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December 18, 1987

Dr. Henry Jarecki
Guana Island Club
Box 52
Roadtown, Tortola
British Virgin Islands

Dear Dr. Jarecki:

I have enclosed a copy of a report on a brief archaeological survey that I conducted, at the invitation of Dr. Michael Gibbons, at Guana Island during July 1987. I hope that you will find it interesting.

I am sorry that I did not have a chance to meet you while I was at Guana, but I hope that I will have an opportunity to do so in the future.

The Guana Island prehistoric site has a lot of research potential, and I would like very much to do more work there. If you are also interested in the site, and would like me to, I would be happy to submit a proposal to continue the research and to record the archaeological resources of Guana Island.

I hope that you and your family have a lovely Christmas and holiday season. I look forward to hearing from you soon.

Sincerely,

Elizabeth Righter

Elizabeth Righter
Archaeologist

ARCHAEOLOGICAL TESTING OF A PREHISTORIC SITE AT GUANA ISLAND, BRITISH VIRGIN ISLANDS JULY 1987

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by
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SURVEY AUTHORIZATION AND PURPOSE

During a four-day period, between July 9,1987 and July 13, 1987, a pedestrian archaeological survey and systematic subsurface testing program was conducted at Guana Island, British Virgin Islands (Figure 1). This investigation, directed by Elizabeth Righter, Territorial Archaeologist for the US Virgin Islands, was conducted at the request of Dr. Michael Gibbons of the Department of Anthropology of the University of Massachusetts, Boston, Massachusetts. In recent years, at the inspiration of Dr. and Mrs. Henry Jarecki, Guana Island has been the subject of diverse studies conducted under the auspices of The Conservation Agency, directed by Dr. James Lazell. The majority of these studies was centered around in-depth observation and recording of the varied biota of Guana Island. Dr. Gibbons, however, aware of the known archaeological site on Guana Island, believed that investigation of this evidence of prehistoric man's past activities on the island would be worthwhile and would contribute information germane to the other studies simultaneously underway. Dr. Gibbons, therefore, contacted Elizabeth Righter to inquire whether she would be available to make a preliminary assessment of the nature and significance of an area from which ceramic sherds and other evidence of prehistoric occupation had been collected for many years. Dr. Gibbons was hopeful that the faunal material in the prehistoric site might shed some light on the nature and age of material that he had unearthed in a rock shelter on the steep hillside above the prehistoric site.

PREVIOUS OBSERVATIONS

The primary locus of the known prehistoric material was the garden on the flat below the Guana Island Club residential complex (Figure 2). For many years in the past, when the ground was tilled and/or when trees and other flora were planted, prehistoric materials; such as, ceramic sherds and shell tools were observed in the overturned soils. Many of these items were collected and preserved by the Jareckis, by gardeners and by other personnel at the Club. It was evident that a prehistoric human cultural site, probably a settlement, was present in the garden area and adjacent vicinity. Although it is possible that other areas of prehistoric human occupation and/or use are present on Guana Island, the subject investigation was centered on the flat area near the known site in the garden and its environs.

SURVEY DESIGN

The investigation of the flat land southeast of the Guana Island Club residential complex was conducted with the assistance of two summer students from Tortola and Ms. Elayne Azevedo.

An initial inspection was made of the garden area. It was determined that most of the buried deposits in the area that was actively gardened had been disturbed. Although disturbed areas can often yield interesting artifacts; other information, which is learned from undisturbed stratigraphy,

can not be obtained in such areas. Therefore, it was decided to undertake a systematic subsurface testing program to identify the extent of the archaeological deposits and to locate areas where the undisturbed buried remains of the site might still be present.

It was observed that the topography was varied and that small mounds and depressions dotted the grass-covered ground surface west of the garden. Two informal hypotheses were generated for testing by the systematic subsurface sampling strategy to be employed:

(1.) That the lay-out of the prehistoric settlement would conform to village patterns recorded elsewhere in the Caribbean, in which residential huts are constructed around a central plaza or common space. In larger settlements, the central area also contained an areyeto or dance arena and possibly a ball court. It was not expected that the latter two features would be present at a small island settlement, but there was a possibility that the low flat depressed area west of a number of small mounds just west of the garden would prove to be the central plaza area or the common ground in the center of a ring of village huts.

(2.) That the small mounds west of the garden would prove to be refuse middens associated with individual huts.

FIELD METHODOLOGY

The short duration of the field survey did not permit time to construct an accurately surveyed field map, and maps presented in this report are not to scale. In the future, an accurate map of the archaeologically surveyed area should be constructed with the aid of surveying instruments.

In the absence of an available accurate map of Guana Island, at a scale useful for the purposes of the archaeological survey, directional references utilized in this report, and test locations cited in Appendix A, are approximate and general rather than specific. Directional references are based on "grid north" (Figures 2 and 8).

An initial inspection was made of the garden area. Here, over the years, ceramic sherds and shell tools had been observed in the overturned earth when trees and other flora were planted. Many items had been collected and preserved by the Jareckis, the gardeners and other personnel and guests at the Guana Island club. It was determined, upon examination, that the soils in the area where active gardening took place, had been substantially disturbed. Disturbed soils can yield interesting artifacts, but other information; such as that present in undisturbed stratified soils and their associated cultural deposits can not be obtained. It was, therefore, decided to conduct a program of systematic subsurface testing to determine the extent of undisturbed deposits, if any, outside the garden area, and to identify and record the nature of these deposits.

An exploratory test pit, Test 1, was excavated adjacent to the southwest corner of the garden. This pit was carefully excavated by stratigraphic level. Excavated soils were carefully examined for cultural remains and all artifacts and associated materials related to human use were collected and separately bagged by stratigraphic level. The soil strata observed on the pit walls were measured and recorded (Figures 3,4, and 5). Excavation of Test 1 uncovered evidence of one prehistoric human occupational component, of unknown duration.

In Test 1, cultural material was buried just below the grass cover and recent humus on the site. The greatest concentration of deposit was located between 10 and 30 centimeters below ground surface. In this level, soils were dark brown/black, discolored by dense concentrations of charcoal dust and decayed organic matter; the residue of human subsistence. Charcoal in sufficient quantity for Carbon-14 analysis was only present at about 24 cm below surface. From this depth a sample of charcoal that was associated with ceramic sherds and small animal bones was collected for analysis. The charcoal sample was turned over to Dr. Gibbons who volunteered to provide for radiocarbon analysis that would yield a Carbon-14 date for the most recent years of the prehistoric human occupation of the site.

Discolored soils that contained evidence of human activity extended to a depth of 84 cm below ground surface, although no artifacts were found below 74 cm below surface. Beneath the discolored soils was undisturbed white sand.

During the first day of the archaeological examination and assessment of a prehistoric site at Guana Island, the assistance of a summer student was available to remove the sod from test pits. In order to test the hypothesis that mounded areas might contain middens associated with households, Shovel Tests 2 and 3 were excavated in areas where there was a slight mound in the topography of the grassy area northwest of Test 1. Test 3 yielded a rich deposit of ceramic sherds, bones and shell. After a rain overnight, the backdirt of the test was examined and numerous small bones were observed pedestalled above the eroded backdirt soils. A careful collection was made of the visible faunal material and ceramic sherds. The faunal bone material, informally listed in Appendix B, was cleaned, numbered and turned over to Dr. Gibbons for analysis. It is expected that this material will be of interest both for understanding prehistoric human food sources and preferences at the site and for indicating some of the species available on the island and offshore during the period of prehistoric occupation.

