

THE ARCH CREEK SITE

D. D. Iaxson

In early January 1956 an area of land, roughly triangular in shape, bounded on the east by Biscayne Boulevard, on the south and west by Arch Creek, in northeast Dade county, was being partially cleared, possibly for the construction of homes (Fig. 1).

Several buildings, part of the abandoned Sea Breeze Trailer park, are scattered about the highest part of the land, some six hundred feet north of the bridge crossing the boulevard. A hand level showed the elevation of these buildings to be approximately five feet above the creek's banks just below and west of the bridge.

In heaping two large piles of mangroves and other vegetation, bulldozers had exposed many whole and fragmentary conch, whelk, clam and oyster shells. More than three hundred sherds and a dozen Strombus celts were picked up in this area on the initial surface survey. Condition and location of the material tended to indicate sporadic occupation by Indians.

A partial list of vegetation included ficus, gumbo limbo, cabbage palm, live oak, pigeon plum, bay, coco plum, mangrove and more recently planted mango, avacado and royal poinciana.

No signs of animal life, other than the raccoon, were noted.

Soil was, for the most part, sand over a basal formation of pot-holed limestone which appeared on the surface frequently. A strip of black dirt, evidence of the midden location, extends several hundred feet NE-SW along the highest part of the land just south of the buildings. A metal fence runs parallel to this area (Fig. 1).

A short distance northwest of this site, Arch Creek runs through the only natural bridge formation in south Florida. Originally the creek was a horizontal solution hole. Swampy, acid-charged ground water gradually weakened the roof of this tunnel until large pieces caved in, eventually forming an open limestone gorge. This small creek rises westward in the glades, is tidal throughout its two mile length, and enters Biscayne Bay through a low marsh.

The location and surface material make this site rather conspicuous. Material had recently been pushed north from the creek banks and also had been scattered south in the course of constructing the trailer court on the ridge. The result was a confusing admixture of modern and ancient artifacts on and near the surface.

Since the north side of the fence was dominated by a large ficus, whose tremendous root system, coupled with the concrete foundation of the old trailer park laundry, made excavating difficult, it was decided to dig all test pits on the south side and parallel to the fence. Here hundreds of conch shells were scattered on the surface. Permission was obtained from the land's owners and eight pits, averaging five feet square, were excavated in a line NESW and separated one from the other from ten to thirty feet (Fig. 1).

Pit one, started in April 1956, was dug on the extreme NE end of the fence row. Digging was very slow on account of large numbers of conch shells, making a shovel almost useless. Over a hundred shells were removed in the first layer. Pit eight, the last test, was completed in August 1956 and was excavated on the extreme southwest end of the fence row.

There was a small percentage of bone in each pit, for the most part rodent, land, sea turtle and deer. Every test showed an abundance of shell of common varieties native to the region at time of occupancy. Shell included the conchs Strombus gigas, Strombus pugilis, Barnea costatus, and the whelk Busycon per-versum. Other shells were the Virginia, crested, winged tree,

