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INTRODUCTION

The Mt. Holly Plantation, a 6000 acre tract in Berkeley County, South Carolina owned by the Alumax Corporation, is slated for construction of an Alumax plant facility. At the request of the CH2M Company, an environmental consulting firm hired by Alumax, the Institute of Archeology and Anthropology performed archeological survey of specific areas in the tract that are slated to receive impact from construction and general reconnaissance of the entire tract.

This project was carried out in three phases. The first phase took place December 7, 8, 9, 1977; the second, January 11 and 12, 1978; and the third, February 1 and 2, 1978. Each phase was contracted for separately and had specific objectives. The primary objective of the first phase was to survey intensively two areas within the large tract that have been selected as alternate possible locations for the construction of an Alumax Corporation plant facility (Fig. 1). The second and third phases of the project involved a general reconnaissance of selected portions of the entire tract. These two reconnaissances were performed to give planners a general overview of archeological resources that might be expected to be present on the remaining portion of land, in light of possible future development of the area. Phase two involved a general reconnaissance of the southern portion of the tract and phase three was a reconnaissance of the northern portion (Fig. 1).

The project was conducted by Mark Brooks, James Scurry, John Norris, Eric Poplin and Claudia Wolfe, all of the Institute of Archeology and Anthropology staff.
FIGURE 1. Alumax project area. Survey areas labeled "A" indicate alternate plant locations that were intensively surveyed. Areas labeled "B" and "C" represent second and third phases sampling units.
The Alumax project area provides an ideal test area for investigating hypotheses concerning several problems in historic and prehistoric research. These hypotheses, to be discussed in more detail in the following section, predict occurrence of sites in the project area in both historic and prehistoric times, particularly after about 8,000 B.C.

Investigation of environmental changes in the Southeast since about 23,000 B.C. has intensified over the past few years (Carbone 1974; Whitehead 1973; Watts 1971), and the resulting information has defined a sequence consisting of four major episodes: (1) the full glacial from 23,000 to 13,000 B.C., (2) the late glacial from 10,000 to 8,000 B.C., (3) the post-glacial climatic optimum from 8,000 to 3,000 B.C., and (4) the recent period from 3,000 B.C. to the present.

There is no documented evidence for human occupation during the full glacial period for South Carolina (Michie 1977) although there is evidence for human occupation during this period in other areas of North America (Krieger 1964). During this period boreal forests covered most of the Southeastern Coastal Plain. Pine was dominant in South Carolina with spruce and fir also present.

The late glacial period provides the first documented evidence of human occupation for the South Carolina Coastal Plain (Michie 1977). This environmental period, corresponding to the Paleo-Indian cultural period of 14,000-8,000 B.C., is characterized by small groups leading a hunting and gathering existence adapted to the environmental conditions of the late Pleistocene (Willey 1966). A slight warming trend led to the development of oak-hickory forests in areas where pine had been prevalent (Shelford 1963). Megafauna of the late Pleistocene became extinct by the end of this period, and the human groups adapted to subsistence based on deer, small mammals, and wild plants (Willey 1966).

The post-glacial climatic optimum period of 8,000-3,000 B.C. constitutes the third period. This environmental period encompasses part of the early and middle phases of the Archaic period of eastern North America, 8,000-1,000 B.C. (Willey 1966). During this period oak-hickory forests continued to dominate and reached their maximum extent, although the existence of open savannas is apparent (Shelford 1963).

After about 4,000-3,000 B.C. the oak-hickory forest began to decline in extent and pine again began to dominate on the Coastal Plain. The Late Archaic of about 2,500 to 1,000 B.C. (Willey 1966) corresponds with the decline in oak-hickory type forests.

The next phase of human occupation extends from 1,000 B.C. to A.D. 1,000 and is termed the Woodland period. The construction of burial mounds in some
areas of North America, as well as manufacture of ceramics, are characteristic of this period. The Woodland period subsistence was still based on hunting and gathering, although some horticulture may have been practiced (Willey 1966).

From A.D. 1,000 to 1,600 more complex societies emerged involving construction of larger villages and large temple mounds as well as widespread dependence on agriculture (Willey 1966). This period is known as the Mississippian period. Populations in general were larger during the Mississippian period than before and the political organization was more complex. With European contact, Mississippian cultures declined and were generally extirpated in the Southeast during the 18th century.

