THREE TEQUESTA AND SEMINOLE HUNTING CAMPS

on the Eastern Tringes of the Everglades

by Kenneth J. Hughes

A PRELUDE TO SOUTH FLORIDA HISTORY

Written history tells us very little about these people called the Tequesta. However, here they left their legacy. Along the inlets and the rivers deep and clear, they gathered; and in the hammocks bordering the Everglades - but never too far from the coast. Among the sawgrass plains they thrived, near flag ponds sometimes created from their borrowing sand to elevate the land. It is here where they nurtured their young. It is here where they crafted weaponry and tools to obtain sustenance for their people, and it is here where they buried their dead.

In Broward County, early man and woman inhabited a wide region, finding providence in the Everglades and along the coast. Yet, today, we know very little about them. It is obvious that these people possessed an immense tolerance in order to survive in such a primeval wilderness, occupying numerous hunting and fishing camps. Furthermore, it is understood that these people were subjugated by the European explorers. But, for the most part, written history has very little to offer about the Tequesta Indians and their ancestors. These answers can only be found through years of archaeological research and interpretation.

Archaeologists have discovered that

Florida was occupied by man as early as 12,000 B.C. Theories reflect that big game hunters first entered the peninsula near the end of the Pleistocene geological period in pursuit of mammoths, horses, and large bison. Although attempts to pinpoint exact dates bring forth debate, some archaeologists believe that early man migrated to the North American continent sometime between 30,000 and 50,000 years ago. This

Although archaeology and history are often considered distinct fields of study, both share the common goals of rediscovering and presenting the past accurately to present and future generations. When the findings of archaeology and history can be used to confirm and reinforce one another, those goals are more fully accomplished. In 'Three Tequesta and Seminole Hunting Camps on the Eastern Fringes of the Everglades," author Kenneth J. Hughes provides an overview of southeast Florida's Indian cultures from the appearance of the first humans in the region over 14,000 years ago to the arrival of the Seminoles in the Everglades during the first half of the nineteenth century. He also presents a detailed archaeological report on three Broward County Tequesta and Seminole sites collectively known as the Alandco sites, tracing the progress of the investigations there and relating the findings to the recorded history of the area.

Mr. Hughes, whose articles have appeared in past issues of Broward Legacy, is a former Broward County Historical Commissioner who has done extensive research, both historical and archaeological, into the county's past.

concept is based upon the land bridge theory, which points to an event believed to have occurred during the Ice Age.

Geologists believe the Ice Age lasted approximately two million years and resulted in major topographical changes. During this time, glacial ice advanced and withdrew at least four times across this continent. Temperatures dropped and the seas lowered, twice exposing a land bridge between Siberia and Alaska. It is generally believed that these bridges were exposed between 10,000 and 70,000 years ago, bringing early man into this continent.²

The Pleistocene era had to have had a great effect upon the cultural development of man's traditions. Deserts turned into swamps and meadowlands, then reverted back to deserts. Both man and game migrated across the continent as a means of surviving the encroaching ice. These changes necessitated an adaptation of hunting methods and weapons, prompting traditions which developed into the Paleo culture (12,000 B.C.-7,500 B.C.).

Through methods of carbon dating certain cultural materials, archaeologists have discovered that Paleo traditions were already widespread across North America between 11,000 and 11,500 years ago. Stone points found at animal kill sites and the bones of large game are all that remain to signify the existence of Paleo man in Florida and elsewhere on the continent. Once again, natural changes, growth in numbers, and availability of providence necessitated continual adaptation.

When larger game became extinct, man and woman in North America had to rely on smaller game and fish as a means of sustenance. Of course, these Indians also thrived upon natural subsistence provided by gathering roots, nuts, and berries, such alternate food sources being, for the most part, supplemental to their diet. Methods of obtaining woodland animals and fish, and methods of gathering wild vegetables resulted in improved weaponry and further adaptation of tools. Henceforth, the successive Archaic tradition (7,500 B.C.-1,000 B.C.) pronounces a noticeable complexity in man's cultural development.

Some debate remains over the development of Archaic society. Some archaeologists believe it signified the activities of an unspecialized group of hunters and gatherers, while others suspect it merely developed out of the earlier Paleo traditions. However, all agree it exhibited increasing complexity. The development of early Archaic traditions were gradual from region to region, occurring while Paleo traditions were still in practice. However, Archaic traditions eventually became dominant across North America. Numerous examples of this culture have been found across Florida.⁶

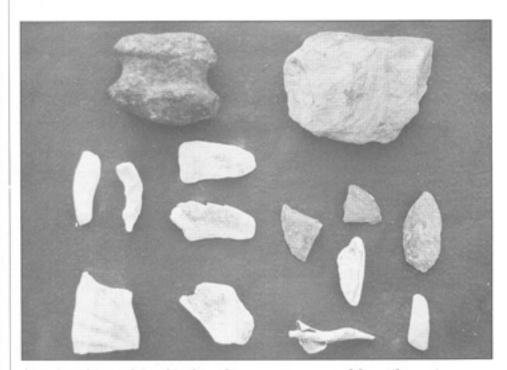
As Florida's early population increased, the traditional Archaic groups became more sedentary. We witness, through archaeological discoveries, the implementation of bone tools and the development of a greater variety of tools. This more settled lifestyle resulted from the more constrained ranging habits of the small game which these people hunted, the lesser distances to sources of wild vegetables, nuts, fish, and shellfish, and improved methods of harvesting. Nevertheless, local game and food sources can become depleted. Henceforth, the Archaic people did migrate to some small extent in search of new sustenance.

