

PROCEEDINGS

**First
San Salvador Conference
Columbus And His World**

Compiled by Donald T. Gerace



held
October 30 — November 3, 1986

at
The College Center of the Finger Lakes
Bahamian Field Station
San Salvador Island, Bahamas

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Second Printing March, 1991

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Library of Congress Catalog Card Number 87-70948

ISBN 0-935909-23-0

*Typeset by Summit Technical Associates, Inc.
Coral Springs, Florida*

*Printed by Technical Communications Services
North Kansas City, Missouri*

*Published by College Center of the Finger Lakes
Bahamian Field Station
270 Southwest 34 Street
Fort Lauderdale, Florida 33315*

Lucayan Lifeways at the Time of Columbus

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ABSTRACT

The Lucayan Indians of the Bahamas were the first New World natives encountered by Columbus. Columbus's journal of his sixteen-day journey through the Bahamas archipelago is the only known eyewitness description of the Lucayans who had succumbed to European pestilence, treachery and greed within two decades of the Landfall. Archaeological research conducted at Pigeon Creek, San Salvador, and other prehistoric settlements in the central Bahamas has provided important information on Lucayan origins, subsistence, technology and trade. A reconstruction of Lucayan lifeways at the time of Columbus enables us to better understand these New World natives, as well as to verify certain of Columbus's observations.

INTRODUCTION

"They all go quite naked as their mothers bore them,"¹ said Christopher Columbus of the islanders who had gathered to watch the landing of the *Nina*, the *Pinta* and the *Santa Maria*. Thus began one of the most astonishing encounters of history, the meeting of the Old World and the New. On October 12, 1492, Columbus took possession of a small island at the far reaches of the Ocean Sea and named it San Salvador after the Holy Savior who had guided him safely ashore. To the natives who watched this ceremony without understanding its meaning or comprehending its magnitude, the island already had a name. It was *Guanahani*. The people of Guanahani, who Columbus called Indians, are called Lucayans.

Columbus' *Journal of the First Voyage* provides the earliest eyewitness description of the Lucayans. He tells us that they were a gentle people, handsome and of good stature. Their hair was worn down over their eyebrows with a long hank in back which they never cut. They painted their faces and bodies in red, black and white designs which must have been a

colorful if disappointing sight to the Europeans who had crossed the ocean in search of gold, spices and the Grand Khan of Cathay. But not riches nor Oriental potentates awaited Columbus on that isolated beach in the Bahamas. "They are very poor in everything," was his sad comment. The Lucayans wore little clothing, nothing more than the leaf of a plant or a net of cotton covering their private parts, and except for a few ornaments there was no sign of the gold that Columbus had hoped to find in great abundance.

Columbus' wish was to convert the Indians to Christianity but his arrival was ultimately responsible for their eradication. Only a few years after the landfall the Spanish priest-historian Bartolomé de las Casas was able to comment that to sail to the Lucayan Isles one need only to follow the floating corpses of Indians that marked the way.² Although this was likely an exaggeration, the gentle Lucayans were little prepared to deal with the onslaught of Europeans to their island paradise. They had no resistance to the diseases brought by the Europeans; nor were they able to live under the harsh treatment that the Christians imposed upon them. It has been estimated that from 20,000 to 40,000 Indians lived in the Bahamas when Columbus arrived. Their encounter with Europeans, however, was so devastating and so final that within two decades of the landfall the Lucayans were gone, victims of pestilence, treachery and greed. The Lucayans, who had welcomed Columbus to the New World, became the first to succumb to the new social order that was to overwhelm America.

THE LUCAYANS

Who were the Lucayans? When and from where did they come to the islands we call The Bahamas? What was their lifestyle like? Such questions have interested archaeologists and other scholars for close to a century. In 1887, William K. Brooks presented the first scientific paper on the Lucayan Indians.³ Brooks noted the close resemblance between three Lucayan skulls from New Providence Island and crania known from Haiti and Cuba. By referring to the Lucayan specimens he was also able to dispel the then current myth that a race of giants had once existed in western Florida! Theodoor de Booy conducted an archaeological survey of the Bahamas in 1912, followed by additional surveys and test excavations by Froelich G. Rainey, Herbert W. Krieger, Julian Granberry, John M. Goggin and Ruth Durlacher Wolper.⁴ Krieger suggested that a close cultural connection existed between the Lucayans and the Arawaks of Hispaniola. Granberry divided the Bahamas into three cultural-geographical zones and pointed to a close relationship between Lucayan ceramics and the pottery of northern Haiti.