The first European attempt at colonization in the New World was made by the Spanish in 1526. The expedition was led by Lucas Vaspez de Allyon and probably landed in the vicinity of Georgetown (South 1972). Although this settlement was short-lived, Spanish interest in the area continued. Later in the sixteenth century, Desoto, in his exploration of the area, made contact with the Indians. The Indians encountered were divided into large, distinct groups, living in villages (South 1972). These groups were highly organized, complex societies, with a subsistence based on agriculture, hunting, and fishing. By the time the English settlement of 1670 in Charles Towne, aboriginal populations of the Coastal Plain were well acquainted with Europeans and their trade goods. These goods consisted of guns, powder and shot, clothing, rum, beads, and other trinkets, and were exchanged for skins and furs. Trade with the Indians flourished until the mid eighteenth century (South 1972; Orvin 1973). In addition to trade goods, new diseases were introduced to Indian populations. The population of the two major groups of the project area, the Etiwan and Sewee, decreased dramatically because of these new diseases (Orvin 1973). In addition further reduction of the Sewee occurred when they attempted to by-pass the middleman in their trade with England and sent a commercial expedition to England in canoes. Many lost their lives at sea and others were picked up and sold as slaves by passing vessels (South 1972).

The climax of the reduction of the Indian populations of the South Carolina Coastal Plain took place from 1715-1716 during the Yemassee War (South 1972). The Sewee completely disappeared after this war and those few individuals surviving probably were assimilated into the culture of the English settlement.
HISTORIC LAND USE OF THE AREA

As European activity in the area of Charleston increased, many colonists began moving up the major drainages of the Cooper and Ashley Rivers inland from Charleston, as larger areas of land were available there. The area near Goose Creek, which is adjacent to the project area, is known to have been inhabited from 1699 (Orvin 1973), with a considerable number of French Huguenots present in addition to colonists of English descent.

Although the British government had planned for Carolina to be a province for planters, the original colonists soon met with difficulty in planting, as the climate and soil of the area were not suited to the European cereals introduced (Orvin 1973). In addition many colonists had little knowledge of agriculture and showed little interest in it, preferring to take part in Indian trade. These factors contributed to a food shortage which prompted the local government to issue an order in 1671 forbidding any type work other than planting (Orvin 1973). Even though the Indians relied heavily on maize agriculture, the colonists showed little interest initially in its production. Soon, however, the colonists realized its many uses (including the making of liquor) and its cultivation became widespread (Orvin 1973). By 1739 corn had become an important crop primarily for home consumption (Mills 1826).

Toward the end of the seventeenth century, rice was introduced from Madagascar (Mills 1826). Rice required a considerable amount of standing water for the grain to mature properly (Lees n.d.; Allston 1843), and soil with a high clay content was also desired as the clay would help hold water. Much of the project area contains soil of this type in addition to marshy areas. Rice fields were created by the construction of dikes and ditches to hold water in specified areas. These dikes and ditches were also used to collect and channel runoff from upland areas into the rice fields in a controlled manner. The construction and maintenance of such vast earthworks necessarily took a large work force. Slaves became more important than in earlier times and were essential for these large plantations. Large plantations therefore consisted not only of a large main house, kitchen and outbuildings including barns and workshops, but also included quarters to house the large number of slaves required to work and maintain the rice fields.

Shortly after the American Revolution there was a shift in rice growing to areas which could utilize the tidal fluctuations of the major rivers to flood the fields. Economic factors forced this shift, as this method of rice production allowed for a smaller work force and produced more grain in some cases (Lees n.d.; Allston 1843).

Cotton and indigo were also both suited to the climate and soil of the project area. Indigo was established in the mid eighteenth century to supplement rice production in the Low Country (Huneycutt 1949). Rice and indigo could both be grown on the same plantation with rice being cultivated in the low, frequently flooded areas and indigo being cultivated in the slightly better drained areas (Mason 1976). Though indigo was a commercial crop, many factors
contributed to the abandonment of it for commercial purposes and the final collapse of the indigo trade occurred during the Revolution when the English subsidy ended and exports to England were suspended. By the end of the eighteenth century indigo was no longer a staple commodity. Some plantations switched to rice cultivation but many were unable to make this transition. Those plantations not suited to rice production turned to cotton (Ramsay 1809). Cotton was suited to the climate and soil of the region, specifically the better drained upland areas, and the development of efficient cotton gins made the production of cotton profitable.
RESEARCH STRATEGY AND SURVEY METHODS

To keep within reasonable time and cost frames while providing useful data, an economic strategy for sampling the 6,000 acres of land that comprise the project area had to be developed. This sampling strategy was designed to reflect the archeological resources in the various topographic and environmental zones present. From this information the archeological potential of the entire tract of land could be estimated. It was hoped that this assessment would provide planners with a view of the types of archeological sites and material that could be expected during subsequent development of the project area.

