 detail). The postmolds were bisected and the gray-brown fill removed.

Postmold "A" is 21x22 cms. in diameter and extends to a depth of 72 cms below the plowzone-subsoil interface. The profile tapers to 15 cms. at a point 45 cms. above the base. The post fill contained numerous large and small charcoal fragments from top to bottom. Several quartz flakes were found in the upper postmold fill (to a depth of 23 cms. below the plowzone-subsoil interface). Their significance is not determined. Postmold "B" is 75 cms. southeast of "A". It is 17 cms. in diameter and extends to a depth of 21 cms. below the plowzone-subsoil interface. This profile had straight sides and a flat bottom. Some charcoal flecks were also seen in this postmold.

Additional interface was exposed, but no other postmolds were seen. It could not be determined whether the postmolds were the result of an aboriginal construction or rather part of a more recent fence. A search of the surrounding area turned up no fence wire or posts.

Fifty-four quartz flakes, two quartz core nuclei, two core fragments, two nodular hammer or core fragments, a quartz preform fragment, a crystal quartz flake knife and an ovate preform or biface tool base of rhyolite were collected as a unit from a 160-square meter sample area along the disturbed fence clearing. Additional quartz spalls, a rhyolite flake,
and a quartz core fragment were recovered from the overburden
and fill of Postmold "A". Cultural material density in the
scraped and deflated sample area is 0.35 pieces/1.0 square meter.

White quartz nodules were eroded from the slope below and
about 35 meters west of the sample area. Quartz nodules were
probably collected and reduced to prepared cores or preforms
on the site. Except for a bipolar core nucleus, the cores
are too fragmentary for classification. The bipolar core
reduction technique has been noted at Yadkin phase sites in
McKee and Union Counties, North Carolina (Fischer, 1960).

Site 2-3

A quartz biface tool or point tip and a quartz flake were
found 12.5 meters apart on the gentle southeast slope of a
spur 500 meters south-southwest of the U.S. 74 bridge (Fig. 10).
The material was recovered from a garden about four meters
above a narrow floodplain. A search of the garden and eroded
patches along an adjacent power line access track yielded
no further evidence of habitation or prehistoric use.

Site 3-7

A single quartz core nucleus, possibly used as a scraping or
planing tool, was recovered from the upper slope of a cut
bank about 200 meters west-southwest of the U.S. 74 bridge
(Fig. 11). The machine-cut exposure extends for 20 meters
along the northeast summit of a southeast-extending spur.

Site 0-6

Site C-8 is located on a heavily disturbed slope, 35 meters
south of U.S. 74 and about 140 meters west of the South Fork
Catawba River (Fig. 11). Cultural material is scattered along
an eroded dirt track and gasoline exposure on the gentle south-
eastern slope of an east-extending spur. The central portion
of the spur is covered by the U.S. 74 bridge approach fill.
Figure 10. Site C-6, Croxton Cultural Resources Reconnaissance.
Figure 11. Sites C-7 and C-8, Cramerton Cultural Resources Reconnaissance.
A rhyolite Randolph point (Fig. 5, M), two large fragmentary biface tools of rhyolite (Fig. 5, N and O), and a quartz point tip were found with 31 rhyolite and three quartz flakes in a 5x30 meter area along the pipeline disturbance (density: 0.25 pieces/1.0 square meter). The find location and surrounding area is eroded to red clay subsoil.

At least four varieties of rhyolite are distinguished here. Only one decortification flake is present, which suggests the use of prepared cores or preforms. The assemblage represents a Late Woodland or Historic aboriginal component.

Site C-9

Site C-9 is located on the southwestern toe of a west-extending spur, approximately 150 meters east-southeast of the U.S.74 bridge (Fig. 1). The site is opposite Site C-8 and is also on the gasoline exposure. The site and surrounding slopes are completely deflated.

A bipitted cobble hammer-anvil and five rhyolite flakes (≥2 varieties) were scattered over a 43 square meter area (density: 0.14 pieces/1.0 square meter). A small Woodland camp is indicated.

Maps provided by the Army Corps of Engineers indicate the location of fifty-six existing structures that are within the 500-year flood zone. Twenty-two domiciles along River Street and the southern end of Fifth and Sixth Avenues, and four houses on the north side of Main Street date from the initial mill development of 1906-7. These houses were provided with indoor toilets, baths and water and electric facilities after 1915 (Connette, Hatley and Manley:29). All are currently occupied. Twelve domiciles on the lower slopes of the Brooklyn
Figure 12. Site C-9, Cramerton Cultural Resources Reconnaissance.
section probably date from this same period. Three houses on the southeast periphery of the Woodlawn section date from about 1923, as do the functioning mill structures along Duharts Creek. The remaining at-risk buildings west of the river, public utility and storage facilities, appear to be of recent origin. All of the potentially affected buildings east of the River have been constructed in recent years.

