Bamboo Mound

The salvage archaeology undertaken at Bamboo Mound reveals how it is possible to gain insight into the past even if conditions are poor. From the earliest time that this mound was discovered by archaeologists, it was already partially destroyed and by the time Gary Beiter led a crew to salvage this mound, it had been totally bulldozed off its original site location. Nonetheless, this site was still a valuable research location for several reasons. First, as suggested by Beiter (2001) this site could be utilized as a comparative tool. This can be accomplished by comparing the various material recovered from this site to those known from other South Florida sites. Second, several of the artifacts recovered from this site are unique, or unusual and expand our knowledge about the past of South Florida. This type of new information is always welcome, even if it does require a need to rewrite the books. Despite these positives, it is still essential to protect the archaeological resources of South Florida and ensure that an archaeologist reviews the site prior to any alterations.

Archaeological Setting

Bamboo Mound was located in the Florida Everglades on a tree island. As with many other sites in South Florida, this site is a black dirt midden. The site base was originally located on Miami Oolite with a variety of soil types on top (Beiter, 2001). Dan D. Laxson excavated five test pits at Bamboo Mound and reported on this site in 1959 (Laxson, 1959). He described a Glades II and III occupation, with only 8 decorated pottery types (this description is imperfect as revealed by the 1998 salvage excavation). Moreover, he reported that the mound had been split in two by a railroad track and a canal. The mound had been divided into a northern one-third and a southern two-thirds. Moreover, on the northern side a dynamite shed was built on top of the mound. When Beiter (1997; 2001) visited the site in 1997, he discovered that it had been further destroyed in the intervening years. The southern mound (two-thirds of the original site) had been moved to an unknown location. Consulting photographs, it was determined that the southern portion had been removed sometime between 1959 and 1987. Between 1987 and 1997, the northern mound had been totally removed from its initial location. The site had been scraped with machinery and no natural soil remained. However, there were ridges and piles of material to the west and to the north. The initial western deposit was a ridge with dimensions of three meters high, 20 meters wide and 40 meters long, with little vegetation growth, possibly 10-20 years. There was a pile further to the west that consisted of larger rubble with 20-30 years of tree growth. The northern ridge had a line of bamboo growing on it with a diameter of 5cm (YES, there actually is bamboo growing on Bamboo Mound). In addition, tree growth of about 10-20 years is present on this northern ridge. Beiter (2001) theorizes several processes of site destruction: 1) the initial bi-section as noted by Laxson (1959), 2) the construction of a dynamite shed on the northern mound as noted by Laxson (1959), 3) periodic clearing of combustible vegetation from around the dynamite shed and the movement of this material to the north, 4) the removal of the southern mound to an unidentified location, and 5) the final

bulldozing of the original northern mound to the west. As a result of these actions, the cultural deposits had been totally mixed-up and no clear temporal sequence was evident in the ridges/piles. Each of the spoil piles/ridges had the same general composition: black midden soil, off mound soil, artifacts, ecofacts, features, historic trash, and bedrock fragments with no stratification (Beiter, 2001).

Of interest in the 1997 Phase 1 survey, there was a suggestion that the site could have a significant Archaic component due to concretions that initially appeared similar to concretions dated to the Middle to Late Archaic from the Cheetum site (Beiter, 1997). The Cheetum site is also located in Dade County and had approximately 21 human burials in the concretion layer. A charcoal sample from the underside of a human skull in the concretion produced a radiocarbon date of 4020 $\pm$ 370 B.P. (uncorrected), and a charcoal sample from the bottom of the concretion had a radiocarbon date of 5120 $\pm$ 160 B.P. (uncorrected) (Newman, 1993). Finds from the Archaic are somewhat unusual in South Florida (Griffin, 1989); therefore, the suggestion of an Archaic component at Bamboo Mound was exciting. However, in the course of the excavation this assumption about the concretion was found to be incorrect. It is possible that the site had a Late Archaic occupation, but the clearly documented site chronology runs from the three Glades periods, through the immediate post-contact time, to a final Seminole occupation (Beiter, 2001). As such, the time depth found in this site is important to track changes in the culture of the people who inhabited South Florida.

