

City of DeBary Archaeological Survey

City of DeBary, Florida



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September 1999



Chapter 1. Introduction

A reconnaissance-level archaeological survey for the City of DeBary, funded in part by Historic Preservation Grant-in-Aid No. S9045 from the Florida Division of Historical Resources, was conducted by Panamerican Consultants, Inc., between August 9, 1999, and September 14, 1999. The survey included the identification, documentation and evaluation of known archaeological sites within the city limits. The archaeological resources within the context of this project included both prehistoric and historic period sites. From the information collected, an archaeological site predictive model was developed within the land and water municipal boundaries of the city.

To meet the objectives of the survey, PCI staff completed:

- Informant interviews. Professional archaeologists, local amateur archaeologists and historians, collectors, and residents of DeBary were interviewed to gather information about the location of archaeological sites and artifacts found around the DeBary area.
- A background and literature review. A review was completed of documents at the PCI research library, the University of South Florida Library and Special Collections, the Florida Master Site File, the State Library of Florida, Florida State Photographic Archives, geologic, prehistoric and historic archaeological publications and scholarly reports, maps and manuscripts of northeast Florida, Volusia County, and the City of DeBary.
- Archaeological field investigations. Priority was given to documenting new sites. Previously unrecorded sites within the city limits were located with the help of City of DeBary Historian Jesse Beall, working in cooperation with DeBary residents and property owners. Selected sites already recorded in the Florida Master Site Files were revisited, particularly those along the St. Johns River. Sites were photographed and mapped, and the locations of the sites were recorded in the field with a Garmin GPS 12.



- Site evaluations. Florida Master Site File forms were completed for previously unrecorded sites and updated forms were completed for previously recorded sites. A list of known and newly recorded sites was developed, and a preliminary evaluation of their local and regional significance was completed.
- Development of a site location predictive model and sensitivity maps. An archaeological sensitivity map was produced for the City of DeBary to use as a planning tool. This predictive model identifies areas with high, moderate and low potential for site locations within the city limits of DeBary.
- A report. PCI staff prepared this report of the background information, field investigations, methodology, predictive model and recommendations.
- A public archaeology day. PCI staff worked with City of DeBary Historian Jesse Beall in the publication, promotion, and attendance at DeBary Archaeology Day for interested residents of the area.

Chapter 2. Environmental Setting

Environmental and ecological factors have had a direct influence on the sites chosen by prehistoric and early historic settlers in the DeBary area. The geologic, hydrologic, and meteorological processes that have effected the environment of DeBary and the resources available to human populations are an important part of the formulation of a settlement model. Although the environment has changed over the past 12,000 years, knowledge of the present-day environment can provide clues to past ecological conditions that influenced early human settlement, particularly after 3000 B.C. when the environment began to take on modern characteristics.

PHYSICAL ENVIRONMENT

DeBary lies in Volusia County, which extends inland from the Atlantic Coast near the middle of the Florida peninsula. DeBary is bounded by the St. Johns River to the west and by Lake Monroe to the south. The city is situated on the karst topography of the DeLand Ridge, which is characteristically altered by erosion and collapsed caverns in the underlying limestone. The approximately 43 small water table lakes, sinks, and wet depressions within the municipal boundaries of DeBary are a result of these processes. The St. Johns River flows northward along the western and southern boundaries of the city and is poorly drained, merging into creeks and strands. The river is the third largest drainage basin in the state of Florida and receives slightly more than 60 percent of the runoff from Volusia County (Baldwin et al. 1980; Myers and Ewel 1990).

The Central Lake District physiographic region of Florida includes the karst terrain of DeBary and is the principal recharge area of the Floridan Aquifer. A large section of DeBary lies within the St. Johns River Offset portion of the Central Lake District. The semi-permeable limestone substructure of the area has contributed to the formation of the river basin and the numerous springs located near the river (Myers and Ewel 1990). In the areas east of Lake Monroe and areas adjacent to the St. Johns River, the elevations are less than



five feet above sea level. Soils in these low-lying areas are sandy and poorly to very poorly drained.

The lowland vegetation consists of a pine flatwoods community, primarily longleaf and slash pine with occasional oak trees and an understory of saw palmetto and wiregrass. The freshwater swamps and pond environments support cypress, elm, gum, water oak, and aquatic plants (Baldwin et al. 1980). The St. Johns River and Lake Monroe sustain aquatic fauna including shellfish, fish, reptiles, and amphibians. The adjacent wetlands support a variety of animals including birds, ducks, turkeys, raccoons, opossums, squirrels, beavers, rodents, otters, bears, and panthers (Myers and Ewel 1990). The fresh water also attracts upland species to the shores. The upland areas along the St. Johns River and its wetlands provided a good resource base for native peoples beginning around 6500 B.C., although the environment only began to change to modern conditions after 3000 B.C. (Bellomo 1994). The floral community was probably stable after that time and Konomac Lake would have served as another resource base (Figure 1). The lowlands surrounding Konomac Lake were dredged and the lake enlarged to its current size in the 1970s.

The flatwoods habitat of DeBary provided only limited resources for prehistoric peoples. Rodents, amphibians, birds, and snakes were the

**FLORAL AND
FAUNAL
RESOURCES**

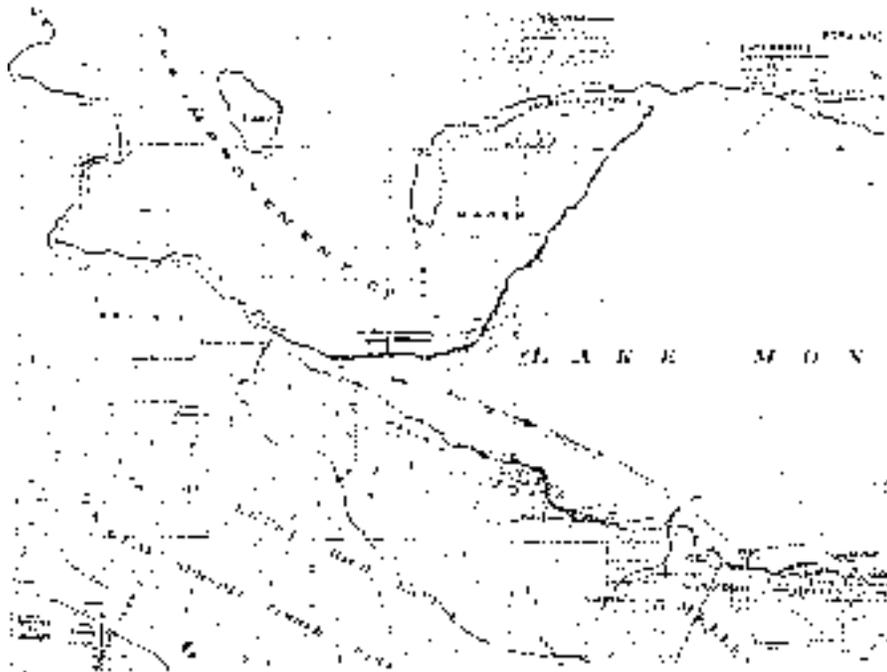


Figure 1. 1871 map of Merritt and vicinity, Orange County, Florida (Published by the Florida Improvement Company, Jacksonville).

majority of faunal species utilizing the habitat, although deer, bear, and panthers were present on a limited basis (Myers and Ewel 1990). The utilization of timber for naval stores has impacted this habitat in historic times.

Slopes and high ridges of excessively and moderately well-drained sand characterize the major residential areas of DeBary. Well-drained soils support xeric vegetational communities predominately forested by pine-scrub oak. The DeBary residential areas have undergone extensive ecological modification since the 1950s.

Chapter 3. Prehistory of the DeBary Area

DeBary is located in Volusia County, which is in the East and Central Region of pre-Columbian Florida (Figure 2) (Milanich 1994).

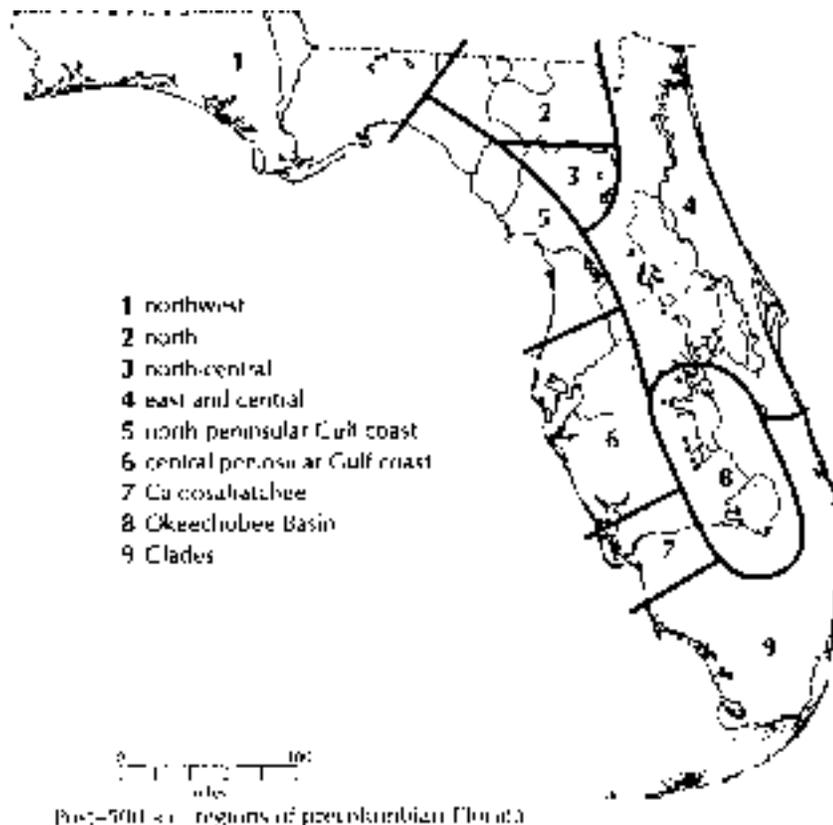


Figure 2. Cultural Regions of Pre-columbian Florida (after Milanich, 1994:xix).

Geographical regions in which archaeological cultures occur are called culture areas and the sequence of changing cultures through time within a culture area are called cultural periods. Cultural periods are identified by the appearance or disappearance of specific types of artifacts such as ceramics and projectile points. This overview of the prehistory of Florida is divided into broad cultural periods that are based on archaeological studies of the pre-Columbian peoples of Florida (Milanich and Fairbanks 1980). These temporal periods are based on cultural changes that were manifested in the artifacts pro-



duced during each of the following periods: Paleoindian, Archaic, Transitional, and Woodland periods.

Stone and ceramic artifact styles provide a set of clues to the cultures that occupied Florida and changes that occurred through time. Cultural periods for Florida are well-documented using stylistic changes in artifacts and absolute dating techniques such as radiocarbon dating. Changes in the styles of lithic (i.e., chipped stone) projectile points and other implements reflect how these items were used. As technology changed, so did the shape of the tool. As a result, diagnostic Florida projectile points are generally accepted as being representative of different temporal periods.

Paleoindians were the first native inhabitants of Florida and are estimated to have entered the area approximately 12,000 years ago during the late Pleistocene epoch. In the southeastern United States, the Paleoindian period lasts from approximately 10,000 to 7,000 B.C. The environment of Florida at that time was markedly different from the modern environment. The sea levels were 135 to 165 feet lower, and the shorelines extended as much as 100 miles beyond the present coastal boundaries (Milanich 1995). The climate was drier and cooler, and sources of fresh water were limited. The Paleoindians in Florida hunted and butchered Pleistocene mammals at watering holes in shallow lakes or deep springs. The remains of mammoths, an extinct species of bison called *Bison antiquus*, and other megafauna have been found at Paleoindian kill sites, many of which are inundated today.

Characteristics of the Paleoindian period include a nomadic settlement pattern, subsistence that included large-game mammals supplemented by small-game hunting and gathering, and an absence of pottery. The most recognizable Paleoindian artifacts are lanceolate stone spearpoints. Paleoindians hafted these long, thin, bifacial points to wooden spear shafts (Milanich 1994). Paleoindian archaeological sites are generally identified solely on the basis of the lithic remains. However, these sites are not very common and many questions remain about the Paleoindians, many of which are listed in the state's historic context: *More Than Orange Marmalade: A Statewide Comprehensive Historic Preservation Plan for Florida* (1995).

So far, there is no firm evidence for Paleoindian occupation in Volusia County. There is reportedly a Paleoindian component at the Dean Sligh site (8VO451) in DeBary (Figure 3), but there has been no controlled excavation there. The recovery of organic mate-

PALEOINDIAN PERIOD

materials from waterlogged Paleoindian sites such as the Little Salt Spring site in Sarasota County and most recently in the Aucilla River in northern Florida have greatly increased our understanding of this period in Florida. Plant remains and artifacts made of wood, which are not typically preserved in terrestrial (land) sites, are providing more information about the lifeways of these ancient Floridians (Milanich 1998).