An archeological site is considered here to be "any place, large or small, where there are to be found traces of ancient occupation or activity" (Hole and Heizer 1978). Ancient is usually defined as anything older than 50 years. For the purpose of the reconnaissance project any site dating prior to 1900 was recorded.

Based upon previous work conducted on the Coastal Plain of South Carolina by the Institute of Archeology and Anthropology (e.g., House and Goodyear 1975; Widmer 1976; South and Widmer 1976), a predictive pattern of the location of prehistoric sites can be constructed. This pattern is based upon the hypothesis that prehistoric populations occupied a certain site in order to exploit the resources available at or near that locality. The resources available at a given site would vary through time as the environment changes. Also, as populations changed through time they would be expected to exploit different resources due to the size of the groups involved, the group's ability to extract a potential resource, and the preference of a group for a particular resource when several choices are present.

Certain localities represent optimal resource exploitation areas. These localities provide the greatest number of potential resources over the longest period of time and are usually found in or near the floodplains of large rivers or streams. From a river and its floodplain an aboriginal population could gather in season anadromous fishes, mussels, wild seeds and fruits, large and small game, as well as migratory waterfowl. These resources are and were potentially available to hunting and gathering people from mid-winter to mid-autumn.

During the late fall and early winter the interriverine uplands of the Piedmont and Coastal Plain, particularly those areas with well-drained and arable soils, have abundant sources of plant foods, principally acorns and hickory nuts. Deer are also attracted to these plant foods and a prehistoric hunting and gathering population could be expected to come to the uplands to gather nuts and to hunt deer.

Between 10,000 and 3,000 years ago the Coastal Plain was covered by hardwood forests composed predominantly of oak and hickory. By 3,000 years ago the Coastal Plain forests were similar to the forests present today being composed primarily of pines with mixed hardwoods (oak and hickory). These forests were quite open and often interrupted by savannahs and marshes.
From these data and the hypothesis of prehistoric site location stated above, the archeologist would expect to find large sites in or along the major drainages of the Coastal Plain. Small sites with low artifact densities dating from the Middle Archaic to the Woodland periods would be expected in the upland areas between the major drainages. The smaller size and lower density of artifacts in these upland sites would be due to the shorter duration of occupation through the seasons. Within the interriverine upland areas, these sites are predicted to occur on high ground close to small creeks and drainages. Interverine flatwoods areas distant from such small creeks are predicted to have low site potential.

Observation of topographic maps of the Mt. Holly Plantation showed it to be in the general upland interriverine area, although several small drainages are present. The sampling strategy was designed to concentrate on the areas of high land lying along the edges of the Laurel and Daisy Swamps that provide access to upland flatwoods resources as well as those available in the small, interriverine drainages. In addition, areas considered to have low site potential were examined to prevent a bias in the sampling strategy. Most of these are upland flatwoods areas quite distant from the small drainages.

Once the sampling strategy was developed an efficient method of examining each sample unit was devised. From the beginning it was recognized that surface inspection of the sampling units would not be sufficient because of extensive ground cover and the potential for buried sites. To give an adequate view of each unit, a system of subsurface testing was designed for each sample unit. Small shovel tests were to be excavated in a systematic manner over each unit and the fill from each test was examined by hand for artifacts. It was felt that this method would reveal buried sites, subsurface features, or sites hidden beneath heavy groundcover.

The first reconnaissance phase examined two alternate areas of impact from the proposed construction of the Alumax aluminum plant. Each of the areas covered 200 acres of land and measured approximately 2,000 feet square. These tracts of land were oriented generally north-south (Fig. 1).

These proposed plant areas were examined by a series of transects. The transects were parallel, oriented north-south, and spaced 250 feet apart. Any open ground along the transect was examined. Small shovel tests, approximately 1 foot square were placed along the transects every 250 feet to check for buried sites and subsurface features. It was felt that a 250 foot interval was sufficient to discover any sites not visible from the surface. In this manner both 200 acre tracts were examined both on and below the ground surface.

