ARCHAEOLOGICAL INVESTIGATION OF THE HARRY T. AND HARRIETTE V. MOORE HOMICIDE SCENE, MIMS, FLORIDA







Thomas E. Penders
Thomas Penders & Associates
3365 Heather Drive
Titusville, Florida 32796

ARCHAEOLOGICAL INVESTIGATION OF THE HARRY T. AND HARRIETTE V. MOORE HOMICIDE SCENE, MIMS, FLORIDA

TPA Project Number: 2005-037

Prepared for:

Office of the Florida State Attorney General Civil Rights Division 110 Southeast 6th Street, 10th Floor Fort Lauderdale, Florida 33301

Prepared by:



Thomas Penders & Associates 3365 Heather Drive Titusville, Florida 32796

Thomas E. Penders, R.P.A. Consulting Archaeologist RPA # 15322

March 2006

TABLE OF CONTENTS

<u>Title</u>	<u>Page</u>
TABLE OF CONTENTS	
LIST OF FIGURES	iv
LIST OF TABLES	iv
ACRONYMS	v
AKNOWLEDGEMENTS	vii
DEDICATION	viii
EXECUTIVE SUMMARY	ix
1.0 INTRODUCTION	1
1.1 Background	1
1.2 Project Location	1
2.0 ENVIRONMENTAL OVERVIEW	4
2.1 Brevard County Environmental Conditions	
2.2 Project Area Environmental Conditions.	4
3.0 ARCHAEOLOGICAL OVERVIEW	4
3.1 Indian River Cultural Area	
3.2 Paleoindian Period (13,500-9,500 BP)	
3.3 Archaic Period (9,500-3,000 BP)	9
3.3.1 Early Archaic (9,500-7,000 BP)	
3.3.2 Middle Archaic (7,000-5,500 BP)	10
3.3.3 Late Archaic (5,000-3,000 BP)	10
3.4 Malabar Period (3,000 BP-AD 1565)	11
3.4.1 Malabar I (3,000 BP-AD 750)	11
3.4.2 Malabar II (AD 750-1565)	12
4.0 HISTORICAL OVERVIEW	
4.1 First Spanish Period (1513-1763)	13
4.2 British Period (1763-1783)	14
4.3 Second Spanish Period (1783-1821)	
4.4 American Territorial Period (1821-1842)	15
4.5 Early Statehood (1842-1861)	16
4.6 American Civil War Period (1861-1865)	16
4.7 Reconstruction and Late Nineteenth Century (1865-1899)	17
4.8 American Twentieth Century (1900-1999)	19
5.0 RESEARCH METHODOLOGY	19
5.1 Historical Research	19
6.0 ARCHAEOLOGICAL METHODOLOGY	
6.1 Phase I Archaeological Survey	20
6.2 Phase II Excavation	25

TABLE OF CONTENTS (Cont.)

<u>Title</u>	<u>Page</u>
7.0 LABORA	TORY METHODOLOGY28
	CAL RESEARCH RESULTS28
	us Regional Research
	reviously Identified Sites30
	us Research at the Moore Site32
	c Property Survey34
	Harry T. Moore Biography44
8.3.2 N	Moore House
	OLOGICAL SURVEY RESULTS48
	eological Reconnaissance Survey (2003)48
	I Archaeological Survey48
	urface Survey50
	1etal Detector Survey50
	hovel Testing Results53
	I Excavation58
	est Units60
9.3.2 F€	eatures
10. DISCUSS	ION
11. CONCLU	JSIONS
REFERENC	ES CITED71
•	APPENDICES
Annondiy A	Unexpected Discoveries and Unmarked Human Burials A
	Site Photographs
Annendix C	Site Documentation
	Site Forms D
	Qualifications E
"Thengiy E	Zummannon

