When Christopher Columbus visited Jamaica during his second voyage to the Americas he encountered a thriving native population that numbered perhaps 100,000 people. These natives befriended Columbus and helped to sustain him while he was shipwrecked off the north coast in 1504. Within another generation, virtually all of the natives, who we today call Tainos, were gone. The victims of forced labor, warfare, and introduced diseases. We know almost nothing about these people. A few archaeology projects have been conducted in Jamaica, but most have been by avocational archaeologists who sought primarily to document the locations of sites. Recently, salvage operations have been initiated to recover archaeological remains from sites that are threatened by development, but long-term, problem-oriented research remains the exception in Jamaica.

The present project is based on a tropical dairy in western Jamaica south of Negril. The site at which we were working was first identified in 1990 by Mr. Roderick Ebanks, Director of Archaeology for the Jamaica National Heritage Trust. The boundaries of the site
later defined during fieldwork directed by Keegan in 1998 (1998 Paradise Park Report). It is located on a coastal dune between the Deans Valley River and Bluefields Bay. Our focus in 2000 was on the Ostionan (called redware in Jamaica) site which is radiocarbon dated to AD 850 (WES15a). A second site (WES15b), located 500 meters to the west, contains only Meillacan pottery and is radiocarbon dated to AD 1430. The two sites are in a good state of preservation and contain evidence for the two known cultures that occupied Jamaica prior to the arrival of Europeans. What is fascinating about these sites is that they contain very different animal remains. While the earlier site has mostly conch shell and turtle bones, the latter has mostly clam shells and reef fish bones. What are the reasons for this difference? Do these reflect cultural preferences? Ethnicity? Resource depletion? Changes in the local environment? Other factors? The goal of the 2000 research was to collect sufficient data to develop a more complete picture of the earliest pre-Columbian peoples of Jamaica, and to address the broader issues of environmental change and cultural identity.

Despite its large size and substantial pre-Columbian population, Jamaica has remained on the periphery of archaeological studies in the West Indies. As is the case throughout the islands, there was an early interest in antiquities and the collection of objects from caves and archaeological sites. These collections were made haphazardly and contain little documentation (see de Booy 1913; Sherlock 1939). In the 1940s, Robert Howard, a student from Yale University, examined the collections at the Institute of Jamaica and undertook limited excavations as part of his Ph.D. research (Howard 1950, 1956, 1965). Howard showed that of the three pottery styles in Jamaica, two matched those from Hispaniola and Cuba. The earlier style, known in Jamaica as redware because of its bright red color, is part of the more general Ostionan Ostionoid subseries (AD 650-1000). The second style, called White Marl for
the archaeological site at which it was first described, fits within the regional Meillacan Ostionoid subseries (AD 950-1550). The third style, from around Montego Bay, shows clear affinities to the Meillacan subseries, but is a local variation with decorations that are found nowhere else.

To a large degree, all that we know of the archaeology of Jamaica is these pottery styles. Most of the archaeology since Howard was done by members of the amateur Jamaican Archaeological Society. Although their work is of the highest quality, it has focused on finding new archaeological sites and on preparing an inventory of these sites. Occasionally they would excavate sites that were threatened with destruction. There are very few radiocarbon dates for the sites, and we are currently working within a very broad chronological framework. In the past five years, the Jamaica National Heritage Trust (JNHT) has been extremely active in documenting archaeological sites threatened by development. This work, directed by Roderick Ebanks and Dorrick Gray has added substantially to our understanding of Jamaican prehistory.

Caribbean archaeologists, following the work of Irving Rouse (1992), have tended to assume that the Ostionan potters were replaced by Meillacan potters. How or why this came about is presently unknown, but recent research conducted in Haiti has shown that the relationship between these groups was far more complicated than previously assumed (Keegan 1999, 2000). Paradise Park offers a unique opportunity to examine the lifeways of the Ostionan and Meillacan peoples. Separate archaeological sites from each group occur in the same general location, separated by only 500 meters. By comparing and contrasting the materials from these sites we will improve our understanding of
these two groups. In addition, we hope to gain insights into their possible interaction, although one site may have been abandoned before the other was settled.