Archaeology at Bamboo Mound

Beginning in June 1998, salvage operations commenced at the various spoil piles and ridges located around the former site of Bamboo Mound. An interesting technique was applied to recovery materials from some of these localities. Using a hydraulic method, water was pumped unto the upper parts of the piles and ridges, which loosened the smaller items and allowed them to flow back down. These smaller items were then screened. This method was used to cut trenches through the piles and ridges, these trenches were than expanded laterally using the same principle. For the excavation of part of the northern ridge shovel tests and postholes were used, due to the possibility that some of the original midden may be present. Solution holes were also found north of the bamboo on the northern ridge. Some of these solution holes appeared to have original deposits; thus, the deeper ones were left intact and were preserved by covering them with a cap of road rock and sand (Beiter, 2001).

Using the methods listed above, numerous materials were recovered, which enabled the archaeologists to determine some facts about Bamboo Mound. Of great importance, diagnostic artifacts were found that enabled the chronological boundaries of this site to be determined. Two Hernando points were recovered. Stone tools are somewhat unusual in South Florida sites, due to the lack of adequate raw material. Unfortunately, these Hernando points are not good time indicators. Indeed, it has been documented that they date from 1000 B.C. to A.D. 900 (Claire, 1996). No fiber-tempered pottery was recovered, but pottery from all Glades periods was found. In addition, there was little evidence of a post-contact, pre-Seminole occupation (A.D. 1513-1760), but there was some evidence of a limited Seminole habitation. Specifically,

some glass beads, an iron tomahawk, and a silver effigy were found, but Beiter (2001) does suggest non-Indians could have deposited these items. Therefore, this site has possible Late Archaic activity, but has clear inhabitation during the entire Glades period (Glades I-III), and an historic occupation by the Seminoles. This is a much longer period of occupation than initially believed from Laxson's (1959) original excavation. This disparity reveals an important problem with arbitrary partial excavation vs. complete excavation. This will be discussed at length below.

Numerous pottery sherds were recovered from this site that ranged throughout the three Glades periods. However, there was an increase in sherd density during two time periods. These were from A.D. 750-1100 (encompassing Miami Incised, Opa Locka Incised, and Key Largo Incised), and A.D. 1400-1500 (consisting of Glades Tooled). A list of all pottery types discovered is found below. Of particular interest was the discovery of some types of pottery that are rare in Southeast Florida. Beiter (2001: 38) suggested that these are the possible result of several occurrences of "emigration, trade, or reproduction." Finally, the Key Largo Incised sherds recovered from this site are interesting due to the extreme variations found throughout the sample. Beiter (2001: 37) divided these into 16 distinct "motif variants."

Along with the pottery, a number of other materials were found including faunal bones, shells, tools, and decorative or ceremonial items. The faunal bones recovered included large quantities of turtle, fish, and snake, along with bird bones, alligator teeth and scutes, deer antlers, teeth and phalanges, the mandibles of small mammals, mainly from raccoons, siren vertebrae, two bear teeth, two stingray barbs, and a panther tooth. Large quantities of conch and clam shells were recovered, along with some oyster and oliva shells, and a very low occurrence of Lion's Paw shell and Flamingo Tongue shell. A large variety of worked bone and shell was found and it is suggested that these were mainly for decoration or ceremony; however, some of the worked antlers may have been the handles of tools (Beiter, 2001). In addition, shell tools were found including celts, a small number of columella hammers and cutting tools, drilled clam shells, and a unique shell point. According to Rudy Pascucci (2005), in one of the earliest walking surveys at Bamboo Mound in the late 1990s, he discovered an exquisite example of a shell hammer with the hallmark drilled hole still intacted. One final item of interest from this site is several shark vertebrae with deep grooves cut around the rims. Beiter (2001) notes that these grooves are not similar to those present on ray vertebrae, which are much shallower and narrower. Therefore, these grooves appear to be evidence of human working, rather than endemic to the species morphology.

Limited human remains were found randomly dispersed throughout the site. These remains included primarily teeth, but a small part of a cranium and a mandible fragment covered with concretion were also recovered. The Minimum Number of Individuals (MNI) is three, two adults and one sub-adult (Beiter, 2001). The state of Physical Anthropology in South Florida has been commented on in the past (Iscan and Miller-Shaivitz, 1983), and while some of the human material from the South Florida Collection has been studied, a collection-wide comparative study is long overdue. One of the major problems with such an undertaking is many of the human remains recovered are scant and extremely fragmentary. However, I believe such an endeavor is both feasible and worthy and I hope to commence a collection-wide study soon.