LIST OF FIGURES

<u>Figure</u>	<u>Page</u>
Figure 1 Location of the project area in Brevard County, Florida	2
Figure 2 USGS map indicating the location of the subject property	
Figure 3 Current aerial photograph of the subject property and surrounding area	
Figure 4 Indian River Cultural Area	
Figure 5 Sea level changes in the past 10,000 years	
Figure 6 Establishing the grid across the site	21
Figure 7 Grid established across the investigation area	22
Figure 8 Crew members excavating shovel test during Phase I survey	
Figure 9 GPS data collection of testing locations	
Figure 10 Test unit N 539/E489 prior to excavation	
Figure 11 Crew excavating two meter square unit during Phase II excavation	
Figure 12 Previously identified sites within 3.2 km of the subject property	
Figure 13 Close-up of exposed refuse pit and artifacts in 2003	
Figure 14 Government Land Office map from 1845	
Figure 15 Close-up of 1943 aerial photograph with Moore house indicated in red	
Figure 16 Close-up of 1951 aerial photograph with Moore house indicated in red	
Figure 17 Aerial photograph from 1961 of the project area	
Figure 18 Aerial photograph from 1972 of the project area	
Figure 20 Aerial photograph from 1993 of the project area	
Figure 21 Photograph of the Moore house after the explosion	/ 1 / 7
Figure 22 Location of surface material recovered during the surface survey	
Figure 23 Areas of the site with greater than 10 metal detector hits	
Figure 24 Typical soil profile within the shovel tests across the site	
Figure 25 Construction artifacts/debris distribution within shovel tests at the Moore site	
Figure 26 Septic drainpipe exposed in N550/E480	
Figure 27 Features identified as a result of the archaeological survey	
Figure 28 Excavation unit locations at the Moore site	
Figure 29 Handmade septic tank (Feature 1) in situ within N546/E479	62
Figure 30 Planview of Feature 2 in N539/E489, N537/E489, and N538/E488	
Figure 31 Cross section of Feature 2	
Figure 32 View to the east of Feature 2 in situ, level 4, N537/E489	
Figure 33 View to the south of Feature 2 in situ, level 4, N539/E489	
Figure 34 Location of the bomb site/Feature 2 in 1951	
LIST OF TABLES	
<u>Tables</u>	Page
Table 1 Prehistoric Cultural Periods of East Central Florida	6
Table 2 Malabar Sub-Period Chronology	
Table 3 Historic Period Chronology	14
Table 4 Property History Chronology	
Table 5 Metal detector results at the Moore sire	52

ACRONYMS

Acronym	<u>Definition</u>
AAP	Area of Archaeological Potential
ACI	Archaeological Consultants, Inc.
AD	Annum Diem
ASTM	Society of Testing and Materials
BP	Before Present
BR	Brevard County
CA	Circa
CARL	Conservation and Recreation Lands Archaeology
	Program
CCC	Civilian Conservation Corp
CM	Centimeter(s)
CMBS	centimeters Below Surface
DHR	Division of Historical Resources
DNR	Department of Natural Resources
E	East, Excessively
FBI	Federal Bureau of Investigation
FDEP	Florida Department of Environmental Protection
FDLE	Florida Department of Law Enforcement
FDOT	Florida Department of Transportation
FEC	Florida East Coast Railroad
FS	Florida Statute, Field Specimen
FSMSF	Florida State Master Site File
FT	Foot, Feet
GPS	Global Positioning System
GIS	Geographic Information System
HA	Hectare
HABS	Historic American Buildings Survey
HAER	Historic American Engineering Record
HWY	Highway
IRAS	Indian River Anthropological Society
IRCA	Indian River Cultural Area
KM	Kilometer(s)
M	Meter(s)
MI	Mile(s)
MM	Millimeters
N	North
NE	Northeast
NL	Nearly Level
NRHP	National Register of Historic Places
NW	Northwest
OAG	Office of Attorney General

ACRONYMS

Acronym	<u>Definition</u>
	•
RD	Road
S	South
SE	Southeast
SEARCH	Southeastern Archaeological Research, Inc.
SR	State Route
ST	Shovel Test, Steep
SW	Southwest/Swamp
USDA	United States Department of Agriculture
USGS	United States Geological Survey
US 1	US Highway 1
W .	West
WPA	Work Programs Administration