The first systematic excavation of an open coastal midden was conducted in 1965 by Charles A. Hoffman at the Palmetto Grove site on San Salvador Island in the central Bahamas.⁵ Hoffman defined the Palmetto

Ware assemblage of Lucayan ceramics and recognized the relationship of Bahamas pottery with that of Haiti and the Virgin Islands. Between 1965 and 1978 sites were excavated on Cat Island, Eleuthera, New Providence, Crooked Island, San Salvador and Middle Caicos.⁶ The status of Bahamas prehistory was reviewed in 1978 by William H. Sears and Shaun D. Sullivan.⁷

Since 1978 there has been a flurry of archaeological activity in the Bahamas, much of it encouraged and supported by the CCFL Bahamian Field Station on San Salvador.⁸ The Pigeon Creek site on San Salvador has been the focus of an ongoing field research project by the author who has also conducted preliminary excavations on Cat Island.⁹ Hoffman has excavated the protohistoric Long Bay site on San Salvador and recently has investigated sites on Samana Cay.¹⁰ Mary Jane Berman and Perry Gnivecki have excavated sites on San Salvador and Long Island.¹¹ John Winter has conducted site surveys in the central and northern Bahamas, and William F. Keegan and Steven W. Mitchell have investigated sites in the southern and central Bahamas.¹² Now, one hundred years after the first interest in Lucayan archaeology we can begin to summarize and assess our knowledge of the existence, substance and caliber of Lucayan culture in the Bahama Islands.

Lucayan Origins

Columbus observed that the people he met during his journey through the Bahamas spoke the same language and shared the same customs as those he encountered later on the island of Cuba. At the time of Columbus the Tainos had successfully colonized all of the major islands of the Greater Antilles with the exception of western Cuba where the pre-ceramic Guanajatabey (also known as the Ciboney) had managed to retain their non-agricultural lifestyle. In the Lesser Antilles to the south lived the Island-Carib, a bellicose people whose northward intrusion into the Taino heartland was only checked by the arrival of the Spaniards.

The Taino occupation of the West Indies had its beginnings at about the time of Christ when migrants from the Orinoco Delta and Guinea Coast entered the Caribbean by way of Trinidad and Tobago.¹³ Using the islands of the Lesser Antilles as stepping stones, these people reached the Greater Antilles by A.D. 600. There they developed a number of chiefdom-level societies, practiced manioc agriculture and the gathering of intertidal and pelagic marine resources, and shared in a religious system based on the worship of "zemis." Another aspect of Taino society, one which is not clearly understood, was their possible role as accomplished traders interacting within an economic network that included the Mesoamerican mainland of the Yucatan and Central America as well as possible contacts with the southeastern United States.

The entry of man into the Bahamas is thought to have occurred between A.D. 800 and 1000, although the exact pattern of island occupation is not

yet understood. Three distinct migration routes may be considered based on archaeological and historical evidence. Sears and Sullivan believe that Tainos from Hispaniola and/or Cuba moved into the Caicos region in the southern Bahamas as early as A.D. 800 in order to collect crystalline salt and dried conch.¹⁴ These commodities were sought after by the historic Tainos of Hispaniola but it is not certain that they can account for early settlement in the archipelago.¹⁵ It also is possible that migrants from Cuba colonized the central Bahamas at about A.D. 900. Radiocarbon dates from the Pigeon Creek site on San Salvador indicate that a large village had been established there by A.D. 1100 and perhaps even earlier based on pottery designs which show strong affinities with the Meillacoid ceramic series from eastern Cuba. The ceramic inventory from Pigeon Creek also suggests the possibility of a third migration route emanating from the Magens Bay region of the Virgin Islands as early as A.D. 900.¹⁶

A more precise determination of the initial route of migration into the Bahamas must await further archaeological research. Indeed, the peopling of the Bahamas may well have been the result of simultaneous migrations from two or more islands in the Greater Antilles leading to the suggestion that the Bahamas may have been a colonial region that was exploited by a number of cultures, or chiefdoms, in the West Indies.

Lucayan Settlement

Well over one hundred prehistoric sites are known in the Bahamas ranging in type from village settlements to cave burials to single activity areas and in size from five hectares to a few square meters. Sites have been found on all of the major islands and many of the smaller ones. Site distribution in the Bahamas seems to correspond closely with climatic conditions. There are relatively few sites in the northern Bahamas, which has been classified as a moist subtropical zone.¹⁷ Whether the low site inventory is due to climatic constraints, distance from the centers of occupation to the south, or the lack of reconnaissance research in the region is not known. The central Bahamas, a moist tropical zone, has the largest number of sites and apparently was the most densely populated zone in prehistoric times. The southern Bahamas, including the Turks and Caicos Islands, have been characterized as a dry tropical zone. Site inventory is relatively low, although a major ceremonial center has been located on Middle Caicos.¹⁸

It is interesting to note that the islands with the largest number of sites are those which are located closest to the open ocean on the eastern bank of the archipelago. These include Eleuthera, Cat Island, San Salvador, Long Island and Crooked Island, all in the central Bahamas. Site location also appears to follow natural or environmental features. It is not uncommon to find sites on coves, inlets, lagoons or other protected areas. Sites are also more commonly found on the leeward side of islands, and with the exception of cave burials are located adjacent or close to the shoreline. Few sites are known to occur in inland locations.

The Pigeon Creek site on San Salvador has been chosen for our discussion of Lucayan settlement, subsistence and technology. Although larger than other known sites, Pigeon Creek is fairly typical in terms of location, midden deposits and other archaeological and environmental features. We suspect that Pigeon Creek was a *cacique* residence and may have played an important role in the social and economic development of Lucayan culture.

