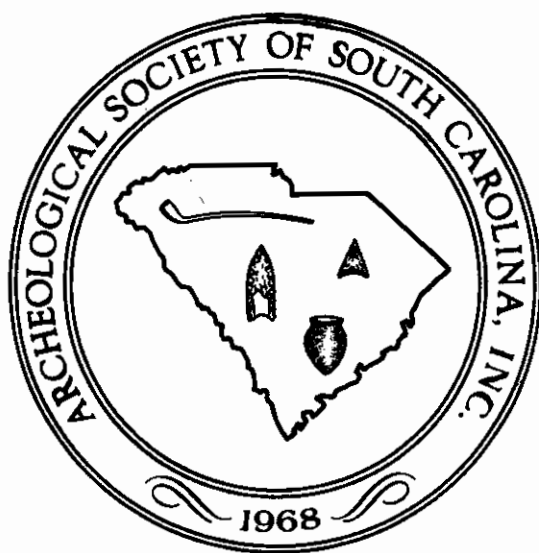


*David M. Anderson*

# South Carolina Antiquities

## THE SECOND DECADE

CONTRIBUTED PAPERS  
CONCERNING THE ARCHEOLOGY OF SOUTH CAROLINA  
AND THE SOUTHEAST



JOURNAL OF THE  
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Wayne Neighbors, Editor  
Archeological Society of South Carolina, Inc.  
Columbia, S.C.

## FIFTH ANNUAL CONFERENCE ON SOUTH CAROLINA ARCHEOLOGY

Saturday, March 31, 1979  
Capstone Hall  
University of South Carolina  
Columbia, S. C.

The conference was jointly sponsored by the Archeological Society of South Carolina, Inc. and the Institute of Archeology and Anthropology, University of South Carolina, Columbia, S. C. This all-day conference presented the latest research conducted in South Carolina in prehistoric, historic and underwater archeology. As a new approach, in addition to the traditional papers on completed projects, this conference also provided for short reports about on-going research in ten-minute "mini" reports. This allowed more speakers within the usual one-day format and better informed the participants about the extensive program of archeological research in South Carolina.

The program chairman was Paul Brockington of the Institute's staff. The morning session on "Prehistoric Archeology in South Carolina" was chaired by James L. Michie of the Institute, and the afternoon session on "Historic and Underwater Archeology in South Carolina" was chaired by Donald R. Sutherland of the S. C. Department of Archives and History. The South Carolina State Archeologist, Robert L. Stephenson, provided the conclusion and summary remarks for the conference.

Following the conference in the evening, a social hour was held at the University House and a banquet was later held at Capstone House. The invited guest speaker at the banquet was Stuart Struever from Northwestern University. His telescoped presentation with slides on the progress of archeological work at the Koster Site was outstanding and entertaining to all. The State Archeologist presented the awards of "Archeologist of the Year" and "Publication of the Year" in South Carolina archeology. Also a special presentation, on behalf of the Society, was made to Dr. Stephenson for his more than ten years of support to the Society. He was presented the first copy to come off the press of the first Occasional Paper of the Society, *Cal Smoak*. A photograph of that special presentation appears on page 9.

To record this important conference, the speakers were invited to prepare abstracts of their talks to be published in this volume. All but a few did, and the abstracts follow as submitted. Abstracts were invited because many of the presented papers have been or will be published elsewhere. Several were the final reports of contract archeology and others represent on-going work and will not be ready for publication until much later.

ABSTRACTS OF PAPERS FROM THE FIFTH ANNUAL CONFERENCE  
ON SOUTH CAROLINA ARCHEOLOGY

Paul Brockington — Program Chairman

Morning Session:

Prehistoric Archeology in South Carolina

Session Chairman: James L. Michie

Excavations at Four Fall Line Sites: The Southeast Columbia Beltway Project  
David G. Anderson  
Commonwealth Associates, Inc.  
Jackson, Michigan

During July and August of 1978, archeologists from Commonwealth Associates conducted excavations at four sites in the route of the proposed Southeast Columbia Beltway, under terms of a contract between Commonwealth and the South Carolina Department of Highways and Public Transportation. The sites were located near Congaree Creek in Cayce, S. C., with two (38LX5 and 38LX106) in the upland/sandhills area and two (38LX82 and 38LX64) in the flat, low-lying floodplain of the Congaree River. Prehistoric components recognized include Middle Archaic through Mississippian in the upland sites and Early Archaic through Early Woodland on the lowland sites. Early Archaic remains were not detected in the sandhills sites. The artifact assemblages recovered from the four sites indicate that considerable differences occurred in the prehistoric use of the two environmental zones. The floodplain sites produced evidence for a wide range of activities including plant processing and tool manufacture while the upland site assemblages were, generally, focused around biface tool use. The evidence suggests relatively short-term use of the uplands during most periods, possibly for hunting stations as opposed to longer term (base camp?) use of the floodplain areas.

Lithic Resources and Materials in South Carolina  
Lee Novick  
Institute of Archeology and Anthropology  
University of South Carolina

Lithic materials have played an important role in the prehistory and history of South Carolina. They range in function from chipped and ground stone tools to building material and grooved stones. There are six geologic belts found in the State. Represented by these belts are the three major rock types: sedimentary, igneous and metamorphic. Archeologically, two belts are important lithic source areas. The Inner Piedmont belt in the western portion of the state is dominated by granite rocks, which were quarried for building and decorative stone, but also includes numerous soapstone outcrops. Partially overlain by unconsolidated coastal sediments is the Carolina Slate belt, in the area often referred to as the Fall Line. This belt is rich in fine grained volcanic and metamorphic rocks that provided excellent material for chipped stone tools. Quartz, a common material in prehistoric assemblages, is found as veins in many of the geologic

belts, as float in the soil, and as river and stream cobbles. Finally, chert occurs across the state in localized outcrops. By studying lithic materials and quarries, followed by analysis that identifies lithic types, it will be possible to study the origins and subsequent distributions of particular artifacts. Only through meticulous record keeping and analysis of these distributions in combination with other data can more be learned about prehistoric trade networks and settlement patterning.

Putting the "Pot" Back into "Potsherd": Vessel Form and Capacity from Sherds  
Marion F. Smith, Jr.  
Department of Anthropology  
University of South Carolina

This paper reports progress in a study of the function of ceramic vessels through the sherds which once constituted them. This researcher's choice of experimentally produced modern potsherd forms as one basic data base is explained. Desirable features of a sherd-oriented model of vessel form are discussed, and the simple concept used here in the inference of vessel capacity is outlined: vessels are assumed to be hemispheres, so that the only parameter to be measured is the average radius or curvature of potsherds. Procedures employed in the experiments are described. Results of the work to date are encouraging. Although the sample of pots is small, the error of estimation for larger pot volumes is generally less than 50%. Factors hampering the archeological application of the method are discussed. Until much more work is done, the archeological significance of these results will be problematic. Promising avenues for further work include the inference of vessel form from curvature data and the concurrent examination of other functionally significant properties of potsherds.

An Archeological Survey of the Atlantic Intracoastal Waterway  
Ishmael Williams, Jr.  
Soil Systems, Inc.  
Marietta, Ga.

From November, 1978 to February, 1979 Soil Systems, Inc. conducted a reconnaissance level survey and a comprehensive literature and records search of the South Carolina Intracoastal Waterway for the Charleston District Army Corps of Engineers. Portions of the waterway were surveyed in order to determine the nature and distribution of prehistoric and historic archeological sites within the easement which may be impacted by continued maintenance and operation of the waterway. The results of the survey are evaluated in light of existing prehistoric and historic sites data and geological and climatic information available for the South Carolina coast so that a predictive model of site distribution is obtained to aid in planning future intensive survey and testing of the South Carolina Intracoastal Waterway. (Abstract received, but paper not read at Conference.)

The South Carolina 151 Intensive Survey Project  
John S. Cable - Commonwealth Associates, Inc., Jackson Michigan  
Charles E. Cantley and Jim S. Sexton, Jr.  
Institute of Archeology and Anthropology, USC

Under the cooperative agreement with the South Carolina Department of Highways and Public Transportation, the Institute of Archeology and Anthropology's Highway Archeology staff conducted an intensive survey of the direct impact zone of the proposed widening of South Carolina Highway 151 between the towns of Pine Ridge and Pageland in Chesterfield County, S. C. The project area corresponded to a number of diverse upland micro-environments on the Fall Line along the eastern edge of the Upper Lynches River valley. Fieldwork on the project lasted a full two months beginning April 12, 1979 and ending June 16, 1979. Over 49,000 individual artifacts of prehistoric or historic affiliation were collected during the survey and the identification of numerous time specific artifact forms provided the basis for documenting an occupational sequence beginning during the Paleo-Indian period and continuing up until modern European settlement. Most notable in the artifact assemblage collected during the survey was the overwhelming abundance of Early, Middle and Late Archaic occupation relative to the other culture historic periods. In addition to the traditional research goals of culture historic identification, the final report on the intensive survey also contains contributions to our understanding of the geology of South Carolina, lithic raw material typology, lithic and ceramic formal analysis, palynology, intra-site structure analysis, site testing methodology, and site/environment relationships on the Fall Line.

Some Observations on Variation  
in Projectile Point Form Among South Carolina Archaic Points  
Albert C. Goodyear, III  
Institute of Archeology and Anthropology  
University of South Carolina

A number of processes were at work in the past which conditioned the morphology of what are called projectile points. Most descriptions of points focus on the steps involved in manufacturing a biface into an idealized final form. After the time a point was manufactured, and perhaps even before, several alterations took place due to resharpening, retipping, rehafting, and recycling one tool form into that of another. The general category of "projectile point" contains much information about how people used, damaged, and repaired a multifunctional tool. This talk presented slides of various Early Archaic points which exhibit attributes diagnostic of a number of these processes.

The Moody Site: An Archaic Site in Edgefield County  
Bryan S. Beard — Aiken, S.C.  
W. C. Moody - McCormick, S.C.

This is a report of an archeological site, the Moody Site (38ED31), located eleven miles west of the city of Edgefield near Lloyd Creek. It is believed that the people who used the area were part of the Stalling's Island group, due to the striking similarity of artifacts to those from Stalling's Island. To date work at the site has amounted to the excavation of approximately 1,800 square feet to a depth of six inches. We wish to make two specific points about the site at this time: 1) it shows little or no pollution by other types of culture, and 2) no pottery has been found, suggesting that the site may be older than 2,000 B.C.

## Patterns of Disease in the Daw's Island Population

Ted A. Rathbun - Department of Anthropology, USC

Jim S. Sexton, Jr. and James L. Michie

Institute of Archeology and Anthropology, USC

We review the types of pathological conditions reflected in eight skeletons recovered from a shell midden on Daw's Island (38BU9) in Beaufort County, S.C. This material reflects a range of pathological conditions which include degenerative changes, probable blastomycosis (fungal infection), nutritional deficiencies, parasitic infestations, dental interproximal grooving, and trauma. We try to relate these varieties of pathology to a larger cultural and ecological context. Basic archeological affinities are discussed for local cultural developments, food resources are surveyed, and a general model of disease patterning for this coastal population is suggested.

Prehistoric Ceramic Analysis Using Petrographic Thin Sections  
and X-Ray Diffraction Techniques

Jolee Pearson

Institute of Archeology and Anthropology

University of South Carolina

Typological analysis of potsherds in prehistoric sites are often determined by such questionable methods as the "plink and plunk" test. The purpose of this project was to establish a possible standard set of identifying criteria in sherd composition that would correlate to cultural sequences or typological categories. An initial control sample set of thirty sherds was taken from cultural sequences and geographical areas within Florida. These samples were examined for textural and mineralogical content by x-ray diffraction and petrographic analysis. Through analysis of the information provided by the diffractograms and thin sections, a preliminary set of proposed standards have been constructed which can be applied in other portions of the Southeastern United States.

Prehistoric Site Investigations  
in the Richard B. Russell Reservoir, 1978-1979

Richard L. Taylor

Institute of Archeology and Anthropology

University of South Carolina

No abstract received.

1,000 Birds: An Abbreviated Report of an Archeological Survey of the  
Proposed Santee-Cooper Power Plant, St. John's Parish, Berkeley County, SC

Stanley G. Knick

The Charleston Museum, Charleston, SC

Intensive survey of a 2,600-acre tract of land in upper Berkeley County revealed only four archeological sites. Environmental reasons are probed for the relative scarcity of sites. One of the sites, a prehistoric ridge-top occupation, is environmentally and culturally highlighted, with an eye towards comparison to late twentieth century American world view.

An Archeological Survey of the Dundarrach Plantation Tract  
Berkeley County, South Carolina

Mark J. Brooks  
Institute of Archeology and Anthropology  
University of South Carolina

No abstract received.

Current Research in South Carolina by Commonwealth Associates, Inc.  
David G. Anderson  
Commonwealth Associates, Inc.  
Jackson, Michigan

During the past year archeologists from Commonwealth Associates, Inc. conducted a number of archeological survey, testing and excavation projects in South Carolina, all in the coastal plain. In March and April 1978 two proposed powerline corridors in the Berkeley-Georgetown County area were examined, with fifty archeological sites located in or near the right-of-way. The powerline surveys were made under the terms of a contract with the South Carolina Public Service Commission. During July and August excavations were conducted at four sites near Columbia for the South Carolina Department of Highways and Public Transportation. During late August and early September test excavations were conducted at two sites on the Cape Romain National Wildlife Refuge, under contract with Interagency Archeological Services, Atlanta. A second survey of proposed construction areas in the Santee National Wildlife Refuge was also performed for I.A.S.-Atlanta in October 1978. Both refuge projects included the preparation of overview documents detailing previous archeological work in each Refuge and the evidence for past human use of each area. The most recent Commonwealth project, which is currently underway, involves testing three prehistoric sites in the right-of-way of the Cooper River Rediversion Canal in northern Berkeley County. The site area extends for almost a kilometer along the first terrace of the Santee River. Preliminary results indicate extensive Woodland and Mississippian components are present on the sites.

Afternoon Session:

Historic and Underwater Archeology in South Carolina

Session Chairman: Donald R. Sutherland

Socioeconomic Patterning at an  
Undocumented, Late Eighteenth Century Low Country Site  
Lesley M. Drucker  
Carolina Archaeological Services  
Columbia, SC

This report discusses the major interpretive findings of a contract excavation at the Spiers Landing Site (38BK160) in Berkeley County, South Carolina. Topics will include dietary, status, and refuse patterning and will present evidence to support the hypothesis that the undocumented, Eighteenth Century site represents a slave cabin. A published report should be available in late 1979. The contractor is Interagency Archeological Services, Atlanta.



Historic Site Investigations  
in the Richard B. Russell Reservoir, 1978-1979  
Richard L. Taylor  
Institute of Archeology and Anthropology  
University of South Carolina

No abstract received.

The Excavation of an Historic Canoe  
Alan B. Albright  
Institute of Archeology and Anthropology  
University of South Carolina

No abstract received.

Historic Archeology at Flagg and Grove Plantations  
Berkeley County, South Carolina  
Elaine B. Harold - The Charleston Museum, Charleston, SC  
Kay Scruggs - Roanoke, Virginia

An archeological survey in 1975 focusing on the historic occupation of Flagg and Grove Plantations in Berkeley County located six sites occupied in the Eighteenth and Nineteenth Centuries. Three of the sites reflected the brick making activities on the plantations. Concurrent documentary studies indentified the owners of the plantations and subsequent research has produced specific information on economic activities there.

Fort Lyttleton: Excavations in 1978  
Larry B. Lepionka  
Beaufort Regional Campus, USC  
Beaufort, SC

This presentation will follow the course of excavation as it proceeded over a seven week period, employing slides. The discussion accompanying the slides will indicate the way in which the site was found, the conditions under which excavations took place, procedures of excavations, and the results of the work. Fort Lyttleton was built ca. 1760 to protect the town and harbor of Beaufort from potential Spanish and French attack, and to replace the deteriorated Fort Frederick farther downstream. It was constructed of tabby, the massive front wall facing onto the river being eight feet thick and high and forming a circular structure behind which barracks were built on tabby foundations. The fort was abandoned by colonial forces in 1779 under threat of British attack, and was not known to have been used thereafter, though excavation has produced uniform buttons of the War of 1812 period. In the late Nineteenth Century it was covered over by phosphate ore and slag from a nearby processing plant, and at the time of World War I was damaged on one side by the construction of slipways for a shipyard, so that the site has seen multiple uses. Excavation has revealed the layout of the fort and its mode of construction, and produced a series of artifacts of Eighteenth Century vintage, including military equipment.

Excavation of the Moultrie Family Graveyard at Windsor Hill Plantation  
Stanley South  
Institute of Archeology and Anthropology  
University of South Carolina

The search for General William Moultrie's grave began in 1850, was again undertaken in 1908 and 1909, and finally ended in 1977 with the excavation of the family graveyard site. This summary describes the documentary and archeological data used in the identification of the graves of the various members of the Moultrie family.

Middleton Place  
Kenneth E. Lewis  
Institute of Archeology and Anthropology  
University of South Carolina

During the fall of 1978 initial archeological investigations were conducted at Middleton Place Plantation. This work revealed that the area lying south and west of the main house complex ruins contained domestic, agricultural, manufacturing, and storage activities associated with the plantation settlement that once occupied this site. The spatial layout and composition of these activities correspond to those outlined in a comparative model of plantation settlement, reflecting the documented function of the past settlement at Middleton Place.

Experimental Archeology and Colono Ware  
From the Spiers Landing Site: A Preliminary Analysis  
Ronald W. Anthony  
Carolina Archaeological Services  
Columbia, SC

This talk provides a general description of Colono wares from the Spiers Landing Site (38BK160) and insights into manufacturing techniques and surface treatments of these wares through replication of vessels. The site is located in Berkeley County, South Carolina and is being excavated by Carolina Archaeological Services.

New Techniques in the Use of the Point Sampling Methods  
Charles E. Cantley  
Institute of Archeology and Anthropology  
John S. Cable  
Commonwealth Associates, Inc., Jackson, Michigan

At the onset of preparing archeological sites for excavation, archeologists are immediately confronted with the question of "Where to dig?". Traditional site evaluation techniques generally do not allow the coverage necessary to assess the total range of formation processes that structure sites. Through a continuing contractual agreement between the South Carolina Department of Highways and Public Transportation and the Institute of Archeology and Anthropology, University of South Carolina, a new cost efficient method of total site evaluation has been developed. As a result of experimentation on two prehistoric sites (38CT16 and 38CT25) the method has been modified to further maximize information quality.

With the aid of computer mapping programs the method designed by the authors has proved to be a quick and efficient means of observing subsurface artifact distributions within archeological sites and appears to provide an excellent basis for planning excavation strategies.

Current Research in South Carolina by Soil Systems, Inc.

Patrick H. Garrow

Soil Systems, Inc., Marietta, Georgia

This presentation will briefly detail archeological investigations conducted by Soil Systems, Inc. over the past year. Emphasis is placed on survey and testing level investigations conducted in South Carolina and adjacent areas.

Use Wear Patterns on Historic Period Glass Sherds: Function or Fortuity?

Eric C. Poplin

Institute of Archeology and Anthropology

University of South Carolina

No abstract received.

The Collections Inventory Project

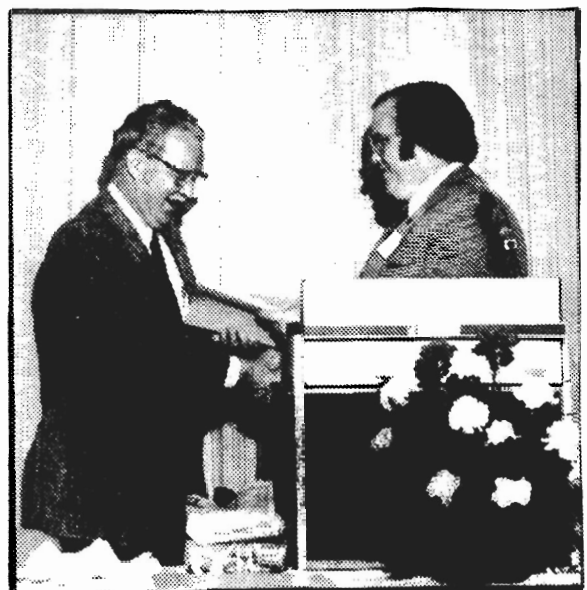
Tommy Charles

Institute of Archeology and Anthropology

University of South Carolina

No abstract received.

At the awards ceremony during the evening banquet following the Fifth Annual Conference on South Carolina Archeology, the Editor, Wayne Neighbors (R) made a special presentation to our South Carolina State Archeologist, Dr. Robert L. Stephenson (L). He was presented the first copy off press of the Society's first Occasional Paper, *Cal Smoak*, in recognition of outstanding and continuous support to the Society for over ten years. It was later hard bound and suitably inscribed by the authors and editor making it a special and unique tribute to Dr. Stephenson on behalf of the Society.



## IN MEMORIUM

ROY J. LYONS

1906 - 1979

The Officers, Directors and members of the Archeological Society of South Carolina, Inc. note, with regret, the passing of one of our faithful and long-standing members, Mr. Roy J. Lyons, of Aiken, South Carolina. Mr. Lyons was a Life Member of the Society and a highly active avocational archeologists. He was born in Laurens County, South Carolina, and died at the age of 73 in Aiken. He was a retired 47-year employee of Southern Bell Company and a member of the Aiken Lions Club (Aiken Lodge 156 AFM), the Aiken County Historical Society, and the Telephone Pioneers of America.

Mr. Lyons was involved in the organization of the Society and served on its first Board of Directors. His efforts were instrumental in the formative years of the Society.

As an avocational archeologist he made many contributions toward understanding and preserving the archeological heritage of South Carolina. In addition to supporting the Society, he identified and recorded many sites in the Aiken County area and gave many talks to interested groups. Mr. Lyons was a strong conservationist and encouraged young people especially to study and preserve our natural and cultural heritage. He took a strong interest in the development of young people and was active in the Boy Scouts of America. As an indication of his efforts and sincerity toward the latter, he was awarded the coveted Silver Beaver Award by the Boy Scouts. He was a man who was always willing to share his considerable knowledge with all who were interested, and as an indication of his will to share and preserve information about the past, he willed his vast artifact collection to the South Carolina State Museum for future displays and permanent safekeeping. The Archeological Society of South Carolina, Inc. has truly lost a great member. We regret his passing and will always keep him in our memory.

Albert C. Goodyear, President  
Archeological Society of S.C., Inc.

IN MEMORIUM  
RICHARD WINGATE LLOYD  
1904 - 1980

Richard Wingate Lloyd died at his home in Camden, South Carolina on January 10, 1980 following a lengthy illness. Born in Haverford, Pennsylvania, the son of Horatio Gates and Mary Helen Wingate Lloyd, he was a 1928 graduate of Princeton University and did post-graduate work in archeology at Harvard. He conducted archeological research for several years in Cluny, France. In later years he had devoted his interests to forestry and for many years was a dedicated tree farmer. His business interests had been in real estate and insurance.