Ceramic material recovered from the test pit was similar to that previously collected from the garden. The ware is a generally plain, unglazed hand-constructed red earthenware of a utiltarian nature. Some fragments contained evidence of red paint. Rim shapes and forms were varied (Figure 6), but there was little evidence of handles, lugs or rim decoration. Griddle sherds, indicating the cultivation and preparation of cassava, were present. Shapes of other sherds suggested vessel forms that were cazuelas, round bowls, straight-sided pots, and flat plates.

Having verified that undisturbed cultural deposits were present outside of and to the northwest of the garden; and that at least some mounded areas were, in fact, middens, it seemed pertinent to obtain a preliminary record of the distribution of such deposits and a definition of the boundaries of the remainder of the site. Since both manpower and time were limited, it was decided that a number of small shovel tests spaced on east-west trending transects with north-south trending bi-secting transects, in a rough grid pattern (Figure 2), would yield the desired information. Deviations from the rough grid were dictated by the presence of manmade or natural features or by the desire to test a specific landform. In order to not disturb buried deposits during the testing program, and in order to establish the presence or absence of buried cultural material, shovel tests were excavated only to a depth sufficient to establish that undisturbed buried deposits were present.

It was anticipated that the sampling method would also indicate the settlement size and pattern of the prehistoric site, and answer the first hypothesis concerning the distribution of huts around a central plaza.

Testing continued in a northerly direction, with shovel tests placed at regular intervals. Shovel Test 4 was devoid of cultural material, but yielded no evidence of a hard surface which might be expected of a central plaza area. It is probable that the depression in this area was created by removal of topsoils in the historic or recent past. Additional tests in this section of the flat area yielded evidence of historic disturbances. Prehistoric cultural material was present in disturbed soils as far west as Test 23 (Figure 2).

After the first day of investigation, with the assistance of summer students, an area of undisturbed concentrated buried prehistoric cultural material had been confirmed to be present northwest of the garden . The rich deposits extended in a northwesterly direction along the inland side of the road for a distance of about 600 feet. The next task was to delimit the extent of undisturbed midden to the north and east, and to define the limits of prehistoric use of the flat outside areas of obvious disturbance where the present club beach facilities are located (Figure 2).

With the assistance of Ms. Elayne Azevedo, shovel tests were made on two transects along the southern border of the pond (Figure 2), and along limited short transects which bi-sected these transects in a north-south direction. Prehistoric ceramic sherds were found in Tests 12, 13/14,16,and 18 along the southside of the pond. There was a scatter of historic material on the ground surface in the vicinity of a PVC pipe and a fenced area near Tests 13/14. The prehistoric material was sparse and there was no apparent midden or evidence of extended prehistoric occupation along the south side of the pond. It is possible that the few prehistoric ceramic sherds found here were introduced by various landscaping activities in the historic past, or that prehistoric occupants of the site utilized the pond area for obtaining food, water and other resources, leaving behind evidence of these activities.

Test 18 contained an unusual deposit of charcoal and Arca zebra shells, some of which showed signs of having been burnt. Arca zebra shells in the stratum below the charcoal, however, were associated with a wet limey white sand, and bore no evidence of burning. The nature of this deposit was unkown. Arca zebra shells were known to have comprised a large percentage of the shells in the Krum Bay midden of St. Thomas, US Virgin Islands, dated at about 1500 B.C. Recently, however, Arca zebra shells have been found associated with historic middens also. Therefore, a charcoal sample was obtained from Test 18 and submitted to Dr. Michael Gibbons for radiocarbon analysis.

Tests along the central transect in the vicinity of the golf course yielded no prehistoric midden material. Observation of the vegetative ground cover in this area indicated that soils contained a large amount of salts and supported a distinctive flora. Stands of tamarind and Pisonia with a few sea grape and turpentine (Bursera simaruba) bordered the area. (The lizard study area was off-limits for the archaeological survey and was not tested.) The topography of the primary and secondary dune formation along the southwestern shore, south of the beach house, suggested that in the past there may have been an inlet from the sea that extended to the golf course area and probably

Connected with the present pond. The sparse ground cover in the golf course area along a probable alignment of such an inlet, supports this hypothesis. It is possible that the prehistoric midden was not found in tests in the golf course area because, during the prehistoric past, this was a periodically wet area and the prehistoric settlement was confined to higher ground which bordered this wet area.

Test 27, conducted north of the fenced garden area, yielded a few prehistoric ceramic sherds mixed with historic materials. No prehistoric materials were found in Tests 19, 21, 22 and 28. Disturbance to soils was indicated in these areas (Figure 2)(Appendix A).

Tests 30 and 31, excavated in the sandy secondary dunes (Figure 2) yielded no prehistoric cultural material. Test 34, excavated on the seaward side of the western car track, about 50 feet northwest of Test 2, yielded large fragments of a prehistoric ceramic bowl and sherds of other vessels. The broken bowl, which had a pronounced shoulder and a wide upright rim the so-called "cazuela" form (Figure 7), was inverted in grey sandy soil. Because inverted bowls have been found associated with burials at other prehistoric sites in the Caribbean, the bowl was carefully excavated. No evidence of a burial was found, and clean sand was uncovered at 60 cm below surface.

Finally a wooded area seaward of the west end of the garden was tested. The exposed soils on the walls of a large ditch utilized for burning branches were inspected. Numerous prehistoric potsherds were observed protruding from the walls of this trench. It appeared that prehistoric deposits in this area were buried beneath a sandy soil overburden about 40 cm thick. Accordingly, tests were excavated to depths of between 40 and 60 cm in the wooded area. No prehistoric cultural materials were found in these tests.

Subsequently, with the assistance of Elayne Azevedo, the recovered ceramic, shell, lithic and other materials were washed, inventoried (Appendix C) and stored in the lab at Guana Island. Bones were cleaned, marked with field numbers and submitted to Dr. Gibbons for analysis (Appendix B).

CONCLUSIONS

Figure 8 depicts the findings of the archaeological survey. It would appear that about half of the original prehistoric settlement area remains in a relatively undisturbed condition buried to the northwest of the garden area. The garden area, itself, also may contain pockets of undisturbed deposit. The distribution of midden deposits, as indicated by the initial subsurface sampling program, suggests that the settlement plan, rather than a village with residential houses situated around a central plaza, consisted of a cluster of residences of a large extended family or a few families. Skeletons associated with individual houses may also be present in buried contexts at the site. The habitation area was the flat dry ground adjacent to the sea, south of a probable swampy area or inlet which may have existed in the vicinity of the present golf course. The pond and the sea would have provided numerous food resources. It appears that cassava was grown and cotton may have been grown also.

Activities, including trapping, hunting and gathering probably took place in the area around the present pond. Potable ground water may have been available.

The results of the Carbon-14 analysis should yield a date for the major period of occupation of the site. The ceramic material is primarily utilitarian and resembles a type known as Elenan in the US Virgin Islands. This pottery was utilized in St. Thomas between about A.D. 900 and A.D. 1200. A few recovered ceramic sherds which resemble those known from the earlier Saladoid series elsewhere in the Caribbean may indicate that there was also an episode of earlier occupation (ca. A.D. 400-600) on Guana Island. The predominance of evidence provided by the ceramic material and the stratigraphy of the site, however, suggests prehistoric occupation of the "flat" by the southwestern beach on Guana Island by a single group during a limited time period. The special conditions of the Guana Island site, such as its isolation and its location on a small offshore island, may be reflected in the ceramic materials which, in turn, may not contain the full inventory of ceramic materials known from mainland sites during the same time period. An explanation for the simple and utilitarian nature of the ceramic material provides an interesting research question. Further understanding of the ceramic assemblage should also assist in an understanding of the forms and functions of ceramic vesels in other sites of similar time periods in the British and American Virgin Islands.