Pigeon Creek is the largest-known Lucayan settlement in the Bahamas, occupying an area of 8.4 hectares (approximately 12 acres) (Fig. 1). The site was probably settled as early as A.D. 1100 or possibly earlier and may have been penecontemporaneous with Columbus' landfall, based on a range of radiocarbon dates from A.D. 1110 to A.D. 1560.¹⁹ The Pigeon Creek settlement was situated in an ideal location. The site covers a long dune ridge along the northeastern shore of the Pigeon Creek estuary in the southern part of San Salvador. It has been said that estuaries have long been a focus of human settlement because of their wide array of living and nonliving resources.²⁰ The Pigeon Creek village certainly fits this description as its location, large size and inventory of archaeological remains clearly indicate. The site's location on a protected cove on the leeward shore of an estuary would have provided the inhabitants with a safe berth for their dugout canoes as well as a convenient access to the rich marine resources of both the shallow waters of the estuary and the nearby ocean. The site has yielded an abundance of clam shells, particularly *Codakia obicularis*, as well as other marine food remains which must have been collected in the vicinity. Bones of grouper (*Epinephelus striatus*), parrot fish (*Sparisoma* sp.) and other ocean species, as well as shells of sea snails (*Strombus* sp., *Cittarium pica*, *Fasciolaria tulip*) and an array of other mollusks attest to a varied marine diet for the Pigeon Creek Lucayans (Fig. 2).

In addition to harvesting the rich bounty of the sea, the people of Pigeon Creek had an agricultural economy. There is evidence that manioc (*Manihot*) was grown and used to make cassava cakes, the staple food of the pre-Columbian Caribbean cultures. It is likely that corn, chili peppers, avocados and other food crops were also utilized. Based on ethnohistoric observations of Taino foodways, the Lucayans probably prepared their meals in large "pepper pots," a kind of slow cooking stew into which any available food was added. The marine and agricultural diet of the Lucayans must have been supplemented with wild plants and animals although we are unsure as to the extent of their utilization. The *butia*, a rodent-like land animal, as well as iguanas, birds and even the domesticated dog were eaten by the Lucayans. One of Columbus' men, upon tasting dog meat for the first time, pronounced it "none too good."

Excavations at Pigeon Creek have enabled us to reconstruct the prehistoric lifestyle of the Lucayan residents. Archaeological evidence of house floors has shown that houses were built side-by-side along the crest of the dune ridge overlooking the estuary. The house floors consist of an obdurate

layer of sand, 15 cm. to 17 cm. thick (Fig. 3). Contained within the hard-packed floors were artifacts, food remains and fragments of charcoal. Artifacts included fish and bird bone needles, dart points of shell and bone, and fragmentary bits of pottery (Fig. 4). Food remains were primarily fish bones and mollusk shells. Pea-size pieces of limestone were distributed throughout the floor layer. Charcoal samples submitted for radiocarbon analysis have given dates of A.D. 1110 \pm 60 and A.D. 1160 \pm 70 for the occupation of the house floors. Presumably, locally gathered palm fronds and other plant materials were used in the construction of the Pigeon Creek houses but archaeological evidence of these perishable materials has not been recovered. Nor do we know whether the number of houses at Pigeon Creek corresponds to the observations of Columbus who reported seeing villages of 12 to 15 houses.

Extensive midden deposits of pottery, stone and shell tools, food remains and other debris are located along the eastern slope of the dune ridge between the house floors and the shoreline. More than 95% of the pottery excavated from the Pigeon Creek middens was the red-colored, shell-tempered Palmetto ware which occurs throughout the Bahamas. The dominant shapes of Palmetto vessels are wide-mouthed bowls, carinated bowls, boat-shaped bowls, and discoidal griddles. The pottery bowls were used for food preparation and storage as well as collecting drip water from caves. The flat-bottomed griddles were used for baking cassava cakes made from manioc flour. The abundance of pottery found at Pigeon Creek suggests that the settlement supported a full-time, agriculturally-based population probably over a long period of time.

The analysis of Palmetto ceramics has provided insights into the nature of Lucayan technology. Pottery production in the limestone and coral islands of the Bahamas must not have been an easy task. Deposits of clay are rare and silicates practically nonexistent. The Palmetto potters used crushed *lucina* shells as a tempering agent which resulted in the production of low-fired, thick-walled bowls and griddles. The thickest pottery, often exceeding 20 mm., is represented by the Palmetto griddles. Griddle sherds generally have mat-marked impressions on their bottom surface. Rather than a design, the impressions result from the clay having been modeled on plaited fiber mats. This would have facilitated the handling of the large, heavy griddles which were 12 inches or more in diameter. In addition to fiber-plaited mats, palm leaves were sometimes used to support the griddles as indicated by sherds marked with leaf impressions on their under surface (Fig. 5).