AKNOWLEDGEMENTS

Thomas Penders and Associates would like to thank the following people for without their help this project would not have been successful. First, I would like to thank the personnel of the Florida State Master Site File, Department of Historical Resources, Tebeau Library, and the FDEP Title & Records Section. They provided background site information, access to various databases, and advice that was indispensable to the successful completion of this project. The Brevard County Planning Office was very helpful in providing maps and aerials needed for this project. A deep debt of gratitude is owed to Greg Jones, an employee of the Government of Brevard County and member of the Indian River Anthropological Society, Mr. Jones was of great assistance with access and information. The following people need to be recognized for their time and assistance: Bob Gross, Roz Foster, Dave Rich and the staff of the Brevard County North Area Parks Operations during my initial investigation in 2003. They provided Thomas Penders and Associates with background information, newspaper articles, property data, and general information, which was important to this project's success. The following IRAS members were instrumental in the completion of the fieldwork phase of this project: Shannon Jones, Jim Escoffier, Stewart Weimer, Jason Wenzel, and Lisa Rogers. A debt of gratitude goes to Vicki Larson and her company Ecospatial Analysts, Inc., for their GPS and GIS support.

Aknowledgements vii

DEDICATION

This report is dedicated to the memory of Harry T. Moore, Harriette V. Moore, and the Moore family. May this report help justice finally be done.

Courage brother, do not stumble though your path be dark as night. There's a star to guide the humble. Trust in God and do the right.

Harry T. Moore

Dedication

EXECUTIVE SUMMARY

The site is located within the community of Mims, just north of Titusville, Florida. This is the location of the residence of Harry T. Moore and his wife Harriette Vyda Simms Moore. They were leaders in the civil rights movement in Florida from the 1930s until someone planted a bomb under their house Christmas 1951. Harry Moore died that night and his wife died a few days later. The Brevard County Commission purchased the ten-acre homesite in 1989. In 1992, the Harry T. Moore Homesite Development Committee of the Brevard County Parks and Recreation Department was established in cooperation with the Brevard County branch of the NAACP to initiate development of the property. The site is to serve as a memorial to the Moores, an education and interpretive center, and as a center for social and cultural activities in the community. In April 1998, the State of Florida provided \$700,000 to fund the Harry T. Moore Memorial Park.

On April 13, 2003, Thomas Penders was contacted by Dave Rich who is a member of the Harry T. Moore site committee. Mr. Rich informed Mr. Penders that heavy equipment operators uncovered a "trash dump". After that conversation Mr. Penders contacted Robert Gross, chairman of the Brevard County Historical Commission. Also notified were Mrs. Vera Zimmerman of the Indian River Anthropological Society and Greg Jones, an IRAS member and county employee. Over the course of the following two days (April 14 and 15) Brevard County Parks & Recreation and SHPO personnel were notified of the find. Thomas Penders and Associates notified Mr. Rich to stop collecting material from the site and the county was notified to stop all construction activities around the feature. Thomas Penders and Associates conducted a preliminary field investigation on April 19-20, 2003.

On September 9, 2005, Thomas Penders & Associates was contacted by the Civil Rights Section, of the Florida Office of Attorney General (OAG) to assist them in their investigation of the Christmas 1951 murders of Harry T. Moore and his wife Harriette Vyda Simms Moore. The goals of the project were to verify the actual location of the house site and to recover any material that could be analyzed and used as evidence to solve the crime. Thomas Penders & Associates with assistance of members from the Indian River Anthropological Society conducted the investigation from December 5, 2005 through January 16, 2006. The Phase I survey included the excavation of 72 shovel tests, surface survey, and metal detector survey. The results of this survey identified three features and confirmed the location of the house. Two features were subjected to additional testing during a Phase II excavation at two of these locations. Excavation found the hand-made septic tank associated with the Moore house and a soil anomaly thought to be the actual bomb site. Excavation of the bomb site failed to identify any remains of an explosive device or residues that could be related to explosives. It is the opinion of Thomas Penders & Associates, that Feature 2 is the probable the location of the Christmas 1951 bomb site. However, 50 years of disturbances and soil leaching have destroyed any residuals.

