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An initial archeological survey of the Wachesaw/ Richmond Plantation property, Georgetown County, South Carolina

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by

James L. Michie

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Edward D. Stone, Jr. and Associates sponsored this archeological study of Wachesaw and Richmond Hill plantations. Without their dedication and concern for the archeological record, these cultural resources would have suffered considerable damage. It is through such interests that substantial advances can be made towards understanding the cultural systems and the heritage of coastal South Carolina. Among those gentlemen responsible for funding this study are Ned D. Stone and James F. Haden, project managers.

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THE ENVIRONMENTAL SETTING OF THE WACHESAW/RICHMOND PROPERTY

Physical Environment

Location

Flowing out of North Carolina in a path roughly parallel with the Atlantic coast, the Waccamaw River meanders slowly across the Lower Coastal Plain of South Carolina and enters the upper reaches of Winyah Bay, 20 miles north of Georgetown. As the embayment begins to broaden, the Pee Dee, Black, and Sampit rivers discharge their waters into the Waccamaw River system. The narrow peninsula of land between the river and the ocean is known as the Waccamaw Neck. Set in an environment of truncated sandy bluffs and extensive bottomland forests, both Wachesaw and Richmond Hill plantations are located on the eastern edge of the peninsula where the Waccamaw enters the embayment (Fig. 1).

Geology, Geomophology, and Soils

The Coastal Plain of South Carolina extends from the Fall Line to the coast, a distance of about 120 miles. This geographic province constitutes a thick wedge of sediments that begin at the Fall Line and steadily increase to a depth of about 3,500 feet at the coast. The basal zone of this formation is represented by crystalline and metamorphic rocks that were formed prior to the Cretaceous. The sediments that overlie this basal unit are soils that were deposited during successive cycles of transgressions and regressions of the sea that began in the Late Cretaceous and continued through the Pleistocene. During the Holocene significant changes occurred with the formation of barrier islands, deltas, and estuaries. Presently, change is a continuing process and is observable in beach attrition, prograding dune ridges, and the modification of estuarine landforms (Colquhoun 1965, 1969; Cook 1936; Michie 1980).

The Waccamaw Neck is a relatively recent geological formation that represents a Pleistocene barrier island or bar formation elevated approximately 15 to 25 feet above sea level. As Colquhoun (1969: 28) points out, "The Waccamaw, Little Pee Dee, Pee Dee, and Black rivers each show major deflection from their expected courses as a result of barrier construction during several intervals of Pleistocene time." Given the specific location of this landform (Fig. 1) and its relative elevations, it is probably associated with the Pamlico Formation described by Colquhoun (1969) and Cook (1936).

For the most part, the Wachesaw/Richmond property contains 1,250 acres of relatively flat sandy soils with rather limited topographic relief. The majority of this acreage is situated in a forested environment; however, a small portion on the eastern edge at the Waccamaw is represented by old

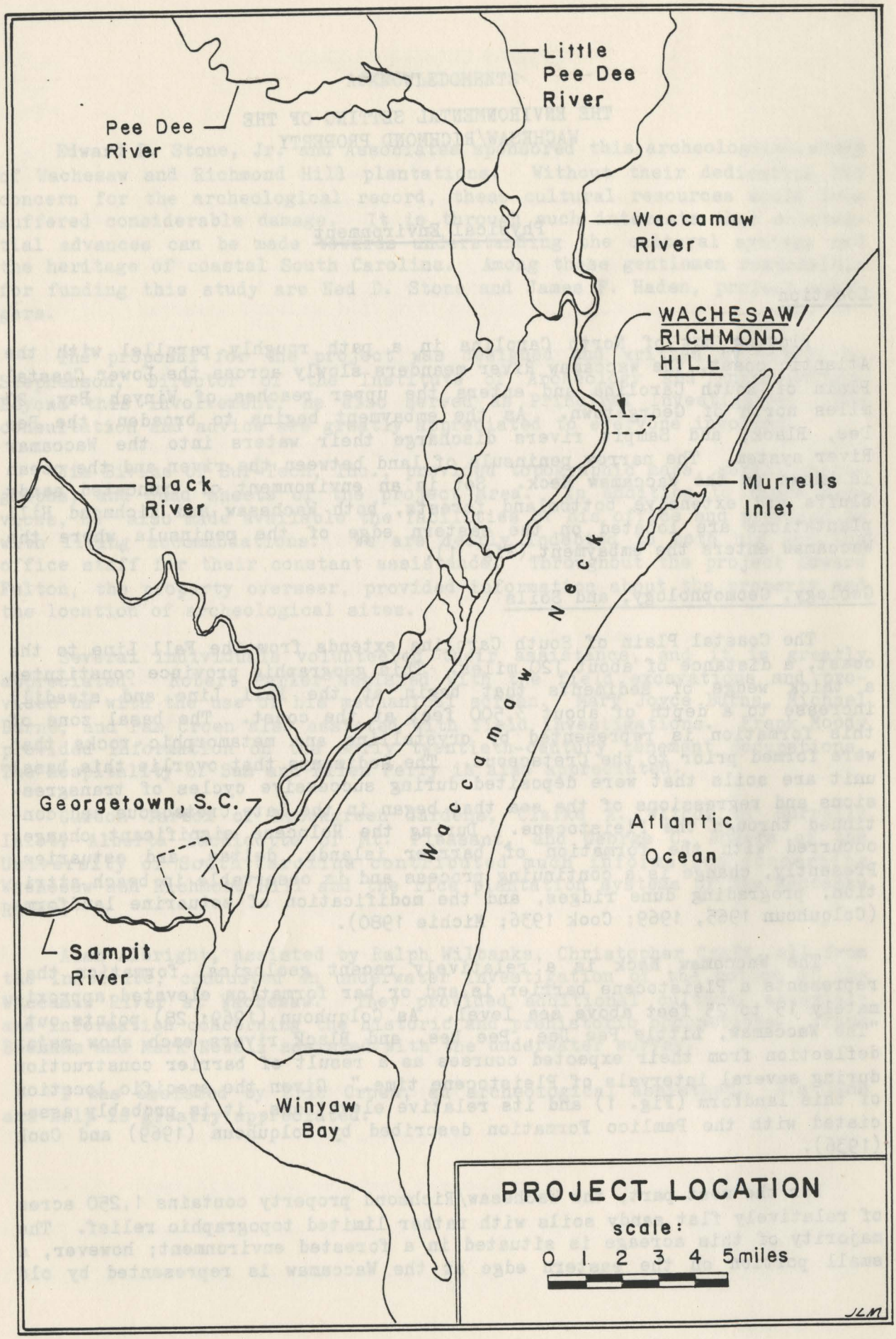


Figure 1. Project Location.

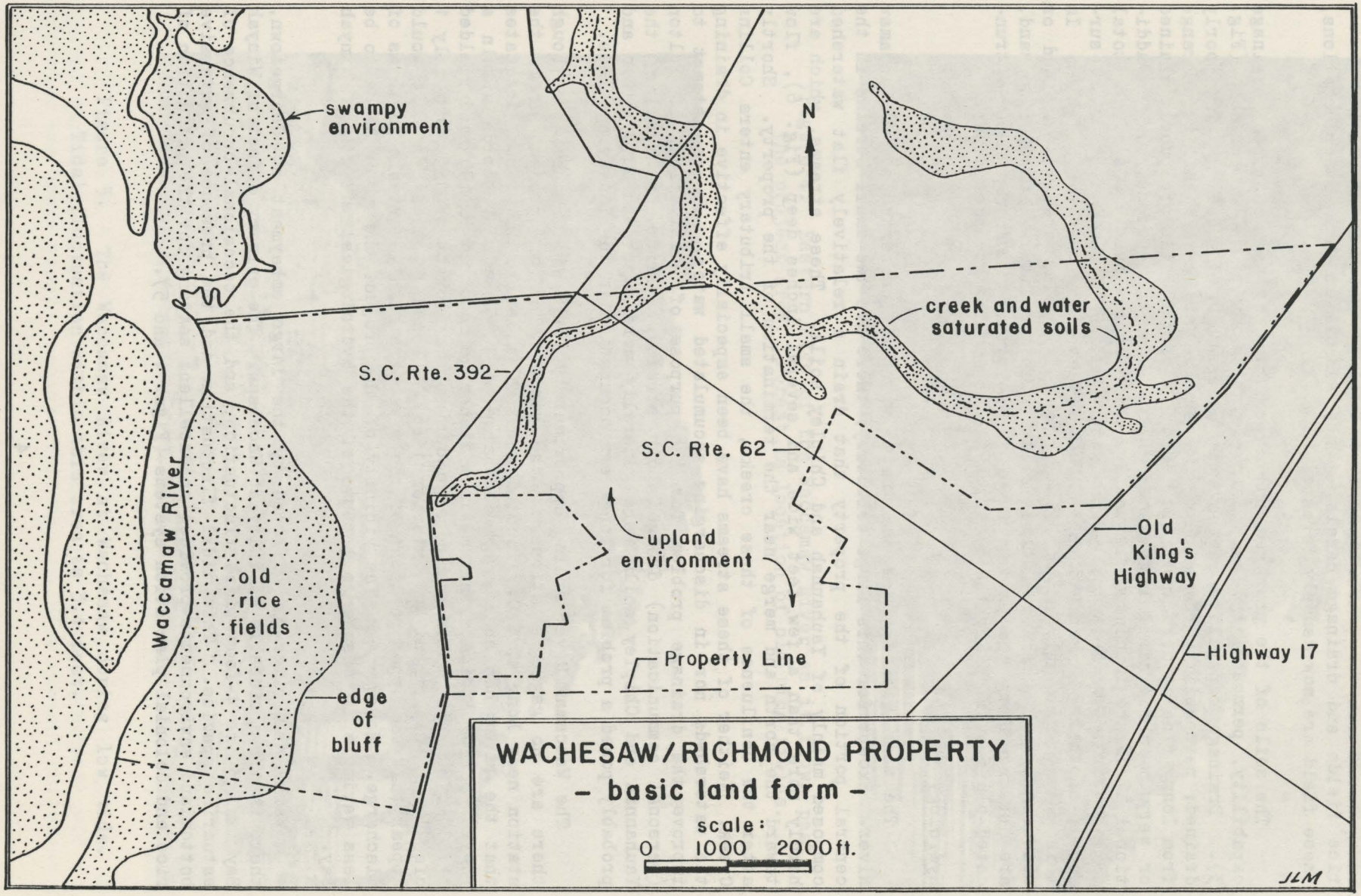


Figure 2. Wachesaw/Richmond Property, basic land form.

rice fields and drainage canals. Once associated with the plantations, these field are now densely forested (Fig. 2).

The soils of the property are diversified in terms of types, drainage capability, permeability, and their elevation above the water table (Fig. 3). Drainage capability ranges from excessively drained to very poorly drained; permeability ranges from moderate to very rapid; soil types range from loamy fine sand to muck. At least 22% of the soils are poorly drained or very poorly drained with water tables near the surface, and an additional 17.6% are inundated frequently. With approximately 40% of the total soils affected by relatively high water tables (0.0-1.5 feet below surface), another 34% remains only 1.5-3.0 feet above the water table. In this perspective only about 25% of the total soils are well drained or excessively well drained. These soils, which constitute sand or fine sand, are located along the eastern edge of the property and represent a truncated bluff overlooking the old rice fields and the Waccamaw River.

Hydrology

The main water system associated with the property is the Waccamaw River. Except for this large tributary, there are two small streams in the central portion of the property that drain a relatively flat watershed composed mainly of Yauhannah and Chipley soils. These streams, which are hardly more than a few feet wide and several inches deep (Fig. 6), flow toward the north and merge near the termination of the property. Shortly after the confluence of these creeks, the small tributary enters Collins Creek. Neither of these streams have been especially effective in draining the watersheds nor in discharging accumulated water. In an attempt to improve the drainage problem for the purpose of cultivation, Ed Fulton (personal communication) dredged both streams. Prior to dredging, the Yauhannah and Chipley soils were generally more saturated with water and probably posed a problem for long-term occupation in the low-lying areas.

The Waccamaw River drains approximately 1,110 square miles. Although there are no gaging stations in the vicinity of the project area, the station near Long's, S.C., located about 20 miles to the north, indicates that the river has an average discharge of 1,154 cfs. Records within a 16-year period indicate that maximum discharge occurred in 1961 and yielded 11,100 cfs, while minimum discharge during the drought of 1954 was only 1 cfs (U. S. Department of Interior 1966). Based on these data it would appear that the upper portions of the river are highly variable in terms of discharge. However, in the vicinity of the project the river tends to be less variable in discharge because of the hydrological effects of Winyah Bay.

While the river is affected by the large embayment at Georgetown, there is not noticeable salinity at Wachesaw. The primary effect of Winyah Bay is a 3- to 4-foot tidal fluctuation, and the occasional occurrence of estuarine species. This tidal fluctuation and the presence of extensive bottomland environments provided an excellent setting for the production of rice and colonial plantation systems (Figs. 4 and 5).

Figure 4. Eastern edge of the Waccamaw River as it flows past the project area. Forest is location of old rice fields.

Figure 5. The Waccamaw River at Wachesaw during low tide. Tidal fluctuation within this area is 3.4 feet.

Flora

A brief literature search indicates that within the general vicinity of the project area only one attempt has been made towards identifying plant species or plant communities. In the summer of 1983, however, Edmisten and Harris (1983) conducted a transect survey of the Wachesaw property. The survey, designed to assist planning and development, describes the existing forest and directly enhances the archeologists' perspective of potential resources available to prehistoric populations.

According to Edmisten and Harris (1983), there are eight separate vegetation types: 1) mixed mesophytic forest, 2) hydric hammocks, 3) floodplain forest, 4) hardwood swamp, 5) freshwater marsh, 6) fields, 7) planted pines, and 8) lawns with trees. These classifications are based on information obtained from color and infrared aerial photographs and field surveys.

The mixed mesophytic forest is similar to the southern mixed hardwood forest described by Quaterman and Keever (1962). The hardwood species are represented by beech (Fagus grandifolia), laurel oak (Quercus laurifolia), Southern magnolia (Magnolia grandifolia), white oak (Quercus alba), sweet gum (Liquidambar styracivlua), mockernut hickory (Carya tomentosa), pignut hickory (Carya glabra), water oak (Quercus nigra), southern red oak (Quercus rubra), black gum (Nyssa sylvatica), and American holly (Ilex opaca). Although this specific forest has not reached full maturity, it has passed through several phases of succession that have practically depleted the presence of pines. The understories within these forests seem to be relatively open or dense (Figs. 6-9).

The hydric hammocks exist toward the eastern section of the property and are located in the vicinity of the two small creeks that flow north to Collins Creek. These hammocks, which were probably wetter prior to dredging the creeks, contain a variety of hydric species represented by sweet gum, black gum, red maple (Acer rubrum), sweet bay (Magnolia virginiana), tulip (Liriodendron tulipifera), swamp chestnut oak (Quercus michauxii), and red bay (Percea borbonia).

Occupying a similar setting, the floodplain forests that exist along the lower reaches of the creeks where dredging has not occurred support a community of tulip, red maple, black gum, water ash (Fraxinus caroliniana), sweet gum, red bay, sweet bay, and swamp chestnut oak trees.

The swampy environment located along the western edge of the property and adjacent to the Waccamaw River is classified as a hardwood swamp. This area has been altered significantly with the clearing and subsequent cultivation of rice during the eighteenth and nineteenth centuries. Alterations and modifications in addition to land clearing would include the construction of barge canals and various irrigation systems to control the inundation of rice fields. These old fields have returned to forest and are represented by a dominance of bald cypress (Taxodium distichum), with lesser amounts of tupelo (Nyssa aquatica), red maple, water ash, and others (Fig. 7).

The interior swamps, detached from the Waccamaw, are either isolated or connected loosely with the interior streams. These areas are maintained

Figure 6. Small unnamed stream east of Highway #392. This stream was dredged about 25 years ago to facilitate improved drainage.

Figure 7. Old rice field now heavily forested in cypress and tupelo. Irrigation and barge canals are still present.

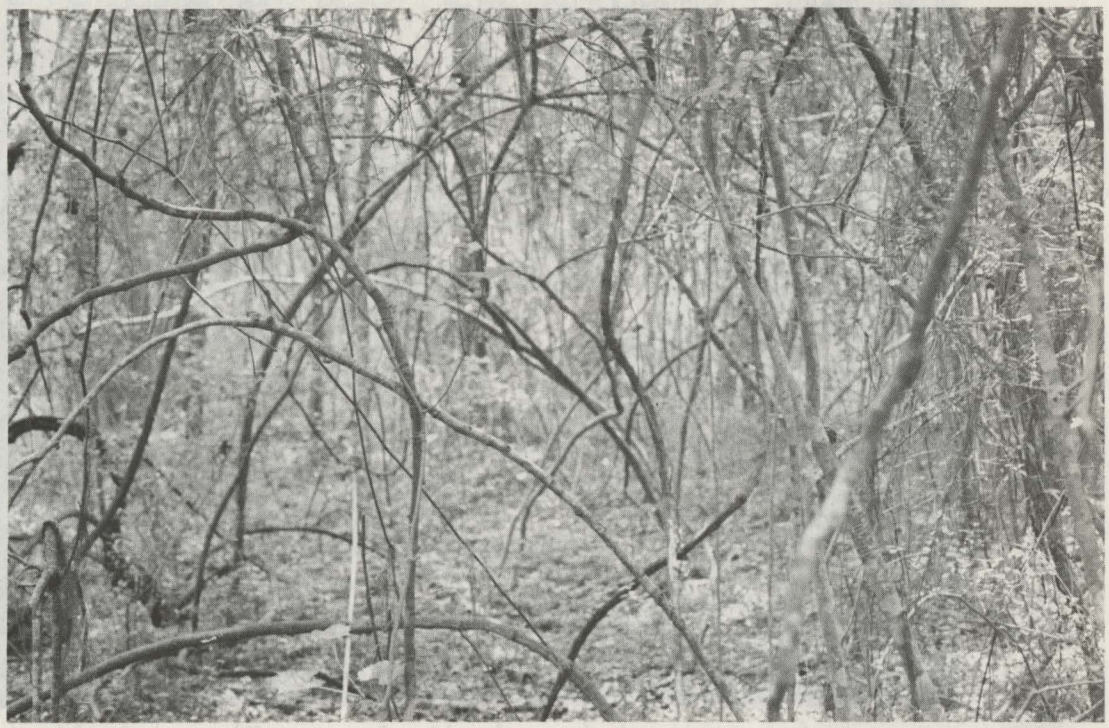


Figure 8. Dense forest composed of oak and pine with an understory of myrtle, yaupon holly, sparkleberry, and other bushes.

Figure 9. Open pine forest near the eastern edge of the property. These trees were planted by Ed Fulton in ca. 1950.

by surface water collected from the watersheds and give support to a community dominated by tupelo and cypress. Also common to these areas are sweet gum, red bay, sweet bay, loblolly bay (Gordonia lasianthus), red maple, and water ash.

The live oak (Quercus virginiana) is present throughout the eastern edge of the property and is found within the mixed mesophytic forest, old house sites, and extensive lawns. These trees range from seedlings, full maturity, and death in full maturity, with diameters occasionally in the range of 6 feet (abh). In the southern portion of the property near Brookgreen Gardens, there is an ancient avenue of live oaks (Fig. 10) leading to the Richmond Hill plantation site. The plantation, according to local informants, burned at the turn of the century and no attempts were made towards reconstruction. Based on the size of the trees and the very fact that no one has lived there since the 1800s, one would be encouraged to believe the trees were planted by one of the original plantation owners, possibly John D. Magill. Several of the large oaks around the Belin-Flagg home site also exhibit large diameters, but do not form any linear pattern. These oaks may represent relic trees that were allowed to remain during the clearing of forest and the construction of the Belin-Flagg home in the 1800s (Fig. 11).

Pines are present throughout the area. In the mixed hardwood forest large loblolly pines (Pinus taeda), although infrequent, compete with the other canopies. Within the understories and seedling layer, however, the pine is relatively absent. The planted pine forests are formed with either longleaf (Pinus palustris) or shortleaf (Pinus echinata), with understories composed of shrubs and herbs, and hardwood seedlings. Because of different episodes in the termination of cultivation, these pine forests are in various stages of succession. For example, the deerfield, which has not been cultivated in several years, is beginning to yield substantial growths of broomstraw (Andropogum virginicus), interspersed with occasional small pines. A planted pine community near Richmond Hill (Fig. 9) exhibits a relatively open understory with occasional small hardwoods, while other such communities are being taken over by hardwoods in a predictable stage of succession.

In general, then, the floral communities are in various stages of succession that range from youthful pine forests to hardwoods approaching maturity. Such succession is no doubt related to the demise of the plantation systems during the late 1800s. Aerial photographs in the Map Depository at the University of South Carolina indicate little difference in the property since 1936, except for abandonment of two rather small cultivated fields. The youngest forest is at least 30 to 40 years old.

Fauna

The terrestrial and marine environments of the property play host to a varied number of species. Throughout the survey a number of species were seen and additional ones were noted in the form of animal tracks that appeared in roadbeds and cultivated fields (Figs. 12-16). Ed Fulton, who has hunted the property for 40 years, also provided much information.

Figure 10. One of many large live oaks that form an avenue leading to Richmond Hill Plantation. These oaks were probably planted by George Magill in the 1800s.

Figure 11. A grove of live oaks located near the Belin-Flagg house site. Although relatively youthful, these trees may date to the late 1800s.

FIGURE 12

MAMMALIAN SPECIES

Species	Common Name
Sciurus carolinensis	squirrel
Scalopus aquaticus	mole
Cricetidae	mice and rats
Odocoileus virginianus	white-tailed deer
Didelphis marsupialis	opossum
Procyon lotor	raccoon
Sylvilagus floridanus	cottontail rabbit
Vulpes fulva	red fox
Mephitis mephitis	striped skunk
Lynx rufus	bobcat
Lutra canadensis	river otter
Chiroptera	bats

FIGURE 13

AMPHIBIANS AND REPTILES

Species	Common Name
Agkistrodon piscivorus	cottonmouth
Agkistrodon contortrix	copperhead
Crotalus spp.	rattlesnake
Lampropeltis getulus	king snake
Natrix spp.	water snakes
Columber contrictor	black racers
Farancia abacura	mud snake
Kinosternon subrubrum	mud turtles
Sternotherus odoratus	musk turtles
Pseudemys spp.	common sliders
Chelydra serpentina	snapping turtles
Terrapene carolina	box turtle
Alligator mississippiensis	alligator

FIGURE 14

AVIFAUNA

Species	Common Name
Ardea Herodias	blue heron
Ardea occidentalis	white heron
Anas platyrhynchos	mallard duck
Anas acuta	pintail duck
Aix sponsa	wood duck
Cathartes aura	turkey vulture
Buteo jamaicensis	red-tailed hawk
Pandion halioetus	osprey
Colinus virginianus	quail
Meleagris gallopavo	turkey
Zenaidura macroura	mourning dove
Otus asio	screech owl
Bubo virginianus	great horned owl
Picidae	woodpeckers
Hirundinidae	swallows
Cyanocitta cristata	blue jay
Corvus brachyrhynchos	crow
Mimus polyglottos	mockingbird
Turdus migratorius	robin
Hylocichla mustelina	thrush
Fringillidae	sparrows

FIGURE 15

ICHTHYIC SPECIES

Species	Common Name
Micropterus salmoides	largemouth bass
Chaenobryttus gulosus	warmouth
Mugil cephalus	mullet
Esox niger	jackfish
Alosa sapidissima	shad
Anguilla rostrata	eel
Cyprinus carpio	carp
Ictalurus spp.	catfish
Lepomis macrochirus	bream
Pomoxis annularis	crappie
Amia calva	mudfish
Roccus chrysops	white bass
Lepisosteus osseus	garfish

FIGURE 16

MISCELLANEOUS AQUATIC SPECIES

Species	Common Name
Callinectus sapidus	blue crab
Uca pugnax	fiddler crab

For the most part, the mammalian species are confined to the cover and rich vegetation of the mixed hardwood forest along the edge of the bluff. The bottomland environment, composed of cypress and tupelo, with numerous ponds and old drainage canals, also offers sufficient biomass for other species. The pine forests, however, have little to offer except cover.

White-tailed deer are not common in the area. They enter the property from Brookgreen Gardens in order to feed on the mast provided by the rich ecotone. Raccoons and opossums share the uplands and bottomlands year-round. Other species, such as bobcats, skunks, and foxes, are rarely seen. Rats and mice, moles, and squirrels are bountiful in the hardwood forests.

Although reptiles and amphibians are not especially frequent in the uplands, box turtles, cottonmouths, and black racers were seen. Crows, sparrows, mockingbirds, blue jays, ospreys, river swallows, and doves were spotted in the area. Turkeys are no longer seen, but Ed Fulton stated that they were present during the 1930s and 1940s.

The fauna of Wachesaw and Richmond Hill is diversified, much of the diversity being attributed to the protected lands of Brookgreen Gardens that exist on the southern edge of the property. Prior to land clearing and subsequent cultivation during the eighteenth century, the hardwood forest extended farther to the east, thereby providing additional cover and resources for terrestrial species. The bottomland environment, presently dissected by numerous barge canals and drainage systems, which allows constant saturation of soils, may once have afforded a richer and more diverse ecosystem capable of generating additional plants. Such a system would have enticed a greater diversity of animal species, especially white-tailed deer (Halls and Ripley 1961). The protohistoric environment would have offered a great deal of biomass for the indigenous American.

Considerations of a Paleoenvironment

During the last 40,000 years the environment of South Carolina has been subjected to continuous change generated by fluctuating climatic conditions. The changing climate, accompanied with various stands of sea level, was influenced by oscillating glaciation. Unfortunately, the effects of glaciation on the physical environment are not thoroughly understood, and consequently little is known about paleoenvironments. As Watts (1971: 676) has stated, the "vegetational history. . .of the Southeastern United States is poorly known." Whitehead (1965: 416) agrees that, "com-

paratively little is known concerning Pleistocene vegetational and climatic changes in unglaciated eastern North America." A literature search for local paleobotanical information indicates that such studies in South Carolina are poorly represented.

The paleobotanical studies by Watts and Whitehead deal with the accumulative sediments found in ponds and lakes, and in many instances these depositional records have marked hiatuses in the sequence of stratification. These geologic data from the areas of Virginia, North Carolina, South Carolina, Georgia, and Florida, when combined, formed a general picture of climatic and vegetational history of the Southeast. Although many other studies are required for specific and localized environments, the research does provide a format of vegetational change through the past 40,000 years (Fig. 17).

While there are problems in palynological and sea level studies, some conclusions can be drawn. During the height of maximum glaciation, about 17,000-20,000 years ago, sea level dropped more than 100 meters, thereby exposing vast areas of the continental shelf. The reduction in sea level extended river channels across a newly developed Coastal Plain some 240 km wide. Following a period of glacial intensity, the Wisconsin glaciers began to retreat northward. Subsequently, sea level rose as water was released from the melting glaciers. During the first several thousand years the rise was relatively rapid (Fig. 18), averaging about 80 cm per 100 years. However, by 8,000-9,000 years ago, the rate of continental submergence had decreased and transgression was reduced to about 3 cm every 100 years. Rising sea level was not a steady, uninterrupted inundation of the Coastal Plain, but rather a fluctuating rise, producing transgressive and regressive phases that yielded eustatic curves (Fairbridge 1961: 556) (Fig. 19).

Recent research in Georgia and South Carolina has indicated that significant environmental change and sea level fluctuations have occurred during the last four millennia. Michie (1973) reported an inundated shell midden that is flooded daily with nearly 1.5 meters of sea water, and DePratter (1977) has demonstrated that a significant fluctuation occurred from about 3,100 to 2,500 years ago. This information is based on buried archeological sites on the leeward edge of barrier islands on the Georgia coast. The presence of specific pottery types of known age was discovered beneath late Holocene marsh peats, silts, and clays, and the radiometric dating of buried and associated tree stumps provided the parameters of time. The buried sites indicated that sea level had peaked and remained relatively stable at an elevation of about 1 to 2 meters below present sea level. For several hundred years the elevation apparently remained constant, but by 3,050 years B.P., the sea was dropping, and by 2,750 B.P., the receding waters had reached an elevation about 3 to 4 meters below the present elevation. For a short period of time the sea remained low, but by 2,550 B.P., it was rising and probably attained an elevation not very different from the present by about 2,300 B.P. (DePratter 1977).