The remaining land was examined in two separate phases. In the northern part of the plantation five parcels of land were selected as representative of both high and low potential upland areas and carefully examined for sites. Parallel transects, spaced 300 feet apart, were placed over these areas and all open ground along each transect was examined for cultural material. The spacing of 300 feet was considered adequate to examine the necessary acreage and keep within the time constraints of the reconnaissance project.
In addition to surface observation, small shovel tests, approximately 1 foot square, were excavated to check for buried sites and subsurface features along the transects at intervals of 100 feet. This 100 foot interval was employed to give a better view below the ground surface than the 250 foot interval used in the examination of the two alternate plant locations. Use of the closer interval would be helpful in evaluating the effectiveness of different methods. Also, three road segments were examined on foot with the roadbed, ditches, and adjacent open areas being checked for evidence of previous human occupation.

In the southern portion of the project area, the three parcels of land were examined. Parallel transects were placed over these areas spaced 150 feet apart with all open ground along the transect being checked for cultural material. Subsurface tests, approximately 1 foot square, were placed along the transects every 150 feet. A new interval for the transects and the subsurface tests was implemented because no archeological sites were discovered along any transect during the first two reconnaissance phases. It was hoped the new interval would increase the probability of locating sites without increasing the time spent in the field. Two plowed fields were examined with transects running across the fields at intervals of 60 feet with no subsurface tests. This interval was considered adequate due to the excellent ground surface visibility. In addition, two road segments were examined as in the northern portion.

Typical methods of surface examination along transects are shown in Figures 2 and 3. Figure 4 shows methods employed in excavation of subsurface tests.

During the course of the first fieldwork phase two eighteenth century homesites were discovered with the help of Mr. John Phillips. These were outside the alternate plant locations. Brief historical research identified these sites as early rice plantations, with one house possibly having been built before 1695. A new emphasis was placed on the location of historic sites. Further historical research revealed the possible presence of as many as four additional houses of the same period. Approximate locations of these houses were transferred from old maps (Faden 1780; Cook 1773) to the present U.S.G.S. map of the area. Several of these potential site areas were examined on foot during the second and third phases of the reconnaissance.

Once an archeological site was discovered, the extent of the site was determined by surface inspection and, when necessary, by small shovel tests. If surface features were present a sketch map of the site showing the relationships of the features to each other and to present cultural features such as roads and powerlines, was drawn. In addition, detailed drawings and measurements of surface features were made to provide information on the spatial distribution of each feature within the site and possible correlation to the size of the site, especially in the case of historic structures. At one site, 38BK279, two 0.5 meter test squares were excavated by shovel to a depth of 35cm. The dirt removed was shifted through a 1/4 inch mesh screen. These test pits were excavated to determine if subsurface features were present, the depth to which cultural material was present, the depth of disturbance by plowing, and to recover additional artifactual data concerning temporal setting and function of the site.
FIGURE 2. Surface examination along transect.

FIGURE 3. Surface examination along transect.

FIGURE 4. Excavation of test pit.
Grab samples of artifacts were made at each site. At sites with low artifact densities all of the visible surface material was collected. At sites with high artifact densities only a small percentage of the material present was collected. Diagnostic artifacts were given a greater consideration and therefore made up a large portion of the entire sample. Artifact collections were labeled giving the site number, the survey area designation, and the data collected. Artifacts collected around features were kept separately and labeled accordingly. It was hoped that this separation of material within a site would give indications of the functions of the features around which the collections were made.

Additional analysis of the artifacts collected from each site was conducted in the laboratory of the Institute. After the artifacts were washed, each artifact was examined, identified, and catalogued. The collection and analysis of artifacts were necessary to adequately define each site. Temporal settings and functional data can be determined for prehistoric sites by the identification of certain bifaces, certain types of tools (like scrapers or axes), or the types of ceramics present at the site. Historic sites can also be dated by the identification of certain ceramics, glasswares, smoking pipes, buttons, and various other artifacts. It was also hoped that data on the function of each historic site could be extracted from the artifacts collected at that site. All of this information is necessary to adequately assess the significance of the archeological sites in relation to the Mt. Holly Plantation and the Coastal Plain of South Carolina.
SITE DESCRIPTIONS

38BK279. This is a small multicomponent site at the southern end of a small knoll that is situated on a broad terrace and extends eastward into, and is almost completely surrounded by, Daisy Swamp (Fig. 1). The soil, a grey sandy loam over a yellow sandy loam, is different from the soil of the surrounding swamp which has a high clay content. It is this combination of the high clay content of the soil and the high water table that produces the swamp. Consequently, the knoll, with its sandy loam soil is free of standing water.