Executive Summary iX

ARCHAEOLOGICAL INVESTIGATION OF THE HARRY T. AND HARRIETTE V. MOORE HOMICIDE SCENE, MIMS, BREVARD COUNTY, FLORIDA

1.0 INTRODUCTION

1.1 Background

The site is located within the community of Mims, just north of Titusville, Florida. This is the location of the residence of Harry T. Moore and his wife Harriette Vyda Simms Moore. They were leaders in the civil rights movement in Florida from the 1930s until someone planted a bomb under their house Christmas 1951. Harry Moore died that night and his wife died a few days later. The Brevard County Commission purchased the ten-acre homesite in 1989. In 1992, the Harry T. Moore Homesite Development Committee of the Brevard County Parks and Recreation Department was established in cooperation with the Brevard County branch of the NAACP to initiate development of the property. The site is to serve as a memorial to the Moores, an education and interpretive center, and as a center for social and cultural activities in the community. In April 1998, the State of Florida provided \$700,000 to fund the Harry T. Moore Memorial Park.

On April 13, 2003, Thomas Penders was contacted by Dave Rich who is a member of the Harry T. Moore site committee. Mr. Rich informed Mr. Penders that heavy equipment operators uncovered a "trash dump". After that conversation Mr. Penders contacted Robert Gross, chairman of the Brevard County Historical Commission. Also notified were Mrs. Vera Zimmerman of the Indian River Anthropological Society and Greg Jones, an IRAS member and county employee. Over the course of the following two days (April 14 and 15) Brevard County Parks & Recreation and SHPO personnel were notified of the find. Thomas Penders and Associates notified Mr. Rich to stop collecting material from the site and the county was notified to stop all construction activities around the feature. Thomas Penders and Associates conducted a preliminary field investigation on April 19-20, 2003.

On September 9, 2005, Thomas Penders & Associates was contacted by the Civil Rights Section, of the Florida Office of Attorney General (OAG) to assist them in their investigation of the Christmas 1951 murders of Harry T. Moore and his wife Harriette Vyda Simms Moore. The goals of the project were to verify the actual location of the house site and to recover any material that could be analyzed and used as evidence to solve the crime. Thomas Penders & Associates with assistance of members from the Indian River Anthropological Society conducted the investigation from December 5, 2005 through January 16, 2006.

This study utilized methodology that complied with Section 106 of the National Historic Preservation Act of 1966, as amended by Public Law 89-665; the Archaeological and Historic Preservation Act, as amended by Public Law 93-291; Executive Order 11593; and Chapters 267 and 337, Florida Statutes. All work was carried out in conformity with the standards contained in *The Historic Preservation Compliance Review Program of the Florida Department of State, Division of Historical Resources Manual* (Tesar 1990).

1.2 Project Location

The project area is located within in the community of Mims, in northern Brevard County, Florida. It is located at the terminus of Freedom Road between US Highway 1 (US 1) to the east and Singleton Avenue on the west, and south of Parker Road (Figure 1). The legal description of the property is Section 20, Township 21 South, Range 35 East of the Mims (USGS 1979) Quadrangle Maps (Figure 2).

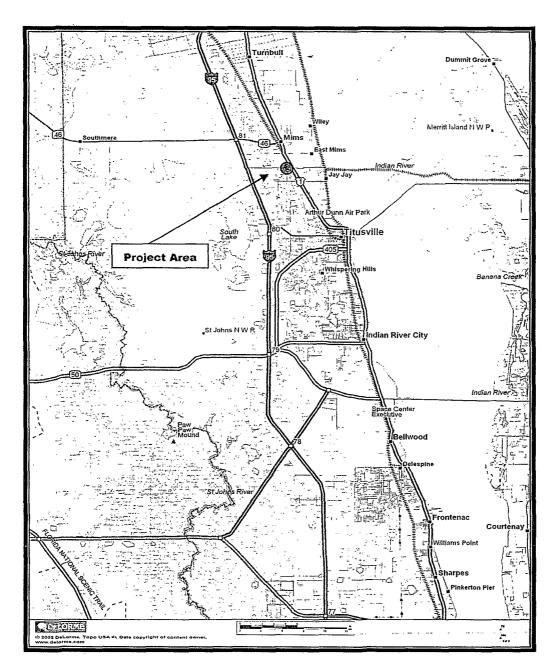


Figure 1. Location of the project area in Brevard County, Florida.

