

THE VIEQUES ARCHAEOLOGICAL PROJECT

By Alfredo E. Figueredo

Vieques, with approximately 161 square kilometers of surface area, is the second largest of the Virgin Islands, surpassed only by St. Croix with its approximately 223 square kilometers. Its present government is that of a Municipality within the Commonwealth of Puerto Rico (a Free State associated to the Union), with large areas under Federal United States jurisdictions, primarily those of the Department of the Navy and the General Services Administration. Firing ranges and other military uses preclude access to over half the island except under special circumstances.

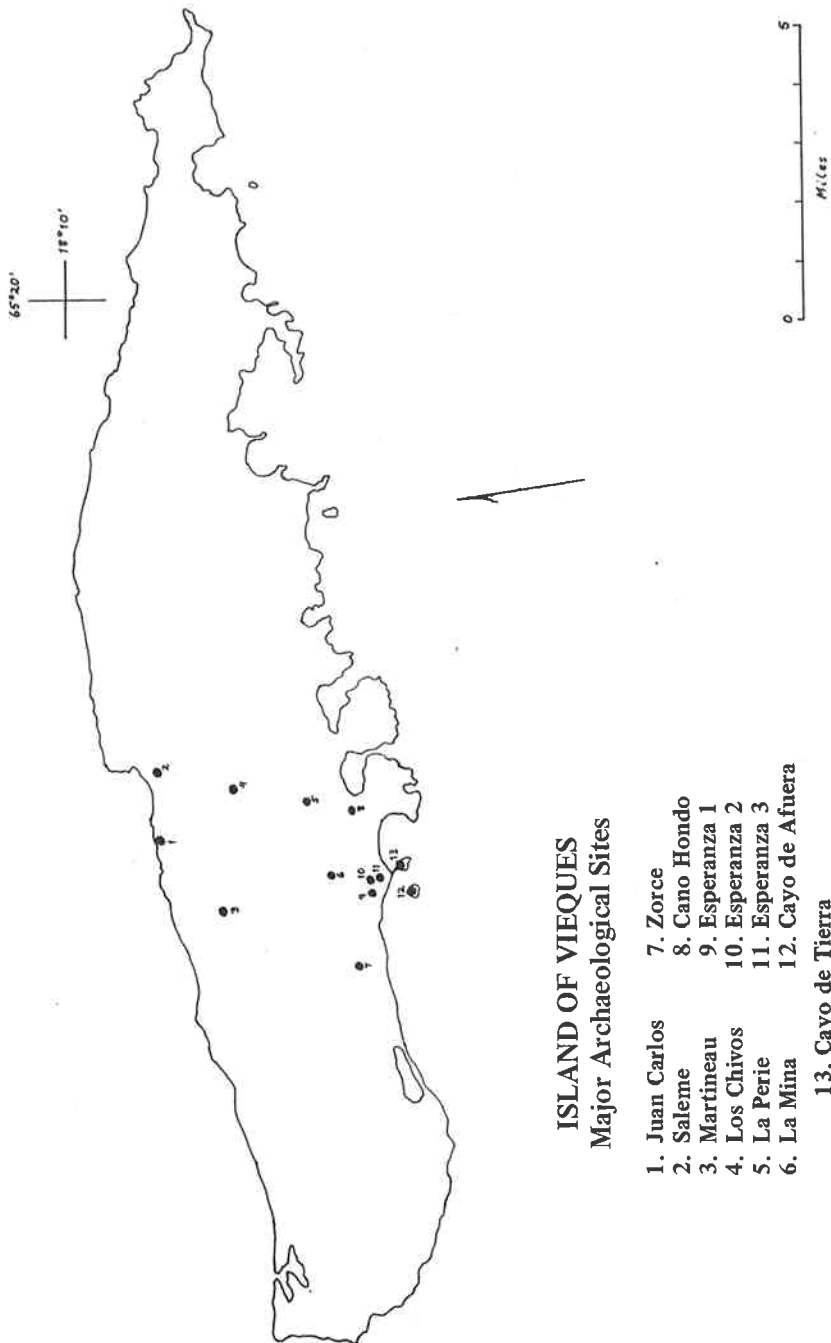
Warlike Indians inhabited the island during Contact times until they were exterminated in 1514 (Rouse 1952: 555). They called their homeland *Bieque*, whence the modern name. European attempts at settlement were thwarted by the Spaniards of Puerto Rico, who themselves only occupied the island effectively during the first half of the XIX Century, building an impressive fortress above the new seat of government, a town named after the reigning monarch, Isabel II. Under its own governor at first, it was annexed to Puerto Rico in 1854.