Artifacts were sparsely scattered over a 50 by 100 meter area of a plowed field and access road. Early Archaic, Late Woodland and Historic eighteenth century occupations are present at the site. The Archaic component is represented by a fragment of a chert Kirk biface (Coe 1964). Eight sand tempered, plain sherds; two simple stamped sherds; and one fabric impressed sherd, as well as a fragment of a Caraway biface represent a Late Woodland occupation (Coe 1964). The Historic component is represented by one fragment of a kaolin pipe stem and by five types of historic ceramics: one blue edged pearlware sherd; one creamware sherd; one underglaze blue Chinese porcelain sherd; two westerwald sherds; and one delft sherd. It is quite possible, however, that the historic material is not indicative of historic occupation within the site area. The use of partially standing buildings as road fill throughout the project area has been a common practice for some time (John Phillips, personal communication).

38BK280 and 38BK281. 38BK280 and 38BK281 are both historic home sites which may be the remains of an eighteenth and nineteenth century rice plantation. It is believed that one of these two sites is the Thorowgood Plantation. Further historic research will have to be completed before it can be determined whether 38BK280 or 38BK281 is the site of Thorowgood.

Thorowgood was one of the first plantations in Berkeley County. In 1682, 3,000 acres of land were deeded to Joseph Thorowgood (Royal Land Grants). Historic research and early maps date the house to 1695.

38BK280 lies on the eastern end of a terrace that projects into Laurel Swamp (see Fig. 1). The area is forested in pine to the east and south, and fallow fields lie to the north and west. The site has been heavily disturbed by bulldozer activity, which has resulted in the dispersion of artifacts over a larger area. There are artifacts and brick rubble scattered over a 70 by 20 meter area. A portion of a structure, which was perhaps the main house, was bulldozed to provide fill for the road that runs north-south through the site. The foundation of what may have been the front porch of this structure (Fig. 5) and the brick floor of what is believed to be the kitchen, are still intact. Approximately 100 meters west of the bulldozed structures are several piles of brick rubble. It is highly probable that these brick piles are the remains of associated out buildings. Additional work will have to be undertaken in order to establish whether these represent rubble from the main house or from its out buildings.
FIGURE 5. Brick foundation of porch of structure at 38BK280.

FIGURE 6. Circular brick lined well at 38BK280.
The site 38BK281 is situated on the southwest end of a knoll and is almost completely surrounded by Laurel Swamp (see Fig. 1). Although the house is no longer standing there are several features visible above the ground surface, including a circular brick lined well (Fig. 6) and a portion of a brick floor which is believed to be part of a kitchen (Fig. 7). Mr. John Phillips, the manager of the project area, has made two test excavations and has located what appear to be the foundations of the main house (Fig. 8) and the kitchen. Additional excavation will have to be made before this supposition can be verified. In Laurel Swamp to the north and west of 38BK281 there is a system of dikes and canals thought to be the remains of the rice fields. It is not known whether these fields are associated with 38BK280 or 38BK281.

A small grab sample of artifacts was taken from the material Mr. Phillips had found during his test excavations. Artifacts recovered in this sample include 58 fragments of wine bottle glass, 8 sherds of porcelain, 60 creamware, 10 pearlware, 9 English mottled brown stoneware, 6 lead glazed slip ware, 6 delft, 10 early salt glazed stonewares, 1 Buckley ware, 3 Jackfield, 25 lead glazed earthen wares, and 15 sherds of Colono-Indian ware. Mortar, brick, plaster fragments and pieces of window glass were also found. The mean ceramic date calculated for 38BK281 is 1795 (South 1977). There is almost a hundred years difference between the date represented by the artifacts and the date that was provided by historic research, indicating perhaps a long span of occupation at the site.