Evidence for multiple fluctuations during the past 4,500 years is reported by Brooks et al. (1979) and Colquhoun et al. (1981). This evidence is based on geological data obtained from marsh facies and the macro flora and fauna that exists in stratified marsh sediments. These combined

FIGURE 17

VEGETATIONAL HISTORY OF SOUTH CAROLINA
(After Watts 1970, 1971, 1980; Whitehead 1965, 1973)

TIME (B.P.)	AGE	VEGETATION	CLIMATE
40,000	Sangamon	Oak/hickory forests, abundance of pine, presence of cypress, sweet gum, etc.	warm trend
35,000		Climate and forests changing	
30,000			cooling
25,000		Northern forests begin to appear	
20,000	Wisconsin full-glacial	Semi-boreal, open forests with jackpine and spruce, oak/hickory percentages low and occurring in alluvial floodplains. Cypress disappearing.	maximum glaciation
15,000		Appearance of beech, alder, and hemlock forests, i.e., northern hardwoods.	
10,000		Climate and forests changing to include oak and hickory.	warming
5,000		Oak and hickory appear in higher percentages. Pine is abundant, also cypress and sweet gum. Present-day forests emerge.	warm trend

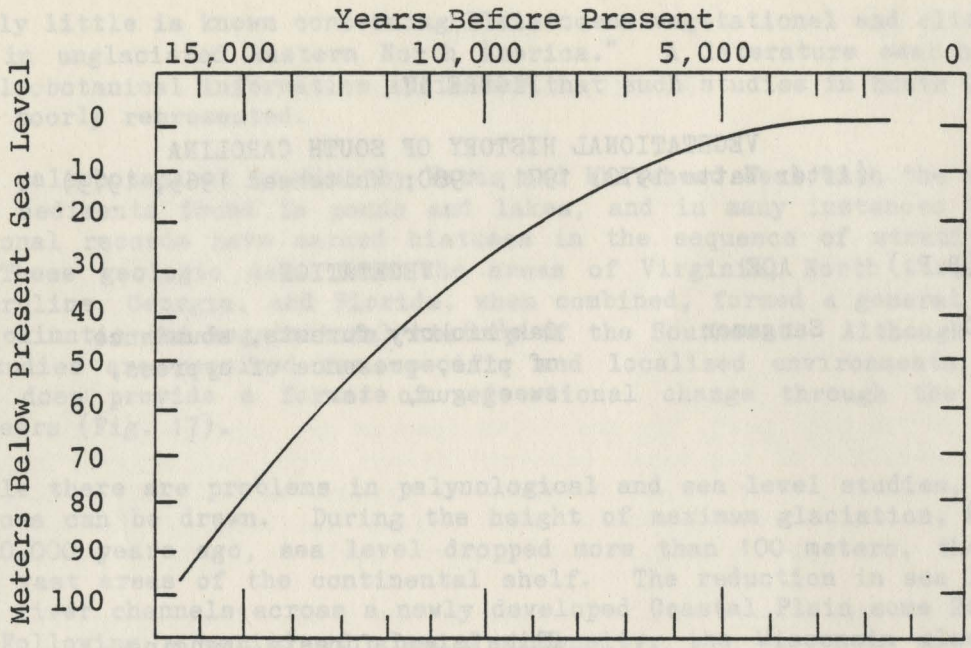


Figure 18. Proposed submergence curve based on radiocarbon dates related to various stands of sea level. (After Flint 1971:326)

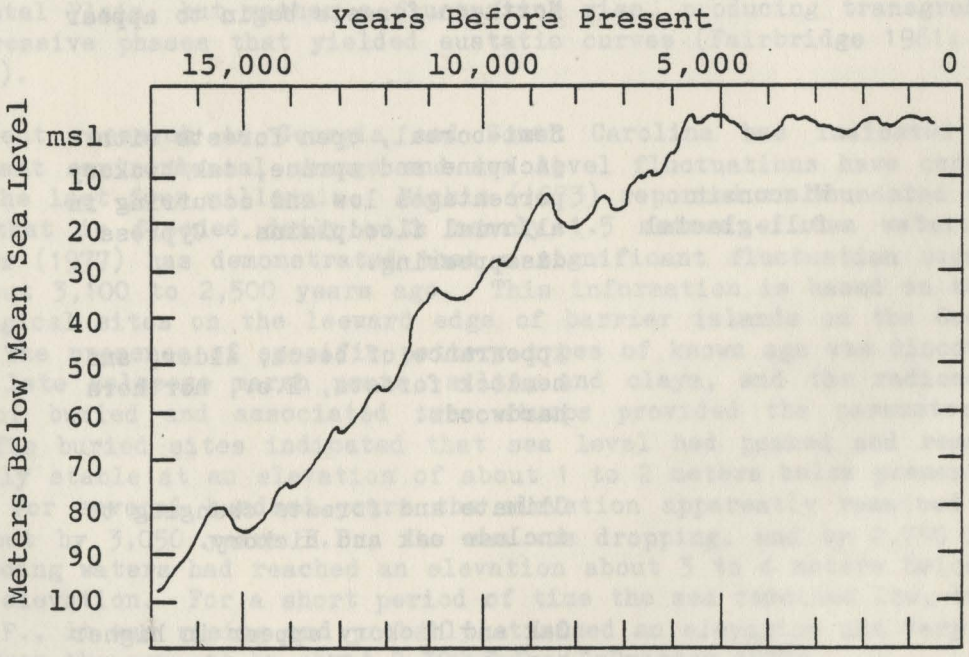


Figure 19. Eustatic sea level curve based on submarine and glacial morphology, including radiocarbon dating. (After Fairbridge 1961: 556)

data indicate both transgressive and regressive phases of sea level fluctuation. Further studies involving estuarine shell middens of various time periods and their specific locations, paired with the location of interriverine sites, provided additional information to support sea level fluctuations that tend to occur every four or five hundred years (Fig. 20).

These successive fluctuations and their effects on the marine ecosystem would have affected the coastal populations of indigenous Americans, especially in terms of settlement and subsistence patterns. At different periods of time and with various stands of sea level, the location of marine and terrestrial resources was constantly changing in regard to spatial position, and such changes demanded human adaptation to the environment.

During the late Pleistocene a barrier island (Waccamaw Neck) formed along the northern coast of what is now South Carolina, and consequently deflected the flow of the Waccamaw and Pee Dee rivers (Colquhoun, personal communication). By at least 25,000 years ago the sea was falling because of increased Wisconsin glaciation (Flint 1971). This fall in sea level extended the Waccamaw River out across a newly emerging Coastal Plain. With a significant climatic change the Sangamon forests had disappeared and were replaced with communities of Jack pine and spruce in the uplands and galley forests of scattered hardwoods in the bottomlands (Watts 1970; Whitehead 1965). The appreciable drop in sea level also brought about significant changes in the hydrology of river systems. With the base level of all rivers extended to the new position of the ocean, some 240 km to the east, all river grades were increased which caused their channels to deepen. Although the amount of stream gradation is unknown, the Waccamaw was probably much lower than at present.

By at least 12,000 years ago the sea was rising and the base levels of rivers were moving to the west. Such movement once again affected river hydrology and consequently the Waccamaw began to rise. The floral environments had adquired various northern hardwoods such as beech, alder, and hemlock, as oak and hickory were beginning to emerge in the upland (Watts 1970). At some time prior to 4,000 years ago the present environment was established and sea level was near its present elevation (Watts 1970). Winyah Bay was probably a fully developed stratified (in terms of salinity) estuary with associated flora and fauna, and the Waccamaw was less affected by tidal fluctuation. Following a drop in sea level some 3,200 years ago, and successive fluctuations that have been monitored by Colquhoun et al. (1981), it would seem reasonable to suspect the elevation of the Waccamaw varied with each successive rise and fall and sea level. The effect of these oscillations on the immediate environment is uncertain, but it seems that it would effect bottomland plant communities. Such changes may include a rise or decline in mast bearing trees, cypress, tupelo, and other such species.

The environment of the project area, then, has not been static; it has been subjected to the dynamics of climate and glaciers. Such changes would have affected the biotic resources, and consequently the organisms that depended on them.

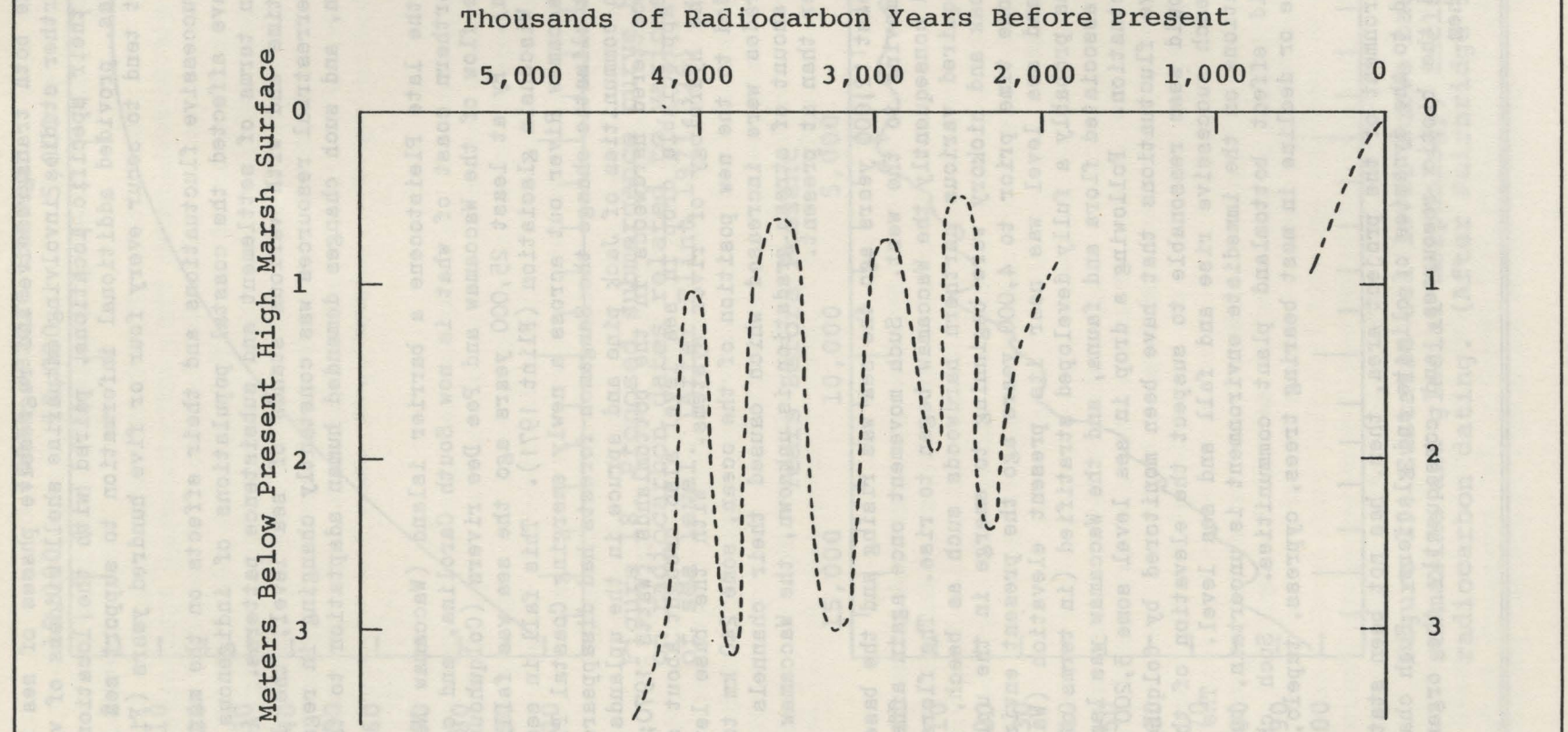


Figure 20. Proposed sea level fluctuations based on geological and archeological information, and radiocarbon dates (After Colquhoun, et al. 1981).

AN ARCHEOLOGICAL OVERVIEW OF SOUTH CAROLINA WITH AN EMPHASIS ON THE LOWER COASTAL PLAIN

Paleo-Indian Period

Before the tenth millennium B.C., nomadic hunters entered what is now South Carolina and other areas of the southeastern United States, with an economy oriented towards the exploitation of now extinct megafauna. These early hunters exploited other game, such as white-tailed deer, and a variety of plant foods. The evidence for early hunters in South Carolina is demonstrated by fluted projectile points found in the Piedmont, Fall Line, and the Coastal Plain. These points are found throughout most of the state, but the greatest density occurs in the lower fringes of the Piedmont and the Coastal Plain. Settlement patterns and land utilization, based on distributional studies (Michie 1977; Charles 1981), show a strong preference for major river valleys and large creeks, but avoidance of rough terrain and areas of high physiographic relief. Areas of the present-day coastline, e.g., Bluffton, Charleston, Beaufort, and Georgetown, have also yielded these early points, but the sea was considerably lower then and the points were not associated with coastal environments during their abandonment.

Although no archeological evidence of exploiting megafauna has been found in South Carolina, the remains of a juvenile mastodon were found at a coastal site near Myrtle Beach that were tenuously associated with stone tools (Michie 1976; Wright 1976). The site, which is actually located at Surfside Beach and slightly north of the project area, is buried beneath eight feet of sandy Holocene sediments in a moist matrix of peats, and was discovered when a small creek was dredged. The mastodon bones, in addition to other mammalian and reptilian remains, were first noted in the backdirt of the dragline operation. A heavily battered hammerstone and a large flake-like implement, both covered with black peat, were found at this site. Subsequent geological studies indicate the fossil-bearing matrix formed as the result of a shallow pond during the last of the Pleistocene, some 11,000-12,000 years ago. Although the mammalian remains and the stone tools were not discovered in context together, their association with Pleistocene-deposited peats would argue for potential contemporaneity.

A similar situation in central Florida was also noted by Hoffman (n.d.). Beneath approximately eight feet of marl and river-deposited sediments and immediately adjacent to the Silver Springs River, Hoffman discovered the remains of two juvenile mammoths directly associated with chert debitage and a Suwannee point. Both geological and botanical analyses of the soils indicated the animals had died in a shallow pond located in a bottomland environment.

The exploitation of proboscidea in wet environments such as creeks and ponds is recorded at several localities in the American Southwest. Mammoths were not the only victims of hunters. Other mammalian species such

as horse, tapir, camel, sloth, and bison were also hunted during the Late Pleistocene environments (Wormington 1957).

Archaic Period

By the eighth millennium B. C., the Pleistocene glaciers retreated into Canada, and environmental conditions were significantly different. The semiboreal forests disappeared and were replaced with northern hardwoods and mixtures of oak and hickory. With increasing climatic changes through the centuries, the present-day forests emerged by at least 5,000 years ago. During these environmental changes, the Archaic Period witnessed changes in settlement, subsistence, and technology in order to contend with major variables such as population growth and environmental change (see Fig. 21).

The Archaic period is subdivided into three stages: Early, Middle, and Late (Griffin 1967). The Early Archaic is a technological expression of the earlier Paleo-Indian Period, but with changes in subsistence strategies. Characterized by the Dalton, Palmer, and Kirk series of bifacial implements (knives/projectile points) (Coe 1964) and specialized tool assemblages composed of endscrapers, burins, gravers, and blades, this segment of the Archaic lasted from approximately 8,500-6,000 B.C. Subsistence was apparently directed towards the specialized hunting of white-tailed deer, as indicated by the high incidence of deer bones in the lower levels of the Stanfield-Worley bluff shelter (Dejarnette 1962), Russel Cave (Weigel et al. 1974), and Meadowcroft (Adovasio et al. 1978). By the end of the Early Archaic, lithic technologies were changing and new biface and tool types began to emerge. The Stanly and Morrow Mountain bifaces, along with the Guilford (Coe 1964), serve as temporal indicators for the Middle Archaic, which lasted from about 6,000-3,000 B.C. During this period of time people were using more forest resources, while maintaining a primary dependence on white-tailed deer. Instead of congregating along the edges of major river valleys, people began to exploit the resources of the interriverine forests. By at least 3,000 B.C. technologies had changed to include the Savannah River Archaic biface as a new tool type (Coe 1964), while subsistence systems were beginning to include shellfish as a dietary supplement. During this time, dramatic shifts in population density and resource exploitation occurred, especially along the Savannah River and the coastal islands that developed as a result of rising sea levels.

In the Savannah River valley, shell middens such as Stalling's Island (Claflin 1931), Groton plantation (Stoltman 1974), and the Bilbo site (Williams 1968) demonstrate a heavy dependence on mollusks and a trend toward sedentism. The coastal areas of South Carolina and Georgia display large rings and middens composed primarily of oyster shells that date to the end of the Archaic and the beginning of the Woodland period (Marrinan 1975; DePratter 1976; Trinkley 1980). Lithic technologies were beginning to move away from the large square stemmed Savannah River biface and began to include a smaller variety of stemmed points. The utilization of steatite began to appear, along with the inclusion of ground stone tools. A further expansion of technologies is reflected in the appearance of socketed antler

FIGURE 21

A CULTURAL SEQUENCE FOR HUMAN OCCUPATION
IN THE LOWER COASTAL PLAIN OF SOUTH CAROLINA

CHRONOLOGY	CULTURAL SEQUENCE	SUBSISTENCE
9,000 B.C.	Paleo-Indian	Specialized hunting and gathering
	Early Archaic	Hunting and gathering
6,000		
	Middle Archaic	Hunting and gathering
3,000		
2,000	Late Archaic	Hunting and gathering Shellfish extraction
1,000	Early Woodland	Hunting and gathering Shellfish extraction Potential for horticulture
500		
0	Middle Woodland	Hunting and gathering Shellfish extraction Probable horticulture
	Late Woodland	
500 A.D.		
	South Appalachain Mississippian	Cultivation of crops with continued hunting and gathering and use of shellfish
1,000		
1700	Historic	Agriculture and demise of indigenous Americans
1980	Present	Industrial

TRENDS: Increase in social complexity, sedentism, population, technology

projectile points, bone pins, and other material possessions manufactured from bone and antler. Quite possibly the origins of these items were rooted in the earlier periods of the Archaic, but unfortunately the acidic soils of non-shell midden sites do not preserve perishable items.

In addition, pottery began to appear along the coast in association with shell middens by at least 2,000 B.C. This pottery, commonly referred to as fiber tempered, is the earliest known ceramic in North America. Shortly after its appearance, a sand-tempered variety also emerged, and both types apparently co-exist in a context of Late Archaic lithic and bone technologies. For this reason, Crusoe (1974) has suggested an Archaic affiliation, while Trinkley (1980) has proposed Woodland affinities. The Archaic was rapidly diminishing by 1,500 B.C. with the production of pottery, the probable introduction of specific cultigens, and a new lifeway.

Woodland Period

The Woodland period, which lasted from about 1,500 B.C. to A.D. 700, is characterized technologically by the production of pottery, the manufacture of small triangular projectile points, smoking pipes, the bow and arrow, the construction of burial mounds, permanent structures, and the cultivation of plant foods (Griffin 1967; Willey 1966; Stoltman 1978). Hunting and gathering continued as a subsistence base, but the development of cultigens supplemented the Indian's diet. The cultigens, in addition to structures and shell midden deposits, provide evidence of increased population and sedentism. Cultigens noted in the eastern United States include squash, bean, sunflower, sumpweed, maygrass, Iva annua, gourd, corn, and Chenopodium (Ford 1978). Presently, however, these specific plant remains have not been discovered in an archeological context in South Carolina. While charred corncobs are known to exist in some of the Mississippian sites in the state (Ferguson 1974), they are not known to exist during the Woodland period.

The ceramics of the Woodland period are characterized by size, shape, temper, and decorative motifs, while projectile points tend to become increasingly smaller and more delicately manufactured. Pottery is recognized through time and space with specific tempering agents such as sand, shell, and sherds, while surface decorations are represented by cord-marking, fabric impressions, net impressions, check stamping, simple stamping, stamping with a carved paddle, and occasional burnishing. Plain pottery also exists. During the Late Archaic and Early Woodland periods, decorations involved punctations and pinched designed (Trinkley 1980; Williams 1968; Anderson 1982).

Shell middens along the coast exhibit pottery sherds from all phases of the Woodland. Many of the middens indicate that only specialized activities were being performed at specific sites, e.g., shucking of shellfish, while other shell middens would tend to argue for a diversity of activities, including extended occupations (Trinkley 1980; Michie 1980).

In many ways the Woodland period was an extension of the Archaic, especially in terms of subsistence and settlement strategies. Although technologies were changing to adapt to sedentism, the population still continued to rely heavily on the forests and streams for sustenance (Spencer and Jennings 1965). Shellfish and cultigens were substitutes, perhaps, for a system otherwise oriented toward an Archaic subsistence pattern.

Mississippian Period

The Mississippian period, also known as the South Appalachian Mississippian regional complex in the Southeast (Ferguson 1971), began approximately A.D. 700 and terminated with the emigration of Europeans to the New World during the seventeenth and eighteenth centuries (Willey 1966). This period is characterized by the construction of large, truncated temple mounds frequently associated with a complex of smaller burial mounds. Subsistence strategies were oriented toward an increased utilization of cultigens, especially corn, supplemented by beans and squash. Hunting and fishing, in addition to the gathering of wild plants, provided other forms of sustenance. Settlements were generally associated with large, nutrient rich bottomland environments capable of yielding a high return of cultivated crops. With its temple mounds, and a large scale shift toward cultivation, this cultural period represents a complex social/political and religious system with a marked degree of sedentism (Willey 1966; Ferguson 1971).

The bow and arrow and small triangular projectile points continued to be manufactured, while earthenware vessels became increasingly larger and were accompanied by a change in surface decoration. These vessels were apparently used for a variety of activities that included cooking, storage, and the interment of human remains. Although surface decorations were usually complicated stamped with arrangements of circles or rectangles, other motifs included applied clay nodes near the rim and reed punctations. Incising was also used, while plain, burnished vessels also existed. The clay was tempered with a variety of elements that included sand, shell, and occasionally fibers (South 1976; Ferguson 1974).

Population increased significantly, as evidenced by large villages and a dramatic increase in the production of cultivated crops, due in large part to a movement away from an egalitarian society to a complex, stratified society, exemplified by chiefs and priests.

The Mississippian period in South Carolina, with its roots embedded in the traditions of the Mississippi Valley, collapsed soon after its introduction to the Europeans, who continued to migrate to the Atlantic coastal states. Within a few decades the aboriginal people had suffered excessively from disease and economic exploitation. By the mid-eighteenth century the indigenous Americans had practically disappeared along with their cultural systems (Waddell 1980).

Historic Period

As early as 1521, the Spanish were sailing along the South Carolina coast in search of treasures and land suitable for settlement. Francisco Gordillo, under the request of Lucas Vázquez de Ayllon, set sail from Puerto de la Plata, sometime in 1520, in an attempt to explore a large portion of the Atlantic coast. On August 18, Gordillo anchored at what later become Santa Elena, and probably made his first contact with the mainland of South Carolina. From Santa Elena, which is now called Port Royal Sound, he sailed northward, and subsequently entered St. John the Baptist (perhaps Winyah Bay) and probably at present-day Chesapeake Bay. On his return voyage in 1521, Gordillo sighted a Spanish caravel, commanded by Pedro de Quexos (Quattlebaum 1956). As it turned out, Quexos was on a clandestine mission (without authority) to capture Indian slaves. Apparently able to convince Gordillo there was a substantial profit in the slave market, both adventurers pooled their resources and began a search for local inhabitants.

Following a period of several days, marked by severe storms, they sighted a high promontory. Although the exact location is unknown, it may have been in the vicinity of Georgetown. As one author states, "This promontory could be none other than Pawley's Island, South Carolina, part of which still stands today, after the storms and erosions of the centuries, some twenty or thirty feet above the sea--a unique spectacle on this otherwise flat coast" (Quattlebaum 1956: 10). Sending a landing party ashore, they discovered natives, who would later be taken as slaves. Very near this high promontory, the Spaniards found a large embayment at a latitude of 33 1/2 degrees which has been interpreted as Winyah Bay (Quattlebaum 1956). Using the embayment as a temporary residence, the Spaniards explored the territory and laid claim to all the lands and its resources. After a brief reconnaissance, the adventurers enticed 140 Indians aboard the caravels and set sail for the slave market at Hispaniola.

With the illegal capture of slaves, the Indians were later freed and were returned to South Carolina. On their return voyage they were accompanied by Lucas Vázquez de Ayllon, who had recently received a patent from King Charles V to plant a colony in the newly discovered land. In July of 1526, Ayllon set sail with six ships and a small vessel to be used as a tender. Aboard the caravels were at least 600 people, which included Negro slaves, women, children, and Dominican friars. Additional cargo included horses, equipment, and provisions necessary for settlement.

Presumably arriving at the Cape Fear River and at a latitude of 33 3/4 degrees, Ayllon missed his original destination. Upon trying to enter the sound, the capital ship was lost in the sandy shoals along with all of its possessions. The crew, however, was saved, and the remaining vessels anchored in Cape Fear. Several days later the ships sailed out and followed a westerly course for a distance of 40 or 50 leagues until they reached St. John the Baptist at a latitude of approximately 33 degrees. Entering what is regarded as Winyah Bay at Georgetown, they proceeded up the Gauldape (Waccamaw River) and established settlement at San Miguel de Gualdape. Not only was part of the trip made by water, but other members of the party, including the horses, walked from Cape Fear along the beach

until they arrived, presumably, at the western edge of Waccamaw Neck. At this location, now in possession of the Baruch Institute, Ayllon established his settlement in August of 1526. The settlement, however, marked by a series of tragedies, was ill-fated from the beginning.

In the heat of the late summer an affliction of malaria spread through the small village and took many lives, including the life of Ayllon. Soon afterwards, a revolt broke out among the leadership, and consequently a number of the settlers were killed. Later, the harsh treatment of the Negro slaves resulted in insurrections and eventual executions. With the approach of winter, the discouraged colonists decided to abandon the project and return to Hispaniola. The return voyage, however, was also wrought with considerable hardships. Not only were people suffering from disease and hunger, but the freezing weather took other lives. When the Spaniards finally arrived in Hispaniola in 1527, there were only 150 survivors of the original 600 (Quattlebaum 1956: 7-31).

The exact location of San Miguel de Gualdape is not presently known, although many authors have voiced their opinions about its location. While the exhaustive research of Quattlebaum tends to indicate that Winyah Bay and the Waccamaw form the river Gualdape and the location of San Miguel, especially in consideration of geographical similarities and the reports of Spanish writers, Paul E. Hoffman (1983) has challenged this interpretation. Accordingly, the Spanish reports were written and based on second hand information several years after the return of the colonists. Furthermore, the original latitudes provided for the location of the river Jordan and Gualdape vary considerably in different Spanish accounts. In concern of Ayllon's petition for exclusive rights to explore the land previously discovered by Gordillo and Quexos, he stated the land was around a latitude of 34 degrees. When he finally obtained permission to investigate and settle the new land, the license specified that the area he was to settle lay between latitudes 35 degrees and 37 degrees north (Hoffman 1983). Based on this information, such a location would not include South Carolina, but rather the coastline of North Carolina and Virginia.

While the interpretations of Quattlebaum have been challenged by Hoffman, Charles Stockell (1977), a local Beaufort historian, argues loosely that San Miguel may have been situated in Port Royal Sound. His basic thesis is that when de Soto arrived at the Indian Village of Cofitachique on the Savannah River, he found Spanish materials. The close proximity to Port Royal, accordingly, would argue for a more southerly location. However, as Baker (1975) has argued, the present archeological evidence would indicate that Cofitachique was located on the Wateree River, a major tributary of the Santee. If Baker is correct, then Cofitachique would have been closer to Winyah Bay instead of Port Royal Sound.

The determination of the exact location of San Miguel is not the purpose of this paper, but its mention is relative to possible Spanish influence within the drainage of the Waccamaw River, and hence, the project area. If the Spanish actually settled on Winyah Bay, then local protohistoric inhabitants may have acquired cultural materials from Spanish contact.

Not long after Ayllon's failure, Hernandes de Soto entered South Carolina from Georgia and traversed portions of the Coastal Plain and the Piedmont in 1540. Although his route is relatively unknown, he may have crossed the Savannah River at Silver Bluff, just south of Augusta, and wandered through the Coastal Plain until he crossed the Congaree River. From this crossing, he may have moved southeast and then north along the Wateree River until he arrived at Cofitachique (DePratter; personal communication; Baker 1975). Pressing northward, he left Carolina and eventually entered Tennessee (Savage 1956: 36).

By 1565, the Spanish had considerable influence in Florida, and they pushed up the coast, establishing and maintaining additional colonies. As a result, Pedro Menéndez de Avilés established Fort San Felipe and the town of Santa Elena at Port Royal Sound on Parris Island. The settlement lasted for 21 years with an exception of a one-year withdrawal due to Indian hostilities during which time the town was burned. Returning after the attack, the Spanish remained until 1587. The Spanish withdrew because of an English raid in 1586 that extended through portions of the Carribean. Too few in number to defend the outlying territories, the Spanish retreated into the relative security of Florida (Wright 1976; South 1979).

Concurrent with the sixteenth-century ambitions for settlement, the French also made attempts at colonization in the coastal areas. Jean Ribault and a group of Huguenots attempted a small settlement of Port Royal Sound in 1562, but after several months of poor management, the colony disbanded. There is also evidence to suggest that a French fortification was constructed near the mouth of the Edisto River in the 1570s, but it too was abandoned (Wright 1976: 31-35). Nearly a century after the unsuccessful attempts at colonization by the French and Spanish, a small English colony under a charter granted to the Lords and Proprietors established a settlement at Albermarle Point near the present city of Charleston. These new settlers were inexperienced in methods of cultivation, and consequently depended on the indigenous Americans for major food supplies. Subsistence farming, however, was later incorporated into a steadily growing economy to include the sale of deerskins, fur, and timber (Wright 1976: 46). During the earlier years, thousands of deerskins were shipped to England, in addition to pitch, tar, rosin, and turpentine, materials necessary for construction and maintenance of English ships.

The utility of the growing colony was quickly realized by England, and trade with the Indians and colonists soon flourished and reached large proportions. In the latter part of the seventeenth century, rice production became an important crop, and by 1700, the coastal area was shipping 300 tons a year to England (Wright 1976: 73). Because rice production required considerable acreage, people began spreading out from Charles Towne to acquire large tracts of select bottomlands. The inland swamps near the coast were ideal for the cultivation of rice because these lowlands provided fertile soils and an abundan e of water, while the areas required only a minimal amount of clearing. Although some rice cultivation occurred in the interior along major river valleys, the coastal areas were preferred. This important money crop lasted for nearly 200 years but the increasing occurrence of floods and coastal hurricanes wrought havoc on the crop, and growers were brought to the edge of economic ruin (Wright 1976: 73-74).

As a competing crop, indigo was being shipped to England in large quantities in the mid-1700s. Developed during the beginning of the 1740s, the crop reached an enormous level of production by 1750. Unlike its competitor, rice, the indigo plants adapted to varying environments, which included the upland areas of the Coastal Plain. Free from the havoc of floods, the crop continued in popularity. With an overproduction of rice during England's war with Spain and France, and a reluctance to export the product, indigo gained a firm hold on the Carolina economy. The production of this product for clothing dye remained steadfast until the invention of the cotton gin in 1791 (Wright 1976: 79-80).