Finally, the site potentially should contribute significantly to an understanding of the flora and fauna available on and offshore from Guana Island at the time that the site was occupied by prehistoric cultural groups. Changes in environmental conditions and in landforms between the prehistoric period and the present may be reconstructed from the archaeological data.

Only a limited portion of the island was surveyed for prehistoric resources. It is likely that other loci of prehistoric activity are present on the island.

During the 1987 archaeological survey, evidence of historic cultural activity on the island was also abundant. The structural remains and the archaeological deposits associated with historic occupation of the island also have significant research potential.

RECOMMENDATIONS

Generally, a phased approach to archaeological research, such as that initiated by the subject survey, is both practical and beneficial to the resources involved. One of the first activities that should take place as a follow-up to the 1987 investigations is a systematic pedestrian archaeological survey, with limited subsurface testing, of the entire island. The cultural resource survey should address and attempt to locate and identify both prehistoric and historic resources. An inventory should be compiled of these resources, which should be accurately mapped utilizing surveying intruments. resources should be prepared.

With regard to the known prehistoric archaeological site, initial testing of the prehistoric site on the flat land inland from the southwest beach at Guana Island indicated that about one-half of the habitation site may still lie buried in a relatively undisturbed condition beneath the grassy expanse west of the present garden area. About one-half of the site has been subjected to substantial disturbance and a large percentage of the potential information in this section of the site has been lost.

The undisturbed portion of the prehistoric site has significant research potential. A program of protection and of systematic careful data recovery should be established for this section of the prehistoric site. Awareness of the presence of the resource is the first step. It is important, now, to take specific measures to prevent future disturbance to, or destruction of, the undisturbed remainder of the site. Among such measures would be cessation, with the exception of grass cutting, of landscaping and construction activities in the area. It may be difficult to continue to prevent such activities for any length of time or to control such activities in the future. Therefore, a systematic data recovery plan would be desirable.

It is recommended that a management plan be developed for the site. The management plan would combine implementation of protective measures for the site with a phased data recovery program. Education of the grounds staff as to the provisions of such a plan would be necessary.

During the first year of data recovery, several three-meter square excavations could be made to recover material from the midden deposits. Such material would be carefully collected, recorded and subjected to detailed analyses. This research would coordinate well with the other research projects underway at Guana Island, and, ultimately, should contribute information of interest to biologists, soils scientists and ecologists conducting projects on the island and elsewhere in the Caribbean.

At some time in the future, it would be desirable to also conduct a program of archival research and historic archaeological investigation and data recovery on the island. Of particular interest would be comparison of lifeways among occupant cultural groups from distinct time periods but with similar environmental conditions and isolation factors.

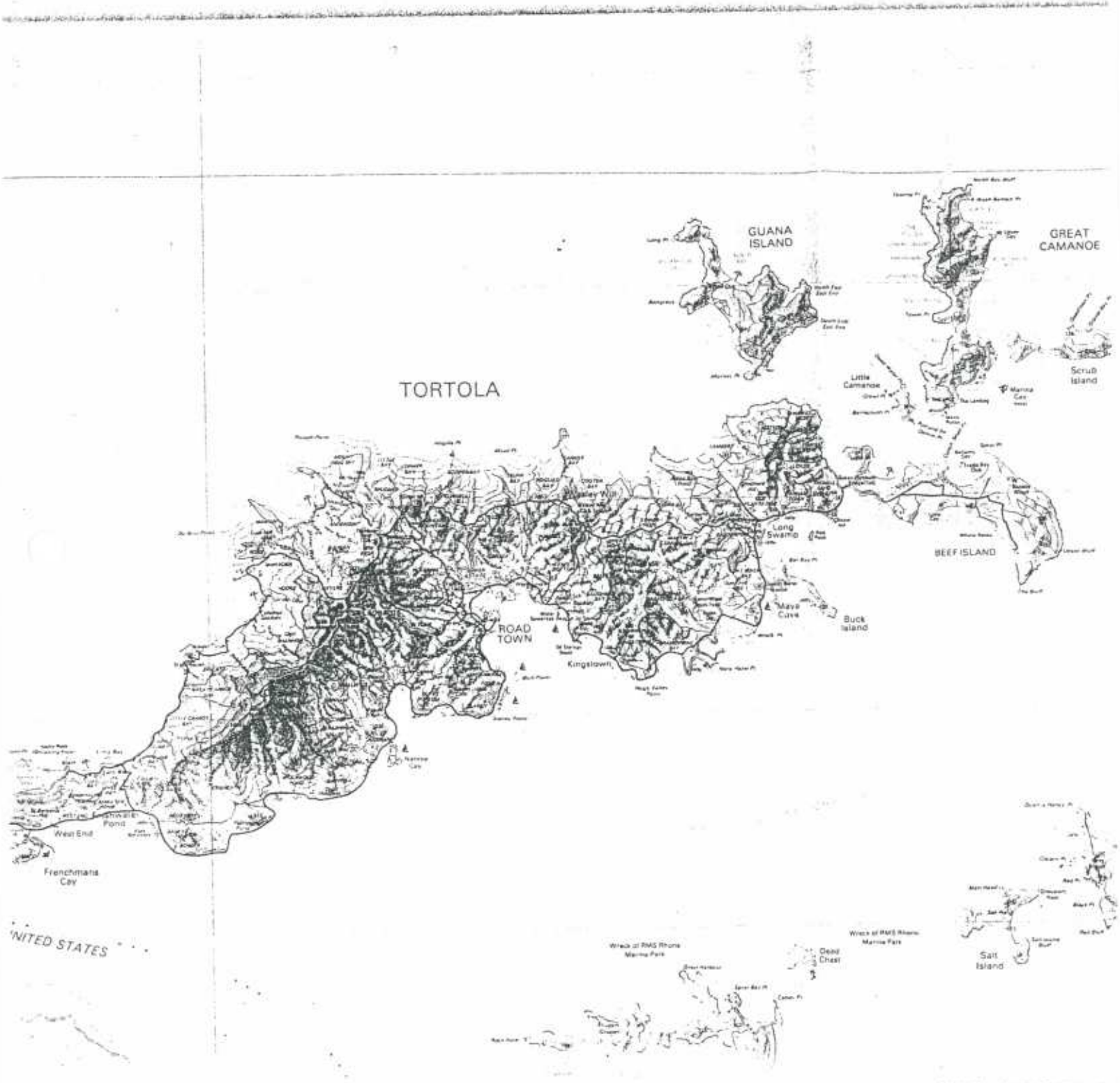


Figure 1. Location of Guana Island in Relation to Tortola, British Virgin Islands.