38BK282. This is a prehistoric Woodland period site with a possible historic component. The site was discovered in the road under the powerline (see Fig. 1). All artifacts were collected from a 25 by 50 meter area of the road cut, ditches and disturbed ground under the powerline. The area has been heavily disturbed by the construction and maintenance of the powerline and access road. The prehistoric material collected consisted of a single quartz biface and 20 very eroded, sand tempered sherds. Historic ceramics, including 1 sherd of pearlware and 7 of ironstone whiteware were found, along with 8 pieces of dark green wine bottle glass and 2 pieces of clear glass. Small pieces of brick rubble were also found in the road. The historic artifacts are representative of the late eighteenth through the early twentieth centuries. Since most of the existing roads in the project area have been built up with the rubble from 38BK281 and 38BK282, it is doubtful that this material represents a historic occupation at this site.

38BK286. This is a small site consisting of two components: a nineteenth-early twentieth century Historic period component and a temporally unknown prehistoric component. The artifacts were sparsely scattered over a 50 by 100 meter area of a plowed field and adjacent road. 38BK286 is situated on a small rise of land that is free of standing water (see Fig. 1). The soil is a dark, organic clayey sand of 15 cm overlying a yellow to orange sand extending to a depth of at least 35 cm. The historic component is represented by a portion of a dispensary bottle; 1 manganese glass fragment; 1 brown beer bottle glass fragment; and 9 sherds of ironstone whiteware. All of these date from the late nineteenth and early twentieth century. A portion of
FIGURE 7. Portion of brick floor of structure at 38BK281.

FIGURE 8. Foundation of structure at 38BK281.
a kaolin pipe stem was also found which dates from the late eighteenth century to the present. The prehistoric component is represented by a single quartz biface fragment.

38BK287. An historic component at this site is represented primarily by a sparse scatter of twentieth century ceramics, although 1 kaolin pipe fragment which could date from the eighteenth century was also found. A collapsed tenant house is located approximately 100 meters away from the area of collection. This suggests that the material collected may represent a twentieth century trash dump. One sand tempered, plain sherd indicates a Woodland component.

The site was located on a small cultivated rise of land next to a creek (see Fig. 1). The soil is a dark, organic, clayey sand of approximately 10 cm over yellow to orange clayey sand extending at least to 30 cm. The area surrounding the field is forested in pines.

38BK288. This is a cemetery situated on a small rise of land (see Fig. 1). It consists of a dilapidated iron fence, five headstones and six footstones. The graves contain the remains of Charles Napoleon Heape (1879-1937), Emma Ann Whaley (1854-1929), John Madison Heape (1848-1923), Mary Baker Whaley (1855-1879), Eliza L. Whaley (1807-1891), and N.B. Whaley (died 1893). The cemetery is overgrown and is presently avoided by farming operations.
Despite the level of investigation employed and the small number of sites found on the Mt. Holly Plantation, the reconnaissance made significant contributions to the ongoing research of Berkeley County and the Coastal Plain of South Carolina. Presently a large number of historic and prehistoric sites are known in Berkeley County and an attempt is being made to reconstruct settlement and subsistence patterns of the people who lived on the Coastal Plain during the last 12,000 years. The reconnaissance of the Mt. Holly Plantation provided new information for consideration when future research in this and similar areas is undertaken.

It was felt that the area of investigation as shown on present topographic maps would have provided hunting and gathering people over the last 8,000 years with a fairly substantial resource base during the late fall and early winter. The presence of a large number of small sites with low artifact densities dating from the Archaic and Woodland periods was anticipated before visiting the project area. The people who occupied the Coastal Plain of South Carolina during Archaic times are thought to have been nomadic hunters and gatherers. This would account for the small scatters of lithic material usually identified as Archaic period sites. During the Woodland period people began following a more intensive schedule of seasonal movements. Groups were probably staying in certain areas (optimal resource exploitation areas) for longer periods of time and returning to these same areas year after year. The construction of burial mounds and the increase in housing structures at sites of this period is evidence of such longer occupation.

The area of Mt. Holly Plantation should have provided the necessary autumn resources to have attracted both large and small groups of hunter-gatherers. There are several possibilities that might explain why the evidence of these people was not found in the project area as anticipated.

One possibility is that the survey methods employed were not sensitive enough to locate the archeological sites present, although it was hoped that the varying intervals of transects and subsurface tests eliminated such problems. Similar methods of reconnaissance had been used before on the Coastal Plain with favorable results with respect to site discovery (Widmer 1976; Brockington n.d.) and were therefore felt to be adequate.