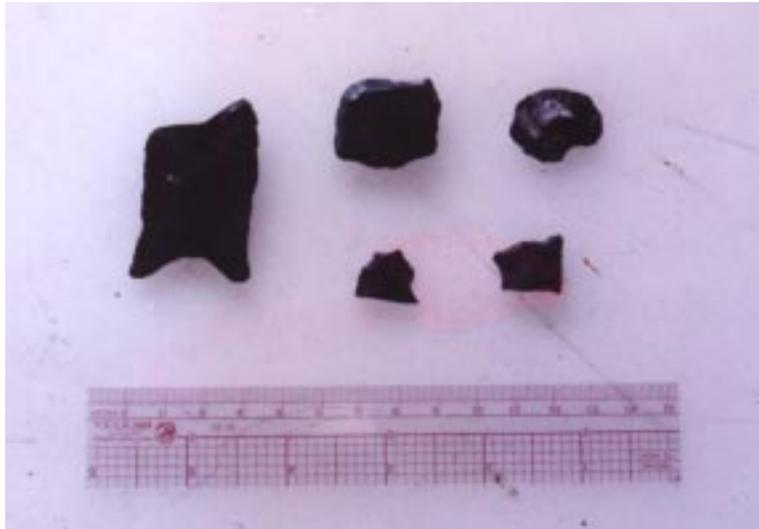


Figure 3. Truncated Suwannee point (left) from the Dean Sligh site (8VO451) in DeBary (photograph courtesy of Dean Sligh, Orlando, Florida).

The Paleoindian tool kit remains the most characteristic and identifiable clue to their culture. Clovis, Suwannee and Simpson points are the names given to lanceolate points found in Paleoindian sites in eastern North America. Suwannee points are found most commonly found in Florida. Bullen describes the Suwannee form as “slightly waisted ... with concave base, basal ears, and basal grinding of bottom and waisted parts of sides” (1975:55). The Suwannee is not typically fluted. Clovis points, indicative of Paleoindian occupation throughout most of North America, are rarely recovered in Florida.

Paleoindians used lanceolate spearpoints and other small lithic hand tools designed to hunt and process plants and animals. Bifacial knives and scrapers were used to butcher meat and clean hides. Other implements include oval ground stone weights or bolas, which may have been connected by thongs and thrown to bring down small game such as water birds (Neill 1971; Purdy 1981). Bones sharpened on both ends have been recovered at Paleoindian sites and may have been used to hold back the tissue while the carcasses of animals were butchered (Waller 1976). Most Paleoindian tools probably served multiple purposes, a result of the mobile lifestyle of Paleoindian groups.

Pollen and charcoal samples recovered in cores taken from the bottoms of Lake Sheeler near Gainesville and Lake Tulane near Avon Park provide information on the environment of Florida during the Paleoindian period (Watts and Hansen 1988). During the period between 10,000 to 7000 B.C. the dominant natural community was mesic broad-leafed forest. Warm summers and cool winters characterized the climate, and the frequency of natural fire was low.

Perhaps the most influential environmental condition on the lifestyle of the Paleoindians of Florida was the limited sources of fresh water. The many inland rivers, lakes, springs, marshes, and wet prairies, which appear on the modern landscape of Florida, were almost nonexistent in the Paleoindian period. Fresh water was supplied by limestone-bottomed catchments such as water holes, lakes, and prairies, and very deep sinkholes. The presence of karst topography, in which sinkholes form, is a good indicator of Paleoindian settlements. Because of the cooler drier climate, the vegetation included plant species such as scrub oaks and pine that thrive in dry areas, open grassy prairies, and savannas.

The major theory of concerning Paleoindian settlement was first developed by Neill (1964a and 1964b), and later supported through the extensive recording and analysis of Paleoindian sites by Dunbar and Webb (Dunbar 1983, 1991; Dunbar et al. 1989; Webb et al. 1984). Neill's "oasis" model is based on the fact that limited potable water sources existed at this time. As such, the few that did exist would have been crucial to the survival of Pleistocene animals in the area for drinking water. For Paleoindian populations, these watering holes would have provided easy and dependable access to game, as well as fresh water for themselves.

The oasis model has been substantiated by evidence of hunting and butchering activities near former water holes and other perched water sources in the Tertiary limestone (karst) regions of Florida. Indeed, the majority of Suwannee and Clovis projectile points - the most diagnostic type of Paleoindian tools - have been found more commonly in Tertiary limestone regions (Dunbar and Waller 1983). Research by Carr (1986) has uncovered a filled-in solution hole and a corresponding Early Archaic and Paleoindian site in southern Florida, extending the area of settlement while still supporting the oasis model.

In general, Paleoindian settlement followed a seasonal round. Settlement was probably determined more by availability of lithic resources and water than by availability of floral and faunal resources. Over time,

the distribution of both of these resource types influenced settlement patterns. By the Middle Paleoindian period, settlement may have been more territorial, perhaps as a result of decreased resources and concomitant increased population (Anderson 1996). Materials recovered from Harney Flats, a Paleoindian terrestrial site in Hillsborough County, have yielded more information about adaptations of Paleoindian populations (Daniel and Wisenbaker 1987).

Daniel (1985) developed a model for Paleoindian cultural adaptations to short term environmental changes as well as to the gradual long-term environmental shift during the Holocene to a modern climate and biota. Based on findings at Harney Flats, archaeologists have concluded that some Paleoindian groups may have practiced a more sedentary lifestyle with a greater dependence on plants and smaller fauna (Daniel 1985; Daniel and Wisenbaker 1987). In addition to kill sites with large mammal remains, a subsistence strategy which incorporates collecting and storing smaller game and plants would enter into the archaeological record in field camps, hunting stations, habitation, extractive, and cache sites. Fewer residential moves would be required with such a strategy, which sends specialized groups out from semi-permanent camps near water sources to collect food.

Primarily through excavations at waterlogged sites in Florida, such as a Paleoindian component at the Page/Ladson site in Jefferson County, the subsistence of Paleoindians has been reconstructed (Dunbar et al. 1989). Both extinct and modern faunal species seem to have made up the diet. Most of the extinct species were large mammals such as sloth, tapir, horse, camelids, and mammoth. Some smaller extinct animals were also consumed. Modern species in the diet included deer, fish, turtles, shellfish, gopher tortoise, diamond-back rattlesnake, raccoon, opossum, rabbit, muskrat, and wood ibis. In addition, panthers and frogs have also been recovered from Paleoindian sites.

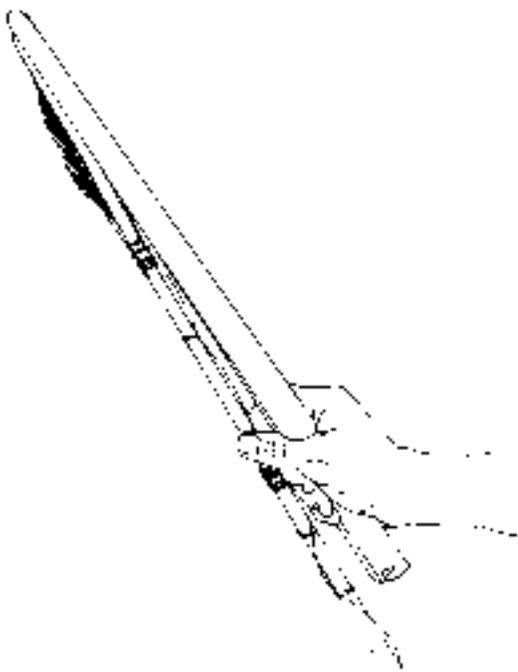
The archaeological evidence suggests that Paleoindian cultures subsisted on both large and small game mammals. In addition to food, these animals were used for their furs and as a raw material source for tools. There is little evidence of extensive reliance on coastal resources; however, as more sites are uncovered, this will likely be shown to be a substantial additional resource.

Toward the end of the Paleoindian period, large lanceolate points such as the Suwannee point disappear from the archaeological record and are replaced by smaller points such as the Greenbrier (Bullen 1975). In addition, side-notched points such as Dalton and Hardaway appear.

Such points may have been replacing earlier lanceolate points, or they may have been in use during part of the same period. Side-notched points also may have functioned more as hafted knives rather than projectile points. In general, the smaller side-notched points are interpreted as a result of changes in the environment and subsequent shifts from the hunting of large Pleistocene mammals to smaller game such as deer. Towards this end, these smaller notched point forms were probably fitted to shafts, which were propelled either by hand or with the aid of a spearthrower known as an atlatl.

The Archaic period occurred from about 7000 to 2000 B.C. and is associated with the Holocene geologic epoch. The forests of the late glacial pre-Holocene were replaced by more xeric woodlands, which included oak and pine (Miller 1998). After the extinction of the Pleistocene megafauna, human subsistence strategies became more diverse, and included the collection of new terrestrial plants and animals and aquatic species. These changes are seen in the way stone tools changed through time. Smaller side-notched spear points and knives replaced the large multifunctional lanceolate-shaped spear points used during the Paleoindian period. These smaller tools were designed to be thrown or launched with a spear-thrower (atlatl) (Figure 4) or hafted to handles and used as knives.

ARCHAIC PERIOD



These changes in the way people lived were due in large part to the physiographic and climatic changes occurring in Florida. As a result, subsistence and settlement patterns of the Archaic hunting and gathering groups also changed. People began to live in larger groups, use different types of stone tools and inhabit more of what is now Florida. Although the atlatl was developed during the Archaic, pottery and the bow and

Figure 4. Sketch of an atlatl developed during the Archaic period for launching spears (courtesy of Evelyn Raiford, Historic St. Augustine Preservation Board).

arrow had yet to be invented in North America. These two major innovations would come later during the Transitional period. It is important to note that these changes in material culture, social organization, and settlement and subsistence did not occur quickly. As Milanich (1994:63) points out, the changes that are visible in the archaeological record took place over many generations and were the result of shifting adaptations to a gradually changing environment.

EARLY ARCHAIC. The Early Archaic (7000 to 5500 B.C.) represented a continuation of the Paleoindian occupation of Florida and occurred during a time of rising sea levels, a gradual warming trend with less arid conditions, and the spread of oak hardwood forests and hammocks. An obvious difference between the Paleoindian and Early Archaic is the shift from lanceolate blade-like points like Suwannee and Simpson points to smaller side-notched and stemmed projectile points/knife forms such as the Bolen and Kirk clusters.

However, the waterlogged artifacts found in the deposits of an Archaic cemetery at a peat-bog pond site in northern Brevard County demonstrates how incomplete a picture of past life we have when we only have lithic artifacts to consider (Doran and Dickel 1988). The Windover Pond site (8BR246) was used as a cemetery for 1,000 years beginning approximately 6000 B.C. Artifacts preserved in this anaerobic environment have provided much information about the textile and wood technologies of the Archaic peoples in the East and Central Region of Florida.

Subsistence and settlement patterns became more diversified during the Early Archaic. The shift in how people lived is reflected in the location of archaeological sites from this time period across the landscape. In general terms, subsistence and settlement patterns became more diversified during the Early Archaic, perhaps as a result of the shift in climate.

Chert is a flintlike stone found in the limestone formations of Florida that was quarried by Paleoindians and Archaic peoples and chipped into tools. Archaic peoples had a larger, though less carefully worked tool kit than their ancestors of the Paleoindian period. While thermal alteration of chert occurred for the first time during the Early Archaic period, the practice was limited (Powell 1990). Alternate beveling of the cutting edges of stone tools was a common practice during the Archaic period and is interpreted as evidence of the resharpening of lateral margins by pressure flaking. Evidence suggests that the wooden shaft would typically be held in the left hand while the right side of the actual point was resharpened with the

right hand. This process resulted in the removal of flakes in a downward motion from one lateral margin, then, when the point was flipped over, flakes would be removed from the opposite lateral margin in the same fashion. This method of resharpening results in beveled margins that appear as unifacially resharpened edges that occur on opposite sides of the implement (Figure 5).

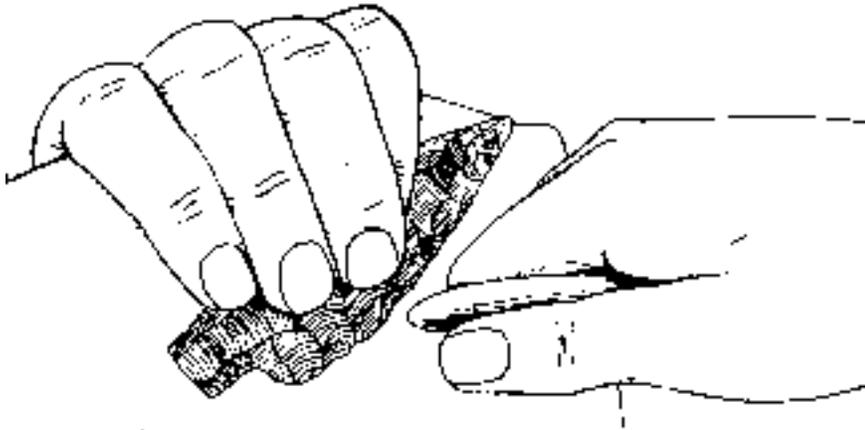


Figure 5. Sketch showing the beveled edge of a projectile point produced by pressure flaking (from Purdy 1981).

