Ref. only

THE PREHISTORIC SETTLEMENT SYSTEM Robert S. Carr

Arch Creek

One of the most frequent questions asked of archeologists is how do they find sites. While the answer is not simple, the logic behind the location of prehistoric sites is. Archeologists simply try to put themselves in the place of the Indian and attempt to see the world as they would have seen it. When a site was selected by the Indians for habitation, it was done on the basis of the advantages offered by its location in relation to its closeness to food and drinking water, its accessibility by canoe, and protection from storms. This group of variables is the basis for constructing a prehistoric site model for southeastern Florida and for allowing the archeologist to predict the location of sites, even in areas now covered by urban development.

This site location model may vary for different time periods because of changes in the environment, population, or cultural beliefs that might have altered the choice of location for activity areas. For example, there is the contrast offered by the coastal sink-hole cemeteries of the Late Archaic Period compared to the construction of burial mounds 2000 years later, or the locations of Late Archaic villages presently beneath the waters of Biscayne Bay because the sea level has risen dramatically since that time.

The combination of all the sites, including the locations involved in the population's annual pattern of food procurement, habitation, and disposal of the dead, represents the settlement system. The prehistoric settlement system for southeastern Florida reflects an effective adaptation to all of the region's major natural features: the Everglades, the estuaries of the Atlantic Coastal Ridge, and the barrier islands such as Key Biscayne and Miami Beach. All of these areas were easily accessible to one another by canoe because of the rivers, creeks and sloughs that drained from the Everglades into Biscayne

Bay, and because the Bay provided a relatively safe and protected waterway for canoe travel between the coast and the islands of the Bay and the upper Florida Keys.

One of the factors of settlement that intrigue archeologists is the time of year that the various sites were in use. Questions about whether sites were used year round or on a seasonal or periodic basis have been raised by most prehistorians concerned with native South Floridians. While studies in other areas of eastern North America often reveal clear evidence of seasonal shifts of settlement in response to changes of climate and of availability of various food resources, similar "seasonal" shifts of settlement in South Florida remain to be demonstrated. Although archeologists have been able to identify specific animal and plant remains within the archeological record, and often correlate these remains with specific times of the year when these animals or plants would have been available, this positive record of the time of the year when the site was not in use during other times of the year when such seasonal indexes might be absent.

One of the reasons for this interest in settlement shifts is the belief among some scholars that the Tequestas were basically coastal dwellers, moving into the interior Everglades only for the purposes of hunting and fishing, occupying the Everglades tree islands only briefly. Excavations, however, demonstrate that interior sites were often intensively used and may not have been only temporary camps. Many of these midden deposits were large and deep (i.e. Da34 and Da45), and include cemeteries, and in at least one case, a constructed burial mound (Da45). In fact, the evidence gleaned from interior excavations has revealed marine food refuse (ie. sea turtle bones) that had been obtained in Biscayne Bay, the Atlantic Ocean, and Florida Bay. In other words, the evidence suggests that the Everglades sites might have served at times as primary habitation bases, with some foraging and food gathering being

directed at the coast rather than the reverse coastal-interior pattern often presented.

I suspect that descriptions of prehistoric settlement in South Florida should avoid terminology like "nomadic" or "semi-nomadic." Terms like nomadic conjour images of a homeless people drifting aimlessly through a hostile world. In reality, I suspect the Tequestas and other south Florida Indians of the Formative Period were very much at home in the wetlands. They lived in bands of extended families, perhaps varying from a dozen to forty people, and utilized either "permanent" or "semi-permanent" villages in both the coast and interior, with frequent trips scheduled to procure food and other resources throughout the region.

Without a doubt, the coastal sites represent a prime focus of prehistoric habitation. Taylor's survey of sites in Everglades National Park₁ indicates the larger area of habitation sites on the coast, a size difference, in part that can be attributed to the volume of shell refuse accumated on coastal sites. In other words, coastal subsistence produces more voluminous and durable refuse than interior subsistence activities might produce.

Nonetheless, the exact relationship between coastal and interior subsistence patterns remain to be demonstrated.