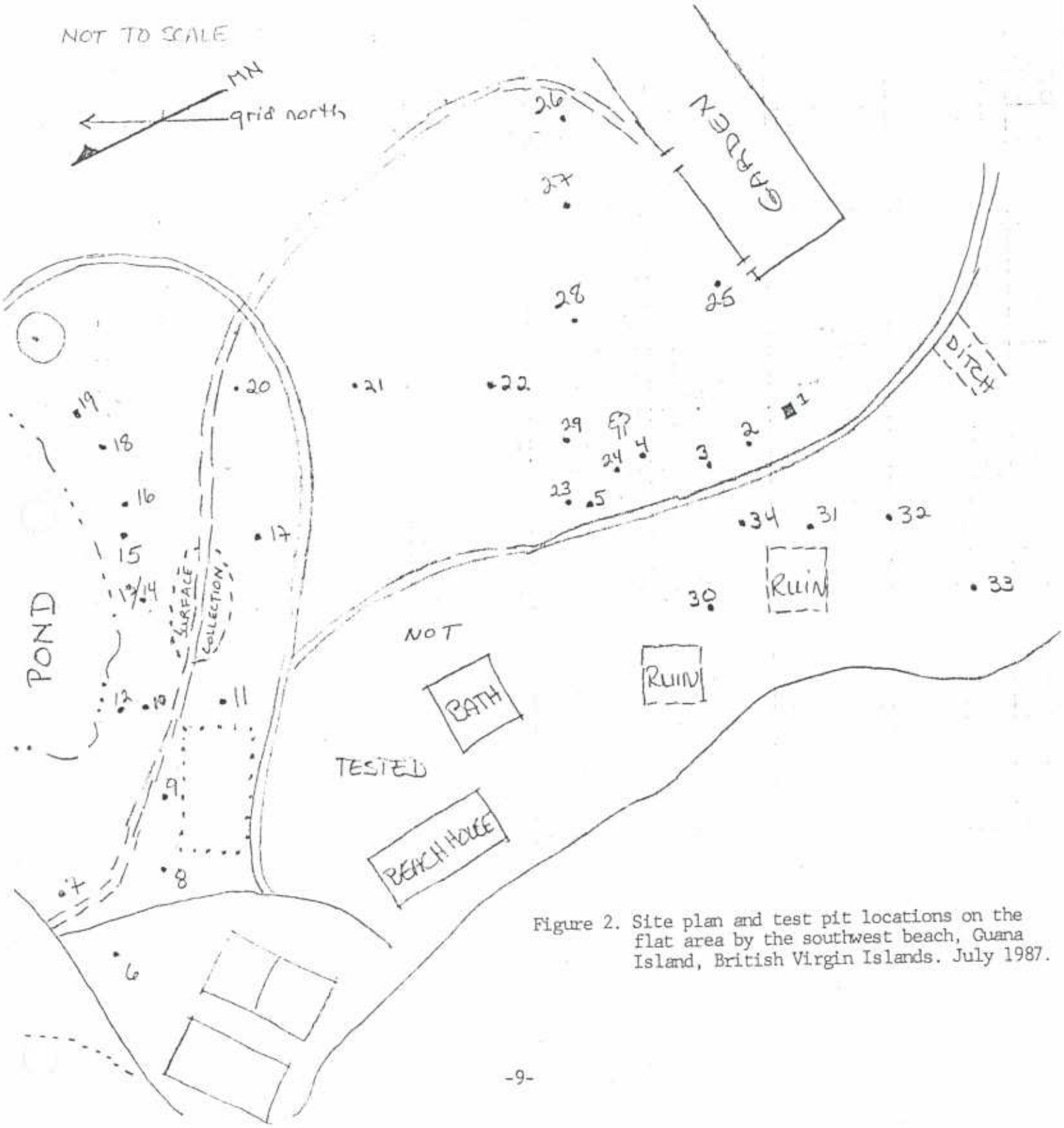


Figure 2. Site plan and test pit locations on the flat area by the southwest beach, Guana Island, British Virgin Islands. July 1987.

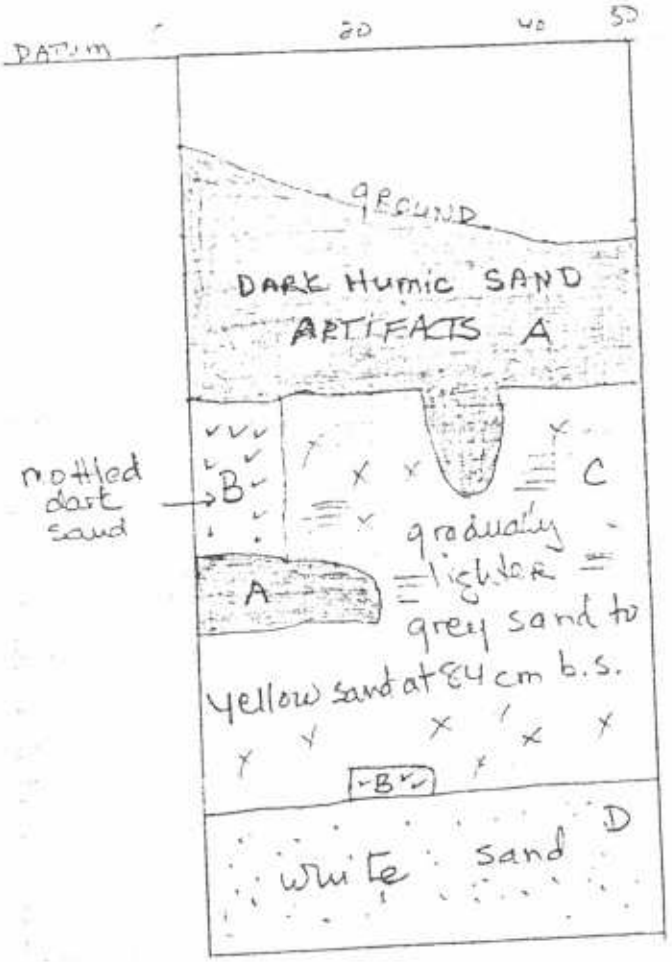
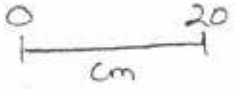


Figure 3. North stratigraphic profile of Test 1, Guana Island, BVI.



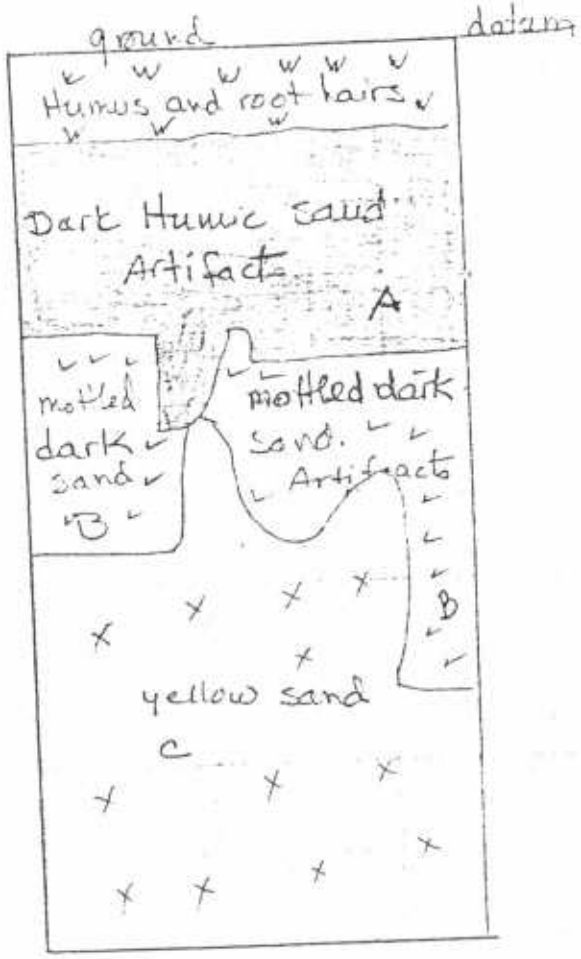


Figure 4. East stratigraphic profile of Test 1 Guana Island, BVI.