Early historical documentation provides little knowledge about south Florida's prehistoric Indians, yet it does provide numerous examples of changing patterns in our ecosystem - changes which have affected mankind through the years. For example, nineteenth century sources reveal that the ever-changing Everglades sometimes lashed out and flooded the coastal plains, thereby diminishing the pasture lands so vital to the deer. Droughts parched the glades, and fires diminished the vegetation. In effect, the deer population would either face starvation or would migrate. When such natural changes took place during prehistoric times, man would migrate too, or adapt to even smaller game as a source of food. In contrast, storms along the coast often resulted in ocean surges, trapping fish in tidal pools, where they became easy prey for man and for wildlife such as the raccoon and bear. Thus, migration did occur, but within a somewhat stable territorial domain.⁵

These sedentary Archaic traditions developed into the Formative culture (1,000 B.C.-1,300 B.C.), and the establishment of more distinct cultural domains. In Florida, Indian cultures began to regionalize about 2,000 B.C., with subtropical Florida, the St. Johns Basin, and the northwest Gulf coast becoming distinctive cultural areas. The Indians in the southern part of the peninsula, and especially in the Circum-Glade cultural region of southeast Florida, continued to subsist by hunting, fishing, and gathering until the time of European contact, while the Indians to the north began to plant crops.⁹

Each cultural region was influenced by the other, from the gatherers and fishers of south Florida to the planters of Apalachee, and even northward to the most civilized culture in the United States, the Adena-Hopewell of the Ohio River valley. A review of current archaeological findings in our region reveals evidence of this territorial influence. Archaeologists have discovered materials in south Florida crafted from non-native stone which provide proof of trade and migration.⁵⁰

Florida Indian culture during the early years of the Historic period consisted of



A contrasting variety of tools and weapons recovered from the eastern fringes of the Everglades reveals human ingenuity to manufacture essentials from shell and provides evidence of trade with northern cultures. Note the serpentine hammerstone (upper left), and metamorphic rock, chips, and partially formed point (upper and center right).



Sixteenth century Timucuan Indians preparing food as engraved by Theodore de Bry from an original drawing by Jacques LeMoyne. No original depictions of southeast Florida's Tequesta Indians are known to exist.

five major tribes. The Apalachee Indians ranged across north Florida, the panhandle, and southward toward the Suwannee River. The Timucua occupied the forests of central Florida and the Gulf coast as far south as the Tampa Bay area. In the south-central part of the peninsula, the Ais Indians lived along the Atlantic coast from the vicinity of southern Indian River County northward toward the Tomoka River in Volusia County. The Caloosa Indians ranged across southwest Florida, and the Tequesta occupied the lower east coast. "

Dissimilarities among the Florida Indians as witnessed by the Spanish explorers enabled the latter to identify these five major tribes as well as numerous cultural sub-groups. These dissimilarities were determined by geographic boundaries, by dominion of leadership, and by characteristic traits. A few examples of dissimilar characteristics include variety of languages, diet, methods of obtaining food, and contrasting skills and craftsmanship.¹²

Sources of food for people in the forests certainly differed from those of coastal people. Likewise, materials for crafting weapons and tools varied in each region. Another example of regional variations can be found in pottery. Soil classifications vary greatly between some regions. Consequently, clay differentiation enables the archaeologist to determine the regional source of natural materials from which pottery is made. 13

In south Florida, the Caloosa and Tequesta are noted for their immense shell

mounds, mainly constructed from conch and oyster shells. Those living directly along the seacoast were predominantly non-horticultural, not unlike the Ais tribe further up the Atlantic shore. Their sources of food from the sea were similar, and they were known as capable hunters. Fishing was commonplace among all the coastal tribes; however, the southern tribes, including the Ais, remained primarily gatherers, hunters, and fishers, while the Apalachee and Timucua tilled the soil in addition to hunting. In south Florida, and particularly at three inland hunting camps in Broward County, the Tequesta people ranged their territory while gathering and harvesting natural sustenance and hunting game to supplement a varied diet.14

Topography along the eastern fringes of the Everglades in Broward County was comprised of sawgrass plains and elevated hardwood hammocks where the Tequesta people lived and hunted. These people also lived at locations along the coast such as the mouth of the Miami River, where, sometime between 1565 and 1572, Spanish explorer Pedro Menendez established a missionary community near their village. The Tequesta ranged across much of the Circum-Glades cultural region, from extreme southeast Florida northward as far as the present boundaries of Indian River County. They extended westward into the Everglades, while the Atlantic coast defined their eastward extent.15

These people received providence from both the Everglades and the coast. Deer, smallgame, land turtles, birds, and snakes were hunted with bows and arrows and with hammerstone or shell clubs. Most often, projectiles were fashioned from bone points or shell material, and, more rarely, from a quality of stone brought into the region through trade or migration.¹⁶

Sources of material for bone points generally came from larger game such as deer. The points were first shaped, then placed in a fire to obtain hardness. Most bone points naturally assumed the round shape of the bone. However, some flat bone points have also been recovered.¹⁷

As mentioned previously, the Tequesta also obtained providence from gathering roots, acorns, fruits, and berries, and from harvesting the bounty of the sea. An examination of material from a variety of kitchen middens across southeast Florida has determined that the Tequesta consumed all varieties of fish, including shark, sailfish, and stingrays. Their diet also consisted of terrapins, sea turtles, and sea mammals such as the manatee and porpoise.¹⁵



Sixteenth century drawing of a Florida Indian by British artist John White.