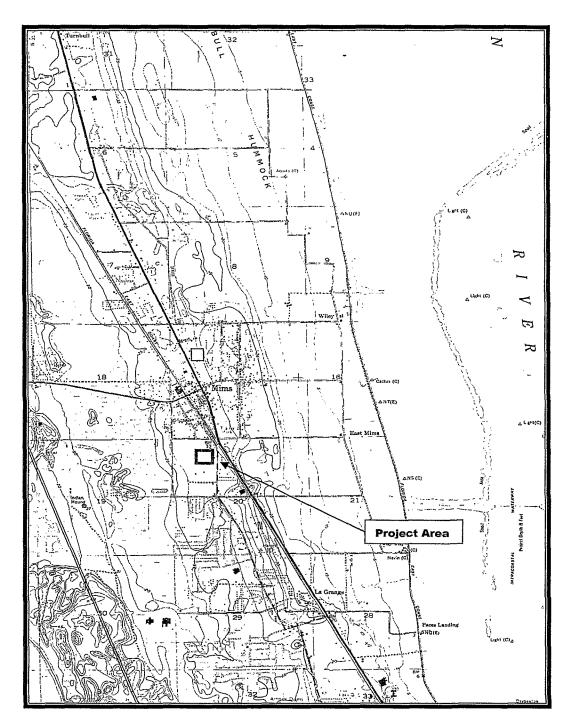


Figure 2. USGS map indicating the location of the subject property.

2.0 ENVIRONMENTAL OVERVIEW

2.1 Brevard County Environmental Conditions

Brevard County lies in the coastal lowlands physiographic region and is less than 20 meters (m) or 66 feet (ft) above sea level. The climate is subtropical with hot humid summers and mild winters. Average rainfall is 53 inches (1.3 m) a year with the peak rainy season during the summer months. The US Department of Agriculture (USDA) in 1974 indicated there are four parallel geological features that parallel the coast: Pleistocene Talbot escarpment, Ten-Mile Ridge, Atlantic Coastal Ridge and the barrier island. Four distinctive environmental features are situated between the geological features and have been identified as the ocean coastal strand, Indian River estuarine lagoon system, "Pamlico wetlands" and St. Johns Area (Huckle, et. al. 1974: 1-2).

The Indian River lagoon is situated between the barrier island/coastal strand and the Atlantic Coastal Ridge. This area is comprised of rows of relict dune ridges with vegetation consisting of sea oats, saw palmetto, scrub oaks, sea grapes, wax myrtle, lantana and bay cedar. The Atlantic Coastal Ridge runs the length of the county and forms a natural division between the Indian River and St. Johns River ecosystems. Landscape of the Atlantic Coastal Ridge consists of dune ridges oriented parallel to the lagoon system and coast with wet swales in between. These swales contain many ponds, lakes and narrow sloughs (Huckle, et. al. 1974: 1-2). The "Pamlico Wetlands" is an area between the Atlantic Coastal ridge to the east and Ten-Mile Ridge to the west. Between these two ridges the landscape consists of pine flatwoods, numerous ponds, lakes, and sloughs.

The St. Johns Area consists of a marsh zone is part of the floodplain found on both sides of the St. Johns River and is filled with a series of lakes, sloughs, hammocks, cypress domes, ponds and hardwood swamps. This marsh is bordered by a sandy prairie (also part of the floodplain) and is primarily grass palmetto and low shrubs. Pine and cabbage palm flatwoods is the adjacent zone to the sandy prairie and are nearly level and poorly drained. Pine and cabbage palm flatwoods tie together wet prairies, marshes, sand hills, hammocks, scrub areas, bay heads, and cypress domes. Throughout this region are oak palm hammocks found on relict dune ridges and scattered ponds, lakes, swamps, and sloughs (Brown, et. al 1990: 40; Abrahamson, et. al 1990:110).

2.2 Project Area Environmental Conditions

The project area is located at the terminus of Freedom Road and has been in use as a county park and education center since 2003. The project area was formerly owned by the Mack family that operated a citrus grove within the site boundaries. Prior to that, it was used for the same purpose by Harry T. Moore. Today the subject property has a large education center with a paved asphalt parking lot. There has been significant alteration of the property south and southeast of the education center for stormwater retention. The grounds are covered with planted sod and is still contains orange and pecan trees. The closest permanent water sources are the Indian River Lagoon located 2.4 km (1.5 mi) to the east and the St. Johns River 4.8 km (3 mi) to the west. To the north is undeveloped land and single-family residences, to the east are single-family residences and agricultural land, to the south and west are rural residential areas and agricultural land. Current conditions at the site are documented in Appendix B.