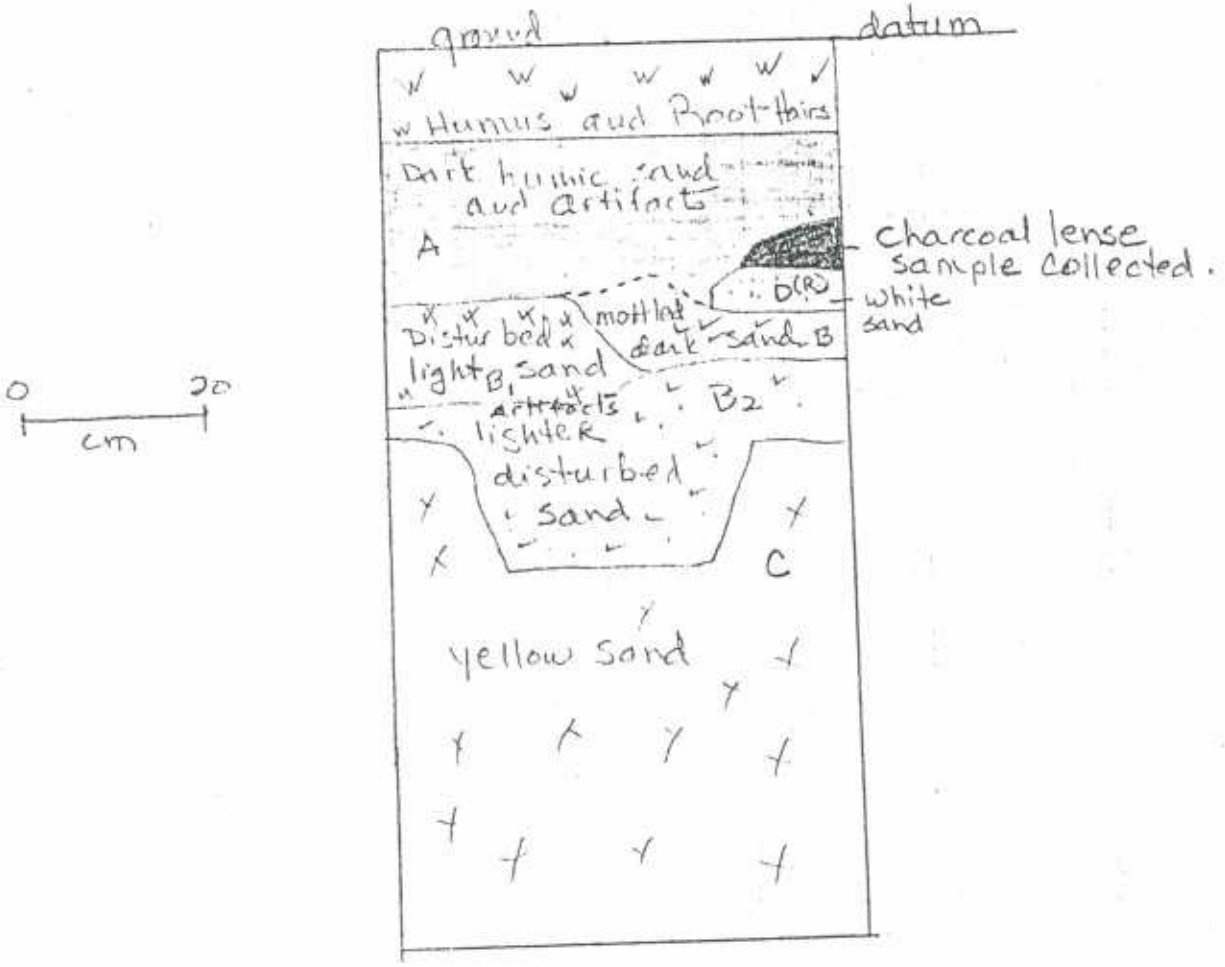


Figure 5. South stratigraphic profile, Test 1, Guana Island, BVI.

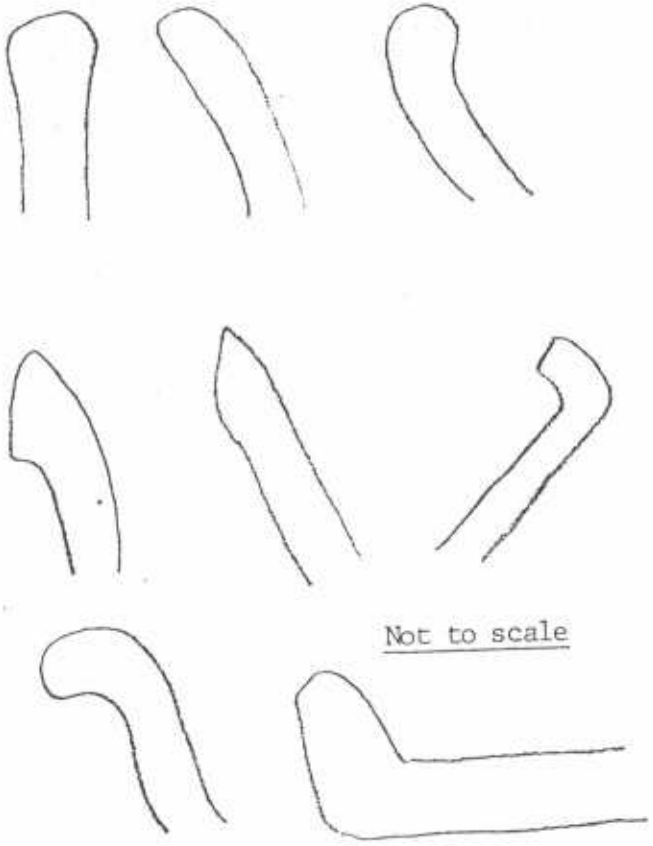


Figure 6. Schematic diagrams of rimsherd profiles showing variation among sherds recovered during the July 1987 testing program. Guana Island, British Virgin Islands.

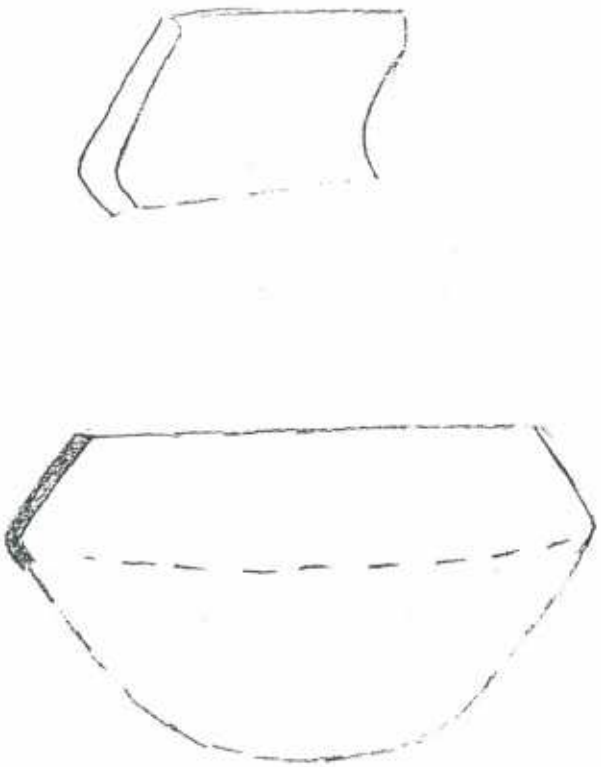


Figure 7. Sketch of "cazuela" rimsherd and reconstruction of bowl as it might have appeared. Sketch is not to scale. Test 34, Guana Island, British Virgin Islands.