From their inception in the beginning of the eighteenth century, plantations represented a minority of the population. Although some planters may have received large acreage through arbitrary means of Royal Grants, "it is said that generally only families with influence, who could get grants from the Royal governor of the province, came into possession of these (valuable rice) lands; some of the grants contained thousands of acres" (Cook 1926: 80). The great landowners of the mid-eighteenth century had become prosperous, especially in terms of rice, indigo, and forest products, and this prosperity coincided with slave labor. The small farmers, without large tracts of land, political influence, or slave holdings, failed to compete with their wealthy contemporaries. As a result, the small farmers moved inland and away from the area of Charles Towne (Wright 1976: 80).

From Charles Towne, people moved north and south along the coastal areas seeking rich and fertile soils for cultivation. This early migration, which took place shortly after the establishment of Charles Towne in 1670, led to the development of several coastal towns. Among these early towns were Beaufort in 1711, and Georgetown in 1730. Encouraged by free land under the land grant system, people began acquiring properties for investment and agriculture.

With the spread of the plantation system and rice production, the Pee Dee and the Waccamaw rivers soon became the most productive areas within the state. Not only were these areas productive, but they also fostered the growth of social and political affluence that continues to echo in the history of South Carolina. In the Waccamaw Neck the Allston families produced three governors and managed to intermarry with nationally known figures, exemplified in part with the marriage of Aaron Burr's daughter, Theodosia, to Governor Joseph Alston. In the eighteenth and nineteenth centuries, the Waccamaw Neck was a thriving interaction of plantations (Rogers 1978).

HISTORICAL OVERVIEW OF WACHESAW AND RICHMOND HILL PLANTATIONS

Introduction

Although at least three major houses, or the remains of houses, were discovered that relate to eighteenth- and nineteenth-century occupations, no record or plat could be found showing the style of architecture. There are also no records of buildings, such as barns, sheds, and slave cabins, except in the archeological record and in the memories of a few individuals. The Civil War destroyed much information, i.e., the subsequent burning of court houses and historic documents. The plantation system collapsed after the Civil War and the houses were destroyed by the twentieth century. With the loss of historical records and the destruction of architectural structures, the history of Wachesaw and Richmond Hill is obscure.

The Early History

If Quattlebaum (1956) is correct in his presumption that the Spanish occupied a portion of Winyah Bay and that they investigated the surrounding territory, then they may have traversed areas within the project. However, the location of San Miguel de Gualdape is yet to be determined.

During the seventeenth century, protohistoric Indians occupied the bluff at Wachesaw. The evidence of their occupation is reflected in the numerous cultural materials and the human burials that have been excavated and collected during the past 50 years (Trinkley 1979). The Indians came into contact with European traders and acquired various cultural materials, exemplified in part with the appearance of beads and other trade items discovered with burials (Trinkley 1979). With the emergence of Europeans, the Indians suffered from disease and the possibility of being captured and sold into slavery. Although disease and warfare with other indigenous tribes were destructive, slavery was the most destructive element (Rogers 1970: 10).

The Waccamaws were in constant conflict with the early settlers. Not only were they responsible for stealing cattle, but they frequently engaged in armed disputes. Shortly before 1720, the Waccamaws relocated along the Black River to take advantage of the trade system, but the local settlers became uneasy of their presence. This tension exploded in 1720, and consequently the Waccamaws were destroyed (Rogers 1970: 12-14).

By at least 1705, people began acquiring land in the vicinity of Georgetown, and by 1710, the lands were being improved for cultivation and the raising of horses, cattle, sheep, and hogs. In 1711, Percival Pawley obtained substantial land grants on the Pee Dee, Sampit, and Waccamaw rivers. These lands, according to Rogers (1970: 18), were among the first

to be improved. Shortly afterwards, settlers began moving into the area of the Black River, and in 1723 they petitioned for the construction of a church. Among the early settlers were the Allstons, Belins, and Pawleys, families that would later become important in the development of Waccamaw Neck. John and William Allston acquired grants as early as 1732, while George Pawley, the son of Percival, acquired grants in 1737 (Rogers 1970: 16-26).

Concurrent with the 1730s' immigration into the Waccamaw Neck, Governor Robert Johnson instituted the township system, which was designed to entice settlers into the back country. One of the ten townships was established on the Waccamaw, several miles above Georgetown County. The township, known as Kingston, never became as prosperous as the others mainly because of poor land. However, the settlements at Brittons Neck at the confluence of the Pee Dee rivers, and at the Welsh Tract further up the Pee Dee, were much more successful. By the 1740s, these communities were steadily growing in terms of livestock, population, and agriculture (Sellers 1977; Rogers 1970).

With the early acquisition of land, both Wachesaw and Richmond Hill were probably acquired in the 1730s and 1740s. While there are apparently no existing records to document a grant, Lachicotte (1955: 64) states "It is supposed that the plantation (Wachesaw) was once owned by an Alston or Allston, which one is definitely not known." An inspection of early maps indicated that Wachesaw was known to the settlers as Captain Bluff in 1757 (DeBrahm 1757), but the name would suggest a location rather than a residence. This question was dealt with during the reconnaissance survey by testing the bluff at Wachesaw. Early European cultural materials were found scattered across the yard in the vicinity of the Kimbel home, and a test pit disclosed the presence of old brick and oyster shell mortar, accompanied with glass and ceramics, indicating a date in the range of 1740 and 1750. In fact, the excavated materials and those recovered from the beach would indicate a near continuous occupation from about 1740 until 1820. Based on this information, there is little doubt that a structure existed when DeBrahm (1757) completed his map of South Carolina. However, the question of who owned the property is not solved. It may well have been an Allston or a Pawley, for both names appear in the immediate vicinity of the bluff on maps drawn in the 1770s (Cook 1773; Mouson 1775). It is also interesting to note that Wilson's map (1822) does not indicate any occupation shortly after the turn of the century. Either this was an error in surveying, or it may indicate that no one was present. The absence of European cultural materials after 1820 is information that could be used to argue for a discontinuity of occupation.

With the publication of Mill's Atlas in 1825, the name Belin appears at Wachesaw, and for the first time ownership and land use can be traced. The land was presumably acquired from "an Alston or Allston" (Lachicotte 1955: 64) by Rev. James L. Belin. Belin did not live at the edge of the bluff, but about five hundred feet to the east in a grove of oaks (Lachicotte 1955: 67; Ed Fulton, personal communication).

Belin was born in All Saints Parish in 1788 and was probably related to the Belin family who received land grants along the Black River in 1732. Apparently with a successful plantation, he earned a substantial amount of

money and was able to purchase a summer residence, The Hermitage, at Murrells Inlet. Belin later became pastor of the Methodist Church at Murrells Inlet, which today bears his name: Belin Memorial Methodist Church. Having attained success as a planter and clergyman, he died in 1859, from injuries suffered after a fall while driving along his plantation road (Lachicotte 1955: 64).

Prior to his death, James Belin apparently gave all of his property to Dr. Allard Belin Flagg, his nephew. Dr. Flagg's grandfather, Dr. Henry Collins Flagg, was a native of Rhode Island, and served as a surgeon during the Revolutionary War under the command of General Nathanael Greene. At the end of the war, he married a wealthy rice heiress, Rachael Moore Allston, the widow of Colonel William Allston of Brookgreen Plantation. Their son, who was also a physician, Dr. Ebenezer Flagg, married Margaret Elizabeth Belin in 1817, who later gave birth to nine children, including Allard Belin Flagg.

Allard B. Flagg later married Penelope Bentley Ward, the daughter of Joshua John Ward, "the richest rice planter of his day" (Rogers 1970: 256). Their marriage produced two children, Alice and Allard B. Flagg (Jr.), but Mrs. Flagg passed away and left her husband to manage the children, the affairs of the plantation, and her children's share of Joshua Ward's estate. Prior to the turn of the century, Allard Flagg left the plantation and moved to the Hermitage at Murrells Inlet, conveying his entire estate to Hesse E. Belin. At a later date, Hesse gave the property to Allard's daughter, Alice, in 1896. Having dealt with about 50 years of plantation management, Allard Flagg died in 1901.

In addition to the plantation and the Hermitage, Flagg was also responsible for the construction of a small church on the southern edge of his property. The church, named Saint John the Evangelist, was built in an attempt to relieve the burden of long travels to the main church in Murrells Inlet. Plans were made in 1854, and in May of 1857, the church was completed. However, after the Civil War, the membership declined sharply and the church fell into disuse. With the church in bad condition and without its rector, Alexander Glennie, Allard Flagg decided to "tear up the building and to use the lumber for a cottage" (Lachicotte 1955: 65). The lumber and other materials were taken to the beach near Murrells Inlet, but after construction it was destroyed twice by storms. The remaining evidence for this structure was discovered at its original location on Wachesaw. Although Lachicotte (1955: 65) noted that the steps were still present, we could find no evidence of their presence. According to Ed Fulton, the steps were constructed from large blocks of red sandstone and were later removed by various people.

Subsurface testing revealed brick and mortar fragments, lathing nails, construction nails, and small pieces of plaster. Such debris would argue for a structure with a brick foundation, wooden framing, and a plastered interior. The exact size of the structure, however, is unknown. With the death of Allard Flagg, the property passed through a succession of owners during the twentieth century.

In contrast to Wachesaw plantation, less is known about Richmond Hill. Interesting facts in its history point to a relationship between the

Allstons and their immediate families, e.g., Joseph Allston, Theodosia, and Aaron Burr.

Prior to 1825, there is no mention of occupations in the vicinity of Richmond Hill. The archeological testing, although limited, revealed that a residence was constructed sometime in the late eighteenth century and continued through most of the nineteenth century. With the publication of Mill's Atlas in 1825, the name Allston appears on the edge of the bluff between Wachesaw and Laurel Hill plantations. Laurel Hill presently exists to the south of Richmond Hill. There is no historical or archeological record of additional plantations in the area.

Richmond Hill must have belonged to an Allston. Allston ownership is further suspected with the name, Richmond Hill. In the year 1800, Joseph Alston (Allston), who owned The Oaks plantation, which is located several miles to the south of Richmond Hill, met Theodosia Burr, the daughter of Aaron Burr. After Theodosia's father was sworn in as the Vice President of the United States, she and Joseph returned to Waccamaw Neck and resided at The Oaks. There, in an affluent social environment, the daughter of the Vice President must have had considerable influence among the Alstons and other members of the family who spelled their name Allston.

It is most interesting to note that Theodosia's younger years were spent in New York state, living in a large plantation overlooking the Hudson River. The plantation "was a splendid mansion of lofty chambers, mahogany staircases, and Ionic columns. Built in 1760, it was set among oaks and cedars with lawns extending down to the river. During the Revolution Col. Burr had served there under General Washington. In 1789 it had been the home of Mrs. John Adams and had a long history of warm hospitality" (Rogers 1978: 7). Not only did this plantation receive towering political figures such as Thomas Jefferson, Alexander Hamilton, and John Adams, but it also included visits from refugees associated with the French Revolution: Talleyrand, Louis Philippe, and Jerome Bonaparte. Ironically, the name of this splendid plantation was none other than Richmond Hill (Rogers 1978: 7).

With the appearance of Theodosia Burr in 1801 at Waccamaw Neck, and with her marriage to a prominent Alston (Allston), one could easily suspect that Richmond Hill on the Waccamaw received its name through social and political interactions. Furthermore, the archeological record indicates that someone moved in and built a home only a few years prior to Theodosia's appearance on the Waccamaw. While this information fails to demonstrate the reason for attaching the name, Richmond Hill, it does indicate a coincidence with the arrival of the newlwed Alstons.

Richmond Hill, however it acquired its name, became a prosperous plantation and was later owned by Dr. John D. Magill in 1850. With 212 acres of rice land, and 500 to 600 acres of uplands and a summer residence at the seashore, Magill's plantation had 116 slaves and produced 420,000 pounds of rice in 1850. In addition to Richmond Hill, he also owned another plantation named Oregon, further up the Waccamaw River in Horry County. This plantation was composed of 248 acres of bottomland rice lands and 4,000 acres of upland pines (Rogers 1970: 257).

The Magills had lived on the Waccamaw since 1780, and had originated from the Black Mingo region. They had fought in the American Revolution and had contributed fighters to the brigade of General Francis Marion. Dr. Magill married Mary Eliza Vereen, the daughter of Captain William Vereen, and had two sons, John D. Magill, Jr. and William Joseph Magill. After Dr. Magill's death in 1863, his children inherited Oregon and Richmond Hill plantations.

Throughout the early ownership of both pieces of property, rice production appears to have been the main activity. The cultivation of corn and other grain is seldom mentioned by Rogers (1970) and other authors. Possibly these grains were not grown on a large scale because the by-products of rice were frequently used for livestock. As Rogers (1970: 325) points out by citing Mill's, Statistics of South Carolina, "every thing is fed on rice; horses and cattle eat the straw and bran, hogs and fowls, etc. are sustained by the refuse; and man subsists upon the marrow of the grain." Another indication in the shortage of cultivated grains is provided by the fact that "in order to tide over the slaves at Matanzas," corn was purchased "from Eleazer Waterman in Georgetown. The corn was priced at one dollar a bushel in town or at one dollar and 6 1/4 cents if delivered at the plantation. Waterman bought his corn in Cheraw and freighted it down the Pee Dee River in a steamboat." The implication of this statement is that either Matanzas was producing an insufficient amount of corn or that his earlier purchase of corn was insufficient.

An insight into plantation produce is also provided by Rogers (1970: 331): "The basic diet" of slaves "consisted of rice, corn, peas, and potatoes with rations of molasses, salted fish, pork, bacon, and fresh beef. The fresh beef was always given out as soup which was thickened with rice and garden vegetables...." Such rations may have originated in small plots generated by the slaves; on occasions their hogs, chickens, pumpkins, and other personal commodities were purchased by the plantation owners (Rogers 1970: 348). Additionally, the larger plantations seem to have been more self-sufficient, while smaller ones relied on the purchase of various products. In 1842, the Winyah and All Saints Agricultural Society was formed to improve crops, to breed horses, mules, sheep, and cattle, to conduct experiments, and to study animal diseases. Concomitant with this endeavor that exemplifies a concern for growing corn, rice, and potatoes, the Waccamaw Hot and Hot Fish Club and the Pee Dee Planters Club had formed, not only as a social club to pursue entertainment, but also to exchange notes on the production of livestock and specific crops.

In 1851, many of the planters of the Waccamaw were producing excellent crops of corn and rice. In fact, the quality of these crops was so outstanding that delegates were elected to attend the World's Fair in London and exhibit their produce. Dr. Heriot of Waccamaw won a prize medal for Carolina rice, while other noted Carolinians, such as Wade Hampton and William Seabrook, won medals for cotton.

While specific row crops were grown among the plantations of the Waccamaw, and while there was some self-sufficiency among planters in terms of corn, peas, and potatoes, others obviously depended on produce being sold in Georgetown. The reliance on Georgetown by the Belins, Flaggs, and Magills is presently unknown. However, as Rogers (1970: 341) states, "Rice

was Georgetown's contribution to western civilization." The owners of both Wachesaw and Richmond Hill plantations certainly capitalized on this product.

Although the owners of Wachesaw and Richmond Hill failed to receive awards for the production of rice and corn, they were certainly in the mainstream of social and political activities. Throughout their lives they were members of the Hot and Hot Fish Club and were entertained by other plantation owners along the Waccamaw. The planters were a small group, "set above the rest of society, but closely knit together by ties of blood and common interest" (Rogers 1970: 269). With the marriage of Joshua John Ward's dauther to Dr. Allard B. Flagg, a large party was held at Ward's home. Those who attended the party were among the most affluent in the region: the Heriots, Petigrus, LaBruces, Vaux, and Belins from Sandy Island; the Allstons, Izards, Poinsetts, Reads, Westons, and Fords from the Pee Dee area; in addition to all of the families in the Waccamaw.

The Belins, Flaggs, and Magills, while intermarried to aristocrats, apparently never attained state or national recognition in public office. Nevertheless, they were a solid part of the regional scene and contributed heavily to the cultivation of rice and the care of humanity. The Rev. James L. Belin was deeply involved in the Methodist "Mission to the Slaves" (Rogers 1970: 349) and in 1836 formed the Waccamaw Neck Mission. Belin continued to work for a better slave life, but later fell from his buggy and died. However, he had set aside a large sum of money to continue his work with the Methodist church.

At a later date, the Episcopalian Church adopted a similar philosophy on the treatment of slaves. As a result, Dr. John D. Magill, who used his medical talents for the betterment of slaves, joined the church to further its cause. Dr. Allard Flagg, who was responsible for erecting the small church at Wachesaw, was also trusted in the physical examination of slaves. When asked once to evaluate the condition of slaves, he devalued an earlier appraisal by deducting sixteen thousand five hundred dollars from the former estimate. This deduction, and apparently honest evaluation, allowed the entire lot of slaves to be sold to a single buyer without separating families, friends, and possessions (Rogers 1970: 329).

Wachesaw and Richmond Hill were rice plantations and social systems that existed for many decades. They were tied into the social and political figures that dominated Waccamaw Neck during the eighteenth and nineteenth centuries, and they participated in the grand events of aristocracy. Through family intermarriages they became related to each other and shared a great deal of wealth and prestige with governors and senators, and surely with the Vice President's family, Theodosia and Joseph Alston. The grandfather of Dr. Allard Belin Flagg, Dr. Henry Collins Flagg, had even met and dined with George Washington in 1791, and provided the new President with sleeping accommodations at his Waccamaw residence, Brookgreen Plantation (Rogers 1970: 172-173).

The Late History

In the aftermath of the Civil War, the southern plantation systems began to collapse, and those within Waccamaw Neck were no exception. The plantation owners complained that the Union soldiers obstructed a return to normality, while freedmen disrupted attempts to reinstitute former agricultural systems. In addition, many planters were concerned about meeting the requirements of Lincoln's terms of amnesty. Those who were able to meet the requirements were frequently faced with inadequate work forces and steadily increasing debts with lending institutions. The planters who were unable to cope with the problems of Reconstruction abandoned their farms, and consequently. many plantations were either burned or pillaged. In this setting of unrest and uncertainty, the incessant floods and hurricanes of the 1860s and 1870s wrought disaster to potential rice crops and within a few decades the plantations had practically disappeared (Rogers 1970: 416-462).

The ownership of properties quickly passed through a number of hands as potential investments, and soon local investors and northern entrepreneurs began to acquire the land. While some of the lands were partially cultivated, many of them were converted into hunting preserves. In the case of Wachesaw and Richmond Hill, upland cultivation and hunting appears to be typical in land utilization.

In the late 1890s, the burning of Wachesaw plantation marked the end of any further plantation considerations. It was never rebuilt. Shortly after the turn of the century, Richmond Hill was burned through carelessness (Ed Fulton, personal communication). In 1904, Wachesaw passed out of the Belin ownership when it was sold to Samuel Sidney Fraser of Georgetown. Keeping the property for only one year, Fraser sold it to Robert Ernest Beaty, also of Georgetown. In 1910, the property was sold to Clark A. Wilcox of Marion, South Carolina, who also purchased The Hermitage in Murrells Inlet. Using the property for a number of activities, which included cultivation and hunting, in addition to a small store and docking facilities, Wilcox sold it to William A. Kimbel of New York City in 1930. With small portions of the property under cultivation, Kimbel's main interest in purchase was to secure a private hunting preserve. Shortly after the purchase, Edward Fulton was employed to manage and maintain the property as well as construct small sheds and homes. In an attempt to clean the property, Fulton removed the remains of the old Belin/Flagg home and dismantled several small houses that were once slave cabins (Ed Fulton, personal communication). Not only were these structures totally removed, but all brick fragments and other cultural materials were carefully gleaned from the soil during successive cultivation.

During the first decade the property was used primarily as a hunting preserve, but in 1940, Kimbel constructed a large brick residence at Wachesaw Landing overlooking the Waccamaw River. The home, which originally served as a vacation retreat, later became a full-time residence.

An Archeological Overview of the Project Area

The Wachesaw Landing Site, 38GE9, was first investigated in May 1930 as the result of excavating the chimney foundation for the existing log cabin. During the removal of soil, the workmen found several Indian burials which were brought to the attention of the Charleston Museum. Associates of the museum, W. H. Ritter and E. B. Chamerlain, excavated the area and discovered seven adult burials and the remains of another adult and child in the immediate vicinity of the foundation. In addition to the burials, the investigators also found a variety of European trade goods such as beads, and implements of brass and copper. A tin-plated latten spoon and a broken C-bracelet were also among the items, and the presence of copper stains on the bones would suggest the placement of other copper and brass items during interment. These items, accordingly, would suggest European contact during the latter part of the seventeenth century, or early eighteenth century (Trinkley et al. 1983).

Several years later the property caretaker, Ed Fulton, discovered two burial urns and cover bowls while filling in an old roadbed between the Kimbel house and the log cabin. The urns, one of which contained the remains of an infant, were donated to the Charleston Museum. With the construction of the Kimbel house in 1941, five additional burials were found in the excavation of the basement. Unfortunately, these burials were not salvaged, but the workers did note the absence of grave goods. According to Ed Fulton, other burials were found during the excavation of a water-line trench that presently connects the Kimbel home with the log cabin. The fate of these skeletons is unknown.

With an interest in investigating a potential Siouan village associated with the historic contact period, Michael Trinkley began preliminary studies (see Trinkley and Hogue 1979). His literature search and informant interviews generated a journal article that described the location of the Waccamaw Indians and the materials that had been discovered during the 1930s and 1940s. As a consequence of this investigation, he returned to the site in 1982, and conducted a field excavation directed toward the following: the recovery of a controlled sample of cultural remains (especially pottery); the identification and collection of additional human skeletal remains from a documented context; and the identification of the Siouan Waccamaw village believed to be located at Wachesaw Landing (Trinkley et al. 1983). Although he was unable to recover additional skeletal remains, he was able to find a considerable amount of cultural ceramics, suggesting the presence of a village. However, the absence of features, postholes, artifacts, and additional skeletal materials may indicate, as Trinkley (et al. 1983) points out, that the village may be located to the north of his test units, or that portions of it have collapsed into the river. Perhaps the span of occupation was short, thus not leaving an abundance of materials and features. It is possible that the main part of the village is located to the north and to the west of the Kimbel home. Our transect tests during the reconnaissance survey revealed an increase in cultural materials at the apex of the hill, in addition to a greater depth of dark soil, both of which would indicate greater intensity of cultural activities to the west of the Kimbel house. However, before such determinations can be established the site needs intensive testing with large units over the entire area. Only then can this question be answered.

Apart from the investigations at Wachesaw, little research has been done in Waccamaw Neck. Drucker (1980a) conducted a small reconnaissance survey between Garden City and Surfside Beach, and later conducted a survey of Brookgreen Gardens (Drucker 1980b) and the Myrtle Beach Air Force Base (Drucker 1980c). In addition to these investigations, the University of South Carolina became involved in the recovery of extinct animal remains at Surfside Springs (Michie 1976; Wright 1976).

RESEARCH OBJECTIVES

Introduction

The reconnaissance survey of the Wachesaw/Richmond Hill property was designed to facilitate a number of objectives. The first goal was to determine the extent of the Wachesaw Landing Site, 38GE9, and obtain specific information regarding depth, cultural components, and the presence or absence of features. Secondly, we wanted to locate the house sites of Wachesaw and Richmond Hill, the Belin Church (Saint John the Evangelist), and the earthen fortification potentially associated with the Revolutionary War. The survey was oriented toward determining and/or confirming site location; recovering specific materials for occupational dates, i.e., ceramics, glass, and nails; determining size of the structure, if possible; locating associated outbuildings such as privies, sheds, barns, and slave quarters; determining patterns of site location; and locating any other historic sites not mentioned in the literature or through informant interviews.

In addition to locating and investigating the historic components, we also attempted to locate and define any prehistoric sites. Specifically, we wanted to identify the cultural components, to determine site depth, to determine the occupation, and to determine patterns of site location.

Research Design

The antebellum plantations of the South were spatially designed for a large population of people to produce specialized cash crops. The plantations were self-sufficient in terms of daily subsistence needs. Such systemic traits influenced the overall plantation arrangement and settlement pattern (Lewis 1984; Prunty 1955).

Most plantations, according to Prunty (1955: 465-466), consisted of a nucleated village with a cluster of buildings and slave quarters grouped closely around the main house. The slave quarters were generally arranged in compact rows along short roads, forming a square or rectangle of buildings. The service buildings included tool sheds, barns, storage sheds, cotton gins or rice mills, and a blacksmith shop.

During the eighteenth century the southern plantations were centered around the main house and its dependencies (Waterman and Bowers 1969: xiv) and exhibited an arrangement of Georgian symmetry (Waterman 1945: 17), i.e., equal numbers of service buildings and slave quarters flanked along the forecourt of the main house. However, at the close of the century the arrangement of dependent structures began to change from being on either side of the forecourt, to being in line with the orientation of the house.

In terms of plantation location, Rogers (1970: 27) states, "The land system itself had been shaped by the importance of access to water. It had always been the policy in granting lands to narrow the frontage on rivers in order to give as many settlers as possible an opening on them. Each plantation, each farm, had its landing." In a recent archeological survey designed to address the question of plantation location, South and Hartley (1980: 24-25) demonstrated in the vicinity of Charleston that nearly half of all plantations were situated within 100 feet of deep water river channels and were constructed on contour elevations in the range of 5 to 15 feet. "The importance of deep water and high ground simply reveals the obvious, because early settlers were interested in access to the highways of the period, the streams and river channels by which they communicated with their neighbors and the world" (South and Hartley 1980: 25). In order to formulate a research design, these patterns reveal expectations of land form and the archeological record.

In plantation settlement, service structures and slave quarters should exist in close proximity to the plantation house. Generally, there is a systematic patterning and arrangement of architectural structures. These patterns should be easily discernible through appropriate survey methods. The survey strategy was to predict the location of architectural structures associated with these plantations and to discover other historic buildings that might be located on the property.

Prehistoric settlement patterns and site locations have yet to be modeled in the Lower Coastal Plain of South Carolina. There are some general expectations, given the topographic setting, the quality of soils, and the presence of a rich bottomland environment. The bluff is an area with high potential for aboriginal occupation for the following reasons: the soils are highly permeable and well drained; bottomland environments have a high carrying capacity for flora and fauna; the bluff's ecotone is an ideal location for a variety of species, offering access to terrestrial and bottomland organisms; and the undulating topography isolates occupations on knolls and ridges.

The two small creeks along the northern edge of the property have narrow floodplains and limited amounts of deer browse. These areas, therefore, have a reduced carrying capacity. Their adjacent soils are neither highly permeable nor well drained, and the topography is relatively flat, encouraging long-term saturation.

Based on these environmental data, sites would tend to cluster in areas of high biomass and be less frequent in areas of low biomass, i.e., the small creeks. This settlement model would also argue for greater temporal diversity along the bluff, i.e., Paleo-Indian, Early, Middle, and Late Archaic, Woodland, and Mississippian occupations, with limited diversity in the other areas.

There are additional considerations for bottomland environmental utilization along the Waccamaw. There is a possibility that ancient artifacts and related mammalian fossils may exist at depths greater than five or six feet. As early as 1802, John Drayton recorded the presence of Pleistocene fossils that were recovered during the construction of deep canals in floodplain environments. Similarly, Late Pleistocene fauna was recovered

near Surfside Beach during the dredging of a creek (Michie 1976; Wright 1976). The fossilized bones of mastodon, bear, deer, turtles, etc., in addition to stone tools, were removed from a swampy matrix eight to nine feet below the surface. Pleistocene fossils associated with Paleo-Indian occupations have also been discovered in other areas of the Southeast in riverine and swampy environments (Michie 1977; Carr and Dunbar 1983). Considering that the Waccamaw is a mature river system with broad sediment-accumulative floodplains, there is potential for similar associations to exist in the bottomland environments of Wachesaw.

Survey Methodology

Prior to implementing our field strategy toward site discovery, archival maps, topographic maps, and literature were reviewed, and local informants were consulted. The maps and literature provided general information about the plantations and the earthen fortification but did not pinpoint any of the mentioned structures. During the first visit to the project area, Edward Fulton gave us a tour and pointed out the location of plantations and other associated structures.

In order to investigate all of the known structures in the area, transects were established in the immediate location and soil was removed with a posthole digger at 25-foot intervals. The direction of the transect lines were oriented and maintained with a Brunton compass, and the set intervals were established with chaining pins. Soil was removed to at least a 24-inch depth and the recovered materials were bagged with provenience numbers. In the event that materials were deficient in quantity, or that the area of occupation was difficult to define, other transects were used to locate and isolate occupational debris.

Wachesaw Landing, 38GE7, was investigated in a similar manner. Because archeological materials had been removed from a large area on the apex of the bluff, we utilized the U.S.G.S. triangulation markers as datum points and extended transects in a north/south and east/west direction. The transects were also controlled with a Brunton compass, and the soil was removed at 25-foot intervals. Each provenience point was excavated to a depth of 24 inches, or until sterile sand was encountered. When the U.S.G.S. datum points could no longer be used, other datum points were established at provenience points along the transects. At the northern edge of the site, a power pole served as the final datum point.

With a substantial increase in site density at the southern edge of the Kimbel home, a three foot square test pit was excavated to determine the presence or absence of cultural features. This pit demonstrated that cultural materials existed in a relatively stratified context.

All roads, paths, cultivated fields, and other areas of surface exposure (see Figs. 22-25) were fully investigated by walking and making 100% surface collections. Areas around the plantation were tested with transects (100-200 foot lengths) in an attempt to locate additional structures. The knolls and ridges along the western bluff were also tested in a similar manner (Fig. 22), as were the well-drained soils along the small

Figure 22. The use of transects and posthole diggers was an effective means of testing in dense brush and open areas.