The Dade County historic and archeological Survey that was conducted between 1978-1980, located and assessed a total of 350 prehistoric archeological sites in the county. This is by no means all of the sites that existed there, but it is a large enough sample to provide the basis for classifying these sites into types and thus provide the basis for a regional settlement model. These site types are described as follows:

These are among the most important sites because they contain information about how people lived. A wide spectrum of activities are associated with

habitation, such as food preparation, tool usage, and daily activities that can be reconstructed from the artifacts and food refuse that occur there. In fact, there is very little of the prehistoric material culture that can not be found in association with habitation sites.

Southern Florida has a large number of habitation sites that range from an area of 5 meters in diameter where a few individuals ate and lived for a short period of time—in some cases only days or weeks—to areas of fifty hectares where hundreds of people lived nearly year round over periods of hundreds and even thousands of years. A good example of a major village or "town" site is the village of Tequesta at the mouth of the Miami River.

Archeologists refer to the larger prehistoric habitation sites as black-dirt or shell middens. A midden is an accumulation of cultural debris that may actually cause an increase in the ground elevation. Some middens in South Florida are two to three meters deep. A midden is an organically enriched deposit of cultural debris and garbage - the refuse of subsistence and habitation activities. A single shovel full of midden soil might contain parts of broken and discarded tools, pottery sherds, hundreds of animal bones, fragments from meals, charcoal from cooking fires, charred plant remains, and even human bones. Often a midden is the same location where the houses were situated because the Indians made no major effort to dispose of their trash away from the area of their dwellings.

During the assessment of Dade County sites, habitation sites were classified on the basis of the depth of the cultural deposit. These depositions are described and interpreted as follows:

1. Slight Habitation
Scattered or isolated marine shells, animal bones or artifacts.
This quantity of evidence is not necessarily associated with habitation, but could also result from tool manufacture, hunting, fishing, or meal preparation.

2. Slight to Moderate Habitation

Less than 20 centimeters of cultural deposit. Probably a "camp" that was subject to occasional seasonal or infrequent occupation, or a single occupation of one group for several months or less.

3. Moderate to Intensive Occupation

Twenty to sixty centimeters of cultural deposit. This type probably includes all kinds of habitation possibilities, ranging from a single continuous occupancy to scattered visits over thousands of years.

4. Intensive Occupation

Sixty centimeters or more of midden deposit is used to define the deepest stratified sites. These could include "camp" sites used periodically over thousands of years, but also include the largest sites in continuous use, such as the village at the mouth of the Miami River.

Constructed Mounds

Mounds should not be confused with middens. Although both types of sites are elevated deposits of sediment, the mound is purposely constructed, while the midden's elevation is an unintentional by-product of long-term occupancy that results in accumulations of trash that, through time, continued to add to the elevation of the site.

Mounds were constructed in southern Florida, as were similar mounds throughout eastern and midwestern North America, as part of a religious-social tradition for burying the dead and for creating earthen platforms for religious structures. Ethnographic evidence from other parts of the Southeast indicates, in certain cases, that constructed mounds were used by tribal chiefs as platforms for their houses.

The mounds of southeastern Florida are constructed from either sand or limestone boulders. While southeastern Florida is one of the few areas of North America that has rock mounds, their significance may be no more mysterious than the simple fact that the Indians used building materials that were easily available in the vicinity of the site. It is noteworthy that most rock mounds occur from the Miami River southward to the Florida Keys, where loose rocks abound in the hardwood hammocks. Conversely, deep deposits of sand occur less frequently south of the Miami River, and not

surprisingly, sand mounds tend to occur more frequently from the Miami River northward.

Studies of historical records and of accounts by archeologists who visited Miami before intensive development indicate that there may have been at least fifteen mounds in present-day Dade County. Three of these were rock mounds, and the others were made of sand, except for possibly one muck burial mound (Da36) once located on Flagami Island. Most of the fifteen mounds have been destroyed by development, and those that survive have been the targets of skull collectors and treasure hunters, making the task of preserving these remaining mounds difficult at best.