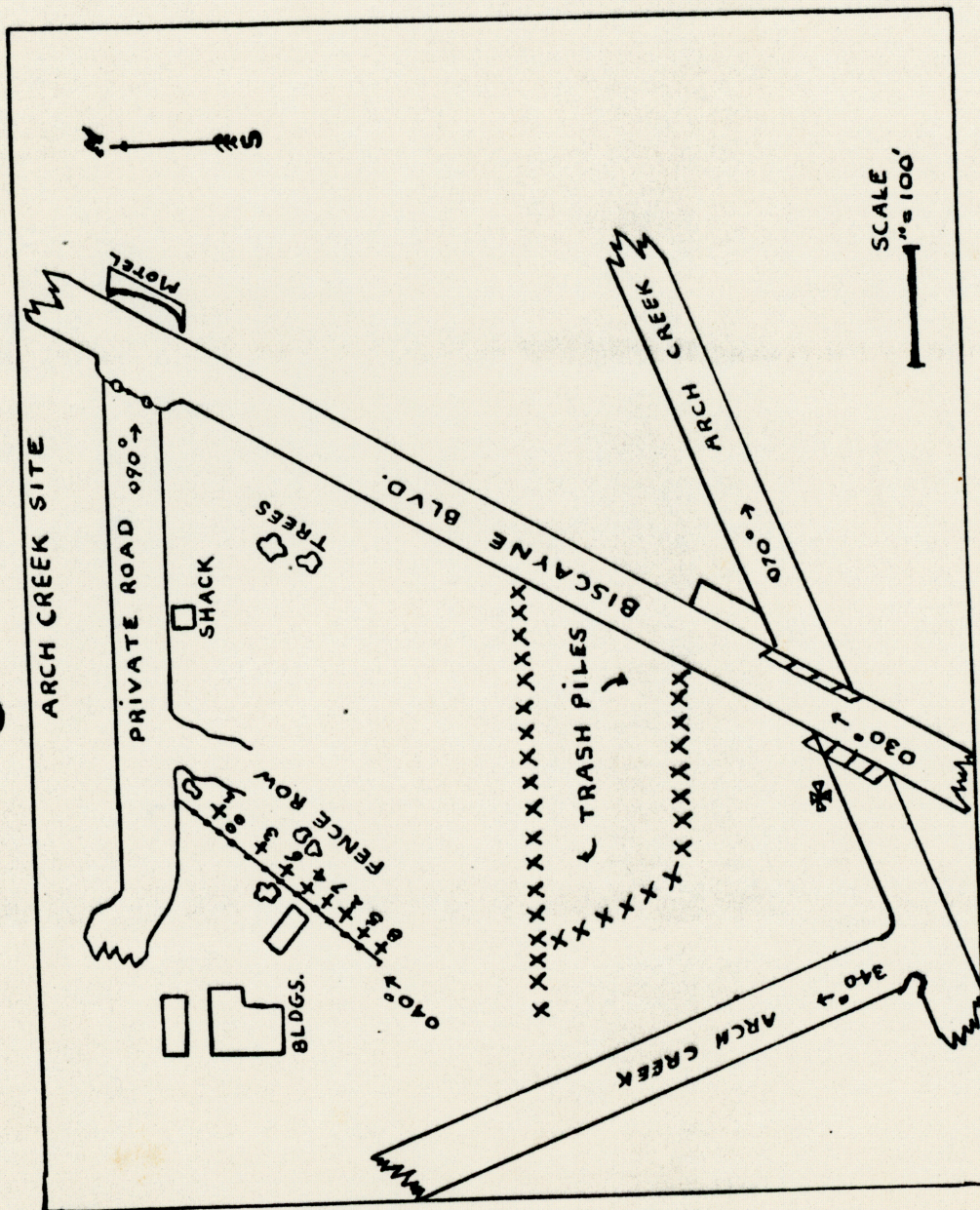


Fig. 1. Map of Arch Creek Site showing location of tests.

and bush oyster, various clams and the band shell Fasciolaria
gigantia.

Finds, while not dramatic, were gratifying. In the top level of Pit one was found a single sherd with an incised zig zag motif parallel to the rim. This type had previously been excavated in Hialeah numbers 1 (Laxson, 1953) and 4 and a Marine Air Station midden. A tiny well constructed, stone pendant of the "plumb bob" type was found in the top layer of Pit eight. A Cypraea spoon was in Pit three and an excellent specimen of Busycon pick was found in Pit four. A discoidal sherd (Fig. 2, C) and fragments of a bone pin of the "expanded head" type were also found. Vertical distribution of specimens is given in Table 2.

Many shark vertebrae were found at all levels, some were perforated for use as beads, others had rims badly concaved from wear as if clamped in a yoke of some sort. It is thought possible they were used as net handles or were strung together by the rims for ornamental purposes.