Another possibility is the destruction of the prehistoric sites by large-scale timbering operations. In parts of at least two survey tracts, the ground surface had been badly disturbed by heavy vehicles. Ruts and holes from vehicles and tree stumps nearly 30cm deep were observed by the survey crew in one particular section. In this same area the ruts were as frequent as furrows in a plowed field. Archeological sites with low artifact densities could be effectively hidden and destroyed by such disturbance.

A third, and the most reasonable, possibility is that the expected sites were simply not present. The reasons for the absence of prehistoric sites in a particular area are as complex as the reasons for their existence. The fact
that the expected sites were not found adds as much to the construction of
the settlement and subsistence patterns of the people of the Coastal Plain
as finding archeological sites. By determining why people are not living
at a particular area one can then eliminate similar areas during subsequent
investigation, and therefore, be better able to define hypothesized patterns.

A major factor in the lack of prehistoric occupation on the Mt. Holly
Plantation could be the qualities of the soils in the area. The soils in the
upland sections of the plantation seem to have a high clay content. Standing
water and wetland vegetation were observed on the crests of the large, rela-
tively high areas of the plantation. Some of the small shovel tests produced
ground water at depths of 5-15cm. If all the soils of the Mt. Holly Planta-
tion are similar to those observed in the survey tracts, then the area is not
well-suited to provide the large quantities of autumn resources necessary to
attract hunter-gatherers or even dry places to live while exploiting such
resources. Additional support for this hypothesis comes from the uniqueness
of the soils at 38BK279. According to Mr. John Phillips, the manager of the
Mt. Holly Plantation, the small knoll on which the site is located is the
only area on the entire plantation that has a very loose, sandy soil and is
well-drained.

The areas noted on the maps as swamps are actually low, intermittent
drainages. There is little permanent water or types of vegetation usually
associated with swamps. This could be due to historic land use, i.e., drain-
ing and filling of the swamps to produce farm land, but references to this
have not been found. As these drainages exist at present they would not
provide the resources thought to have been available before the commencement
of the reconnaissance. Continued work, both with previously discovered sites
and new field situations incorporating the soil and swamp data evidenced by
this reconnaissance, will have to be conducted to test further and better
define the prehistoric settlement and subsistence patterns of the South
Carolina Coastal Plain.

If one looks at the soils of the Mt. Holly Plantation in view of historic
development, it is quite apparent that the possible explanation for the
lack of prehistoric sites, the absence of well-drained soils, is a reason
for historic period settlement. Poorly drained soils would be a necessity
if one were attempting to grow rice away from a major source of water. It
is known from historical research that the Thorowgood Plantation, located on
the present Mt. Holly Plantation, was an early (1682) rice growing operation.
In addition, an elaborate system of dikes and ditches was observed in the
western portion of the low area shown on Figure 1 and identified on the U.S.G.S.
map as the Laurel Swamp. It appears that water was being stored in small ponds
located at the head of Laurel Swamp. The water could be drained from these
ponds into rice fields as needed and then drained back into the "swamp." This
is quite a different operation than was employed to grow rice along the tidal
rivers. The rise and fall of these rivers was used to flood or drain the rice
fields.

The comparison of an upland rice plantation, like the Thorowgood Plantation
in the 17th and 18th centuries, to the more common tidal rice plantations would
be extremely important to historical studies. The positive identification of 38BK280 and/or 38BK281 as the Thorowgood Plantation would be necessary if such a comparison were to be undertaken. In addition to this specific study, general information concerning the early development of the South Carolina Coastal Plain during the historic period could be obtained from both sites and would contribute greatly to the cultural heritage of the State.

Information concerning the land use and spatial organization of a large farming operation could also be extracted from research and study of the Thorowgood Plantation from its beginnings in 1682, through divisions in the 18th, 19th and 20th centuries, and its eventual incorporation into the present Mt. Holly Plantation. The significance of these historic sites, 38BK280 and 38BK281, lies in their potential for providing data, and these sites merit special attention if necessary to protect this potential.
RECOMMENDATIONS

Although no archeological sites were discovered in either of the two areas selected as possible locations for the Alumax plant, the general reconnaissances of other areas of the Mt. Holly Plantation indicate that the tract has great potential for providing significant information concerning the historical development of plantation systems in the South Carolina Low Country. Thorowgood Plantation, which was established in 1682 is believed to have been located during this project at either 38BK280 or 38BK281. Its early development and the continuous occupation of the area throughout the eighteenth and nineteenth centuries would give the archeologist an excellent view of the development of this portion of the Low Country during the eighteenth century plus insight into changes in the area during the nineteenth century.