Debate continues among southeastern archaeologists about whether to place early side-notched forms such as the Bolen in the Late Paleoindian or Early Archaic periods. This is largely the result of conflicting evidence from archaeological sites in Florida and the Southeastern Coastal Plain. Milanich (1994) and Purdy (1981) both describe Bolens as Late Paleoindian period implements, since these points were recovered in association with lanceolate Suwannee and Simpson forms at the Harney Flats site in Hillsborough County (Daniel and Wisenbaker 1987). However, other archaeologists assign Bolens to the Early Archaic (Goodyear 1982; Tesar 1994; Tuck 1974; Widmer 1988).

Numerous small Early Archaic special activity sites and campsites have been located throughout the Central Florida Highlands (Milanich and Fairbanks 1980; Milanich 1994). Tesar (1994:111) summarizes Early Archaic settlement as being characterized by relatively large base camps that were occupied at least semi-permanently and smaller seasonal camps and special use sites. These base camps are often located near “ecotonal breaks” with dependable sources of freshwater nearby. Because these sites were typically in desirable locations, they were also sometimes reoccupied during later periods.

Paleoindian and Early Archaic artifacts are sometimes recovered in association with each other; however, overall Early Archaic

settlement patterns appear to be more widespread than those of the Paleoindian period. This expansion in settlement patterns is probably due in part to the warming trend and increase in precipitation that occurred at the close of the Pleistocene. Early Archaic people also began to utilize coastal and riverine environments more heavily. However, as Milanich (1994:64) points out, we lack information about the full range of Early Archaic tools (lithic and bone) because of the scarcity of artifact collections from professionally excavated sites.

MIDDLE ARCHAIC. As populations grew and the climate continued to become more like modern conditions, Archaic groups began to become more diversified. They slowly moved into previously unoccupied environmental niches and began producing stone tools that tended to be stemmed rather than notched. This diversification is seen in the variety of stone tools produced, the exploitation of shellfish resources, and the increase of archaeological sites that date to this time period. Archaeologists refer to this period as the Middle Archaic period (5500-3000 B.C.).

The Middle Archaic was a wetter period with the intrusion of mixed pine and oak into the hardwood forest. As conditions became wetter after 6500 B.C. (Watts and Hansen 1988), large river systems and wetlands developed, and people began to exploit the resources associated with these habitats (mainly freshwater shellfish). This trend toward more sedentary occupations and more circumscribed territories continued into the Late Archaic, as conditions became similar to the modern environment. Milanich (1994:76) points out that Middle Archaic sites are found in a variety of locations around Florida including wetland systems such as the St. Johns River Basin. In sum, Middle Archaic habitation sites increased in size, included denser amounts of artifacts and for the first time included large shell middens.

Lithic technology during the Middle Archaic was centered on the stemmed point (Figure 6). Few Middle Archaic point types in Florida are side-notched. Stem configurations vary and some are no more than protrusions that extend from the basal region of the tool (e.g. Brier Creek or Morrow Mountain cluster). Other stem configurations are well formed and extend as obvious hafting attachments (e.g. the Newnan cluster). Alternate beveling of points was still practiced but on a lesser degree than during the Early Archaic period.

While basal grinding is seldom found on Middle Archaic forms, the use of thermal alteration increased during this time. Thermal alteration or heat treating of stone was often done to increase control over the fracturing properties of the raw material. Heat-treated

chert is commonplace at Middle Archaic sites in Florida. Although the thermal alteration of chert took place throughout the Archaic, this practice appears to have peaked during the Middle Archaic (Ste. Claire 1987).



Figure 6. Archaic tools recovered from the DeBary Area (James Barwick Collection, PCI photograph courtesy of Freddie and Margie Oglesby, DeBary, Florida).

LATE ARCHAIC. The Late Archaic (3000-1500 B.C.) is characterized by the emergence of modern environmental conditions in Florida as major wetland systems developed (Watts and Hansen 1988, Table 3). Deposits from Lake Sheeler suggest that the dominant natural community appears to have been pine forests interspersed with swamps. Water levels and fire frequency were high during this time.

While many, if not most, of the same cultural traits were carried over from the Middle into the Late Archaic, certain developments separate the two periods. In particular, the use of steatite cooking vessels and the development of fiber-tempered pottery are unique to the Late Archaic (Milanich 1994; Powell 1990). In Volusia County in the East and Central Region of Florida, the Late Archaic is divided into two phases: the Mount Taylor phase and the Orange phase.

Mount Taylor Phase. With the rise of water levels during the Holocene, the southern part of the St. Johns River changed to a rich habitat that could support freshwater shellfish. The Mount Taylor phase is named for the type site in Volusia County (Goggin 1952) and is characterized by the use of stemmed projectile points and the emergent importance of freshwater shellfish in the diet of Archaic peoples. Radiocarbon dates from the Tick Island site on the St. Johns River in Volusia County indicate that Archaic people began to live in the St. Johns Basin between 4000

and 2000 B.C. (Miller 1998; Jahn and Bullen 1978). While people did not necessarily occupy different environmental zones during the Mount Taylor phase, they began to successfully exploit *Viviparus georgianus*, a still water snail which grows in colonies in the stable environment of creeks, lakes, sloughs, and springs within the St. Johns River basin (Cumbaa 1976; Miller 1998;). Bivalve mollusks (*Elliptio* sp.) and apple snails (*Pomacea paludosa*) also are found in the large Mount Taylor shell middens blanketing the banks of the St. Johns River (Bullen and Bryant 1965).

Extensive shell middens that date to the Late Archaic are found throughout the state. Interestingly, Milanich (1994:87-88) points out that few large Late Archaic sites are found in the interior forested regions of Florida. This is thought to be the result of a reliance on riverine and coastal wetland resources. Mount Taylor populations also hunted deer, snakes, and birds and collected wild plants and nuts. Banner stones of steatite, bone points, and bone tools are found in Mount Taylor shell middens, typical of the tool assemblage of the preceramic Archaic throughout the southeast United States (Miller 1998:70).

Recent excavations at the nearby Groves' Orange Midden wet site (8VO2601) have recovered an artifact assemblage from the early occupation of the St. Johns River basin during the Mount Taylor and Orange phases (Purdy 1994; Wheeler and McGee 1994). The water-saturated Mount Taylor artifacts clearly show the foundations of the cultural tradition that would develop in the St. Johns area. Artifacts recovered from the Mount Taylor tool kit include bone and shell tools for leather and textile working, fishing implements, marine shell tools, wood working implements, shark tooth tools, and baked-clay objects used as cooking stones for indirect heating.

The Enterprise Midden site (8VO55) in Volusia County on the banks of Lake Monroe has yielded artifacts primarily from the Mount Taylor and Orange phases (Goggin 1952; Russo et al. 1992). The Enterprise midden was first described by Jeffries Wyman (1875) in his memoir on the fresh water shell mounds of Florida (Figure 7). The high bluff Wyman described a century ago has been reduced to an apron of midden after extensive mining and leveling activity.

The general trend of the Late Archaic can be summarized as a shift towards large relatively permanent villages. The Mount Taylor phase lasted from about 3000 B.C. until the first hand-molded fired clay pottery was introduced into the archaeological record about 2000 B.C.



Figure 7. Shell Mound at Old Enterprise (Wyman 1875:19-20, Plate 1).

Orange Phase. In southeastern North America the development of pottery began in coastal South Carolina, Georgia, and northeast and southwest Florida around the same time. This crude fiber-tempered ware marks the beginning of the Orange phase around 2,000 B.C. in the East and Central Region of Florida (Milanich 1994: 88; 1998: 29). Bruce Smith (1986) refers to the introduction of pottery and the widespread trade in gourds in southeastern North America as a “container revolution.” The use of pottery spread rapidly among the pre-Columbian populations in North America and may have played a role in the intensive exploitation of wild seed crops and the development of horticulture. Most of the Orange ceramics contain fibers from palmetto fronds or Spanish moss incorporated into the pottery to help strengthen the clay (Figure 8). The tool kit of the Orange phase is similar to the Mount Taylor phase with the addition of pottery and the concomitant evidence of basketry impressed on the clay pots (Milanich and Fairbanks 1980).

By the Orange phase, the Late Archaic peoples were well adapted to the riverine environments. Miller (1998) points out that there is a dramatic increase in the number of sites recorded in northeast Florida at this time, which not only attests to their successful adaptation, but also to a rapid growth in the population. While fiber-tempered pottery is found throughout Florida, Orange wares are found primarily in the north and eastern parts of the state (Griffin 1945).

The Florida Transitional period is identified on the basis of development of ceramics rather than major changes in subsistence or settlement patterns. The definition of this period has been so problematic, that Milanich (1994) has recommended discarding the term Transitional pe-

**TRANSITIONAL
PERIOD**

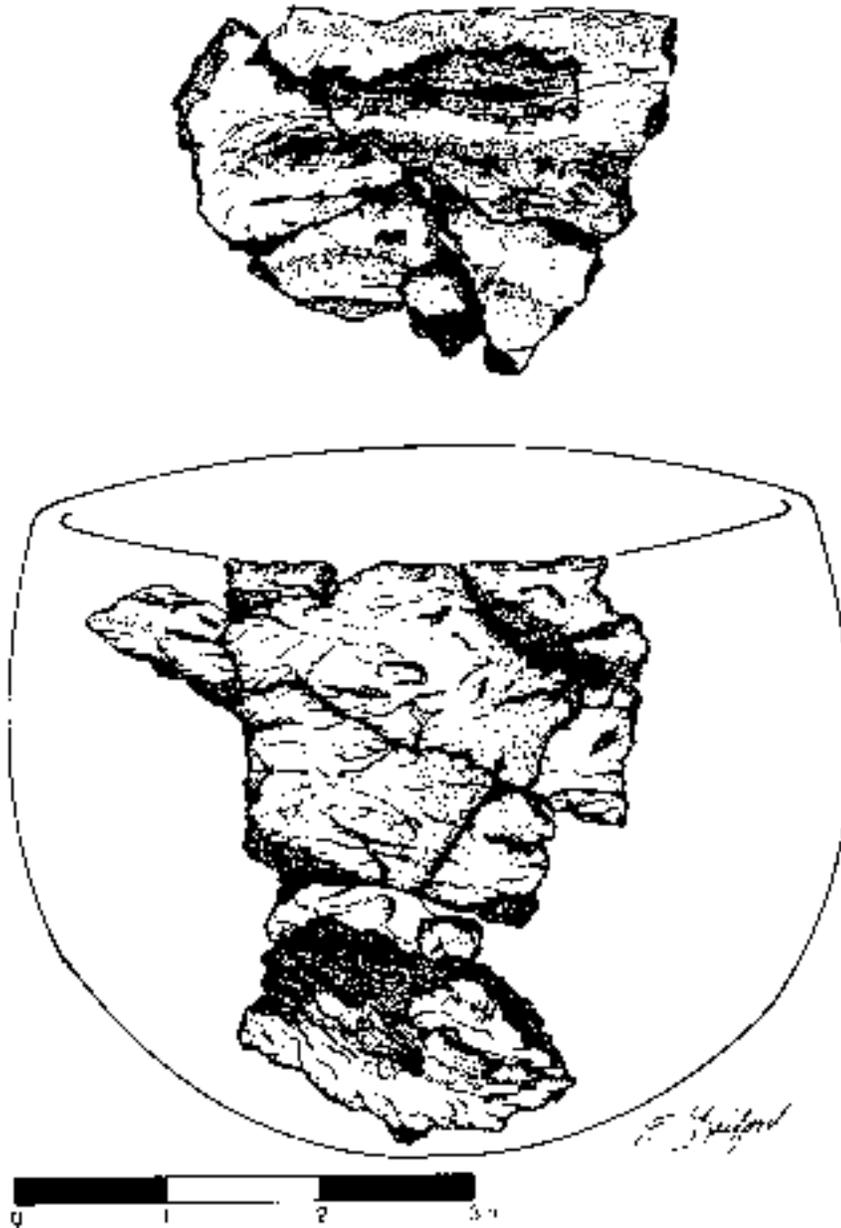


Figure 8. Sketch of Orange period pottery (courtesy of Evelyn Raiford, Historic St. Augustine Preservation Board).

riod altogether. However, the Transitional period appears to mark the beginning of cultural variations about 1200 or 1000 to 500 B.C. These can be recognized in the archaeological record as differences in ceramic styles and designs. The degree to which they represent other differences in lifeways is not clear. In fact, variation in ceramic decoration may not actually represent a cultural transition in eastern Florida (Milanich 1994; Miller 1998). From 1250-1000 B.C. sand began to be introduced along with plant fibers into the ceramics as temper, and the coiling method of manufacturing clay pots was first used (Sassaman 1993).

In addition to the emergence of ceramic traditions, the Transitional period has been characterized in the archaeological literature by the inception of limited horticulture. Horticulture preceded the early fiber-tempered pottery, which appeared in three areas of the southeastern United States between about 2000 and 1000 B.C. (Sassaman 1993).