The Lucayans of Pigeon Creek also utilized locally available resources for their tools and utensils. *Strombus* shells were reworked into scrapers, gouges, awls and spoons (Fig. 6). This was the hardest material available to the Lucayans and conch tools would have served a variety of purposes from canoe making and woodworking to agricultural and household needs. Other shells, such as the *Codakia* and *Lucina* clams, were also made into

tools. Shells were also used as ornaments. Pendants were made from cowrie, olive and oyster shells and tiny shell beads are commonly found on Lucayan sites. A large *Chama* shell from Pigeon Creek has two drilled holes which were probably threaded with a cotton cord for use as an amulet (Fig. 7).

Coral (*Acropora* sp.) occurs frequently at Pigeon Creek. Coral in its fresh state is naturally abrasive due to the sharp polyps on its surface. As a tool, it would have been an excellent woodworking rasp and could also have been used for grating manioc into flour as well as to card seeds from cotton bolls. Coral tools from Lucayan sites have usually been ground to a smooth surface. Limestone was also utilized by the Lucayans. Limestone slabs and bowls would have had many uses and calcified limestone blades, although brittle, could have been used to cut vegetables or split palm fronds for basket making.

An unique limestone sculpture found in a Pigeon Creek midden gives us a rare glimpse into Lucayan ritual and belief. It is carved in the likeness of a parrot fish on a thin piece of limestone much in the manner of the thin stone heads, or *bachas*, of Mexico and Guatemala (Fig. 8). The carving is probably a "zemi." Zemis were nature spirits or deities represented as idols of stone, wood, clay or cotton fashioned as human or animal effigies. Images of zemis were painted on the body, carved as amulets and modeled onto the rims of pottery bowls.²¹ Zemiism can be defined as the personification of spiritual power achieved with the aid of supernatural forces represented as idols. It was a widespread belief system among the Tainos, although when Columbus sailed through the Bahamas he failed to observe any evidence of Lucayan religion and believed that the Indians had none.

LUCAYAN TRADE

A number of tools and ornaments made from materials not indigenous to the Bahamas have been excavated at Pigeon Creek. Polished stone celts and pestles, quartz beads and smooth granite polishing stones could only have been obtained from localities outside of the Lucayan heartland. The utility of such objects and the social prestige of their ownership is obvious, but the implications of their presence at Pigeon Creek must be given close scrutiny. It is suggested that these exotic materials were brought to the islands as trade items in return for products that the Lucayans had to offer.

When Columbus sailed through the Bahamas he witnesses many aspects of native life and economy. One of his first observations on the day of discovery was that of the islanders swimming and canoeing out to his ships with parrots, skeins of cotton thread and darts which were quickly swapped for glass beads, hawks' bells and other European trade goods. The Lucayans appeared not to have been deterred by the strange visitors with their awesome looking ships. According to Columbus they willingly traded everything they had. This suggests that the Lucayans were experienced traders and that trading was indeed an important part of their economy.

The reciprocal movement of goods from one region to another must correspond to the availability of tradable resources in each region. In the coraline islands of the Bahamas where certain natural resources are not available there would have been a need to import non-local commodities such as quartz tempered pottery, stone axes and celts, polished stone pestles and quartz beads, all of which have been found archaeologically. An x-ray diffraction pattern for a jade celt fragment from Pigeon Creek has pointed to the Motagua Valley of Guatemala or the Nicoya region in Nicaragua as likely places of origin thereby demonstrating that long distance trade did indeed occur.²² The idea that the Lucayans may have taken part in a long distance trading network begs the obvious question: What local resource or resources in the Bahamas were exchanged in return for the imported commodities?

Columbus provides descriptions of at least three commodities that may have been important Lucayan trade items, namely parrots, darts and cotton. Parrots and darts are mentioned only in passing and will not be discussed here. Cotton, however, is mentioned frequently by Columbus and must be seriously considered as a possible Lucayan trade product.

Cotton in the Bahamas

At least two species of cotton were present in the West Indies in pre-Columbian times. *Gossypium barbadense*, also known as Sea Island cotton, reached the West Indies from Peru by way of northern South America. *G. hirsutum* of southern Mexico and Guatemala extended into the Antilles with one of its varieties, *punctatum*, reaching the Bahamas where it is known today.²³

The distinctive black loam soil and moist tropical climate of the central Bahamas is ideal for growing cotton as the Loyalists learned when they brought their plantations to the islands in the 18th century. In his 1708 description of the Bahamas, John Graves from Carolina mentioned that the islands produced the best cotton in all the Indies,²⁴ and in 1783 the Loyalist John Wilson gave an optimistic assessment of the potential of the Bahamas black loam for growing Sea Island cotton.²⁵ By 1875 the Loyalists had planted 2,476 acres to cotton, producing 124 tons. During the next 25 years this amount steadily increased to 602 tons.²⁶ The eventual collapse of the Bahamas cotton economy was due less to soil depletion than to destructive insects and unstable social conditions.