3.0 ARCHAEOLOGICAL OVERVIEW

The project area falls within the East and Central cultural area which encompasses a large region that stretches from the Florida border with eastern Georgia to the northern terminus of the wetlands of the Kissimmee River drainage and west to within thirty miles of Tampa Bay (Milanich 1994) (Figure 4). That the region in prehistory represented a unified and distinct cultural entity throughout its geographical extent is more of a convention adopted by archaeologists than a true picture of social,



Figure 3. Current aerial photograph indicating the project area and current conditions.

Table 1. Prehistoric Cultural Periods of East Central Florida

Date (Years Before Present)	Cultural Period
	Paleoindian
13,500	- Clovis
10,800	Folsom
10,000	Dalton
	Archaic
9,500	Early Archaic
7,000	Middle Archaic
5,000	Late Archaic
	Mt. Taylor
4,000	Orange
	Malabar
3,000	Malabar I
1,000	Malabar II

political, and cultural uniformity. In reality, at least seven distinct culture regions border the East and The primary trait that is common throughout the area, both within its heartland and along its varied borders, is the distinctive St. Johns pottery. Outside the heartland, however, along the borders, the distribution of St. Johns pottery decreases and it often becomes a minority ware or changes in technological attributes. Other traits such as mound building, modes of subsistence, and seasonal movements also differ along the regional borders. The cultural periods within this region begin, as with all of Florida, in the Paleoindian Period and end with the regional culture known as Malabar II (Table 1).

3.1 Indian River Cultural Area

The Indian River Cultural Area (IRCA) is located within the region defined by Milanich (1994:243) as the East and Central Region of Florida (Figure 4). The Indian River sub-region (area) was first defined by Irving Rouse in 1951 and within this area defined the Malabar culture. The Malabar Culture or IRCA can be described as nondescript when compared to other cultural areas it is a separate cultural area and is a transitional zone between the St. Johns culture to the north and Glades culture to the south and has characteristics of each (Rouse 1951:68-69; Milanich 1994:249; Hann 2003:9). Subsequent research has further refined our concept of the boundaries of the area. The IRCA consists of Indian River, Brevard, St. Lucie, Volusia and Martin Counties. Boundaries have been defined as the county line between Volusia and Brevard counties, the St. Johns River to the west, Atlantic Ocean to the east, and St. Lucie Inlet to the south (Figure 4). The cultural subdivisions as described by Milanich (1994) and Rouse (1951) are summarized in Table 1.

3.2 Paleoindian Period (13,500-9,500 BP)

The earliest dates confirming the human occupation of Florida is approximately 13,500 years before present (BP) and lasted until 9,500 BP (Milanich 1994:37; Widmer 1988:58) (Table 1). During this period, Florida was twice the size it is today with sea levels 60 to 100 meters lower, exposing large areas of the continental shelf. The east coast of Florida was as much as 60 kilometers (km) further east (Milanich 1994:38) than at present and overall the environment of Florida was considerably drier than it is today (Figure 5). Vegetation of north Florida was open pine forest with oak/hickory areas

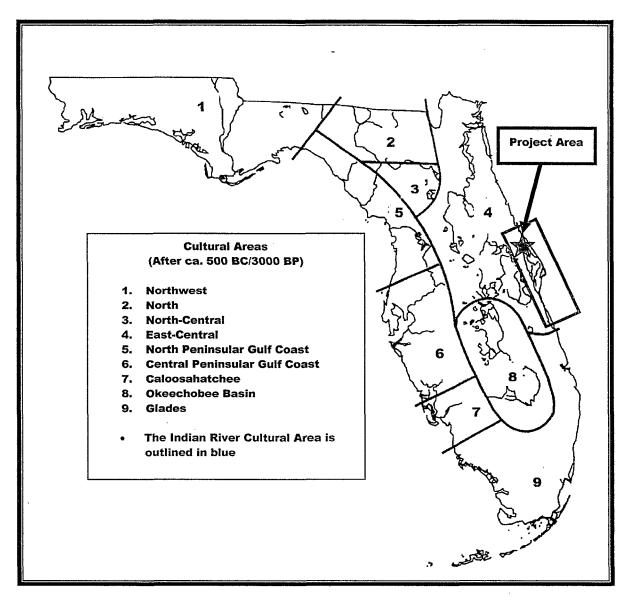


Figure 4. Cultural areas of Florida (as defined by Milanich 1994).