The 1909 U.S. Geological Survey map of Gaston County depicts a road extending along the western side of the river from Duharts Creek to Upper Armstrong Bridge (Hern, Brinkly and Drane). Traces of this dirt track are visible at the base of the slope immediately above the floodplain at several locations (Fig. 7). This road probably served the J. Holland and J. Reid farms in the late 1800's, but it may have been in use much earlier (Jagan:1975).

No historic structural remains were seen in the floodplain. No historic or prehistoric cultural material or strata were seen in the flood plain test pits and stream bank profiles.

Conclusions
Nine aboriginal sites representing sixteen to eighteen components were examined during the reconnaissance (Fig. 3). Sites C-1 and C-3, both fairly extensive, may have multi-element Woodland components; multi-element Archaic components might also be represented. The remaining sites are relatively small, low density sites and are probably the remains of subsistence procurement camps, occupied briefly.
by small parties.

Available archeological data indicate that the general adaptive systems reconstructed for other areas of eastern North America also obtain for aboriginal cultures of the western Piedmont. The increased site frequency and size seen in the small survey sample indicates an intensified use of the lower South Fork Valley in the Woodland period. Although the regional population may have increased during this period, settlement pattern changes in the hinterland make this difficult to verify. The frequency of Middle and Late Archaic sites along the interfluvial divides of the region is as great as that seen in the survey area, and multielement components are common. Upland Woodland sites are less common, and they are seldom as large as Site C-3.

At the behavioral level there are some differences to be noted in logistical strategies. While projectile points and cutting tools dominate the implement inventories of both early and late components, the Archaic people seem to have been making most of their flake knives and many of their points from local raw materials as the need arose. Some of the Woodland groups also used the local quartz, but they were also provided with prepared cores or preforms of rhyolite. More carefully finished biface knives of this material were apparently reused until broken.

The lower South Fork Catawba Valley was on the northern periphery of western Piedmont Mississippian development.
University of North Carolina - Charlotte Archeological Laboratory collections contain curvilinear complicated-stamp pottery from several Mecklenburg and Cabarrus County sites. Three of these sites are on the eastern side of the Catawba River opposite Belmont. The current study was unable to confirm the presence of Mississippian sites in Gaston County, and no material of this phase was identified in the survey area.

Historic cultural material is reported from several aboriginal sites in Gaston County, but none of these assemblages have been systematically examined. Although the Catawba, or some related Siouan-speaking group probably inhabited the lower South Fork basin in the late prehistoric and protohistoric period, their seems to be no archeological confirmation of this proposition. Indeed, little or nothing is known concerning the archeological manifestations of this or other ethnohistorically identified groups of the region. As Baker suggested in 1975, the towns around the mouth of Sugar Creek to which the Catawba withdrew in the first quarter of the eighteenth century might provide baseline data for the study of this important group in the protohistoric period.
ASSESSMENT

The survey area and surrounding Piedmont have been inhabited continuously for the past twelve thousand years. Archaic and Woodland Indian sites representing several temporal and cultural phases were located during the survey. All of the examined sites were on spurs and promontories above the largely inundated floodplain. With the exception of the badly disturbed exposures seen within Cramerton, every such partially exposed prominence examined had some evidence of aboriginal use.

Sites of the type described above are probably present on all of the spurs and terrace remnants fronting the floodplain. Of the nine sites examined, Site C-3 may have a remnant of undisturbed cultural deposit below the plowzone, and sub-plowzone features may be truncated in the otherwise sterile subsoil of Site C-5. Sites C-4 and C-6, although ephemeral, probably retain some horizontal integrity. The remaining small sites are badly disturbed. All of the low-lying slope and prominences in the developed areas of Cramerton have been radically disturbed by residential, industrial, and road construction. Of the fifteen to twenty less disturbed locations that would likely yield evidence of aboriginal activity along the river, all are above 590 feet elevation (Fig. 13).

Extensive testing and observation in the bottomland yielded no evidence of prehistoric or historic activities. Elsewhere in the Piedmont, sites are seen in floodplain
Figure 13. Known and Predicted Cultural Resource Loci at Cramerton, North Carolina.
settings. Evidence of recent alluviation has been noted at a number of stream bottom locations, and the stratified silts observed in one of the test pits on the western margin of the floodplain south of Cramerton may be of recent origin. It is possible that cultural strata lie buried below the water table.