For the hundred years that ended in 1941, sugar cane culture was the dominant economic activity, and Vieques knew periods of great prosperity, during which railroads and harbors, now abandoned, were built. Production in the large sugar factories is said to have reached 20,000 tons annually (Anonymous 1971), which, at today's prices, would bring \$8,000,000.00 (about \$1,000.00 *per capita* based on the present population of 8,000). Had the centrals remained open, Vieques would be in another sugar boom! The fields, however, lie waste or as pasture for cattle of poor quality. A savannah landscape, with *Acacia* stands, predominates.

Monte Pirata, named after the famous sea-robber Cofresi, is the highest point with but 299 meters' elevation, the island relief being mostly gentle hills and dissected plateaux and plains. Whereas the northern coast affords few anchorages, the southern coast possesses several good harbors for small and medium-sized vessels, being very indented with prominent peninsulas and bottleneck bays. The rainfall has been estimated at 47 inches annually (Anonymous 1971), but it varies from place to place, the western and northwestern areas appearing better watered. There are numerous perennial brooks and brackish tidal ponds.

Saved for scattered allusions (cf. Loven 1935: 278), Vieques was unknown to archaeology until Irving Rouse conducted excavations there in 1938. Since then, Diana Lopez has investigated a larger number of sites (Davila 1975). Charles Tricoli and Pablo A. Delorme, amateur archaeologists, have conducted limited excavations, while Bertha Coles, an interested local resident, has collected materials from site surfaces. Irresponsible looters and uneducated builders have destroyed many times the area excavated by these serious students. Some sites exhibit the appearance of a fresh battlefield full of artillery craters. There is no effective control on these immoral activities.

After looters and bulldozers, the other major danger to Vieques archaeology is haphazard research. With the exception of Rouse's (1952), there is no published account of archaeological field work in Vieques. Because of this, every interested student is forced to undertake his own basic excavations, since he is likely to be either in ignorance of previous field work or unable to use it. This proliferation of useless or redundant excavations, ever repeating the first steps



ISLAND OF VIEQUES
Major Archaeological Sites

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| 1. Juan Carlos | 7. Zorce |
| 2. Saleme | 8. Cano Hondo |
| 3. Martineau | 9. Esperanza 1 |
| 4. Los Chivos | 10. Esperanza 2 |
| 5. La Perie | 11. Esperanza 3 |
| 6. La Mina | 12. Cayo de Afuera |
| 13. Cayo de Tierra | |

of research, and going no further, is most censurable.

The Vieques Archaeological Project was first conceived as an attempt to round-out information provided by Rouse on the aceramic sites of Vieques' southern coast (cf. Figueredo 1974b). For this purpose the author contacted Ricardo E. Alegria, Puerto Rico's foremost and most respected anthropologist, who had the kindness to arrange a small grant matched between two local societies. Once the grant had been awarded by the Puerto Rican Society of Natural History and the Guaynia Archaeological and Historical Society of Ponce, Edward L. Towle of Island Resources Foundation generously matched it a third time with funds that Paul M. Caron, of Paris, France, had provided the Foundation for scientific work in Vieques. Thus armed financially, the Project could expand into a more ambitious research plan.

It was proposed primarily to fulfill the first objective explained to Alegria, then with his leave use the extra funds to acquire a chronological framework for the prehistory of Vieques by means of radiocarbon dates. For that purpose, suitable samples were to be obtained from one each of the following sites: aceramic, early ceramic, and late ceramic.

A preliminary reconnaissance of the island was effected 22-25 November, 1974, by Jeffrey M. Gross, Katheryne B. Kay, Bruce E. Tilden, and the author. All the necessary sites having been located in the field, Jeffrey M. Gross and the author returned to Vieques accompanied by William Willard, who had the kindness to fly us there and back in his private plane 25-31 March, 1975; this was particularly helpful, as scheduled flights between St. Thomas and Vieques were no longer available. In Vieques itself, we were generously assisted by Joseph Campbell, Pablo A. Delerme, and Deborah Young during the excavations of late March. Angel Colon of Fomento Industrial and the Mayor of Vieques, Luis A. Castano, were very cooperative in obtaining the necessary permissions for excavation, as was Bertha Coles.