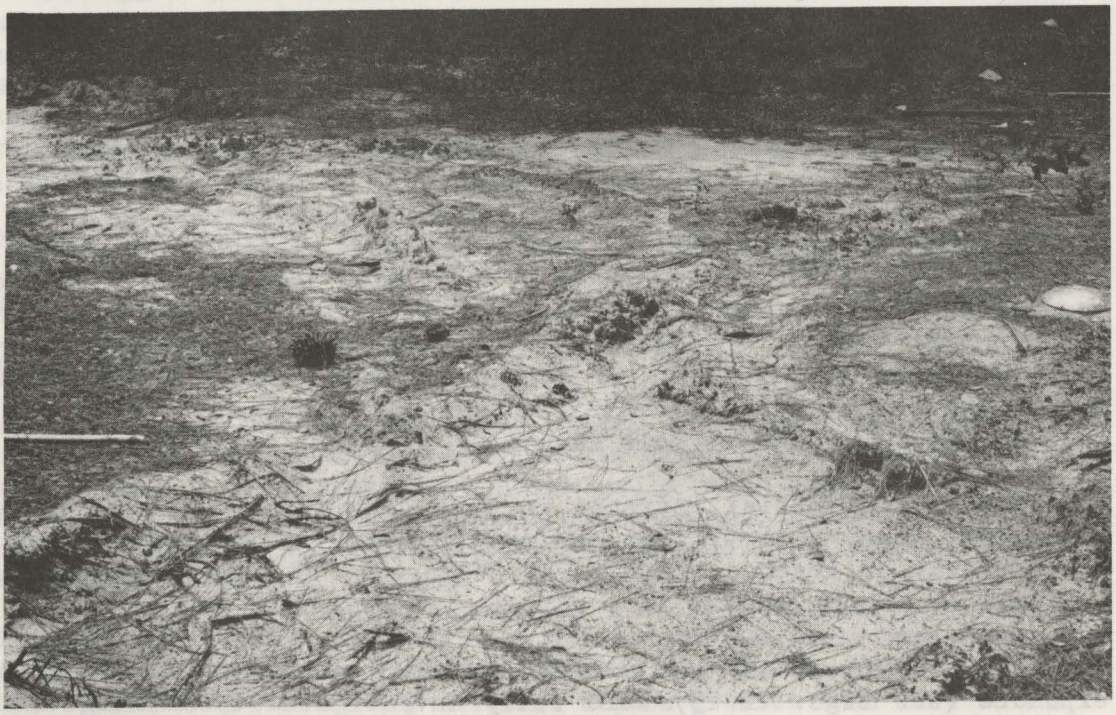


Figure 23. Highly disturbed areas, such as this local trash dump, provided visibility during the walk-over survey.

Figure 24. The main road leading from Wachesaw to Richmond Hill, and other such roads, provided surface visibility and the opportunity to discover sites.

Figure 25. The deerfield, and other small cultivated plots, furnished additional means of site detection.

creeks. In an attempt to verify the postulate that sites would tend to be less frequent along the small creeks, we went outside of the property lines and walked the cultivated fields adjacent to these drainages.

Areas that demonstrated a relatively high density of cultural materials were more intensively investigated by shortening the transect intervals to 10 feet, establishing perpendicular transects, and excavating test pits for site depth and temporal diversity.

These various methods allowed for a comprehensive reconnaissance survey and supported the postulate that sites clustered along the bluff and were less frequent in the zones of poorly drained soils with low permeability. The survey also discovered historic structures that were unknown by local informants.

SITE DESCRIPTION AND EVALUATION

Introduction

Thirty-one archeological sites were discovered during the reconnaissance survey. Among these 23 were historic sites, and the remaining ones were prehistoric occupations. The sites, however, were not mutually exclusive. In some instances, such as Wachesaw Landing and the Richmond Hill Barn site, the remains constitute multiple occupations, both historic and prehistoric. While there are no standing structures to indicate historic occupations, the archeological record is identifiable through surface deposits such as collapsed chimneys, brick foundations, and subsurface scatters of cultural materials such as glass, nails, and ceramics. Although it is difficult to assign function to structural remains, the historic sites have been tentatively identified on the basis of oral tradition and spatial patterning. Such sites would include the main house, slave quarters, barns, and other service buildings.

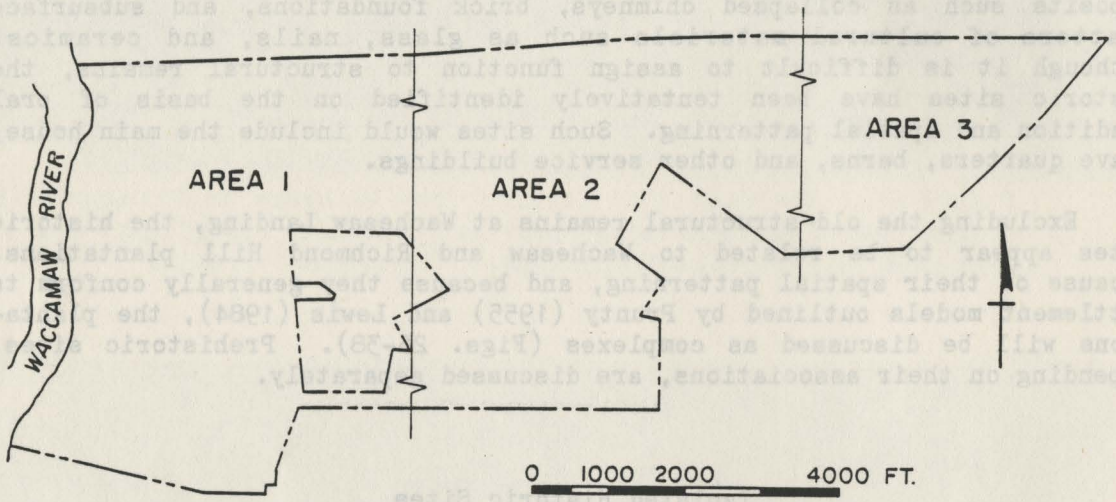
Excluding the old structural remains at Wachesaw Landing, the historic sites appear to be related to Wachesaw and Richmond Hill plantations. Because of their spatial patterning, and because they generally conform to settlement models outlined by Prunty (1955) and Lewis (1984), the plantations will be discussed as complexes (Figs. 26-38). Prehistoric sites, depending on their associations, are discussed separately.

Isolated Historic Sites

38GE7 (Wachesaw Landing)

One of the main objectives of the survey was to determine the spatial extent and subsurface integrity of Wachesaw Landing. The site's spatial extent, both horizontally and vertically, was tested through transects and sampling units. The greatest amount of prehistoric materials was in the vicinity of the Kimbel home and on the apex of the knoll. With increasing distance from the knoll, the cultural materials became less frequent. By utilizing the U.S.G.S. "REFERENCE" marker south of the Kimbel home, the main occupation can be defined spatially: to the east for a distance of 350 feet; west to the edge of the bluff; to the south 175 feet, and to the north 500 feet.

The soil profiles in the area of intense occupation indicate black soil from 12 to 15 inches. Below the dark soil is brown soil to a depth of 18 inches where it begins to contact with lighter sand, although variable at different locations. The dark upper zone contains the majority of cultural materials associated with the Late Mississippian and historic Waccamaw Indians, although pottery sherds and other materials continue into the



KEY MAP FOR SITE LOCATION

NS - (11/83) - ERD

Figure 26. Key map for the location of specific areas and sites.

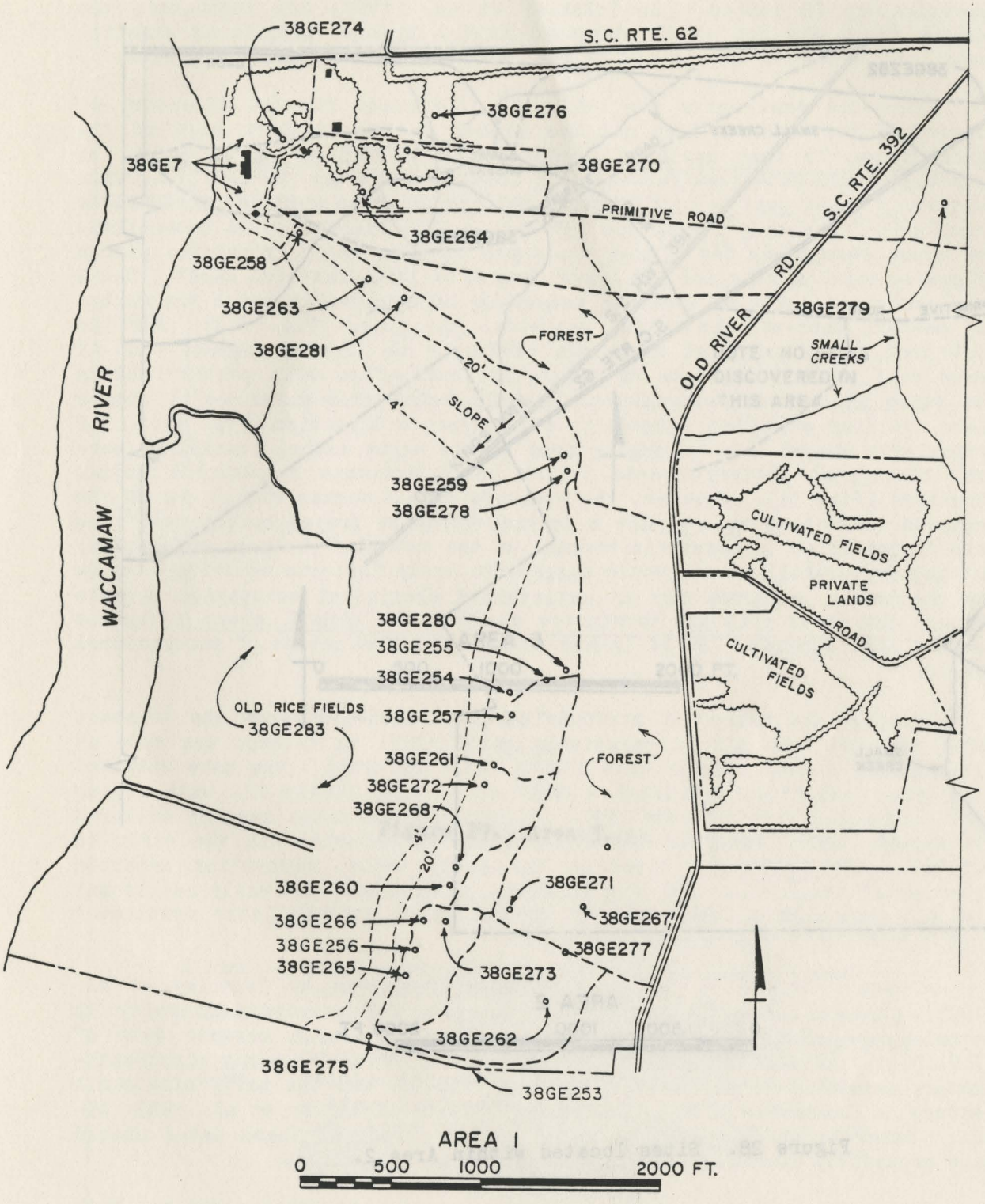


Figure 27. Sites located within Area 1.

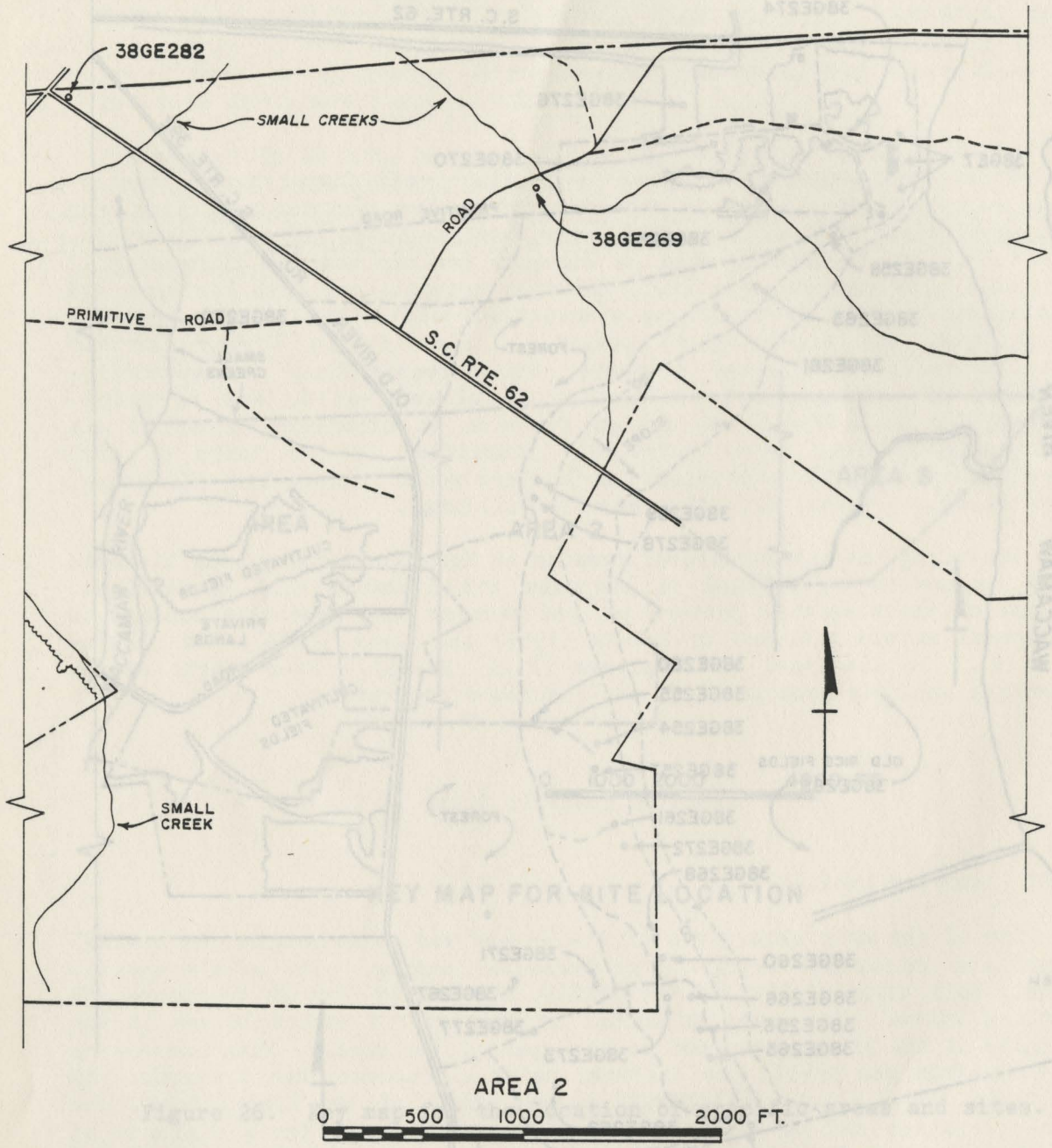


Figure 28. Sites located within Area 2.

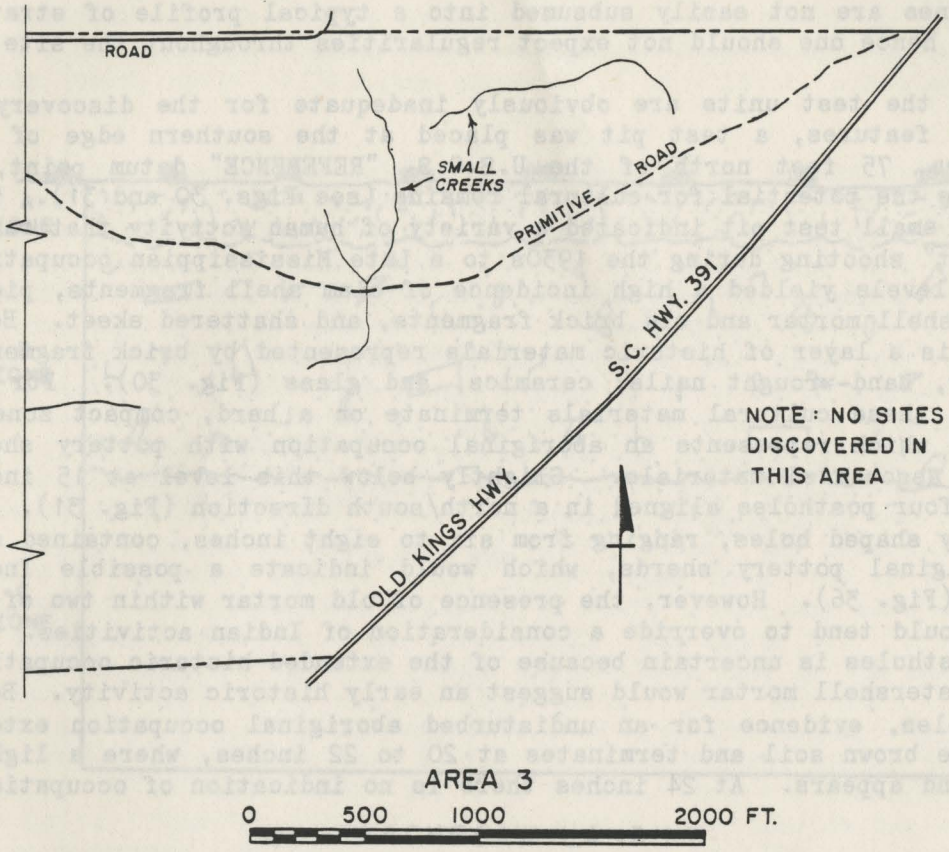


Figure 29. Area 3.

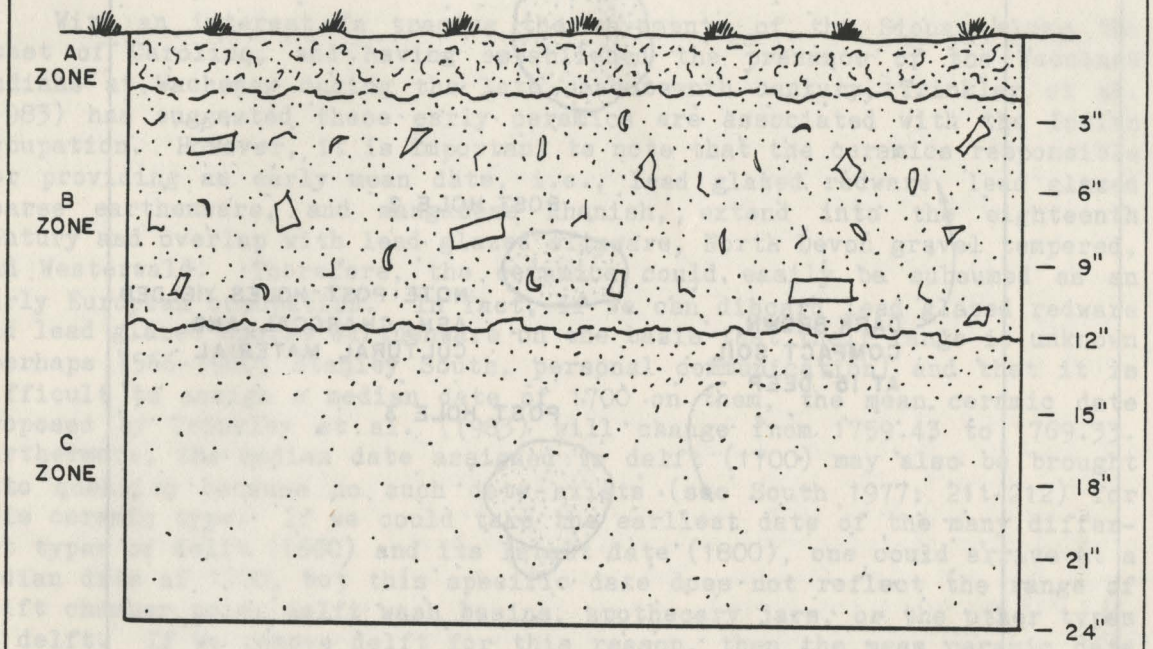
brown zone. With the appearance of white sand the occupation is no longer present. The aboriginal occupation, therefore, is confined to a zone of approximately 20 inches. As Trinkley et al. (1983) has indicated, the various zones are not easily subsumed into a typical profile of stratigraphy, and hence one should not expect regularities throughout the site.

While the test units are obviously inadequate for the discovery of subsurface features, a test pit was placed at the southern edge of the Kimbel home, 75 feet north of the U.S.G.S. "REFERENCE" datum point, to investigate the potential for cultural remains (see Figs. 30 and 31). This relatively small test pit indicated a variety of human activity that ranged from "skeet" shooting during the 1930s to a Late Mississippian occupation. The upper levels yielded a high incidence of clam shell fragments, pieces of oyster shell mortar and old brick fragments, and shattered skeet. Below this zone is a layer of historic materials represented by brick fragments, old mortar, hand-wrought nails, ceramics, and glass (Fig. 30). For the most part, these cultural materials terminate on a hard, compact zone of brown soil which represents an aboriginal occupation with pottery sherds and other associated materials. Slightly below this level at 15 inches there are four postholes aligned in a north/south direction (Fig. 31). The irregularly shaped holes, ranging from six to eight inches, contained several aboriginal pottery sherds, which would indicate a possible Indian structure (Fig. 36). However, the presence of old mortar within two of the features would tend to override a consideration of Indian activities. The date of postholes is uncertain because of the extended historic occupation, but the oystershell mortar would suggest an early historic activity. Below the postholes, evidence for an undisturbed aboriginal occupation extends through the brown soil and terminates at 20 to 22 inches, where a lighter colored sand appears. At 24 inches there is no indication of occupational debris.

Although the number of historic ceramics recovered from the transect units and the test pit is relatively small (29), an attempt was made at establishing a mean ceramic date (South 1977: 217-218). The date obtained from this assemblage indicates a mean of 1774.13 (Table 1), with median dates extending from 1713 to 1857. Although these dates suggest cultural continuity, there seems to be a clustering of materials in the early to mid-1700s, and another cluster in the early 1800s, suggesting separate episodes of occupation. If this is actually the case, the early settlement yields a mean ceramic date of 1737.78 (Table 2) and the later settlement with a mean of 1811.40 (Table 3).

A larger sample of historic ceramics recovered by Trinkley et al. (1983) produced a different set of dates. With greater diversity in ceramic types and frequencies, they established a mean ceramic date of 1768.13 (the date is in error; it should be 1759.43). The early eighteenth-century materials yielded a mean date of 1718.98, and the early nineteenth century is indicated by a mean date of 1819.18 (Trinkley et al. 1983: 45-46). Based on the analysis of 203 historic ceramics, these dates should more accurately describe the range of historic occupations.

The meaning of these dates, however, is not altogether certain. With the presence of early ceramics, kaoline pipes, black glass, and hand-wrought nails, one could easily make an argument for an early European



WACHESAW LANDING
TEST PIT
38GE7

scale:
0 3 6 9 12 in.

A ZONE — 2 1/2" OF RECENT FILL, DARK BROWN SOIL WITH FEW CULTURAL MATERIALS.

B ZONE — 9" DEPOSIT OF OLD BRICK, OYSTER-SHELL MORTAR, HISTORIC CERAMICS, GLASS, HAND-WROUGHT NAILS, CLAM SHELLS, AND INDIAN POTTERY. SOIL IS BROWN AND COMPACT.

C ZONE — PREDOMINATE INDIAN OCCUPATION AND FEW HISTORIC MATERIALS. POST-HOLES NOTED AT CONTACT ZONE. DARK BROWN, COMPACT SOIL AT ZONE OF CONTACT. SOIL BECOMES LIGHTER WITH INCREASING DEPTH. CULTURAL MATERIALS TERMINATE AT 24".

JLM

Figure 30. Wachesaw Landing test pit profile and cultural units.

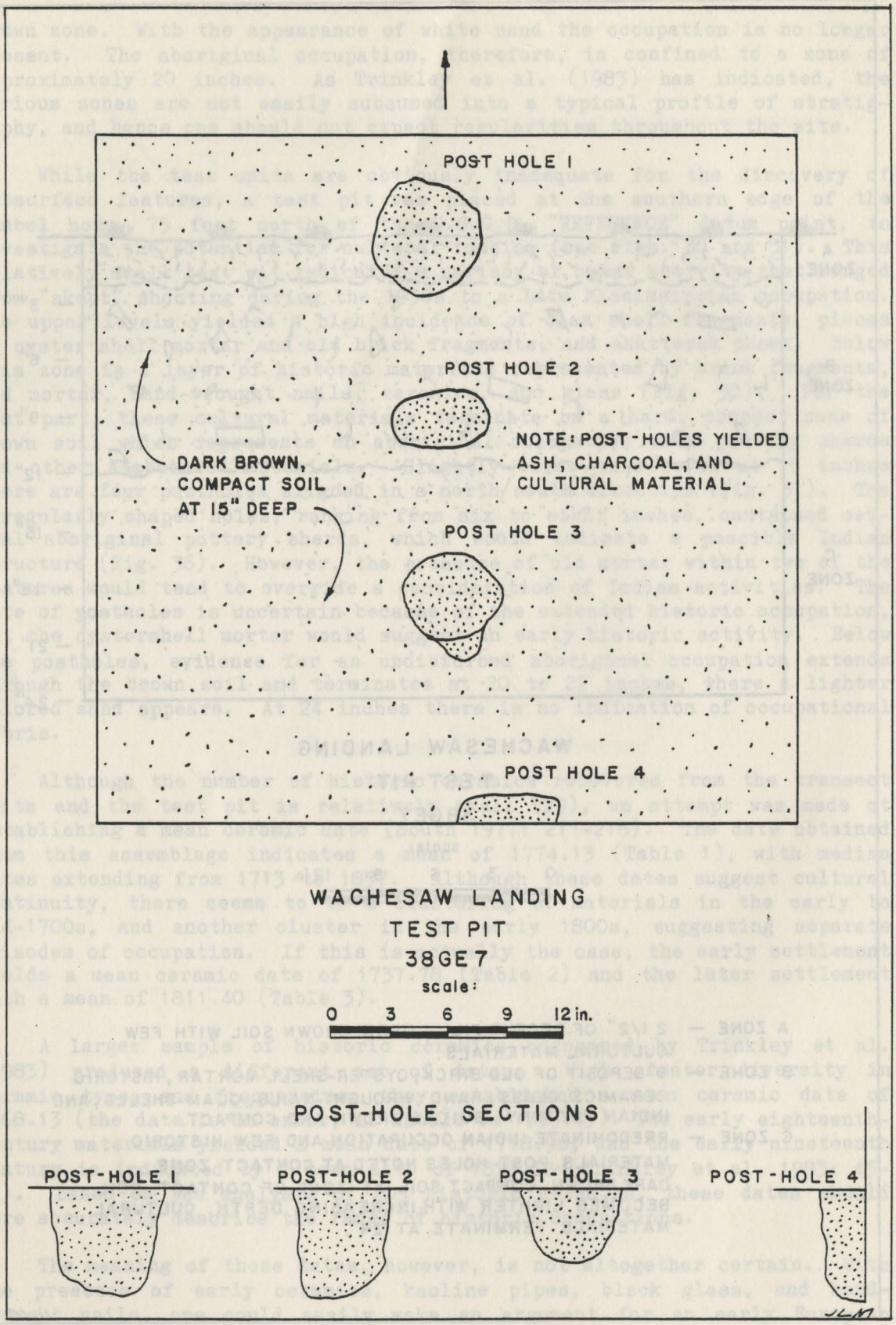


Figure 31. Wachesaw Landing test pit depicting postholes.

settlement. Rogers (1970) indicated that there were land grants in the Georgetown area during the early 1700s, and on the Waccamaw as early as 1711. Shortly after this initial settlement, John and William Allston had left their home in St. John's Berkeley and taken out grants on the Waccamaw in 1732, and were followed by other settlers. This occupation at Wachesaw Landing, then, could reflect the presence of an Allston, a Pawley, or some other settler.

With an interest in tracing the movements of the Siouan along the coast of Carolina, and having established the presence of the Waccamaw Indians at Wachesaw during the late seventeenth century, Trinkley et al. (1983) has suggested these early ceramics are associated with the Indian occupation. However, it is important to note that the ceramics responsible for providing an early mean date, i.e., lead glazed redware, lead glazed coarse earthenware, and manganese Rhenish, extend into the eighteenth century and overlap with lead glazed slipware, North Devon gravel tempered, and Westerwald. Therefore, the ceramics could easily be subsumed as an early European occupation. In fact, if we can discard lead glazed redware and lead glazed coarse earthenware on the basis that their range is unknown (perhaps 1566-1980; Stanley South, personal communication) and that it is difficult to assign a median date of 1700 on them, the mean ceramic date proposed by Trinkley et al. (1983) will change from 1759.43 to 1769.33. Furthermore, the median date assigned to delft (1700) may also be brought into question because no such date exists (see South 1977: 211-212) for this ceramic type. If we could take the earliest date of the many different types of delft (1600) and its latest date (1800), one could arrive at a median date of 1700, but this specific date does not reflect the range of delft chamber pots, delft wash basins, apothecary jars, or the other types of delft. If we remove delft for this reason, then the mean ceramic date moves up to 1772.67. However, if the authors are considering eighteenth century decorated delftware, with a median date of 1750, the mean ceramic date falls back to 1771.63.

Without the specific median dates for delft, lead glazed redware, and lead glazed earthenware, the mean ceramic date for their early eighteenth century assemblage may also be challenged. By removing these types, the ceramic date of 1718.98 would be increased to 1730.32. This later date corresponds more closely with our date of 1737.78 on the bluff and 1737.05 on the beach (see Tables 2 and 5).

If we are indeed looking at an early historic occupation, then we have to question the function of the settlement. According to Ed Fulton, a tavern once stood on the apex of the bluff and served river traffic. This specific function may be questioned with the low incidence of tobacco pipes and bottle fragments, artifacts that should have a higher incidence in such an establishment. Presently, any considerations for an early eighteenth century plantation system may be questioned on the grounds that no other sites of comparable dates were found during the survey. If Prunty's (1955) model is correct, then other associated structures should exist in close proximity in the form of a nucleated village. However, these structures have not been found. The settlement apparently is isolated and represents a single domestic household with its beginnings rooted in the early eighteenth century.