Our major objective is to collect a large, systematic sample of artifacts and food remains from both sites. This will be accomplished through the use of block excavation units which will expose large areas of each site. Block excavations allow us to work together and to better observe how materials are related to each other in the ground. We will also collect additional materials for radiocarbon dating. At this time our goals are limited to finding out what materials occur in the sites and how the two sites compare.

From September 8-22, a team of four trained volunteers (Jean Borchardt, Bob Gezon, and Ralph and Mary Lou Pax) and four archaeologists from the JNHT (Selvenious Waters {team leader}, Nicole Patrick, Michelle Topping, and Ricardo Tyndall) undertook excavations at the Ostionan site (WES15a) at Paradise Park, Westmoreland, Jamaica, under the direction of Dr. William Keegan and Sharyn Jones O'Day. We excavated 12 one-by-one meter squares in two parts of the Ostionan site. The first four were located on the south side of the "shortcut" road in an area called Unit 300, and the other 8 were located about 100 meters to the east on the north side of the road in an area called Unit 400.

During the project we were assisted on one day by Dr. Phillip Allsworth-Jones and five students from the University of the West Indies. They helped us complete the excavation of Unit 300 and begin excavations in Unit 400. We were also visited by students from Paradise Park Preparatory School. They had the opportunity to observe how archaeology is done, and the prehistory of the area was explained to them.
Prior to the start of excavations, Keegan and Jones O'Day revisited the site area to establish new excavation units and to make other needed preparations. In the course of their preparations they discovered two new Amerindian sites on the Paradise Park property. First, while walking to the known sites they discovered pottery, shell, and lithics along a road leading up to the riverside park at Paradise Park. The objects encountered were too small to be diagnostic. They also did a pedestrian survey of a recently harrowed field near the dairy and found pottery, lithics, and shell. Again, the materials encountered were not diagnostic. No further testing was conducted at either site.

On September 12, 2000, we began excavations on the south side of the shortcut road in an area in which Ostionan materials were observed on the surface. This location is about 900 meters east of the Deans Valley River where the Princeps Palm woodlands begins. Four 1 x 1 meter excavation units were opened in a north-south alignment to the south of the shortcut road near the beginning of the palm forest. The first, fourth, fifth, and sixth units were excavated and the area was designed 300 A-F. The units were excavated in 10-cm levels using pointing trowels and all of the soil was sifted through 5-mm hardware-cloth screens. In addition, bulk samples were collected and water-sieved through window-mesh (1.25 mm) screens. The soil had a very high clay content and it was extremely difficult to sieve. The cultural deposit has been disturbed by land crab burrows, and there was no change in stratigraphy over the 50 cm that we excavated. It is possible that this deposit was produced by the storm surges that redeposited materials from the north side of the road. The deposit contained a variety of marine and terrestrial mollusks, chert, bone, and pottery, although bones were surprisingly rare. The site is clearly a redware (Ostionan) site based on the materials...
recovered. On September 15th it was decided that these units would be abandoned and that a new area would be opened on the north side of the shortcut road. In addition to the problem of sieving the soil, one unit had encountered the water table at 55 cm below surface.

Unit 400 excavation area.

The new area, designated Unit 400, is approximately 100 meters east of the 300 units. The soil was much drier and had a higher humic content than that in Unit 300. A total of 8, 1 x 1 meter squares, were excavated in this area. They contained classic Ostionan pottery, including redware, red-paint above the shoulder, tabular lugs, loop handles, and black smudging. More animal bones were encountered in this area, including fishes (grunt, jack, and parrotfish), hutia, iguana, and sea turtle. By far, sea turtle dominates the deposit. Again, bulk samples, which were water screened through window mesh sieves, were taken to document the smaller species that were utilized by the inhabitants of the site.