The Archaeology of Cotton

The archaeology of cotton in the West Indies is yet to be documented and little is known about cotton production in the region prior to Columbus. That cotton was grown in the islands cannot be disputed. Columbus was offered skeins of spun cotton wherever he went. On San Salvador he

obtained 16 skeins, or the equivalent of an *arroba* (25 lbs.) of spun cotton thread. "I saw clothes of cotton made like short cloaks," he said upon reaching Fernandina, and went on to describe "beds and furnishings (made) like nets of cotton," or hammocks. The Lucayans are said to have snared parrots with cotton nooses and pigeons with fiber nets. They also caught fish with cotton nets and cotton lines.²⁷ Cotton cords or nets may also have been used to fasten cargo to canoes and cotton bolls would have made a good caulking material for the wooden dugouts.

Explanation of past lifeways is largely dependent upon the interpretation of the material remains which have survived in the archaeological record. Evidence of a cotton economy among the Lucayans, however, may not be immediately recognizable in the archaeological record due to the perishable nature of cotton products. Cotton thread, cordage, hammocks, fish nets and the like would not be expected to survive in the damp climate of the Bahamas. Archaeologists, therefore, must look for secondary evidence of Lucayan cotton production. The analysis of fiber impressed pottery may prove to be informative in this regard. We have seen that pottery griddles were formed on basketry mats and occasionally on palm leaves. If cotton cloth was also used in a similar manner the fiber impressions should show up on pot sherds.

Artifacts used in the production of cotton thread should also be present on Lucayan sites. Clay spindle whorls, although not abundant, are known from Long Island,²⁸ and a possible limestone whorl and perforated shell disk have been found at Pigeon Creek. Non-ceramic whorls may also have been used by the Lucayans. The expectations of finding such artifacts, however, must be understood within the contexts of preindustrial cotton technology. Being a lightweight fiber, cotton is difficult to spin and care must be taken not to put too much force on the thread. The modern Indians of Peru use lightweight wooden or even vegetable whorls on thin wooden spindles which are spun in small pottery or wooden bowls, 4" to 5" in diameter.²⁹ Clam shells would, of course, serve the same purpose.

In the Lucayan Isles there are a number of materials that could have been used to spin cotton thread. Wooden and vegetable whorls would have been available. Small gourds or calabashes could also have been used as is illustrated by Douglas Taylor's account of spinning by the Caribs of Dominica:

A band of teased cotton wound around the left wrist is spun onto a long stick or spindle by rolling the latter on the right knee. The upper end of the spindle is crooked. A round disk of calabash, through whose center the stick is passed, acts as a base for the growing spool of thread.³⁰

CONCLUSIONS

Columbus' assessment of Lucayan Indian culture was bleak and tinged with disappointment. Archaeological research conducted over the past

century has provided a basic knowledge of Lucayan origins, settlement, economy and social life. It is now evident that Lucayan culture was not as stark or impoverished as Columbus reported in his journal. To the contrary, the Lucayans lived in a region of abundant food resources, enjoyed social and economic relationships with other peoples of the Caribbean, and had developed a level of technology that was particularly well adapted to a carbonate island ecology. It appears that the Lucayan lifestyle was enhanced by their participation in an economic interaction sphere that included many islands in the northern Caribbean. Indeed, Lucayan settlement in the Bahamas was surely influenced by and may have depended upon the production and intra-island exchange of cotton and cotton products.