It is also possible that the South Fork Catawba River was more subject to flood than some of the other large streams on the Piedmont, even during the prehistoric period. During his journey up the Catawba Path in 1701, Lawson noted extensive treeless areas. The historic Catawba Indians, like several other eastern Woodland peoples, reportedly used fire surrounds in deer hunting. Considering the destruction wrought by the floods of 1916, it is no surprise to find historic structures absent from the bottom.

The Catawba (Issa), or a culturally related group, inhabited the region of the survey by 1539. European disease may have radically altered the aboriginal demographic pattern of the area by the period of sustained contact after 1670. When Whites began to settle the lower South Fork in the late seventeen-forties, there were few, if any, year around Indian residents in the survey area.

The early grants were large tracts devoted to mixed farming. The alluvial floodplain and more level slopes around Cramerton were cultivated, and the area continued to support sizable farms until Mayes Mills and the town of Mayesworth were constructed in 1906-07.
Most of the mill housing that Stuart Cramer had built in the town that bears his name is in a good state of repair, as is the housing of the Baltimore Road area south of Cramerton. Although the original mill was recently leveled, the footings and upper foundations of the major buildings can still be traced in the sloping field south of the old Southern Railway station. Aside from the structures noted earlier, all of these buildings are on the slopes above the area to be affected by the proposed project.
RECOMMENDATIONS

Information recovered by background research and field reconnaissance indicates the presence of several prehistoric and historic sites within and adjacent to the area to be affected by the proposed project. Although most of the observed material is beyond the 500-year flood hazard zone, one or more of the physical alternative flood control measures could adversely affect scientifically and historically significant cultural resources. The following measures are recommended in order to minimize potentially adverse effects, should channel excavation, channel realignment, levee construction, or structure raising be implemented.

Figure 13 shows the location of twenty-two known and predicted aboriginal sites on promontories and terraces above the flood hazard zone. It is recommended that these locations be avoided in planning for equipment access facilities and earth borrow sites. Archeological site reconnaissance or additional testing (Sites C-3 and C-5) is recommended where such disturbance is deemed necessary.

Forty houses dating from 1906-07 and about 1923 are within the flood hazard zone (Fig. 13). If it is necessary to raise these buildings, it is recommended that they be examined by a preservation archeologist or historian in order to record pertinent structural information.

Fred. W. Fischer
Archeologist
January 28, 1982
York, South Carolina
REFERENCES CITED

Baker, Steven G.

Blanton, Robert
1982 Personal communication

Cathey, Cornelious C.
1966 Agriculture in North Carolina Before the Civil War. Raleigh: North Carolina State Department of Archives and History.

Clay, James W. and Douglas M. Orr, Jr.

Connette, Woody, Tom Hatley and Roger Manely

Coe, Joffre L.

Charlotte, Observer, The
1970 June 3
1981 April 3

Brickell, John

Cope, Robert F and Manly Wade Wellman

Cumming, William P. (editor)
1958 The Discoveries of John Lederer. Charlottesville (Va.): University of Virginia.

Dickens, Roy S., Jr.

Fischer, Fred W.
1979 Archeological Impact Assessment: Bessemer City Reservoir and Intake Line, Gaston County, North Carolina. Ms. on file, Archaeology Branch, North Carolina Division of Archives and History.
1980  Archeological Impact Assessment: Coffee Creek Wastewater Outfall, Mecklenburg County, North Carolina. Ms. on file, Archaeology Branch, North Carolina Division of Archives and History.

Gastonia Gazette, The
1967  July 8

Hearn, W. Edward, L.L. Brinkley and P.F. Drane

Hudson, Charles

Keel, Bennie C.

Lawson, John

LeGrand, H.E. and K.J. Nundorff

Mclain, Steven
1982  Personal communication.

Orrell, Durward
1981  Personal communication.

Peck, Rodney M.

Perkinson, Phil H.

Pettit, Minnie Stowe

Purrrington, Burton L.
1981  Archeological Investigations at the Slipoff Branch Site, A Morrow Mountain Culture Campsite in Swain

Ragan, Robert A.

Separk, Joseph H.

Sharpe, Bill

Stout, Alan R.
1982 Personal communication.

Willey, Gordon R.

addendum

Richie, James
END
DATE
FILMED
5 - 83
DTIC