

# EXCAVATIONS AT THE ARBORETUM SITE

By Bruce E. Tilden

During the summer of 1972, the Arboretum site (so named because of its location within the former Magens Bay arboretum) was discovered by Alfredo E. Figueredo while conducting excavations there for the Department of Conservation and Cultural Affairs.

The Arboretum site is one of four preceramic sites all within walking distance of each other and located within the Magens Bay site cluster. Of these sites, three (Zufriedenheit, Herleins Kob, and Arboretum) are marked by surface midden deposits composed of shell (*Chione cancellata*, arks, whelks), and fine-grained basalt flakes. All are located in soil resembling Jaucas sand which is riddled with land crab holes.

The Arboretum site composes approximately one acre of surface situated on the southeastern perimeter of the former arboretum within the Magens Bay Authority property. The site is bounded on the north and east by a flat area overgrown with grass and low bush. To the south a barbed wire fence marks the southern limits of the site and the Magens Bay Authority property. To the west the site's borders are halfway into the former arboretum.

In the summer of 1972, two 1.5x1.5m test pits were aligned 9m apart along a southwest-northeast axis and excavated. The organic assemblage was comprised of *Chione cancellata* shells mixed with a few arks, whelks, land snails and fish bones. The artifactual assemblage was composed of both used and unused fine-grained basalt flakes, basalt cores, several oval hammerstones (see plate 1 A & E), shell picks (see plate 1 D), and an oval shell inlay approximating 2cm in length with beveled edges (see plate 1 B).

The Arboretum site based on the artifactual assemblage was assessed to be preceramic dating to the first millenium B.C.

In the summer of 1974, the author conducted excavations at the Arboretum site for the Department of Conservation and Cultural Affairs with volunteers from the Federally sponsored Youth Conservation Corps summer program. Three 1.5x1.5m test pits were aligned along a southwest-northeast axis adjacent to the southwestern test pit excavated during 1972 where the central portion of the midden was found. Artificial 10cm levels were employed in the excavations due to the lack of any apparent natural strata. All materials excavated were sifted through 1/8" mesh screen. All three pits were excavated to a depth of at least 100cm where the uniform gray Jaucas-like sand ended and a hard yellowish white sand predominates.

As was expected both organic and artifactual assemblages collected in 1974 were similar to those collected in 1972; however, with the addition of organic and artifactual materials collected in 1974 the overall sample for the Arboretum site was significantly enlarged. As in 1972 the 1974 organic assemblage was dominated by *Chione cancellata* shells, a few arks, whelks, land snails and fish bones. The artifactual assemblage was composed of used and unused fine-grained basalt flakes, large and small fine-grained basalt cores, several hammer stones, shell picks, a possible very worn shell scoop and two very thin shell beads fashioned from mother-of-pearl and not exceeding 1cm in diameter (see plate 1 C).

In order to obtain absolute dates fro the Arboretum site two radiocarbon samples were submitted to Lamont-Doherty Geological Observatory which em-

loys the CO<sub>2</sub> gas proportional counting system. The radiocarbon samples were composed of *Chione cancellata* fragments collected from pit 10. Radiocarbon sample L-1380A was procured from level E (35-45cm) and L-1380B from level J (85-95cm). The final results indicate the following dates: 50A.D ±70 (L-1380A) and 460 B.C.±60 (L-1380B). When modified to allow for secular fluctuations in atmospheric 14C and other contingencies, these samples yield the following dates: 550 B.C. (L-1380A) and 1050 B.C. (L-1380B) (Gary S. Vesceilius: personal communication).

The final results for L-1380A and L-1380B indicate that habitation of the Arboretum site by preceramic peoples occurred during the first millennium B.C. as had been predicted earlier (Figueredo 1974a). From the material evidence available it appears that the preceramic inhabitants of the Arboretum site were fishermen and gatherers. Due to the small quantity of organic remains (shell and fish bone) and a rather unsophisticated lithic industry (when compared to earlier and other contemporary preceramic peoples of the region), two explanations are possible: 1) Because the Arboretum site lacks such traits as the manufacture of ground stone tools and stone beads which are common at the earlier preceramic Krum Bay culture it is possible to infer that the lack of such traits exhibits a lithic and possible cultural degeneration with the progression of time. 2) Because deposition of organic and artifactual remains at the Arboretum site has been estimated at 1mm per year as compared to 5mm per year at the Krum Bay site cluster and later ceramic sites in the Virgin Islands (Gary S. Vesceilius: personal communication), it is reasonable to infer that the Arboretum site was one of specialized (seasonal?) occupation.

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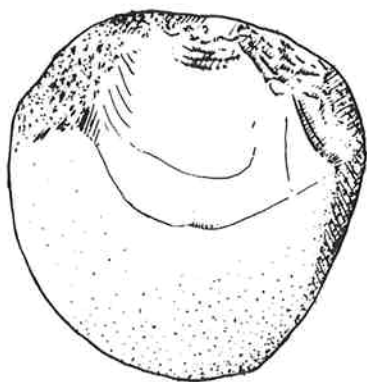
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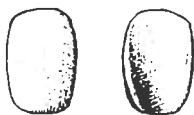
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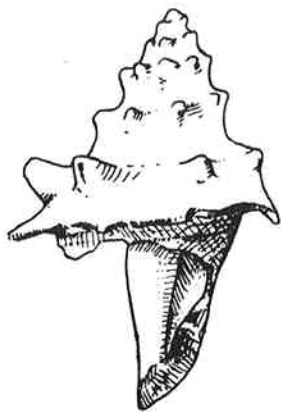
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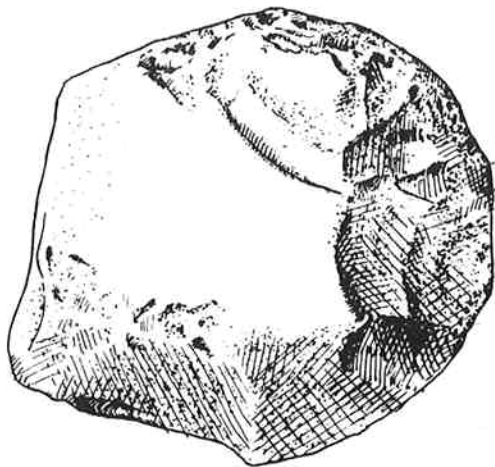
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C



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