Dick Lloyd's passing is a great loss to all who knew him or were associated with him. To know Dick, or even to meet him for the first time, was to feel comfortable in the sincere friendship of a truly fine gentleman. To be associated with him was to enjoy a trust and confidence rarely excelled and at the same time was to be exhilarated with the ever present challenges of his active, scholarly mind.

He was instrumental in establishing the Camden District Heritage Foundation (Historic Camden) in 1967, and he was a charter member of the Kershaw County Historical Society, serving on its executive board. Always an active member of these groups, his ideas and suggested programs, over the years, formed a good deal of the basis for the highly successful pursuit of historic preservation in Camden and Kershaw County. His activeness extended beyond the ideas he put forth. He was equally active in doing the work required and often in providing some or all of the actual funds for various aspects of the work. He was a true philanthropist in the philosophical sense of the term. His philanthropy extended to those things in which he was deeply involved (and those were many) and which he knew really merited financial support, rather than in things that came at the end of a tax year when it was economically wise to make contributions.

Historic preservation and heritage matters were only a part of Dick's dedicated interests. He was active in the U. S. Forestry Association and received its highest award — the Chantes F. Flory District Service Award. He served on the boards of the Wateree Forestry Club and the Kershaw County Forestry Board. He donated 1,000 acres of land to Camden for a watershed district and donated the Price House and the Douglas-Reed House to be used as a Community Center. He contributed to the Kershaw County Fine Arts Center and to many other projects.

Dick Lloyd's membership in the Archeological Society of South Carolina, Inc. and his deep and abiding interest in the work of the Institute of Archeology and Anthropology were richly rewarding to both organizations. Because of his background at Harvard and in France he was acutely concerned with the programs of the Society and of the Institute.

We have all lost a most valued friend and associate. We will always be proud to have known Dick Lloyd. Our lives and our work are much the richer for having known him as scholar, colleague, associate, and friend. Our deepest sympathy is extended to his widow, Mrs. Margaret Hebard Lloyd, and to his surviving family.

Robert L. Stephenson  
South Carolina State Archeologist

TEST EXCAVATIONS AT TWO SITES  
IN THE CAPE ROMAIN NATIONAL WILDLIFE REFUGE  
CHARLESTON COUNTY, SOUTH CAROLINA

BY

DAVID G. ANDERSON and STEPHEN R. CLAGGETT

ABSTRACT

*Test excavations at two sites in the Cape Romain National Wildlife Refuge, northern Charleston County, South Carolina, are summarized. The Moore's Landing Site (38CH184) was found to contain a shallow late prehistoric (Mississippian period) shell midden, with moderate preservation of ceramic, bone, shell, and other artifactual remains. The second "site" (38CH292) proved to be an example of redeposition, the results of dredging operations. A summary of previous archeological investigations in the project area is presented, including an analysis and evaluation of accessible site files and collections. Criteria for recognizing primary from secondary (dredgework) midden deposits are presented. The location of the Andersonville Mound (38CH9), one of the largest shell midden sites in the state, and initially thought to be in the project area, is examined, and work at the site by members of the Charleston Museum earlier in the century is summarized. The project highlights the need for the maintenance of accurate site file records as well as for care in the recognition of sites in the coastal zone.*

INTRODUCTION

From August 23 to September 5, 1978, testing operations were conducted within two areas of the Cape Romain National Wildlife Refuge, Charleston County, South Carolina. The areas examined included the site of a proposed headquarters complex at Moore's Landing and the site of a proposed dredge spoil pile on Bull's Island. (Figure 1). Previous investigations, conducted by Newell Wright in December of 1977, had suggested that four archeological sites were located in these areas, 38CH9/38CH184 at Moore's Landing and 38CH40/38CH292 on Bull's Island. Wright's

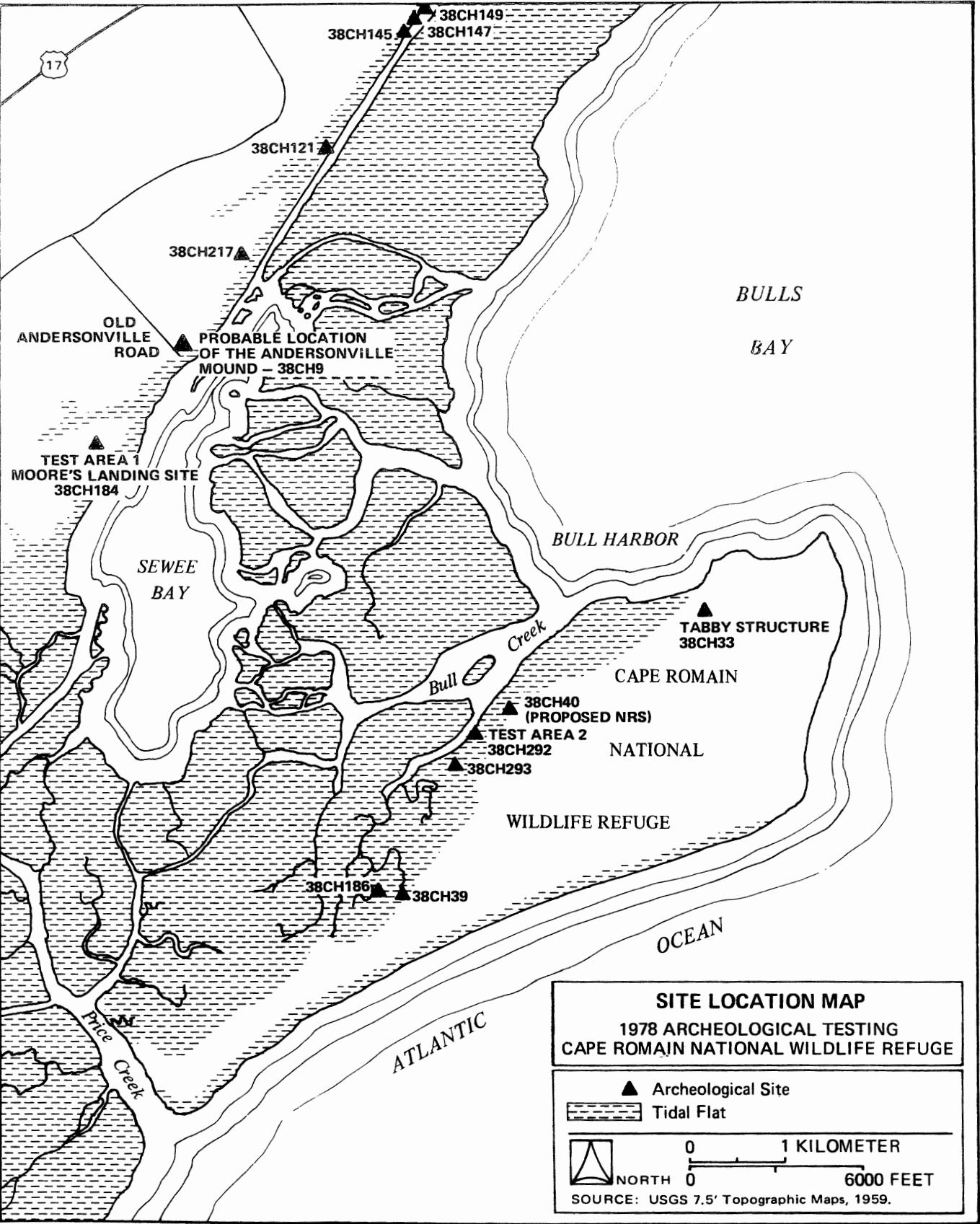


Figure 1. General map of the area of the Cape Romain National Wildlife Refuge and locations of sites in the general area of the testing operations in 1978.

(1978) reconnaissance focused on these locations and recommended a program of limited archeological testing, to evaluate the significance of any cultural resources that might be present. This report summarizes the testing program that was undertaken in late 1978.

Field survey and test excavation activity was carried out on Bull's Island on August 28 and 29th, 1978, and in the vicinity of Moore's Landing over eight days from August 23 to September 5, 1978. In addition to controlled surface collections, 28 excavation units were opened at Moore's Landing at 38CH184 and five on Bull's Island at 38CH292. The project fieldwork was directed by David G. Anderson, assisted by Chevis D. Clark II.

A late prehistoric (Mississippian period) shell midden and associated artifact scatter was delimited near Moore's Landing. Small quantities of artifacts dating to other periods were also recovered, indicating some use of the 38CH184 area during the earlier Woodland and succeeding colonial and early national (historic) era. The 1978 testing, which consisted of three 1x2 meter pits opened to a depth of 70cm, and twenty-five ½-meter pits opened to a depth of 20cm below the plow zone, indicated that most site deposits were in the plow zone and heavily disturbed. In spite of this disturbance, moderately well preserved zooarcheological (bone and shell) remains as well as a substantial number of prehistoric lithic and ceramic artifacts were recovered. The site designated 38CH9 (Awendaw or Andersonville Mound) was reported in the state site files near 38CH184, but actually was found a considerable distance from the Moore's Landing area. The remains of the Andersonville Mound, formerly one of the largest shell middens on the South Carolina coast, were located a mile to the northeast of Moore's Landing, further up the coast.

The second area examined during the 1978 testing, a shell scatter on Bull's Island, was found to contain redeposited shells from recent (early 20th century) dredging operations. Although designated 38CH292 in the State site files, and recorded as a possible prehistoric site, no evidence for aboriginal remains was encountered during the testing, and the area was interpreted as a recent spoil pile.

A fourth site, 38CH40, reported to be in the general area of 38CH292, was found to be about one-half mile to the northwest. Some years earlier this site had been proposed as eligible for inclusion in the National Register of Historic Places, but the nomination process had been delayed until the precise location of the site could be verified. The 1978 testing program, therefore, included not only the examination of two specific site areas (38CH184, 38CH292), but also the relocation of two other sites (38CH9, 38CH40) of previous uncertain provenience.

All artifacts, photographs and photo record sheets, field and analysis notes, and a copy of the final report have been placed on file at the Charleston Museum\* in Charleston, SC. Copies of all field notes and the final report are also on file at the Institute of Archeology and Anthropology, University of South Carolina, Columbia, South Carolina.

\* (Accession # 1979.11)



## ENVIRONMENTAL PERSPECTIVE

Introduction

The Cape Romain National Wildlife Refuge is located in northern Charleston County, South Carolina, immediately along the coast in the Sea Island area. The refuge extends over 60,000 acres along a 25 mile section of the coast, from the southern part of Bull's Island and Sewee Bay in the south, to Cape Island and Alligator Creek in the north. Most of the refuge is characterized by estuarine marshes that are covered at high tide, with a small fraction of dry ground on the mainland or on the offshore islands. Wright (1978:9-19) has provided a detailed discussion of the environment in the vicinity of the refuge, particularly concerning the local geology and Holocene and Recent (contemporary) ecological communities. The present review, focusing on the two test areas, is designed to complement rather than reiterate Wright's efforts.

The highly variegated coastline characteristic of the Sea Island area extends from just north of Winyah Bay to the Savannah River and on down the Georgia coast. The current shoreline and barrier islands reflect the (relative) stabilization of sea level following the close of the Wisconsin glaciation (Cooke 1936), although minor fluctuations of two or more meters are documented during the Holocene (Michie 1973, DePratter 1977). Distinct geologic microfacies are represented in the two test areas, although both have roughly similar origins (Wright 1978:10). The surface in the vicinity of Moore's Landing (39CH184), located along the modern coastling, reflects deposition of the early or pre-Wisconsin Princess Anne formation (ca. 50,000 B.P.) The portion of Bull's Island that faces the coastline where 38CH292 is located, in contrast, may be a late Quarternary or Holocene feature, a part of the Silver Bluff formation (ca. 25,000 B.P. or later). Beach and bar formation, movement, and degradation on the seaward face of Bull's Island, furthermore, is a highly dynamic process, with large areas built up or washed away in a matter of years.

The Moore's Landing area represents ground surface that has remained stable since the entry of man into the region sometime in the late Pleistocene. However, the ground surface at 38CH292, on Bull's Island, may have been formed after this time. Given the lowered sea level during the late Pleistocene, both areas were unquestionably available for occupation during the Paleo Indian period, even if the surface at 38CH292 has been altered considerably since this time. The possibility of an early (Paleo Indian) occupation at either location is discounted given the absence of nearby major drainages (cf. Michie 1977). Later Holocene occupations are probably related to the development of stable estuarine environments, although this process is at present poorly understood or dated (DePratter 1977, Brooks et. al. 1979).

The geological formation processes involved in the development of the modern coastline, marine deposition and erosion, preclude the presence of much lithic material of use to aboriginal populations. The entire coastal plain in the vicinity of South Carolina, in fact, is largely devoid of useful stone of any kind (Anderson, Lee & Parler 1979:10-12). Lithic artifacts found on sites along this part of the coast are manuports and are apparently quite rare (South 1960:66, Trinkley & Carter 1975:5, Chevis D. Clark II: personal communication).

The ecological distinctiveness of the coastal area is due to the proximity of the ocean, with its salt spray and tidal effects. Wright (1978:15-19) adopted Larson's (1969) tripartite division of the coastal area into the Strand, Lagoon and Marsh, and Delta sectors, to provide detailed descriptions of contemporary

ecological communities in the vicinity of the Cape Romain National Wildlife Refuge. Following Milanich's arguments, it is suggested that "Live Oak Strand" is a more appropriate term than "Delta":

The live oak strand is less than a mile wide, extending up the Southeastern coasts on both the barrier islands and the mainland... The mainland live oak strand differs only in having a larger number of plant and animal species available and the presence of fresh water rivers and their deltas which cut the strand... Because the live oak strand represents an ecotone between the resources of the marsh, lagoon, and ocean and the biotopes of the Pine Barrens and their specialized resources, it provided an opportune place to live (Milanich 1971:98)

Ferguson's (1971, 1975) work with late prehistoric sites tends to support Milanich's inference. The Live Oak Strand was apparently a favored area during the Mississippian as well as earlier times.

The vast majority of the Cape Romain National Wildlife Refuge falls within the Lagoon and Marsh and the Strand sectors. Of the four sites examined here, 38CH184 (Moore's Landing) and 38CH9 (Andersonville Mound) lie within the mainland Live Oak Strand sector, and 38CH40 on Bull's Island is within the barrier island Live Oak Strand sector. Only the 38CH292 area, which this study indicates was not used aboriginally, lies within the Lagoon and Marsh sector. Given lowered sea levels, many sites currently found in the Lagoon and Marsh sector may have been in the Live Oak Strand at the time of their deposition.

This environmental summary, it should be cautioned, is of value only for the recent past, even extrapolating for sea-level differences. Wright (1978: 12-14) indicates that the paleoecology of the coastal area appears to be somewhat different prior to 4,000 to 5,000 B.P. Conclusions about post-Pleistocene vegetational succession in the region are still somewhat speculative. Following Wright's (1978:14) cautionary note, archeologists working in the area of the refuge should strive to recover paleoenvironmental as well as artifactual data from their sites. Future efforts should be directed towards the recovery and identification of pollen, floral, and faunal remains, and the use of these data in environmental (in addition to subsistence) reconstructions.

#### Moore's Landing (38CH184) Site Conditions

The Moore's Landing area is located along the western edge of the estuarine zone, immediately back from and roughly 1 to 4 meters above the high tide mark. A strip of live oak forest some 75 meters wide borders the marshlands. Site 38CH184 is located within a plowed field extending for some 300 meters beyond this inland to a small tidal creek (Figure 2). The setting falls within Milanich's (1971:108-109) Live Oak Strand microenvironment and would have been an ideal location from which to exploit both the nearby estuary and the strand environment itself as well as (possibly) the pine forests of the interior, which begin within a mile of the coast.

Soils in the vicinity of site 38CH184 are Chipley loamy fine sands, that are described as:

... a deep, nearly level, moderately well drained to somewhat poorly drained soil, that is sandy throughout... This soil is friable and easy to work (Miller 1971:10).

This soil type is considered only fairly-well-suited to not-well-suited for most crop types, although it is considered suited for both open and woodland wildlife

(Miller 1971:42,48). As such, it is among the best land for both game and agriculture in the area immediately adjacent to the estuary. Two of the largest late prehistoric (Woodland/Mississippian) sites reported in northern Charleston County occur on this soil type at Porcher's Bluff (38CH80) and in the area immediately north of the Andersonville Mound (38CH9). The relationship of sites and soil types along the coast needs considerable study. It is tempting to speculate on the relationship of the late prehistoric use of the Moore's Landing area to the agricultural potential of the soil (*cf.* Ferguson 1975, Pearson 1978:69-70). For the present, however, all that can be stated with assurance is that the soils at

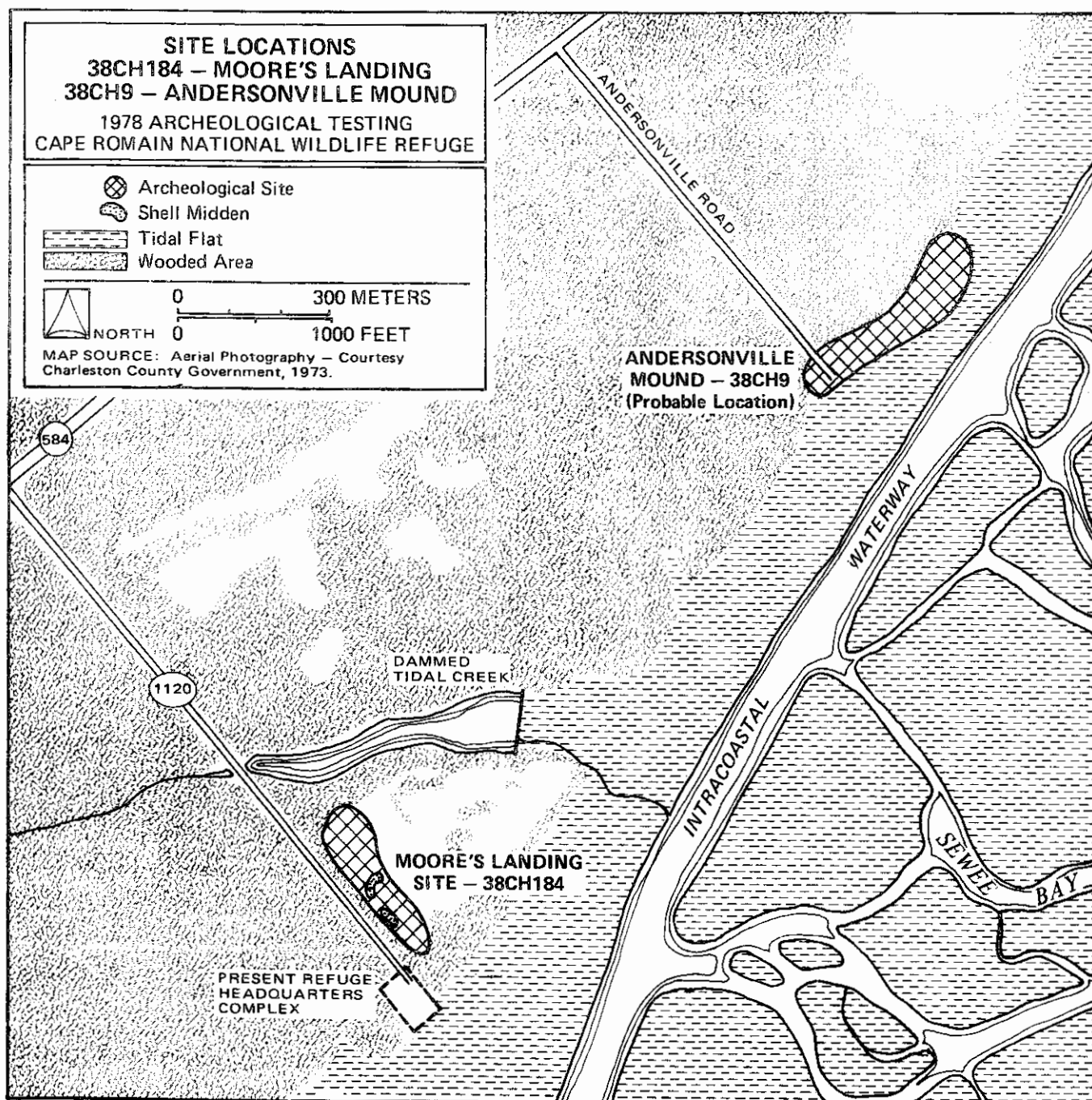


Figure 2. General location map for sites 38CH184, Moore's Landing, and 38CH9, the Andersonville Mound at its relocated position.

Moore's Landing reflect a location well suited for dry, comfortable camping, with firewood and moderate game resources close at hand. These conditions, coupled with the proximity of the estuary and a nearby fresh water source (the tidal creek), probably help to explain why the site area was occupied.

#### Site 38CH292 Site Conditions

The site designated 38CH292 lies within the Lagoon and Marsh sector, approximately 100 meters due west of the inner face of Bull's Island (Figure 3). The vegetation in the site area is marsh grass, while a typical Live Oak Strand community occurs on the island itself. The immediate site area is recorded as "Made Land" in the Charleston County Soils Map (Miller 1971:maps 30-31), a term used to refer to dredge spoil areas. Spoil was used to build an access road and docking facility through the marsh, from the natural face of Bull's Island to the channel of Summerhouse Creek, to provide easy access to the island by boat. This and other "Made Land" areas in the vicinity of northern Charleston County are characterized by low cedars, grasses, and some scrub hardwoods. The vegetational assemblage may represent early stages of succession culminating in vegetation similar to that in the Live Oak Strand sector.

Natural soils in the 38CH292 site area (not those brought in by dredging or construction activity) are Capers silty clay loams, formed:

... on tidal flats that are inundated by 2 to 6 inches of sea water once or more each month. They are very poorly drained and are saturated with sea water.... All Capers silty clay loam is in marsh grass. ...It is not suited to crops and woodland, because of its salt and sulfur content. If this soil is drained, it becomes so extremely acid that plants die (Miller 1971:8-9).

Immediately east of these soils, across Summerhouse Creek, are soft tidal marsh soils characterized by a surface layer of:

... dark colored soft clay, clay loam, muck, or peat ... underlain by gray to dark-gray, soft, fine-textured clayey material that is permanently saturated (Miller 1971:29).

This land, flooded with each high tide, contains rich shellfish and other estuarine resources of value to aboriginal populations exploiting the Lagoon and Marsh sector.