NOTES

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8. I am indebted to Dr. Donald T. Gerace, Director of the CCFL Bahamian Field Station, and Kathy Gerace for their support, encouragement and hospitality during the past eight years.
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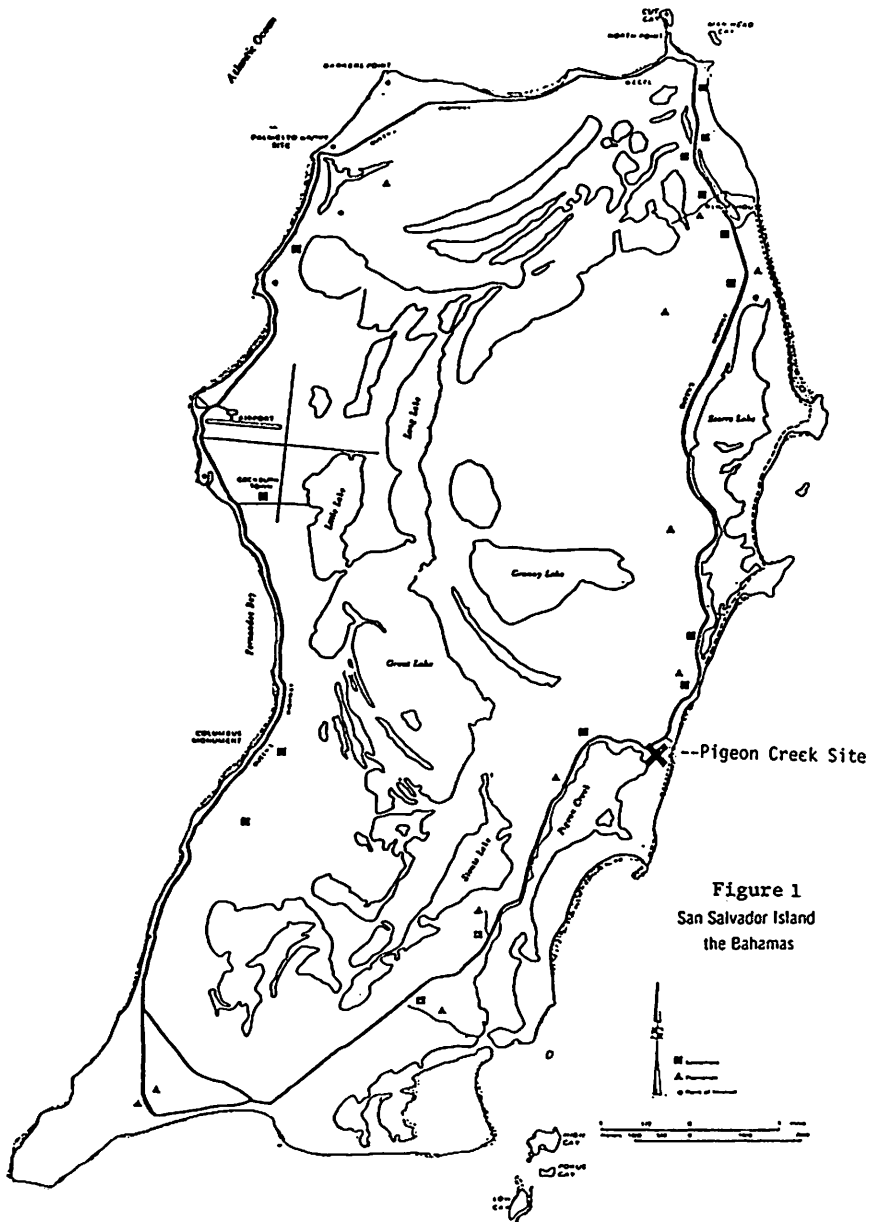


Figure 1
San Salvador Island
the Bahamas

Fig. 1. San Salvador Island, the Bahamas

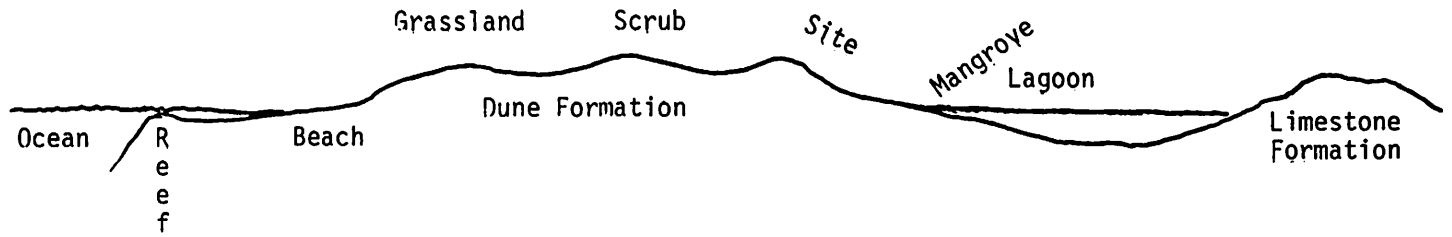


Fig. 2. An Idealized East-West Transection of the Pigeon Creek Site Region

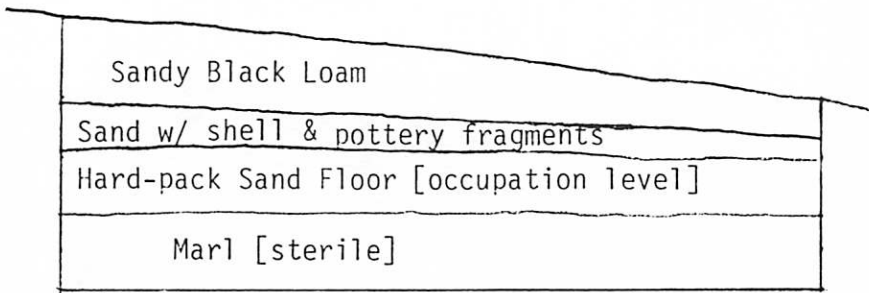


Fig. 3. South Face of Occupation Feature at Pigeon Creek (1 cm = 20 cm)