A fiber-tempered ceramic variant known as Tick Island Incised was produced at the same time as Orange series ware and occurs in the Upper St. Johns River drainage area. The designs incised onto the exterior of Tick Island ware are curvilinear and incorporate small dashes or punctations. A typical design uses concentric circles and small dashes between the lines of the circle. This type is somewhat localized and is not typically found at sites outside of the Upper St. Johns area.

During the late Transitional period, more and more sand was added to the clay as a tempering agent. Eventually, this technique replaced the practice of using plant fibers as a tempering agent. Early sand and grit-tempered pottery in north Florida was produced by the Deptford culture. The other dominant pottery type that followed the fiber-tempered tradition is called St. Johns. St. Johns pottery relies on microscopic sponge spicules or exoskeletons as temper. Although some sand was added to this pottery, St. Johns ware lacks the fiber, sand, and grit temper that is typical of much prehistoric pottery. Deptford and St. Johns were produced at the same time and are often recovered in association with each other; however, the Deptford culture area is primarily to the north of Volusia County. DeBary is located in what was the St. Johns heartland.

The lithic assemblage of the Woodland period is similar to that of the Transitional period in that they had projectile point forms that overlap, and expedient tools were more prevalent than curated tools. Point types such as the Citrus and Hernando points are found in sites that date to the Woodland period. Other point types developed during the Woodland period, although quality of craftsmanship declined. For the most part Woodland point types are stemmed, though some triangular forms appear and persist into Mississippian times. Woodland point types commonly found in Florida include Broward, Sarasota, Taylor, Bradford, Ocala, Duval, Columbia, and Weeden Island points (Powell 1990). Flake tools and shaped tools continued to be made during the Woodland period, but the emphasis was still on an expedient flake tool technology.

ST. JOHNS CULTURES. The St. Johns cultural tradition of the East and Central region of Florida includes a distinctive ceramic tradition, the beginning of mound burial, and a semi-sedentary lifestyle. In the St. Johns culture area, cultural traits clearly changed through time, resulting from

WOODLAND PERIOD

different types of adaptations and different levels of social complexity. St. Johns people adopted and came to rely on maize, bean, and squash agriculture in the later pre-Columbian times and their social organization shifted from the band organization of hunter-gatherers to the chiefdoms observed by the first European explorers of northeast Florida (Miller 1998). The East and Central Florida region does not contain the fertile soils needed for the slash-and-burn agriculture practiced by peoples in the St. Johns heartland. Therefore, they and their Timucua descendants never practiced the intensive farming, which other groups employed to the west and in the Florida Panhandle. Although St. Johns people planted crops, they did not share the beliefs or the level of social complexity of inland southeastern cultures (Milanich 1998).

St. Johns pottery was produced from approximately 500 B.C. until European contact and slightly later (circa A.D. 1513 to 1565). St. Johns paste is chalky and surface treatment may be plain, checked-stamped, incised, painted, or cord marked. While this ceramic type is found across the peninsula, the St. Johns River drainage in northeastern Florida was the core area of the St. Johns culture. In East and Central Florida, the St. Johns culture grew directly out of the Orange culture. This is evidenced by the carryover of late Orange phase designs to early St. Johns period pottery. Within the St. Johns period there are two major sub-periods, I and II, which were separated at about A.D. 800 with the emergence of check-stamped pottery (Goggin 1952; Miller 1998). Within each of these sub-periods, there are several divisions.

St. Johns I. People of the St. Johns I culture (500 B.C. to A.D. 100) were foragers who relied primarily upon hunting, fishing, and wild plant collecting. During this time, the resources found near freshwater wetlands, swamps, and the coastal zones were typically the most heavily exploited. St. Johns I sites are often shell middens in coastal zones that contain St. Johns Plain and Incised pottery, and occasional Deptford ceramics as well. The earliest St. Johns pottery has a chalky paste, was formed using a coiling technique, and was commonly decorated with incising. Low sand burial mounds also appear for the first time during the St. Johns I period.

St. Johns Ia. At St. Johns Ia sites (A.D. 100 to 500), St. Johns Plain and Incised pottery continued to be produced and a red-painted St. Johns variant called Dunn's Creek Red was also made. Deptford and Swift Creek pottery were traded into northeast Florida from north central Florida and the panhandle. Exotic Hopewellian artifacts also occur in burial mounds after about A.D. 100. This is the first period where foreign materials appear in the archaeological record of the St. Johns culture area

(Miller 1998:85-86). High-status burials contained mica, galena, copper, animal jaws, ear spools, quartz, and animal effigies from the Hopewellian trade network (Milanich 1994). Weeden Island pottery has also been recovered from late St. Johns Ia sites.

St. Johns Ib. The St. Johns Ib period (A.D. 500 to 750) is similar to the St. Johns Ia period except that Weeden Island pottery is more common. During this period, St. Johns Plain and Incised wares and Dunn's Creek Red pottery were still produced. The majority of everyday ceramics were plain. As the St. Johns culture continued in northeast Florida, sand mounds continued to be used and grew in size as time passed.

St. Johns IIa. During the St. Johns IIa period (A.D. 750 to 1050), St. Johns checked-stamped pottery appears for the first time (Figure 9). As populations grew, the number and size of mounds and villages increased. The total number of recorded sites is greater for the St. Johns II period than the St. Johns I and shows increasing settlement of inland environments away from lagoons, streams and rivers. This indicates less dependence on riverine and coastal resources and suggests an alternative source of food. By A.D. 800 foreign nonutilitarian ceramics became common in burial mounds and only individuals of high status were buried within the mounds (Miller 1998). During the late St. Johns IIa times, late Weeden Island pottery was traded into northeast Florida and is sometimes recovered in sand burial mounds that date to this period.

St. Johns IIb. During the St. Johns IIb period (A.D. 1050 to 1513), check-stamped pottery continued to be produced and some Fort Walton and Safety Harbor culture ceramics were traded into northeast Florida. During this period, certain southeastern Mississippian traits such as limited horticulture and the use of flat-topped pyramidal mounds are evident (Milanich 1994:269-270). The Thursby mounds in Volusia County (8VO35 and 8VO36), the Shields Mound in Duval County and Mount Royal in Putnam County (8PU35) are examples of these large ceremonial sites along the St. Johns River. Of these, Mount Royal is the largest and most famous. It was at Mount Royal in the late nineteenth century that C.B. Moore found a copper plate with the "forked-eye" motifs of the Southeastern Ceremonial Complex of Mississippian period sites (Milanich 1994). C.B. Moore (1894) also recovered indirect evidence for agricultural practices in Volusia County from the Thursby Mound site (8VO36) in the form of clay, gourd, squash, and corncob effigies. Corncob-marked ceramics and cucurbit seeds and rinds were recovered from Hontoon

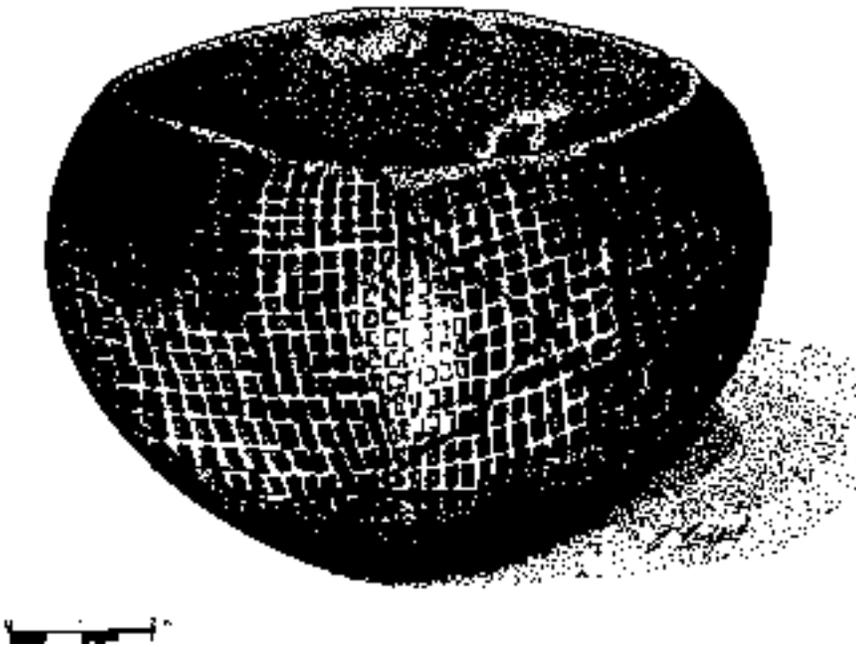


Figure 9. Sketch of St. Johns Check Stamped pottery (courtesy of Evelyn Raiford, Historic St. Augustine Preservation Board).

Island (8VO202) (Newsom 1987). The St. Johns IIb period ended in 1513, when Spanish explorers arrived in Florida and the lives of the Florida Indians changed drastically.

St. Johns IIc. The St. Johns IIc period (A.D. 1513 to 1565) is the period of first European contact or the protohistoric period and is characterized by the introduction of European artifacts. Items such as trade beads, non-aboriginal ceramics, metal hawk's bells, mirrors, and iron chisels and axes were recovered in burial mounds from this period. Native American artisans reworked metals such as copper, silver, and gold into aboriginal forms. These items were worn as jewelry and are interpreted as status markers for the native peoples. In Volusia County, the Hontoon Island wet site (8VO202) yielded Majolica ceramics and a copper coin that date to the sixteenth century. The shapes of native pots recovered at Hontoon Island also indicate European influences (Purdy 1987).

Early French and Spanish ethnohistoric accounts refer to native groups living in the St. Johns River drainage extending east to the Atlantic coast and as far north as southeast Georgia. Milanich (1995) refers to the Tumucua speakers of this area as the colonial-period Eastern Tumucuan. Chief Saturiwa and allied chiefs dominated the area from his village near the mouth of the St. Johns River south

**ACCULTURATIVE
STAGE**

along the Atlantic coast to the village of Chief Seloy, which was the later site of St. Augustine. Other allied eastern Tumucua chiefs, named Emoloa, Casti, and Malica, lived west of Saturiwa's village along or near the St. Johns River (Figure 10) (Hann 1996). Further south along the St. Johns River was the territory of Chief Utina, a chief whose power and influence equaled that of Saturiwa and whose territory extended to the area just north of Lake George in Putnam County. Another group affiliated with Chief Utina lived along the Oklawaha River in an area extending into Lake County, which is sometimes referred to as Ibiniyuti.

Other Eastern Tumucuan groups who did not live along the St. Johns River also are mentioned in sixteenth century accounts. The Eclavou, Onachaquara and Omittagua lived east of the river, and the Astina lived to the west (Hann 1996; Milanich and Hudson 1993). The Ais were a native group of hunters and gatherers living to the south of Timucuan along the Atlantic coast. Ais territory extended along the Indian River inland. Ais lived primarily off marine resources. Artifacts within the Ais region bear affinities to the St. Johns and Glades traditions (Milanich and Fairbanks 1980; Rouse 1951). While ethnohistorical accounts offer glimpses into the indigenous populations of East and Central Florida from this period, the native populations were decimated by the mid-eighteenth century.

Based on the review of archaeological literature, surveys and recorded sites in Volusia County and the DeBary area, Table 1 lists



Figure 10. A 1591 DeBry engraving of Chief Saturiwa and his allied vassal chiefs in 1564 (from Fundaburk 1957:Plate 11).

the possible periods of occupation for prehistoric sites within the boundaries of DeBary.

Table 1. Prehistoric Periods of the DeBary Area

| | |
|----------------|----------------|
| Paleoindian | 12,000-9000 BP |
| Early Archaic | 9000-7500 BP |
| Middle Archaic | 7500-5000 BP |
| Late Archaic | 5000-2500 BP |
| Woodland | 2500-1200 BP |
| Mississippian | 1200- AD1513 |
| Protohistoric | AD1513- AD1565 |

Chapter 4. History of the DeBary Area

This overview of the history of northeast Florida is divided into general historic cultural periods based on historic and archaeological literature, maps and manuscripts of northeast Florida, Volusia County, and the City of DeBary. Interviews and accounts from people with knowledge of the history of the area including Jesse Beall, Historian for the City of DeBary, also have been incorporated into the culture history.

FIRST SPANISH COLONIAL PERIOD (A.D. 1513-1763)

The first recorded European to reach Florida was Juan Ponce de Leon who landed on the East Coast near St. Augustine in 1513. Panfilo de Narvaez followed him in 1528, landing near Tampa Bay and trekking into the interior of Florida reaching the Apalachee region of west Florida. Hernando de Soto landed near Tampa Bay in 1539 and proceeded to march inland through Florida in search of gold. The de Soto trail, as reconstructed, headed north from the village of Ocale (approximately 25 miles southwest of present day Ocala) to the west of Gainesville, in the area of the San Felasco Hammock that was inhabited by Potano and Utina bands of Timucua Indians. From there, de Soto continued north into Georgia (Milanich and Hudson 1993). On his trek through Florida, de Soto did not see the St. Johns River, but the devastating secondary epidemiological and psychological effects of the expedition on virtually all of the southeastern native populations were recounted later in French and Spanish documents in the early 1560s (Hann 1996).