The soils of the inner face of Bull's Island, just east of the 38CH292 area, are part of the Crevassee-Dahoo complex of excessively to poorly drained sandy soils (Miller 1971:12). Although poorly suited to cultivation, they are considered "suitable for residences if they are leveled and smoothed" (Miller 1971:12). The characteristic microenvironment, the Live Oak Strand floral and faunal community, may have extended to the 38CH292 area in the past, given a 1 to 2 meter rise in sea level over the past 4,000 years (eg. Michie 1973, Brooks et. al. 1979)

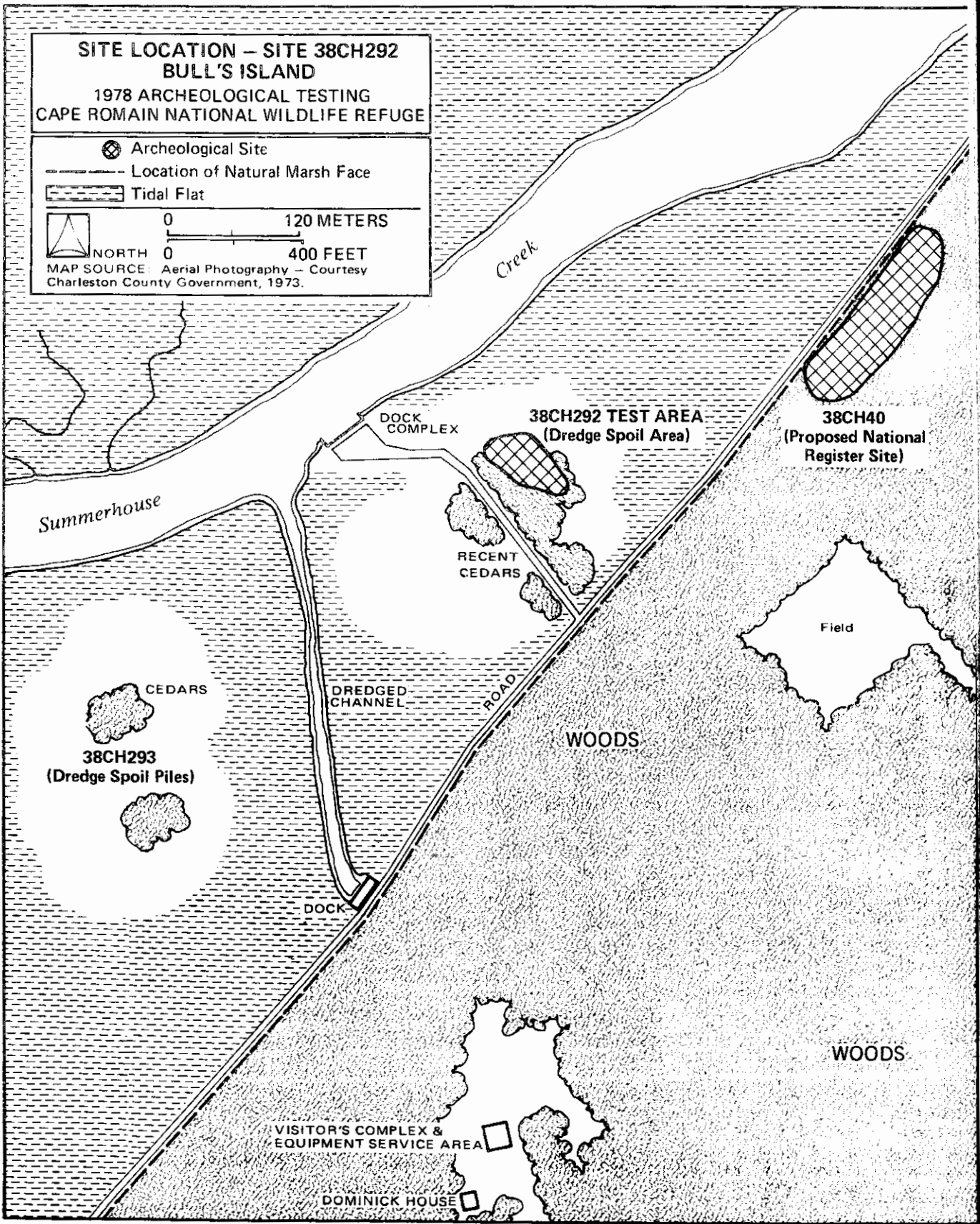


Figure 3. General location map for sites 38CH292 and 38CH40. Note location of dredge spoil piles.



## PREVIOUS ARCHEOLOGICAL INVESTIGATIONS IN THE PROJECT AREA

Archeological investigations on a professional level have been undertaken in the vicinity of Sewee and Bull's Bay for over fifty years. In the 1920's Anne King Gregorie and Laura Bragg, then Director at the Charleston Museum, visited a number of sites along this portion of the coast including the Awendaw or Andersonville Mound (38CH9 in the State files, SC:CH:6 in Charleston Museum). Gregorie's (1925:18-19) statement on this site is found in Appendix II. In July of 1933 two other Charleston Museum researchers, G. Robert Lunz and E. Burnham Chamberlain, revisited, tested, and mapped 38CH9. Their report and Map, also in Appendix II, form the only detailed record of the site, which has since been largely destroyed by road construction. The report of Lunz and Chamberlain, with its detailed locational information, was used here to relocate the site.

On April 12, 1934, Lunz visited and collected prehistoric remains from a shell midden in the vicinity of a tabby foundation on the northern end of Bull's Island (Figure 1). This site, recorded as SC:CH:33 and later as 38CH33 in the State files, was revisited on December 10, 1938 by W. W. Ritter. Ritter, a Boston architect who wintered in South Carolina, visited numerous archeological sites along the coast during the 1930's (Anderson 1977:12). The interest of both Lunz and Ritter appears to have been directed primarily toward the aboriginal midden rather than to the tabby structure itself, which has since been recorded as a 1794 lookout station (Charleston County Inventory, S. C. Dept. of Archives and History). It was of interest primarily because an interpretive sign posted near the ruin indicated its age and function were unknown, and furthermore, that efforts by archeologists to resolve the mystery (!) had remained unsuccessful.

In 1938 Ritter also conducted extensive surface collections as well as a limited test excavation at the Andersonville Mound. This material, together with the surface collection of Mr. Andrew Jackson, a local resident, were donated to the Charleston Museum in January of 1939. The site was visited again in 1959 by Eugene Waddell, then a student at the College of Charleston, who found that it had been leveled to provide road fill. Waddell's description of the Andersonville Mound, as he encountered it in 1959, is included in Appendix II. It was Waddell's careful directions, coupled with Clark's knowledge of the general area, that enabled the present investigators to quickly determine the location of the site. There are no reports of visits to site 38CH9 between 1959 and 1978, although the location was known to local collectors (Chevis D. Clark II: personal communication). In August of 1978, the site was visited twice: on the 23rd by the present investigator in an effort to resolve the locational ambiguities, and on the 28th by Michael B. Trinkley as part of his own program of coastal research. The August 1978 visits revealed further destruction by recent road construction and land leveling activity as part of a housing development project underway in the area. A brief description of the site as it appeared in August 1978, and a list of artifacts that were recovered during a general surface collection, is included in Appendix II.

In 1963, the Cedar Grove site, also known as the Indian Kitchen Midden Mounds, was reported to the Charleston Museum by Dr. Benton Owen of New Haven, Connecticut. On August 18, 1964, Eugene Waddell of the Charleston Museum staff formally recorded the site as SC:CH:40 (State files 38CH40). During his 1963 visit, Owen placed a test unit to a depth of at least 18 inches into the midden; this is probably the scar that Trinkley and Carter noted in a 1974 visit to the site, and that the present investigators observed in August 1978. The location of this site, ambiguously reported in the state files, is correctly noted in Figure 1 and 3, roughly half a mile to the northeast of the Summerhouse Creek boat dock.

In the mid-1960's, W. E. Edwards (1965), who served as the S. C. State Archaeologist until 1968, reported on excavations at the Sewee shell ring in northern Charleston County. The Sewee excavations documented the presence of Late Archaic period Awendaw ceramics on the site. Edward's statements form the only report on excavations at a shell midden site, other than limited testing associated with survey work, in the region north of Charleston Harbor in the South Carolina coastal plain. No other survey or excavation activity took place in the northern coastal plain during the 1960's, although a number of private collectors are known to have been operating, some of whom later gave their collections to the Charleston Museum or the Institute of Archeology and Anthropology, USC.

In 1969 and early 1970, information in the site files of the Charleston Museum was incorporated into a State-wide Archeological Site Inventory (Stephenson 1975: 55-56), initiated and maintained at the Institute of Archeology and Anthropology, University of South Carolina, Columbia, SC (hereafter referred to as IAA). The information currently in the inventory from site 38CH9, and much from 38CH40, entered the IAA files at that time. It should be cautioned that only a partial transfer of information occurred; no collections analysis was attempted, nor was it possible to locate all of the notes for individual collections. Researchers making use of Inventory information, therefore, should be aware that for many sites considerably more documentary evidence is available at the Charleston Museum than is reported in the IAA site files.

A considerable amount of research-oriented fieldwork has occurred in the estuarine zone in recent years, directed toward the location and description of sites, and the collection of artifact samples from them, to permit minimal cultural-historical assignments. Summaries of recent coastal research have appeared in a number of places (Trinkley and Carter 1975, Trinkley 1976, Anderson 1977, Wright 1978). In 1970, Eugene Waddell and E. Thomas Hemmings traveled the length of the Georgia-South Carolina coast, recording measurements at every known shell ring, and making a small artifact collection from each. The results of this project have been briefly summarized (Hemmings 1972, Trinkley 1976a), and the field notes and sketch maps provide the best information base to date on coastal shell rings, including five in the northern Charleston County area (Buzzard's Island, Sewee, Auld, Stratton Place, and Yough Hall).

In 1974, Michael Trinkley and Jacki Carter (1975) conducted an extensive archeological survey throughout Charleston County, over 61 separate square mile sample blocks stratified by environmental zone. This survey augmented existing information on shell midden sites as well as marked the first serious attempt to systematically examine portions of the interior Sea Island terrain. During this survey Trinkley and Carter located and prepared the first descriptions of Moore's Landing site, which they recorded as 38CH184. As a part of the same survey they revisited 38CH40, on Bull's Island near 38CH292, and initiated National Register nomination proceedings for this site. The Trinkley and Carter survey located a number of other archeological sites within the Wildlife Refuge, and provides a useful data base upon which to build investigations of coastal adaptational patterns.

Since 1975, Michael Trinkley (1975) has been working at the Lighthouse Point shell ring (38CH12) immediately south of Charleston Harbor, and with materials from a number of other coastal sites. This research formed the nucleus for his Ph.D. dissertation "Investigation of the Woodland Along the South Carolina Coast", which was not completed at the time this report was prepared for publication. (Editor's Note: Since this paper was completed, the dissertation has become available. A copy will be placed in the Society Library.)

Under the direction of the Charleston Museum and College of Charleston staff, Chevis Clark, a local anthropology student, has gathered an extensive sample of artifactual and other data from a number of shell midden sites in northern Charleston County. Clark and other amateur and professional archeologists within the state are continuing to record new sites in the estuarine zone, amassing data useful to eventual analysis and synthesis.

On May 4, 1976, a party led by Dr. Robert L. Stephenson conducted a brief reconnaissance on Bull's Island, and at that time the 38CH292 area was recorded as a possible shell midden. No ceramics and only one stone "artifact", recognized to be of questionable nature, was recovered during this survey. In retrospect, it is evident that the shell accumulation is redeposited dredgework, and thus not an archeological site. It should be noted, however, that artifacts are rare on some coastal shell middens, particularly sites of the Woodland period (Michie 1979:52). In August of 1978, when 38CH40 was revisited, for example, only one sherd was recovered although a total of some two hours was spent on the site looking for surface remains. When shell lenses are observed, a site may or may not be present, but it should be recognized that considerable work may be needed to settle the question.

The most recent work in the project area prior to the August 1978 testing was a reconnaissance and overview of the entire refuge accomplished by Newell Wright (1978) in late 1977 and early 1978. The report on this activity provides a good general introduction to the history, archeology, and environment of the area.

In addition to these specific projects, a number of long-range archeological topics are under consideration that may have a profound effect on future research in the project area. Stephenson (1975:54) has indicated that at least a three-year program of research should be expended in a study of contact period coastal tribes. Such a project would make use of both archeological and historical research; extensive documentary evidence exists and could be readily exploited (Swanton 1946, Milling 1940, Bull 1969, Waddell 1980). Stephenson (1975:58) has also recommended that at least one additional year of research should be conducted at the Sewee shell ring, and two years at the Auld shell ring, as part of an extended study of the Late Archaic in the region.

Historic sites investigations remain to be initiated in the general vicinity of the Cape Romain National Wildlife Refuge. Gregorie (1925:16) mentions the existence of colonial lime-kiln sites along the tidelands northeast of Charleston, an industry that remains poorly understood, although one producing a profound effect on local archeological resources. Most historic sites research to date in coastal South Carolina has focused on military fortifications, plantation complexes, or elaborate domestic structures in or near Charleston, although some recent work has focused on more prosaic sites (e.g. Drucker & Anthony 1979; Keller, Bernhardt and Garrow 1979).

#### A COMMENTARY ON THE DATA BASE

Four sites were of principal concern during the 1978 testing — 38CH9, 38CH40, 38CH184, and 38CH292. Wright's (1978) reconnaissance included a commentary on the possible locations of these four sites:

Two sites 38CH9 and 38CH184 were shown by the Institute of Archeology and Anthropology's Statewide Inventory within the impact zone at Moore's Landing Headquarters ... 38CH9 was described as a mound of some 557 feet long, 90 feet wide, and 9 feet high. The site report, however,



indicates that at least some, if not all, of the site had been destroyed in the process of road building. During the survey no evidence was recovered of this site in the form of a mound or the remains thereof in the road. Either the mound aspect of the site has totally disappeared, or the description of the site location is incorrect.

The site report on 38CH184 describes an occupation during the Woodland and Mississippian periods. The cultural material recovered during the survey is probably from that site. ...Another site 38CH292 was also listed by the Institute of Archeology and Anthropology as being within the impact zone. 38CH292 is located on the east side of the road twenty meters southeast of the Summerhouse Creek dock. Deposits of shell up to forty centimeters thick were observed, but no artifacts were recovered in spite of close examination of several exposures (Wright 1978:43,46).

From Wright's review of the State site files, it appeared that two sites, 38CH9 and 38CH184, were located in the Moore's Landing area. Actually, the problem was more complex. Site 38CH9 (Awendaw or Andersonville Mound), recorded as near Moore's Landing, was actually found to be a mile up the coast. Site 38CH184, which was actually at Moore's Landing, was plotted a half mile off in the files, near the real site of 38CH9.

Vague or contradictory site data, particularly with regard to location, was also apparent in the case of a third site, 38CH40, that was believed to be near the project impact zone on Bull's Island. A National Register of Historic Places nomination form for this site had been filed with the Fish and Wildlife Service authorities, but had never been acted upon because the location was in doubt. During the 1978 testing the present investigators were asked to try and resolve the location of this site. The precise location of 38CH40, as noted, was found and is indicated on Figures 1 and 3. As in the case of 38CH9, the present investigators were able to locate the site through a careful examination of the Charleston Museum site records, coupled with Clark's knowledge of the area.

The effort expended verifying the locations of the four sites examined during the 1978 testing program is instructive. Future work in the coastal areas of South Carolina should consider the following points.

- (1) Shell midden sites are often difficult to recognize and verify.
- (2) Existing site file information, particularly with regard to location, may be vague or inaccurate.
- (3) Unanalyzed collections or documentary materials may exist both for previously recorded and unrecorded sites.

Thus, while a rich record documents the cultural resources in the Cape Romain National Wildlife Refuge, considerably more material awaits discovery and analysis. The Charleston Museum, Institute of Archeology and Anthropology, private collectors, and various archival repositories are suggested as locations from which to initiate in-depth research.

A SUMMARY OF HUMAN OCCUPATION  
IN THE VICINITY OF  
NORTHERN CHARLESTON COUNTY, S.C.

The Prehistoric Era

The prehistoric human occupation of the lower coastal plain of South Carolina dates from sometime during the last major period of glaciation until the early sixteenth century, when the European voyages of exploration along the southeast coast began. Knowledge of local prehistoric occupation is to a large extent inferred, and not directly obtained from studies within the project area. Although prehistoric research in the lower coastal plain has increased markedly in recent years, as indicated in the review of past fieldwork, the area is still largely unknown. Even within the historic era the first one and a half centuries of activity are largely obscure; little specific information is known about either the Indian or the European occupants of the Carolinas during the period from the 1520's through the 1660's. For the study of much of both the historic and prehistoric eras, therefore, archeology is the only available method.

Paleo-Indian Occupation (c.20,000-10,000 BP)

The Paleo-Indian period, as presently recognized, lies at the end of the Wisconsin glaciation, and marks the earliest human occupation of the southeastern United States. The approximate date of man's entry into the New World, and into the southeast, is currently unknown, although recent discoveries suggest a date upwards of 15,000 years ago (Adavasio et. al. 1976, MacNeish 1976). Sites of this early period, however, remain to be identified and securely documented in the southeastern United States. A number of archeological sites have been found throughout North America that have been dated between 13,000 and 11,000 years ago (Haynes 1969). These sites are characterized by distinctive fluted projectile points, and the artifact category has come to be a diagnostic marker of Paleo-Indian activity.

Fluted projectile points have been found on a number of sites in South Carolina (Wauchope 1939, Waring 1961, Waddell 1965b). Michie (1977) has documented the occurrence of over 100 Paleo-Indian projectile points throughout the state. His research indicates that the Paleo-Indian occupation of the South Carolina area was oriented toward the terraces of major drainages, with less emphasis on minor drainages or in the interriverine area. A number of fluted points have been recovered in the lower coastal plain along both the Santee and Cooper River drainages (Waddell 1965b, Michie 1977), although no sites of this period have been discovered in the vicinity of the refuge itself. Gregorie found one Dalton point along the coast some miles to the south of the refuge (Koob 1976) and an inspection of portions of her collection by Chevis D. Clark II (personal communication) has also turned up what appears to be the base of a fluted point from the same area near Porcher's Bluff (38CH8).

Until the very end of the Wisconsin glaciation, the sea level was much lower than at present, and the coastal plain was much larger, with a somewhat colder climate. Given lowered sea levels, Paleo-Indian sites may be located in areas of the refuge now covered with marsh or thick sediments. In addition to modern faunal communities, a diverse Rancholabrean assemblage was present, including bison, tapir, mammoth, mastodon, giant sloths, and a number of other now-extinct species. The Paleo-Indian inhabitants of the region may have exploited these extinct species, although little is known about their hunting, gathering, and settlement systems.

Early Archaic Occupation (c.10,000-8,000 BP)

The Early Archaic period follows the close of the Pleistocene glaciation, and is viewed as a time of readaptation, by local populations, to the changing environmental conditions brought about by climatic warming, rising sea level, and concomitant floral and faunal readjustment (Fitting 1968, Ford 1974, Morse 1975). During this period, the Pleistocene megafauna (e.g. mammoth, mastodon, sloth, etc.) are replaced by an essentially modern faunal assemblage, probably forcing some redirection in hunting patterns. While archeological knowledge of settlement-subsistence patterning during this period is almost completely unknown, there is some evidence for an increase in population, and an expansion in exploitation from along major drainages to throughout the coastal plain (Anderson, Lee & Parler 1979; James L. Michie: personal communication).

Early Archaic activity in the vicinity of northern Charleston County is recognized by the presence of diagnostic projectile points that have been dated to this period at other localities in the southeast. Dalton, Palmer, and Kirk projectile points (Coe 1964, Goodyear 1974) have been reported from the general project area, at sites both immediately adjacent to the estuary (Koob 1976:20) and in the interior (Wood 1977:49, Asreen 1974, Brockington 1978). At the present little is known about Early Archaic site distribution, although there is some suggestion that larger sites tend to occur along river terraces, with smaller sites away from this zone. No Early Archaic sites are known within the refuge, although about three miles to the west of the Moore's Landing area Gene Penniger (personal communication) has gathered an extensive collection of Archaic projectile points from a site near the Wando. Penniger's collection, which the author has inspected, includes Dalton, Kirk, Morrow Mountain, Guilford, Gary-like, and Savannah River stemmed points, indicating long site use.

Middle Archaic Occupation (c.8,000-4,500 BP)

Middle Archaic period sites appear to be fairly common within the coastal plain, and are indicated by the presence of Morrow Mountain I and II and Guilford Lanceolate projectile points (Coe 1964). Koob (1976:20-22) reports the occurrence of Morrow Mountain types from a number of sites in Christ Church Parish, Charleston County; these sites are in plowed fields immediately adjacent to the tidal marshlands. Asreen (1974) and Brockington (1978) report the presence of Guilford Lanceolate-like bifaces from sites along the proposed Cooper River Rediversion Canal in northern Berkeley County. Guilford-like forms are common in private collections from this part of the coastal plain, and are almost invariably chipped from orthoquartzite. As with the preceding Paleo-Indian and Early Archaic periods, no sites from this time range have been excavated in the vicinity of northern Charleston County, and knowledge of the period comes from excavations at localities elsewhere in the general region.

Late Archaic Occupation (c.4,500-2,500 BP)

The Late Archaic period in the lower coastal plain has received more attention from archeologists than any other prehistoric period. The Late Archaic is locally recognized by the appearance of punctated fiber and sand tempered ceramic complexes (Stallings and Thom's Creek ware-groups, after South 1976), and ends when these wares are replaced by stamped ceramic complexes, such as Refuge, Deptford, Cape Fear, and Wilmington. The unusual attention that the Late Archaic has received is due, in part, to the early radiocarbon dates associated with the ceramics. These dates, which range from roughly 2,500-1,000 B.C., are among the earliest in North America. In the vicinity of northern Charleston

County Awendaw ceramics have been dated at the Yough Hall shell ring to 1,820 B.C.  $\pm$  130 (M-1209, Waddell 1965a) and at the Sewee shell ring to 1,345  $\pm$  110 (GX-2279).

Larger numbers of Late Archaic shell midden sites have been located within and adjacent to the estuary in the vicinity of the Cape Romain National Wildlife Refuge (Gregory 1925, Waddell 1965a, Trinkley & Carter 1975). These sites are characterized by Awendaw finger pinched (Waddell 1965a, Trinkley 1976a) and Thom's Creek punctate (Griffin 1945) sand tempered ceramics. Stallings fiber tempered ceramics are rare along this portion of the coast, and appear instead to be concentrated south of Charleston Harbor in the Sea Island area (Anderson 1975:183; Trinkley 1976a; Anderson, Lee & Parler 1979:134-135).

The geographic scale or range of Late Archaic adaptation in the lower coastal plain is the subject of some current research. Widmer (1976), for example, has recently examined the occurrence of Awendaw and other Late Archaic artifacts in the Cooper River drainage. His research indicated that Late Archaic settlement in the area was predominantly an estuarine adaptation, with only limited movement into the interior by Sea Island inhabitants. Widmer (1976:46) did suggest that other Late Archaic groups may have occupied the interior, however, having little interaction with the coastal groups. This view has also been expressed employing a larger, regional perspective, based on the distribution of a number of distinctive Late Archaic artifact categories.