The contiguous beach and river bottom were also investigated. With excessive erosion along the bluff and the subsequent deposition of sand and cultural materials, the beach became another window through which to view various episodes of historic and prehistoric occupations. Virtually the same materials recovered through excavation were found on the beach, except for a significant increase in metal objects (Fig. 35). The historic ceramics yielded a mean ceramic date of 1783.82, which is higher than the bluff date of 1774.13 (Tables 1 and 4). The early eighteenth century ceramics, however, correspond closely: 1737.05 for the beach and 1737.78 for the bluff (Tables 2 and 5). The later nineteenth century ceramics on the beach also correspond with those on the bluff: 1811.40 and 1814.11 (Tables 3 and 6). Although the nineteenth century ceramics agree with a mean ceramic date of 1819.18 computed by Trinkley et al. (1983:46), the beach assemblage provides additional evidence that the eighteenth century occupation may be later than 1718.98.

A small sample of pottery sherds and lithic material were recovered from the beach. They are similar to those recovered in excavation. Trinkley's (1979) ceramic identification and analysis is summarized in Figure 35.

The underwater survey was conducted by the Institute of Archeology and Anthropology, under the direction of Alan Albright. Using Institute and contract divers, the team operated from a pontoon boat at selected locations about 100 feet from the beach in 20 to 25 feet of water. The survey extended from the northern limits of the property, south to the creek that enters the old rice fields. The results of these efforts have shown that there are no submerged barges, boats, or other forms of vessels. There are, however, considerable amounts of aboriginal ceramics scattered across the river bottom in the vicinity of the bluff, and small amounts of historic materials. The materials are similar to those recovered from the beach and the bluff, with the only difference in size and attrition (Appendix A). Generally the aboriginal sherds were much larger, but the constant effect of current and shifting sediments have eroded the materials severely.

The materials scattered across the beach and on the river bottom show the effects of erosion during the past several hundred years. With the site situated on the outside edge of an active river meander, and with daily tidal fluctuation, the sandy knoll has been subjected to continuous erosion. Although it would be difficult to assess the amount of erosion, the presence of large pottery sherds on the river bottom, approximately 100 feet from the bluff would suggest a substantial amount since occupation.

Even though portions of the site have been lost to erosion, portions still remain intact. The site is significant because it can reveal information about prehistoric inhabitants during the Mississippian period and about the Waccamaw Indians and early historic settlements in the Waccamaw Neck.

TABLE 1

MEAN CERAMIC DATE FOR WACHESAW LANDING

Ceramic Type	Range	Median	No.	Product
North Devon gravel tempered	1650-1775	1713	1	1,713
British brown stoneware	1690-1775	1733	4	6,932
Westerwald	1700-1775	1738	7	12,166
White salt glazed stoneware	1740-1775	1758	1	1,758
Jackfield earthenware	1740-1780	1760	1	1,760
Creamware	1762-1820	1791	4	7,164
Green edged pearlware	1780-1830	1805	2	3,610
Annular ware pearlware	1790-1820	1805	1	1,805
Overglazed enamelled China trade porcelain	1790-1825	1808	3	5,424
Transfer printed pearlware	1795-1840	1818	3	5,454
Ironstone whiteware	1813-1900	1857	2	3,714
			29	51,500

Mean Ceramic Date = 1774.13

TABLE 2

EARLY 18TH CENTURY CERAMIC DATE

Ceramic Type	Range	Median	No.	Product
North Devon gravel tempered	1650-1775	1713	1	1,713
British brown stoneware	1690-1775	1733	4	6,932
Westerwald	1700-1775	1738	7	12,166
White salt glazed stoneware	1740-1775	1758	1	1,758
Jackfield earthenware	1740-1780	1760	1	1,760
			14	24,329

Mean Ceramic Date = 1737.78

TABLE 3

EARLY 19TH CENTURY CERAMIC DATE

Ceramic Type	Range	Median	No.	Product
Creamware	1762-1820	1791	4	7,164
Annular ware pearlware	1790-1820	1805	1	1,805
Green edged pearlware	1780-1830	1805	2	3,610
Overglazed enamelled China trade porcelain	1790-1825	1808	3	5,424
Transfer printed pearlware	1795-1840	1818	3	5,454
Ironstone whiteware	1813-1900	1857	2	3,714
			15	27,171

Mean Ceramic Date = 1811.40

TABLE 4

MEAN CERAMIC DATE FOR THE WACHESAW BEACH ASSEMBLAGE

Ceramic Type	Range	Median	No.	Product
North Devon gravel tempered	1650-1775	1713	4	6,582
Underglazed blue Chinese	1660-1800	1730	1	1,730
Overglaze enamelled China	1660-1800	1730	1	1,730
British brown stoneware	1690-1775	1733	8	13,864
Lead glazed slipware	1670-1795	1733	14	24,262
Westerwald	1700-1775	1738	18	31,284
Delft tin enamelled	1600-1802	1750	6	10,500
White salt-glazed stoneware	1740-1775	1758	5	8,790
Creamware	1762-1820	1791	44	78,804
Undecorated pearlware	1780-1830	1805	8	14,440
Annular ware pearlware	1790-1820	1805	4	7,220
Blue/Green edged pearlware	1780-1830	1805	2	3,610
Transfer printed pearlware	1795-1840	1818	1	1,818
Willow pattern pearlware	1795-1840	1818	2	3,636
Mocha	1795-1890	1843	2	3,686
Ironstone whiteware	1813-1900	1857	24	44,568
Transfer printed whiteware	1820-1900	1860	1	1,860
			145	258,654

Mean Ceramic Date = 1783.82

TABLE 5

EARLY 18TH CENTURY CERAMIC DATE

Ceramic Type	Range	Median	No.	Product
North Devon gravel tempered	1650-1775	1713	4	6,582
Underglazed blue Chinese	1660-1800	1730	1	1,730
Overglaze enamelled China	1660-1800	1730	1	1,730
British brown stoneware	1690-1775	1733	8	13,864
Lead glazed slipware	1670-1795	1733	14	24,262
Westerwald	1700-1775	1738	18	31,284
Delft tin enamelled	1600-1802	1750	6	10,500
White salt glazed stoneware	1740-1775	1758	5	8,790
			57	99,012

Mean Ceramic Date = 1737.05

TABLE 6

EARLY 19TH CENTURY CERAMIC DATE

Ceramic Type	Range	Median	No.	Product
Creamware	1762-1820	1791	44	78,804
Undecorated pearlware	1780-1830	1805	8	14,440
Annular ware pearlware	1790-1820	1805	4	7,220
Blue/Green edged pearlware	1780-1830	1805	2	3,610
Transfer printed pearlware	1795-1840	1818	1	1,818
Willow pattern pearlware	1795-1840	1818	2	3,636
Mocha	1795-1890	1843	2	3,686
Ironstone whiteware	1813-1900	1857	24	44,568
Transfer printed whiteware	1820-1900	1860	1	1,860
			88	159,642

Mean Ceramic Date = 1814.11

FIGURE 32

WACHESAW LANDING TRANSECT DATA
POWER POLE DATUM

Historic Materials

2 Brick fragments
1 Machine cut nail

Prehistoric Materials

4 Rhyolite flakes
3 Chert flakes
1 Slate fragment
1 Heat treated chert biface
4 Pee Dee complicated stamped sherds
4 Pee Dee textile wrapped sherds
2 Pee Dee simple stamped sherds
2 Wachesaw series sherds
18 Plain pottery sherds
164 Small and indeterminable sherds

FIGURE 33

WACHESAW LANDING TRANSECT DATA
U.S.G.S. REFERENCE DATUM

Historic Materials

3 Hand wrought nails
6 Machine cut nails
2 Wire nails
1 Coal cinder
4 Clear glass bottle fragments
1 Green glass bottle fragment
6 Black glass bottle fragments
11 Oyster shell mortar fragments
40 Old brick fragments
2 British brown stoneware sherds
2 Westerwald sherds
3 Small and indeterminable historic sherds
1 .22 caliber shell casing
4 Skeet fragments

FIGURE 33 (Cont.)

Faunal Materials

46 Clam shell fragments
10 Oyster shell fragments
1 Cockle shell fragment
1 Fish odolith
5 Bone fragments (small)
1 Fossil shark tooth

Prehistoric Materials

1 Quartz flake
1 Quartzite chunk
5 Rhyolite flakes
1 Small indeterminable gray rock
1 Deptford linear check stamped sherd
1 Fabric impressed sherd
22 Pee Dee complicated stamped sherds
2 Pee Dee textile wrapped sherds
13 Pee Dee simple stamped sherds
2 Pee Dee rim sherds with fillet applique
2 Wachesaw series sherds
1 Burnished sherd
43 Plain sherds
183 Small and indeterminable sherds

FIGURE 34

WACHESAW LANDING TRANSECT DATA
U.S.G.S. WACHESAW DATUM

Historic Materials

2 Hand wrought nails
1 Clear glass bottle fragment
2 Green glass bottle fragments
1 Black glass bottle fragment
4 Oyster shell mortar fragments
1 Old brick fragment
1 Transfer printed pearlware sherd
1 Green edged pearlware sherd
2 Creamware sherds
1 Westerwald sherd
2 Overglazed enamelled Chinese trade porcelain
1 Kaolin pipe stem
9 Skeet fragments
1 Deteriorated metal fragment (small)

FIGURE 34 (Cont.)

Prehistoric Materials

6 Rhyolite flakes
1 Chunk of rhyolite
1 Quartz flake
1 Chunk of quartz
1 Chert flake
2 Unidentified meta-volcanic flakes
1 Deptford check stamped sherd
1 Finger nail impressed sherd
36 Pee Dee complicated stamped sherds
5 Pee Dee textile wrapped sherds
14 Pee Dee simple stamped sherds
1 Pee Dee rim sherd with fillet applique
4 Wachesaw series sherds
1 Burnished sherd
53 Plain sherds
286 Small and indeterminable sherds

FIGURE 35

WACHESAW BEACH ASSEMBLAGE

Historic Materials

145 Ceramic fragments (see Table 4)
1 Black glass bottle base
13 Black glass bottle fragments
1 Case bottle fragment
1 "Dyottville Glass Works" bottle base
1 Carter's ink bottle base
4 Clear glass bottle fragments
1 Windowpane fragment
1 Blue trade bead fragment
5 Kaolin pipe stem fragments
6 Kaolin pipe bowl fragments
2 Kaolin pipe bases
16 Copper boat rivets with washers
4 Copper boat nails
1 Machine cut nail
1 Large forged nail
1 Brass shoe buckle
1 Brass lantern wick-holder
1 Brass lock cover plate
1 Brass .38 caliber shell casing
1 Small roll of brass (1/32" thk. and 7/8" wide)
1 Small roll of brass (1/32" thk. and 5/8" wide)
6 Pieces of thin brass

FIGURE 35 (Cont.)

Historic Materials (Cont.)

1 Brass item (unknown function)
18 Brass shotgun shell casing
1 Brass thimble
1 Brass trigger guard (flintlock)
2 Lead musket balls (.58 caliber)
2 Brass buttons (1.285" dia. and .925" dia.)
1 Brass ornament
1 Brass hinge (small)
1 Brass handle from a riveted copper pot
1 Brass portion of a riveted copper pot
2 Deteriorated steel and brass pocket knives (18th and 19th Century; Stanley South, personal communication)
1 Shoe button
7 Lead fragments
1 Lead ornamental cover (walking cane?)
1 Brass eyelet
2 Axes
1 Hoe
1 Pinale hinge
1 Pad lock

Faunal Materials

4 Bone fragments

Prehistoric Materials

4 Quartz chunks
1 Quartz hammerstone fragment
3 Quartz flakes
2 Basalt flakes
1 Rhyolite flake
1 Chert flake
1 Chert cobble
1 Coquina flake
1 Orthoquartzite flake
1 Quartzite chunk
1 Unidentified flake
1 Baked clay object
1 Late Archaic stemmed point made from rhyolite

NOTE: Pottery sherds were not recovered from the beach for two reasons: 1) fear of depleating the archeological record which has suffered severely during the past decades, and 2) specific information on the aboriginal ceramics is available in the literature (see Trinkley 1979).

FIGURE 36 (Cont.)

6"-9" Level	9 Skeet fragments
	2 Bone fragments
	2 Kaolin pipe stem fragments
	1 Black glass bottle fragment
	1 Clear glass bottle fragment (burned)
	2 Creamware sherds
	1 Overglazed enamelled China trade porcelain
	2 British brown stoneware sherds
	2 Westerwald sherds
	4 Hand-wrought nails
	3 Deteriorated metal fragments
	3 Pee Dee complicated stamped sherds
	1 Wachesaw series
9"-12" Level	2 Oyster shell mortar fragments (large)
	1 Old brick fragment
	1 Basalt chunk
	6 Black glass bottle fragments
	1 Machine cut nail
	1 Hand wrought nail
	1 Kaolin pipe stem
	1 North Devon gravel tempered sherd
12"-15" Level	1 Clam shell fragment
	1 Oyster shell mortar fragment
	10 Bone fragments (mammalian)
	2 Bone fragments (fish)
	1 Pig tusk
	5 Hand wrought nails
	1 Deteriorated metal fragment
	1 Clear glass fragment (windowpane?)
	1 Kaolin pipe bowl fragment
	1 Westerwald sherd
	1 Transfer printed pearlware sherd
	1 Rhyolite flake
	1 Rhyolite chunk with cortex
	1 Fabric impressed sherd
	32 Pee Dee complicated stamped sherds
	7 Pee Dee textile wrapped sherds
	1 Incised pottery sherd
	3 Wachesaw series sherds
	5 Burnished sherds
	15 Plain sherds
	22 Small and indeterminable sherds
15"-18" Level	2 Clam shell fragments
	1 Hand-wrought nail
	3 Rhyolite flakes
	1 Quartz flake
	1 Quartz chunk
	15 Pee Dee complicated stamped sherds

FIGURE 35 (Cont.)

According to Trinkley's 1979 analysis, based on a sample of 313 sherds, 217 represent the Pee Dee Series, and the remaining represent the Wachesaw Series. Within the Pee Dee Series, 55% were complicated stamped, 16% were simple stamped, 23% were plain, 5% were textile wrapped, and the remaining 1% were corn cob impressed and cord marked motifs. Within the Wachesaw Series, complicated stamped represented 58%, simple stamped 30%, and plain 12%. Also reported were four clay disks, a rhyolite triangular point, rhyolite and quartz flakes, a small quantity of animal bone, and two kaolin pipe stem fragments.

FIGURE 36

WACHESAW LANDING TEST PIT DATA

Provenience	Cultural Materials
0"-3" Level	20 Clam shell fragments
	12 Oyster shell mortar fragments
	3 Small and indeterminable pottery sherds
	NOTE: Clam shells and mortar are only a small sample.
3"-6" Level	1 Clam shell fragment
	2 Oyster shell fragments
	2 Old brick fragments
	3 Oyster shell mortar fragments
	3 Hand wrought nails
	1 Machine-cut nail
	5 Skeet fragments
	6 Black glass bottle fragments
	1 Brass fragment (small)
	1 Light green windowpane fragment
	2 Ironstone whiteware sherds
	1 White salt glazed stoneware sherd
	1 Transfer printed pearlware sherd
	1 Green edged pearlware sherd
	1 Jackfield ware sherd
	1 Annular ware sherd
	1 Westerwald sherd
	1 Orange micaceous sherd (Spanish?)
	1 Olive jar sherd (Spanish?)
	1 Quartz cortical flake
	2 Pee Dee complicated stamped sherds
	1 Wachesaw series
	16 Plain sherds
	Note: Brick, mortar, and shell are only a small sample.

FIGURE 36 (Cont.)

15"-18" Level (Cont.)	1 Pee Dee simple stamped sherd
	6 Pee Dee textile wrapped sherds
	6 Burnished sherds
	20 Plain sherds
	15 Small and indeterminable sherds
18"-21" Level	2 Clam shell fragments
	1 Quartz chunk (large)
	2 Pee Dee complicated stamped sherds
	3 Burnished sherds
	4 Plain sherds
	19 Small and indeterminable sherds
21"-24" Level	1 Bone fragment
	1 Rhyolite flake
	1 Unidentified rock fragment
	1 Plain sherd
	6 Small and indeterminable sherds
Posthole #1	5 Shell fragments (Clam?)
	1 Bone fragment
	2 Small oyster shell mortar fragments
	1 Pee Dee textile wrapped sherd
	1 Pee Dee simple stamped sherd
	1 Burnished sherd
	2 Check-stamped sherds
Posthole #2	1 Clam shell fragment
	1 Oyster shell mortar fragment
	2 Charred wood fragments
	1 Pee Dee simple stamped sherd
	1 Small and indeterminable sherd

NOTE: Postholes #3 and #4 failed to yield any cultural materials. Small flecks of charcoal, however, were present.

38GE283 (Old Rice Fields)

The old rice fields, flood canals, and the barge canal leading to Richmond Hill plantation (Fig. 37) were probably cleared and constructed in the late eighteenth and nineteenth century with the emergence of the two plantation systems. Although it may have been constructed earlier by an Allston family, the fields were certainly being used by Belin and Magill in the nineteenth century.

The production of rice is complex, which requires various combinations of dry soils, wet soils, and flooded soils. In order to attain these conditions in different seasons, "Rice lands are laid out into squares, or

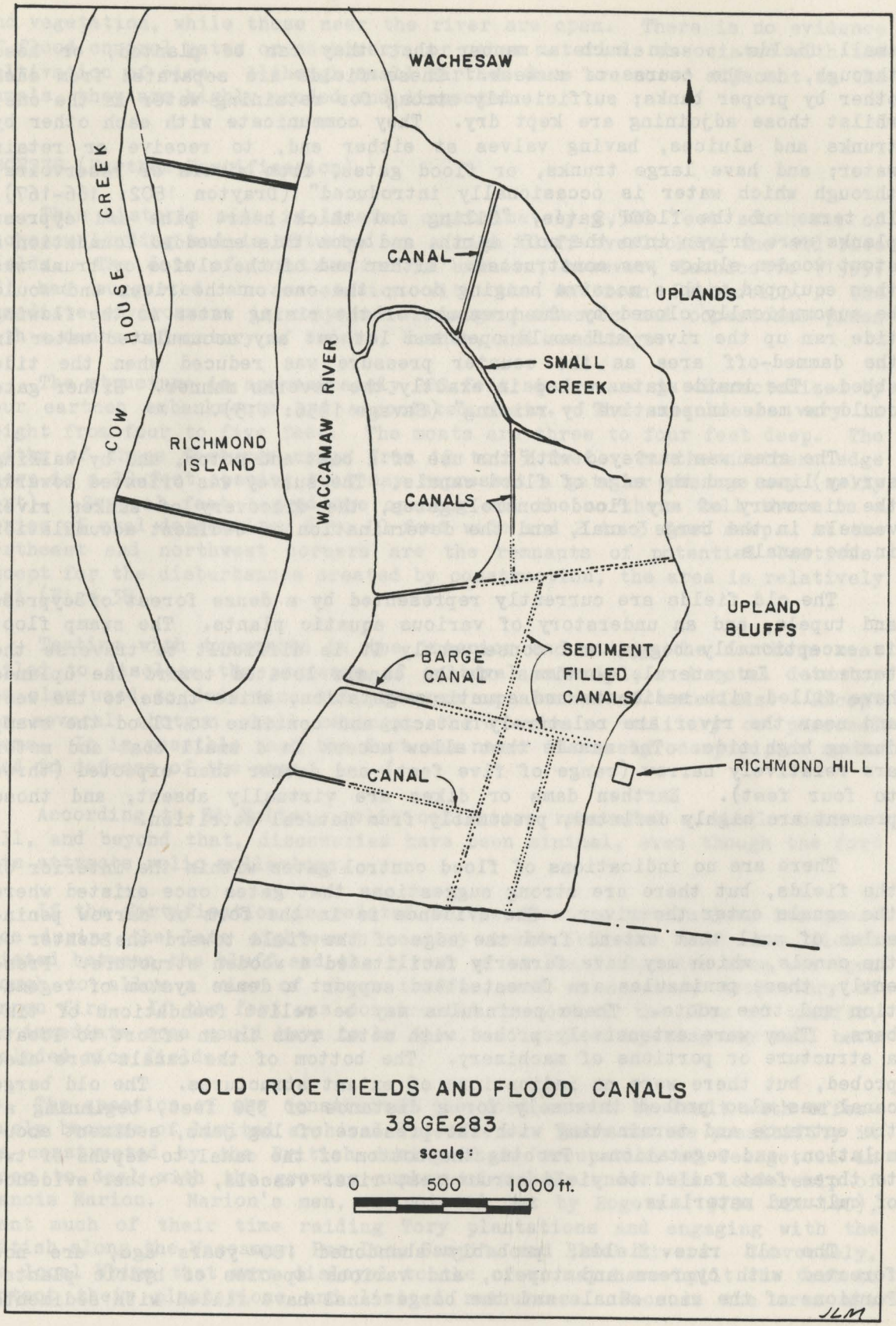


Figure 37. The old rice fields and canals associated with Wachesaw and Richmond Hill.

small fields. . .in such a manner that they can be planted, or hoed through, in the course of a week. These fields are separated from each other by proper banks; sufficiently strong for retaining water in the one, whilst those adjoining are kept dry. They communicate with each other by trunks and sluices, having valves at either end, to receive or retain water; and have large trunks, or flood gates, from rivers or reservoirs; through which water is occasionally introduced" (Drayton 1802: 166-167). In terms of the flood gates, "Piling and thick heart pine and cypress planks were driven into the soft earth, and upon this embedded foundation a stout wooden sluice was constructed. Either end of the sluice or trunk was then equipped with a massive hanging door; the one on the river end would be automatically closed by the pressure of the rising water as the flowing tide ran up the river and would open and let out any accumulated water in the dammed-off area as the counter pressure was reduced when the tide ebbed. The inside gate worked in exactly the reverse manner. Either gate could be made inoperative by raising" (Savage 1956: 115).

The area was surveyed with the use of a boat and motor, and by walking survey lines and the edge of flood canals. The survey was oriented towards the discovery of any flood control gates, the discovery of sunken river vessels in the barge canal, and the determination of sediment accumulation in the canals.

The old fields are currently represented by a dense forest of cypress and tupelo, and an understory of various aquatic plants. The swamp floor is exceptionally boggy, and consequently it is difficult to traverse the terrain. In general, portions of the canals located toward the uplands have filled with sediments and aquatic vegetation, while those to the west and near the river are relatively intact, and continue to flood the swamp during high tide. The canals that allow access in a small boat and motor are relatively narrow (range of five feet) and deeper than expected (three to four feet). Earthen dams or dikes are virtually absent, and those present are highly deflated, presumably from natural attrition.

There are no indications of flood control gates within the interior of the fields, but there are strong suggestions that gates once existed where the canals enter the river. The evidence is in the form of narrow peninsulas of soil that extend from the edge of the field toward the center of the canals, which may have formerly facilitated a wooden structure. Presently, these peninsulas are forested and support a dense system of vegetation and tree roots. These peninsulas may be relict foundations of timbers. They were extensively probed with metal rods in an effort to locate a structure or portions of machinery. The bottom of the canals were also probed, but there were no indications of extant structures. The old barge canal was also probed intensely for a distance of 350 feet, beginning at the entrance and terminating with the presence of log jams, sediment accumulation, and vegetation. Probing the bottom of the canal to depths of two to three feet failed to yield structures, river vessels, or other evidence of cultural materials.

The old rice fields, probably abandoned 100 years ago, are now forested with cypress and tupelo, and various species of hydric plants. Portions of the rice canals and the barge canal have filled with sediments

and vegetation, while those near the river are open. There is no evidence of flood control gates or machinery, or other materials associated with the cultivation of rice. Although small earthen dams are noted adjacent to the canals, they are highly eroded and dissected.

38GE278 (Earthen Fortification)

This historic site is located approximately 2,500 feet southeast of Wachesaw Landing and is situated on a high bluff overlooking the old rice fields. The date of construction is unknown; however, Lachicotte (1955: 67) has suggested an association with the American Revolution. The immediate environment is composed of large hardwoods and occasional pines with a dense understory of briers, bushes, and seedlings.

The structure is approximately 200 feet square and is characterized by four earthen embankments and associated moats. The embankments vary in height from four to five feet. The moats are three to four feet deep. The widths of these features range from 12 to 15 feet. On the northern edge there is a 20-foot opening that may represent a gate or passage way (sally port). Several feet beyond the opening and the northern wall there is a series of oval depressions 6 to 10 feet wide and 2 to 3 feet deep. At the northeast and northwest corners are the remnants of potential bastions. Except for the disburbances created by construction, the area is relatively flat (Fig. 38).

Testing with transects in the interior and within the northern moat failed to disclose the presence of cultural materials. A metal detector was also used to determine the presence or absence of materials. Except for several shotgun shell casings, there were no military or personal items. It is possible that the fort was never intensely occupied, or never used in defense of the area.

According to Ed Fulton, relic collectors recovered a single cannonball, and beyond that, discoveries have been minimal, even though the fort site attracts relic collectors.

If the fortification is related to the American Revolution, its presence during the late eighteenth century would indicate that rice fields existed between the bluff and the river, or at least that the area was open enough to allow a view of river traffic, and an accurate trajectory of cannon fire. If the fort was constructed to control the flow of traffic, the immediate area would have to be open, and such an opening may well have included rice fields.

The question of who constructed the fort cannot be dealt with effectively because of limited archival literature. There is the possibility it was constructed by the British during their occupation of Georgetown in order to deal with the growing number of rebels under the leadership of Francis Marion. Marion's men, as pointed out by Rogers (1970: 121-140), spent much of their time raiding Tory plantations and engaging with the British along the Waccamaw, Pee Dee, Sampit, and Black Rivers. Conversely, the local Whigs that were disloyal to the crown may have built the fort to protect their plantations and limited resources. Because the area was

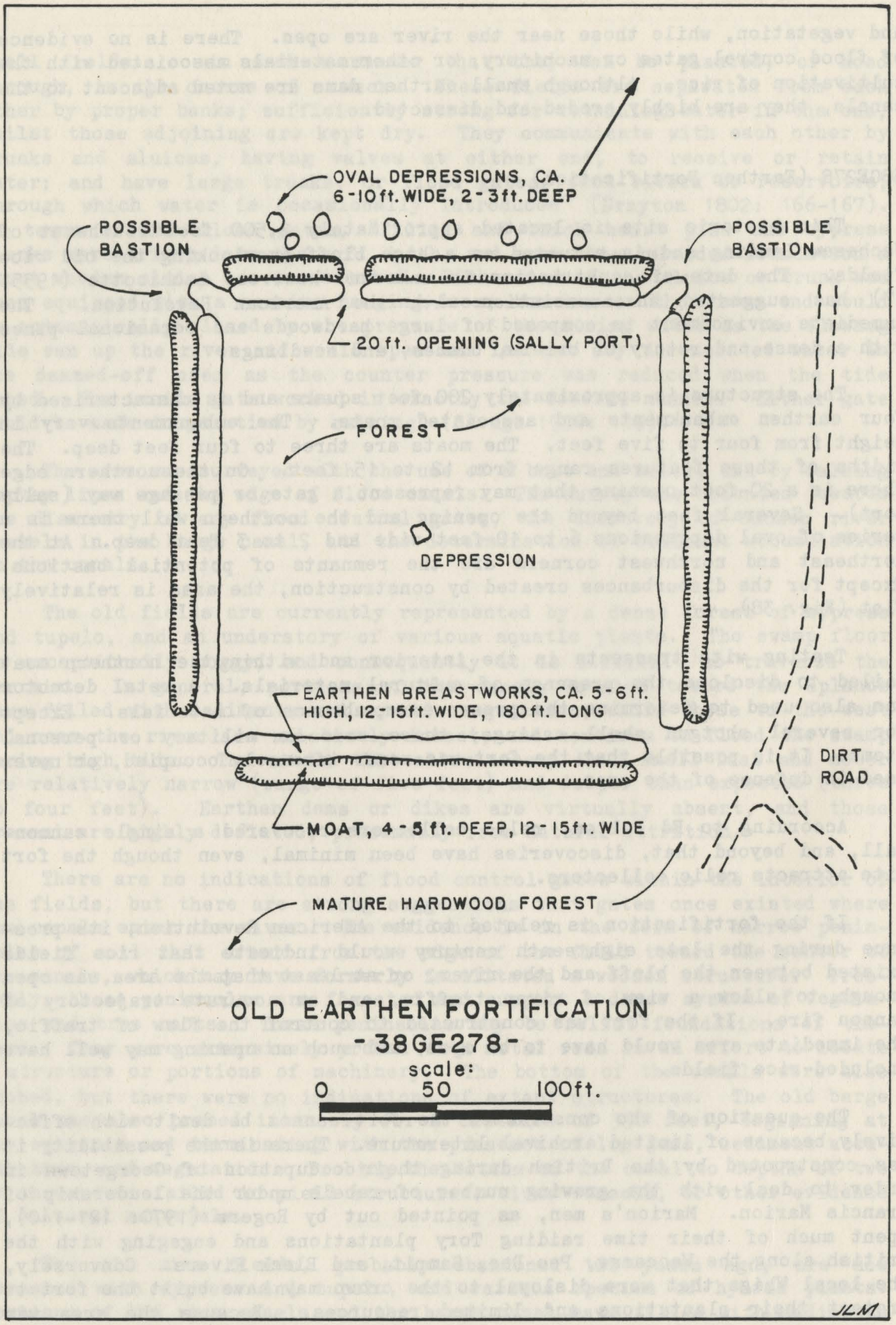


Figure 38. Old earthen fortification possibly associated with the Revoluntionary War.

heavily divided politically, however, no substantive statement concerning the construction of the fort can be made.

38GE253 (Brookgreen Land Line)

This large earthen structure is located at the southern edge of the property and separates Richmond Hill from Laurel Hill plantation. Constructed of adjacent sandy soils, the structure is 7 feet high and 15 feet wide at the base, and extends for a distance of 1,600 feet from Gordon's Church at Highway 392, west to the edge of the old rice fields.

The antiquity of the structure is unknown. Laurel Hill was originally owned by the Waites family in the early eighteenth century, so they could have been responsible for its construction. However, a series of land sales after 1750 is also a factor to be considered. Gabriel Marion (brother of Francis Marion) purchased it in 1750 and later sold it to Plowden Weston in 1775. Weston, who apparently wanted to increase his estate, purchased additional adjoining property from William Alston of Brookgreen in 1777. After his death in 1827, the property was inherited by one of his children, Francis Marion Weston.