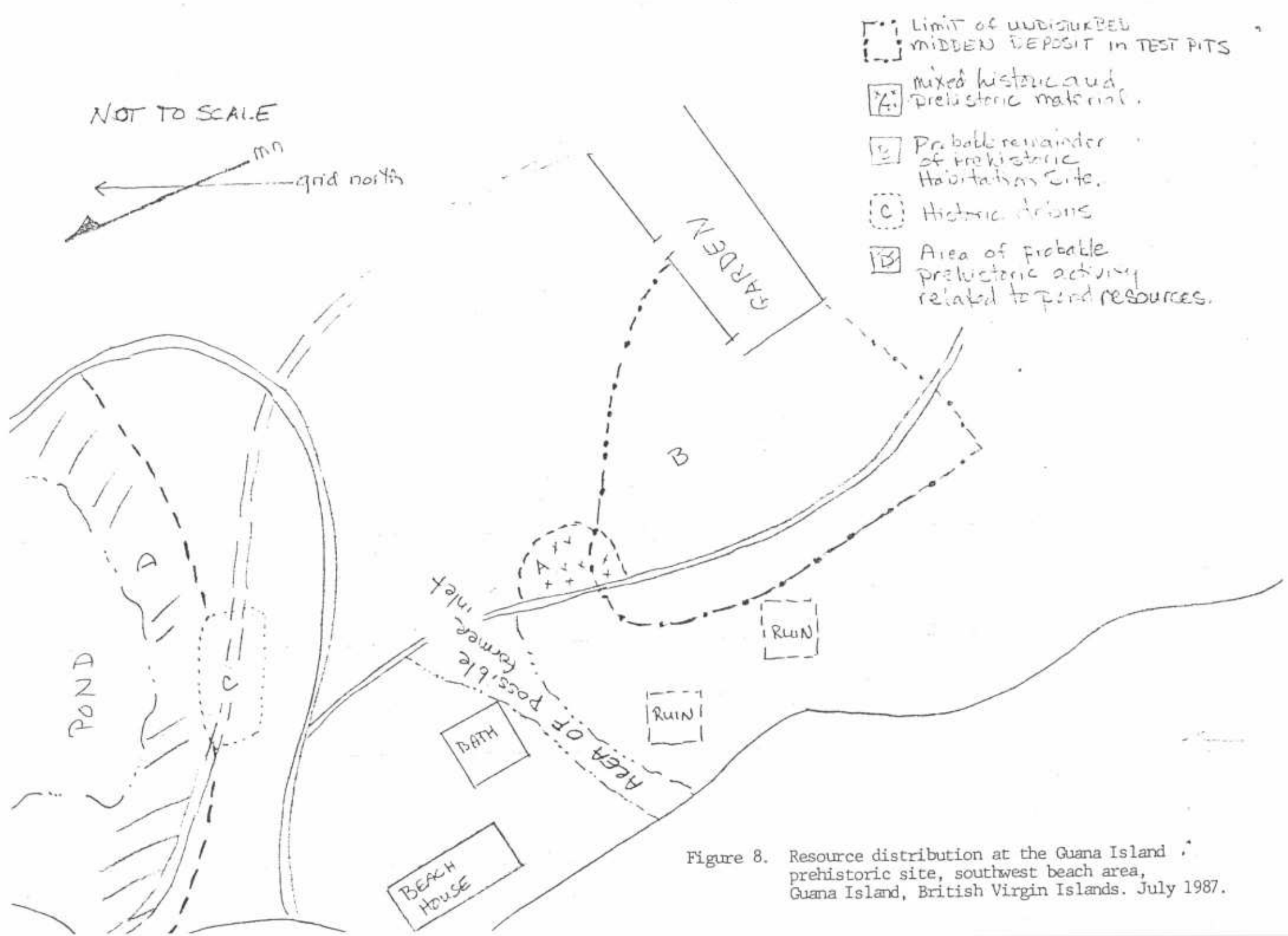


Figure 8. Resource distribution at the Guana Island prehistoric site, southwest beach area, Guana Island, British Virgin Islands. July 1987.

APPENDIX A

Bag List and Guide to Test Pit Locations

Guana Island Testing
July 9-13, 1987
Elizabeth Righter

GUANA ISLAND PREHISTORIC SITE

Bag List and Guide to Test Pit Locations

#1. Test 1. Excavated by levels carefully. Located west of southwest garden entrance, and southwest of turpentine (Bursera simaruba) tree. Ceramic sherds at 20cm below surface, in black soil with charcoal. Charcoal sample taken from Level 2 (10-30cm below surface). Level 1 was 0-10cm below surface, and Level 3 was 30-84cm below surface. Level 4 (D Figure 3) originated 86cm below surface. Soil are profiles attached.

#2. Test 2. Shovel test excavated by Clifford. Level 1. Dark sandy soil, about 0-40cm below surface.

#3. Test 3. Levels 1 and 2. Excavated by Clifford. A rich thick cultural midden, about 0-60cm below surface. Two bags of material collected, including 2 conch whorl tip zemis, 1 fragment of Acropera cervicornis, and many small bone fragments. Bones from this test pit were left in charge of Michael Gibbons for analysis at the University of Massachusetts lab.

#4. Test 4. On the "flat" southwest of a lone tree inland of the southwest car track to the garden. Test was about mid-point of the grassy area. No cultural material.

#5. Test 5. On a mounded area northwest of Test 4, about fifteen feet northeast of the car track. Brick fragments, whelk shells, and ceramic sherds. Level 1 was topsoil, 0-12cm below surface. Level 2 was grey sand, 12-36cm below surface.

#6. Test 6. Located northeast of the tennis court at the double "Y" in the road, between the sewer vent and a Pisonia tree. Test 6 was closer to the pond than to the beach. No cultural material.

#7. Test 7. In the same area, but north of the "Y", near the pond; about forty feet southwest of a row of coconut trees along the south side of the pond. No cultural material.

#8. Test 8. Located southwest of the car track on the southwest side of the pond and northwest of a white fenced-in area. About fifty feet southeast of Tests 6 and 7. One whelk shell.

#9. Test 9. Located about the midpoint of the fenced area, between the car track and the fence. Test was 35cm deep in dark sandy topsoil, grading into lighter soil.

#10. Test 10. Located about twenty feet northeast of the east end of the white-fenced area, on the north side of the road. No cultural material.

#11. Test 11. Located opposite Test 10 on the south side of the car track. Test was in an "inland" area on a little rise near a concrete trough. Excavated to 40cm below surface. One whelk and much charcoal. Area appeared to have been disturbed by brush burning and other activities in the recent past.

#12. Test 12. Located north of Test 10, about one hundred feet south of the pond, forty feet inland of the coconut tree line, and thirty feet northeast of the white-fenced area. Topsoil level was 0-10cm below surface. Test abandoned.

#13. Test 13. Located close to Test 14. Excavated to 25cm below surface. Area looks as if it is subjected to periodic flooding and/or has a high salt content in the soil (perhaps a former salt pond?). Vegetation is sparse and consists primarily of a small shiny-leafed ground cover. Visibility of ground surface is good.

A surficial survey was conducted in this area along the car track next to a stand of tamarind trees, near a recently-installed PVC pipe. Many historic sherds and bits of glass were noted (including tin-enamelled ware), along with small conch shells (Strombus sp.)
and whelk shells (Cittarium pica).

#14. Test 14. Located at the end of a row of coconut palm trees, between the palms and the north car track. Test 14 was opposite a big stand of trees in a mossy area. Test excavated to 40cm below surface in very humic sandy soil. Level 1 (0-10cm) contained 2 ceramic sherds, 1 Cittarium pica shell, and 2 stone flakes.

#15. Test 15. Located on a slightly mounded area about thirty feet east of Tests 13 and 14. Two fragments of historic bottle glass on surface; 2 fragments of coral and 1 Cittarium pica in the test pit.

#16 Test 16. Located near the pond on a rise, about 100 feet from a a stand of tamamrind trees near the track and west of a seagrape. An area of low sparse mossy vegetation. Sherds were present on ground surface. Test excavated to 25cm below surface.

#17. Test 17. Located on a mounded area south of Test 16, near flag for golf course hole no. 3 and near a diagonal road from the beach house to the tractor shed on the pond. No artifacts were found in the test, but about twenty feet to the northwest near the seagrape and a Pisonia cluster were 2 small sherds in the topsoil. There was much debris, both prehistoric and historic cultural material, on the road surface in this area.