During the reconnaissance a number of maps (Faden 1780; Cook 1773) were inspected, and as many as four structures were shown on them that may be on the Mt. Holly Plantation. If, in the future, further development or construction is planned on the Alumax property, a survey to establish the exact locations of these various homesites should be conducted. This survey should include a thorough search of all land plats, grants, deeds, wills, and other historical documents from which the history of the Mt. Holly Plantation can be compiled. These records would give the approximate locations of the various homesites plus their owners and land use information during the eighteenth, nineteenth, and twentieth centuries. From this an archeologist should be able to locate these sites on the ground.

The data developed during the reconnaissance indicate that 38BK280 and 38BK281 are very likely eligible for the National Register of Historic Places, and we recommend their nomination. The excavation or further testing of 38BK280 and 38BK281, however, is not necessary at present. Should these sites, or other historic sites discovered in the future, be in danger of impact, the excavation or protection of these sites would be imperative. The excavation of such sites would not only provide the data described above but would be an important public relations aspect of the future development of the area.

Additional reconnaissance of the entire plantation to locate prehistoric sites is not felt to be necessary. If in the future, however, specific sections of the plantation that have not already been intensively examined become endangered, intensive survey of these areas would be necessary. Additional testing and/or excavation at the two known prehistoric sites, 38BK279 and 38BK282, is not felt to be necessary at present. If, in the future, these sites would be in danger of impact then the excavation or protection of these sites would be necessary. Hopefully, the functions of these sites could be defined and the reasons for their presence in the area, when other sites are absent, could be determined.
REFERENCES

ALLSTON, R. F.
1843 Memoir of the introduction and planting of rice in South Carolina. Miller and Browne Co., Columbia, South Carolina.

BROCKINGTON, PAUL E.

CARBONE, VICTOR A.

COE, JOFFRE L.

COOK, JAMES
1773 A map of the province of South Carolina with all the rivers, creeks, bays, inletts, islands, inland navigation, soundings, time of high water on the seacoast, roads, marches, ferrys, bridges, swamps, parishes, churches, towns, townships, county parish district and provincial lines. . . Map 31 7/8 x 30 3/4 in., scale ca. 1:600,000. London.

FADEN WILLIAM
1780 A map of South Carolina and a part of Georgia. District of North America, republished with considerable additions, from the surveys made and collected by John Stuart Esq. His Majesty's Superintendent of Indian Affairs. Col. map on 4 sheets 136 x 123 cm., scale ca. 1:320,000. London.

HOLE, FRANK AND ROBERT F. HEIZER

HOUSE, JOHN H. AND ALBERT C. GOODYEAR
1975 An archeological survey of a portion of the Charleston Innerbelt Freeway, Charleston County, South Carolina. Institute of Archeology and Anthropology, University of South Carolina, Research Manuscript Series 83.

HUNEYCU TT, DWIGHT JACKSON
KRIEGER, ALEX D.

LEES, WILLIAM

MASON, ROBERT EUGENE

MICHIE, JAMES L.
1977 Late Pleistocene human occupations in South Carolina. Senior Honors Thesis, Department of Anthropology, University of South Carolina.

MILLS, ROBERT
1826 Statistics of South Carolina including a view of its natural, civil and military history, general and particular. Hurlbert and Lloyd, Charleston, South Carolina.

ORVIN, MAXWELL CLAYTON

RAMSAY, DAVID
1809 The history of South Carolina, from its first settlement in 1670, to the year 1808, published by David Longworth.

ROYAL GRANTS
Royal grants, Vol. 38, p. 61. South Carolina Department of Archives and History, Columbia, South Carolina.

SHELFORD, VICTOR E.

SOUTH, STANLEY

SOUTH, STANLEY AND RANDOLPH J. WIDMER
1976 Archeological sampling survey at Fort Johnson, South Carolina (38CH275 and 38CH16). Institute of Archeology and Anthropology, University of South Carolina, Research Manuscript Series 93.

THORNTON, JOHN AND ROBERT MORDEN

WATTS, W.A.

WHITEHEAD, DONALD R.

WIDMER, RANDOLPH J.
1976 Archeological investigation at the Palm Tree site, Berkeley County, South Carolina. Institute of Archeology and Anthropology, University of South Carolina, Research Manuscript Series 103.

WILLEY, GORDON R.