Mill's Atlas indicates an Alston living in the immediate vicinity of Richmond Hill in 1825, and ceramics recovered from excavation would indicate an early nineteenth century occupation. Hence, with occupations at Laurel Hill and Richmond Hill in 1800, the Land Line probably predates the nineteenth century and may be associated with the expansion of the Weston plantation in 1777. It should be pointed out that the structure could be related to any of the landholders, and John D. Magill, the owner of Richmond Hill, is no exception.

38GE280 (Richmond Hill/Wachesaw Land Line)

This earthen structure is located 3,400 feet south/southeast of Wachesaw Landing. Constructed of adjacent sandy soils, the structure is about three feet high and eight feet wide at the base. It extends from the edge of the bluff on the northern periphery of Richmond Hill cemetery to the east for a distance of several hundred feet before it terminates in a dense understory and pine forest. Presumably, the remainder of it was destroyed during cultivation in the 1900s.

Although this small earthen boundary probably separated Wachesaw from Richmond Hill Plantation, the date of construction is not known. It could easily have been built by either James L. Belin or John D. Magill in the early nineteenth century, or by Allstons who were living at or near Richmond Hill some years earlier.

38GE254 (Richmond Hill Cemetery)

Located approximately 3,400 feet south/southeast of Wachesaw Landing is a small cemetery. Associated with the plantation system of Richmond

Hill, the cemetery is located immediately south of site 38GE280 on the edge of the bluff overlooking the old rice fields.

The graves are arranged in a linear pattern parallel with the edge of the bluff and extend to the northeast for a distance of 128 feet. Although the graves are aligned with the edge of the bluff, several graves were noted on the slopes about 25 to 35 feet to the northwest. At least 19 graves were determined by the presence of stone markers, metal markers with paper inserts, an inverted marble slab without inscriptions, and oval depressions without markers.

According to Ed Fulton the cemetery was originally associated with Richmond Hill plantation and facilitated the burial of slaves. The extant grave markers would tend to support this contention. At least two people in the cemetery were born into slavery, as indicated by birth dates: Tobie Small (1858) and Sara Alston (1860). Other birth dates and similar names, i.e., March Small, Jake Small, Rev. Grant Sparkman, Allen Sparkman, and Elizabeth Lange Monroe, who were born between 1869 and 1893, would suggest consanguineous relationships and an obvious desire to be buried with family members. Although there are graves without markers, wooden markers may once have identified earlier interments. However, without archival research and plantation records, this would be difficult to determine. This small cemetery may well have been associated with the activities of Richmond Hill during the nineteenth century.

38GE279 (Wachesaw Road Cemetery)

Wachesaw Road extends eastward in a relatively straight line where it meets Highway 392. Although it is not easily observable, the road continues across the highway and eventually enters Highway 62. Shortly after crossing a small creek and at a distance of approximately 200-300 feet to the north is another small cemetery. James Moody and Ed Fulton (personal communication) have provided similar directions for its location, but is have never been found despite two separate attempts, because the site is located in pines and a dense understory. In an effort to find the cemetery, the old roadbed was used as a datum point, and point intervals were spaced at 50 feet. From each point we entered the forest with a Brunton compass and traversed straight lines for a distance of 300 feet each. When this failed, we spent the remaining time walking zigzag patterns between the points. Neither of the methods were successful. The antiquity of the cemetery extended into the nineteenth century and was used as a burial site for Wachesaw slaves. After emancipation, the cemetery continued to function sporadically until the middle of the twentieth century, but until the cemetery is located, no further comments can be offered.

38GE259 (Flagg Church Site)

The site of the Flagg Church is located slightly north of the Revolutionary War fortification and near the edge of the bluff. The area is presently forested in pines and hardwoods with an open understory of vines, briers, and seedlings. The remains of the church are not visible on the surface, but exist below the ground in the form of mortar and brick frag-

ments, lathing and building nails (machine-cut), and plaster fragments. Lachicotte (1955: 65) stated that the church was dismantled for its lumber by Allard Flagg, shortly after the Civil War, but that the sandstone steps were allowed to remain in place. Ed Fulton (personal communication) stated that one of the steps was removed several years ago, but that another one was visible at the entrance of the church. A search with metal probe rods failed to reveal any steps. Presumably, the remaining step has also been removed.

The church was apparently constructed of wood, which rested on a brick foundation. The fragments of plaster would indicate the interior was plastered. Without additional excavations, the spatial dimensions are questionable. Probing for possible foundations and brick fragments provided an estimate that the structure may have been 25 feet wide and 50 feet long. Apart from the scatter of brick fragments there are no other indications of size.

About 25 feet from the rear of the church is a small oval depression situated between two large oaks. Tests with a posthole digger showed that the soil was highly mottled, meaning that it is a cultural intrusion. The function of the hole is uncertain, but it may be the location of a privy. Additional investigations are required to determine the function.

38GE272 (Firebreak Site)

Approximately 100 feet south of the Open Area site (38GE261), several fragments of historic materials were recovered from a small firebreak. These materials were clustered in a small area: a black glass bottle fragment, a blue edged pearlware sherd, and two sherds of lighter yellow creamware. The mean ceramic dates for these sherds is 1805 and 1798, respectively (South 1974: 334).

In an attempt to locate a possible structure, the area was investigated with a series of transects and posthole tests at 10-foot intervals. The soil profiles revealed an old plow zone six to seven inches deep and an undisturbed sub-matrix of tan sand. With increasing depth the sand becomes lighter in color, and at 24 inches it becomes white. These test units did not reveal any disturbed subsoils or additional occupational debris. The origin of these materials is unknown.

38GE276 (Dog Kennel Site)

The Dog Kennel Site is located in a cultivated field 700 feet east of Ed Fulton's home, and north of the old dog cages. A relatively small number of historic materials was found in the field, which is about 200 feet wide and 400 feet long. Ceramics and glass fragments were not clustered in any specific area, but rather scattered over most of the field. Although two annular ware sherds were recovered, the majority of sherds was represented by ironstone whiteware, which suggests a later occupation. The identifiable sherds, although small in number, produced a mean ceramic date of 1850.26 (Table 7).

An extensive walk-over of the field did not reveal any bricks, mortar, or nails. A single fragment of clear windowpane glass would suggest that a structure was once associated with the materials, however.

TABLE 7

MEAN CERAMIC DATE

Ceramic Types	Range	Median	No.	Product
Annular wares pearlware	1790-1820	1805	2	3,610
Transfer printed whiteware	1820-1900	1860	1	1,860
Ironstone whiteware	1813-1900	1857	12	22,284
			15	27,754

Mean Ceramic Date = 1850.26

Other Materials:

1 Clear glass windowpane fragment
1 Olive colored bottle fragment
1 Clear glass bottle neck
1 Plain porcelain
1 Rhyolite flake

38GE282 (Tar Kiln Site)

This late historic site is located at the northeastern side of the intersection of Highways 392 and 62, and 150 feet east of the old Wilson home (Fig. 39). Set in an environment of large pines with mixed oak and hickory, the site is represented by a circular mound of earth and a brick-lined cistern. There is also an early twentieth century scatter of refuse 50 feet to the northwest: broken bottles, deteriorated metal containers, pieces of wire, and ceramic fragments. These materials are probably related to garbage disposal during the occupation of the Wilson home.

The tar kiln, which is composed of adjacent sandy soils, is 45 feet in diameter and is elevated 2 feet above the surrounding terrain. The slightly depressed interior of the kiln was tested to confirm its function in the process of obtaining pine rosin. Mottled soil, burned sand, and large lumps of charcoal, all of which continued to a depth of about 18 inches, was revealed by the test. At the base of the mound there was a relatively intact humus zone with a submatrix of undisturbed tan sand. The artificial mound of earth and the exceptionally burned sand confirm that these features, paired with the cistern, functioned as a kiln to obtain pine rosin.

The cistern is located approximately 45 feet east of the kiln on a slight slope about 2 feet lower than the kiln. The cistern is circular and

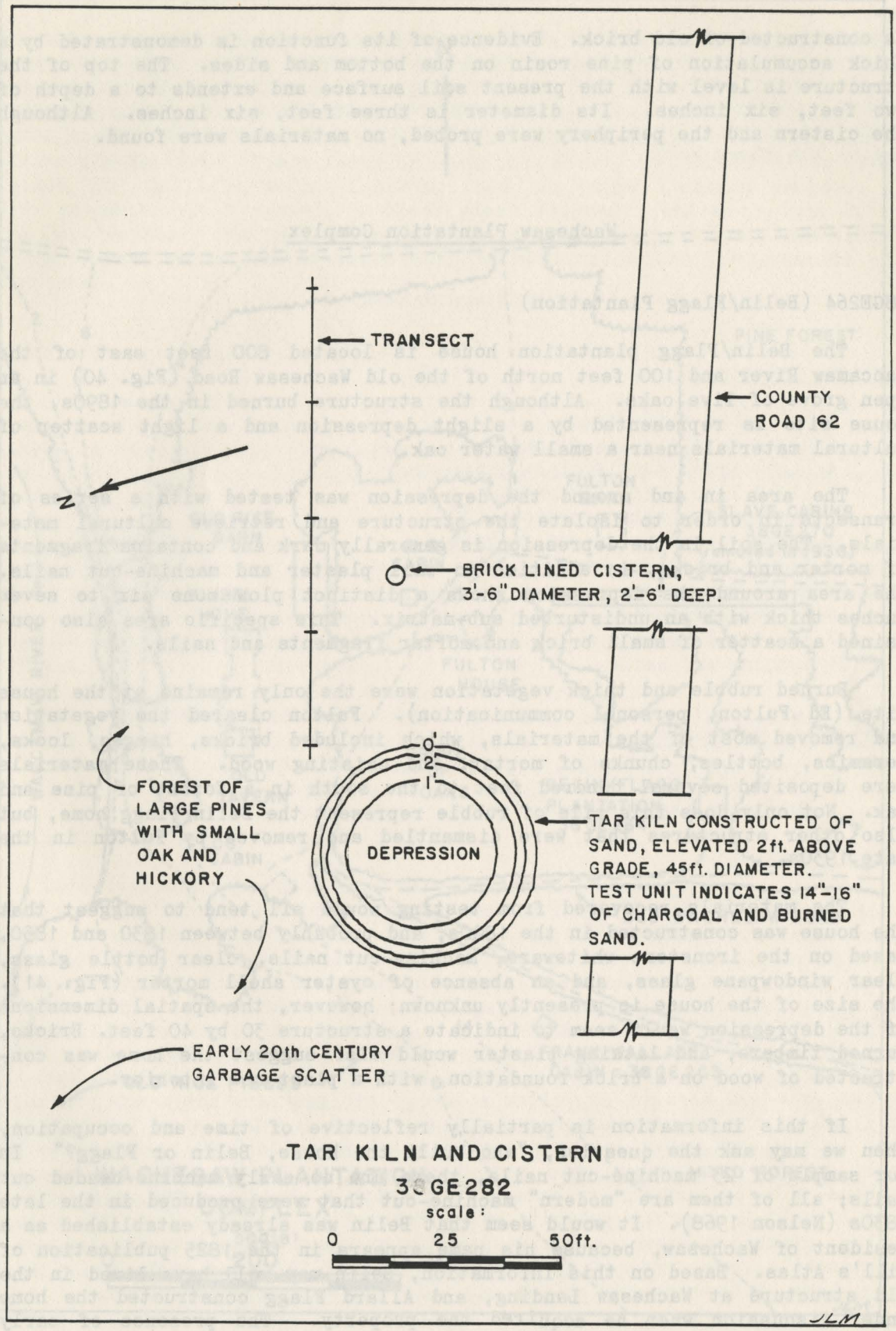


Figure 39. Tar kiln and cistern site.

is constructed of old brick. Evidence of its function is demonstrated by a thick accumulation of pine rosin on the bottom and sides. The top of the structure is level with the present soil surface and extends to a depth of two feet, six inches. Its diameter is three feet, six inches. Although the cistern and the periphery were probed, no materials were found.

Wachesaw Plantation Complex

38GE264 (Belin/Flagg Plantation)

The Belin/Flagg plantation house is located 800 feet east of the Waccamaw River and 100 feet north of the old Wachesaw Road (Fig. 40) in an open grove of live oaks. Although the structure burned in the 1890s, the house site is represented by a slight depression and a light scatter of cultural materials near a small water oak.

The area in and around the depression was tested with a series of transects in order to isolate the structure and retrieve cultural materials. The soil in the depression is generally dark and contains fragments of mortar and bricks, in addition to wall plaster and machine-cut nails. The area around the depression shows a distinct plow zone six to seven inches thick with an undisturbed sub-matrix. This specific area also contained a scatter of small brick and mortar fragments and nails.

Burned rubble and thick vegetation were the only remains at the house site (Ed Fulton, personal communication). Fulton cleared the vegetation and removed most of the materials, which included bricks, hinges, locks, ceramics, bottles, chunks of mortar, and existing wood. These materials were deposited several hundred feet to the south in a forest of pine and oak. Not only does this pile of rubble represent the Belin/Flagg home, but also other structures that were dismantled and removed by Fulton in the late 1930s.

The materials recovered from testing would all tend to suggest that the house was constructed in the 1800s, and probably between 1830 and 1850, based on the ironstone whiteware, machine-cut nails, clear bottle glass, clear windowpane glass, and an absence of oyster shell mortar (Fig. 41). The size of the house is presently unknown; however, the spatial dimensions of the depression would seem to indicate a structure 30 by 40 feet. Bricks, burned timbers, and lathing plaster would also suggest the home was constructed of wood on a brick foundation, with a plastered interior.

If this information is partially reflective of time and occupation, then we may ask the question, "who built the house, Belin or Flagg?" In our sample of 23 machine-cut nails, there are no early machine-headed cut nails; all of them are "modern" machine-cut that were produced in the late 1830s (Nelson 1968). It would seem that Belin was already established as a resident of Wachesaw, because his name appears in the 1825 publication of Mill's Atlas. Based on this information, Belin may well have lived in the old structure at Wachesaw Landing, and Allard Flagg constructed the home under discussion when he acquired the property. The presence of early

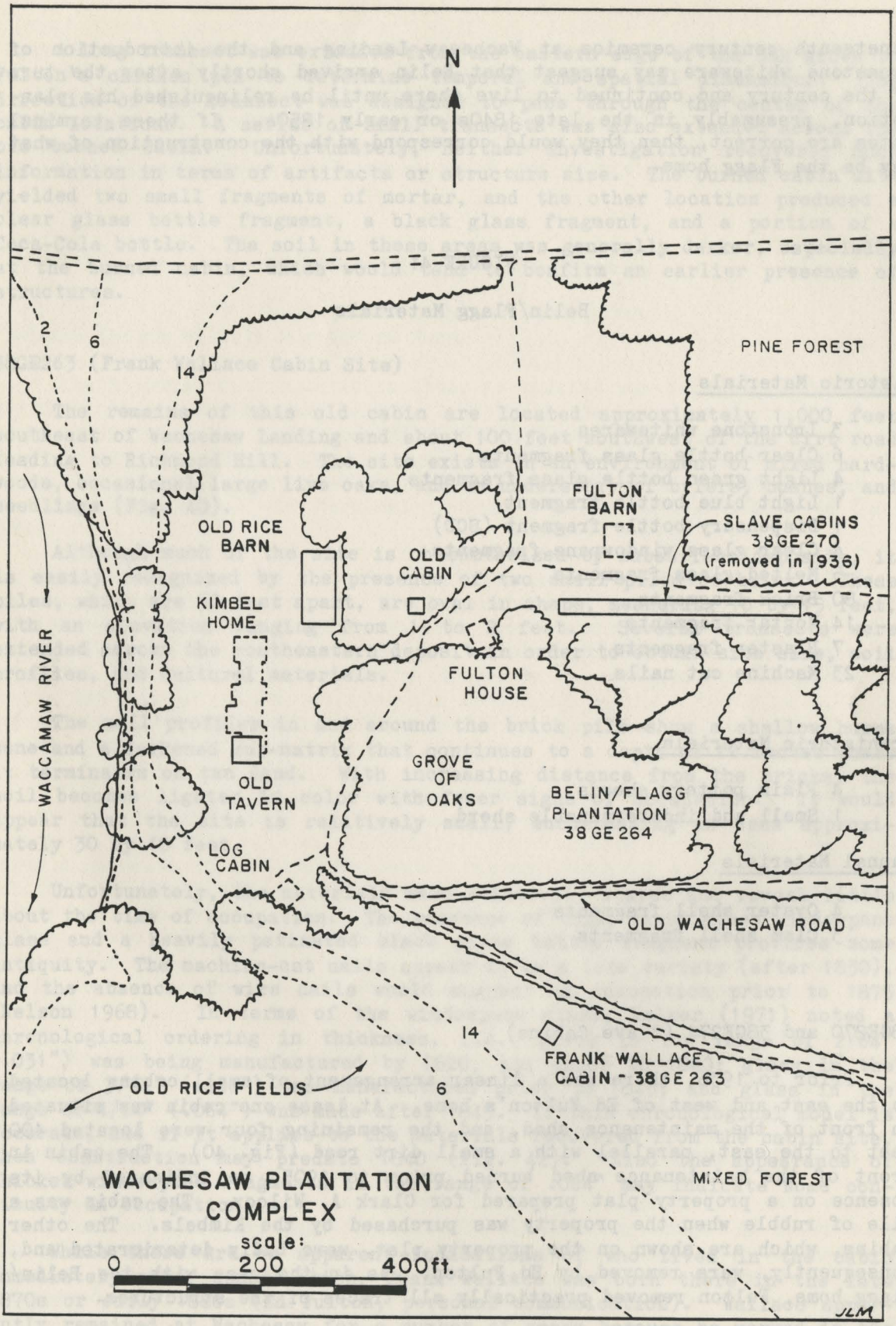


Figure 40. Portions of the Wachesaw Plantation complex as it appeared in the 19th century.

nineteenth century ceramics at Wachesaw Landing and the introduction of ironstone whiteware may suggest that Belin arrived shortly after the turn of the century and continued to live there until he relinquished his plantation, presumably in the late 1840s or early 1850s. If these terminal dates are correct, then they would correspond with the construction of what may be the Flagg home.

FIGURE 41

Belin/Flagg Materials

Historic Materials

3 Ironstone whitewares
6 Clear bottle glass fragments
4 Light green bottle glass fragments
1 Light blue bottle fragment
1 Dispensary bottle fragment (SCD)
4 Clear glass windowpane fragments
5 Melted glass fragments
80 Brick fragments
14 Mortar fragments
7 Plaster fragments
23 Machine cut nails

Prehistoric Materials

4 Plain pottery sherds
1 Small and indeterminable sherd

Faunal Materials

4 Oyster shell fragments
3 Clam shell fragments

38GE270 and 38GE274 (Slave Cabins)

Prior to 1936, there was a linear arrangement of small cabins located to the east and west of Ed Fulton's home. At lease one cabin was situated in front of the maintenance shed, and the remaining four were located 400 feet to the east, parallel with a small dirt road (Fig. 40). The cabin in front of the maintenance shed burned prior to 1905, as indicated by its absence on a property plat prepared for Clark A. Wilcox. The cabin was a pile of rubble when the property was purchased by the Kimbels. The other cabins, which are shown on the property plat, were badly deteriorated and, consequently, were removed by Ed Fulton. As in the case with the Belin/Flagg home, Fulton removed practically all traces of the structures.

A long transect was extended from the eastern edge of the oak grove to Fulton's chicken pen to determine temporal and spatial dimensions. The direction of the transect was designed to pass through the center of the cabin locations. A series of small transects was also extended across the old burned cabin. Unfortunately, neither investigation recovered much information in terms of artifacts or structure size. The burned cabin site yielded two small fragments of mortar, and the other location produced a clear glass bottle fragment, a black glass fragment, and a portion of a Coca-Cola bottle. The soil in these areas was generally darker, especially at the burned cabin, which would tend to confirm an earlier presence of structures.

38GE263 (Frank Wallace Cabin Site)

The remains of this old cabin are located approximately 1,000 feet southeast of Wachesaw Landing and about 100 feet southwest of the dirt road leading to Richmond Hill. The site exists in an environment of mixed hardwoods, occasional large live oaks, and an understory of briers, bushes, and seedlings (Fig. 40).

Although much of the site is characterized by subsurface deposits, it is easily recognized by the presence of two small piles of brick. These piles, which are 50 feet apart, are oval in shape, measuring 10 by 15 feet, with an elevation ranging from 1 to 2 feet. Several transects were extended across the southeastern deposit in order to obtain site size, soil profiles, and cultural materials.

The soil profiles in and around the brick pile show a shallow humus zone and a darkened sub-matrix that continues to a depth of 12 inches where it terminates on tan sand. With increasing distance from the bricks, the soil becomes lighter in color with fewer signs of occupation. It would appear that the site is relatively small, encompassing an area approximately 30 by 40 feet.

Unfortunately, the materials were relatively scarce and reveal little about the time of occupation. The presence of thin, light green windowpane glass and a heavily patinated black glass bottle fragment provides some antiquity. The machine-cut nails appear to be a late variety (after 1830), and the absence of wire nails would suggest an occupation prior to 1875 (Nelson 1968). In terms of the windowpane glass, Walker (1971) noted a chronological ordering in thickness, i.e., glass in the range of 2/64" (.031") was being manufactured by 1820, and prior to 1840; glass in the range of 3/64" (.046") was manufactured prior to 1845; and glass in the range of 4/64" (.064") was made after 1845. If this chronological model is accurate, and if it applies to the materials recovered from the cabin site, then construction may predate 1840 (Fig. 42). Also the appearance of thicker windowpane fragments in the range of .064" may indicate some continuity in occupation.

While there are no apparent indications of who lived in the cabin immediately after construction, Frank Wallace was born there in the late 1870s or early 1880s (Ed Fulton, personal communication). Wallace apparently remained at Wachesaw for a number of years because he worked in the

rice fields on Richmond Island after Reconstruction. In his later years, he returned to Wachesaw and worked for Fulton. Although Wallace had numerous conversations with Fulton about past lifeways, he never mentioned the formal occupation of his parents, or their position within the plantation system. Based on the limited amount of material information, the cabin may well be associated with either the Belin or the Flagg plantation complex.

FIGURE 42

Frank Wallace Cabin Materials

Historic Materials

4 Light green windowpane fragments (.055")
9 Clear windowpane fragments (.064")
1 Black glass bottle fragment
3 Brown glass bottle fragments
1 Clear glass bottle fragment
1 Clear glass medicine bottle fragment
9 Machine-cut nails
1 Kaolin pipe stem
1 Ironstone whiteware
1 Deteriorated metal fragment
1 Jew's Harp fragment

Prehistoric Materials

3 Small and indeterminable pottery sherds
1 Quartz cortical flake

Faunal Materials

1 Horse tooth (incisor)

Old Rice Barn

As a part of the Wachesaw Plantation complex, this barn was once situated immediately west of Ed Fulton's workshop, and north/northeast of the Kimbel home. The only evidence of its location exists on a property plat that was prepared by W. F. Sarvis in 1905.

The barn had collapsed prior to the Kimbel purchase and its remains were removed by Fulton in the late 1930s. Following its removal, the area was intensively cultivated for more than 15 years. With each successive season of cultivation, bricks and other materials that hindered plowing were continuously cleared. Presently, the area is represented by a grassy lawn.

In a brief attempt to confirm its location, a transect was extended across the presumed area of occupation. This investigation failed to discover anything but a single brick fragment and a badly deteriorated machine-cut nail. The soil profiles about 75 feet of the workshop did indicate disturbed earth to a depth of 10 to 12 inches, but much of the disturbance was related to cultivation.

Richmond Hill Plantation Complex

38GE266 (Richmond Hill Plantation House)

The Richmond Hill plantation house is located approximately 3,400 feet south/southeast of Wachesaw Landing. Although the house is no longer present, remnants of the brick chimney are clustered on a high bluff overlooking the old rice fields and the barge canal. These structural remains lie adjacent to a small dirt road that parallels the edge of the bluff, and it is also centered at the terminal position of the extant avenue of oaks (Fig. 43).

The environment in this area is composed of mixed hardwoods, with a dominant assemblage of oaks. The understory is remarkably dense, represented by oak seedlings, myrtle bushes, vines, and briers. With this thick vegetation, it was both difficult and time consuming to place transects at specific locations in the vicinity of occupation. Instead of using transects and set intervals, we placed a series of posthole tests in selected areas with less vegetation. These tests were located on the north, east, south, and west sides of the brick rubble.

The areas to the south and east failed to produce evidence of structural remains, but along the northwest periphery there were nails, glass, ceramics, and other cultural materials. The ceramics which ranged from the late eighteenth to the mid-nineteenth century produced a mean ceramic date of 1841.13 (Table 8). The nails are all machine-cut and represent both early and late types. The early machine-headed nails, according to Nelson (1968), were being manufactured between 1815 and the late 1830s, and the "modern" machine-cut nails were made after 1840. Because there are no wire nails, the structure was probably built prior to 1850, and perhaps as early as 1815.

The windowpane glass also supports an early date of construction. The presence of thin glass in the range of .036" to .058" would indicate a time frame between 1820 and 1840 (Walker 1971), which corresponds with the mean ceramic date and the nail chronology. With the appearance of thicker glass in the range of .070" to .085" (see Table 8), there is an indication of occupational continuity.

Size and architectural features of the house cannot be dealt with because of the lack of information. Bricks, plaster, and large nails would tend to suggest a wooden framed structure on a brick foundation with a plastered interior.

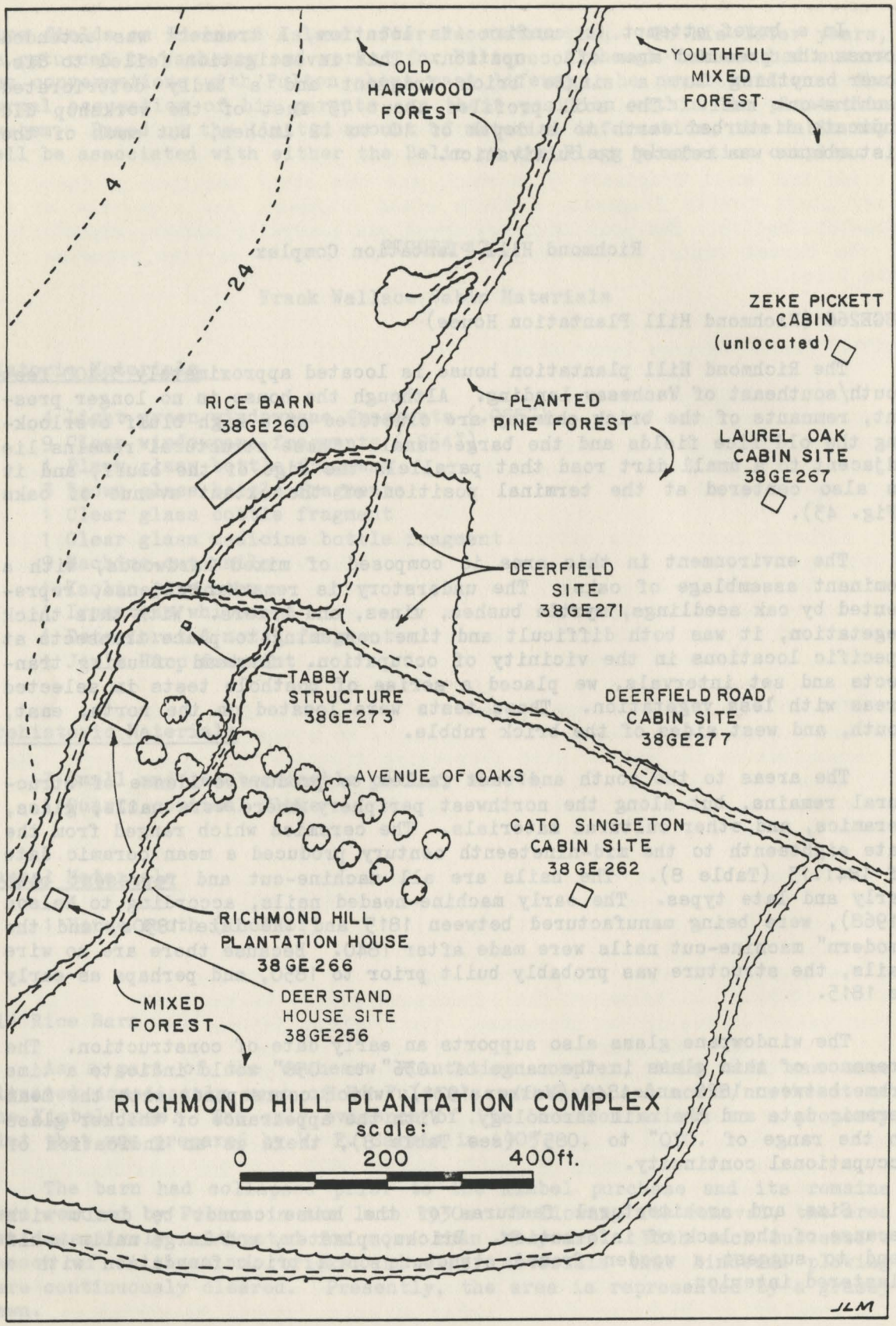


Figure 43. Portions of the Richmond Hill Plantation complex as it appeared in the 19th century.