"It is suggested that Late Archaic artifact distributions delimit the boundaries of relatively endogamous, probably tribal level social groups. At least two, and possibly three, such groups are hypothesized to exist in the Sea Island area of South Carolina, characterized by Stallings wares in the southwest and Awendaw ware in the northeast, with a possible third group between them. The Stallings group in the southwest may have extended up the Savannah River, since strong similarities exist in the Late Archaic assemblages of some coastal and interior sites (Waring 1968, Stoltman 1972). A separate group may have occupied much of the interior of the Coastal Plain, characterized by Thom's Creek ceramics, while yet another group (or groups) were probably present in the Piedmont. Group endogamy is inferred from the relatively discrete ceramic distributions. If exogamous spouse procurement and exchange occurred, greater intergradation and stylistic overlap might be expected." (Anderson, Lee & Parler 1979:94-95).

The suggestion that group spouse procurement behavior helps to explain the distribution of particular artifact categories, and hence Late Archaic settlements, characterizes this latter view, and offers an alternative to Widmer's (largely) ecological model.

Aside from Stallings or Thom's Creek ceramics, Savannah River Stemmed projectile points (Coe 1964) are also used to indicate Late Archaic site use. Projectile points of this type have been reported at a number of sites in this portion of the coastal plain (Trinkley & Carter 1975, Widmer 1976, Wood 1977). It should be noted, however, that the number of documented projectile points dating to the Late Archaic, when compared with ceramic artifacts, is low. If not for the presence of Thom's Creek or Stallings wares, few sites of this period might be recognized in the lower coastal plain.

#### Woodland Occupation (c.2,500-1,000 BP)

The Woodland throughout the eastern United States is characterized by

increasing population, sedentism, and reliance on horticulture/agriculture. The nature of this adaptation in the southeast Atlantic coastal plain is poorly understood, although increased use of both floodplain and upland (interriverine) resources appears indicated from site distributional studies (Asreen 1974:12, Brockington 1978, Brooks & Scurry 1978).

Woodland sites are commonly reported from the northern Charleston County area, and are characterized by the presence of South's (1976) Deptford and Cape Fear ware groups. These ceramics have been reported from shell midden sites along the coast (Trinkley & Carter 1975) as well as at a number of nonshell midden locations in the interior (Asreen 1974, Widmer 1976, Wood 1977). Excavations and research have recently been conducted at a number of Woodland sites in the interior, including work at Huger (Brooks & Green 1978), and at several sites along the proposed Cooper River Rediversion Canal (Brockington 1978, Anderson 1979c). When these excavations are reported they should provide basic information about Woodland settlement and use in the lower coastal plain.

#### Mississippian Occupation (c.1,000-500 BP)

The Mississippian occupation of the lower coastal plain of South Carolina is not well understood. Ferguson (1971, 1975) has summarized much of the available data on the location and distribution of major sites (mound groups and ceremonial centers) in the area, and an orientation towards both coastal (estuarine) and interior resources is indicated. The degree of reliance on agriculture by local Mississippian groups is unknown, although for parts of the southeast, it is believed to have contributed a major part of the diet. No Mississippian period sites have been excavated in the immediate area of the refuge, although two have been examined elsewhere along the coast including a palisaded ceremonial center at Charles Towne Landing (South 1971) and the Irene mound near Savannah (Caldwell & McCann 1941).

Trinkley and Carter (1975) reported the occurrence of Chicora ware-group ceramics, South's (1976) category for wares of the Mississippian period, at two coastal sites in northern Charleston County at 38CH180 and at 38CH184, the Moore's Landing site. Gregorie (1925) illustrated complicated stamped ceramics from a number of sites in Christ Church Parish that have since been recognized as prehistoric in age. Asreen (1974:8) reported the presence of South Appalachian Mississippian remains at three sites along the initial Rediversion Canal route in northern Berkeley County, at 38BK83, 38BK84, and 38BK113. Brockington (1978) recently noted the presence of a number of additional Mississippian period sites along the Rediversion Canal route, primarily along the Santee River terraces. A distribution of Mississippian sites both along the coast and inland along the two major drainages in the area, the Santee and the Cooper, appears indicated, although the dimensions of this settlement/subsistence adaptation are largely unknown (see also Anderson 1975:189-191, Brooks & Scurry 1978).

#### Protohistoric Occupation (c.500-200 BP)

Although European explorers were operating in the Carolinas from the early 16th century onwards, permanent colonization did not occur until the English settled at Charles Towne Landing in 1670. Decimation or replacement of the local aboriginal populations quickly followed, until by the early 19th century, few native groups were left in the State. The initial century and a half of the contact era, however, covering much of the 16th and 17th centuries, saw only intermittent exploration along both the coast and the interior. Tribal level

groups were encountered in both areas, and a wealth of descriptive information is intermixed in the colonial records. Wright (1978:30-32) has summarized some of the readily available data directly pertaining to the Cape Romain National Wildlife Refuge. Doubtless, much more could be uncovered given time and funds for an extensive search. During the early colonial period, the DeSoto expedition (1539-1542) occurred, and may have passed into the South Carolina area where the apparent Mississippian chiefdom of Cofitachiqui was encountered (Baker 1974). A number of scholars have researched available records from early Spanish, English, and French explorations, as well as from the English colonial period following 1670, and summarized the information on the aboriginal populations that were encountered (Gregorie 1925, Milling 1940, Swanton 1946, Bull 1969, South 1972a, Baker 1974, 1975, Waddell 1980). An extensive ethnohistorical literature on the protohistoric exists and has been partially researched, although to date only one component has been examined in detail by archeologists, at Charles Towne Landing (South 1971).

#### The Historic Era (c. AD 1520-1978)

##### Introduction

The Low Country of South Carolina is one of the most historically significant regions of the United States. This report section is meant to generally outline the history of the Charleston-Georgetown area and examine use of the project area in regard to that history. Again, Wright (1978:32-35) has provided a good basic review which this overview is designed to complement rather than to reiterate. It should be emphasized that over one and a half centuries of Spanish, French, and English exploration occurred in the general South Carolina area prior to the English settlement in 1670 (Quattlebaum 1956). Archeological remains from this early colonial period are currently unknown in the refuge area, however, and in all probability are rare if present at all. The focus of this review, the period of English settlement, is to provide a perspective for the historic remains that do occur within the refuge.

Specific sources examined in the preparation of this review, other than maps, include: Crane (1928), Doar (1936), Gaillard (1887), Jones (1971), Orvin (1973), Rogers (1970), Sass (1956), Smith (1909), and Wallace (1951).

##### The English Colony: The Economic Base

The establishment of Charles Towne in 1670 was the direct result of English special interests personified by the eight Lords Proprietors. For reasons of either political or financial indebtedness, in 1662-63 King Charles granted these men financial and effective governmental control over the Carolinas. The Proprietors sought to encourage the settlement and development of their colonies, and instigated policies of religious toleration and a certain degree of self-government for persons willing to emigrate to Carolina. Their desire to maximize profits while avoiding the responsibilities of true proprietors, however, soon led to disenchantment among the colonies. Besides the development of commercial enterprises in the Low Country, the Proprietors and the Crown were also eager to have the new colony serve as buffer against the Spanish in Florida and the French in the Mississippi and Gulf region. By fostering the development of Carolina Low Country towns and parishes, England and the Proprietors were able to realize financial profits in the one hand, while forstalling foreign encroachment on the other.

Colonial rivalry over the control of the southeast led to occasional raids and counterraides between English, French, and Spanish settlements until well



into the 18th century. This intermittent warfare extended to maritime commerce, with the capture and/or destruction of enemy vessels a common event. Piracy flourished along the Carolina to Florida coast until about the 1720's and posed a serious economic hardship to the early colony. Guarding coastal commerce and defending the region from attack was a major concern of South Carolinians until the post-Civil War era. A tabby structure on Bull's Island (recorded as 38CH33) is believed to have served as a lookout post during the early National period. This structure, which is near a prehistoric site, was briefly investigated by G. Robert Lunz in 1934 and W. H. Ritter in 1938. The South Carolina Department of Archives and History, Charleston County, filed a report that the structure was built in 1793, and was:

...probably an American variation of the Martello Tower which was built as a watch tower to spread the alarm in case of the approach of enemy ships. This is one of two such known ruins in South Carolina.

The construction of the structure at this time may have had unusual stimulus: in early 1793 a French privateer, when arrested for capturing a British vessel in American waters, threatened to shell Charleston (Wallace 1951:346). Privateers were operating regularly in the coastal waters, and the Bull's Island, and other forts were constructed to keep watch for them.

During the late 17th and 18th centuries, the Charleston region was the focus for profitable systems of trade (with native American groups for deer skins), agriculture (especially indigo, rice, and cotton), and the production of naval stores (lumber, tar, turpentine, etc.). From its inception, until 1807, Charleston also served as a major port for the importation and sale of African slaves. Domestic trade in slaves, which were the mainstay of Low Country agriculture, continued to center in Charleston until emancipation. As a proprietary and later Royal colony, the commercial system that created and sustained South Carolina was fostered by policies of religious tolerance that encouraged immigration, official leniency (or neglect) in matters of self-government, and financial bounties on agriculture and forest products. Governmental mismanagement caused increased dissatisfaction with Proprietary control and their ownership was ended in 1719, but the commercial and agricultural foundations of the region remained strong and relatively unchanged after establishment of the Royal colony in 1729.

Another major force that shaped the early history of South Carolina was the near-constant threats posed by native American groups. Conflicts between the European powers were for the most part conducted indirectly through attempts to align the Cherokees, Creeks, Yamassees, Tuscaroras or other native groups into political alliances that would result in the Indians acting as military buffer groups or as actual instruments of aggression. The Tuscarora Wars in North Carolina and the Yamassee War in South Carolina during the first decades of the 18th century were serious threats to the existence of both colonies. Milling (1940) recounts the events leading to and following the Yamassee War of 1715 in detail. One result was the decimation or removal of most Indians from the lower coastal plain of South Carolina. The Sewee, a group then living in and near the present Cape Romain National Wildlife Refuge area, are believed to have moved into the Piedmont shortly after this time (Milling 1940:226). By the early 18th century, the native populations of the northern Charleston County area had been displaced (see Wright 1978:30-32).

Settlement of the Low Country outside the immediate environs of Charleston was a haphazard matter. Choice rice and indigo lands were quickly claimed by

the Proprietors or other persons of influence. Actual settlement of those lands was a different matter and it was left, for the most part, to yeoman farmers like the Huguenots or simple squatters to populate the swamp and savannah lands along the Ashley, Cooper, Santee, Black, and Sampit Rivers. By the mid-18th century, as evidenced on maps (Cook 1773, Mouzon 1775), the coast in the vicinity of the Cape Romain Refuge was moderately well settled. The nature of this settlement needs to be defined. Generally, the marshes are believed to have been used as a source of shellfish for lime production (Gregorie 1925). The houses shown on the various maps, however, probably represents farms of some kind.

#### The Low Country in the Revolution

The American Revolution modified certain aspects of the regional economy, particularly through loss of British markets and market subsidies. Reorientation of agricultural priorities from indigo to rice and cotton allowed the Low Country "aristocracy" to retain their prominence in the financial and drastically altered governmental affairs of the new nation. On the most obvious level, the Low Country is best known during the Revolution for the exploits of Francis Marion. His military feats, and those of his contemporaries (Sumter, Lee, Hampton, Tarleton) were central to the War's conduct in the Carolinas, although it must be recognized that Marion was only one of scores of military, political, and religious leaders to emerge from the Low Country gentry.

Military engagements in the Charleston-Georgetown area during the Revolution were numerous and generally of the nature of skirmishes rather than large battles. Their outcome did affect the larger course of the war in the South, however, by compounding the problems Cornwallis' forces had in maintaining lines of supply and communication. British difficulties in the Carolinas led directly to their eventual surrender by engaging troops and preventing major movements against Washington from the south. The coastal/estuarine zone in contrast, saw little activity other than as a temporary staging area for ships approaching the Charleston or Georgetown areas.

#### The Post-Revolutionary Economic Boom

An inordinate portion of tidewater social and economic life continued to revolve around plantation life during the post-Revolutionary period. Charleston continued to develop as a major eastern port and center of commerce, but Georgetown in particular was overshadowed by the surrounding rice plantation system. While demand for naval stores and indigo declined drastically as a result of the break with England, rice cultivation, and to a lesser degree cotton, produced for South Carolinians some of the largest fortunes in America during the early to mid-19th century. Waccamaw Neck, Black River, and the Santee and Cooper Rivers were the focus of the burgeoning rice industry and most of the transportation systems (roads, canals) that existed were constructed or improved specifically to facilitate movement of crops, supplies, people, and information between the scattered plantations and market centers of Charleston, Georgetown and Beaufort. The growth of settlement along U.S. Highway 17 (the old King's Highway) through Charleston County was fostered, in part, by the development of the route as a major artery of commerce. Most modern roads, in fact, deviate only slightly from routes depicted on maps drawn during this period.

#### Low Country Political and Settlement Organization

Local governmental systems outside the immediate Charleston area also existed to serve the plantation network. Voting districts, road commissions, and military units were structured around the various church parishes established



and modified during the 18th and 19th centuries to serve the spiritual and secular needs of plantation populations. The parish system acted to reflect and reinforce social values imparted by the ethnic backgrounds of the original Low Country settlers, although there were few real barriers to inter-marriage or commercial interaction. In the northern Charleston County area, these informal divisions were witnessed by intensive settlement of the Goose Creek area by Barbadoans, Oyster Point by the English, and Cooper River and the Santee by the Huguenots and their descendents.

#### Antebellum Sectionalism

The Charleston-Georgetown area continued its dominance of South Carolina life in other ways during the antebellum period, especially in terms of the political arena. In 1790, the state capitol was moved to its present location in Columbia, but Charleston continued to exert a disproportionate role in the governmental affairs of the state. Internally, representation in the state government continued to favor the Low Country aristocracy and their interests. The sectionalism which had its roots during the early colonial period continued during the early 19th century, as a monied, slave-holding minority was legally allowed to dominate the more populous "white belt" of the upcountry. The executive branch served basically a figurehead function, subject to the whims of the legislature. Through the Civil War, the educated, wealthy Low Country aristocracy dominated South Carolina politics and by doing so, acted as a dominant force in the Southern policies on state's rights and slavery during the antebellum period.

#### The Civil War Period

The parishes functioned as local governmental units, as centers of organization for military units, and as informational centers. Actual military action along the northern Charleston County coast was minimal during the Civil War, mainly troop or ship movements. Coastal lookouts kept track of Union gunboats, and Bull's Island was itself occupied in March of 1864 for a short period of time (Wright 1978:34). Confederate batteries were established at several locations along the coast and rivers to dissuade Union gunboat activities. Gregorie (1925:19) reports the presence of a Confederate gun battery near the Andersonville Mound (38CH9), only a short distance from the Moore's Landing area (see Appendix II).

Until very late in the war, Charleston was a center of Southern resistance, particularly in terms of blockade running, but was forced to yield as a direct result of Sherman's activities in Savannah and Columbia. The pressing effects of the war for the Low Country other than loss of lives were shortages of food and supplies coupled with the looting and destruction of homes after the fall of Charleston in February, 1865.

#### The Low Country in the Postbellum Period

Reconstruction saw an intensification of certain of the antebellum political rivalries, generated in part by the new presence of emancipated black slaves and northern "carpetbaggers". Republican and Democrat conflicts revolved around matters of political prestige and continued until the turn of the century over items such as disposal of abandoned farmlands and control of the state system of liquor dispensaries. Throughout the period of Reconstruction, agriculture continued as the mainstay of the Low Country economy, with cotton gaining dominance after the decline of rice prior to the First World War. The coastal area bordering the estuary in northern Charleston County was settled by small

communities of mostly black tenants, many of whose descendants remain in the area today. Timber production gained importance during the first part of the 20th century, but rapid depletion of that resource and the economic depression of the 1920's and 1930's led to the formation of the Francis Marion National Forest, begun in 1934 and expanded gradually to its present dimensions. A similar concern with managing and conserving portions of the estuarine zone led to the establishment of the Cape Romain National Wildlife Refuge about the same time, in 1932.

Recent activity along the coast paralleling the estuary has focused on housing development; many roads have been, or are being, opened through formally forested areas. Large numbers of archeological sites are being exposed and degraded by the construction activity. Once the development are occupied, residents will pose a potential threat to all aspects of the adjacent marshlands resources. Relic collection and vandalism of marshland sites, although uncommon at the present, will in all probability increase markedly in the years ahead.

#### PROJECT RESEARCH GOALS

##### Descriptive Inventory Functions

A major goal of the project was the effective documentation of all archeological resources encountered. Primarily an inventory function, this encompassed the preparation of accurate descriptive information about site location, content, and general environmental associations. Additionally, a descriptive summary of site contents, using locally accepted taxonomies, is included in this technical report.

Careful and complete documentation of field and laboratory activity is the responsibility of every archeologist. Effective documentation of data collection and analysis procedures, and results, provides the archeological community with the information necessary to evaluate or expand upon project work. In the present example there are two additional reasons why documentation is important. First, as indicated in the review of past research, very little is known about the archeological resources in this part of the coastal plain. Descriptive summaries of other than the most general nature are lacking, and any detailed report on the archeological resources that occur in the area would be of value. Second, of the more than 250 archeological sites recorded in state files and at the Charleston Museum for Charleston County, more than half are poorly documented, possessing minimal information about site location, condition, or content. A large number are the products of informant interviews, and have never been visited, collected, or described by a professional archeologist. Since site information is the basis upon which all subsequent archeological research is built, it is important that these data be as well documented as possible.

##### The Nature of Past Human Occupation in the Lower Coastal Plain

At the present little is known about even the occurrence of specific archeological materials in the lower coastal plain. Although inductive attempts at pattern recognition using large numbers of site have appeared (i.e. Waddell 1965a,

Anderson 1975), little is known about individual site size, content, or function. Waddell (1965a), for example, noted that Late Archaic Awendaw finger-pinched ceramics appeared to occur almost exclusively along the coast, in the region between Charleston Harbor and Awendaw Creek. An adaptation towards tideland resources was indicated, with little evidence for the ware on nonshell midden sites. An examination of Late Archaic assemblages in the Ashley/Cooper Rivers area by Widmer (1976:25) has indicated some occurrence of finger-pinched ceramics on nonshell midden sites, but considerable additional research is needed to resolve this distribution and its significance.

A similar pattern of estuarine adaptation may be indicated by the distribution of Wilmington ware-group ceramics. Few artifacts of this category have been noted inland in the coastal plain southwest of the Santee (Anderson 1975). Finally, South Appalachian Mississippian period artifacts have been reported from the Sea Island area and inland along major drainage systems (Ferguson 1971, 1975), but the nature of coastal Mississippian adaptation is very poorly understood, and its similarities or differences with Mississippian adaptational systems in the interior are unknown. Since the testing at 38CH184 revealed a Mississippian component, the site data form an initial basis for comparisons on this order.

#### The Coastal Transhumance Settlement Problem

Prehistoric archeological sites have been reported throughout the South Carolina coastal plain, from the Sea Island area to the Fall Line, along major river margins, and in the interriverine zone. One explanation proposed to account for some of the distributional variability, particularly among sites of the same period, is that the remains reflect transhumance. Transhumance is a pattern of scheduled, seasonal population movement between environmental zones to exploit the resources of each. The principal exponent of this theme in the southeast in recent years has been Milanich (1971) who proposed it in conjunction with his analysis of the Deptford culture.

According to Milanich, prehistoric site distribution in the southeastern Atlantic coastal plain during much of the last 4,000 years can be explained in terms of seasonal population movements between the Sea Island area and the interior. This pattern of regular settlement movement and subsistence orientation forms the basis for the "Coastal Tradition", a transhumance-based adaptation that Milanich feels continued largely unchanged from the Late Archaic until the adoption of intensive agriculture during the Mississippian period.

Under this view, prehistoric populations spent much of the year living in the Sea Island area, exploiting the variable resources of the ocean and marshland, and nearby upland communities. Movement into the interior river valleys occurred periodically, possibly during the fall when oak/hickory mast was abundant, or during periods of resource shortage along the coast. Specific resource exploitation models are, however, poorly developed at present.

A corollary of Milanich's model of transhumance applied to coastal plain archeological remains would be that specific sites or areas would show signs of temporary or semipermanent, but not sedentary occupation and use. For the lower coastal plain, year-round settlement in one location, such as in the Sea Island area or along one of the major drainages, would not be expected.

Trinkley (1975:38), Widmer (1976:46), Milanich et. al. (1976) and others (Fish 1976; Anderson, Lee & Parler 1979) have recently suggested that a model of transhumance may be inappropriate for the lower coastal plain. Instead, the possibility of year-round occupation in both the Sea Island and along the interior

river valleys is suggested. One alternative to Milanich's model, by Widmer (1976:46-47), hypothesizes a bipartite pattern of exploitation, with sedentary groups occupying the Sea Island area and seminomadic groups in the interior:

It is hypothesized here that this (estuarine) ecological zone allows the development of an adaptive system which favored sedentary life. This sedentary existence is evidenced by the large shell sites in the estuary sector... Because nonestuary resources such as deer, hickory nuts, acorns, and migrating waterfowl were also located in this sector there was no need to exploit the interior...

A separate adaptive system was developed to exploit the relatively rich, but only temporarily available, resources in the non-estuary interior regions of the lower coastal plain. Therefore, a seminomadic adaptive strategy, possibly based on a seasonal scheduling pattern, but certainly of limited length of habitation at any one site, was developed. The resultant settlement pattern is one of small sites with individual activity areas representative of short-term utilization.

Resolving archeological correlates of sedentary as opposed to mobile populations, or for long-term as opposed to short-term site use, has been variously approached in the southeast (Morse 1975, 1977; Bowen 1977; Schiffer 1975; Stanfill 1977; House & Ballenger 1975). In the Atlantic coastal plain subsistence remains have been examined for evidence of seasonality at a number of sites (e.g. Trinkley 1976b). Most of these have been shell middens where the depositional environment favors preservation, but recently promising efforts along these lines have been attempted on nonshell midden sites from the interior of the coastal plain (Trinkley 1974:13-14, Widmer 1976:36-37, Anderson 1979b:209-219).

At 38CH184, where well-preserved (if fragmentary) shell and bone remains were recovered, it is possible to begin to investigate coastal Mississippian settlement and site use patterns. Although Milanich (1971:150) believes that the "Coastal Tradition" adaptational pattern is no longer viable after the advent of agriculture, the model has never been tested with Mississippian remains from the South Carolina area. The nature and geographic extent of the adaptation producing sites like 38CH184 remains largely unknown, and forms an important subject for research. At the present only two studies exist that attempt to focus on the spatial correlates of coastal Mississippian adaptation: Pearson's (1978) model of late prehistoric settlement on Ossabaw Island, Georgia, and Ferguson's (1975) examination of the occurrence and distribution of political and ceremonial centers throughout the South Appalachian region. The late prehistoric component at 38CH184 is examined in relation to both of these models, which are discussed in greater detail in the concluding section of this paper.