Among the best preserved of the surviving mounds in Dade County is the burial mound (Da20) along the Little River in the community of El Portal. This mound has the distinction of being Dade County's first publically preserved archeological site, dedicated as an archeological park in 1925 as part of the Sherwood Forest development. Although the mound's integrity greatly suffered in the 1940's from the many neighborhood children determined to wrestle the mound's secrets from the earth, in general, the mound's form and the many beautiful oak trees make this one of the most attractive and charming vistas in all of Dade County (fig. 4.2).

In 1980, the Dade County Historic Preservation Division excavated several small test pits on the mound to determine the site's integrity and age. A number of human teeth and some fragmented human bones were uncovered proving that it was a burial mound, and beneath the mound a prehistoric habitation site filled with charred animal bones and shells was discovered. Charcoal from this midden strata indicated that the habitation site was used about 2,000 years ago. A radiocarbon date of 505-645 A.D. was determined for charcoal in the basal sand at the bottom of the mound indicating that it was constructed some time after that date. Near the bottom of one of the two test pits, a small

stubby forty year old wooden pencil was found, modern testimony to the proverbial archeological Kilroy who had been there first.

Similar destructive curiosity has targeted the burial mound at Cutler (Da8) during the last century, but again, the mound's format is generally preserved and what is heralded as the county's largest oak tree grows stoically upon the mound's crest, its roots undoubtedly rearranging whatever burials might have been missed by looters.

The Cutler Mound is 12 by 1 meters at the base and about 2 meters above the surrounding terrain. Henry Perrine Jr. described and removed (then lost) a number of burials from the site (see Chapter 1), and subsequently, Ralph Monroe of Coconut Grove lead and photographed a digging expedition to the mound at the turn of the last century (fig. 4.3). Today, the mound is preserved within the Deering Estate County Park.

Cemeteries

The mortuary behavior of the Tequestas and their predecessors was undoubtedly a complicated set of procedures that involved a variety of specialized activity areas. Ethnographic and archeological evidence indicates that often some form of defleshing of the deceased was practiced before interment. Evidence of a specialized burial preparation area within an artifical pond has been uncovered at the Fort Center site near Lake Okeechobee. Accounts of the earliest European observation of Key West (the name was actually corrupted from Cayo Hueso, or Bone Key) indicate that human skeletons lay strewn on the beaches, causing early visitors to conclude that the Indians there were cannibals or that the skeletons were the result of a great Indian battle. In all probability, the skeletons were placed on the beach to allow them to be defleshed in preparation for burial.

A similar practice of secondary burial preparation may have occurred on coastal and interior sites in Dade County. There are numerous reports of

DADE COUNTY'S PREHISTORIC SITES

The Metro-Dade survey of archeological sites located and assessed over three hundred and fifty prehistoric sites in present-day Dade County. This number probably represents about one third of the sites that existed there before urban development. A selection of 17 of these sites is discussed in this chapter. The seventeen were selected because they are among the County's most significant prehistoric sites (although there are certainly many other important sites in Dade County), and because, overall, the sites discussed provide a representation of the typical prehistoric site types and their associated natural environments. These sites provide examples of the prehistoric adaptation to the four principal physiographic regions with Dade County: The Atlantic Ocean, Biscayne Bay, the Atlantic Coastal Ridge, and the Everglades (fig. 4.8). In addition, most of have been subjected to major archeological and collecting activities, and thus provide the major data base for most of what we know about the prehistory of the area.

SITES ON THE RIVERS

The rivers of southern Florida were the roadways of prehistoric times. Although Dade County's rivers are hardly imposing, they provided canoe access between the interior Everglades and Biscayne Bay and the Atlantic Ocean. From the Oleta River and Arch Creek to the north, and southward to Snapper Creek, the Indians inhabited the elevated river banks and traveled between the Everglades and Biscayne Bay, fishing and hunting across the once wild countryside.

The mouth of the Miami River was the largest and probably the most populated complex of prehistoric sites of any similar-sized area of southeastern Florida. At one time, both the north and south banks of the river

were the sites of large Indian villages and constructed mounds (fig. 4.9). At least five mounds are recorded as being in the vicinity of the Miami River's mouth.