TABLE 8

RICHMOND HILL PLANTATION HOUSE ASSEMBLAGE

Ceramic Type	Range	Median	No.	Product
Lighter yellow creamware	1775-1820	1798	2	3,596
Creamware	1762-1820	1791	1	1,791
Blue edged pearlware	1780-1830	1805	1	1,805
Undecorated pearlware	1780-1830	1805	3	5,415
Transfer printed whiteware	1820-1900	1860	9	16,740
Ironstone whiteware	1813-1900	1857	7	12,999
			23	42,346

Mean Ceramic Date = 1841.13

Other Historic Materials

1 Lead glazed red earthenware
6 Thin, light green windowpane fragments (.044"-.055")
6 Thin, clear windowpane fragments (.036"-.058")
5 Thick, clear windowpane fragments (.070"-.085")
2 Black glass bottle fragments
2 Clear glass bottle fragments
1 Wine glass fragment
1 Frosted glass fragment
7 Machine cut nails (Modern type)
4 Machine cut nails (Early type)
1 Kaolin pipe stem
2 Plaster fragments

Prehistoric Materials

1 Plain pottery sherd
2 Rhyolite flakes

It would appear that occupation began shortly after the turn of the nineteenth century and probably continued into the 1900s. Since rice was being planted on Richmond Island after emancipation, the plantation system may have functioned until the turn of the century. According to James Moody (personal communication), the plantation house later became a residence for local tenant farmers and burned in the early 1900s.

38GE256 (Deer Stand House Site)

This site is located 260 feet south of the Richmond Hill plantation house and 100 feet east of the small road that parallels the bluff. It

exists in a dense environment of mixed hardwoods, with an understory composed of moderately-sized seedlings, various bushes, vines, and briers.

The only visual evidence of the structure is noted by the presence of a small scatter of bricks. Using the brick as a datum point, transects were extended across the site and test units were excavated. The results of this investigation indicate the house was relatively small and that it was temporally associated with the plantation complex (Table 9).

TABLE 9

DEER STAND HOUSE SITE ASSEMBLAGE

Ceramic Type	Range	Median	No.	Product
Jackfield earthenware	1740-1780	1760	1	1,760
Annular wares	1780-1830	1805	5	9,025
Undecorated pearlware	1780-1830	1805	1	1,805
Transfer printed whiteware	1820-1900	1860	2	3,720
Ironstone whiteware	1813-1900	1857	9	16,713
			18	33,023

Mean Ceramic Date = 1834.61

Other Historic Materials

6 Black Glass bottle fragments
8 Light green bottle fragments
5 Clear glass bottle fragments
2 Frosted glass fragments
2 Thin, light green windowpane fragments (.050"-.055")
1 Hand wrought nail
25 Machine cut nails ("Modern" type)

Faunal Materials

1 Large bone (cow?)
3 Small bone fragments

38GE262 (Cato Singleton Cabin Site)

This small cabin site is located about 700 feet east/southeast of the main plantation house, and approximately 250 feet west of a small dirt road (Fig. 43). The environment in this area is relatively open and is represented by mixed hardwoods and occasional pines.

The site is easily recognized by the presence of a brick pile clustered around the base of a large pine. Several transects were extended

over this area and samples were taken at 10-foot intervals. An area of intense occupation was noted immediately east of the bricks. This area was characterized by dark soil and an increase in cultural materials. Although ceramics are poorly represented, the structural materials would suggest contemporaneity with the plantation system (see Fig. 44). If the dark zone of intense occupation reflects the size of the structure, then it would appear small and in the range of about 20 feet.

During the late 1800s, Cato Singleton was living in the house and was employed as a tenant farmer (Ed Fulton and James Moody, personal communication). Beyond this information, little is known about the occupants, their employment, or their role in the plantation system.

In all probability, this specific site and the others that form a linear arrangement, i.e., 38GE277 and 38GE267, are contemporary and represent a cluster of slave cabins. After the Civil War, these cabins were certainly used by local tenant farmers, exemplified, in part, by Cato Singleton and Zeke Pickett.

FIGURE 44

CATO SINGLETON HOUSE SITE ASSEMBLAGE

Historic Cultural Materials

1 British brown stoneware (1690-1775; median date 1733)
1 Ironstone whiteware (1813-1900; median date 1857)
2 Black glass bottle fragments
2 Green glass bottle fragments
1 Brown glass bottle fragment
3 Clear glass bottle fragments
1 Clear glass bottle base; molded rectangular
1 Clear glass bottle neck; applied lip
1 Thin, clear glass lantern mantle (?)
1 Thick, clear glass container fragment
3 Light green windowpane fragments (.055", .055", .075")
24 Machine cut nails, ("Modern" type; after 1840s)
3 Machine cut nails (machine-headed; 1815-1840)
1 Deteriorated metal fragment

38GE277 (Deerfield Road Cabin Site)

This site is located about 225 feet east/southeast of a small cultivated field and is scattered in a dirt road for a distance of about 75 feet (Fig. 43). On the north side of the road is a pine forest about 50 years old; the forest to the south is older, composed of large oaks and occasional pines. The recent pine forest bordering on the southern edge of the site was cultivated prior to 1936; the site was probably disturbed from farming activities.

The entire roadbed was thoroughly collected and the peripheral areas on the north and south were probed with metal rods to determine the extent of brick fragments. This brief investigation determined that the greatest number of brick fragments, although few, are located in the roadbed and the immediately contiguous areas. Most of the site exists within the road and much of it has been destroyed.

In terms of site location, the structure once existed between 38GE262 and 38GE267 and may have been associated with a formal arrangement of cabins. Although the ceramics are somewhat limited in number, a mean ceramic date of 1843.66 would suggest contemporaneity with Richmond Hill plantation (see Tables 8, 9, and 10).

TABLE 10

DEERFIELD ROAD SITE ASSEMBLAGE

Ceramic Type	Range	Median	No.	Product
White salt glazed stoneware	1740-1775	1758	1	1,758
Over glazed enamelled China trade porcelain	1790-1825	1808	1	1,808
Annular wares	1790-1820	1805	2	3,610
Transfer printed whiteware	1820-1900	1860	4	7,440
Ironstone whiteware	1813-1900	1857	10	18,570
			18	33,186

Mean Ceramic Date = 1843.66

Other Historic Materials

1 Albany slip stoneware/salt glazed interior (19th century)
1 Unglazed orange earthenware
8 Black glass bottle fragments
1 Machine cut nail ("Modern" type; after 1840)
1 Iron pot fragment
2 Deteriorated iron fragments
1 Kaolin pipe stem fragment

38GE267 (Laurel Oak Cabin Site)

The area to the north and east of the Deerfield site was once cultivated, but in 1936, the field became fallow and was planted in pines by Ed Fulton. According to Fulton, there was a large oak near the center of the field, accompanied with a light scatter of bricks. This area, which is the location of another cabin site, has never been cultivated.

In an attempt to locate the area of occupation, several transects were extended across the site and soil samples were removed at 10-foot intervals. While there is a light scatter of cultural materials within a 50- to 75-foot diameter, there is a small concentration about 35 feet north of the oak and beneath a dense canopy of grape vines. Accompanying this scatter is a zone of dark soil extending to a depth of about 12 inches, which probably locates the house.

Ceramics were disappointingly scarce, as were other cultural materials, but they parallel with a portion of the other site assemblages. While it is difficult to obtain a date on this small site, its linear association with the other sites would argue for contemporaneity, as would the artifacts (see Figs. 43 and 45).

FIGURE 45

LAUREL OAK CABIN SITE ASSEMBLAGE

Historic Cultural Materials

1 Annular ware (1790-1820; mean date 1805)
2 Transfer printed whitewares (1820-1900; mean date 1860)
1 Black glass bottle fragment
2 Green glass bottle fragments

Zeke Pickett Cabin Site

In 1889, Zeke Pickett was born on Richmond Hill in a cabin located about 600 feet northeast of the Deerfield site. According to Ed Fulton, the cabin existed on the edge of the old field now planted in pines (Fig. 43).

The environment on the north edge of the pine forest is characterized by an emerging oak forest that has passed through pine succession. With a dominant canopy of oaks and few pines, the understory is composed of a dense growth of oak seedlings that offers limited visibility. Separating these two forests is a narrow firebreak that extends from the edge of the dirt road east towards Highway 392.

In an attempt to locate this apparently early cabin, the entire firebreak was walked in an effort to find scattered or isolated cultural materials that would provide information on the site. When this method failed to disclose artifacts, we walked through the oak forest in a zigzag pattern looking for collapsed chimneys and scattered bricks. At a later date we returned to the area and deepened the zigzag pattern to include a north/south penetration of 150 feet. In addition, we also probed the area with metal rods. During these investigations two small brick fragments, beer bottles and cans, tin buckets, tin cans, and other refuse associated with the twentieth century were located. Except for the isolated brick fragments, there was no evidence of a nineteenth-century structure.

38GE271 (Deerfield Site)

This site is located within 400 feet north/northeast of the main house at Richmond Hill and adjacent to the planted pine forest (Fig. 43). Although this area was cultivated several years ago, it has become fallow with the growth of small pines and broomstraw. In this field historic and prehistoric materials were found.

The historic materials clustered at the southeastern edge of the field near the junction of the dirt roads; the prehistoric materials were scattered across the entire area. The bottle fragments, pipe stems, ceramics and brick fragments indicate a structure was once there. Unfortunately, however, continued cultivation and the removal of bricks has destroyed any spatial integrity and opportunity to understand form and function of this site with the plantation system.

FIGURE 46

DEERFIELD ARTIFACT ASSEMBLAGE

Historic Cultural Materials

4 Black glass bottle fragments
2 Kaolin pipe stems
1 Deteriorated metal fragment
2 Annular wares (1790-1820; mean date 1805)
3 Transfer printed whitewares (1820-1900; mean date 1860)
2 Ironstone whitewares (1813-1900; mean date 1857)

Prehistoric Cultural Materials

7 Plain pottery sherds
1 Fabric impressed sherd
2 Deptford linear check stamped sherds
2 Rhyolite flakes

38GE273 (Tabby Foundations)

Situated at the base of the hill between the plantation house and the rice barn is a small foundation constructed of oyster shell and mortar (Figs. 43 and 47). Except for this foundation, there are no other indications of a former structure.

In an attempt to associate the structure with time and function, five subsurface test units were excavated: three within the interior and two on the outside. These units demonstrated that the soils on the inside and outside are undisturbed and relatively sterile. There are no indications that the structure served as a privy, and there were no building materials

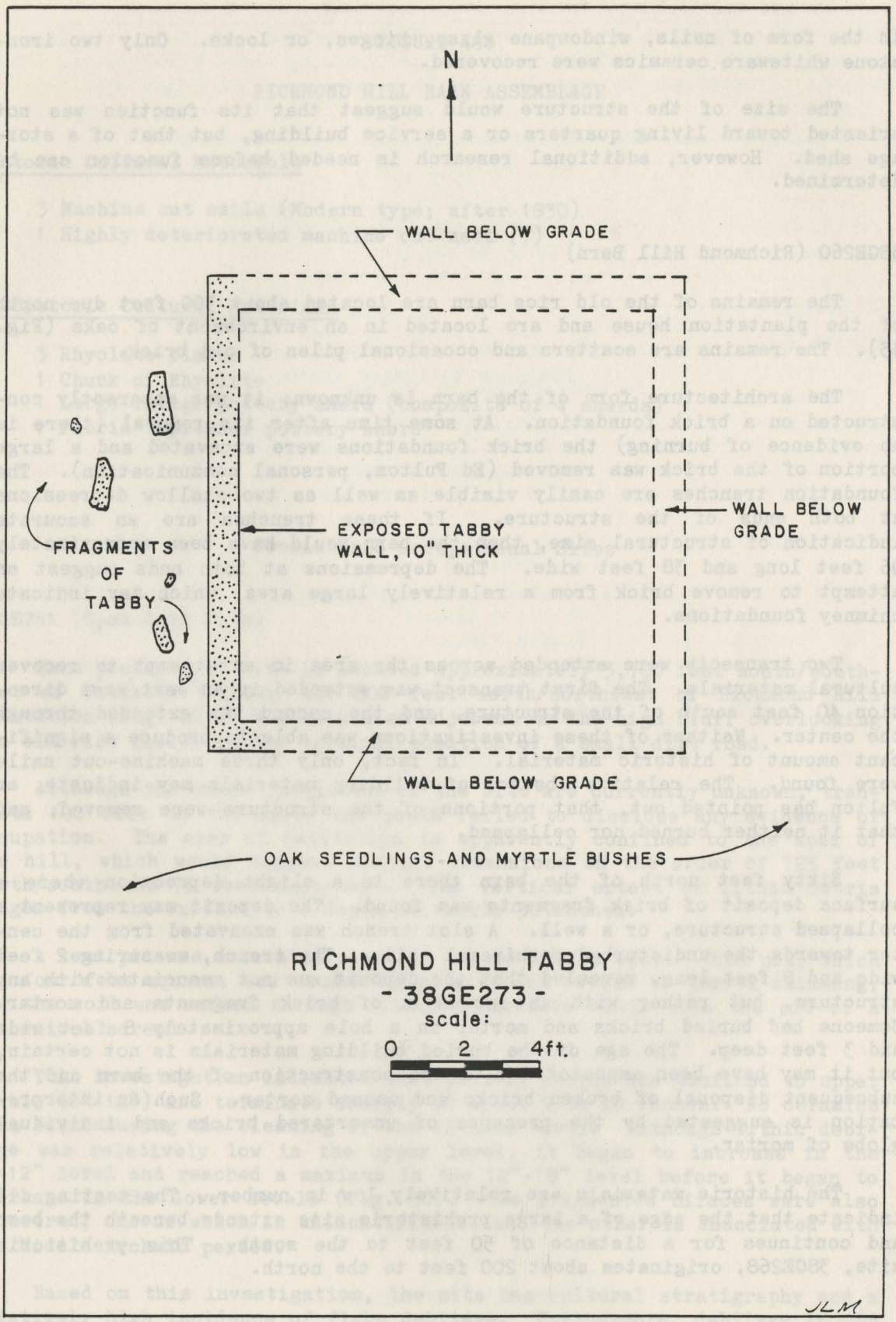


Figure 47. Richmond Hill tabby foundation.

in the form of nails, windowpane glass, hinges, or locks. Only two ironstone whiteware ceramics were recovered.

The size of the structure would suggest that its function was not oriented toward living quarters or a service building, but that of a storage shed. However, additional research is needed before function can be determined.

38GE260 (Richmond Hill Barn)

The remains of the old rice barn are located about 300 feet due north of the plantation house and are located in an environment of oaks (Fig. 43). The remains are scatters and occasional piles of old brick.

The architecture form of the barn is unknown; it was apparently constructed on a brick foundation. At some time after its removal (there is no evidence of burning) the brick foundations were excavated and a large portion of the brick was removed (Ed Fulton, personal communication). The foundation trenches are easily visible as well as two shallow depressions at both ends of the structure. If these trenches are an accurate indication of structural size, then the barn would have been approximately 96 feet long and 38 feet wide. The depressions at both ends suggest an attempt to remove brick from a relatively large area, which may indicate chimney foundations.

Two transects were extended across the area in an attempt to recover cultural materials. The first transect was extended in an east/west direction 40 feet south of the structure, and the second was extended through the center. Neither of these investigations was able to produce a significant amount of historic material. In fact, only three machine-cut nails were found. The relative absence of building materials may indicate, as Fulton has pointed out, that portions of the structure were removed, and that it neither burned nor collapsed.

Sixty feet north of the barn there is a slight depression where a surface deposit of brick fragments was found. The deposit may represent a collapsed structure, or a well. A slot trench was excavated from the center towards the undisturbed perhiperal soils. The trench, measuring 2 feet wide and 8 feet long, revealed that the deposit was not associated with any structure, but rather with an inclusion of brick fragments and mortar. Someone had buried bricks and mortar in a hole approximately 8 feet wide and 3 feet deep. The age of the buried building materials is not certain, but it may have been associated with the construction of the barn and the subsequent disposal of broken bricks and unused mortar. Such an interpretation is suggested by the presence of unmortared bricks and individual globs of mortar.

The historic materials are relatively low in number. The testing did indicate that the edge of a large prehistoric site extends beneath the barn and continues for a distance of 50 feet to the south. This prehistoric site, 38GE268, originates about 200 feet to the north.

FIGURE 48

RICHMOND HILL BARN ASSEMBLAGE

Historic Cultural Materials

3 Machine cut nails (Modern type; after 1830)
1 Highly deteriorated machine cut nail (?)

Prehistoric Cultural Materials

3 Rhyolite flakes
1 Chunk of Rhyolite
1 Large refuge pottery sherd (composite of 4 sherds)
1 Fabric impressed pottery sherd

Prehistoric Occupational Sites

38GE261 (Open Area Site)

This prehistoric site is located approximately 3,700 feet south/southeast of Wachesaw Landing and 800 feet north/northeast of Richmond Hill plantation (Fig. 27). The site lies adjacent to the high bluff overlooking the old rice fields at the terminal position of a small dirt road.

Although the exact dimensions of the site are currently unknown, transects 100 feet to the north and south failed to disclose any evidence of occupation. The area of habitation is apparently confined to the apex of the hill, which would suggest spatial dimensions on the order of 125 feet north/south and 75 feet east/west. The vertical extent of lithic debris ranges from the surface to a depth of nearly 30 inches.

A test pit was excavated near the center of the apex. This pit, which was four feet square, was excavated in six-inch levels by shovel skimming, and the soil was sifted through 1/4-inch hardware cloth with the aid of a mechanical screen.

This investigation indicated that pottery sherds are confined to upper levels (0"-12") and terminate sharply at about 9 to 10 inches. No ceramics were found during the cleaning of the 12-inch level. Although lithic debitage was relatively low in the upper level, it began to increase in the 6"-12" level and reached a maximum in the 12"-18" level before it began to decrease in the lower levels (Fig. 50). Two fragmented bifaces were also recovered, one of which is unidentifiable, and the other is associated with the Middle Archaic period.

Based on this investigation, the site has cultural stratigraphy and a relatively high incidence of flake debitage. Furthermore, debitage in the

lower levels suggests the presence of Early Archaic materials, and hence, the probability of a multicomponent site spanning some 9,500 years. The analysis of materials by specific levels is presented in Figure 49.

FIGURE 49

OPEN AREA SITE ARTIFACT ASSEMBLAGE

Provenience	Cultural Materials
0"-6" Level	3 Oyster shell fragments
	1 Ironstone whiteware sherd
	1 Rhyolite flake with cortex
	1 Quartz flake with cortex
	7 Savannah check-stamped pottery sherds
	3 Plain pottery sherds
	5 Small and indeterminable pottery sherds
6"-12" Level	2 Bone fragments
	1 Ironstone whiteware
	2 Sandstone concretions
	17 Rhyolite flakes
	2 Quartz flakes
	6 Dacitic tuff flakes
	1 Rhyolite biface (tip portion)
	1 Savannah check stamped pottery sherd (composite of 4 sherds)
	1 Fabric impressed pottery sherd (composite of 3 sherds)
	4 Fabric impressed pottery sherds
12"-18" Level	3 Quartz flakes
	47 Rhyolite flakes
	9 Dacitic tuff flakes
	1 Rhyolite biface fragment (Morrow Mountain)
18"-24" Level	5 Charred hickory nut fragments
	1 Quartz flake
	17 Rhyolite flakes
	4 Dacitic tuff flakes
24"-30" Level	6 Rhyolite flakes

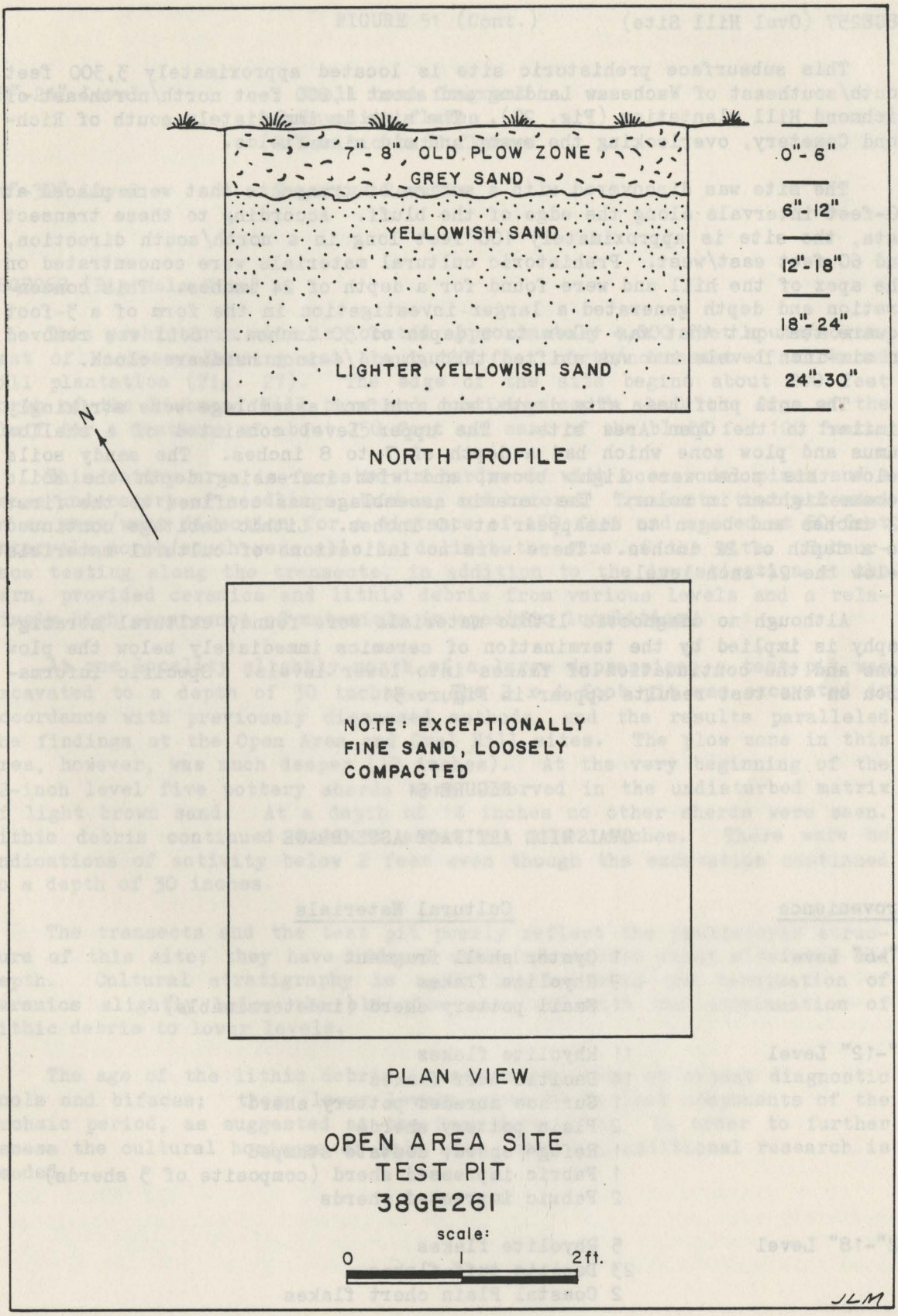


Figure 50. North profile and plan view of test unit at the Open Area site.

38GE257 (Oval Hill Site)

This subsurface prehistoric site is located approximately 3,300 feet south/southeast of Wachesaw Landing and about 1,200 feet north/northeast of Richmond Hill plantation (Fig. 27). The site is immediately south of Richmond Cemetery, overlooking the swamp and old rice fields.

The site was discovered with a series of transects that were placed at 50-feet intervals along the edge of the bluff. According to these transect data, the site is approximately 100 feet long in a north/south direction, and 60 feet east/west. Prehistoric cultural materials were concentrated on the apex of the hill and were found for a depth of 24 inches. This concentration and depth generated a larger investigation in the form of a 3-foot square test pit that was taken to a depth of 30 inches. Soil was removed in six-inch levels and was shifted through a 1/4-inch hardware cloth.

The soil profiles, site depth, and artifact assemblage were strikingly similar to the Open Area site. The upper level consisted of a shallow humus and plow zone which had a depth of 7 to 8 inches. The sandy soils below this zone were light brown, and with increasing depth the soils become lighter in color. The ceramic assemblage was confined to the first 12 inches and began to disappear at 10 inches. Lithic debitage continued to a depth of 22 inches. There were no indications of cultural materials below the 24-inch level.

Although no diagnostic lithic materials were found, cultural stratigraphy is implied by the termination of ceramics immediately below the plow zone and the continuation of flakes into lower levels. Specific information on the test results appear in Figure 51.

FIGURE 51

OVAL HILL ARTIFACT ASSEMBLAGE

Provenience	Cultural Materials
0"-6" Level	1 Oyster shell fragment
	9 Rhyolite flakes
	1 Small pottery sherd (indeterminable)
6"-12" Level	11 Rhyolite flakes
	14 Dacitic tuff flakes
	1 Surface abraded pottery sherd
	2 Plain pottery sherds
	1 Refuge sherd, dentate stamped
	1 Fabric impressed sherd (composite of 3 sherds)
	2 Fabric impressed sherds
12"-18" Level	5 Rhyolite flakes
	23 Dacitic tuff flakes
	2 Coastal Plain chert flakes

FIGURE 51 (Cont.)

18"-24" Level	1 Small bone fragment 2 Rhyolite flakes 8 Dacitic tuff flakes
24"-30" Level	Negative Results

38GE268 (Big Hole Site)

This prehistoric site is located approximately 4,000 feet south/southeast of Wachesaw Landing and about 400 feet north/northeast of Richmond Hill plantation (Fig. 27). The edge of the site begins about 200 feet north of the Richmond Hill barn and continues south along the edge of the bluff for a distance of about 250 feet and east of the bluff for 100 feet.

This entire area is forested in hardwoods with occasional pines and a dense understory of seedlings, bushes, and briers. Transects that extended in an east/west direction for a distance of 150 feet and spaced at 50-feet intervals north/south were able to delimit the size of the site. Subsurface testing along the transects, in addition to the investigation at the barn, provided ceramics and lithic debris from various levels and a relatively high occurrence of materials in specific localities.

At one locality slightly north of a large depression, a test pit was excavated to a depth of 30 inches. The 2 x 4 foot pit was excavated in accordance with previously discussed methods, and the results paralleled the findings at the Open Area and Oval Hill sites. The plow zone in this area, however, was much deeper (12 inches). At the very beginning of the 12-inch level five pottery sherds were observed in the undisturbed matrix of light brown sand. At a depth of 14 inches no other sherds were seen. Lithic debris continued down to about 21 to 22 inches. There were no indications of activity below 2 feet even though the excavation continued to a depth of 30 inches.

The transects and the test pit poorly reflect the prehistoric structure of this site; they have offered some information about site size and depth. Cultural stratigraphy is again implied with the termination of ceramics slightly below the old plow zone and with the continuation of lithic debris to lower levels.

The age of the lithic debris is unknown because of absent diagnostic tools and bifaces; these lower levels probably reflect components of the Archaic period, as suggested at the Open Area site. In order to further assess the cultural horizons of this site, however, additional research is needed.

FIGURE 52

BIG HOLE ARTIFACT ASSEMBLAGE

Provenience	Cultural Materials
0"-6" Level	1 Rhyolite flake
	2 Plain pottery sherds
	2 Small and indeterminable sherds
6"-12" Level	1 Small bone fragment
	1 Oyster shell fragment
	3 Plain sherds
	1 Fabric impressed sherd
	1 Rhyolite flake
	1 Dacitic tuff flake
12"-18" Level	3 Plain pottery sherds
	1 Large plain sherd
	1 Check stamped sherd (Savannah ?)
	3 Rhyolite flakes
18"-24" Level	1 Pottery sherd with brushed exterior
	1 Rhyolite flake
	2 Dacitic tuff flakes
24"-30" Level	Negative results

38GE255 (Richmond Cemetery Road Site)

This small prehistoric site is located east of Richmond Hill cemetery (38GE254) and west of the main road that leads from Wachesaw to Richmond Hill plantation. The site exists in the roadbed leading to the cemetery (Fig. 27).

Evidence for a prehistoric occupation was first noted in the presence of three pottery sherds that were surface collected at separate locations along the road. Although these artifacts represent an apparent small occupation, a transect was extended down the center of the roadbed in an effort to isolate an occupation. The result of the transect produced a single artifact: an argillite flake. The ceramics that were surface collected are the following: a plain sherd and two fabric impressed sherds.

38GE258 (Cottonmouth Site)

At a distance of about 200 feet southeast of the log cabin and immediately west of the main road in an environment of oaks and seedlings is a ridge overlooking the swamp and a garbage dump. A transect placed across this ridge located a relatively small site (Fig. 27).

Near the edge of the ridge the transect recovered four pottery sherds: two plain and two check stamped (Deptford?). The remaining test units failed to disclose additional cultural materials. The adjacent roadbeds were also inspected, which failed to yield any signs of occupation.

38GE265 (Box Turtle Site)

This site is situated about 500 feet north of the Brookgreen land line and immediately east of the road that extends along the edge of the bluff near Richmond Hill (Fig. 27). The environment in this area is exceptionally dense and is composed of hardwoods with a high incidence of oak seedlings and myrtle bushes. A transect was extended from the edge of the road to the east. Pottery sherds were found near the bluff. At a distance of 100 feet from the center of the road, a small deposit of oyster shells was found at a depth of 14 inches. This deposit was 20 inches in diameter and 4 inches deep. In an attempt to associate the shell cluster with a specific cultural period, additional test units were excavated to the north, east, south, and west. This attempt, however, failed to relate the deposit to any artifact or other cultural assemblage. The soil profiles demonstrated an obvious intrusion, and the physical condition of the shells indicated a relatively recent deposition. Such an indication is suspected because the shells were neither deteriorated nor leached.

The pottery sherds discovered at the beginning of the transect are represented by a plain sherd and a heavily deteriorated sherd. No other materials were recovered.

38GE269 (East Barrow Pit Site)

At a distance of about 2,100 feet southeast of the intersection of S.C. Routes 392 and 62, a dirt road leads to the northeast and crosses a small stream some 900 feet from Route 62 (Fig. 28). Prior to crossing the swamp, and on the east side of the road, there is a slightly elevated terrace overlooking the stream and its bottomland environment.

During construction of the road, or with road improvements, the western edge of the terrace was removed for fill. The remaining portion of this sandy elevation, which is forested in pine and small sweetgum, was tested with a transect. The test units disclosed the presence of five ceramics: four plain sherds with a scraped interior and exterior, and a plain sherd without tool marks. Four of the sherds were found on the apex of the terrace, and the remaining one was found 75 feet to the northeast near the slope. These sherds were all confined to an old plow zone about 7 to 9 inches deep, suggesting the site had been disturbed through cultivation.