Tests seem to indicate stratigraphy within Glades II times (Table 1). Surfside Incised (Fig. 2 F) along with the St. Johns wares were near the top. Opa Locka Incised (Fig. 3, E-F) seemed to average rather deep while Key Largo Incised (Fig. 3, A) was concentrated at a shallow depth. Several transitional forms were found. A few of the Opa Locka Incised sherds (Fig. 3, C-D) had single arches but were classified as Opa Locka rather than Key Largo because of the lack of a vertical line. Another type was in the form of Opa Locka plus vertical lines extending downwards to form Key Largo with a multiple top (Fig. 3, B). These forms tend to indicate Opa Locka becoming Key Largo with time. Ft. Drum Incised appears relatively early.

It was noted that only a single sherd of the Glades III index marker, Glades Tooled, was found. Actually the example (Fig. 2, D) seemed more a modification of the Fort Drum "ticked" rim, possibly a forerunner of Glades Tooled. Occupation seemed to be Glades II A, B, and C. The picture was not unlike the Grossman's Hammock site, at some levels (Brooks 1956).

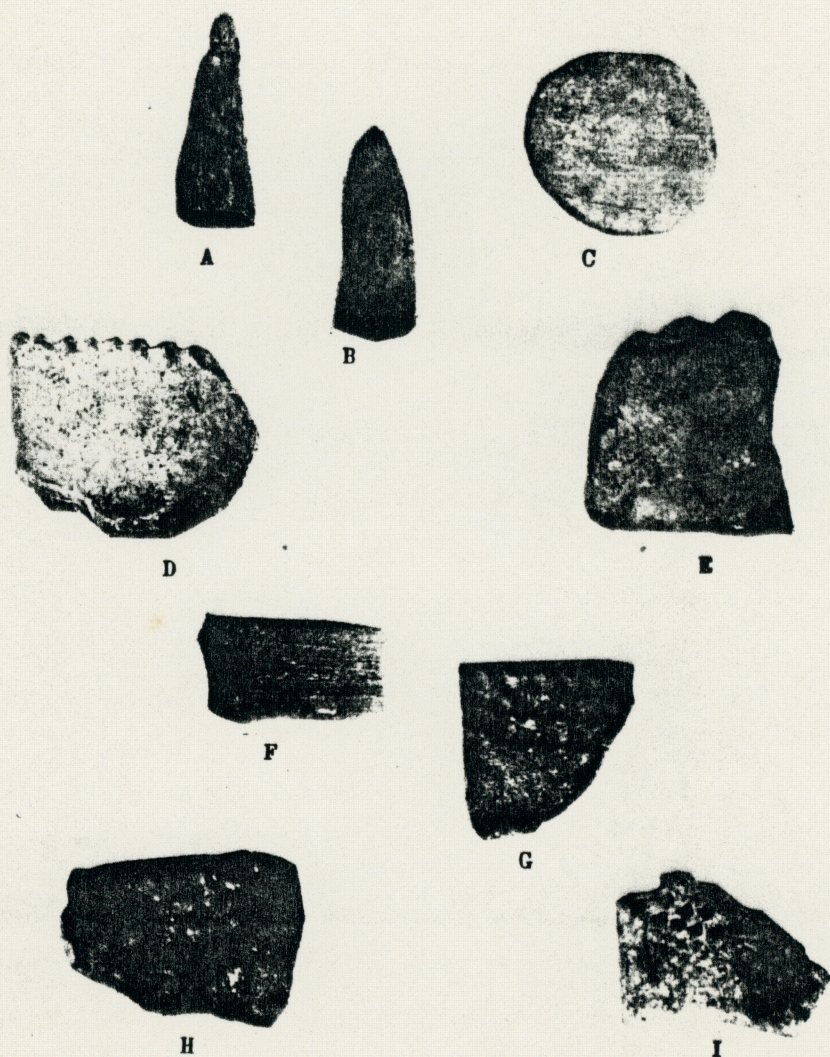


Fig. 2. Specimens from the Arch Creek site.

A, cut deer antler, possibly a plummet; B, utilized deer antler
tine, possibly a flaker; C, pottery disc; D, Glades Tooled; E,
Glades Plain with fluted rim; F, Surfside Incised; G, Plantation
Pinched; H-I, unique punctated.