One prime example of shark product manufacturing by the Tequesta was investigated by archaeologist Gypsy Graves in 1989. The New River Midden consisted of an oak ridge on the north bank of that historic estuary, nearly three miles from the present coastline. There, scientific excavation revealed possible evidence of a prehistoric beach site and a canoe landing where sharks were dragged ashore and processed.¹⁹

The industrious Tequesta people manufactured their tools from the strombus and busycon shells. Waste was virtually nonexistent. Each shell provided celts for cutting and skinning. The center columella served as a pounder or gouger, and the smaller pieces were drilled and worn as pendants or were manufactured into arrowheads and spearpoints. Drilled shark vertebrae and sometimes pieces of decorated pottery also served as pendants. In addition, olive shells were shaped and worn as ear bobs. Shell fragments, food bone, and refuse from manufacturing was discarded. Such everyday practice provided additional strength to the rich and verdant soil and supplied fill, thereby elevating the Tequesta villages.20

Archaeologists have discovered evidence indicating that some of south Florida's Indians practiced ceremonial burials for their dead. The bones of the victims, once cleansed by time, were reinterred in neat bundle burials. Some burials also contained important ceremonial objects. Archaeologist Wilma Williams, the first president of the Broward County Archaeological Society, discovered one such grave, which contained a wooden canoe paddle, on the Margate-Blount mound in northern Broward County.²¹

Besides tools and weapons manufactured from shell, wood, and bone, the Tequestas also had access to items manufactured from non-native stone. The latter material entered this area through trade and/or by means of travelers and migration. Artifacts constructed from non-native materials are, as noted previously, not commonplace. Nonetheless, they have been found at various locations across south Florida. The availability of non-native materials such as metamorphic rock guaranteed durable construction. Unfortunately for Florida's native people, weapons designed through time-honored Archaic traditions, no matter the material, proved inefficient in battle against the Europeans.22

Tribal wars, slavery, and the introduction of pestilence from Europe wiped out much of Florida's native population. This decimation began soon after the discovery and exploration of the peninsula in the 1500s. Spanish missions were established at several locations to promote Catholicism, yet economics remained the primary factor as explorers conducted a continual search for mineral wealth. The very existence of the missions established Spanish claim to the territory, at the same time exposing the natives of the peninsula to European culture.²³

The first missions expanded northward along the coast from St. Augustine to the Carolinas. By 1606, a mission was established at Potano, among the western Timucuan tribe. All Timucuan towns had been brought under mission control by 1633, and the Spanish then began their expansion into the Apalachee territory, which encompassed the Florida panhandle. Notably, by 1674, Spanish Florida boasted thirty-two missions and 13,152 Christian Indians.²⁴

The demise of Florida's aborigines originated, in part, with the activities of English colonists in the Carolinas. These Europeans influenced several strong tribes to the north of Florida, and, beginning in 1690, directed hostilities against the Florida aborigines in an attempt to destroy Spanish influence in the peninsula.²⁵

British depredations in Florida during the early 1700s resulted in the capture, relocation and enslavement of many Florida Indians. Although the British were unsuccessful in their campaign against St. Augustine, the Apalachee province and the territory belonging to the Timucuas were laid to waste. These engagements all had an indirect effect on the tribes of south Florida.²⁶

Spain's hold over Florida was gradually weakening by the time of the Seven Years War. A subsequent British victory and treaty of submission resulted in the forfeiture of Florida in 1763. Brief accounts of these events indicate that the remnants of the Tequesta and other aboriginal tribes were shipped to Havana during the Spanish exodus.²⁷

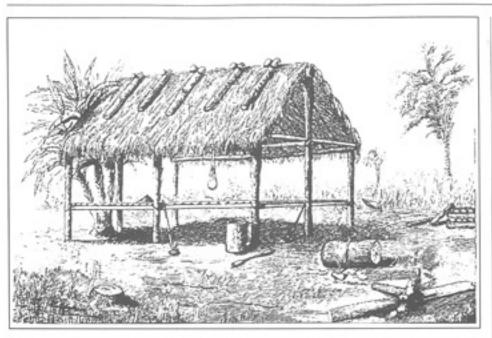
Over two hundred years of Spanish occupation in Florida had diminished most tribes, leaving the peninsula largely void of Indians even before the Spanish evacuation. Farther north, in the Georgia Territory, tribal wars between the Appalachian and Muskogean branches of the Creek Indians had caused new groups to migrate into the Florida peninsula. The Alachua Seminoles were established in Florida by 1750, and the Miccosukees, established from other prominent Creek bands, first came to Florida during the British period (1763-83). Later, other branches of Lower Creeks broke away from their tribe, establishing a strong Seminole culture in Florida by the early 1820s. The few Florida aborigines who may have remained after the Spanish evacuation were supposedly absorbed by these new tribes. 28

Both the Alachua Seminoles and the Miccosukees initially experienced complacency and growth in the Florida peninsula. They lived in peace with the British, who controlled Florida for twenty years, and they continued to expand after Florida returned to the Spanish flag following the American Revolution. However, Spanish influence in the late eighteenth and early nineteenth centuries was too weak to earn the trust of the Indians.²⁰

These two very different groups of Seminoles, speaking different languages,



LeMoyne-De Bry illustration of Timucuan Indians planting.