On May 1, 1562 French Protestants under the command of Jean Ribault found and explored a large river in the northern reaches of the Florida peninsula (Figure 11). Within a year the French successfully established Fort Caroline on what is today the St. Johns River, which they called the River of May. In 1564 an additional force of three hundred French Protestants joined the garrison already in place, and a foothold for the French was secured on the Florida mainland. This French presence created a strong threat to the Spanish shipping that had to follow the Gulf Stream and pass through the Bahamas Channel between the mainland and the Bahama Islands (Franklin and Morris 1996).





Figure 11. 1591 DeBry engraving of Captain Ribault with Timicua Indians near the mouth of the St. Johns River (from Fundaburk 1957:Plate 8)

The colony suffered from lack of supplies and poor relations with the Utina Indians. Jean Ribault was sent from France with supplies and a contingent of 600 soldiers and settlers to reinforce the fort. The French and Spanish were in direct competition for Florida and the Spanish king, Phillip II, sent Admiral Pedro Menendez de Aviles to destroy Fort Caroline and reclaim the land for Spain (Tebeau 1971).

Although there had been previous attempts by the Spanish to establish colonies on the mainland, the French presence in Florida provided an impetus for another, more determined effort to secure a base in Florida. Menendez established a base to the south of St. Augustine and continued to periodically attack the French. In response, Ribault formulated a plan to attack St. Augustine from the sea and organized a group of French ships to carry this out. The ships ran aground during a hurricane at Matanzas Inlet to the south of St. Augustine. With 500 soldiers, Menendez took advantage of the loss of the French fleet and attacked the poorly defended colony at Fort Caroline on September 20, 1565. Almost all of the settlers were massacred except for approximately 60 women and children who were captured (Gannon 1993). About fifty other settlers escaped Menendez and sailed for France. Fort Caroline was claimed by the Spanish and renamed San Mateo (Milanich and Hudson 1993).

Menendez then turned south and engaged the shipwrecked French fleet, Ribault among them, at Matanzas Inlet. The French surrendered, but Menendez, believing they were heretics and faced with the problem of caring for about 350 prisoners, killed all but those professing to be Catholic or musicians. To secure the northern boundaries of Spanish La Florida against any further invasions from other colonial powers, a small town was settled at Santa Elena on the coast of South Carolina. The St. Augustine settlement was maintained and a string of Spanish missions were established west across Florida towards Tallahassee (Tebeau 1971).

Menendez went on to found the city of St. Augustine in 1565. Chosen for its strategic location, St. Augustine existed as a military outpost and as a base for missionaries, who worked at converting the native population to Catholicism. Military operations took place in the form of land patrols to keep other colonial powers (such as France and Britain) from infringing on the Spanish claim. Spanish military ships also used St. Augustine as a base of operations for protecting the gold-laden ships that passed through the Florida Straits en route to Spain from Mexico and South America.

In an effort to convert the Potano Indians and recruit Native American labors for Spanish projects such as the construction of the fort in St. Augustine, Menendez instituted a mission system across north Florida in 1565 (Hann 1996; Milanich and Hudson 1993). Timucuan villages were targeted for the construction of missions, and accounts of both mission and Indian life were included in Spanish documents throughout the seventeenth century. These accounts mention skirmishes between native groups and the Spanish, disease epidemics, and the decline of indigenous populations (Gannon 1965; Johnson 1991; Milanich and Hudson 1993).

In 1696, the Jonathan Dickins family was shipwrecked near the Jupiter Inlet and encountered the Jeaga and Ais tribes. These groups were not fluent in Spanish and were living independent of colonization or Christianity. According to Dickinson's account, they appeared to be allied to the Spanish to the extent that the shipwrecked group pretended to be Spanish to receive better treatment (Andrews and Andrews 1975; Rouse 1951). Shipwrecks apparently were common along the Ais-controlled coastline. The Ais salvaged the wrecks and reportedly killed the survivors (Higgs 1942). However, the survivors of the Spanish Plate Fleet of 1715 were spared by the native peoples, after their ships were destroyed by a hurricane. Excavations of the McLarty Site (Burgess and Clausen 1976) and the Higgs Site (Smith 1949) indicate a cooperation between the Ais and the survivors of the disaster (Bellomo 1994).

As the number of Timucuan Indians living in this region of Florida had sharply declined since the arrival of the Spanish, Guale, and Yamasee Indians from the Georgia coast and Apalachee Indians from western Florida began to move into the area around St. Augustine during the 1600s. The efforts to Christianize the Timucua, Guale, and Apalachee Indians increased through the mission system. By 1684 the English settled in Charleston, South Carolina, and influenced the Indians to overthrow the Spanish in Florida (Tebeau 1971).

In their effort to take the town of St. Augustine, the English destroyed the missions north of the city in 1702, but failed to take the stone fort, although they did burn St. Augustine. St. Augustine was rebuilt, however, and by 1708 it was the only remaining Spanish mission in Florida.

After continual struggle for control of the coast, Spain ceded all of Florida to England in the Treaty of Paris dated 1763. The British split Florida into two parts: East Florida, with its capital in St. Augustine, and West Florida, with its capital at Pensacola. While the Spanish cession caused an immediate rush from Carolina for land to use for rice cultivation in the areas above the St. Marys River, the area south of the St. Marys was for the most part ignored, since it was characterized as “dismal swamp” (Chesnutt 1978). Yet the area was full of timber to be harvested and cultivated for the production of naval stores.

The American Colonies declared their independence from British rule in 1776. According to Coomes (1975), Georgia and South Carolina required their citizens to take a strict oath of loyalty to the Revolutionary cause, forcing loyalists to seek shelter in the Province of East Florida.

The native population had been ravaged by war and disease, which left much of Florida uninhabited by Native Americans by ca. 1750. This void allowed the Lower Creeks from Alabama, Georgia, and the Carolinas to migrate into Florida. In the field notes accompanying de Brahm’s 1765 map of Florida (Figure 12), he refers to these migrating groups with the Spanish term *cimarrone*, or “wild” and “runaway”. The term “Seminole” is thought to have derived from this reference (Fernald and Purdum 1992).

On the banks of the St. Johns River in a town west of St. Augustine called Picolata, fifty Lower Creeks ceded the territory east of the St. Johns River to the British on November 18, 1765. After

BRITISH PERIOD (1763-1783)

the Treaty of Picolata, the west bank of the St. Johns River became known as the “Indian Shore” and the native peoples of the North and Central Region of Florida were increasingly referred to as Seminoles by travelers, government officials, and traders (Weisman 1989, 1999).

Beginning in 1767, Seminole settlement radiated across the Florida landscape (Weisman 1989). The Seminoles prospered in Florida raising cattle and growing their traditional crops of corn, beans, squash, and tobacco, as well as crops such as sweet potatoes and melons borrowed from the Spaniards (Fairbanks 1973). During this period, the Seminoles established permanent towns from the Apalachicola River to the St. Johns River. A Seminole component was found at the DeLeon Springs site (8VO30) in Volusia County. Among the artifacts recovered were a carved deerbone hairpin, a Spanish olive jar sherd, and a Kaskaskia point. Dunbar (1981) argues that DeLeon Springs may be one of the largest and earliest Seminole sites south of St. Augustine.

Instead of the mission system of the Spanish, the British set up several trading posts in Florida. Seminoles traded deer, wild cattle, and furs in exchange for guns, iron tools, cloth, and a variety of ornamental jewelry (Fairbanks 1973; Weisman 1989). During this time, runaway black slaves from the Carolina colonies fled to Florida and sought refuge either in a black colony outside St. Augustine, where they were to become farmers and occasionally soldiers, or in the Seminole settlements in the interior of the colony. The Seminoles helped the runaways form their own settlements, and often prevented slavecatchers from capturing them (Fairbanks 1973).

In 1771 Bernard Romans surveyed the St. Johns River and was followed by William Bartram in 1773. Bartram traveled along the river to an area just south of Salt Lake (Cabell and Hanna 1943; Bartram 1791). Bartram’s famous observations of the St. Johns River and of Seminole Country were detailed, though sometimes exaggerated, accounts of the flora, fauna, and native peoples in the area. Following Bartram, William deBrahm surveyed British East and West Florida from 1766 to 1770. DeBrahm named modern Lake Monroe after the Grant family, which was given approximately 20,000 acres on the eastern shore of the lake by the British (Figure 13). However, no settlements were established on the lake during this period, and the name was not maintained (Francke et al. 1986). Plantations were established along the banks of the St. Johns River on the lower portions of the river around Jacksonville, Palatka, and Orange Park. Many of these were abandoned after the British Period and quickly reoccupied by the Spanish and Spanish loyalists.



Figure 12. DeBrahms 1765 Map of Florida (courtesy Florida State Archives).

At the Revolutionary War's end, the British defeat at the hands of the American colonists saw a new Treaty of Paris, which returned sovereignty of Florida to the Spanish and began the Second Spanish Period. Many large land grants were awarded along the fertile lands of the St. Johns River north of present day DeBary. However, most of the grants awarded to Spanish loyalists to the south were unoccupied during this period (Department of Natural Resources 1849). Near the end of the Second Spanish Period Moses Levy purchased more than 50,000 acres of land around the St. Johns River from grant holders. Levy established a plantation called *Hope Hill* on the west bank of the river near present day Astor and raised sugar cane (Caball and Hanna 1943).

With the return of the Spanish to East Florida came the attempt to reassert Spanish religious and cultural dominance in the

**SECOND SPANISH
COLONIAL PERIOD
(1783-1819)**

region, which had adopted a multi-cultural character under British rule. Although St. Augustine returned to its position of a Spanish trade entrypoint, it was no longer an essential military position guarding the route of Spanish shipping returning to the Old World. Trade also took on a more international aspect, with more vessels entering the harbor under foreign flags than under the flag of Spain (Griffin 1983). The influx of foreign nationals into the north Florida region likewise contributed to the continued deterioration of Spanish dominance in the area, along with a growing sentiment that the new United States should control Florida (Franklin and Morris 1996).

Indian refugees from the Creek War of 1814 fled to Florida and almost doubled the Seminole population. The new Seminoles were mostly Upper Creeks, originating from central Alabama, and spoke the Muskogean language. The Florida Seminoles spoke the Mikasuki language (Fairbanks 1973). Border conflicts between the Seminole and white settlers increased and culminated in 1817 with the First Seminole War. General Andrew Jackson, known to the Seminoles as Sharp Knife, invaded Seminole territory killing Indians and burning houses. This military effort was largely responsible for Florida becoming a United States Territory with Andrew Jackson as a military governor.

Florida became an U.S. territory in 1821. Landowners who had been granted land under Spanish rule were permitted to keep their lands. Governor Jackson organized the Territory of Florida into two counties, Escambia and St. Johns, with the legislative council meeting in Pensacola in 1822, and in St. Augustine in 1823 (Tebeau 1971). The First Seminole War ended with the Treaty of Moultrie Creek in 1823, which stipulated that the Seminoles would move to a reservation in the middle of Florida. This led to an increased Seminole presence in the East and Central Lakes Region. The Mizell site (8OR14) yielded a ceramic assemblage from which the Seminole pottery type Winter Park Brushed was named (Goggin 1958). Ceramics of European manufacture included sherds of blue shell-edged pearlwares, transfer-printed wares, and kaolin pipe fragments. The site demonstrates the Seminoles' use of lakes in the central Florida Lake district for animal husbandry and plantation agriculture (Weisman 1989).

During the territorial period, methods of transportation to connect the coasts to the interior became a priority. In addition to road improvements and new road construction, travel increased up inland rivers through the harness of steam power. There was con-

**TERRITORIAL TO
CIVIL WAR
PERIOD
(1821-1865)**

stant consideration for a canal to be cut through the state. Also, rail routes began to crisscross Florida.

The Payne's Landing Treaty of 1832 required the Seminoles to relinquish their land within three years and move onto reservations in the western United States. The Seminole leader Osceola killed Chief Charley Emathla who had agreed to move his town to Oklahoma. When the three years had expired, 180 Seminoles attacked a column of 108 men led by Major Francis Dade. The attack took place near the Withlacoochee River near present-day Bushnell while Dade and his men were en route from Ft. Brooke (present-day Tampa) to Ft. King (near present-day Ocala). The Seminoles left only three men alive at the battle and they died within a matter of weeks from their wounds (Chamberlin 1995; Covington 1993). With minimal Seminole casualties, the raid was an overwhelming victory. The battle demonstrated to the U.S. Army that the Seminoles, when organized, represented a considerable military force. In addition, the victory resulted in the capture of over one hundred U.S. Army muskets by the Seminoles.