#### Lithic Resource Exploitation Patterns

A final subject for project research focused on aboriginal selection and use of lithic raw materials in the Sea Island/coastal zone. Lithic raw material sources are scarce in the lower coastal plain, and the occurrence and use of lithic artifacts on local prehistoric sites remains largely unexplored. A range of raw materials have been observed on archeological sites in the coastal area, including chert, quartz, slate, metasandstones or quartzite, steatite, ferruginous sandstone, and rhyolite (Michie 1979:53, Widmer 1976:32-33, Trinkley 1975: 21-2), but little is known about selection practices or procurement systems. Is lithic raw material selection dictated by proximity of source, or by other factors such as the intended function of the manufactured tools? Given an (apparent)

local scarcity of lithic raw materials, evidence for conservation practices might be expected within site assemblages. Few large, useable but unused pieces of material would be expected, and stoneworking technologies might incorporate a range of procedures such as bipolar flaking, thermal alteration, or recycling, to facilitate efficient raw material use (e.g. Goodyear 1974, Anderson 1979a). The use of fine quality materials from distant sources (i.e. Allendale chert, or Piedmont-derived quartz, rhyolite, or slate) as opposed to the use of poor quality, but more readily available local materials (i.e. Santee River cherts and quartzites) also bears investigation.

#### FIELD AND LABORATORY METHODS

Field procedures at both 38CH184 and 38CH292 included (1) intensive surface reconnaissance, (2) excavation of systematically dispersed 0.5 meter test units, (3) excavation of at least one 1x2 meter test unit intuitively placed in rich scatter and, (4) controlled surface collection around each unit and by loci. A transit, 30-meter tape, and stadia were used to lay out all collection units and in-site mapping. Temporary field datums were tied in with two or more fixed (permanent) datums. Records were maintained employing unit level sheets, photo record sheets, and master feature and excavation/collection unit inventory sheets. A daily field log and all mapping notes were kept in a Dietzgen mining/transit book with water resistant paper. Number 2 pencils were used to record all notes. Color slides (Kodachrome 64) and black-and-white (Kodak Tri-X 400) shots document field activities. In all, 36 color slides and 20 B&W photographs were taken. All artifacts were placed in plastic bags labelled with permanent magic markers.

Laboratory analysis was initiated prior to the completion of fieldwork. Each night field and site records were examined and corrected and augmented as necessary, and artifact processing began. All artifacts were washed and rebagged into plastic sandwich bags, by provenience and major artifact category, with a three-by-five inch card detailing provenience data included. Collected artifacts were classified using established local taxonomies where possible. Prehistoric ceramics were examined for paste and surface finish attributes and then tabulated, by weight and count, using South's (1976) Indian Pottery Taxonomy for the South Carolina Coast. Most of the ceramics recovered readily fit into established type categories subsumed in the South taxonomy. A nondiagnostic category was used to handle all ambiguous sherds that were too small or weathered to be readily identified. Additionally, an "unknown stamped" category was used for all complicated stamped sherds that could not be readily sorted into either York or Chicora ware-groups — South's taxa for the late prehistoric/early historic assemblages in the area. Prehistoric lithic artifacts were classified and tabulated by raw material, evidence for use as a tool, and decortication stage. Historic artifacts were classified employing taxonomies developed by Noel Hume (1970) and South (1972b), or else were described from a perspective emphasizing manufacturing technology, decoration, and perceived function or origin. Descriptive tabulations of all artifacts recovered from 38CH184 and 38CH292 are found in Appendix I. A detailed technical examination of all recovered shell and bone remains, by Albert E. Sanders and Peter Coleman of the Charleston Museum, is found in Appendix III.

THE RESULTS OF THE TESTING  
THE MOORE'S LANDING SITE (38CH184)

Field Activity at 38CH184

At the time of the 1978 testing the field defining the general boundaries of site 38CH184 was overgrown in weeds half a meter to two meters tall. The field had been cultivated in 1977, and had last been plowed late in that year, following the fall harvest. By August 1978 the site area had lain fallow for a year. Surface visibility was poor, and was estimated at from one to five percent. Efforts to have the site plowed, by local farmers and by the refuge authorities, were unsuccessful. Prior to initiating testing operations approximately eight hours were spent walking over the project area, which consisted of the field and portions of the adjacent woods (Figure 4). This reconnaissance relocated the concentrations of artifacts and shell originally reported by Wright (1978:36-43), and provided a picture of site conditions and artifact distributions that helped to guide the testing. To overcome the problems created by the poor surface visibility, systematic test pitting operations employing one-half meter units were conducted over the field and in the adjacent woods, and larger, one by two-meter units were intuitively placed in rich areas of the scatter.

To maintain spatial control a temporary datum was established in the field near the center of the shell and artifact scatter. This datum was marked with a two-foot length of  $\frac{1}{2}$ -inch diameter iron rebar, and was tied in to a number of fixed points in and away from the field. A permanent site datum was established outside the area of planned construction (Independent Telephone Company underground phone cable marker pole B19-10, located at the south end of the field near the present refuge sign). Twenty-five 0.5 meter test units were laid out across the major and minor axes of the project area. Twenty meter interval spacing was employed, except in the woods where shorter distances were used (Figure 4). Larger, 1x2 meter, units were then placed at the approximate centers of the three shell scatters observed in the field.

The fill from each unit was passed through  $\frac{1}{4}$ -inch screen, and all remains, except small shell fragments, were saved. In all of the tests the plowzone was removed as a single level. At least one 20cm subplowzone level was removed from the half meter tests, while a series of 10cm levels (to a depth of 70cm) were removed from each of the three larger units. Profiles were drawn and photographed for each of the 1x2 meter units, with Munsell charts used for color control. Depositional information (i.e. depth of plowzone, root disturbances, etc.) was recorded for the smaller units. Upon completion of the testing, surface collections were made about each unit for a minimum of ten minutes. During the field operations 138 points for a site map were recorded using a transit, tape, and stadia (Figure 4). Throughout the mapping and fieldwork all distances under 30 meters, including the location of all test units, were taped.

The Moore's Landing (38CH184) Assemblage

A light scatter of shell fragments was observed over much of the field at Moore's Landing, with three concentrations noted in the southern end (Figure 4). Most of the shell fragments were small, reflecting extensive plow reduction. Oyster (*Crassostrea* sp.) and clam (*Mercenaria* sp.) accounted for most of the remains, with whelk (*Busycon* sp.) fragments and marsh periwinkle (*Littorina* sp.) noted less frequently. The testing indicated that the site assemblage occurred almost entirely in the plow zone. Little evidence for undisturbed shell lenses, features, or artifact concentrations was noted below the plow zone level in any

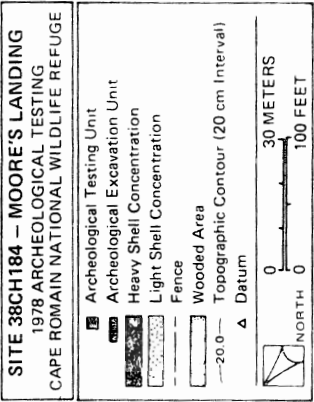
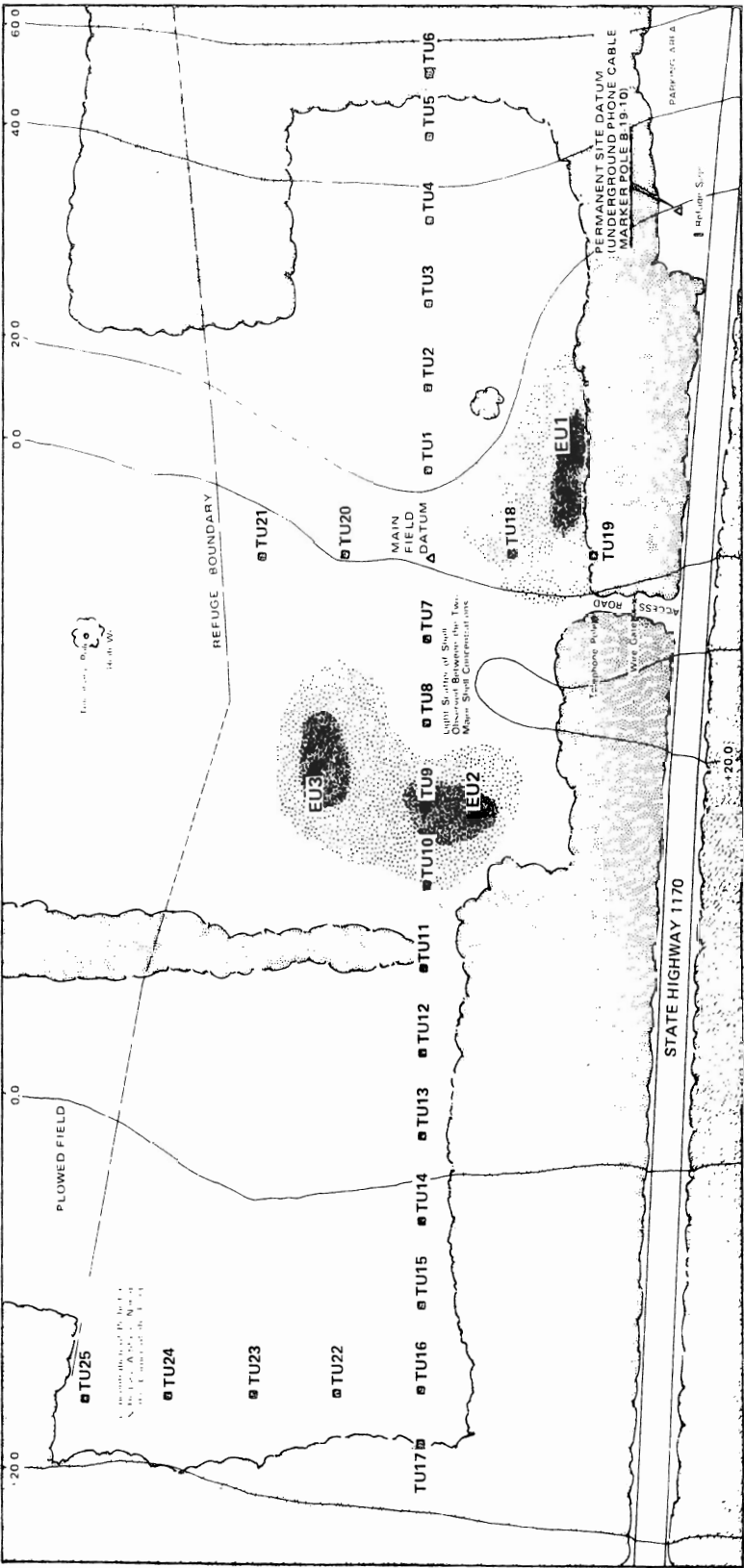


Figure 4. Site 38CH184 area at Moore's Landing. Note location of test and excavation units as well as shell concentrations.



of the 25 half-meter test units. In the areas of comparatively dense shell concentrations, tested with 1x2 meter units, however, small pockets of shell were noted at the base of the plow zone (Figure 5). Although partially reduced, the remains in these pockets appeared to be at or near their original place of deposition, and provided reasonably intact shell specimens useful for species identification.

The original size and depth of each of the three shell middens at 38CH184 appears to have been relatively restricted. Given the degree of scattering and plow reduction observed, and the relatively small quantities of shell recovered in most of the tests, the lenses were probably not much more than 10 to 20cm thick originally, and under 20 meters across.

The testing and surface collection recovered several hundred prehistoric and historic artifacts, the vast majority of which (N=394) were aboriginal pottery fragments (See Appendix I). The prehistoric ceramic assemblage was predominantly late, with most identifiable sherds falling into South's (1976) Chicora ware-group. A few Woodland sherds (N=12) were also present, including representatives of the Deptford, Cape Fear, and Wilmington ware-groups. Somewhat spatially discrete patterns of site use were indicated by the distributions of ceramics on the site. Woodland sherds occurred primarily in two areas, at the north end of the site near the tidal creek, and at the south end in the test units closest to the marsh face. The Mississippian assemblage, in contrast, was



Figure 5. Excavation Unit 1, west wall profile at 38CH184. Flecks of shell are visible in the plow zone level. Only a few small, relatively undisturbed pockets of shell were apparent at the base of the plow zone.



thinly scattered over the entire field with a major concentration in the south central area around the shell lenses. The low incidence of Woodland pottery at Moore's Landing, compared with the later Mississippian assemblage, suggests a less intensive use of the area. Alternatively, it may indicate site use in different activities (producing less broken pottery). Mississippian site use, additionally, was clearly associated with the exploitation of shellfish. The Woodland components in contrast, while adjacent to both the estuary and the tidal creek, were not found associated with shell.

Surface finishes present in the ceramic assemblage included plain (N=110), burnished plain (N=6), cordmarked (N=8), linear check stamped (N=2), fabric impressed (N=1), and complicated stamped (N=88). Nondiagnostic fragments, too small or weathered to permit accurate finish identification, accounted for the largest single category (N=179). All but one of the sherds were either non-tempered or contained small (natural?) rounded and subrounded quartz sand inclusions. The exception was a single fragment of Wilmington (or Hanover) sherd tempered fabric impressed ware.

The high incidence of nondiagnostic sherds (45.4% of the site assemblage by count) appears to reflect the extensive plow reduction of the site deposits. Most of the sherds recovered during the 1978 testing were small ( $\bar{X}$  = 4.00g), and nondiagnostic sherds ( $\bar{X}$  = 2.05g) were, on the average, less than half the weight of sherds in identifiable categories ( $\bar{X}$  = 5.62g). An attempt to determine possible plow reduction patterns, by comparing the average weight of sherds in the plow zone (N = 346,  $\bar{X}$  = 3.9g) with those in the sub-plow zone levels (N = 21,  $\bar{X}$  = 3.7g), indicated little difference in the size of the artifacts in the two proveniences. The low number of subplowzone sherds, and their possible derivation from above, through disturbances, may help to explain the similar average weights. The observation that most of the site sherds were small and probably plow-reduced, in fact, additionally supports the inference that subplowzone remains on the site were minimal, and largely derived from above.

The 88 complicated stamped ceramics recovered during the testing were separated into three categories: Chicora (N = 20), York (N= 5), and unknown (N = 63). Chicora/York separation followed guidelines proposed by South (1976). York ceramics, assumed to date to the post-European contact era, have been described as exhibiting the following finishes:

Carved paddle stamped with enlarged motifs, carefully applied decorative motifs, burnishing, finger punctated rim strips and folded rims, sloppy incising, corncob impressed type present (South 1976:28).

York ceramics have been interpreted by South as reflecting a breakdown in the Chicora ware-group tradition, which is characterized by well executed:

Carved paddle complicated stamping, burnishing, rosettes, reed punctations and punctated rim strips (South 1976:28).

Chicora ceramics are a hallmark of the Mississippian period in coastal South Carolina, and are believed to date from about AD 1200 to AD 1500 (Taylor and Smith 1978:151). The final category, "unknown stamped," was created to handle sherds that could not be readily sorted into either Chicora or the York taxa. All of these sherds were believed to be complicated stamped, with finer sorting rendered difficult due to a small sherd size or an eroded or blurred (poorly applied) finish. A few Woodland period simple stamped sherds may have been present, although this is considered unlikely, since no larger simple stamped sherds were observed in the remainder of the site assemblage.

South (personal communication) has cautioned that separation between Chicora

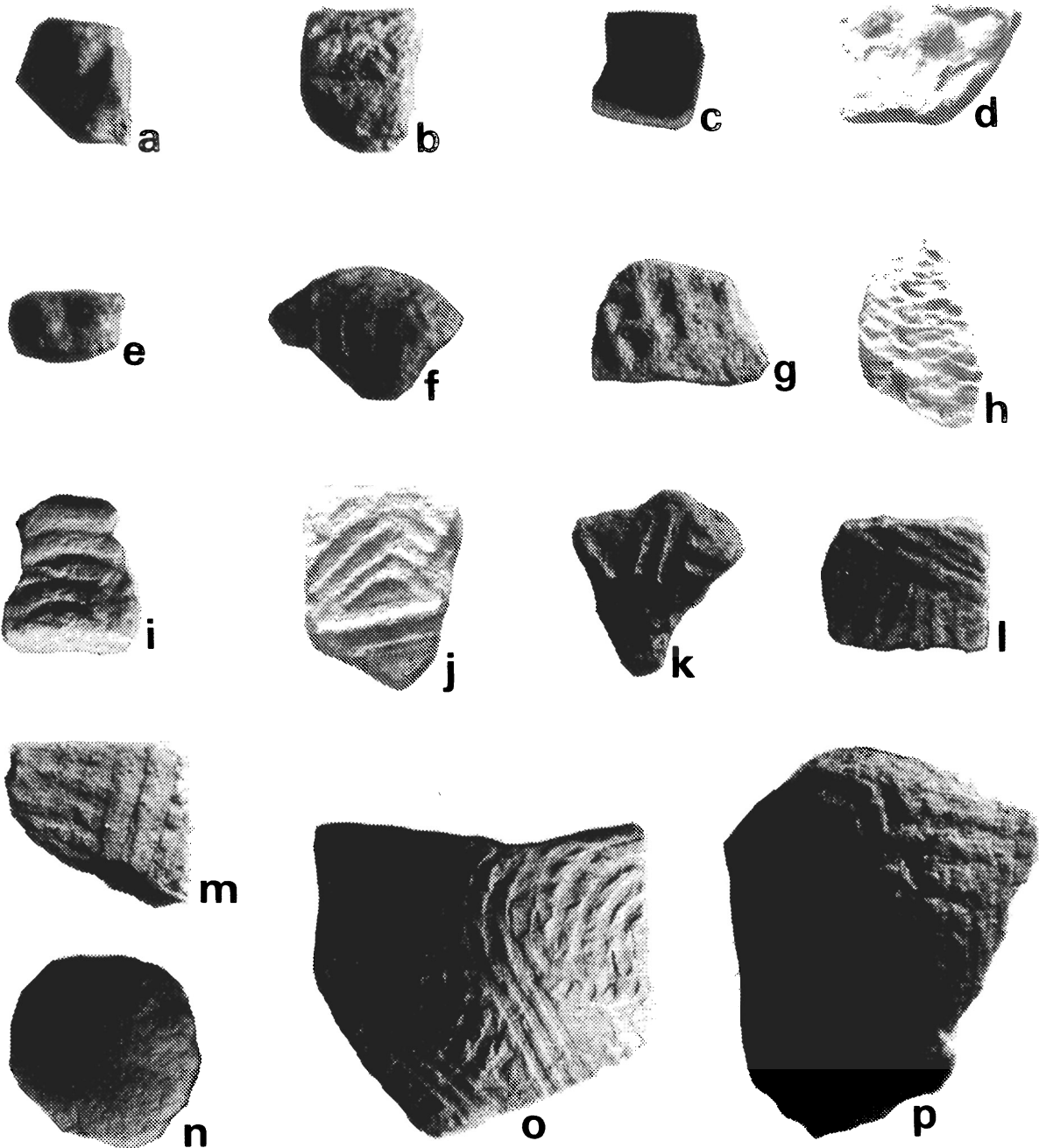
and York ware-groups can only be effectively made on a vessel or assemblage basis. Large, poorly carved or carelessly applied stamping (York attributes) do occur on occasion in Chicora assemblages which renders meaningful classification difficult if sample sizes are low. To successfully distinguish whether one or both of these ware-groups are present within a site assemblage, therefore, collections characterized by moderate quantities of large sherds or vessels would be required. The Moore's Landing assemblage, unfortunately, consisted of small sherds with few rims present. Separation between Chicora and York wares was based on the less precise criteria of large, poorly executed and applied stamping. The large numbers of "unknown" stamped sherds ( $N = 63 / 72\%$  of all complicated stamped sherds recovered) reflects the difficulty of applying Chicora/York sorting criteria to small body sherds.

As an assemblage, the Moore's Landing material most closely resembled Coe's PeeDee series (Coe 1952, Reid 1967). Carefully carved and applied stamps were common, even on many of the "unknown" stamped fragments that were too small to confidently sort into one ware-group or the other. Specific designs recognized in the assemblage, following Reid's (1967) definitions, included the split diamond and the line block (Figure 6). Concentric circles and a variant of the filfoot cross may have also been present, although sherd sizes were too small, and the designs too blurred, to permit confident assignment. Sherds classified as York, therefore, may be less carefully executed Chicora variants. No apparent spatial separation was noted between the Chicora and York ceramics on the site, and the presence of York-like attributes may reflect temporally late, Chicora period site use, perhaps during the early Contact era.

Only a small number ( $N = 23$ ) of lithic artifacts were recovered at Moore's Landing; all are briefly described in Appendix I. Raw materials present included Allendale Chert ( $N = 9$ ), opalized shell ( $N = 9$ ), an unknown chert ( $N = 2$ ), and orthoquartzite ( $N=3$ ). The unknown chert is heavily patinated and may be opalized shell. Raw material sorting criteria was based primarily on color and texture, and may be subject to some error. A major emphasis of current research in South Carolina focuses on the identification of lithic raw material sources and the development of reliable sorting criteria for recognizing artifacts from these sources (e.g. Novick 1978).

Allendale chert, from the Rice Quarry (38AL14) on the lower Savannah River, is a white to yellowish brown chert with a low incidence of macroscopic fossiliferous inclusions. At Moore's Landing it was the best quality knapping material observed, with a fine-grained structure. The opalized shell recovered at Moore's Landing was a bluish-white to gray chert-like material with extensive macroscopic fossiliferous inclusions. The material appears to be poorly suited for knapping. Three outcrops of opalized shell are known from along the Santee drainages, at 38CH33 near the Lake Marion dam in Clarendon County, at an as of yet unrecorded site in Sumter County on the Wateree, and at Buyck's Bluff (38CL17) in Calhoun County (Anderson 1979b). The orthoquartzite at Moore's Landing is a light brownish-white material with a pronounced grainy texture. This material, of moderate knapping quality, outcrops in the Black Mingo formation, and outcrops are common along the Santee River in Berkeley, Clarendon, Williamsburg, and Georgetown Counties (Cooke 1936:41, Overstreet & Bell 1966:26, Anderson 1979c). Petrographic analyses and descriptions of the Allendale and Santee River cherts, employing thin-sectioned specimens from known quarry sites, have recently been reported by Dr. Gerald R. Baum of the College of Charleston (IN: Anderson 1979b:29-37).

Aboriginal selection at Moore's Landing appears to have favored lithic materials found within the coastal plain. No Piedmont materials were recovered,



**ABORIGINAL POTTERY  
MOORE'S LANDING – 38CH184**

a-f, i-p— Late (Chicora/York) Complicated Stamped Ceramics.  
h,g— Possible Woodland Stamped, Fabric Impressed Wares.

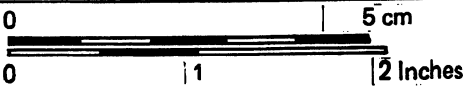


Figure 6. Pottery sherds typical of the collection from the Moore's Landing site.

and local (Santee River area) cherts and orthoquartzites were somewhat more common than cherts from the comparatively distant Allendale quarries, even though the latter material was far superior in knapping quality. Given the small sample size, it is difficult to generalize about lithic raw material use at Moore's Landing. About half the lithics recovered were found in test units at the north and south ends of the field, in the areas producing much of the Woodland pottery. This might suggest a somewhat greater proportional use of lithics on the site during the Woodland than during the Mississippian. No apparent preferences were noted in the use of specific materials by components; each category was fairly evenly distributed over the site.