South Florida Seminole Indian chickee, late nineteenth century.

experienced similar threats to their existence when Florida became a United States territory in 1821. Both tribes strove to avoid the expanding American settlements and eventually migrated into southern Florida. Their common enemies insured a degree of unification.³⁰

The invincible Seminoles must have experienced the great Everglades of western Broward County in ways similar to those encountered by the Tequesta. As in former centuries, the condition of the swamps, often flooded but sometimes parched, could only warrant seasonal occupation. In fact, the Seminoles occupied many of the very camps formerly inhabited by the Tequestas. During wartime, the Seminoles sought the shelter of the Everglades islands. However, once spring and summer approached, they found seclusion along the mainland ridge and received their sustenance and materials from abandoned settlements and shipwecks.31

THE ARCHAEOLOGY

The Tequesta Indians occupied the eastern fringes of the Everglades, both north and south of New River. Cultural evidence of their existence has surfaced in recent years as urban development has proceeded westward across the county. From an educational standpoint, these sites provide additional knowledge of the Tequestas and their ways. However, from a preservation standpoint, each midden, mound, and encampment has become threatened by sure destruction with the onslaught of growth. 32

The Alandco I, Alandco II, and Alandco

III middens (sites 8BD01447-8BD01449 on the Florida Master Site File) in Broward County are prime examples of seasonal hunting camps. These were first occupied by the Tequesta and then by the Seminoles. Each are located in natural low-lying ridges which support a growth of hardwoods such as oak, strangler fig, laurel, and palmetto bushes. This terrain, altered somewhat by regional dredging, was considered the eastern fringe of the Everglades during the nineteenth century.³³

Cultural material found on these three sites reveal temporary occupation. Zooarchaeological remains indicate that larger game was scarce, and the Tequesta were dependent upon sustenance from small birds, turtles, snakes, alligators, and opossums. Historical materials also reveal evidence of destitution among the midnineteenth century Seminoles who frequented the area.³⁴

Military reconnaissances on New River during the Second Seminole War (1835-42) and the Third Seminole War (1855-58) revealed that the Seminoles were in need of food, tools, and weapons. Shipwrecks along the coast were a main provider of such supplies. However, the Indians had to seek materials elsewhere when shipwrecks were non-existent.²⁵

An unidentified band of Indians destroyed the Cooley residence and nearby settlements in January 1836. Major William Lauderdale's abandoned blockhouse was torched sometime between May 1838 and February 1839, and the Seminoles destroyed an old mill along New River near the site of the Cooley plantation during the 1850s. One report reflected that the Indians destroyed the mill for the purpose of removing iron from the structure.36

Notably, the seasonal hunting camps located three and one half miles farther up the south fork from the old settlement yielded historical evidence in the form of iron artifacts. Few of these represent tools of necessity. In addition, other evidence surfaced at these camp sites indicating Seminole occupation during the period between 1893 and 1911, as well as evidence of farming by the settlers who cultivated this area, known as the "Old Dania District," after 1911.37

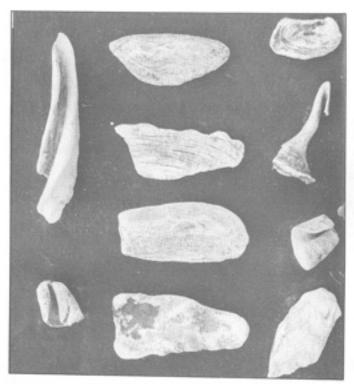
THE ALANDCO I MIDDEN (SITE 8BD01447)

Alandco I is a small oval midden along a three to four foot ridge elevation. High points of this encampment measure at five feet to five feet six inches. The area of the midden measures approximately twentyfive meters by thirty meters. The initial discovery and investigation of the site by the author under the South Florida Regional Planning Council Development of Regional Impact (DRI) guidelines, determined evidence of transitional occupation both before and after European contact.³⁸

A minimal number of screened posthole tests along the elevated ridges within the tract yielded the discovery of each midden, and seven screened posthole tests determined the extent of the Alandco I site. The initial examination of cultural material vielded evidence of zooarchaeological material in the form of bird, snake, and small animal bones, fish and shark vertebrae, turtle shell, and a canine tooth. A bone arrow point, broken and unfired, was found in one posthole at twenty-five centimeters depth. The diligent craftsman may have been distraught over the loss of this projectile. However, sources of material to craft another were limitless.39

Ceramic ware is another notable feature that surfaces from Tequesta middens. A variety of pottery was discovered in the screenings. Notably, years of comparison studies and scientific carbon dating of associated materials found with pottery have enabled archaeologists to use ceramics as a model in dating south Florida's hunting camps. Alandco I posthole screenings reveal a variety of pottery known as Glades Plain Ware.⁶⁰

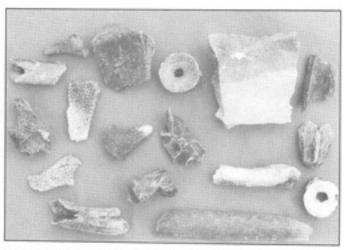
Later investigations of the site conducted by archaeological consultant William Gerald Kennedy, Ph.D.., discovered four variations of ceramics: Glades Plain Ware, St. Johns Plain Chalky Ware, St. Johns Check Stamp, and Belle Glade Plain. The transect corridor surveys by Kennedy also revealed a variety of zooarchaeological remains from mammal,



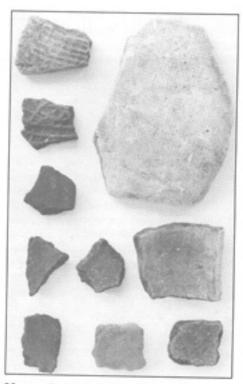
The Tequestas manufactured many useful tools and ornaments from shell. Four Strombus Giga celts (center) served as scrapers and cutters. The Busycon Columella (top left) makes a useful gouger and digging tool.