On the same day as the attack on Dade, Osceola led an assault on Fort King. These incidents sparked the Second Seminole War. During this war, military outposts were established in central Florida including Fort Christmas, Fort Mellon, Fort Lane, Fort McNeil, Fort Gatlin, and Fort Taylor in the St. Johns basin (Davidson 1835-37). Nine named steamboats running on the St. Johns River in 1837 were used to service Fort Mellon on the southern shore of Lake Monroe, transporting troops, provisions, and removing captive Seminoles to Fort Marion (Castillo de San Marcos) in St. Augustine. The United States made the first extensive logistical employment of steamboats in warfare, contracting a total of thirty-nine vessels during the Second Seminole War (Francke 1977:51-58).

In April of 1836 General Winfield Scott, the second commander of the Army of the South in the Second Seminole War, reconnoitered the St. Johns River aboard the steamboat *Essayons*. On an 1836 map in the *American State Papers*, the "New Depot of Gen. Scott" records the point that Scott identified as an Indian crossing about eight miles below the southern end of Lake Monroe. Though it was never fortified, Scott's depot was referred to as Fort Florida (Figure 13) (Cabell and Hanna 1943; Francke 1977; Francke et al. 1986).

In 1837, the same year that Osceola was taken prisoner under a white truce flag, Lt. Colonel A. C. W. Fanning was sent up the St.

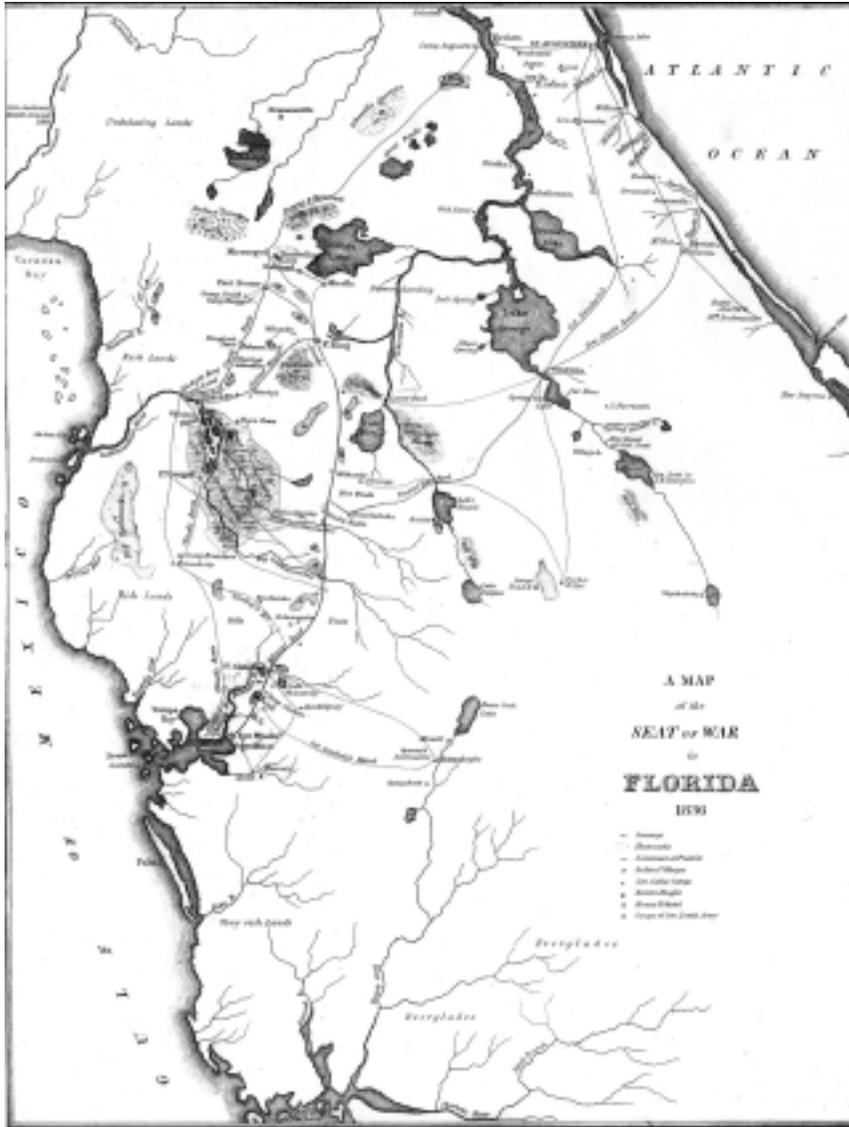


Figure 13. Fort Florida designated as New Depot of Gen. Scott on 1836 War Seat Map of Florida (courtesy Florida State Archives).

Johns River with his men. He traveled on the steamer *Santee* in search of the Seminole leader King Phillip. On February 8, 1837, they engaged the Seminoles in a skirmish on Lake Monroe. Captain Charles Mellon was killed in the fight and Camp Monroe, which was later fortified, was named Fort Mellon in his memory (Francke 1977; Sprague 1964).

The federal forces were confused by the Seminole raid-and-run tactics and were unfamiliar with the wooded and swampy terrain. The war spread to the south, in the vicinity of Lake Okeechobee, in the Everglades. After Osceola was taken prisoner, he was brought to Fort Marion in St. Augustine. His fellow Seminole prisoners

starved themselves until they were able to escape through their cell windows. Osceola, however, contracted malaria and later died in Fort Moultrie, South Carolina (Nolan 1995). The war continued until 1842, and almost 4,000 Seminoles were shipped to the western territories. Hundreds more were killed in battle or died awaiting deportation (Weisman 1999). In total, the Second Seminole War cost the United States an estimated \$40,000,000 and the lives of 1,500 troops. The Third Seminole War lasted from 1855 to 1858. More Seminoles were deported by the U.S. Government, leaving only about 200 people to continue living in south Florida.

In 1845 Florida became a state, though by 1861 it would again leave the Union. The area of the St. Johns River was not settled until the middle of the nineteenth century following the close of the Third Seminole War. American settlers moved into the area of the St. Johns River. Steamboats traversed its waters, and sugar cane was grown although on a limited scale compared with the earlier grand plantations before the Second Seminole War. However, citrus growing was expanded on plantations, and cotton cultivation continued (Griffin 1999).

The community of Enterprise was established in 1841 by Cornelius Taylor, a former timber agent. Enterprise was built at the abandoned lakeside site of Fort Kingsbury, where Taylor also planted citrus groves (Francke et al. 1983; Schene 1976). In 1843 Enterprise was the county seat of Mosquito County (Figure 14), which changed its name in 1845 to Orange County. During the 1840s and 1850s shallow-draft steamboats delivered mail from Palatka to Enterprise, where a post office was established in 1845 (Schene 1976).

By the 1850s Jacob Brock began transporting invalids up the St. Johns River to Enterprise, which had become popular as a health resort due to its sulfur springs. He built the famous Brock House in 1852, completed a steamboat wharf in front of the 100-room hotel, and operated the first regular line of Steamboats to Lake Monroe from Jacksonville. The Brock Line of steamboats included the *Hattie*, *Darlington*, *David Clark*, *Enterprise*, and *Floridance*. In 1854 the area of Orange County east of the St. Johns River became Volusia County and Enterprise became the seat of the new county. In 1855 Governor Broome appointed Elijah Watson of Enterprise as the first sheriff of Volusia County (Francke et al. 1983). The 1860 census lists four towns in Volusia County: Volusia, Enterprise, New Smyrna, and Sand Point (Dunn 1998; Schene 1976).

During the Civil War, Florida joined the Confederate States of America. Small militia bands formed in 1861 when Florida se-

Coastal communities in Florida were raided and occupied at will by Union forces. Fortunately there were no military objectives in the interior to draw attention, and no invasion occurred until 1864 (Tebeau 1971). Jacksonville was invaded and abandoned four separate times. In April of 1862, as the Confederates withdrew after the first invasion, they destroyed eight of their own sawmills, along with four million board feet of lumber, an iron foundry, and an ironworks. Retreating Confederate forces followed the tracks inland towards Baldwin, nineteen miles west of Jacksonville, where three railway lines converged. To prevent it falling into enemy hands, the Confederate troops pulled up several miles of railroad track along the route (Tebeau 1971).

In 1864, the St. Johns River became an important part of the Union strategy to create the South Atlantic Blockading Squadron. Under the command of Captain George B. Balch, the St. Johns River naval forces set out to capture some small Confederate steamers in order to navigate and explore areas where vessels with heavier drafts could not go. The 117-foot Union vessel *Columbine* captured the smaller 81-foot sternwheeler *General Sumter* in Lake George on March 12, 1864 (Figure 15). Immediately the Union-controlled *General Sumter* set out to capture the *Hattie Brock*, which was hauling 150 bales of cotton for export by the Confederacy. They successfully captured the 131-foot *Hattie Brock* in Lake Monroe on March 14, 1864, and headed downriver towards Enterprise with the wide sidewheeler in tow.

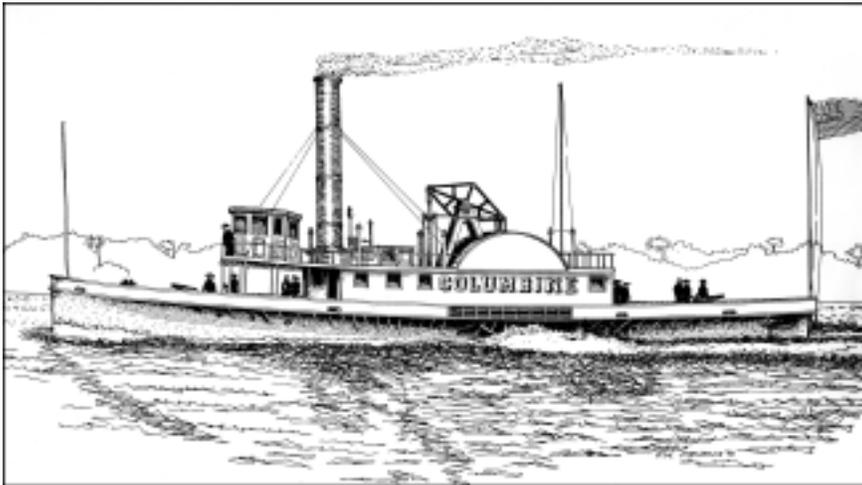


Figure 15. Sketch of the Union Steamer *Columbine* (courtesy Jesse Beall, DeBary City Archives).

At the landing dock of the Brock House, they supplied their boats with wood fuel and encountered Miss Hattie Brock after whom the captured boat had been named. According to an account published in the New York *Tribune* on April 1, 1864, from the verandah

of the Brock House, Miss Brock expressed her indignation and grief at the capture of her namesake by the Yankees. The marines were glad to get away as soon as their boats were supplied according to the account. They also took with them two black males and three black females from their stop at Enterprise and 2,000 pounds of sugar from a refinery about two miles farther downriver (Francke 1991; Francke et al. 1986). According to Arthur Francke (1991), a former historian for DeBary Hall, Inc., and member of the Volusia County Historical Commission, the *Hattie Brock* was towed for a little over six hours to the vicinity of Watson's Landing located at the lake end of modern Maple Avenue on Lake Monroe. Francke also locates the site of the sugar refinery farther downstream within the modern city limits of DeBary on DeBary Creek.

Ensign Sanborn, in command of the *Columbine*, decided to destroy the refinery and succeeded in destroying the greater portion of the works and all but one of the sugar-processing kettles. By impressing blacks into service, they were able to move the sugar and kettle by wagons to the river and load it aboard the *General Sumter*. The ruins of the refinery were left behind to avoid an encounter with an approaching force of 30 of 40 confederate guerillas. The ruins of a sugar mill on DeBary Creek are marked on an 1871 map of the Lake Monroe area (the same year DeBary Hall was built) and on an 1882 map of DeBary Hall Property. An orange grove surrounding the "Watson Place" is also marked on the 1882 map just west of a trail to Watson's Landing on Lake Monroe (Francke 1991).

During the fourth invasion, Union troops again entered Jacksonville and moved towards Baldwin along the rail track route. Confederate forces withdrew along the route of the advance, and finally a definitive battle was fought at Olustee. This resulted in Confederate troops retaining control of Florida's interior, which they maintained until the end of the war.

After the war, reconstruction proceeded in Florida at a decidedly slow pace, but by the end of the nineteenth century, Florida's population had increased to approximately 400,000 people (Marth and Marth 1988). This was due to homesteading acts as well as the citrus, naval stores, lumber, cattle, phosphate, and tourist industries.

In 1871, General Henry R. Sanford bought 12,000 acres near modern Mellonville on the upper St. Johns and experimented with growing various kinds of fruit trees (Cabell and Hanna 1943). During the same year, Samuel Frederick deBary, a prominent wine and Mumm's Champagne importer, businessman, and sportsman from

**RECONSTRUCTION
TO SPANISH-
AMERICAN
WAR PERIOD
(A.D. 1865-
1898)**

New York City, built a mansion known today as DeBary Hall. Its Italianate architecture is typical of southern plantation houses of the era. DeBary became interested in Florida through guidebooks such as the *Rambler*, which featured Jacob Brock's hotel at Enterprise, the Volusia County seat until 1888. DeBary ran a citrus and orange plantation on the lakeside property and wintered at the mansion until his death in 1898 (Figure 16) (Francke 1991; Francke et al. 1986).