Rouse (1952: 556) had located 3 small aceramic sites forming an apparent site cluster such as those of the St. Thomian Archaic (Figueredo 1974a: 9) The site at Cano Hondo (Puerto Mosquito), excavated by Rouse in 1938, was selected for our purposes. We camped at Puerto Mosquito for 5 days, laying out a grid covering the central portion of the site and surface-sampling using plane coordinates. A trench one meter wide was aligned north to south, two units 1.0 by 1.5 with an intervening balk 1.0 by 0.25 m being excavated down to bedrock, which was found at a maximum depth of 35 cm. Three superposed strata were found in both units. Soil samples were taken from the balk.

Three hammerstones were found on the site surface; the upper half of a ground stone celt, a conch-lip hammer, and several conch-tip 'picks' were found in Stratum I; one hammer-edge grinder, an edge grinder, some flakes and several conch-tip 'picks' were found in Stratum II, and no definite artifact was found in Stratum III. Midden shell was submitted for radiocarbon-dating from strata II and III, using *Murex brevifrons* and *Cittarium pica* respectively. In order to date an artifact and settle the question of whether three Coroso-type sites were aboriginal or not, the conch-lip hammer (*Strombus costatus*) was submitted from Stratum I.

The dates were as follows:

Stratum I	UGa-995	3010±70 B.P.
Stratum II	UGa-997	2705±70 B.P.
Stratum III	UGa-996	2855±65 B.P.

Gary S. Vescelius was kind enough to assess these dates on the basis of their

reported isotopic fractionation and the secular fluctuations of ^{14}C , approximating thereby the true calendric dates. According to this assessment, strata II and III should refer to 1580 and 1600 B.C. respectively. Stratum I yielded the oldest date, but this may be explained in terms of an old conch shell having been used as a tool at a later time; the true age of desposition may be estimated at 1560 B.C.

It will be seen, then, that our assumption, based upon preliminary data, that Cano Hondo belong to the Virgin Islands Archaic has been borne out by our excavations. A celt akin to those from Grambokola was found in Stratum I, and edge grinders such as occur at the Krum Bay sites were found in Stratum II. The radio carbon dates for Krum Bay establish the probable occupation there to between 1700 and 1450 B.C. (Gary S. Vescelius: personal communication), dates contemporary with the occupation at Cano Hondo of perhaps 1600 to 1550 B.C.

Pablo A. Delorme and others had informed us that Diana Lopez excavated at the early ceramic site of Zorce yet took no radiocarbon samples. Since we had no access to information regarding her work at any rate, we decided to excavate at this rather large site. A test pit 1.0 by 0.6 m was plotted next to a huaquero-hole, which we taylored and used to control stratigraphy. The soil was extremely hard-packed clay, though we dug down to 60 cm through 5 strata. Charcoal was found at Stratum IVB in what we thought may have been sufficient quantity, yet it proved to be extremely light in weight (the substance is not yet identified), and yielded a very poor date:

Stratum IVB	UGa-994	2055±1525 B.C.
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Taking into account the mass spectrometry analysis and other factors, Gary S. Vescelius (personal communication) believes the true calendric date to be 325 A.D. This is roughly the date we would expect from the middle-Cuevas pottery associated with the sample. The error factor, though, is relatively large.

The westernmost midden at the large Esperanza site (Rouse 1952: 558) was selected for dating the late ceramic period, since our surface sampling revealed relatively late and complex Chicoid pottery there. Two small test pits, 0.75 by 0.5 m, were excavated into the single stratum to a maximum depth of 30 cm. A sample of *Lucina pectinata* yielded the following result:

Stratum I	I-8476	405±80 B.P.
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The true calendric date may be somewhere between 1200 and 1300 A.D.

The net result of the Vieques Archaeological Project was to demonstrate that the Virgin Islands Archaic was represented in that Island. Over a dozen aboriginal sites were relocated in the field and some were surface-sampled. First-hand information on the geography of Vieques was obtained, and the articles on specific topics that will follow this one will lay the foundations for further scientific archaeology in that second largest of the Virgin Islands.

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