A variety of Check Stamp pottery includes rim shards and a drilled piece, which most likely served to support a handle.



Midden refuse provides the archaeologist with an understanding of the Tequesta's diet. Shark, terrapin, fish, birds, snake, manatee, deer, and opossum provided a variety of protein.



Natural clays provided early man with a material for making ceramic vessels — essential for storing and transporting food and water. The Glades Plain and the St. Johns Check Stamp pottery found on the Alandco middens date these sites between 500 A.D. and 1500 A.D.

reptile, amphibian, and fish species. One human tooth was also noted. The presence of burned and unburned zooarchaeological remains suggest the site's apparent use as a kitchen midden. 41

The aforementioned preliminary investigation by the author also revealed historical evidence at Alandco I. A few iron square nails were discovered during the screened posthole tests. The source of this material may never be known. However, the quality of the metal and craftsmanship of the nail reveals that it predates the 1850s, probably dating closer to the 1830s. No evidence could be found suggesting that these artifacts were hand crafted by the Seminoles. Since further investigations by Kennedy did not reveal the presence of additional square nails, and since the quantity of nails were too few, we must rule out the possibility that a nineteenth century structure was once situated on the midden.42

The next archaeological site was discovered on a hammock ridge east of the Alandco I Midden. Land east and west of this hammock, once covered with sawgrass plains, provided barriers, or even perhaps security, to the occupants. However, dry paths between each hunting camp could be found by following the hammock ridges to the north, where they eventually converge. Of course, communication between the camps may have been most accessible by means of canoe. In addition, the easternmost ridge connected directly with the north-south mainland ridge, thus allowing eventual access to the New River and the coast. 43

In effect, these hammocks served as highways to and from the mainland, the coast, and the eastern fringes of the Everglades. They provided partial shelter from the elements and had sufficient elevation to provide dry ground for camping. Moreover, the palmetto, with its seasonal bloom of berries, and other natural fauna attracted insects, reptiles, small game, and of course, man.⁴⁴

The natural food chain becomes endless in the Florida hammock, as insect, reptile, and mammal each becomes prey to the other. The bear, deer, and opossum, as well as the panther, rat, raccoon, and even man could not survive without this primeval storehouse. 45

Further examples of the food chain can be found in south Florida's abundant natural vegetation. Native plants provide food for man in the form of roots, nuts, and berries. In the hammock, as well as along the coast, the Tequesta could harvest the crab apple, the prickly pear, the cocoplum, and the pidgeon plum. Here, man had an abundance of coontie, which could be obtained from the arrowroot plant, and a seasonal supply of nuts from the oak. The sea grape and the wild grape were plentiful, as was the wild guava and the strangler fig. The latter, also known as the Indian rubber tree, is commonly found in elevated south Florida hammocks. The presence of these trees is a general indicator that an Indian camp or habitation once existed nearby.⁶⁵

THE ALANDCO II MIDDEN (SITE 8BD01448)

The first survey along the Alandco II ridge involved the placement and screening of nineteen postholes. These were located on the highest elevation in the northern part of the hammock, and along the western slope of the hammock to the south, where the higher portions became inaccessible due to pasture and holding areas still in use. Vegetation on the hammock consisted of oak, laurel, a few sabal palms, strangler fig, and palmetto. Notably, much of the western slope of the ridge was washed by runoff from an adjacent spoil berm. This berm, once elevated higher than the hammock, was created in former years by the excavation of a quarry pit, which was also located east of the hammock.47

The procedures adopted during the first survey of this property were designed to determine positive evidence that archaeological sites existed there, and to cause the least disturbance to the hammocks. Postholes were generally excavated to fortyfive centimeters in depth. All materials, including archaeological evidence minus a few samples, were returned to the postholes. In addition, most postholes were excavated at seventy-five to 100 feet apart, the exceptions being areas which yielded noticeable and unnatural changes in elevation. In these zones, postholes were established at twenty-five to fifty feet apart in an effort to determine the extent of the site.48

The Alandco II site extended along 200 feet of north to south ridge. It may have actually consisted of two sites. However, disturbed portions of the ridge and runoff from displaced soil resulting from a much earlier quarrying operation, resulted in an intermixing of udorthents, or backfill soil, and artifacts. Subsequently, archaeological evidence, both displaced and in situ, were found during the survey along the entire western slope of the ridge. Yet, artifact concentrations were greater in the screenings taken from the northern and southern portions of the hammock. Only a scattering of cultural material was evident between these two locations.49

The highest concentration of food bone and pottery found in the few screened postholes came from near an elbow of the hammock where the high ridge turned slightly to the east. Further visual examination revealed this midden to be the largest, and therefore the most occupied, site on the tract. However, this site had, as previously mentioned, also received extensive damage during the 1950s and 1960s from the quarrying operation which cut away the eastern slope of the hammock and a small portion of the site. An interview with the dragline operator who originally excavated the quarry lake revealed that the quarry operators had no knowledge that an archaeological site existed on the property until this survey was conducted.50

The greater portion of the disturbed site was located directly on the southwest berm of the quarry lake. Most of the disturbed material was either redeposited north and east along the shoreline or washed into the lake. Some redeposited material had washed back onto the hammock, thereby hindering accuracy in determining the site's extent. Further determination would require scientific methodology and larger scale trench excavation, which would ultimately disturb the natural hammock to a great extent and was therefore avoided within the tree areas. 51