A surprising diversity of marine mollusks was recovered, although Strombus sp. is dominant in terms of weight. One possible interpretation is that because these were the first people living in this area they were experimenting with which mollusks were worth targeting. All of the mollusk samples have been processed. We recorded NISP, MNI, and weight. Only tools and unusual specimens were saved. There were a number of shell tools including a Strombus celt (ax or adze) and Strombus columella picks and knippers. The site contains a substantial number of olive shells, several of which were made into beads and pendants. Also, a number of them are broken, which suggests that they were manufacturing olive beads and pendants at the site. No clam shell scrapers were found, which contrasts sharply with the Meillacan deposit.
A variety of stone objects are present in the deposit. Chert (locally called flint) is especially common, as is firecracked limestone (burned limestone from the lining of fire pits). Several repetitive forms of chert objects are apparent, but further study is necessary. The most unique find is an ear spool that was probably made of agate. It is 12 mm in diameter and has a lateral groove. There is also a hole through the middle that was likely used to insert colorful feathers. It was found just above a feature that we interpret to be the center post of a house.

Jean Borchardt excavating the post stain.

The stain from the decomposition of a large (center?) post was found in the southernmost square of Unit 400. Its size suggests that it supported a very large structure. Five meters to the north another stain and slumping midden materials suggest that an outer wall was located here. In the adjoining units to the north we encountered a very dense midden deposit. Such a deposit is exactly what one would expect to find along the exterior wall of a structure. The deposit contained a substantial number of Pleurodonte land snails, a variety of marine mollusks, large potsherds, and a surprising amount of bone and chert.

The pottery included all of the classic Ostionan motifs, such as loop handles, red painting above the shoulder, red slip, loop handles, and black smudging. A pointed lug, reminiscent of a turtle's tail was also recovered. The bone included very large elements of sea turtle, as well as iguana, hutía, snake, and reef fishes (parrotfish, grunt, jack, snapper, bonefish, grouper). In addition, several different kinds of echinoderm tests and spines (sea stars, sea urchins, sea biscuits) were found. Again, bulk samples were collected to recover small bones, which were present at a low frequency. A substantial amount of firecracked rock and flaked stone (chert) was also recovered. There was a
surprising diversity of marine mollusks, although Pleurodonte shells (land snails) dominate the deposit in terms of MNI.

Most of the samples that were collected have only received a very preliminary examination. Further analysis is required to identify the species represented by the different non-molluscan animal remains, and the pottery and chert requires further study. It appears that we have succeeded in excavating a trench across the middle of a house, and that the materials recovered reflect the activities of a household. These findings are especially exciting because they will provide our first clear insights into the lives of the first people to live in Jamaica. We will also get a better picture into the environmental changes that occurred on the island after humans arrived.

The next step is to analyze the materials recovered from the site. Animals bones are currently being identified by Sharyn Jones O'Day. Micah Mones, a graduate student at UF, will examine the chert and other rocks. Bill Keegan will study the pottery with the assistance of Ann Cordell, ceramic technologist at the FLMNH. These studies should be completed in a year.

David Fenley, Joe McKnight, and Bill Keegan diving in the sinkhole at Paradise Park.
addition to the land excavations, Bill Keegan, David Fenley, and Joe McKnight made a SCUBA dive in a sinkhole on the Paradise Park property. We made this dive because human remains and other Taino artifacts have recently been found underwater in sinkholes and caverns. Unfortunately, the Paradise Park sinkhole has at least 30 cm of silt at the bottom. Thus, any artifacts that were deposited by people living in this area are likely buried under a substantial overburden. The sinkhole is about 20 meters deep, and has a substantial rock overhang beneath the surface. It is also choked with algae and leaves, which limited visibility even with dive lights. Any further investigation of the sinkhole would require the use of a dredge.

It is clear that the work to date has barely scratched the surface. The archaeology of Paradise Park promises to be extremely interesting, and holds the potential for revolutionizing our understanding of Jamaican prehistory. Future expeditions are in the planning stages.
References