Most of the lithic artifacts recovered at Moore's Landing were small. Only one moderate sized piece of material was present in the assemblage, a cortical fragment of opalized shell weighing 25.2 grams. The average weight of the Allendale chert artifacts (0.08 g) was somewhat less than for the opalized shell (1.03 g), excluding the large chunk. The Allendale material, imported from a greater distance, may have seen proportionally more use in final stage manufacturing or in finished products at Moore's Landing. Alternatively, the smaller size of the Allendale debitage may reflect the different working nature of the two stone types. The Santee River cherts are highly fossiliferous, at least when compared with the Allendale materials, and are somewhat more difficult to knap. Reduction of Santee River cherts, other things being equal, might result in larger fragments of debitage than if Allendale material was used.

A surprising amount of cortical material was present in the assemblage. Four of the nine pieces of Allendale chert (44.4%), and seven of the ten opalized shell fragments (70.0%), exhibited cortex, suggesting some on-site initial stage manufacturing, or else the importation of relatively poor quality stone. The somewhat lower proportional incidence of cortical material in the Allendale assemblage is as expected, given the greater distance to the source (cf. Mathis 1977). A high incidence of cortical material in later (Woodland period) assemblages, compared with the incidence in the preceding Archaic levels, was observed at the Cal Smoak site on the Edisto River. At Cal Smoak this patterning was attributed to a range of possibilities, including the exhaustion of readily obtainable high quality stone at the quarry site, changes in lithic technology (as characterized by an apparent decrease in finely manufactured, special purpose tools from the Archaic to the Mississippian), higher tolerated levels of waste during procurement, and possible changes in site use patterning (Anderson, Lee & Parler 1979:48-49). At Moore's Landing the high incidence of cortical material may be related to one or all of these factors; what is clear is that lithic raw material use was minor, and entailed the use of relatively poor quality material.

Only one possible stone tool was recovered in the Moore's Landing assemblage, a 25.2g chunk of opalized shell. This fragment, found in EU3, exhibited crushed steep-angled edges in two slightly concave areas, and may have seen use as a spokeshave. The relative absence of stone tools may reflect curation in a stone free area. Alternatively, it may reflect the low site sample fraction investigated, or the previous removal of most unusual plow zone artifacts by local collectors.

The bone and shell remains recovered during the 1978 testing at Moore's Landing were examined by Albert E. Sanders and Peter Coleman of the Charleston Museum staff, and the results of their analysis are reported in Appendix III. A total of 118 bone fragments were recovered in the excavation units, 115 in the plow zone and 3 in the subplowzone levels. The fragments were small ( $\bar{X}$  = 0.29g), but in good condition. All of the faunal remains came from the vicinity of the

of the three shell middens, and all but one of the fragments came from the 1x2 meter units opened at the center of each scatter. The small size of the bone remains reflects plow reduction rather than weathering; the associated shell produced a favorable preservation environment.

The shell remains in the three middens were similar, with *Littorina* sp., *Busycon* sp., *Crassostera* sp. and *Mercenaria* sp. identified from each. Given the nature of the sample the relative percentages of each species could not be determined, although *Mercenaria* fragments were the most commonly recovered remains, followed in descending order of incidence by *Crassostera*, *Littorina*, and *Busycon*. The bone remains exhibited moderate species diversity, with Marine catfish (?*Arius felis*), Diamondback terrapin (*Malaclemys terrapin*), Yellow-bellied turtle (*Chrysemys scripta*), and dog (*Canis* sp.) positively identified. An indeterminate species of bird was also recovered, and a number of unidentifiable fragments were from large mammals, probably white-tailed deer (*Odocoileus virginianus*), although no fragments could be conclusively identified as such (Albert E. Sanders: personal communication). The canid remains consist of tooth fragments, and although possibly a modern intrusion, are in clear association with one of the three shell deposits.

All of the faunal remains appear to be associated with the Mississippian occupation. The results of the analysis document clear use of the estuary, for shellfish, fish, and turtles, as well as use of the live oak strand itself, as suggested by the possible deer remains. The presence of *Chrysemys* and *Malaclemys*, additionally, suggests possible site use during warmer weather (spring through fall), since these turtle species are somewhat more active during these seasons. None of the species recovered, however, provide conclusive evidence for site use during a specific season or seasons, or for a single period of occupation as opposed to repeated or extended occupations.

Three fragments of a baked clay object were found from 30 to 40cm in EU2, below one of the shell lenses. The fragments were characterized by hollow reed punctations and finger (or dowel) impressions, and appeared to derive from what South (1970:3) has described as a "perforated grooved mellon shaped" object. These artifacts are popularly known as "Poverty Point objects", after the site in northeastern Louisiana where large quantities of them were found in a Late Archaic/initial Woodland context. Based on the work at Charles Towne Landing, South (1970:9) attributes a similar, Late Archaic age to some coastal South Carolina specimens. Recent work at the Huger site (Mark J. Brooks: personal communication) and at the Mattassee Lake sites (Anderson 1979c), however, has also documented the occurrence of baked clay objects in clear Woodland contexts, suggesting a long temporal range for the artifact type in the South Carolina area. No other evidence for a subplowzone, Late Archaic or Woodland component was recovered, and the object may be associated with the Mississippian component.

A number of 19th and 20th century historic artifacts were also recovered on the site, and are described in Appendix I. No evidence for a colonial structure was noted, however, even at the northern end of the field where Wright (1978:49) previously collected materials of this age. The field had not been replowed since Wright's December 1977 visit, and it is possible that most surface artifacts were collected during the initial reconnaissance.

THE RESULTS OF THE TESTING  
AT 38CH292

38CH292 Field Activity

As at 38CH184, reconnaissance was first conducted over the entire impact area. Surface visibility was poor due to extensive marsh grasses and recent silt. Three hours of intensive examination failed to produce a single aboriginal artifact. Considerable quantities of historic debris were noted in the proposed impact area, however, especially in the area to the north of the test units. This area is currently in use as a dump by the refuge and (for the present) should not be construed as a historic site. A shell lens was observed by the marsh edge in the location designated by Stephenson during his initial reconnaissance; this lens was at the base of spoil brought in for a dock and access road complex. Four 0.5 meter test units were placed along the edge of the marsh within the shell scatter, and one 1x2 meter unit was opened directly within the most extensive deposits (Figure 7). All fill was passed through  $\frac{1}{4}$ -inch screen, and

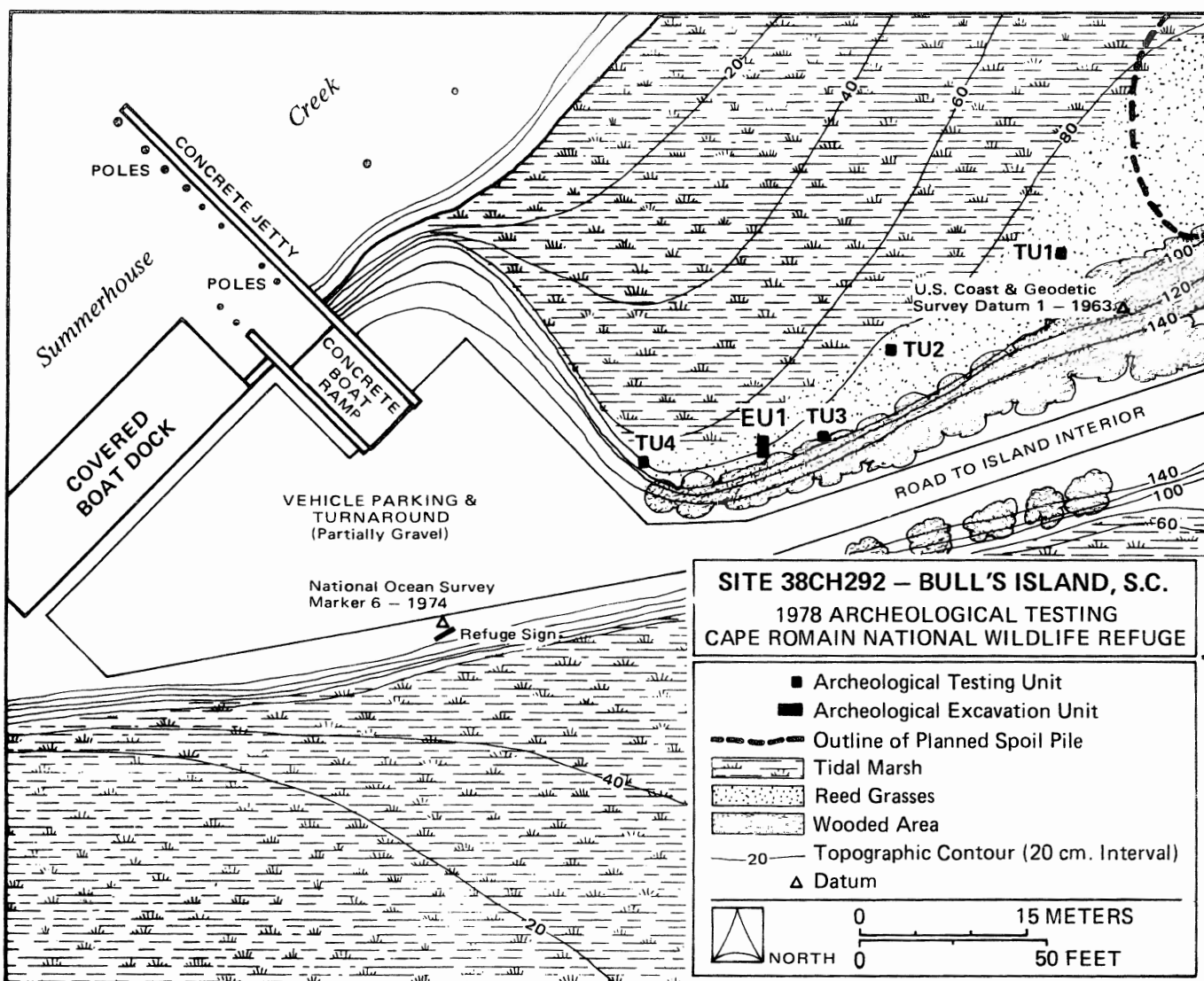


Figure 7. General map and location of test units at site 38CH292, Bull's Island.

excavation proceeded until clay was reached, or until infiltrating water precluded further effort. The testing was done at low tide; the area of the observed shell, it should be noted, is partially submerged at high tide. A temporary field datum was set up near the dock, and 26 points on a site map, including the location of the five test units, were shot-in with a transit and tape (Figure 7). Two permanent datums were tied in: (1) U. S. Coast and Geodetic Bench Mark No. 1/1963 and (2) National Ocean Survey Marker No. 6, 1974.

#### Bull's Island (38CH292) Results

No prehistoric artifacts were recovered in the testing of 38CH292, in spite of an intensive surface reconnaissance and the excavation of five units. A 1x2 meter test, opened in the main shell lens, visible at the edge of the road spoil, indicated shallow deposits (under 40cm) that appear to have been brought in by dredging operations. The testing was instructive, however, in that it prompted the investigators to develop methods for distinguishing midden deposits from dredgework: secondarily deposited shell concentrations (Table 1).

ATTRIBUTES	MIDDENS	DREDGEWORKS
Shell composition	Intact shells (more or less)	Broken or crushed shells (more or less)
	Food species	Food and nonfood species
	Large overall size	Diverse; small "seashells" may be present
Artifacts	Yes (may be rare)	Unlikely
Vegetation (if above high tide line)	Live oaks/pines (unless recently cleared)	Cedars, scrub brush (unless very old)
Configuration of lens or location	Natural (evenly weathered)	Unnatural (irregular, incompletely weathered; i.e. linear as along the intra-coastal waterway, etc.)

Table 1. Attributes for distinguishing coastal middens from dredgework shell accumulations.

A number of recent historic artifacts were discovered in the immediate vicinity of 38CH292, including a small piece of rusted iron found in the upper part of EU1. The 38CH292 area has been used as a trash dump and, like most modern roadside areas, was also characterized by recent litter.



## CONCLUSIONS

The Moore's Landing Site and the Mississippian Occupation  
of the South Carolina Coastal Plain

The 1978 test excavations at Moore's Landing (38CH184) documented the presence of three small shell middens in the live oak strand immediately adjacent to the Sewee Bay estuary in northern Charleston County, South Carolina. The shell middens appear to have originally been no more than 10 to 20 cm thick, and under 20 meters in diameter, suggesting relatively brief, or restricted, use of local shellfish resources, at least when the site is compared with other, larger coastal shell middens. Animal bone, lithic artifacts, and Mississippian period ceramics were recovered from the area of each midden, and a low density scatter of lithic and ceramic artifacts was also observed over much of the surrounding terrain. The testing detected little evidence for subplowzone features, and indicated that the shell scatters had been highly disturbed by historic period cultivation. Given the small area examined, however, it is not possible to conclusively state that structures or other subplowzone features were absent. The majority of the assemblages, spatially restricted to the area in and near the three shell middens, and functionally exhibiting minimal evidence for more than a few activities, suggests short-term site use by fairly small groups.

As indicated in the summary of human occupation (page 27), Mississippian lifeways are currently poorly understood in this part of the southeastern Atlantic region. Along the South Carolina coast, in fact, only one Mississippian site has been excavated and reported in detail — the palisaded late prehistoric ceremonial center at Charles Towne Landing (South 1971). While moderate numbers of Mississippian period artifacts have been reported from surface collections or test excavations along the coast (i.e. Moore 1898, Gregorie 1925, Griffin 1943, Trinkley & Carter 1975, Anderson 1975, Michie 1979), little is actually known about these components. This lack of knowledge make it difficult, therefore, to place the Mississippian component at Moore's landing into a meaningful perspective. Two recent models of Mississippian settlement from the general region, however, are useful in helping to understand the late prehistoric occupation of the Moore's Landing area. The first, developed by Leland G. Ferguson (1971, 1975) examined the distribution of late prehistoric ceremonial centers over the entire South Appalachian region, while the second, developed by Charles Pearson (1977), focused on late prehistoric sites on Ossabaw Island, a sea island on the north Georgia coast immediately below Savannah. The models, while differing in scale, examine the ecological associations and locational relationships of the Mississippian sites over their respective study areas.

The South Appalachian culture area was originally defined by William H. Holmes in his classic study "Aboriginal Pottery of the Eastern United States" as:

"A culture province of somewhat marked characteristics (comprising) the states of Georgia, South Carolina, and contiguous portions of Alabama, Florida, North Carolina, and Tennessee."  
(Holmes 1903:130)

The ceramics of the area, Holmes observed, were particularly characterized by carved paddle stamping. Archeological investigations conducted throughout the South Appalachian area since 1903 have documented the long history of the tradition, from the simple and linear, check stamped wares of the Early Woodland period through the complicated stamped ceramics of the Mississippian period. The geographical boundaries of Holmes' South Appalachian province were used

by James B. Griffin (1967:185) to delimit a regional variant of Mississippian adaptation in the eastern Woodlands, and it is from this 1967 paper that modern use of the expression "South Appalachian Mississippian" originates. The first major attempt to synthesize existing information on the Mississippian cultures in the South Appalachian province was conducted by Leland G. Ferguson (1971) in a Ph.D. dissertation completed under the direction of Joffre L. Coe at the University of North Carolina at Chapel Hill. Ferguson's synthesis, and subsequent elaborations (i.e. 1974, 1975), form the basic foundation for all subsequent studies of Mississippian period adaptation in the region.

Ferguson (1971:148) examined the distribution of Mississippian platform mounds throughout the South Appalachian province, and found a close correlation of these sites with specific forest and soil types. This distribution was tentatively interpreted by Ferguson (1971:245-248) as reflecting selection for environments suitable to a hybrid agricultural/hunting/gathering adaptational system. Griffin's (1967:189) basic definition of "Mississippian" had referred to it as:

"...the wide variety of adaptations made by societies which developed a dependence upon agriculture for their basic, storable food supply." (Griffin 1967:189)

Ferguson (1971:12,246), in contrast, noted there was little direct evidence for heavy reliance on agriculture by South Appalachian groups, and suggested instead that hunting and gathering may have played a major role in subsistence through part or all of the region. This observation is important in light of the archaeological record found at Moore's Landing, where Mississippian period site use apparently focused on hunting and shellfish collection. Mississippian sites encountered in the South Appalachian region should not, therefore, (following Ferguson's reasoning) be routinely assumed to reflect a reliance upon agriculture. Instead, the distribution of Mississippian components may reflect a highly diversified settlement/subsistence system, within which the role of agriculture must be documented. If agriculture provided only a minor part of the diet throughout much of the South Appalachian region, the resource of the estuary may have further reduced its importance in the sea island area. A major research domain in any investigation of Mississippian in the region would appear to be delimiting the relative importance of agriculture as opposed to other methods of food production.

Turning to the location of specific sites, Ferguson (1975) noted that Mississippian ceremonial centers in the South Appalachian area tended to be located along major drainages and were symmetrically distributed at, above, and below the fall line. A nearest neighbor analysis, furthermore, indicated that the ceremonial centers were regularly spaced rather than randomly distributed. Ferguson (1975) suggested that the regular patterning could be used to predict the location of other, incipient ceremonial centers (i.e. those lacking platform mounds). The location of the moundless ceremonial center at Charles Towne Landing, excavated by Stanley South in 1971, was in a predicted location, and was cited as one such example.

Ferguson's model provides a basis for delimiting where major Mississippian centers might occur in the region and, equally important, where they might not be expected. Extrapolating from the model, Mississippian sites located away from a center might be assumed to be in some way derived from, or subsidiary to, such a site. That is, Mississippian components found away from a center might reflect populations controlled by the center, or (seasonally?) dispersed from it in the performance of certain tasks. The Moore's Landing site (38CH184),

the subject of the 1978 testing, is located roughly midway between two incipient centers predicted by Ferguson's locational model — one (already documented) near Charleston and the other (as of yet undiscovered) near the mouth of the Santee River. The Mississippian component at 38CH184, therefore, may have been formed by a group or groups linked in some way to a center in one of these areas. Although this line of reasoning is somewhat tenuous, it does suggest that Mississippian components in the region should be examined in terms of their geographic proximity to ceremonial centers.

The second locational/ecological model of Mississippian settlement in the region, by Charles E. Pearson (1978), is a logical outgrowth of the first (although independently derived). While Ferguson examined the region, Pearson focused on all known Irene phase Mississippian sites (large and small) within a relatively restricted area, on Ossabaw Island, Georgia. Employing data from surface collections, Pearson (1978:66ff) was able to document a four-level hierarchy of Irene phase components on Ossabaw Island, based on site size. The sites within each level of the hierarchy, furthermore, were found to be differentially distributed with respect to a series of specific environmental variables, including soil type, contemporary forest community, distance from salt marsh, and distance from tidal creeks. The four levels were interpreted as reflecting functionally different site classes within the island's Mississippian settlement system. A brief description of each site class is provided below, with specific characteristics derived from Pearson's (1978:72-76) Ossabaw Island data.

Class I Sites (119,000 - 412,500 m<sup>2</sup>) These sites were the largest on the island, and were apparently important population centers characterized by multiple burial mounds. In Pearson's words,

"... it is hypothesized that the Class I sites, based on their size, long period of prehistoric occupation, burial mounds, and optimum location with respect to environmental factors, were permanent year-round settlements. These sites are postulated to have been the major centers of population and many, if not all, social, political, and religious activities on the island."  
(Pearson 1978:74)

Class II Sites (26,000 - 55,740 m<sup>2</sup>) These sites form the second level in the settlement hierarchy, and were less important population centers than the Class I sites, although characterized by similar activities and year-round settlement. Burial mounds may or may not have been present.

Class III Sites (7,380 - 20,800 m<sup>2</sup>) These sites are best characterized as economically self-sufficient hamlets, described as:

"... permanent or semipermanent settlements which, although economically self-sufficient, were probably dependent upon and related to larger sites in certain sociopolitical spheres. These settlements likely consisted of from one to several households." (Pearson 1978: 74-75)

Burial mounds may or may not be present, and if present are much smaller than those at larger sites. Class IV sites without mounds,

"... are assumed to have seasonal occupations, the result of a seasonal population dispersal over the island." (Pearson 1978:75)

Class IV Sites (1 - 4,000 m<sup>2</sup>) These sites exhibit considerable diversity in location, and

"... are considered to have been the location of a single, or, at most, a limited range of cultural activities. Most were probably short-term occupations, with many of the smaller one perhaps

representing only a single day's occupation. Several consist of a single shell-midden, and seem to represent short-term shellfish-gathering stations." (Pearson 1978:75)

Pearson's Irene phase settlement model provides a valuable perspective from which to examine individual Mississippian sites in the Georgia/South Carolina sea island area. Determining where in the hierarchy (i.e. which Class) a site occurs can be determined from its size (extent of surface artifact scatter), and the site record can then be compared with expectations derived from the model. While admittedly a trial formulation in need of testing and refinement, Pearson's model nonetheless represents the first detailed attempt to interpret variability in coastal Mississippian site distributions in the region.

At Moore's Landing three dense concentrations of Mississippian artifacts and shell were observed, each roughly 20 meters in diameter, with a light scatter of shell and artifacts noted over a much larger area. If each of the three concentrations represents a single component, or period of occupation, then the size of the individual scatters at Moore's Landing (under 1,000 m<sup>2</sup>) clearly fall within Pearson's (1978:75-76) Class VI site type. If all three concentrations are assumed to be contemporaneous, even the most liberal estimates for the size of the combined scatter would barely put the site into Class III range. Using Pearson's (1978) model, therefore (assuming applicability along the northern South Carolina coast), the Moore's Landing site would be interpreted as a short-term special activity area, or at the most a semipermanent (seasonal?) habitation area. As indicated in the discussion of the testing program, such an interpretation is strongly suggested by the nature of the recovered artifact assemblage. While hardly a conclusive test, the results suggest that Pearson's (1978) settlement model may have some utility, and should at least be considered, when Mississippian period sites are encountered along the South Carolina coast.

### Conclusion

Mississippian settlement/subsistence systems, it has been noted, are currently poorly understood along the southeast Atlantic coast. The models proposed by Ferguson and Pearson, however, appear to successfully predict at least some of the variability evident in the distribution of late prehistoric sites in the region. Moderate numbers of Mississippian period sites have been reported from the South Carolina coastal plain (Figure 8), both along the coast and inland along the major river drainages (e.g. Ferguson 1971, Anderson 1975: 189-191, Brooks & Scurry 1978:60). An interpretive synthesis of this distribution, when developed, will undoubtedly contain attributes from both Ferguson's and Pearson's models. Several large ceremonial and/or mound centers are known in the South Carolina coastal plain, together with numerous smaller sites of unknown function. Ferguson's (1975) work clearly demonstrates that the centers are regularly distributed with respect to each other and, following Pearson, it is also probable that the smaller sites are ordered about the centers in some kind of multi-level hierarchy. The data from Moore's Landing, a relatively small late prehistoric site, argues for the presence of short duration settlement within such a hierarchy, at least in the sea island area.