The next survey of the Alandco II site, conducted by William Kennedy, Ph.D., and an eight member field party, incorporated the same methodology to determine site locations and extent. This survey also employed mechanical augers to take samples for further study at Florida Atlantic University. Kennedy's survey identified the site as a scattered kitchen midden of approximately thirty meters north to south and thirty-five meters east to west. Subsurface artifacts and zooarchaeological material, including charred bone, were thinly scattered and intermixed with more recent historical material such as common nails and shotgun shells.52

The pottery found at Alandco II during the Kennedy survey was identified at Florida Atlantic University as Glades Plain Ware and a small percentage of St. Johns Chalky Ware. Although a lack of decorated wares makes it difficult to date the site, provisional placement when compared to neighboring sites places Alandco II in the Glades III period, which spanned the years from approximately 1300 A.D. to the disappearance of the Tequesta in the eighteenth century.⁵³

Ironically, many more examples of ceramics and a few examples of historical artifacts surfaced during efforts to ready the hammock and the neighboring quarry pit to meet Broward County's Local Area of Particular Concern (LAPC) preservation criteria. This resulted in yet another survey by the author, per authorization of the



Seminole man as illustrated in the 1887 MacCauley report.

Broward County Historical Commission and the Port 95 Commerce Park, to recover artifacts exposed outside the LAPC perimeter. Such cultural material, at that time being unknowingly displaced and exposed, would otherwise be destined for obvious destruction.⁵⁴

ALANDCO III MIDDEN (SITE 8BD01449)

An interesting variety of artifacts was recovered during the last survey near Alandco II, which provided more light on the importance of this midden. However, before concluding with these findings, we must first review the Alandco III site. Alandco I and II were situated on narrow hammock strands near sawgrass plains and most likely served as cance landings and intermittent hunting camps. Alandco III is situated along a broad hammock ridge under an enormous covering of fauna. This site was first identified and noted on maps during the initial survey, yet, as a result of inopportune scheduling, no postholes were placed by the author to verify the extent of the midden. Subsequently, its existence was brought to the attention of those who would continue the survey.¹⁶

The Alandco III site covers a larger area, and therefore may have provided sufficient shelter for a larger number of temporary dwellers. It was located along a possible trail that led south from Alandco II, and connected to a northern trail which may have intersected with yet another trail leading to Alandco I. Of course, if the surrounding sawgrass plains were flooded extensively, these trails would have been passable only with great effort or with the aid of canoes.⁵⁴

Doctor Kennedy's field crew determined the extent of Alandco III as fifty meters by fifty meters, which conformed to the shape of the hardwood ridge. The artifacts of ceramic and zooarchaeological material determined by the test holes were scattered, with the exception of some concentration near the higher elevation. Ceramics found at the site included the usual Glades Plain Ware and St. Johns Chalky Ware.⁵⁷

Kennedy's field crew did recover a Glades tooled rim shard which dates the occupation at A.D. 1400 to 1513, and a St. Johns Plain Ware piece altered to a semicircular shape with perforation. The zooarchaeological material found at Alandco III consists of remains of mammals, reptiles, and fish. This site, like the former two, represents a kitchen midden, and was therefore classified as a temporary hunting camp. Modern glass and nails also found on the site indicate some disturbance, and are most likely evidence from farming and, more recently, from ranching.⁵⁸

ALANDCO II REVISITED

In an effort to preserve the natural beauty of the hardwood hammocks and the rare vegetation therein, designated LAPC zones were recommended and were eventually established by the Broward County Commission. These protection zones incorporated the three Tequesta hunting camps as recommended by the archaeological reports. Notably, further evaluation of the Alandco kitchen middens and other archaeological sites in Broward County revealed one outstanding feature which gave the Alandco sites an added importance.⁵⁹

Following the Alandco survey, efforts were made to upgrade the Florida Master Site File list for Broward County—a longtime recommendation of the late archaeologist Wilma Williams. Twentyplus years of countywide growth and development had resulted in the destruction or partial destruction of several archaeological sites which were formerly recorded on the state list. These losses, in the main, resulted from a lack of both public knowledge of the sites and a criteria for their preservation. 60

A one and one-half year review of Broward County's archaeological sites listed in the Florida Master Site File revealed an additional significance of the Alandco middens. In addition to their scientific importance, these three Tequesta middens, in fact, represent the few remaining Broward County archaeological sites east of U.S. Highway 441 in the eastern flatlands and along the Atlantic coastal ridge which have not been stripped of their native vegetation and which have not experienced major subsiding. Consequently, the landowners, the property developers, and preservationists cooperated as a single entity to ensure that these hardwood hammocks be preserved from destruction.61

The feature which gives these kitchen middens their significance guaranteed their ultimate preservation. Doctor Kennedy's report compared their similarities to another site located several miles southwest of the tract. In recent months, other areas of the property have endured a positive transformation to support a natural ecosystem. The LAPC plan which included the Alandco II site also required that the adjacent quarry lake berm be restructured and planted in native Florida vegetation, especially that associated with natural freshwater ponds and springs. These efforts at preservation resulted in an ironic discovery.62

The initial excavation of the quarry lake in years past had caused significant damage to the Alandco II site. However, during those years, preservation concepts were lax, and the excavators did not realize that an archaeological site existed on the property. As a result, many artifacts were disturbed and redeposited in the berm. In addition, some undisturbed portions of the midden were capped by the berm. These areas were obviously unapproachable during the archaeological surveys which determined the significance of the site. 60