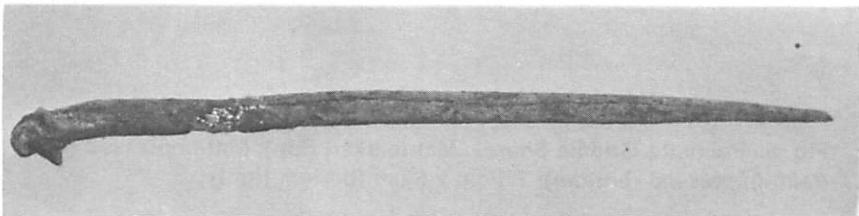
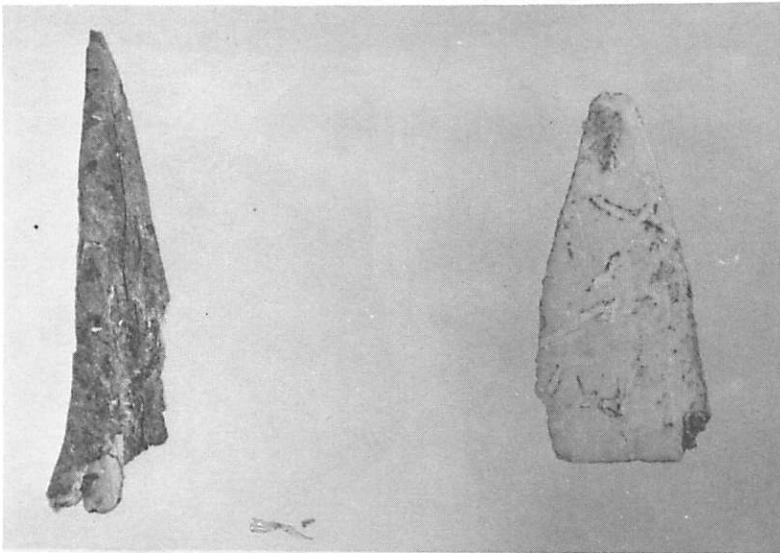


Fig. 4. Bone Dart Point, 3.5 cm (top left); Shell Dart Point, 2.5 cm (top right); Bird Bone Awl, 10.5 cm (bottom)

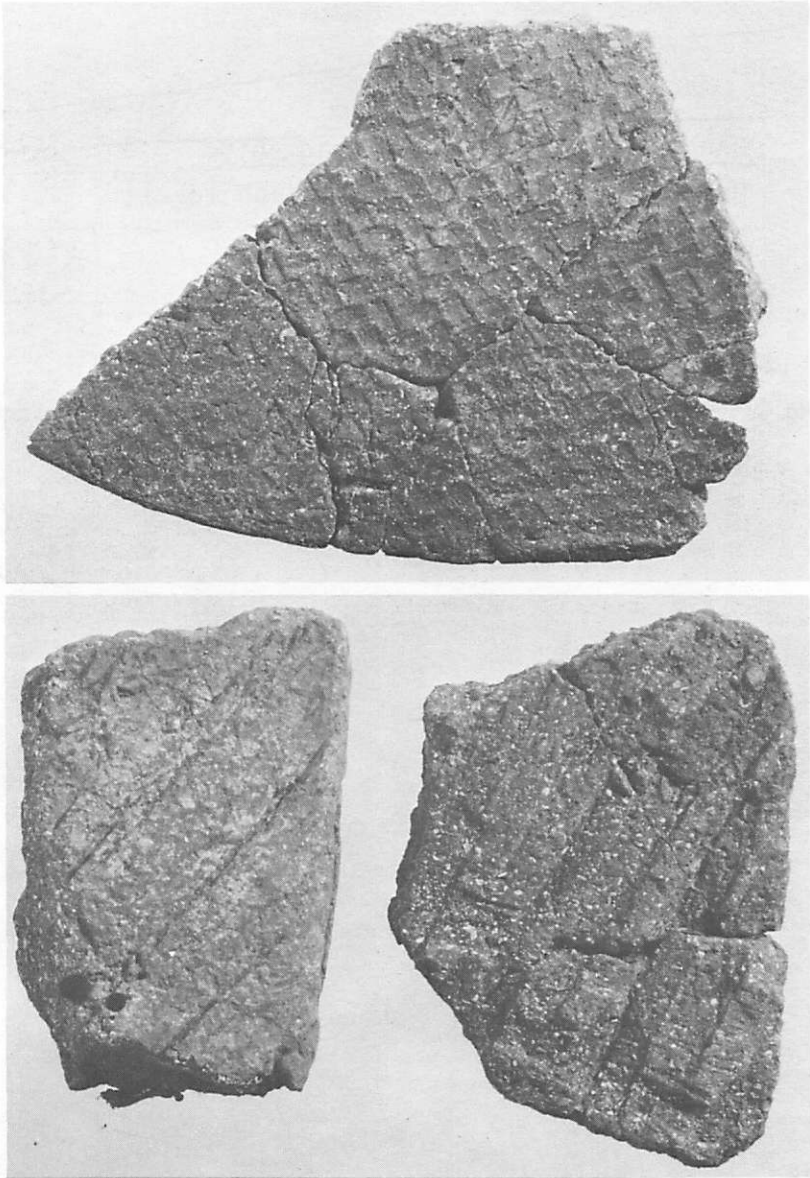


Fig. 5. Palmetto Griddle Sherds. Mat-marked (top); Mat-impressed (top); Palm-impressed (bottom); 7.5 cm x 5 cm (bottom right)