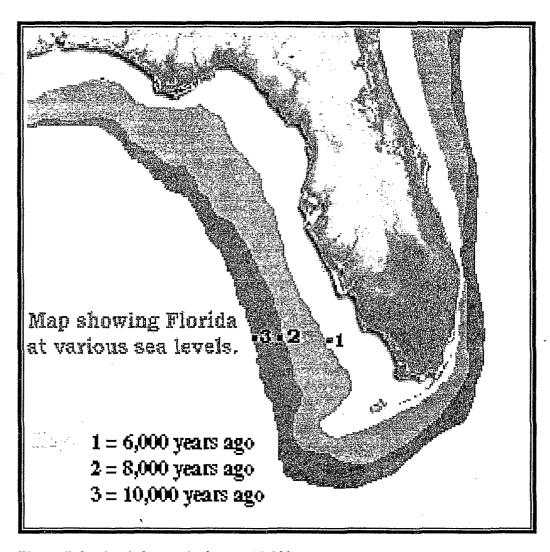


Figure 5. Sea level changes in the past 10,000 years.

and local prairies. Peninsular Florida had open arid scrub vegetation with the coastal strips supporting savannas and dune scrub except where springs and rivers brought life to the dry conditions. These hammock areas supported a suite of animal and plant life that exceeded what would have been available in the dry forests alone. By 10,000 BP, the forests became denser, while oaks and pines filled in previously unforested areas. Oak savannas replaced much of the scrub vegetation of the lower peninsula. Small perched water sources were located in the St. John's and Indian River beds. These areas were probably populated with larger numbers and variety of fauna than other areas of Florida due to more available water resources.

Paleoindian culture was relatively uniform across North America. The traditional view is that Paleoindians traveled in small, highly mobile bands that followed and exploited herds of megafauna. Many researchers now suggest that the Paleoindian diet was more generalized and included smaller game, fish, shellfish, and plant foods. Paleoindians have been characterized as hunting and gathering nomads, moving seasonally as the availability of game and wild plant foods changed, settling only for brief periods when resources such as nuts or fruits were temporarily plentiful. Aquatic resources are rarely included in discussions of the Paleoindian subsistence, but would have provided a stable food source when compared with terrestrial habitats. Hammocks near fresh water sources and the Atlantic and Gulf coasts of Florida would have provided a stable reliable source of fish and shellfish. It is highly unlikely that such resources were ignored.

3.3 Archaic Period (9,500-3,000 BP)

The Archaic Period is divided into three distinctive periods that reflect an evolution in culture and subsistence. These changes were based upon a reaction to the changing environment and increasing population (Jennings 1989:116). The Early Archaic Period was a time of instability in the environment and a total shift to alternate food resources with the extinction of the megafauna. The Middle Archaic Period reflects a period of increasing diversity, more sedentary lifestyle and population expansion. The Late Archaic Period is a time of large population growth, increased sedentarism and shows the most obvious evidence of possible trade and the firm establishment of regional specialization (Milanich 1994:85).

3.3.1 Early Archaic Period (9,500-7,000 BP)

The Archaic began with a large-scale change in the environment. During the middle to late Paleoindian Period widescale melting of the ice sheets covering the northern latitudes of the planet caused the sea levels to rise and inundate large areas. Water levels continued to rise steadily, and by 8,000 BP were close to present day (Figure 5). This rise caused an increase in the number of lakes and ponds (Watts 1986:6-7). The Indian and St. John's Rivers were established and wetlands were developing along the present day coastlines and rivers. The environment was becoming similar to present day Florida but with greater seasonal cycles (Watts 1986:16). Larger settlements close to aquatic resources were established during the Early Archaic with the growth in population. They developed large base camps with smaller foraging camps (Milanich 1994: 69). Deer remains are well documented from Early Archaic sites in Florida. However, use of aquatic resources was beginning during this period. Ste. Claire (1988) hypothesized exploitation of marine shell fish may have begun during the Early Archaic Period in the St. Johns area. The presence of diverse and high yield plant food made plant utilization increasingly advantageous as well.