The recent restructuring of the lake berm according to LAPC criteria resulted in the unexpected redepositing of artifacts and cultural material for more than 100 feet north of the highest elevation of the adjacent midden and several feet east of the southwest corner of the quarry lake. Rainfall then uncovered additional artifacts which were intermixed with the udorthent soil, and a dredge backwash pipe spilled water onto the lake beach, uncovering a small area of undisturbed midden and revealing heavier artifacts resting in situ. Artifacts were also



Evidence of Seminole activity on the eastern fringes of the Everglades during the mid-nineteenth century is represented by these artifacts. The solid-shot cannonball, perhaps salvaged from a beached shipwreck or from one of the sites of Fort Lauderdale, most likely served as a tool for pounding the coontie root into an edible flour.

redeposited into the lake and could be seen resting in the shallow waters near the shoreline.64

Once again, continuous monitoring of the preservation zones to ensure that they remained undisturbed, the full cooperation of the developers, and the approval of the Broward County Historical Commission resulted in a survey and recovery of redeposited artifacts which were not within the boundaries of the LAPC preservation zone. Considerations were implemented by the advisory staff of the Historical Commission to extend the preservation zone, however, such an extension was deemed impractical for the following reasons. First, the area had received extensive damage in years past; second, hardwood trees were nonexistent in this sector; and finally, the artifacts, including those in situ, were resting on a precariously sloped beach and would eventually wash into the lake.65

The procedure to collect artifacts from the disturbed quarry lake berm east of the Alandco II LAPC preservation area was accomplished by placing and measuring ten reference stakes along the west and south shorelines. The corridor widths in both sectors were constant. However, the slope of the berm to the lake on the west beach was much more critical than that on the south beach. The artifacts were collected from between the reference points and recorded.⁶⁶

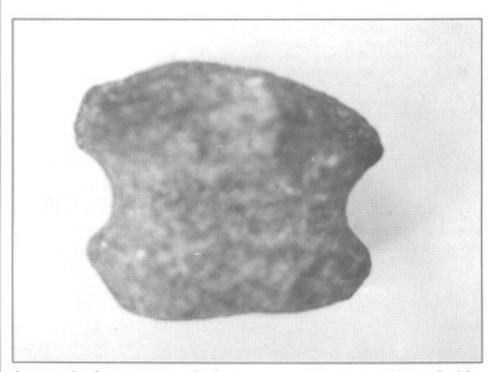
Although many artifacts were displaced,

all were recorded in an effort to determine the eastward extent of the Alandco II kitchen midden before the quarry lake was excavated. Subsequently, by determining the percentages of cultural material found exposed on an x-y plane along the south and west beach, the percentage of the midden still intact within the LAPC protection area could be averaged. An estimated thirty-five percent remained. In effect, the highest elevation of the midden had long since been removed.⁶⁷

Of course, some artifacts were also found in situ along the lakeshore. One apparent survivor of the changed landscape was uncovered near the top of the berm on the south shoreline by a mild backwash from a dredge pipe that flowed back into the lake. Evidence of early tool making was exposed in a one-meter square area. A large slate rock, not native to south Florida, rested upon the berm, surrounded by smaller pieces of slate, slate flakes, and chips, and a partially tooled arrowhead. Most fortunately, the near-level natural grade near the adjacent udorthent berm prevented most of this cultural material from washing into the lake.68

Historical evidence was also found exposed on both the south and the west shorelines. This included pieces of olive green nineteenth century glass shards and a few crude pieces of iron knife blades. The latter artifacts may have been damaged during an attempt to craft material into a blade, or they may simply represent worn and discarded tools. Discovery of these Seminole artifacts led to a decision to conduct an electronic survey outside the LAPC protection area, in the udorthent soil along the lake shoreline, for reasons that additional similar artifacts may have been dispersed and covered with backfill. 69

The electronic survey resulted in the recovery of additional pieces of worked



A serpentine hammerstone, also known as a maul, was manufactured with a recessed center for attachment to a handle.

iron, or crude pieces of iron knife blade, a square spike, a square nail, and a sixpound solid shot cannonball. Most of these items were found in situ along the top of the berm corridor in a seven meter area, at an average depth of twenty centimeters. The cannonball was in situ below a root system, at thirty centimeters depth. These exciting discoveries, no matter how crude the artifact, have significant bearing in proving Broward County's history. They support the nineteenth century military correspondence which indicates the Seminoles were indeed burning the fort and settlement and destroying the old mill to obtain the iron for making tools and weapons.70

The six-pound cannonball may have been found by the Seminoles at old Fort Lauderdale on New River, or at the later fort on the beach, and returned inland to their camp. Perhaps it was salvaged by the Indians from a wrecked vessel along the coast. We can only speculate as to its origin. However, the Seminoles' only possible use for such a weighty object would be to use it as a pounder, perhaps to pulverize coontie from the arrowroot plant.⁷¹

No evidence of a United States military camp was found at Alandco II during the initial survey or during this later survey near the site. It is highly unlikely that the cannonball represents a fired projectile. We do know that older draglines used surplus solid shot cannonballs as ballast. However, this artifact was located in situ, below a root system, and had been in the ground for quite a long time.⁷²