Frederick DeBary and friends at DeBary Hall

Figure 16. Fredrick DeBary and friends at DeBary Hall in 1878 (courtesy Jesse Beall, DeBary City Archives).

In 1875 DeBary purchased his first steamboat the *George M. Bird*. He used the boat to transport his horses and dogs on hunting expeditions and to transport his fruit to market. By 1876 he had established the DeBary Merchants Line, which began transporting the mail in 1880 and later merged with the Baya Line in 1883. The DeBary-Baya Merchants Line operated a total of 13 steamers including the *Frederick DeBary* and the *Fannie Dugan* (Francke 1987; Francke et al. 1986).

The DeBary-Baya Line bought the 12-year-old *Fannie Dugan* in 1884 (Figure 17). Already over-aged for a wooden vessel, the *Fannie Dugan* received new boilers and new wheels, then served as the temporary replacement for the *Frederick DeBary* which had burned to the waterline in 1883. The 165-foot *Fannie Dugan* was abandoned on the north bank of DeBary Creek just below DeBary Hall in 1885 and

salvaged in 1886. The large bell was transferred onto another of the DeBary steamers called the *City of Jacksonville*. A crankshaft remained with the wreck until it was removed in the 1960s. It is on display at the nearby Blue Spring State Park (Francke 1987).



FANNIE DUGAN

Figure 17. The Steamship *Fannie Dugan* (courtesy Jesse Beall, DeBary City Archives).

In 1876 Luther Caldwell bought Jacob Brock's Enterprise property, and invested heavily in the formation of the Atlantic Coast, St. Johns, and Indian River railways. During the 1880s, iron was shipped via steamboats for the construction of the Indian River Railroad and for the Enterprise to Titusville Railroad. Indian River citrus was shipped along the rails terminating on a rail-pier between Broadway and present-day Providence Boulevard in Enterprise, where steamboats were loaded. From 1880 to circa 1890, Fort Florida was a steamboat landing and freight dock (Figure 18). Situated near a shell mound on the west bank of the St. Johns River, Fort Florida lies across the river from the mouth of the Wekiva River and is located on private property near the Fort Florida Road through present-day DeBary (Francke et al. 1986).

Freezing temperatures in northern parts of Florida in the late nineteenth century encouraged the development of the citrus industry in south Florida. Frederick DeBary's citrus grove that was planted from the DeBary Mansion to DeBary Creek froze in 1894 and again in 1895 (Dreggors and Hess 1989). Growers began the long process of converting the south Florida swampland to farmland. Major railroads were constructed throughout the state during this time. The railroads built

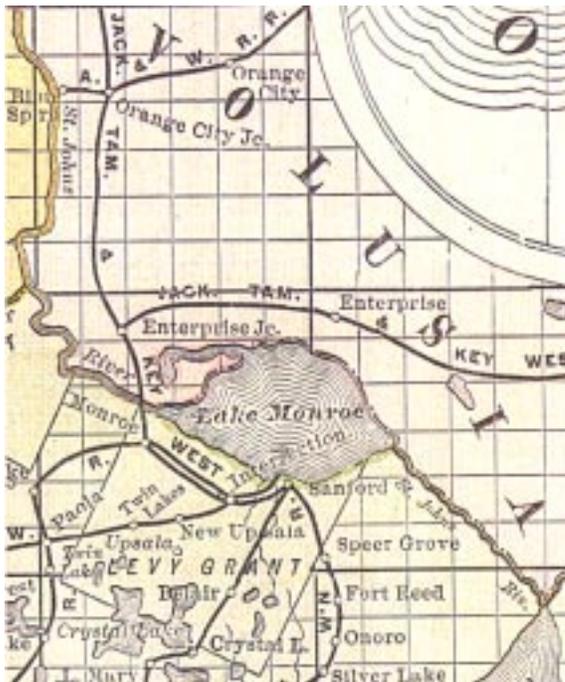


Figure 18. Steamboat landing and freight dock at Fort Florida in DeBary (courtesy Jesse Beall, DeBary City Archives).

by Henry Plant, William Chipley, and Henry Flagler opened up previously undeveloped areas of the state.

In 1887 the Plant System gave access to Jacksonville on the Jacksonville Tampa & Key West Railroad from a spur connecting the City of Enterprise to the Enterprise Junction located in present-day DeBary. Enterprise Junction was later referred to as Benson Junction and functioned as a connecting point between the north-south mainline between Jacksonville and Orlando

and a branch line of the Florida East Coast connecting with the main line near Titusville (Figure 19).



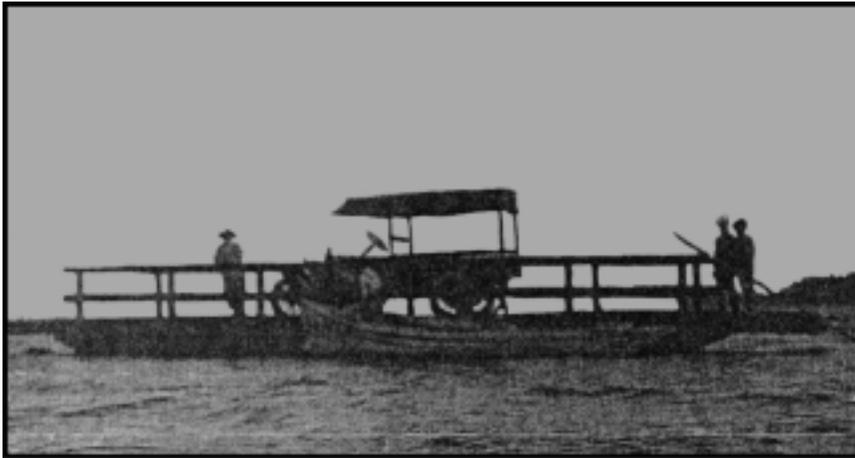
The Florida East Coast branch line was abandoned in the 1950s and the railroad junction designation was removed along with the railroad tracks in the 1970s (Francke et al. 1986).

Figure 19. Enterprise Junction and nineteenth-century railways in Volusia County. (courtesy Florida State Archives)

**SPANISH-AMERICAN
WAR TO CITY
INCORPORATION
(A.D. 1898-1993)**

In 1898, Tampa served as the staging point for the United States (including Teddy Roosevelt's Rough Riders) during the Spanish-American War. At the turn of the century, Governor Napoleon Bonaparte Broward brought Progressive politics to Florida, calling for improved education, health standards, natural resource protection, development of south Florida, and prison reform, among other issues. Social change occurred rapidly in Florida in the early twentieth century. Electrical and telephone service reached many parts of the state, and commercial goods were more accessible (Gannon 1993). The early twentieth century also saw the beginning of Prohibition. Florida's geographical location and miles of coastline made it very attractive to smugglers bringing liquor from the Bahamas and other Caribbean islands (Gannon 1996).

The Valdez area of Volusia County became known as North Monroe and was pioneered by Zeke Stafford in 1911. Stafford operated a launch-lighter ferry, which ran from the river end of Old Monroe Road to the present day I-4 bridge at the outlet of Lake Monroe (Figure 20). The Monroe-DeLand Ferry continued until a wooden



Ferry, with boat beside it -- Lake Monroe, Florida -- about 1916

Figure 20. Ferry transporting a motorcar across Lake Monroe ca.1916 (courtesy Jesse Beall, DeBary City Archives).

drawbridge was built across the same area in 1916. Ferries and bridges were primarily a response to motorcars, which replaced the steamboats as the transportation of choice in Volusia County. Stafford then operated the hand-rotated crank turning draw mechanism and collected the 50-cent toll charged each way. His house was located midway across the bridge which had a first floor under the bridge with a kitchen, bedroom and dining room (Figure 21). When water was too high, a second floor with a kitchen, a living room, a bathroom, two bedrooms and an office

were used exclusively. The first Monroe Bridge continued to operate until the construction of the present US 17/92 bridge was completed in 1933. With the advent of DeBary in 1948, the vicinity of North Monroe became known as South DeBary (Francke et al. 1986).



Figure 21. The first Monroe Bridge was operated by a hand-rotated crank turning draw mechanism (courtesy Jesse Beall, DeBary City Archives).

For Florida, the 1920s were a time of boom and bust, both fueled by real estate and land development. Swelling property prices and land values fed booms in transportation, construction, and banking. The state became a desirable vacation and retirement destination. In 1925, the Ox Brush Fibre Company moved from its original location in Sanford to Benson Junction in DeBary (Figure 22). It successfully operated within the city limits of DeBary and at one time was the largest producer of



brushes in the United States. The brush company, which produced brushes from cabbage palm fibers, also included seventeen employees' houses and supported a grocery store and post office (Figure 23). The plant finally closed in the 1970s (Dreggors and Hess 1989; Francke et al. 1986).

In 1926, Florida's economy collapsed and bank failures became daily occurrences. Two major hurri-

Figure 22. Photograph from the Ox Fibre Brush Company (courtesy Jesse Beall, DeBary City Archives).

canes in 1926 and 1928 and the arrival of the Mediterranean fruit fly in 1929 complicated matters. Despite the blow to the citrus industry, agriculture (fruit, truck farming, cotton, corn, and cattle) remained the economic mainstay of the state. Although real estate and tourism rebounded slightly towards the end of the decade, the forward momentum was halted by the stock market crash of 1929 (Gannon 1996).



Figure 23. Post Office at Benson Junction ca.1945 (courtesy Jesse Beall, DeBary City Archives).

In sharp contrast to the glamorous lifestyles of the wealthy on Florida's coasts, African-American life in Florida for the first half of the twentieth century was defined by political and social repression (Figure 24). Blacks were kept from voting by the Poll Tax and all-white primaries. The turpentine industry imposed a type of forced labor on many black workers (Gannon 1993). Black workers found jobs in DeBary at the Ox Fiber Company in DeBary during the early part of the century.



Annual fish fry -- Ox Fibre Company -- held at Big Whirl on the St Johns River -- off Ft. Florida Road
Lady in front with purse is Dottie Dechert **hopefully we have the name spelled correctly

Figure 24. Company picnic at the whirl on the St. Johns River (courtesy Jesse Beall, DeBary City Archives).

Although New Deal politics and tourism dollars helped during the Depression of the 1930s, Florida's economy benefited from the onset of World War II. Its temperate climate led to its extensive use for training troops, and it was not unheard of to spot German submarines off the Atlantic coast. The development of the highway system that accompanied this military growth contributed to a boom in tourism after the war ended. Industry and agriculture also rebounded during the 1940s. Both migrant labor and labor unions became more common (Gannon 1993).

Settlement in DeBary was sparse until after the Second World War when Florida Power and Light constructed a generating station near Benson Junction on the north side of the St. Johns River. Until the early 1940s members of the DeBary family used DeBary Hall as a winter residence. In 1947 Plantation Estates, Inc., purchased a large area which was formerly part of the holdings of the DeBary estate. Much of this area to the east of present US 17/92 was platted and sold for residential development.

Like residents of the DeBary area through the centuries, local people fished and hunted along the St. Johns River and in the area of



Figure 25. Prehistoric Florida residents killing alligators (DeBry 1591, in Fundaburk 1957).

the fish market for 30 cents a pound. In addition to commercial fishing, Beall found alligator hunting a good but dangerous way to supplement his 65 cents an hour wage from the Ox Fibre Brush Company (Figures 25 and 26)(Ste. Claire 1998).

Lake Monroe in the early part of the twentieth century to supplement their incomes. Jesse Beall recalls running a catfishing outfit on the St. Johns River in the 1950s. Beall often took some of his catch home for supper but sold most of the catfish at



Figure 26. Modern Florida resident killing alligators on the St. Johns River (courtesy Jesse Beall, DeBary City Archives).

In the second half of the twentieth century, Florida has experienced a tremendous influx of population from within the United States and from other countries, including Cuba and Haiti. Cape Canaveral on the Atlantic coast has been the site of many historic advances in space exploration. Tourist attractions bring millions of visitors from around the world to Florida every year. Industry and agriculture continue to thrive in Florida today.

Most of the growth and land development since the 1950s in the DeBary area has been residential. From 1959 until 1975, DeBary Hall was used as the headquarters for the Florida Federation of Art, Inc. At the urging of Senator Everett Dirksen, DeBary Hall was purchased by the State of Florida in 1967 and continued to be used by the Florida Federation of Art, Inc. This property was placed on the National Register of Historic Places in 1973.

During the early 1970s, large tracts of land at the south end of the DeLand Ridge were subdivided and developed. In addition, the construction of the Florida Power peak energy facility north of Highbanks Road and the enlargement of Lake Konomac to provide cooling water for the plant have altered the landscape of DeBary significantly. DeBary Hall functioned as a senior center from 1977 until 1989. In 1990 the state leased the property to Volusia County under a fifty-year renewable lease. The county commissioned a continuing plan to restore the house and grounds for use as a museum. Renovations began in 1993, the same year that DeBary incorporated as a city and elected its first city council. Volusia County acquired Gemini Springs in 1994.