In the Early Archaic, changes in the tool assemblage reflect the changes in subsistence patterns. The stemmed point with corner and side notching replaces the fluted projectile point. The use of muck Brevard-bogs-ponds for internment of the dead has been discovered at three sites in Florida. The Bay West, Republic Groves and Oak Grove are cemetery sites where humans were buried within the shallow margins of small ponds, peat bogs or muck lakes (Beriault, et. al. 1981: 39-58; Wharton, et. al.

1981: 59-80; Doran and Dickel 1988: 263-289). This evidence would suggest that this burial practice was not uncommon.

3.3.2 Middle Archaic Period (7,000-5,500 BP)

The Middle Archaic Period began around 7,000 BP (Table 1) and is characterized by increasing sedentism of the populations, population localization and diversity. Wetlands continued to expand and there was increased precipitation (Milanich 1994:75; Watts 1986:13). Pine swamps were established by the end of this period. By the end of the Middle Archaic, sea levels had risen a total of 26 m (80 ft) (Figure 5) and the coastal margins became more productive (Watts 1986:13). The Middle Archaic can be characterized as a period of increased diversity in resource exploitation and tool classes. Coastal margins became more productive and creating reliable seasonal resources. This change precipitated a continued reduction in mobility and population growth. Shellfish were becoming more plentiful along the coast and in the freshwater sources of east central Florida. Some of the earliest shell midden deposits date to the Middle Archaic (Russo 1988a: 164, 1988b; Milanich 1994:84).

3.3.3 Late Archaic Period (5,000-3,000 BP)

Great seasonal fluctuations noted in the earlier periods had ended. The climate during the Late Archaic Period was wetter due to higher levels of precipitation and accelerated swamping. This swamping reduced arable land but caused increased aquatic. Inhabitants had begun their adaptation to wetlands during the Middle Archaic Period. The Late Archaic Period is dominated by an increased utilization of the Indian and St. Johns Rivers and coastal marshes. Late Archaic sites tend to cluster in and around these wetland areas (Milanich 1994:87). Extensive middens were developed along the fresh water marshes of the St. John's River. Coastal Archaic middens consisting principally of marine shellfish have been tested from the panhandle to southwest Florida. These are located along estuaries, beaches, and the mouths of rivers. Along the East Coast, Late Archaic middens are known from the Florida/Georgia border and as far south as Jupiter Inlet. Preceramic Archaic middens have also been identified along the northeast coast (Russo 1988a, 1988b). These middens consist of shellfish common to beach and brackish estuarine environments as well as small components of freshwater shellfish. They are also characterized by the significant presence of small and large marine fish and, to a lesser extent, terrestrial vertebrates. They range from shell heaps to linear ridges and include occasional shell rings. Although this is not to say that Archaic peoples did not bury their dead in middens along the St. Johns River, either singly or in groups.

The Late Archaic is associated with the Mt. Taylor and the Orange Sub-periods (Table 1). Mt. Taylor is the final preceramic culture in Central Florida. Mt. Taylor could have its origins in the Middle Archaic Period and may have started as early as 6,000 BP and as late as 5,000 BP. The author has designated an arbitrary start date of 5,500 BP (Table 1). Milanich (1994:88) uses this period as a cultural marker to define the start of distinctive and identifiable regionalization in east central Florida. Mt. Taylor Period sites near the St. John's River suggest that freshwater snails and mussels were the most exploited food source. There is an increase in the use of fish such as shark, rays, and Atlantic Croaker along the coast and estuarine-lagoon systems. Sites from both areas show a variety of fish, mammals, reptiles, birds, and amphibians were utilized as additional food sources (Milanich 1994:92). The Orange Period lasted from 3,500 to 2,000 BP (Milanich 1994:86). It is the first ceramic culture of Central Florida and is typified by fiber tempered and hand-molded pottery (Milanich 1994:86). There is an increase in the utilization of shallow dwelling fish, pond snails and mussels in the freshwater marshes (Milanich 1994:92; Sigler-Eisenberg 1988:300). By the end of the Orange Period, there appears to be shift away from these foods to the exploitation of brackish lagoons and coastal margins. This may be due to over utilization of the freshwater resources or the result of population pressures.