

AN ARCHAEOLOGICAL EVALUATION OF

GUN ISLAND

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## PREFACE

Gun Island possesses archaeological sites where the shipwrecked crew of the Dutch East Indiaman 'Zeewyk' camped in 1727. The aim of this paper is to discuss the archaeological potential of the sites in the light of the island's subsequent history. There is a great wealth of information concerning the 'Zeewyk' and Gun Island in the W.A. Archives (Battye Library). This paper presents only a generalized picture drawn from a limited range of references. A significant omission is any discussion of the 'Zeewyk' crew's stay on the island. For a detailed account of this the reader is referred to the 'Zeewyk Log' on file in the Marine Archaeology Department of the W.A. Museum. Also relevant, but not included here, is 'Additional information concerning the Zeewyk'. It too is on file in the Marine Archaeology Department. The Log was translated by C. de Heer.

## INTRODUCTION

On April 8th and 9th, 1974 this author accompanied Hugh Edwards and Jeremy Green on an inspection of the Dutch shipwreck 'Zeewyk' and the related sites on Gun Island where the marooned survivors camped. The goal was to formulate guidelines and recommendations for the archaeological excavation of the land sites. Towards this end, this paper presents a brief resume of Gun Island's history that would be relevant to an archaeological investigation and also outline problems future excavators will have to cope with.

This paper is strictly concerned with the archaeological situation on Gun Island. Discussions of the wreck can be found elsewhere.

## HISTORICAL BACKGROUND

Gun Island is one of many limestone islands in the reef-complex of the Pelsart Group on the Houtman Abrolhos. It is flat, treeless, and approximately  $\frac{1}{2}$  mile long. Geologically, the island is a consolidated coral limestone platform that rises 10 feet above the surrounding reef. On the east and south this platform or reef remnant has been undercut by wave action. Along the west side is a beach of calcareous sands. The island covers an area of approximately 40 acres (O'Loughlin 1969, 15) but at least 80% of this area has been stripped to bare rock by guano miners. The only unexcavated area is the W.N.W. where sand dunes rise 16 feet above water level.

2.7 miles N.W. of the island, on Half Moon Reef, the Dutch ship 'Zeewyk' went aground in 1727. The survivors, numbering approximately 158, came ashore on the island and spent 8 months there constructing a sailboat (a sloop) that eventually enabled them to sail to Indonesia.

Probably the first men to visit Gun Island after the departure of the 'Zeewyk' survivors were Stokes and Wickham of the

British survey vessel H.M.S. Beagle in 1840. Stokes' account of the visit is as follows:

Discoveries in Australia

by J. Lort Stokes  
London 1846 Vol. II

"April 24 (1840). — In the morning the boats were despatched on their ordinary work, and Captain Wickham and myself landed on the largest island, a quarter of a mile long, forming the north-western extreme of Pelsart Group, and which we named Gun Island, from our finding on it a small brass four-pounder of singular construction, now deposited in the United Service Museum, (see the cut annexed) with quantities of ornamental brass work for harness, on which the gilding was in a wonderful state of preservation; a number of glass bottles and pipes, and two Dutch doits, bearing date 1707 and 1720.

This was a very interesting discovery, and left no doubt that we had found the island on which the crew of the Zeewyk were wrecked, in 1727, and where they remained so long, whilst building, from the fragments of their vessel, a sloop, in which they got to sea by the passage between Easter and Pelsart Groups, which has consequently been called Zeewyk Passage. The scene of their disaster must have been on the outer reef, a mile and three-quarters south-west from Gun Island, along which ran a white ridge of high breakers.

The glass bottles I have mentioned were of a short stout Dutch build, and were placed in rows, as if for the purpose of collecting water; some of them were very large, being capable of holding five or six gallons; they were in part buried in the sand, and the portion which was left exposed to the air presented a singular appearance, being covered with a white substance that had eaten away the glaze. A number of seal bones were noticed on this island; and I have no doubt they are the remains of those that were killed by the crew of the Zeewyk for their subsistence. On the north end of the island was a hole containing brackish water; when we dug it deeper the salt water poured in. The next small islet to the E.S.E. we discovered to be that on which the Dutchmen had built their sloop. On the west side of it was a spot free from coral reefs, thus offering them facilities, no where else afforded, for launching the bark which ultimately carried them in safety to Batavia."

During his survey of the Abrolhos, Stokes noted guano deposits on some of the islands, including Gun Island. Later it was recommended (Swan River News, Sept 1, 1846) that the feasibility of a guano industry be explored.

Though the colonial government was slow to respond with a feasibility study, private individuals were quick to exploit the situation. "It is known that guano was taken from the Abrolhos prior to 1847 probably soon after its discovery by Wickham and Stokes ..." (Teichert 1947). From 1844 to 1850 at least four ships are recorded as having transported guano from the Abrolhos (Records of D.L. Serventy in Green 1972, 53).