Miami Midden 1 (Dall)

John Goggin designated the north bank village site as Miami Midden 1 (Dall) and the southern midden as Miami Midden 2 (Dal2). Goggin apparently never excavated in either site - probably a difficult task when he was in the area in the 1930's and 1940's since the sites were under the manicured lawns and gardens of various private homes and hotels. In the 1960's, however, other investigators were able to excavate - including Dan Laxson, the author, the Broward County Archeological Society, and in the mid 1970's, Florida's Division of Archives, History, and Records Management.

The Miami Midden 1 encompasses an area of approximately 50 acres, extending northward along Biscayne Bay to the vicinity of present-day Flagler Street. A slightly elevated ridge is visible in several pre-1910 photographs of Flagler Street's termination at Biscayne Bay. This elevation was probably part of the midden deposit. Several years ago, crane operator Bob Holt told me that when he worked on the construction of the Brickell Tower Building between S.E. 1st Street and 2nd Street, he uncovered several deep, shell-lined pits. Unfortunately, archeologists were not able to analyze these features before they were destroyed.

The midden area extended westward along the Miami River to near the Miami Avenue Bridge, but the deepest and most significant deposits of material were concentrated near Brickell Avenue and the Bay. Scattered refuse and artifacts extended as far inland as the present site of the Cultural Center on Flagler Street and N.W. 2nd Avenue. The broad extent of this site reflects the extensive prehistoric activities that once occurred there.

The site was less than one acre in area, being totally shouldered upon a narrow 7 meter length of river bank. Interestingly, much of the site was under the waters of high tide during archeological excavations there, suggesting that the sea level had risen since the site was occupied. Careful excavation uncovered a thin midden layer of less than 20 cm of animal bones and shell refuse situated directly upon the bedrock (fig. 4.12). A concentration of clam shells on top of an area of burnt limestone bedrock represented a possible hearth. A small number of artifacts were discovered including a possible shell projectile point, a shell anchor, and a perforated shark's tooth. Only a few sherds of undecorated pottery were found.

While this small assemblage of artifacts may seem unspectacular, they are significant because it represents the remains of activities associated with a small group or family camping on the Miami River for either one or several visits around circa 500 A.D. This was probably typical of many such camps on the river, and such small sites have as much to teach us as do the larger ones – sometimes even providing facts that cannot be learned from a larger site.

Despite what might appear to be the temporality of the Jose Marti camp, the remains of a human burial were found within 30 feet of the camp. Buried in a small solution hole, the fragments of the cranium of an Indian woman were found at what is now the location of the park bulkhead.

Arch Creek Site (Da23)

During prehistoric times, an Indian canoe trip from the town of Tequesta at the mouth of the Miami River northward to Arch Creek probably took about one hour to travel the seven mile distance. The view and landscape would have been beautiful - clear bay bottom, a continual green fringe of mangroves, and a distant curtain of pine trees that announced the upland coastal ridge just behind the mangroves. On entering Arch Creek, the view would soon change from beautiful to spectacular.

Mangrove branches overhung the mouth of Arch Creek, and dead-still air greeted canoe travelers as the fresh bay winds were left behind, blocked by the thick mangrove forest. For fifteen minutes, the one mile canoe trip westward was uneventful, the low green swampy banks giving no hint of what lay upstream. As the creek made its first major bend northward, solid cliffs of white limestone suddenly thrust out of the black mangrove muck. There grew hardwood trees lushly draped in Spanish moss, orchids, and bromeliads. It was near the foot of the rock cliff that the canoes landed, and upon the rocky ridge that the Indians had built one of their major coastal villages.

Just 100 meters beyond the landing was the one feature that must have impressed the Indians as much as it marveled the white settlers who followed. A natural bridge of limestone stradled the creek - the last unyeilding rock to survive the milenia of rushing water that had worn the creek bed deep into the oolitic limestone.

The Arch Creek Indian village encompassed much of the ridge north of the creek - probably in excess of 20 acres. It encompassed a deep black dirt midden that was the result of the Tequestas and their ancestors living there continously since at least circa 750 B.C. - in a village probably populated by less than 100 people.