Fig. 6. Shell Gouge (*Strombus Gigas*), 11 cm

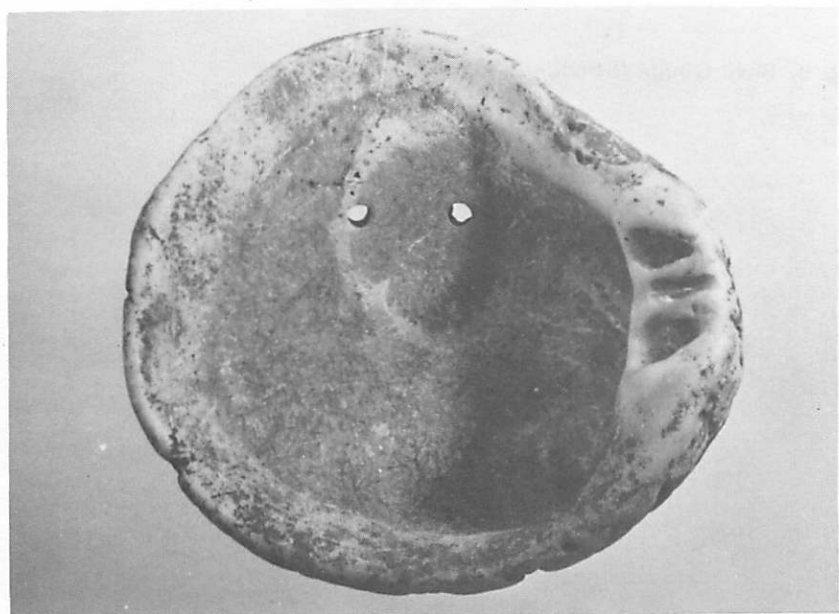
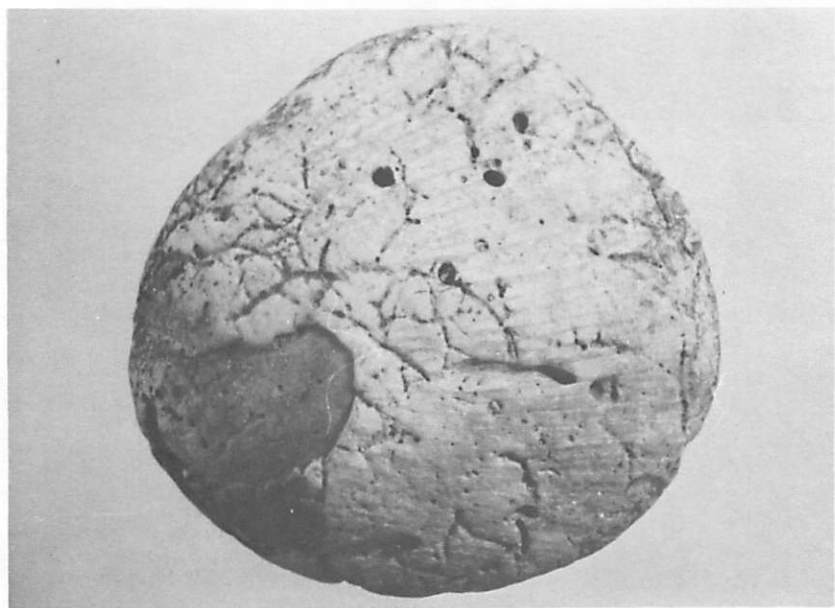


Fig. 7. Shell Pendant (*Chama* sp.), 9 cm

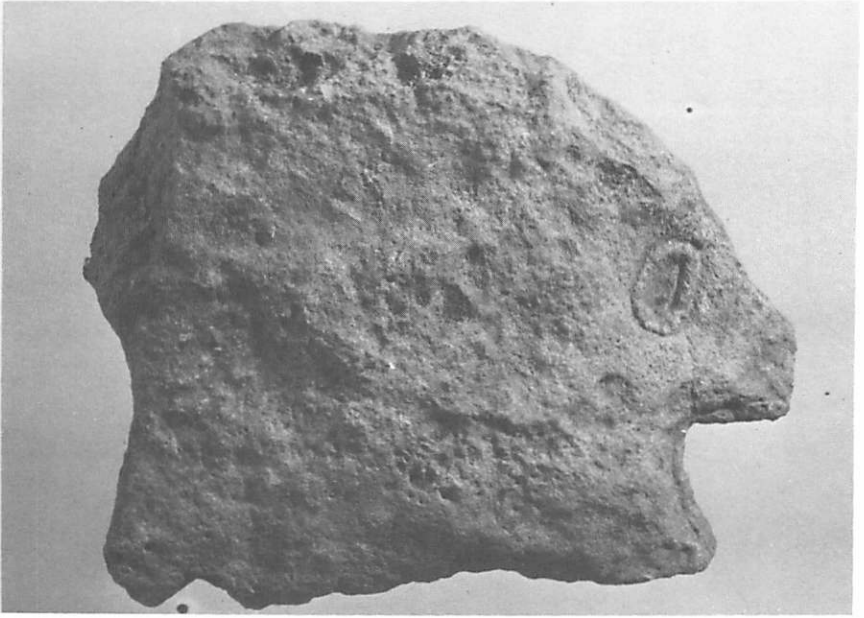


Fig. 8. Limestone Sculpture Depicting a Parrot-Fish, 15 cm