Arch Creek, along with other middens such as Uleta River, Indian and Snapper Creek, and Surfside seemed to have been occupied contemporaneously and abandoned at approximately the same time. The one exception in the general vicinity seems to be the midden near the mouth of the Miami River which shows occupancy during Glades III times.

Fluctuation of sea level may have accounted for the inhabitants departure from the coastal middens by changing the salinity of the water and disrupting important sources of food. The oyster is particularly sensitive to the salinity of water.

Another possibility is that middens such as these were fairly well exposed to the elements. Any series of cataclysmic hurricanes, with the accompanying high winds and tides, could have forced the inhabitants westward into the heavily wooded hammocks which serve as excellent windbreaks. Two Glades III sites, Madden's hammock and Dupont Plaza show material evidence such as Strombus celts, bone pins, sea turtle bones etc. that could indicate their occupancy by former inhabitants of coastal middens.

Appreciation is expressed to Mr. Peter Gluckman, owner of the property, for permission to dig; to Wayne Allen, John Hackett, Bob Masters and Noel Herrmann for digging and screening; and to Ripley P. Bullen, Curator of Social Sciences, Florida State Museum for help with the illustrations.

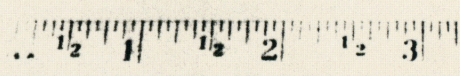
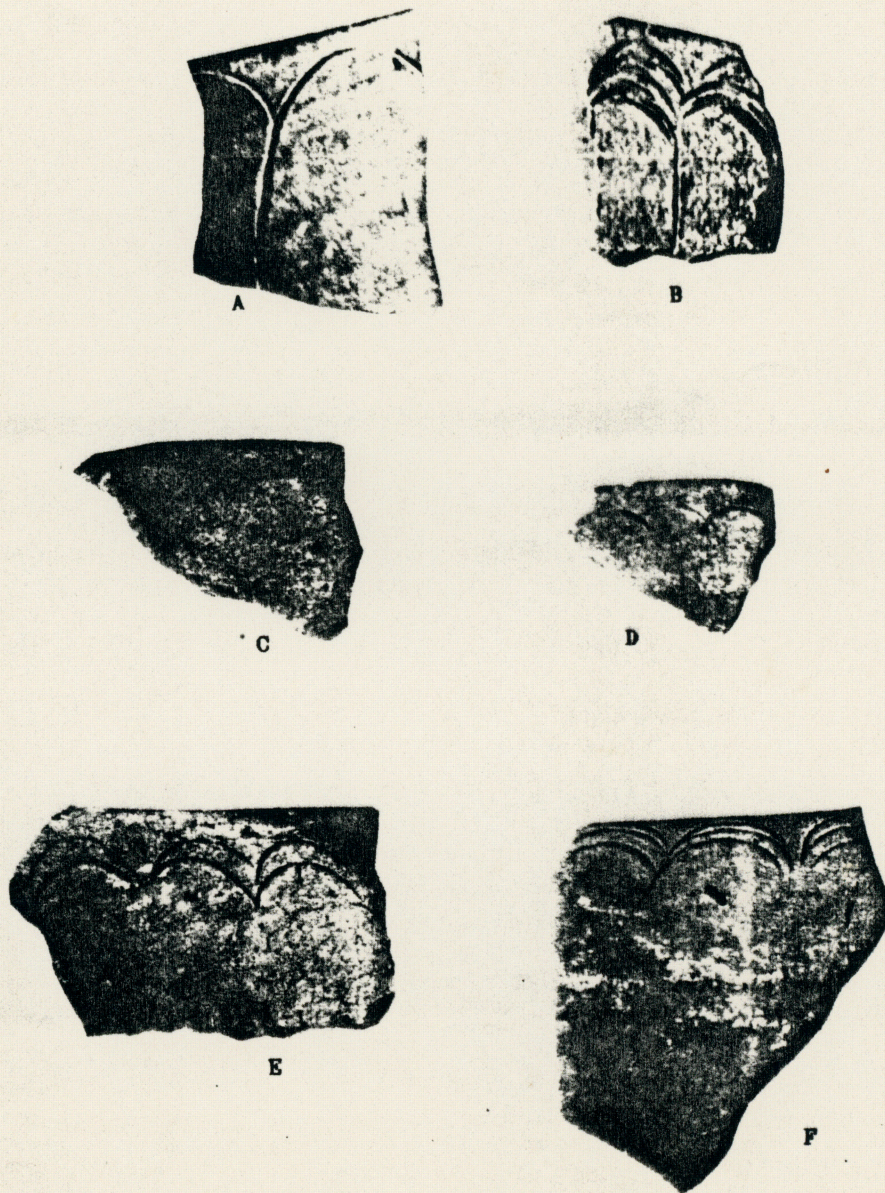