In the 1920's, the botantist John Kunkel Small visited the site and offered the following description..."there are evidences of much activity, in the way of kitchen middens, village sites, and burial mounds." Avocational archeologist Karl Squires dug there in the 1940's, and John Goggin recorded the site for the Florida State Master Site File in the early 1950's. By that time, the site had already been diminished by development, and Goggin could locate none of the burial mounds referred to by Small. The only description of a burial mound at the site is the following account from 1899 by Florence Miller, who had dug there with friends during a picnic outing at the natural bridge.

She left the following description:

A short distance west of the bridge was an elevation, into which we dug. We found skeletons buried on a level in a circle, heads in feet out. An apparently perfect skull would crumble when exposed to air. There were shells on the skeletons, flat shells arranged as a necklace would be, a large one on the breast and smaller ones towards the neck. Each shell had two holes, as for a cord or string, but whatever held them was gone.

Unfortunately, this burial mound is long gone - either destroyed by the construction of Flagler's railroad, or by some other development, such as a road farming, or simply hauled away as fill.

Miller's picnic dig may have been an ominous sign of the future, because the 20th century has not proven kind to Arch Creek - either to its natural or archeological treasures. The site is among the most dug-in of all sites in Dade County. No less than five different excavation projects have been conducted there since Dan Laxson's dig in 1958, when he dug eight excavation squares there. 10 The data provided by these excavation projects, particularly those done jointly by the Miami-West India Archeological Society and the Broward County Archaeological Society, 11 and finally the 1975 excavation project conducted by Florida's Division of Archives, History, and Records Management 12 greatly contributed to the State's decision to acquire the major part of the Arch Creek site and preserve it as a park before it could be destroyed by development.

Among the major impacts to the site was the construction of N.E. 135th Street across the midden - permenantly dividing the site into two sections (fig. 4.13). While most of the archeological integrity of the southern section was permenantly damaged by bulldozing in 1956, and again in the 1960's, the limestone bluffs and canoe landing have survived, along with part of the mangroves.

The most ominous threat to the site was the proposed 1972 development of the area north of N.E. 135th Street as a car lot. Community activists rallied to preserve the property to prevent it from being just another paved development, and eventually their efforts succeeded - with the land being acquired in 1974 as a public park. However, on the very eve of public acquisition, the natural bridge mysteriously collapsed.

Today, the land is a county park and co-managed by the Arch Creek Trust, a group of citizens dedicated to maintaining and restoring the property's original hardwood hammock. A small museum and nature center was constructed there in 1983, and in 1986, the Arch Creek Site was listed on the National Register of Historic Places. A replica of the stone bridge was reconstructed in 1986 by the County and Arch Creek Trust. (See Chapter ____ for a description of the Arch Creek Coontie Mill).

ISLANDS IN THE EVERGLADES

Sites in the Everglades are usually confined to the elevated tree islands that dot the wetlands. These interior sites are more numerous and often better preserved than sites on the coastal ridge and along the bay. This is simply a result of generally less disturbing influences in the interior, although rapid urban growth, farming, and artifact collectors are destroying more and more of these once remote Everglades sites.

There is no significant difference in the age of interior sites as compared with those of the coast. The Late Archaic sites of Biscayne Bay, such as the Atlantis site (Dal082) and Santa Maria (Da2132), have comparable dates to some sites in the eastern Everglades. Everglades sites such as Peace Camp (Bd52), Smith (Bd59), Cheetum (Dal058), and Coleman (Dal41) have all yielded early dates of occupation ranging from 2000-1500 B.C. At the time of the writing of this book no early horizons have been uncovered from sites in

Footnotes for Chapter 4

age	
1	Taylor, et al. Survey of Everglades National Park
2	Goggin Field notes; Master Site File
3	Sears The Fort Center Site
4	Griffin Granda Report
5	Willey Surfside and Opa-locka work
6	Griffin Granada Report
7	Griffin Granada Report
8	Small description of Arch Creek
9	Florence Miller Arch Creek
10	Laxson Arch Creek
11	MIWAS & Broward Arch Creek
12	Carr Arch Creek
13	Laxson Trail site
14	Coleman Report
15	Coleman ibid.
16	Small Surfside
17	Willey Surside