38GE275 (Brookgreen Line Site)

This small prehistoric site is located at the southern edge of the property adjacent to the Brookgreen Land Line, 38GE253 (Fig. 27). It is

situated along the edge of the bluff and in a roadbed that overlooks the old rice fields.

This specific area has extensive exposure in the form of two dirt roads that intercept and offer access to various areas of the property. Although these roads were thoroughly inspected for cultural materials, there was no indication of occupations. Beginning at the slope of the bluff, a transect was extended in an east/west direction, somewhat parallel with the old land line. The results of the test units produced a single pottery sherd: a Refuge dentate stamped. Beyond this sherd, there were no other indications of habitation.

The soil profiles in this area depict an old plow zone that ranges from about 7 to 9 inches deep. The plow zone, which is represented by dark gray sand, lies unconformably on a dark brown sand. Typically, the brown sand grades slowly into a light color with increasing depth.

38GE281 (#3 Cottonmouth Site)

This small historic site is located about 1,600 feet southeast of Wachesaw Landing at the edge of the road that leads to Richmond Hill plantation (Fig. 27). The site was discovered with the first test unit of a transect, but the other units failed to disclose additional cultural materials. After the transect was completed, the contiguous areas were thoroughly walked with the anticipation of finding scattered brick or a collapsed chimney, or other indications of a former structure. In addition to the walk-over survey, the area was also probed with metal rods in order to find subsurface materials. Neither of these approaches, however, was able to generate information concerning the presence of a structure. The appearance, then, of an ironstone whiteware sherd, and a deteriorated fragment of metal is difficult to explain in an area otherwise void of materials.

An Explanation of Significance

With the establishment of the National Historic Preservation Act of 1966, a set of guidelines was established to define the meaning of significance. The guidelines were implemented as criteria for the determination of eligilibility of properties to the National Register of Historic Places. This attempt at setting forth criteria appears as 36 CFR 60.4 (formerly 36 CFR 60.6) in the regulations of the National Register. The criteria are generally concerned with events that have made a significant contribution to history; places that are associated with the lives of persons significant to our past; places and things that embody distinctive characteristics; and places that have yielded, or may be likely to yield, information about the past.

With certain limitations in this criteria, and with a need for more substantive evaluations of cultural resources, several members of the archeological community have tried to improve the meaning of a site's significance. With the implementation of several federal laws in the late

1960s and early 1970s, e.g., the National Environmental Policy Act of 1969, Executive Order 11593 of 1971, and the Archeological and Historic Preservation Act of 1974, archeologists saw a need to set forth additional criteria for a growing number of endangered sites.

Out of this need has grown a relatively large number of publications that address various avenues of significance, many of which are too numerous to mention here. A search through the literature seems to indicate that at least three major publications offer a definitive treatise on meaning of significance: Schiffer and Gumerman (1977), Moratto and Kelly (1978), and King, Hickman, and Berg (1977).

Schiffer and House (1977) have taken a position that significance should operate within a framework of research-oriented questions. As a result, they have developed four separate categories that deal with: substantive significance; anthropological significance; technical, methodological, and theoretical significance. Schiffer and House's approach is to describe and explain the events and processes that occurred in the past; to test anthropological principles through scientific investigations; to answer nomothethic questions; and to address technical, methodological, and theoretical questioning when other categories are difficult to approach.

Morrato and Kelly (1978) also expand the meaning of significance with a list of specific typologies, or categories, directed towards the archeological record. They support the recognition of broad patterns; a scientific approach in establishing reliable facts about the past; the recognition of ethnic significance, especially if the cultural resource holds religious, mythological, spiritual, or other symbolic importance; and the monetary value of a cultural resource.

To King, Hickman, and Berg (1977), a cultural resource is significant if it can relate to the understanding of cultural processes and human behavior. A site's significance is its ability to contribute to theoretical questions concerning anthropology and the processual nature of a site.

Based on this brief overview of significance, there are many levels of interpretation, and interpretation is relative to the philosophies of various researchers. Significance, then, is a consideration of the values mentioned above and contemporary movements in American archeology, exemplified, in part, with the initial establishment of federal rules and regulations that demand an assessment of cultural resources. It is also a datum point to measure the potential value of a site in a multifaceted system of prehistory and history that constantly strives to recognize the qualities of the archeological record.

An explanation of significance, therefore, is the relationship between the archeological record and its potential to answer questions about prehistoric and historic cultural systems. Such questions are generally oriented around cultural chronologies (the relative age of artifacts), lifeways (the overall view of culture: settlement pattern, population density, technology, art, etc.), and culture process (cause and effect relationships; the reason for culture or change).

Sites of Significance and Management Recommendations

One of the most significant sites on the property is Wachesaw Landing, 38GE7. Its prehistoric and historic importance cannot be overstated. The site represents a diversity of Indian occupations that began with the Woodland period and terminated with the arrival of Europeans in the early 1700s. By 1710, the area was being penetrated by settlers, and by 1735-1740 a building was constructed on the bluff overlooking the Waccamaw River. Although there are little indications of form, function, and ownership, an Alston (Allston?) family may have been involved in the early settlement and utilization of the property. By 1825, James L. Belin had acquired the land and established a plantation. Based on the early nineteenth-century ceramics, Belin's home may have been located on the bluff instead of in the grove of oaks situated to the east.

This site provides archeology with an opportunity to study a Late Mississippian and historic contact Indian village in terms of intrasite settlement and spatial organization, burial practices, structural designs, subsistence, health and disease patterns, technology, population density, organization of domestic life, social stratification, and certainly the effects of contact with Europeans. Beyond these research potentials, the skeletal materials have an opportunity to contribute to culture history, i.e., the movement of specific groups of people through time and possible relationships with the coastal Siouan populations (Trinkley et al. 1983).

The remains of the historic structure that exists in the vicinity of the Kimbel home can also contribute to our knowledge of early settlement and lifeways. From the remains of the structure there is a potential to find the location of the foundation footings, and hence, determine the spatial dimensions of the structure. Specific building materials, such as bricks, mortar, nails, plaster, windowpane glass, hinges, locks, etc., can enhance our knowledge of architectural form. In addition to form, the cultural household materials, such as ceramics, glass, furniture hardware, pipe stems, gun flints, etc., can provide insight about function through pattern recognition, which has potential for determining whether the structure served as a tavern or a domestic household oriented toward the cultivation of cash crops.

This site is exceptionally valuable in terms of its archeological research potential. Based on present knowledge, it meets the criteria for eligibility to the National Register of Historic Places. In planning we would recommend two alternatives: 1) the site should be placed on the National Register and be avoided during any considerations of construction or topographic alteration, and 2) if the site cannot be avoided, then the area should be subjected to intense excavation and data recovery. We would also recommend that in the event that either the Kimbel home or the log cabin is removed, an archeologist should be present to determine the potential adverse effects of heavy equipment on the relatively shallow subsurface deposits. If these activities are in any way damaging to the archeological record, we would further recommend the implementation of a data recovery program in the affected areas.

The underwater survey conducted by Alan B. Albright of the Institute of Archeology and Anthropology (see Appendix A) determined that prehistoric and historic materials are scattered across the river bottom in the vicinity of the Kimbel home and Ed Fulton's fishing dock. In the event that this area should be impacted with the construction of a marina or other docking facilities, or if construction on the bluff generates direct or indirect impacts, we would recommend a program of data recovery. Although these materials have eroded and collapsed from a former bluff, and consequently suffered a loss of spatial integrity, the materials are nevertheless important because they represent portions of a former cultural system. Because these materials have not been subjected to the adverse conditions of cultivation, or other such forms of destruction, fragments of pottery and ceramics are relatively large. These large fragments can easily lend themselves to the reconstruction of vessel form and vessel function.

Much of the plantation system relating to either Belin or Flagg has been removed or destroyed since the beginning of the century; the remains of the old home site (38GE264) exist in the form of subsurface deposits. This specific site is also significant because it is associated with events that have made a significant contribution to the broad patterns of our history, i.e., southern plantation systems and the socio-political and economic development of Waccamaw Neck. Subsumed within this significance is the overall contribution to the economic growth of South Carolina during the antebellum era. Although the life of Allard B. Flagg may not be entirely significant to our past, historically his grandfather had fought with Nathanael Greene and served as a surgeon with Greene's continental army. Following Henry Flagg's retirement from the Revolution and the establishment of his Brookgreen plantation, he later hosted a visit from George Washington in 1791. Thus, when Allard Flagg inherited Wachesaw from Belin, his familial background was socially impressive. In a tradition of local affluence, Allard Flagg married Penelope Ward, the daughter of the wealthiest rice planter of his time.

As a part of the Belin-Flagg plantation, and with Flagg's ownership, the Frank Wallace cabin (38GE263) and the church, St. John the Evangelist (38GE259), should be included as a part of the plantation, and therefore recognized as significant. While the antiquity of the small cabin site is unknown presently, it certainly may represent an antebellum structure, and the church was known to have been constructed by an endowment from Flagg in 1855.

If any of these three sites become endangered by construction, roads, golf courses, or other manners of topographic alteration, we would recommend a thorough investigation. Such an investigation would not only include fieldwork in the form of excavation but also archival research. By utilizing these data available in the archeological record and archival land plats, photographs, and other documents, a considerable amount of knowledge can be acquired about the form and function of a nineteenth-century plantation system. In these areas we would suggest a program of intensive testing designed to delimit the size of the structures and determine their relative age. Additional consideration would encompass pattern recognition, subsistence trends, the location of wells and privies, architectural features, and other facets of lifeways.

Similarly, Richmond Hill plantation is significant because of its sociopolitical and economic influence on the development of Waccamaw Neck, and to the general economy of the state. Beyond this significance, the plantation represents a relatively intact system with subsurface deposits in the form of a main house (38GE266), an overseers house (38GE256), a rice barn (38GE260), a small service building (38GE273), and slave quarters (38GE262, 38GE267, 38GE271, and 38GE277).

Some of the Richmond Hill sites have suffered various forms of alteration through destruction, i.e., burning and the removal of bricks and other materials, many of the subsurface deposits are exceptionally intact. Except for sites 38GE277 and 38GE271, we would recommend that the planners either protect these cultural resources through avoidance, or that any adverse effects be mitigated with a substantive program of data recovery through excavation and with archival research.

The historic fortification (38GE278) is significant because it is associated with events that have made a contribution to the broad patterns of history, i.e., the American Revolution. This earthen structure should be protected. If there are any plans for modification or alteration, such as clearing of timber, or other adjustments to its present condition, we would recommend an archeologist be present in the event of slight alteration (clearing of timber, construction of park facilities, etc.), and a comprehensive program of data recovery, photography, mapping, and archival research in the event of destruction.

The rice fields (38GE283) are also significant because they are associated with the plantation systems of Wachesaw and Richmond Hill. The fields are relatively intact, exemplified by the flood canals and a barge canal. Although the reconnaissance survey failed to locate specific machinery associated with the canals, and although there are apparently no other structures within the swamp, we would recommend that an archeologist be present in the event that the fields are altered by dredging because Late Pleistocene mega-fauna were known to have been exploited by Paleo-Indian bands some 11,500 years ago, and these fauna were frequently dispatched in wet, bottomland environments (Michie 1977). The occurrence of mammoth remains and associated stone tools have been documented in a Florida riverbed (Hoffman n.d.), and more recently mastodon bones found near Surfside Beach have been tenuously associated with tools (Michie 1976; Wright 1976). In both of these discoveries, the animals were buried beneath several feet of Holocene sediments and were correlated with sediment-accumulative environments such as river swamps and bottomlands. Thus, there is great potential for such a discovery in the rice fields.

Richmond Hill cemetery (38GE254) is significant because it was associated with a former plantation system, and it has demonstrated continuity of utilization since slavery, and it has ethnic identity. Although the exact number of burials is unknown, an easement of 25 feet should be extended to the north, east, and south in order to avoid disturbance of unmarked graves.

Although little is known of the Wachesaw Road cemetery (38GE279), the planners should locate the cemetery prior to any development. Additionally, an attempt should also be made toward understanding its antiquity

and association with Wachesaw in terms of slave burials and continuity in the burial of relatives. An appropriate easement should also be given to this area if the cemetery can be found.

The tar kiln (38GE282) is not necessarily a significant site because it is not associated with persons or events important to our past, and it is not likely to yield information that would be important to understanding the past. However, with the continued growth of coastal areas, as well as other parts of South Carolina, resources such as these are being steadily destroyed. Consequently, little, if any, of this industrial operation has been recorded. Although the tar kiln and the associated reservoir are not likely to yield cultural materials, we would recommend a brief field investigation to support this supposition, which would include accurate mapping and photography of the site.

At least three of the prehistoric sites found along the edge of the bluff are significant: Open Area site (38GE261); Oval Hill site (38GE257); and Big Hole site (38GE268). All three of these sites have demonstrated relatively undisturbed deposits of cultural materials that extend to no less than 24 inches, and probably no deeper than 30 inches. This situation offers an opportunity for the archeologist to establish a temporal ordering of material culture in the Lower Coastal Plain where little is known about regional chronologies. In addition, this stratification can offer knowledge about raw material utilization through time, i.e., the use of Coastal Plain chert versus the metavolcanic materials and quartz.

The question of site formation processes can also be dealt with at each of these localities. How are these sites being formed? Why are the cultural materials stratified in a sandy matrix that was deposited during the Pleistocene? Could this deposition be attributed to flooding by the Waccamaw River during the Holocene, or simply by wind-blown sands? Flood-deposited sands are highly unlikely for a number of reasons. First, the river is located too far to the west to affect the sites. Second, the sites are elevated well above the floodplain and are not easily inundated. Third, soil profiles do not exhibit strata characteristic of flood deposits. Although there is always considerations for aeolian-deposited sands, paleoenvironmental studies would indicate that much of South Carolina was heavily forested during the Holocene (Watts 1970, 1971; Whitehead 1965, 1973), which would be a hinderance for the removal and transportation of sand.

The formation of cultural stratigraphy may be related to the long-term effects of bioturbation, i.e., the growth, expansion, and decay of tree roots, and the subsurface activities of specific animals such as moles, earthworms, bees, frogs, and other species that burrow (Michie 1983). This notion of site formation can be tested against archeological data by isolating specific behavioral activities and tracing its movement through the soil, and by refitting lithic debitage obtained from various levels.

These sites are important to cultural chronologies, lithic raw material utilization, and site formation processes. Specific studies oriented toward wear pattern analysis and the recognition of assemblages (Keeley 1977; Binford 1981) can also make significant contributions in determining site function throughout its range of occupation.

Many of the sites discovered during the reconnaissance survey of Wachesaw and Richmond Hill are significant. Their importance is not only related to the plantation systems of the historic period, but to the wealth of information that also exists in the protohistoric Waccamaw Indian settlement and the earlier stratified sites that exist along the edge of the bluff. Many of the historic sites are associated with the lives of persons that were important in the development of the Waccamaw Neck, to the economic growth of the state, and to significant events that occurred in the past. The prehistoric sites can generate information about past lifeways in a region that is poorly understood archeologically.

SUMMARY AND CONCLUSIONS

The major goal of this survey was oriented toward the discovery and identification of cultural resources that meet the criteria of significance set forth by the National Register of Historic Places. Other standards used by the archeological community were also implemented. Eighteen sites were selected out of a total of 32. The significant sites are: 38GE7, 38GE264, 38GE263, 38GE259, 38GE266, 38GE256, 38GE260, 38GE273, 38GE262, 38GE267, 38GE278, 38GE282, 38GE283, 38GE254, 38GE279, 38GE261, 38GE257, and 38GE268. In dealing with the mitigation of adverse effects to these sites, we would recommend that these sites be protected, or that they be subjected to a substantive program of investigation, data recovery, and interpretation.

The results of this survey indicate that people were probably present at the beginning of the Early Archaic, some 9,500 years ago, and that sporadic occupation seems to have occurred throughout most of the Archaic, and continued into the Woodland and Mississippian periods. Although there is some indication that people were using resources in the vicinity of the small, inland creeks during the Woodland, the main focus of settlement and environmental utilization involved the high bluffs overlooking the floodplain of the Waccamaw River. This settlement pattern is demonstrated by a near continuous scatter of lithic and ceramic materials throughout the area of the bluff. At three separate locations there are relatively large stratified sites with depths that range from about 24 to 30 inches. The upper levels of these sites contain ceramics and lithics, and the lower levels yield a predominant assemblage of lithic materials. With this obvious cultural stratification, paired with the appearance of Middle Archaic diagnostic bifaces, the sites have a great potential.

Prior to 1700, the Waccamaw Indians adopted Wachesaw Landing as their home. During the course of their occupation they traded with settlers and later buried some of the trade items with their dead in shallow graves. The remains of food, pottery vessels, arrow points, lithic debitage, and other materials that reflect their activities are scattered across the bluffs of Wachesaw. In addition to the cultural materials, postholes, fire hearths, and other indications of disturbances are also found in this highly significant site.

After the Indians relocated, an European settler, perhaps an Alston, moved onto the bluff at Wachesaw and constructed a building. Whether the remains of this collapsed structure represents a former plantation, a single domestic dwelling, or a rumored tavern is currently unknown. The age of the initial occupation, according to the ceramic assemblage, is in the range of 1730 to 1740.

By at least 1825, Mill's Atlas indicates that James L. Belin had acquired the property. During this acquisition he created a plantation system, complete with service buildings and slave quarters. Unfortunately, however, little remains of this plantation. Based on the information provided by Ed Fulton, old land plats, and the archeological record, the

plantation system and spatial arrangement would agree with the settlement models proposed by Prunty (1955) and Lewis (1984).

The location of Belin's house has been brought into question because of a disagreement in the archeological data. Accordingly, Belin and Flagg lived in the same home several hundred feet to the east of the river. However, with the absence of early nineteenth-century materials at Flagg's home, Belin may have lived on the bluff at the location of the earlier structure. This contention is supported with the presence of specific ceramics related to the early 1800s.

Allard Flagg inherited the plantation and apparently continued to use the property and the related rice fields until he died in 1896. The exact use of the property after the Civil War is unknown. The homesite, located in the grove of oaks, may have been constructed shortly after he had acquired the property, presumably in the 1850s. This supposition, paired with other research questions, needs to be dealt with at a later date.

Richmond Hill was probably in the possession of an Alston prior to 1825, because the name appears on Mill's Atlas. The ceramics recovered from the plantation would argue for a relatively late date in the range of late eighteenth to early nineteenth century. Apparently with the construction of the plantation, the owner cleared the bottomlands for the cultivation of rice and cut a barge canal through the swamp to facilitate the transportation of cash crops. Concomitant with the fields and canal, the dwellings, service buildings, and other structures were built at about the same time. Flanked on the north and south of the main house were the service buildings and a probable overseers home; the slave cabins were arranged in a linear pattern to the northeast; a settlement pattern that again agrees with Prunty (1955) and Lewis (1984).

Dr. John D. Magill acquired the plantation in the early part of the nineteenth century, and managed it until his death. Little is known about its operation after the Civil War, but it appears that sharecroppers or tenants were living in the cabins during and after Reconstruction. Judging by a near succession of plant growth, much of the plantation went unused after its collapse in the late 1800s. This virtue, however, has allowed the preservation of many historic sites, and has consequently enhanced their value. Although the above-grade structures disappeared a long time ago, the shallow sub-surface deposits of former occupations and related activities are well preserved and, therefore, highly significant.

Wachesaw and Richmond Hill represent a remarkable capsule of prehistory and history that can make substantive leadways about culture and the processes that formed this culture.

APPENDIX I

Notes Concerning the Underwater
Survey of Wachesaw Landing

by

Alan B. Albright

The underwater survey of Wachesaw Landing was conducted by the Institute of Archeology and Anthropology under the direction of this author. By utilizing the Institute diving team and two contract divers, the survey was efficiently performed from a pontoon boat anchored at specific locations approximately 100 feet from the edge of the bank. A total of 44 dives were made over a two-day period which yielded a considerable amount of historic and prehistoric artifacts. In general, this assemblage of cultural materials duplicated those recovered from the adjacent beach and bluff.

In order to assess a relatively large area, 18 heavily weighted buoys were placed approximately 100 feet from the riverbank and within 20 to 25 feet of water (Fig. 53). Buoys 1 through 9 were equally spaced about 100 feet apart between the northern edge of the property and Ed Fulton's fishing dock. Buoys 10 through 18 were spaced at about 125-foot intervals from the fishing dock to a small creek that flows into the old rice fields. In order to facilitate diving operations, the pontoon boat was anchored in a central location within each dive area after the divers were taken to their assigned buoys.

Each diver took with him a 50-foot rope, an underwater flashlight, and a collection bag. Upon arrival at the buoy anchor on the river bottom, one of the divers tied an end of the rope to the anchor line and used it as an axis to complete a circle as he crawled over the bottom. This method, known as a circle-search, was used at varying distances that began at 15 feet and terminated at 50 feet, thus covering an area 100 feet in diameter. During the investigation, all collected artifacts were returned to the surface and were bagged with appropriate provenience numbers relative to the buoy. At the completion of the circle-search, a second survey technique was implemented. This involved placing the divers near the shore and allowing them to parallel the bank for a short distance, then moving out towards the center of the river, and returning again to shallow water. This zigzag course was used from the edge of Fulton's dock to the entrance of the small creek (Fig. 53) to determine the presence or absence of barges, boats, or other vessels.

Although no sunken boats were discovered, the survey did find a large concentration of prehistoric and historic artifacts in the vicinity of buoys 8 and 9. In this area, particularly between the buoys and beach, several hours were spent in an attempt to recover artifacts and understand the geology and sediment structure of the bottom. Typically, deep silt was encountered in the less active waters near the shore, but with increased distance from the beach the silts became less frequent as heavier sediments

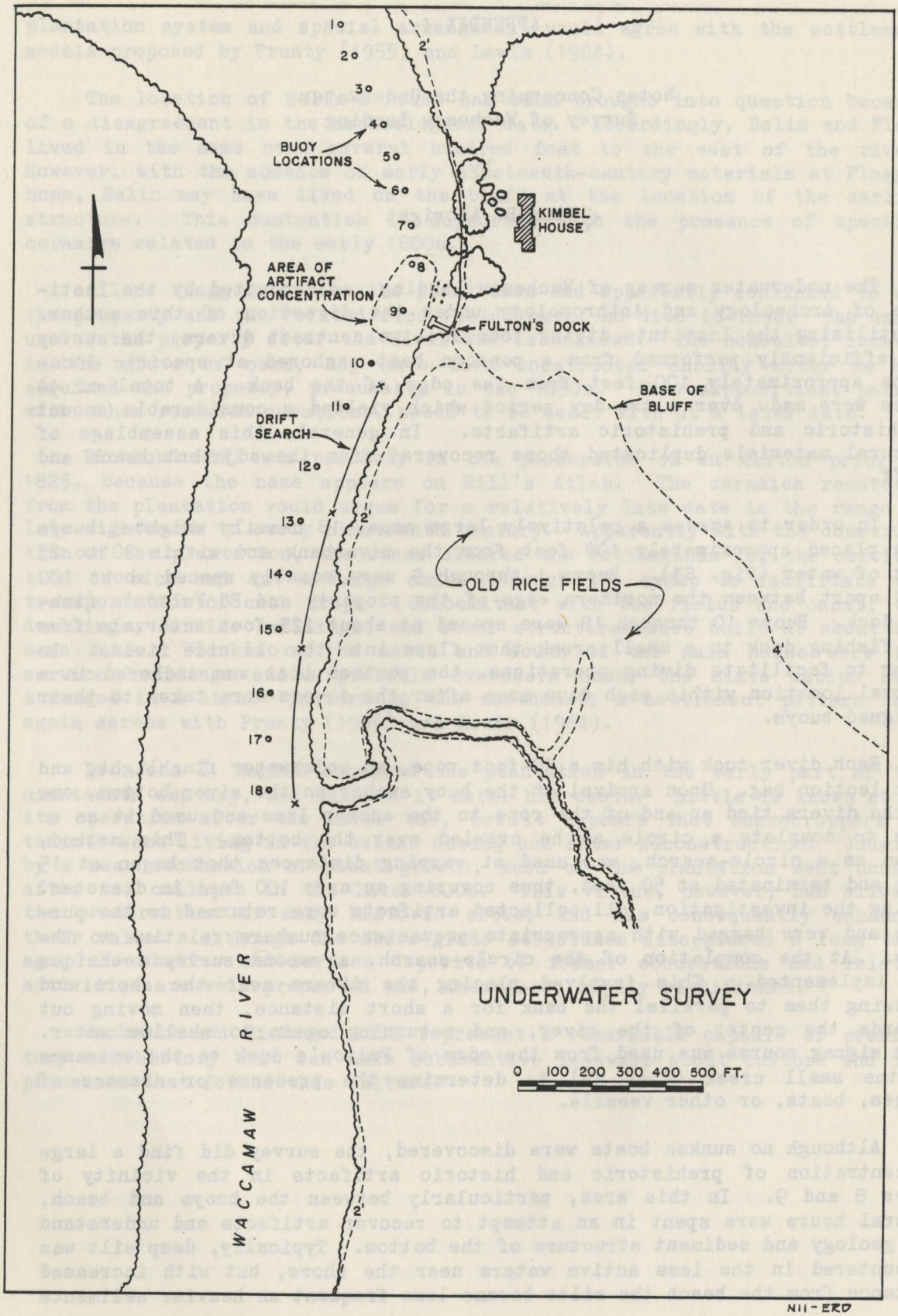
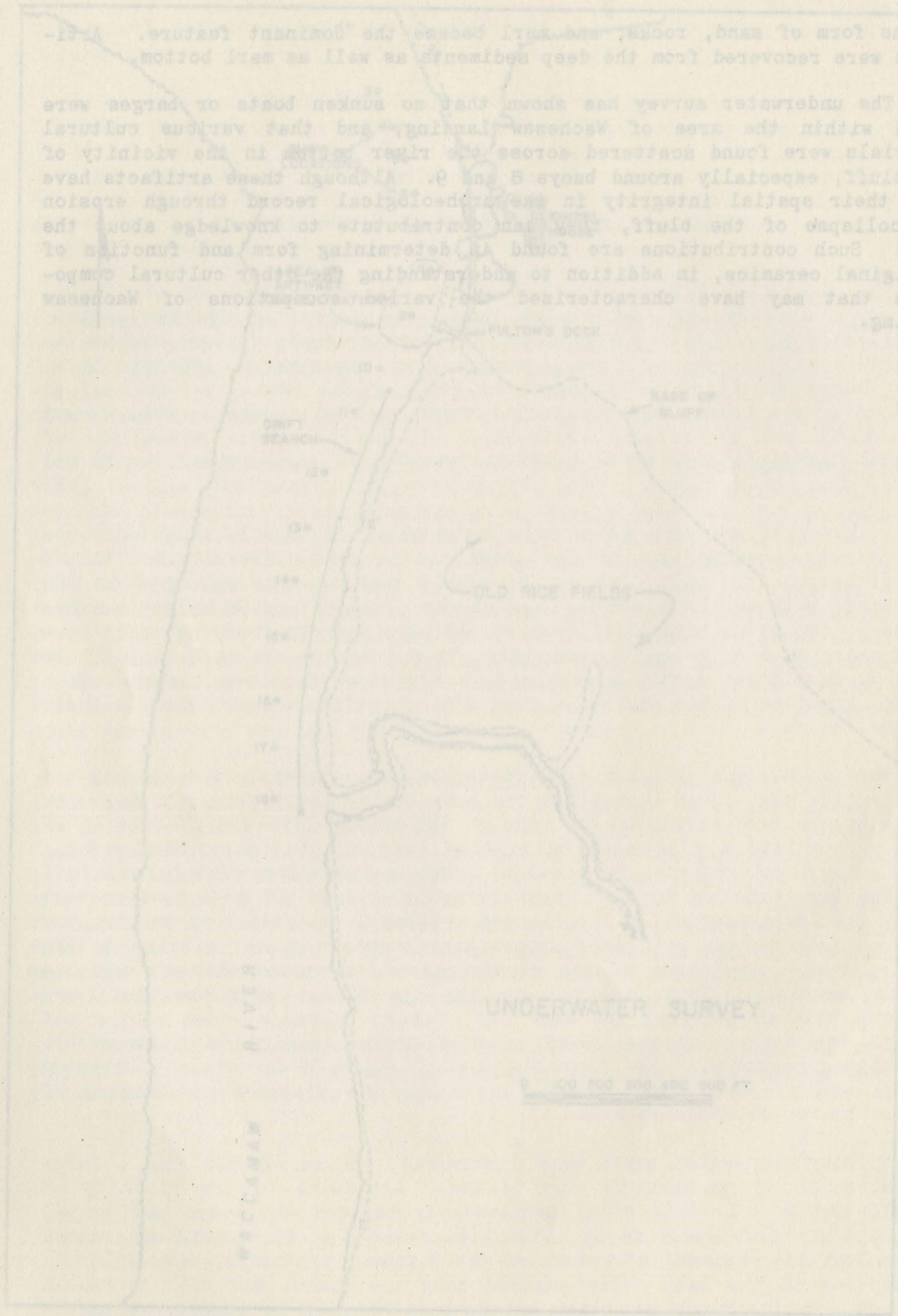


Figure 53. Area of the Waccamaw River subjected to an underwater survey.

in the form of sand, rocks, and marl became the dominant feature. Artifacts were recovered from the deep sediments as well as marl bottom.

The underwater survey has shown that no sunken boats or barges were found within the area of Wachesaw Landing, and that various cultural materials were found scattered across the river bottom in the vicinity of the bluff, especially around buoys 8 and 9. Although these artifacts have lost their spatial integrity in the archeological record through erosion and collapse of the bluff, they can contributute to knowledge about the past. Such contributions are found in determining form and function of aboriginal ceramics, in addition to understanding the other cultural components that may have characterized the varied occupations of Wachesaw Landing.


DRIFT SEARCH
BASE OF BLUFF
OLD RICE FIELDS
UNDERWATER SURVEY

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