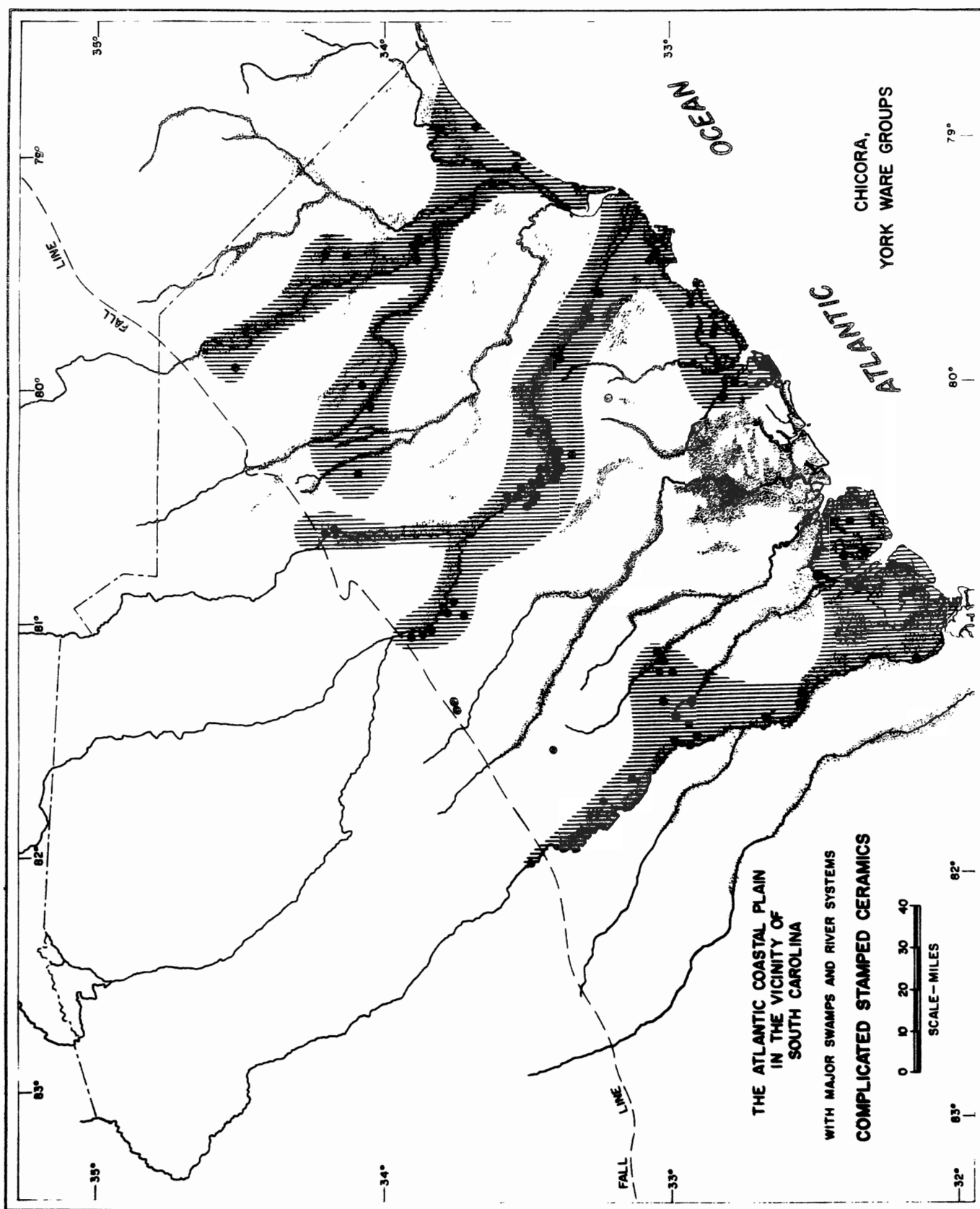


Figure 8. General location of Mississippian period sites in the coastal plain of South Carolina. Note coastal and river drainage distributional patterns.

## APPENDIX I

- Table A. Occurrence of all artifact categories in the excavation units, 38CH184.
- Table B. Occurrence of specific ceramic taxa in the excavation units, 38CH184.
- Table C. Occurrence of all artifact categories in the controlled surface collection, 38CH184.
- Table D. Occurrence of specific ceramic taxa in the controlled surface collection, 38CH184.
- Table E. Occurrence of specific lithic artifacts in all surface and excavation units, 38CH184.
- Table F. Occurrence of historic and other artifact categories in all surface and excavation units, 38CH184.
- Table G. Artifacts recovered by Trinkley and Carter from the Moore's Landing site (38CH184), July 1974.
- Table H. Artifacts recovered by Dr. Robert L. Stephenson from 38CH292 on May 4, 1976.
- Table I. Artifacts recovered by Owens from 38CH40 in 1963, with analysis and commentary by Eugene Waddell and Michael B. Trinkley.

TABLE A  
OCCURRENCE OF ALL ARTIFACT CATEGORIES IN THE  
EXCAVATION UNITS, MOORE'S LANDING SITE, 38CH184

Unit	Size	Level	Pottery		Lithics		Bone		Shell	Fired Clay	Historic
			Ct	Wt	Ct	Wt	Ct	Wt			
EU1	1x2m	0-25	42	186.5	1	0.4	6	1.1	x*		x
		25-40					1	0.1			
		40-50	1	4.9							
		50-70									
EU2	1x2m	0-20	67	407.0	1	1.2	40	16.4	x	-1 x	
		20-30	2	9.5							
		30-40									
		40-50									
		50-70									
EU3	1x2m	0-30	119	346.0	7	31.4	68	15.6	x	x x?	x
		30-40	4	9.1			2	0.7			
		40-50									
		50-70									
TU1	1x1m	0-22	29	110.2					x	x x	
		22-42	2	3.7							
TU2	$\frac{1}{2}$ m <sup>2</sup>	0-22	3	7.3							
		22-42	2	11.8	1	4.13					
TU3	$\frac{1}{2}$ m <sup>2</sup>	0-22	8	32.1					x		
		22-42	3	3.9							

(continued)

TABLE A (continued)

Unit	Size	Level	Pottery		Lithics		Bone		Shell	Fired Clay	Historic
			Ct	Wt	Ct	Wt	Ct	Wt			
TU4	$\frac{1}{2}m^2$	0-28	8	23.3	1	0.4				x	
		28-48	1	1.8						x	
TU5	$\frac{1}{2}m^2$	0-30	10	33.1					x	x	
		30-50									
TU6	$\frac{1}{2}m^2$	0-20	3	24.8							
		20-40									
TU7	$\frac{1}{2}m^2$	0-20	6	17.5							
		20-40									
TU8	$\frac{1}{2}m^2$	0-20	2	7.1	1	2.5			x		
		20-40									
TU9	$\frac{1}{2}m^2$	0-20	10	37.0	2	1.3	1	0.3	x*		
		20-40									
TU10	$\frac{1}{2}m^2$	0-20	2	12.1					x		
		20-40									
TU11	$\frac{1}{2}m^2$	0-19									
		19-39									
TU12	$\frac{1}{2}m^2$	0-20	2	8.6					x*	x	
		20-40									
TU13	$\frac{1}{2}m^2$	0-20	8	17.9					x		
		20-40									
TU14	$\frac{1}{2}m^2$	0-20			2	0.7					
		20-40									
TU15	$\frac{1}{2}m^2$	0-20			1	0.3					
		20-40									
TU16	$\frac{1}{2}m^2$	0-20									
		20-40									
TU17	$\frac{1}{2}m^2$	0-25									
		25-45									
TU18	$\frac{1}{2}m^2$	0-30	14	38.4					x		
		30-50									
TU19	$\frac{1}{2}m^2$	0-30	7	25.8					x		
		30-50									
TU20	$\frac{1}{2}m^2$	0-25	1	2.4					x		x
		25-45									
TU21	$\frac{1}{2}m^2$	0-25	6	31.8							
		25-45									
TU22	$\frac{1}{2}m^2$	0-20			1	0.1					
		20-40									

(continued)



TABLE A (continued)

Unit	Size	Level	Pottery		Lithics		Bone		Shell	Fired		Historic
			Ct	Wt	Ct	Wt	Ct	Wt		Clay		
TU23	1/2m <sup>2</sup>	0-20 20-40										
TU24	1/2m <sup>2</sup>	0-20 20-40	1	5.7	1	0.16						
TU25	1/2m <sup>2</sup>	0-20 20-40			2	0.3						
28 UNITS / 13m <sup>2</sup>			367 1431.9		21 42.89		118 34.2		14	10		3
Plow Zone			346 1354.2		14 40.83		115 33.4		14	5		3
Subplow Zone			21 77.7		7 2.06		3 0.8		0	5		3

NOTES: \* ind. worked fragment  
-1 baked clay ball fragment

TABLE B

OCCURRENCE OF SPECIFIC CERAMIC TAXA IN THE  
EXCAVATION UNITS, MOORE'S LANDING SITE, 38CH184

Unit	Size	Level	Complicated		Stamped		Unknown		Burnished		Cape Fear		Plain		Nondiagnostic	
			Chicora	York	Chicora	York	Stamped	Stamped	Plain	Plain	Cordmark	Cordmark	Plain	Plain	Ct	Wt
EU1	1x2m	0-25	1	7.4	1	8.0	1	57.0	1	5.6			15	65.7	13	42.8
		25-40														
		40-50											1	4.9		
		59-70														
EU2	1x2m	0-20	2	37.9	3	59.4	10	84.6	2	15.4	2	19.7	17	100.5	31	89.5
		20-30			1	7.8									1	1.7
		30-40														
		40-50														
		50-70														
EU3	1x2m	0-30	5	28.9			14	60.5					38	148.2	62	108.4
		30-40					2	7.7							2	1.4
		40-50														
		50-70														
TU1	1x1m	0-22 22-42	3	23.4	6	45.6 1 3.4							6	22.0	14	19.2 1 0.3
TU2	0.5m <sup>2</sup>	0-22 22-42	1	10.1									1	1.7	3	7.3
TU3	0.5m <sup>2</sup>	0-22					2	7.1			1	5.8	1	3.3	2	3.3
		22-42	2	12.6							1	1.4	1	2.2	1	0.3
TU4	0.5m <sup>2</sup>	0-28					1	1.7			1	2.0	2	7.3	4	12.3
		28-48													1	1.8
TU5	0.5m <sup>2</sup>	0-30 30-50	1	9.5			1	9.8			1	5.3			7	8.5

TABLE B (continued)

TU6	0.5m <sup>2</sup>	0-20 20-40							2	17.6	1	7.2				
TU7	0.5m <sup>2</sup>	0-20 20-40			2	10.8			2	5.3	2	1.4				
TU8	0.5m <sup>2</sup>	0-20 20-40									2	7.1				
TU9	0.5m <sup>2</sup>	0-20 20-40	2	5.4	1	10.0	1	2.4	1	3.9	1	12.3	4	3.0		
TU10	0.5m <sup>2</sup>	0-20 20-40	1	7.2	1	4.9										
TU11	0.5m <sup>2</sup>	0-19 19-39														
TU12	0.5m <sup>2</sup>	0-20 20-40					1	4.2					1	4.4		
TU13	0.5m <sup>2</sup>	0-20 20-40			1	7.6							7	10.3		
TU14	0.5m <sup>2</sup>	0-20 20-40														
TU15	0.5m <sup>2</sup>	0-20 20-40														
TU16	0.5m <sup>2</sup>	0-20 20-40			1	4.4							2	2.0		
TU17	0.5m <sup>2</sup>	0-25 25-45														
TU18	0.5m <sup>2</sup>	0-30 30-50			2	20.7					2 1	6.3 6.2	10	11.4		
TU19	0.5m <sup>2</sup>	0-30 30-50			2	9.7					5	16.1				
TU20	0.5m <sup>2</sup>	0-25 25-45									1	2.4				
TU21	0.5m <sup>2</sup>	0-25 25-45	1	13.2	2	9.9			1	3.4	1	3.6	1	1.7		
TU22	0.5m <sup>2</sup>	0-20 20-40														
TU23	0.5m <sup>2</sup>	0-20 20-40														
TU24	0.5m <sup>2</sup>	0-20 20-40			1	5.7										
TU25	0.5m <sup>2</sup>	0-20 20-40														
TOTALS	28 Units	13 m	19	155.6	5	75.2	60	351.3	6	37.4	7	36.2	98	430.9	172	345.3
Plow Zone			18	145.5	4	67.4	57	340.2	6	37.4	6	34.8	92	398.3	163	330.6
Subplow Zone			1	10.1	1	7.8	3	11.1	-	-	1	1.4	6	32.6	9	14.7

GRAND TOTAL 367 Sherds  
1431.9 Grams

Total Plow Zone	Total Subplow Zone
346 Sherds	21 Sherds
1354.2 Grams	77.7 Grams
$\bar{x}$ Size = 3.9 Grams	$\bar{x}$ Size = 3.7 Grams

TABLE C  
 OCCURRENCE OF ALL ARTIFACT CATEGORIES IN THE  
 CONTROLLED SURFACE COLLECTION, MOORE'S LANDING SITE  
 38CH184

Locs	<u>Pottery</u>		<u>Lithics</u>		<u>Bone</u>		Shell	Fired Clay	Historic
	Ct	Wt	Ct	Wt	Ct	Wt			
EU1	5	36.6					x		
EU2							x		
EU3	2	10.1					x		x
TU1									
TU2									
TU3	1	1.4							
TU4									
TU5									
TU6									
TU7									
TU8									
TU9							x		
TU10									
TU11									
TU12									
TU13									
TU14									
TU15									
TU15	2	4.1					x		
TU16							x		x
TU17									
TU18									
TU19									
TU20									
TU21									
TU22	3	18.6	1	2.1			x		
TU23	7	40.3					x		
TU24	4	20.9	1	1.3			x		x
TU25	3	10.4					x		x
TOTALS	27	142.4	2	3.4			10		4

TABLE D

OCURRENCE OF SPECIFIC CERAMIC TAXA IN THE  
CONTROLLED SURFACE COLLECTION, MOORE'S LANDING SITE  
38CH184

Locs	Chicora		York		Unknown Stamped		Burnished Plain		Cape Fear Cord- Marked		Deptford LCS		Plain		Wilmington Fabric		Nondiag.	
	Ct	Wt	Ct	Wt	Ct	Wt	Ct	Wt	Ct	Wt	Ct	Wt	Ct	Wt	Ct	Wt	Ct	Wt
EU1	1	11.0			2	18.5							1	4.5			1	2.6
EU2																		
EU3													2	10.1				
TU1																		
TU2																		
TU3																	1	1.4
TU4																		
TU5																		
TU6																		
TU7																		
TU8																		
TU9																		
TU10																		
TU11																		
TU12																		
TU13																		
TU14																		
TU15																	2	4.1
TU16																		
TU17																		
TU18																		
TU19																		
TU20																		
TU21																		
TU22					1	4.9					1	5.4	1	8.3				
TU23									1	4.3	1	7.2	4	21.1			1	7.7
TU24													3	16.5			1	4.4
TU25													1	3.3	1	5.8	1	1.3
Totals	1	11.0			3	23.4			1	4.3	2	12.6	12	63.8	1	5.8	7	21.5

Grand Total 27 Sherds  
142.4 Grams

TABLE E

OCURRENCE OF SPECIFIC LITHIC ARTIFACTS IN ALL  
SURFACE AND EXCAVATION UNITS, MOORE'S LANDING SITE  
38CH184

Unit	Locs	Description
EU1	0-25	1 - heavily weathered chert int. flake (0.4g)
EU2	0-20	1 - orthoquartzite (?) int. chunk (1.2g)
EU3	0-30	1 - weathered orthoquartzite int. chunk (2.9g)
		1 - opalized shell fire-cracked cortical chunk (2.0g)
		1 - opalized shell cortical chunk (25.2g); possible unifacial tool (Spokeshave?) or core
		1 - opalized shell int. chunk (0.4g)
		2 - Allendale chert biface thinning flake fragments (0.6g; 0.2g) smaller fragment appears intentionally thermally altered
		1 - chert? biface thinning flake (0.1g)

(continued)

TABLE E (continued)

Unit	Loci	Description
TU2	22-42	1 - opalized shell cortical chunk (4.13g)
TU4	0-28	1 - opalized shell cortical chunk (0.4g)
TU8	0-20	1 - Allendale? chert cortical chunk (2.5g)
TU9	0-20	2 - Allendale chert secondary decortication flakes (0.9g; 0.4g)
TU13	20-40	2 - opalized shell? secondary decortication flakes (0.3g; 0.4g)
TU15	0-20	1 - opalized shell int. flake (0.3g)
TU21	25-45	1 - orthoquartzite biface thinning flake (0.1g)
TU23	Surface	1 - Allendale chert primary decortication flake (2.1g)
TU24	Surface	1 - weathered opalized shell secondary decortication flake (1.3g)
	10-40	1 - Allendale chert biface thinning flake (0.16g)
TU25	20-40	2 - Allendale chert biface thinning flakes (0.25g; 0.05g)

NOTE: All biface thinning flakes occurred on interior flakes.

TABLE F

OCURRENCE OF HISTORIC AND OTHER ARTIFACT CATEGORIES IN ALL  
SURFACE AND EXCAVATION UNITS - MOORE'S LANDING SITE  
38CH184

Unit	Loci	Description
EU1	0-25	1 - clear bottle glass fragment (recent) 0.7g
EU2	30-40	3 - baked clay ball fragments, all possibly from one specimen, hollow reed punctations and finger/dowel impressions evident 9.0g, 17.3g, 33.6g
EU3	Surface	1 - brick fragment 112.7g
	0-30	2 - machine cut nails
		1 - white earthenware (ironstone) fragment
		1 - brick fragment 16.2g
TU16	Surface	1 - green wine bottle glass fragment 31.2g
		1 - clear bottle glass fragment 4.6g
TU20	0-25	1 - brick fragment 52.6g
TU24	Surface	1 - clear bottle glass fragment (recent) 3.2g
TU25	Surface	2 - white earthenware plate fragment 14.3g
		1 - sherd "ivory" decaled cream-like ware 8.4g (probably 20th century)
		1 - green Coca-Cola bottle glass fragment 3.2g

TABLE G

ARTIFACTS RECOVERED BY TRINKLEY AND CARTER FROM THE  
MOORE'S LANDING SITE (38CH184) JULY, 1974

Analysis by Michael B. Trinkley - August 15, 1978  
(derived from IAA catalog sheet)

No. 1-2 - simple stamp/nontemp/smooth/1.0/com. ox  
No. 1-8 - check stamp rim straight/ grit temp/ smooth/com ox/.9  
No. 1-3 - cord marked/nontemp/smooth/com. ox/.8  
No. 1-4 - 2 hollow reed punct/grit temp/smooth/com. ox/.8  
No. 1-1 - con. circles/grit temp/smooth. com. ox./.9/7.5YR6/4  
No. 1-2 - lin block/grit temp/smooth/com ox/.6/7.5YR6/4  
No. 1-5 - plain rim/nontemp/smooth/com. ox/1.0  
No. 1-6 - plain rim/nontemp/smooth/com. ox/.7/7.5YR4/2  
No. 1-6 - 24 plain body/grit-temp/smooth/com. ox/.6-.9  
No. 1-7 - 1 fragment chert debitage

Artifacts as reported by Trinkley and Carter (1975:9)  
(from Table 1, Sherds by Site)

2 - Thom's Creek punctate  
1 - Deptford check stamped  
1 - Deptford simple stamped  
1 - Cape Fear cord marked  
2 - Chicora  
26 - sand nontempered plain  
TOTAL 33 sherds

Artifacts as reanalysed by Anderson, 9/5/78

2 - punctate (appear to be PeeDee)  
3 - check stamped (Deptford or PeeDee)  
1 - Cape Fear cord marked  
2 - PeeDee complicated stamped  
30 - plain (sand nontempered)  
TOTAL 38 sherds

Commentary. The two analyses, by Trinkley and Anderson, are for the most part in agreement. Differences in sherd counts appear to be due to breakage, possibly as part of paste examination or storage. The principal difference lies in taxonomic affiliations assigned to the recognized surface finishes: Trinkley places sherds into Deptford and Thom's Creek wares that Anderson would place into PeeDee.

TABLE H

ARTIFACTS RECOVERED BY DR. R. L. STEPHENSON FROM 38CH292, May 4, 1976

Only one possible artifact was observed and recovered — a small fragment of stone. Stephenson, in the site record, questioned whether it was even an artifact, although he recorded the site on the basis of the observed shell lenses. An inspection of this stone by Anderson and Lee Novick (then IAA lab supervisor) on September 5, 1978 suggested that it was a fragment of limestone or concrete. A dilute HCl solution produced strong fizzing upon application.

TABLE I

ARTIFACTS RECOVERED BY OWENS FROM 38CH40 IN 1963, WITH ANALYSIS AND COMMENTARY BY EUGENE WADDELL (then of Charleston Museum) AND MICHAEL B. TRINKLEY (then of Research Lab. of Anth. - UNC/Chapel Hill)

This site was discovered by Professor Benton B. Owen of 470 Prospect St., New Haven, Connecticut, sometime in 1963. The site was reported to the Charleston Museum, where Eugene Waddell formally recorded it as SC:CH:40 on August 19, 1964. A small collection of artifacts was donated to the Museum (Catalog # 63:26.2), all apparently derived from a test excavation that went to at least 18 inches below the surface. Waddell notes that these artifacts were "found 18" down "very near the bottom of a shell stratum", and that the site itself is located on "Bull's Island, S.C.; cedar grove ½m. NE boat dock". The site was given the name Indian Kitchen Kidden Mounds at this time.

In July of 1974 Michael Trinkley and Jacki Carter, then undergraduates at the University of South Carolina, visited the site and reported it in good condition. Trinkley further noted that work on the site (test excavations) would be profitable. He began National Register of Historic Places nomination proceedings for the site by partially completing a nomination form and submitting it to the State Archeologist. Dr. Robert L. Stephenson completed the form and submitted it to the Refuge authorities for review. At the time of the 1978 testing, the nomination had been delayed until a precise site location could be determined.

On August 23, 1978, Anderson, Chevis D. Clark II, and Richard Munoz, the Assistant Refuge Manager, visited the 38CH40 area. The site was revisited on August 29, 1978 by Anderson, Edward Hession (IAS-Atlanta), Ron Hood (FWS-Atlanta), and Richard Munoz. Chevis Clark indicated that he had been to this site before (in 1972 and 1973); subsequent inspection of his site quads indicated that he had indeed recorded its location. At the time of the 1978 visit, the site was in excellent condition, although an access road paralleling the marsh face had removed some shell. This access road, which was of hard packed earth, was paralleled by several small borrow areas of bulldozer spoil piles. The midden itself consisted of a number of small piles of shell of a few meters in diameter at the southwestern end merging to a generally continuous scatter further to the northeast. The area of probable midden was roughly 100 meters (SW/NE) by 40 meters (SE/NW). A large open "pothole" roughly 1½ x 1 meter by ½ meter deep was located some 15 meters off the road; this may be Owen's 1963 test. Only one sand tempered plain sherd was observed, which was left in place. Many of the shells observed scattered within the midden exhibited signs of intentional modification. Whelks, for example, were observed with holes through the whorls. Note: Artifacts from 38CH40 in Charleston Museum - 5 simple stamped (Thom's Creek?) sherds (catalog number 63.26.2).