Additional historical artifacts surfaced during the electronic survey in the form of farming and ranching refuse such as old wire, nails, and an old rake. These exemplify the agricultural importance of the land as noted by the late Broward County Historian, Dr. Cooper Kirk, in this area, once known as the Old Dania District, beginning about 1911. Thus this site supported the Tequesta, the Seminoles, and Broward County's agricultural pioneers.³²

We also have evidence that the Seminoles either lived or camped, during the late nineteenth century, on the eastern part of the hammock where Alandco II is situated. The initial survey by the author revealed surface evidence of habitation in the form of refuse such as the remains of a tin washtub, old wire, and nails, all found in a clearing within a heavy tree area, but overgrown with understory vegetation. On first impression, it appeared that this site served as a cabin or work area for the Dania District farmers. This may be so. However, the site was also occupied by the Seminoles.⁷⁴

The disturbed udorthent lake shoreline opposite the hammock where the surface

refuse was discovered produced a few late nineteenth century or early twentieth century glass shards, a few pieces of broken glass bead, and an entire cobalt glass barrel bead. We know the source of the latter artifact and thereby know that it indicates late nineteenth century occupation.⁷⁵

Many redeposited artifacts were recovered from near the Alandco II midden. For example, decorated pottery shards, somewhat scarce during the original surveys within the LAPC preservation area, were quite commonplace in the adjacent udorthent spoil. In addition, many other artifacts were redeposited in spoil near the northern part of the Alandco II hammock. Here, several strombus giga shell celts were found, in addition to some Glades Plain pottery and a green serpentine hammerstone, also known as a maul. 76

These artifact discoveries raise the question as to whether or not there are two midden sites near each other, or just one continuous site through the Alandco II hammock. Once more, because the area adjacent to the LAPC area was heavily disturbed and for reasons of preservation preventing extensive scientific excavation within the LAPC zone, we can only speculate. The hammerstone provides another example of a tool or weapon brought into the Circum-Glade region of southeast Florida either through migration or trade. The nearest region where this material can be obtained is in the southern Appalachian mountains.77

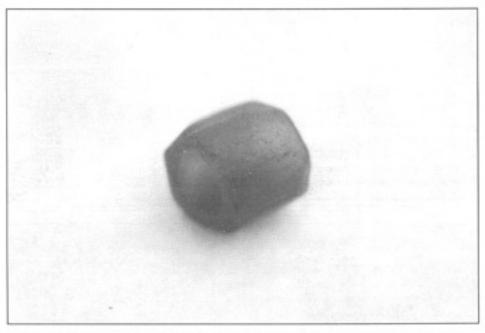
Following the survey to recover artifacts from the lakeshore, the site adjacent to Alandco II was continuously monitored

by the author according to the original guidelines set between the developer and the Broward County Historical Commission. The last task, to shape the lakeshore and plant it in natural vegetation, was followed by additional erosion, which resulted in the exposure of large bone pieces. The Broward County Archaeological Society, which has more than one experienced anthropologist on staff, was invited to study these and determine whether or not a burial had been exposed. These bones, however, proved to be from an alligator, another food source of the Tequesta. Following this discovery, the archaeological group was invited to place a few tests pits outside the LAPC preservation area to determine if any burials exist in one questionable reference area below the udorthent spoil. The presence of a burial might warrant extending the LAPC zone or relocating the burial to within the LAPC area. However, no evidence of burials was discovered.28

CONCLUSION

According to Dr. Kennedy's survey, the pottery components found on the Alandco I, Alandco II, and Alandco III middens reveal similarities between these hunting camps and that listed in the Florida Master Site File as Rolling Hills II (Site 8BD-0073). The Alandco sites served as hunting camps for over 1,000 years, yet the combined components place increased cultural activity there between A.D. 1400 and 1513.79

The historical evidence recovered at



A cobalt-blue barrel bead from the late nineteenth century was recovered from near the Alandco 2 midden. It was most likely received in trade at the Stranahan Trading Post.

Alandco II, formerly separated from the isolated Alandco I midden by a flooded sawgrass plain, indicates nineteenth century Seminole activity. Furthermore, the recovery of a cobalt trade bead indicates Seminole presence sometime between 1893 and 1911. Notably, the trade bead is similar to a variety once sold or traded by Frank Stranahan on New River. Like examples were recovered by archaeologists at the site of Stranahan's trading post, and a similar example was found on Pine Island in 1989.

Once upon a time, the primeval forests sheltered early man from the ravages of the elements and provided a storehouse of sustenance for generations. These hammock lands along the eastern fringes of the Everglades brought providence to the Tequesta people, and then to the Seminoles. However, nature's forces and man's will to improve his lifestyle resulted in the unintentional loss of such places of repose. Most unfortunately, among those losses are numerous archaeological time capsules. However, today, man is wiser. Efforts are now underway to preserve and protect the few remaining archaeological sites in Broward County.81

The recommendation of archaeologist Wilma Williams to reassess existing archaeological sites and record additional discoveries has resulted in a renewed countywide interest in preserving such landmarks. Fortunately for all, the three Alandco sites and surrounding hammock lands received their salvation as part of LAPC protection areas. These places were important to the Tequesta and the Seminoles as temporary habitats and as staging camps for yesterday's hunting expeditions, and they are important, both today and tomorrow, as permanent greenscapes, forever friendly to our environment.⁸²

It is most unfortunate that only a few such places remain near-natural landmarks. Many other archaeological sites in this region have been either altered considerably or totally destroyed. If we are to preserve the survivors and save those few representations of early man's activities in Broward County, we must not hesitate. These prehistoric and historic treasures must be preserved forever from inherent destruction. They must never be desecrated.⁸³



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