As with many sites in South Florida, one of the lower layers of the original Bamboo Mound consisted of concretion. As previously stated, Beiter (1997) initially believed that the concretion from this site was similar to the important Middle to Late Archaic concretion found at the Cheetum site. However, upon investigation he determined that the color and date of the concretion at Bamboo Mound was distinct from that at Cheetum. A sample of clam shell from 20cm below the surface of the concretion at Bamboo Mound was radiocarbon dated to 2990 $\pm$ 70 years B.P., this resulted in a calibrated dates (2 sigma, 95% probability), were 965-735 B.C. (Beiter, 2001). This result is approximately 1000-2000 year later than the Cheetum concretion, but is of a comparable age to the Dade County site of Coleman (3850 $\pm$ 120 B.P. and 3190 $\pm$ 90 B.P.) and the Broward County site of Peace Camp (3050 B.P. $\pm$ 140 years) (Carr et al., 1991; Coleman, 1997; Mowers and Williams, 1972). Furthermore, in one of the concretion fragments a possible post mold was found. Finally, a variety of other objects were found in concretions, including clam shell, bone point, local plain ceramics, St. Johns Plain, fish bones, turtle bones, snake bones, and the already mentioned mandible fragment (Beiter, 2001).

Consideration and Reflection

From the preceding description it is clear that archaeological excavations at the severely damaged Bamboo Mound site resulted in interesting data. Even so, the type of destruction wrought upon this mound prior to proper archaeological investigation is a misdeed. With the amount of data recovered from the destroyed site, imagine the information that could have been gained from an unspoiled site. While there is a need for continued development in areas with archaeological resources, this should only proceed after an archaeological survey has been completed. Also of interest, is the clear disparity of chronological data and pottery types discovered by Laxson's initial excavation and Beiter's later salvage dig reveals a fascinating fact that was discussed by Beiter (2001); namely the method of investigation. Laxson (1959) employed arbitrary sampling and only found eight decorated types of pottery from the Glades II-III period. Conversely, Beiter (2001) found over 40 types of decorated pottery and a much longer inhabitation possibly from the Late Archaic, through the entire Glades, and with a historic Seminole presence. While it is clear that a larger project has produced more data, it should be noted that it is not advisable or scientifically ethically to excavate an entire site that is not endangered. Archaeology by its very nature destroys the sites that it investigates. Thus, it is imperative to preserve large portions of archaeological sites for future generations and the novel techniques they develop. What the disparity between Laxson and Beiter demonstrates is a need for better sampling techniques and an understanding that archaeology is a continuous scientific endeavor. The simple truth is that the more we study the past, the more we learn.

Peter Ferdinando
July 2005

Environmental Setting:

Everglades Tree Island

Site Type:

Black Dirt Midden

Site Function:

Habitation

List of Artifacts Discovered:

Pottery: Deptford Incised/Stamped, St. Johns Plain, St. Johns Incised, Surfside Incised, Glades Tooled, nodded sherds, Glades paste, Matecumbe Incised, Dade Incised, Key Largo Incised varieties, Opa Locka Incised, Miami Incised, Arch Creek Incised, Ft. Drum Incised/Punctate, Gordon's Pass Incised, sand-tempered plain (Glades Pl.), Glades Red, shell tempered plain, unclassified plain, unclassified incised, clay effigy, clay balls, partial clay bead, sherd discs, and clay gaming pieces

Faunal: Turtle, fish, snake, birds, alligator teeth and scutes, deer antlers, teeth and phalanges, the mandibles of small mammals (mainly raccoons), siren vertebrae, two bear teeth, two stingray barbs, and a panther tooth

Shell: Conch, clam, oyster, oliva, Lion's Paw, and Flamingo Tongue

Tools: Hernando points, celts, columella hammers and cutting tools, drilled clam shells, and a unique shell point

Other: Various worked shell and bone beads and points, antler handles, shark vertebrae with deep grooves, glass beads, an iron tomahawk, a silver effigy, and other numerous modern artifacts

Chronology:

Possibly Late Archaic, Glades I, Glades II, Glades III, Seminole

Florida Master Site File #:

Bamboo Mound: 8Da94

Bishop Hammock: 8Bd66
Cheetum Site: 8Da1058
Coleman Site: 8Da141
Peace Camp: 8Bd52

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