## APPENDIX II

1. A Description of the Andersonville Mound (38CH9) in the early 1920's by Anne King Gregorie.
2. Report of the 1933 Charleston Museum Expedition to the Andersonville Mound (38CH9) by G. Robert Lunz, Jr. of the Charleston Museum.
3. A Brief description of the Andersonville Mound (38CH9) in 1959 by Eugene Waddell of the Charleston Museum.
4. Artifacts recovered in a general surface collection of the hypothesized Andersonville Mound area on August 23, 1978 by David G. Anderson of Commonwealth Associates, Inc.

## 1.

A DESCRIPTION OF THE ANDERSONVILLE  
MOUND (38CH9) IN THE EARLY 1920s

But the largest and most interesting shell remains of Indians I have as yet encountered in the Parish are on Andersonville, the plantation of Mr. Sam King on Sewee Bay. Through the courtesy of Miss Bragg of the Charleston Museum, I was present with her March 13, 1922, on one of the Museum's South Carolina archaeological survey trips.

The channel of the coastwise passage for small boats here comes so near the shore that the numbers of the channel markers can be easily read from the beach. Lying parallel with the shore, and separated only by a marshy slough, is a small sand bar or spit. This bar, so conveniently near deep water, seems to have been used as a shell dump by the Indians for generations. Although tons of the shell have now been removed from various local uses, the present pile is still about three hundred feet long, forty feet wide, and nine feet high (in the highest portion). The shell are oyster, clam, conch, periwinkle, and a few freshwater mussel shells which I have not observed elsewhere, probably because their frail composition makes them liable to quicker disintegration. Fragments of clay pottery are plentiful, their patterns and composition similar to those of Porcher's Bluff Plantation. An excellent cross section of the pile was seen in the highest part, where the shells had been removed almost down to the sand at the base. The sides of the excavation were traversed by a dark irregular line, that may indicate a former surface, occupied when the pile was smaller. The spit now has a growth of oaks, pines, cedars, cassines, yuccas, etc. The ruins of an abandoned dwelling house have protected a small area of the pile so that the surface is completely unweathered.

The summit of the pile commands an unobstructed view of Sewee Bay. Apparently its strategic value was appreciated in the 60's, for on the top are the brick metal remains of a gunbase of the Confederacy.

— Anne King Gregorie (Excerpted from "Notes on Sewee Indians and Indian Remains of Christ Church Parish, Charleston County, South Carolina." Contributions from the Charleston Museum, No. 5, pp. 18-19, 1925.)

## 2.

REPORT OF THE 1933 CHARLESTON MUSEUM  
EXPEDITION TO THE ANDERSONVILLE MOUND (38CH9)

Following the policy of The Charleston Museum to map, survey and photograph all possible Indian sites in South Carolina, G. Robert Lenz, and E. Burnham Chamberlain went to Andersonville Mound and began the survey on the morning of July 20, 1933.

The mound is on the property of Mrs. J. R. King of Charleston, S.C., Mr. Lockward Freeman, a son-in-law of Mrs. King now runs the plantation. The Museum stands in debt to Mr. and Mrs. Freeman for the many courtesies shown the staff on this expedition.

Andersonville is located on Sewee Bay off the Georgetown Highway about 25 miles from Charleston. Having a southern exposure on an inland body of water, this place is what might be called ideal Indian country. Oysters, fish and game still abound here.

The mound, or more properly shell heap, is situated on a tongue of land running southwest by northeast. At the present time, the point is almost an island (see map) so made by an artesian well (until recently flowing and a slough of marsh). This peninsula is about 850 feet long and about 150 feet wide. The peninsula is thickly covered with wild grape vines, smilax, spanish bayonet, myrtle, oaks, pines, hackberry and general underbrush. On the southwestern end the land is cleared and there are two brick chimneys standing. These chimneys are all that remains of a house which is reputed to have been built during or shortly after the Civil War.

The shell heap is heavily wooded and thick with underbrush. It should be noted that this factor would decidedly increase the cost of excavation.

The mound is entirely composed of shells, black earth and refuse from Indian inhabitation. Oyster shells are most abundant. These are probably *Ostrea virginica*. Periwinkles and mussel are next in abundance. These are *Liitorina irrorata*, and *Modiolus* sp. respectively. There are quite a number of conch shells in the mound. These are almost entirely *Busycon earica*.

Potsherds are quite numerous and of several different patterns (see Museum Collections). Although only one bone fragment was found there are undoubtedly many such fragments in the mound.

The mound is quite evidently a refuse heap or midden. In one of the old excavations stratification of earth and shell can be observed. This stratification was probably due to the covering over of the shells with earth by the Indians to make the heap more livable.

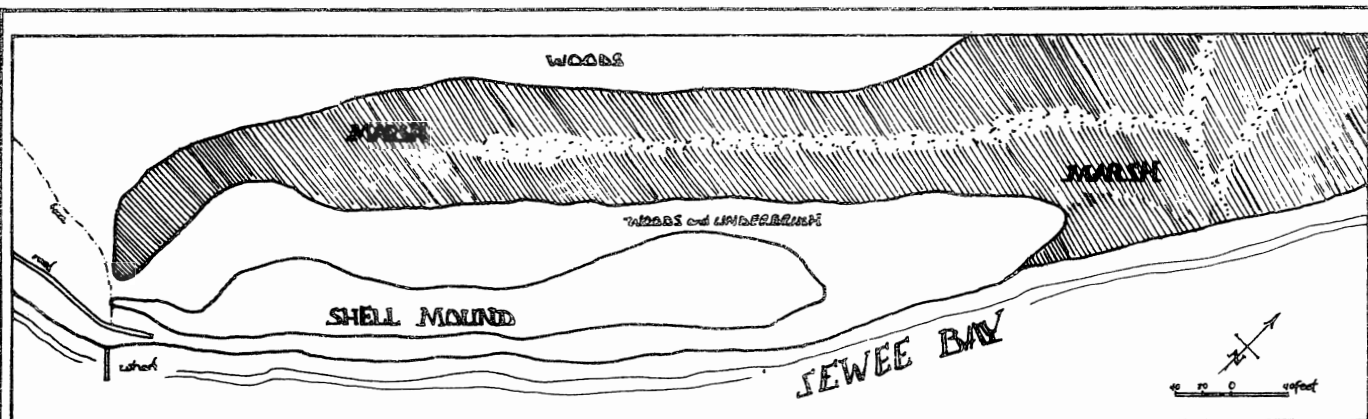
As the map of the mound shows, the ridge is about 557 feet long and 80 feet wide. The highest portion of the mound is 176 feet from the northeast end. It is 10 feet 5 inches high.

The southeastern exposure of the mound is being washed by storm tides. In addition to this, there are already three excavations into the mound. These were made to obtain shell for use on roads. These excavations are shown on the map to be 75, 115 and 155 feet from the northeast end of the mound.

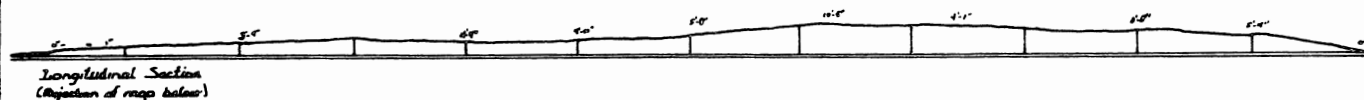
As mentioned before the southwestern end of the mound had at one time a house on it. Of this house only two chimneys remain. This region of the mound is decidedly flatter than the rest and it is my belief that the inhabitants of

this house leveled the mound for their own purpose. It is for that reason that accurate measurements were begun to the northeast of the chimneys. It was felt that the mound had been so changed to the southwest that for all practical purposes the mound could be said to begin at the chimneys. A point is marked off at high water mark 48 feet 6 inches southeast of the more northerly chimney. This point is called "1". A line is run true northeast from "1" for 440 feet. Every forty feet a mark is placed. This is designated by a number. Measurements to the mound from such points are given in the following table:

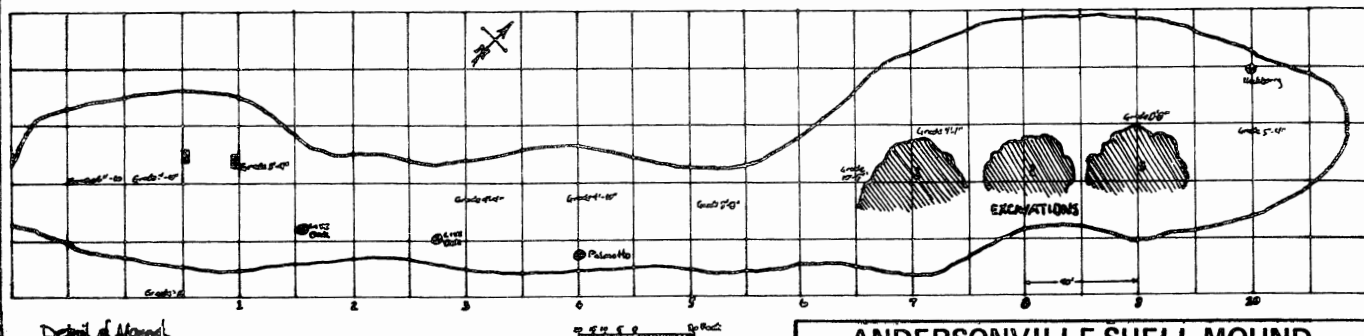
No.	SE Edge of Mound	NW Edge of Mound	Center of Mound	Elevation at Center
1	8'-10"	60'-6"	48'-6"	3'-9"
2	12'	55'	35'	4'
3	8'	50'	32'	4'-4"
4	7'-10"	52'	32'	4'-10"
5	8'-10"	44'-9"	32'-9"	5'-8"
6	13'		52'-9"	10'-5"
7	6'	90'	63'	
8	23'	95'	60'	9'-11"
9	19'-6"	94'-6"	64'	8'-3"
10	26'	86'	55'	5'-4"
11		5'-4" beyond end of mound		



Location of Mound



Longitudinal Section  
(Projection of map below)



Detail of Mound

### ANDERSONVILLE SHELL MOUND

CAPE ROMAIN NATIONAL WILDLIFE REFUGE

SOURCE: G. R. Lutz & E. B. Chamberlain,  
Charleston Museum, July 1933.

There are few if any definite conclusions that can be drawn. However, since no one had ever found evidence of European culture at the site, it is fairly safe to say that it was occupied before the arrival of the settlers. Furthermore, judging from the size of the site it is quite possible that as many as two hundred families were gathered there. Finally, it is of importance to note that the entire region shows considerable occupation which however may have extended over a vast number of years.

A further note on the general topography of the region should be added. About six to seven hundred feet to the southwest of the mound on the shoreline is a somewhat semicircular mound of earth. Mrs. Freeman states that she was told by some of the grandparents that this was the site of a Confederate battery. Our observations and examination agree entirely with her statement.

— G. Robert Lunz, Jr.  
Associate in Biology  
August 2, 1933

(Unpublished manuscript and map obtained from files of Charleston Museum by permission. Map is the only surviving record of the site's original size and shape.)

### 3.

#### A BRIEF DESCRIPTION OF ANDERSONVILLE MOUND (38CH9) IN 1959

Now the Sewee Bay Mound located on Sewee Bay is about or less than a foot high or remains. The shells have been removed for a road (called the Andersonville road - made by the International Paper Company - to haul pulpwood out of the area) which runs from Hwy. 584 to Andersonville. It was used about two years ago. The shells remaining were welks, periwinkles, clams, and oysters.

(Unpublished research notes from files of Charleston Museum by permission.)

Go approximately 16 miles northeast on Highway 17-701, turn right on State 584, proceed 3.5 miles and take another right. This is the Andersonville Road and it was constructed by the International Paper Company. It is about 1.1 mile long and was made from the shell from the site. The site is located to the left at the end of this road.

When I (Waddell) visited the site in 1959, the remains were only one foot high at the highest point. The midden was destroyed by the International Paper Company.

— Eugene Waddell

(Excerpted from the SC:CH:6 site sheet of the site files at the Charleston Museum by permission. Compiled by Eugene Waddell while an undergraduate then at the College of Charleston.)

### 4.

#### ARTIFACTS RECOVERED IN A GENERAL SURFACE COLLECTION OF THE HYPOTHESIZED ANDERSONVILLE MOUND AREA ON AUGUST 23, 1978

The hypothesized area of site 38CH9 was visited late in the afternoon of August 23, 1978, by Anderson, Chevis D. Clark II, and Gene Penniger. The area is located at the end of Andersonville Road (see Fig. 1 in article), fronting and up to 250 meters away from the marsh edge. Channel Marker 68 along the

Intracoastal Waterway was located directly southeast of the site area, in the marsh. The area was characterized by an extensive scatter of shell in and adjacent to the road bed. The entire area at the end of the road appeared to have been intentionally leveled within the past year. This entire section of the coast has been undergoing rapid degradation due to expanding housing development, with access roads cutting through the formerly forested areas. The site area is extensively disturbed; only in the woods away from the leveled areas are traces of intact shell deposits apparent. At the immediate marsh edge a small (Awendaw?) shell pile some five meters in diameter was observed that appears largely undisturbed; this lens was about 15 meters away from the dirt road.

Surface collection procedures consisted of the recovery of all decorated, large, or rim sherds, and all lithics. Approximately one hour was spent in the general site area.

#### ARTIFACTS

1 - PeeDee-Irene complicated stamped	(10.2g)
1 - Ashley complicated stamped	(20.2g)
2 - unknown complicated stamped	(25.0g)
7 - Cape Fear cord marked	(82.3g)
3 - Deptford linear check stamped	(79.8g)
11 - plain (Woodland? - compact paste)	(109.4g)
13 - plain (Thom's Creek? - medalis shell scrapings, poorly fired)	(131.6g)
6 - simple stamped (Deptford?)	(77.7g)
8 - Wilmington cord marked	(113.9g)
2 - unknown cord marked	(36.9g)
1 - orthoquartzite projectile point fragment	(6.8g)
2 - limonitic concretions	(21.4g)
1 - fired clay fragment - daub?	(6.8g)
1 - battered quartz cobble/anvil; ends and sides exhibit wear	(225.2g)

— David G. Anderson  
August 23, 1978

## APPENDIX III

IDENTIFICATION OF SHELL AND OSTEOLOGICAL REMAINS  
FROM THE MOORE'S LANDING SITE (38CH184),  
CHARLESTON COUNTY, SOUTH CAROLINA

BY

ALBERT E. SANDERS  
CURATOR OF NATURAL HISTORY  
THE CHARLESTON MUSEUM

AND

PETER S. COLEMAN  
ASSOCIATE IN BIOLOGY  
THE CHARLESTON MUSEUM

January 9, 1979

Faunal remains were sparse in the areas tested. Shells of the mollusks *Littorina irrorata* (Marsh Periwinkle), *Busycon carica* (Knobbed Whelk), *Crassostrea virginica* (Eastern Oyster), and *Mercenaria mercenaria* (Northern Quahog) were the most common faunal elements in the sample, with *Mercenaria* being the most abundant form. *Busycon*, *Crassostrea* and *Mercenaria* were staple items in the diets of the Indians of coastal South Carolina, and it is probable that *Littorina* was used in stews and chowders. Vertebrate remains consisted of the spine of a marine catfish (?*Arius felis*), fragments of the shell of *Malaclemys terrapin* (Diamond Terrapin) and *Chrysemys scripta* (Yellow-bellied Turtle), a fragment of a bird bone (indeterminate), and fragments of the deciduous upper right third premolar (DPM<sup>1</sup>), upper right first molar (DM<sup>1</sup>), and upper left first molar (DM<sup>1</sup>) of a juvenile canid (*Canis sp.*). It is not known whether these tooth fragments are those of a young wolf (?*Canis lupus*, ?*Canis rufus*) or of a domestic pup. With the possible exception of the canid, all of the vertebrate remains can be regarded as probable items of diet. Level One of Excavation Unit Three contained the most diverse assemblage, yielding elements of all of the forms noted above with the exception of *Canis* and *Chrysemys*.

## APPENDIX III

(Contd.)

FAUNAL ANALYSIS OF MOORE'S LANDING SITE  
(38CH184)

Surface Collection Units		Littorina	Busycon	Crassostera	Mercenaria	?Arius	Malaclemys	Chrysemys	Aves	Canis sp.
EU1		X			X					
TU9		X		X	X					
TU15				X						
TU16			X	X						
TU22			X	X						
TU23			X	X						
TU24			X		X					
TU25				X	X					
Excavation Units										
EU1	0-25	X	X	X	X					
EU1	25-40						X			
EU2	0-20	X			X		X	X		
EU2	20-30	X	X							
EU3	0-30	X	X	X	X	X	X		X	
EU3	30-40	X								X
TU1	0-22		X							
TU8	0-20			X						
TU9	0-20	X	X	X						
TU10	0-20			X						
TU12	0-20		X							
TU13	0-20			X	X					
TU18	0-30			X						
TU19	0-30	X		X	X					



## ACKNOWLEDGEMENTS

The 1978 fieldwork and subsequent report preparation activity associated with the testing operations reported here was carried out under terms of a contract between Commonwealth Associates, Inc. and the Heritage Conservation and Recreation Service (HCRS) of the U. S. Department of the Interior. The Atlanta office of Interagency Archeological Services (IAS-Atlanta), a division of HCRS, let and reviewed the project, acting in behalf of the U. S. Department of the Interior's Fish and Wildlife Service, which manages the Cape Romain National Wildlife Refuge. An expanded report on these testing operations, including an analysis of all previous collections from the Awendaw Mound (38CH9), is on file with the Charleston Museum and IAS-Atlanta (Anderson and Claggett 1979).

A number of people deserve thanks for their help in the preparation of this report. The fieldwork was largely accomplished by David Anderson, Chevis Clark, and David Clark, with the help of a series of volunteers who put one or more days in on the site including: Richard J. Anderson, Jimmy Beatty, Julia Gray, Gene Penniger, and Sharon Pierce. Richard Anderson also helped with the washing; his help, together with that of Jimmy Beatty (who came down from Columbia for a weekend), is deeply appreciated. Dr. Robert L. Stephenson, Stanley South, and Lee Novick of the Institute of Archeology and Anthropology at the University of South Carolina are to be thanked for advice and assistance during project research at the Institute. The staff of the Charleston Museum were likewise extremely helpful including: Alan Liss, Donald and Elaine Herold, Stanley Knick, Peter Coleman, and Albert E. Sanders — all provided input. Donald Herold graciously permitted the duplication of museum file information here. Donald R. Sutherland of the South Carolina Department of Archives and History also provided valuable site information. In the preparation of the report, Stephen R. Claggett helped prepare the historical summary, Stephen Treichler set up the graphic illustrations, and Wayne Neighbors provided editorial commentary. Finally, Ed Hession and Victor Carbone of IAS-Atlanta, and Ron Hood of the U.S. Fish and Wildlife Service provided valuable advice and commentary during the fieldwork and report preparation stages.

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## INDIANS ON THE SAVANNAH RIVER

By

Dixon Hollingsworth

1976

The Partridge Pond Press

P. O. Box 10

Sylvania, Georgia 30467

88 pp., 11 maps, 2 figures, paperbound  
bibliography, index, footnotes

\$4.50 plus t/p

Reviewed By

Lesley M. Drucker

Carolina Archaeological Services

Columbia, S.C.

Looking for a brief, readable, decently researched handbook on the historic Indian groups which inhabited the Savannah River drainage from 1565 - 1840? Then hurry on out with \$4.50 and pick up a copy of Dixon Hollingsworth's (1976) little book entitled *Indians on the Savannah River* (Partridge Pond Press). You will not find detailed discussions of migration history, linguistic affiliations or prehistoric background, but the material contained in the booklet should serve as a basic introduction to the ebb, flow, interaction and final disposition of remnant historic Indian presence in the American southeast.

Hollingsworth is at his weakest when trying to compress thousands of years of cultural change and almost 100 years of linguistic research into approximately seven pages. His command of both prehistoric and linguistic research literature is poor and sometimes betrays a heavy "deterministic" bias. Thus, the four major cultural "stages" which are generally used to describe culture-historical development before the historic period (PaleoIndian, Archaic, Woodland, and Mississippian) become sequential "leaps" of cultural attainment, a stance very much at odds with current anthropologically-oriented archeological interpretation, which integrates environmental adaptation, systemic relationships among technology, subsistence and society, and a general behavioral (multivariate) approach to cultural change. Hollingsworth, on the other hand, presents American prehistory according to a basically 19th century evolutionism in which all cultures "naturally" progress from a state of savagery to a state of civilization — preferably one similar to that of Victorian England. This European bias was originally formulated by Lewis Henry Morgan in describing Iroquois cultures and was popularized during the early to mid-20th century by V. Gordon Childe, but is quite inadequate to deal with cultural complexities in behavioral terms rather than as a list of cultural attributes.

This should not detract from Hollingsworth's major effort, and that is a brief description of the geographic movements and political activities associated with the major Indian groups (Muskogean, Iroquoian and Siouan speakers) whose presence along the Savannah River has been documented by European explorers and

settlers, among them Spanish, French, Dutch, German and English. Hollingsworth deals with each major group individually and ties the material together under the final solutions taken to Indian presence by either the Indians themselves (assimilation into other groups or into white society) or by the white populations (death or forced resettlement). His narrative reconstructions rely heavily on traditional primary sources, such as John Swanton, Edmond Atkin and William Bartram; and secondary sources, such as Chapman Milling, Douglas Summers Brown and Robert Meriwether, and as such reflect the majority of information which would be easily accessible to the researcher with a general interest in the identification and distribution of Indians in the Southeastern states, particularly Georgia, Florida and South Carolina.

This book is presumably not designed to present an authoritative synthesis of the prehistory and history of Southeastern Indians along the Savannah River and therefore cannot be judged too harshly. Its major inadequacies lie in its prehistoric synthesis, which is outdated and factually inaccurate in some cases, and its linguistic reconstructions, which leave even moderately recent research, such as Mary Haas' on Yuchi affiliations completely unaccounted for in the appropriate discussions. However, if one bears in mind that these sections are best not used for quotation purposes, the remainder of the booklet is both enjoyable reading and informative, particularly for the beginning researcher. Hollingsworth is to be commended for his ability to briefly and succinctly present the major points of what are often conflicting historical accounts from many sources.

#### EDITOR'S NOTE

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A copy of this book has been  
donated to the Society's  
library by the author.