Chapter 5. Archaeological Survey Methods

Panamerican Consultants, Inc., conducted a reconnaissance-level archaeological survey for the City of DeBary to identify culturally sensitive zones and to gather information about prehistoric and historic period cultural resources within the municipal boundaries of DeBary, Florida (Figure 28). PCI staff used the data collected to make a preliminary evaluation of the local and regional significance of the archaeological sites and to identify potentially sensitive archaeological areas.

BACKGROUND AND LITERATURE REVIEW

The background review was designed to familiarize PCI researchers with the existing literature regarding the environment, prehistory, and history of DeBary and its immediate surroundings.

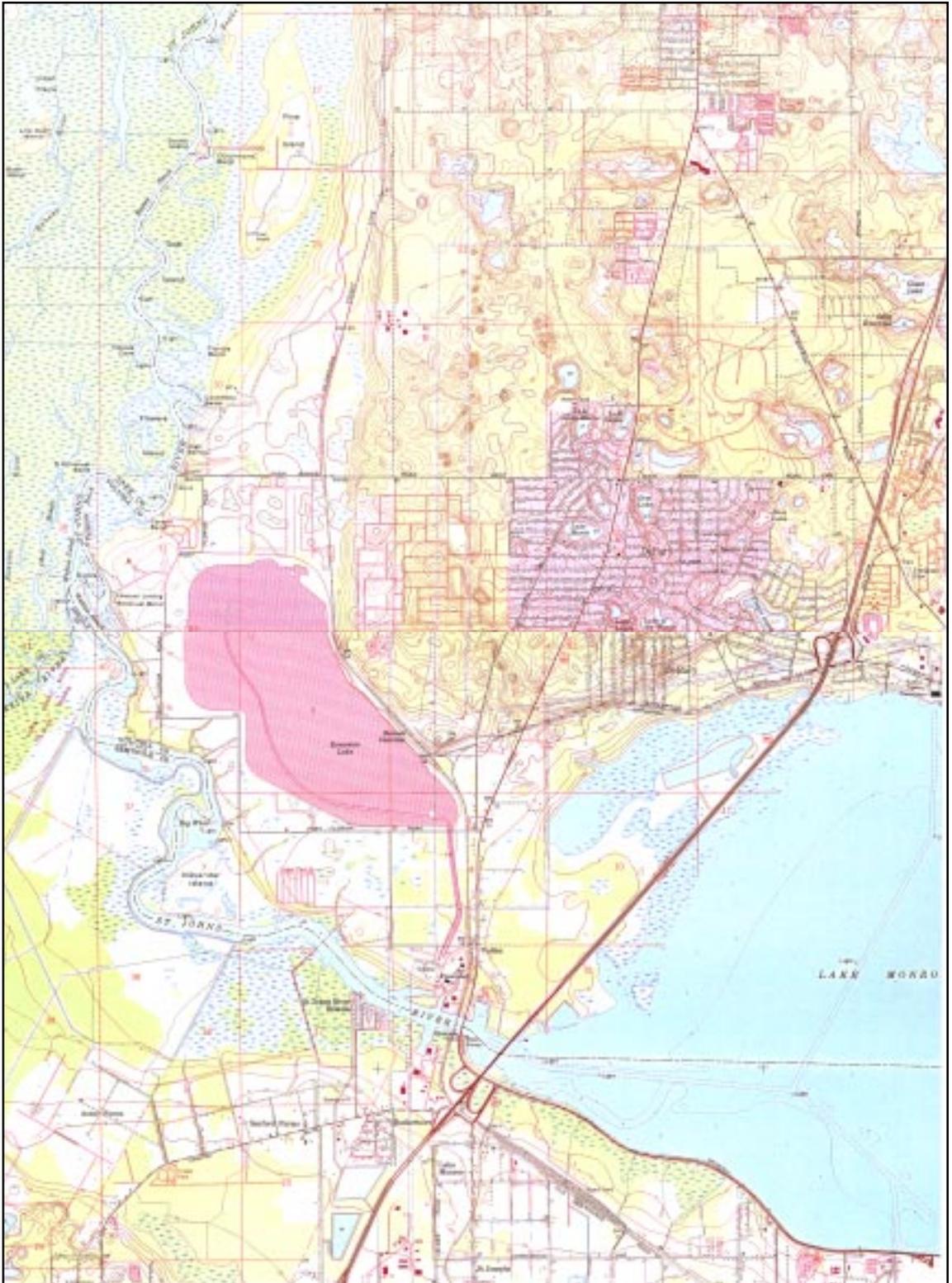
During this phase of the survey:

- Data was gathered on the natural environment, settlement patterns and subsistence strategies of prehistoric populations, as well as historic information about the North and Central Regions of Florida to predict site locations.
- Archaeological models for settlement and site location were reviewed from scholarly publications and survey reports from the area of DeBary, Volusia County and northeastern Florida.
- The Florida Master Site Files were searched for previously recorded archaeological sites within the municipal boundaries and from related areas such as Lake Monroe and the St. Johns River Basin.

Published and unpublished documents were reviewed and studied from:

PCI research library and collections
Florida Master Site Files
University of South Florida Library and Special Collections





USGS Topographic Map of the City of DeBary
(Based on Sanford and Orange City USGS 1:24,000 Quadrangle)



**State Library of Florida
 Florida State Archives Photographic Collection
 Florida Department of Natural Resources
 Florida Department of Agriculture
 The City of DeBary Historic and Photographic Archives**

Past issues of *The Florida Anthropologist* were researched for pertinent articles, and *A Selected Bibliography of Florida Archaeology and Related Topics* (Vojnovski 1997) published by the Central Gulf Coast Archaeological Society, a chapter of the Florida Anthropological Society, was consulted for additional materials such as unpublished manuscripts and reports.

As part of the historic review, early survey, postal, and war maps at the State Library of Florida and University of South Florida were inspected. Additional maps were obtained from PCI and City of DeBary archives to trace the history of DeBary's growth. Pamphlets and brochures from DeBary Hall, Inc., Florida newspaper articles about the DeBary area, and photographs of significant individuals and organizations were studied from the State Library of Florida, the Florida State Archives Photographic Collection and the City of DeBary Archives. The pre-urban environment was researched through the use of soil survey maps and aerial photographs of Volusia County, U.S.G.S. quadrangle maps, and GIS maps of the City of DeBary including contours, vegetation, soils, and the 100-year flood plain.

Knowledgeable local informants were relied upon to collect information on unrecorded sites. DeBary Historian Jesse Beall took PCI researchers to meet with property owners and residents in the DeBary area to gain more information about "backyard" cultural resources. Local amateur archaeologists and historians, landowners and enthusiasts brought a variety of information to the survey through meetings, phone conversations, and DeBary Archaeology Day at the Florence K. Little Town Hall, August 28, 1999 (Appendix C).

With the limitations of time and funds, first priority was given to locating and documenting previously unrecorded sites. DeBary Historian Jesse Beall worked in cooperation with PCI staff and DeBary residents to locate new sites and revisit selected sites along DeBary Creek, the St. Johns River, and the mouth of Lake Monroe. Owners were interviewed about the history of their properties and permission was obtained for the team to walkover sites on their properties (Appendix D).

**INFORMANT
 INTERVIEWS**

**ARCHAEOLOGICAL
 FIELD
 INVESTIGATIONS**

A non-intrusive reconnaissance of identified sites was made and artifacts lying on the surface, in the roots of trees and in the spoil heaps at the entrances of animal burrows were collected for analysis at the PCI laboratory. Elevated areas and eroded deposits along lake, creek, and river banks were inspected for evidence of human subsistence activities. Non-vegetated areas also were checked for archaeological materials. Wood and ferrous fragments of the *Fannie Dugan* steamship were distributed along the shoreline, embedded and protruding from the soft sandy banks. The location of the wreck was estimated based on the actual dimensions of the vessel and the distribution of these materials.

Field notes were kept and, when appropriate, sketch maps were made. Photographs were taken to document the material remains and visual site boundaries. The locations of sites were recorded in the field with a Garmin GPS 12 utilizing software 4.53 providing a position accuracy of less than 15 meters subject to accuracy degradation to 100 meters under the US DOD-imposed Selective Availability Program.

Florida Site File forms were completed for all newly recorded archaeological sites during the survey. Geographic locations of all sites were noted on copies of the Orange City or Sanford U.S.G.S. Quadrangle maps accompanying each form. PCI also provided the City of DeBary with a copy of these maps of site locations included in this report.

When possible, a preliminary evaluation of the local and regional significance was made for new or revisited sites. Criteria for evaluating the significance of sites were based on federal criteria for assessing eligibility for the National Register of Historic Places as presented in 36 C.F.R., Part 63, *Determination of Eligibility for Inclusion in the National Register of Historic Places*. Consistent with the Division of Historical Resources' guidelines for cultural resource projects in Florida, *The Historic Preservation Compliance Review Program of the Florida Department of State*, these criteria are recommended by FDHR for federal, state and local projects.

The principal criteria used to evaluate the significance of sites are:

1. The ability of a site to contribute important scientific information to the study of regional or local prehistory or history;
2. The association of a site with a person or event impor-

SITE RECORDING AND EVALUATION

tant to regional or local prehistory or history;

3. The association of a site with a group or district that is considered to be of regional or local significance;
4. The possession of qualities considered unique or rare, or that provide an especially well preserved example of a particular type of site; and a site's potential for public display and interpretation.

The data collected during a reconnaissance-level survey is insufficient to make a complete determination of National Register eligibility. Certainly, the background and literature review of the survey provides the geographic, archaeological, and historic contexts from which site significance can be tested. Systematic subsurface testing and/or controlled test excavations should be conducted to provide supporting evidence.

The criteria listed have been followed for this project. The development of criteria established locally for site significance is encouraged and in keeping with the intent expressed in Chapter 9J-5.003(35) F.A.C., *Minimum Criteria for Review of Local Government Comprehensive Plans and Determination of Compliance*. For example, a renewed popular interest in the vernacular architecture of Florida's wood-frame "cracker houses" has lead architects to study the regional traditions and architectural forms. Wooden structures built by the early nineteenth century homesteaders through the Seminole Indian Wars, the Civil War, and into the first decades of the twentieth century would fit the time frame for the cracker architecture of Florida. The elements of the cracker farmhouse, plantation, and townhouse have been used as the basis for the design of modern buildings throughout Florida (Haase 1992). Cracker Vernacular structures built during these periods may be extant within the municipal limits of DeBary.

One such structure reviewed during the DeBary survey is the home of former resident James Barwick, identified during a transmission line right-of-way survey for the Florida Power Corporation. The house was built in 1910, but was in ruinous condition and was being used for storage during the 1994 survey. The Barwick House as described below (Bellomo 1994:50) was revisited during the DeBary survey project. It is representative of the early Frame Vernacular rural architecture of the region, but is not considered eligible for the National Register of Historic Places because of its condition (Appendix A).

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Acknowledgements

Many people contributed their time and effort during the course of the DeBary Archaeological Survey. Assistance was offered to gather maps, locate archaeological resources, identify local informants, and gain access to archaeological sites. PCI staff appreciates the many people who helped us to complete this project.

PCI staff wishes to acknowledge the unwavering enthusiasm of DeBary Historian Jesse Beall whose many years of commitment to DeBary's past provided the survey team with a variety of photographs, maps and the location of both recorded and previously unrecorded archaeological sites. Mr. Beall took PCI researchers to meet with property owners and residents in the DeBary area, and promoted the successful DeBary Archaeology Day program among amateur archaeologists, land-owners, and enthusiasts.

The financial, administrative, and clerical support provided by the City of DeBary was an integral part of this project. City Clerk Maryann Yaskanich and City Manager Robert Mauney helped in the location of city maps and in the publication and promotion of DeBary Archaeology Day. Council member George Coleman was also supportive of this project. We would like to thank office staff, volunteers, and administrators for help in collecting materials and in the coordination of survey logistics, especially Darlene McDermott and Barbara Poulton.

We are grateful to the citizens and property owners of DeBary for their interest in the survey and for allowing us to conduct portions of the survey on their properties. We wish to thank Margie and Freddie Oglesby, Tom and Barrie Freeman, and Bud and Alice McMillan for their time and for giving us detailed information about the shell mounds on the properties.

A special thank to the staff of the Florida State Archives, the office of the Florida State Site File, and Joe Knetsch, Ph.D. of the Bureau of Survey and Mapping, Division of State Lands for the Florida Department of Environmental Protection for providing invaluable assistance in archival research. We are grateful to Marilyn Stewart, Ph.D. of the Anthropology Department at Rollins College and to Dean Sligh of Orlando for helping us locate photographs of artifacts from the Dean Sligh Site in DeBary.

A special thank you to Vicki Cole at the Florida Department of State, Division of Historical Resources for technical assistance and patience in the completion of this project.



This project has been financed in part with historic preservation grant assistance provided by the Bureau of Historic Preservation, Division of Historical Resources, Florida Department of State, assisted by the Historic Preservation Advisory Council. However the contents and opinions do not necessarily reflect the views and opinions of the Florida Department of State, nor does mention of trade names or commercial products constitute endorsement or recommendation by the Florida Department of State.