#18. Test 18. This test was located at the southeast end of the pond, about 80 feet inland of the pond and 90 feet west of the seagrape, at the base of the high peak of the ridge. Anadara shells were present on the surface. Arca zebra shells and charcoal were present in the test. No ceramics.

0-22cm below surface = dark humic sand with charcoal and Arca zebra shells. Evidence of a small fire.

22-32cm below surface = medium grey sand.

32-48cm below surface = light grey sand with the consistency of cement. A few Arca zebra shells with no sign of fire were in this level. A charcoal sample was collected. Soils in this area, suggested an old salt pond or shore. Sand, waterworn coral fragments and very white shells were present in very wet strata.

#19. Test 19. Located near a big old seagrape at the base of the hill at the far end of the pond. Test was excavated to 43cm below surface. A few rocks, but no cultural material present.

#20. Test 20. Located inland from Test 19, about 150 feet southwest of coconut palms. One small "whelk" (Cittarium pica) and one broken conch (Strombus sp.) present.

#21. Test 21. Located in a mounded area, near a clump of trees west of a path to the garden, about 100 feet south of Test 20 and southwest of the garden shed ruin. Test pit contained a dense charcoal deposit and dark sand to 70cm below surface.

#22. Test 22. Located about 150 feet south of Test 21, on a mound southwest of a ditch or gullied area. Test is located northeast of Test 4. The area looked disturbed, because large roots, hills and gullies (manmade) characterized the area. Test was sited 250 feet southeast of the flamingo statue and 100 feet northwest of a stand of trees. Topsoil from 0-10cm below surface; grey sand from 10-40cm below surface. No cultural material.

#23. Test 23. Test began on a small mound about 35 feet east of the car track and 70 feet northeast of Test 5. Soil was rocky with mortar bits: disturbed. A pink low-walled ruin (post-in-ground: photographed) was located to the southwest. Tested area appeared to be either at a collapsed ruin or in a mortar-mixing area. Test was moved to the southwest about 15 feet. Here was typical dark sandy soil, with much charcoal, small Cittarium pica shells, and prehistoric ceramic sherds. Test was excavated to 25cm below surface.

#24. Test 24. Located with divining rods. Rods reacted at a spot about 60 feet northwest of Test 4. Here, just below the surface was a "floor" or hardpan of brown sand with ashes and charcoal. No cultural material.

#25. Test 25. Located about 120 feet northeast of Test 1, northwest of southwest garden gate. Test was excavated to 58cm below surface. Upper soils contained 1 ceramic sherd, 1 shell fragment, much charcoal and Cittarium pica and Strombus shells. Pottery was in a level between 22 and 42cm below surface; shell was in lighter sand at 55cm below surface. Charcoal and griddle sherd indicate a possible hearth area.

#26. Test 26. Located 300 feet northeast of Test 2 and southeast of Test 20; northeast of northeast garden gate and southeast of a row of coconut palms at the foot of the slope. High ground here, about 100 feet from the rain gauge. At 0-8cm below surface was historic ceramic material. Below this depth, at 8-20cm below surface, were "whelks" and a flat piece of bone (cut/incised?). Between 20 and 60cm below surface was barren sand.

#27. Test 27. Located northeast of Test 3 and southeast of Test 22 (about 350 feet diagonally southeast of Test 22 and about 200 feet north of Test 3). Area had been previously excavated: one prehistoric sherd, one piece of historic "willoware", and a sherd of tin-enamelled ware were in sandy disturbed soil.

#28. Test 28. Located about 120 feet northeast of Test 4, on a mounded area, south of an old seagrape and the disturbed area of Test 17. Test excavated to 42cm below surface. Disturbed soil. No cultural material.

#29. Test 29. Located about 100 feet northeast of Test 5 in a wooded area near golf course hole marked with a flag with a "G" on it. This test was about midway between the tennis court and the garden. (We avoided the lizard test plot). The area was disturbed, with no topsoil level. Soil was light brownish to white sand to 40cm below surface. Soils and the appearance of the ground surface suggest an area that is inundated frequently or an area that was wet in the past. Higher areas, support trees, but in general the ground in this area is devoid of the thick humic overburden characteristic of the grassy area where the prehistoric deposits were most abundant.

#30. Test 30. Located southwest of Test 24, on a secondary dune inland from the present primary dune. Test was about 50 feet south of the south car track. Soil in the test, excavated to 70cm below surface, was pure sand. This suggests that, in the past, the shore was further inland than at present. Perhaps there was a salt pond where the golf course/flamingo statue are; or the entire area including the present pond may have been submerged with an outlet to the sea in the low ditch-like area south of the beach hut. As one travels southeast from the beach hut, the shoreline progrades southeast, creating an expanse of high dry flat land. Here is where the prehistoric settlement was. This location fits the "model". Consistently, prehistoric settlements were situated on flat land at one side of a major gut, and upwind of a salt pond or marshy area. If the golf course/flamingo statue area were inundated during the period when the island was occupied in the prehistoric past, this left only the high and dry flat area for human settlement. This may explain why the prehistoric deposits terminate abruptly to the west of Test 3.

#31. Test 31. Located about 80 feet southwest of Test 2, and immediately northeast of a ruin identified as a "fort" which was situated about 200 feet inland from the sea. Test was excavated in dark sandy humus to 40cm below surface. No cultural material.

#32. Test 32. Located about 150 feet southwest of Test 1, in the woods west of the garden and northwest of a large ditch where brush is burned. Much leaf litter and many insects were in this wooded area. Old seagrapes. Ceramic sherds were observed in the strata exposed by excavation of the brush burning pit. Soils in Test 32 consisted of dark humic sand with ash to 36cm below surface, and grey sand from 36-42cm below surface. No cultural material. Possibly test was not deep enough to uncover cultural deposits deeply buried.

#33. Test 33. Located in the woods, about 100 feet southwest of Test 32. Excavated to 63cm below surface in grey sand. No cultural material.

#34. Test 34. Located west of the car track, about 50 feet southwest of Test 3. Sherds are evident on the ground surface of the car track near Test 2 and in the ditch south of Test 1. From this test was reovered a large portion of an inverted bowl.* Prehistoric sherds were uncovered at 35cm below surface, and the bowl originated at 42cm below surface. No evidence of a burial was found. Sherds from other vessels were present, but no food remains. Good stratigraphic context:

0-22cm = dark humic sandy soil
22-42cm = dark sand with artifacts. Soil grading to grey.
42-60cm = light grey sand.
60-68cm = white sand.

* The bowl is currently in the hands of the V. Is. Historical Society where it is being glued. We would like to return it to Guana where it could be exhibited.

Finally, a surficial survey was conducted in the garden and along the dirt path on the southwest side of the garden. It appears that about one half of the area occupied during prehistoric times is presently disturbed by gardening activities. There is a good possibility that some undistrubed deposits are present on the northwest edge of the garden where there is mostly bush at present. About one half of the occupied area is buried beneath the grassy expanse northwest of the southwest end of the garden. This area appears to have been minimally disturbed. Thick deposits are present, some of which are midden and contain food remains of great interest. The site may be too disturbed to be able to archaeologically discover the settlement pattern (to locate house posts etc), but it would be worthwhile to excavate the midden to recover evidence of the prehistoric life style, including the subsistence basis. Of interest also are the faunal remains which might provide important evidence about species living on the island, in shore and coastal environments of the island and in the sea around the island.