Fig. 3. Sherds from the Arch Creek site.
A, Key Largo Incised; B, Combination Key Largo and Opa Locka Incised; C-D, Opa Locka Incised variants; E-F, Opa Locka Incised.

TABLE 1. POTTERY DISTRIBUTION AT THE ARCH CREEK SITE

Pottery Types	Depths in inches			Totals
	0-6	6-12	12-18	
Glades Tooled	1			1
Glades Plain, fluted lips		2		2
Surfside Incised	4	1		5
Key Largo Incised	20	3	1	24
Opa Locka and Key Largo Incised - transitional (?)		1		1
Opa Locka Incised	5	12	9	26
Matecumbe Incised	1	4	1	6
Miami Incised	7	5	1	13
Dade Incised	5	3	2	10
Carrabelle Incised-like	1			1
Gordons Pass Incised (?)			1	1
Plantation Pinched		1		1
Ft. Drum Incised	1	3	4	8
Miscellaneous incised	7	4		11
Miscellaneous punctated	2	3		5
Dunns Creek Red	3			3
St. Johns Check Stamped	1			1
St. Johns Plain	3			3
Belle Glades Plain	19	8	2	29
Miscellaneous Plain	3			3
Glades Plain	868	559	241	1668

TABLE 2. ARTIFACT DISTRIBUTION AT THE ARCH CREEK SITE

Artifact Types	Depths in inches		
	0-6	6-12	12-18
Pottery disc	1		
Bone Pin fragments	1	1	
Bone points	8		1
Hollow bone points	2	1	
Worked bone	3	2	2
Sandstone hone	1		
Stone pendant	1		
Strombus Celts	13	3	3
Strombus Gouge	1	1	
Busycon Pick	1	1	
Cypraea Spoon		1	
Shark vertebrae, possibly perforated for use	10	8	4
Shark vertebrae, with worn rims	17	11	5



Fig. 4. Sherds from the Arch Creek site.
 A-B, unique incised; C-D, Dade Incised; E-H, Miami Incised; I, Glades Plain exhibiting smoothing marks; J, Carrabelle Incised-like.

BIBLIOGRAPHY

Brooks, Marvin L., Jr.

1958. "Excavations at Grossman Hammock, Dade County, Florida." The Florida Anthropologist, Vol. IX, No. 2, pp. 37-46. Gainesville.

Griffin, John W., Editor

1949. The Florida Indian and his Neighbors. Winter Park.

Goggin John M.

- 1950a. "Stratigraphic Tests in the Everglades National Park." American Antiquity, Vol. 15, No. 3, pp. 228-246. Menasha.

- 1950b. "The Snapper Creek Site." The Florida Anthropologist, Vol. III, Nos. 3-4, pp. 50-66. Gainesville.

Goggin, John M., and Frank H. Sommer III

1949. "Excavations on Upper Matecumbe Key, Florida." Yale University Publications in Anthropology, No. 42. New Haven.

Laxson, D. D.

1953. "Stratigraphy in a Hialeah Midden." The Florida Anthropologist, Vol. VI. No. 1, pp. 1-8. Gainesville.

Parker and Cook

1944. Late Cenozoic Geology of Southern Florida.

Rouse, Irving Rouse

1951. "A Survey of Indian River Archeology, Florida." Yale University Publications in Anthropology, No. 44. New Haven.

Hialeah, Florida