Appendix B

Informal List of Faunal Bone Material

Elizabeth Righter
July 1987

FAUNAL MATERIAL

Number	Brief Description
3-1	large upper plate of a fish
3-2	similar plate, but rounded; no teeth.
3-3	flat bone with incised lines or evidence of cutting.
3-4	leg bone; possibly turtle.
3-5	flat bone; possibly turtle.
3-6	flat bone; same material, with cuts.
3-7	scapula fragment
3-8	vertebra
3-9	leg bone; possibly turtle.
3-10	fish bone
3-11	fish mandible with recessed tooth.
3-12	parrot fish jaw?
3-13	unidentified bone
3-14	fish bone
3-15	fish vertebra with spike
3-16	vertebra
3-17	fish plate fragment
3-18	vertebra
3-19	parrot fish jaw
3-20	scapula
3-21	scapula
3-22	parrot fish jaw fragment
3-23	hogfish (Bodianus rufus) bone
3-24	ear bone?
3-25	fish vertebra
3-26	flat bone
3-27	flat/curved bone
3-28	paper-thin bone fragment
3-29	leg bone
3-30	flat bone
3-31	hogfish bone

Miscellaneous fish vertebrae
1 human femur end?

APPENDIX C

Artifact Inventory

Elizabeth Righter
July 1987

ARTIFACT INVENTORY-1987 *
GUANA ISLAND

TEST 1 (0-75cm)

12 rimsherds red earthenware

1 bent rim
1 curved bowl rim
1 flat with blob end
1 flared flat-topped rim
1 triangular cross-sectioned
2 smoothed coil, tapered.
1 flared, triangular cross-sectioned.
3 pointed with red paint
1 triangular cross-sectioned with point inverted.

22 body sherds red earthenware

2 bones

1 parrot fish plate
1 fish vertebra

34 shells

4 small Strombus sp.
1 large dorsal fragment ditto
1 fossil ditto fragment
8 Codakia
1 Codakia fragment.
9 Cittarium pica fragments
4 mangrove oyster
1 fossil Ostrea
1 scallop shell fragment (Pectin)
1 bivalve
1 unidentified.
1 large Nerita
1 worm shell

8 coral fragments

7 fragments
1 Acropera cervicornus

2 rocks

1 fire-cracked
1 chipped smooth rock end

* Ceramic sherds, unless otherwise noted, are of prehistoric manufacture

TEST 2 (0-40cm)

4 rimsherds red earthenware

2 flat-topped rimsherds.
1 with "ear" applique on rim (similar to Belmont Grove).
1 pointed sherd with raised lip.

6 body sherds red earthenware

1 large flat red earthenware sherd.

3 bones

1 fish vertebra
1 fish plate
1 femur end?

4 shells

1 Strombus gigas column tip.
2 Strombus sp. (small).
1 ditto whorl tip (a poor man's zemi?)

2 coral fragments

1 (half) smoothed rock.

TEST 3. (0-60cm)

17 rimsherds-red earthenware

1 bat motif.
2 curved bowl lips-thin
2 curved bowl lips-thicker
4 flared flat-topped
1 triangular cross-section
1 plain sherd with coil marks and smoothed coil rim. Black body.
1 griddle sherd with rim and blackened bottom and a flat crudely coiled rim. Grit/sand temper.
1 crude griddle sherd with an irregular rim. Similar to above.
2 everted rim sherd with smooth coiled rim and stick marks. Red painted interior. Grit temper.
1 smooth burnished sherd with coiled rim.
1 plain smooth sherd with a flat-topped rim.

2 basal sherd red earthenware (small bowl)

61 body sherds red earthenware.

1 griddle sherd
6 thin round bowl sherds
1 sherd of a large vessel
2 small flat burned sherds
2 thin curved sherds
4 thick sherds
1 flat sherd, thicker at one end
6 misc. sherds
2 very small bits.

17 shells

1 Cittarium pica with whorl cut out.
1 ditto fragment
6 Strombus gigas fragments including 2 lips and one dorsal section.
One whole shell. One celt of Strombus gigas lip.
4 small Strombus sp. fragments, including two whorl tips (zemis?).
1 fossil lion's paw (Pectin nodosus, Linne)
1 fossil Ostrea
1 unidentified
1 kitten's paw (Plicatula gibosa)

1 coral fragment

1 Acropera cervicornus

TEST 5 (0-36cm)

11 ceramic sherds

2 corroded earthenware rimsherds
9 body sherds

12 shell

11 Cittarium pica fragments
1 Astraea caelata
1 brick
1 brick fragment

TEST 12 (0-10cm)

2 ceramic sherds

2 earthenware body sherds

1 shell

1 fragment of Strombus sp.

TEST 13/14 (0-40cm)

2 ceramic sherds

1 rimsherd
1 body sherd

1 shell

1 Cittarium pica

1 lithic

1 lithic flake

TEST 16 (0-20cm)

9 ceramic sherds

5 body sherds red earthenware (prehistoric)
4 body sherds blue tin-enamelled ware (historic).

5 shells

3 fragments Strombus sp.
1 Strombus costatus
1 Astraea caelata

1 coral fragment

TEST 18 (0-22cm)

4 ceramic sherds

4 body sherds red earthenware (prehistoric)

15 shells

5 Arca zebra shells
1 ditto with square hole in it.
3 ditto fragments
1 Anadara fragment
1 limpet (subfamily Emarginulinae)
1 lip fragment of a helmet (Cassis sp.)
1 plate of a chiton (Chiton tuberculatus)
1 clam valve (unspecified type)
1 fragments of Cittarium pica
1 land snail

2 coral chunks

TEST 18 (continued)

1 lithic

1 rock

TEST 18 (22-48cm)

5 shells

3 Arca zebra
1 Codakia
1 jewel box oyster (Chama sp.)

2 coral

2 pieces weathered coral

2 lithics

1 red rock
1 smooth grey-blue cobble

TEST 25 (22-45cm)

10 sherds red earthenware (prehistoric)

3 rimsherds of a flat plate, red painted. Pieces fit together
2 body sherds of ditto
1 large griddle sherd
4 body sherds

4 shells

3 Cittarium pica
1 Codakia

1 coral fragment

1 lithic

1 piece of blue bit

1 soil sample

TEST 26 (0-8)

3 historic ceramics

2 sherds of whiteware
1 kaolin pipestem fragment

1 glass

1 piece of clear glass

2 mortar chips

1 piece bone

1 flat bone piece (turtle?)

TEST 26 (8-20cm)

2 shells

2 Cittarium pica

TEST 27 (0-10cm)

4 ceramic sherds

1 body sherd red earthenware (prehistoric)
3 historic: 1 willoware transfer; 1 Creamware; 1 tin-enamelled (maiolica).

TEST 34 (0-22cm)

6 sherds red earthenware (prehistoric)

2 fitted rimsherds with coil marks
1 rimsherd of the same bowl
1 red painted basal sherd
2 body sherds

3 shell

1 Strombus whorl with tip sliced off
1 ditto fragment
1 small Astraea caelata

TEST 34 (22-42cm)

10 ceramic sherds

2 large rim and shoulder sherds, red painted with pronounced shoulder and inverted rims.
2 rimsherds of a small curved bowl
6 body sherds.

SURFACE COLLECTION ALONG ROAD NEAR TEST 10

20 ceramic sherds

2 rimsherds red painted curved earthenware bowl (prehistoric)
17 body sherds red earthenware (prehistoric)
1 sherd tin-enamelled ware

2 glass fragments

24 shells

4 picks fabricated from Strombus tips
2 whorl tip zemis (Strombus sp.)
3 thick Strombus fragments
3 small thin-walled ditto
1 small ditto
2 Nerita
1 land snail
1 Anadara fragment
2 Cittarium pica
5 ditto fragments
1 Lucina (buttercup)

1 coral chunk