In 1879 John Forrest, then Deputy Surveyor General, toured the Abrolhos to locate and evaluate the guano deposits. His report, in the form of a handwritten diary includes this description of Gun Island :

April 3rd, Thursday. Went ashore and walked over Gun Island and found scarcely any guano. On the North end was a small quantity heaped up by someone a short time ago and a few tons might still be procured, but nothing worth mentioning.

Found the old encampment of the 'Zeewyk' party in 1727. Number of broken bottles, iron, a cannon ball, broken wine glass, number of clay pipes in perfect preservation (and) also two coins, one of copper about the size of a half penny with 'Hollandia 1720' on it and the other the size of a four penny with 'Zeelandia 1722' on it. No water on the island (Forrest 1879, 2)

In 1883 Charles Edward Broadhurst tested the quality of the island guano and the following year formed the partnership of 'Broadhurst and McNeil, Guano Contractors'. The firm leased 20 islands, including Gun, for 5 years. The leases were subsequently renewed several times. In 1888 Broadhurst's eldest son, Florance, took over active management of the company (Green, 1972).

Using Malay labour mainly, guano contracting was an ambitious and energetic enterprise, at times as many as 90 vessels were chartered to transport the guano to points through the world. But the boom was a short-lived one; by the turn of the century rising costs and competition from chemical fertilizers caused the industry to rapidly decline. For a thorough discussion of the Abrolhos guano industry see Green (1972, paged 44-54).

Contrary to Forrest's evaluation, the deposits on Gun Island were one of the most heavily mined in the Pelsart Group.

In July and August of 1894, W. Saville-Kent, the Commissioner of Fisheries, visited the Broadhurst camps in the Abrolhos. While there he completed photographic studies of the natural history and guano digging on the islands. His photographs of Gun Island show the workers' camp to be situated on the E.S.E. shore. These photographs also show the jetty to be made of wood, whereas now, in the same location there is a massive limestone one. This excellent collection of photographs is now in an album in the W.A. Archives.

#### On Gun Island Florance Broadhurst

... was astonished to observe the site where the people from the wrecked 'Zeewyk' made their camp. It was near the ship and there Mr. Broadhurst found the traces of two distinct camps which nearly a century and a half had not obliterated. Indentations were still apparent in the ground made by the feet of the company while moving in the form of half circle round the camps (Weldon, n.d., 10).

In the course of digging for guano, numerous Zeewyk relics were encountered. The Broadhursts, both father and son, were historically-minded men spending long hours carefully collecting and researching the artifacts. Their collection furnished the material for popular museum exhibits in Perth and inspired considerable interest in the Dutch wrecks on W.A.'s coast. (Broadhurst, n.d.)

In 1897 the surveyor A.J. Wells mapped the guano fields on the island. In his field book (n.d.) are sketches of the limits of the fields and the location of the guano-diggers' camp.

Little was recorded of the island's history from the guano days till 1968 when British Petroleum operated an unsuccessful oil rig. While constructing their camp the oilmen demolished the guano camp on the east side of the island and accidentally unearthed several Dutch graves on the west side (Edwards, 1974 personal communication).

At present Gun Island is uninhabited and is protected as a Fisheries and Fauna Reserve.

#### THE 1974 INSPECTION

From the archaeological point of view, the area of prime concern is a corridor of land approximately 50 metres wide and 300 metres long that extends along the N.W. coast of the island. This is the only portion of the island not radically altered by guano digging or drilling operations. Zeewyk material is scattered throughout this area and several possible campsites were noted. The campsites were identified by the presence of potsherds, broken clay pipes, bottle glass, fragmented barrel hoops, and burnt and butchered bones.

The physiography of the area is that of a sand dune stabilized by shrub-like vegetation.

The excavation potential is excellent. The deposit, being of sand, allows for easy excavation and stratigraphic interpretation.

The major drawback to an excavation in this area is that it is a nesting ground for shearwaters or muttonbirds. The shearwater is a migratory sea bird that characteristically burrows into the sand to build subterranean nests. Hence the area is literally a maze of burrows.

An advantage to the shearwater's nesting habits is that by looking through the excavated dirt at the mouth of the burrows it is possible to gauge the subsurface artifact content. For instance, during this inspection the majority of artifacts were found in the back dirt outside the burrows.

Also relevant to any future investigations are:

- 1) The presence of at least two natural wells on the island, both of which appear to be seasonal. These wells represent one facet of the larger problem of how the survivors procured drinking water.

2) The guano diggers screened the guano to remove undesirable stones etc. During this process they undoubtedly unearthed considerable Zeewyk material. Evident at the north end of the island are several places where broken Dutch bottles were discarded from the guano screens. These screening sites may prove to be valuable sources of archaeological data.

3) The site where the survivors built their boat will have to be ascertained. Stokes (1846, 150) indicates it to be on a nearby islet E.S.E. of Gun Island, whereas O'Loughlin (1969, 11) reports it on the western side of Gun Island and Edwards (personal communication) believes it to be on the eastern side. This problem is certainly worthy of investigation.

4) A significant feature of the Dutch camps is that they appear to be single occupation sites. In other words, they were not inhabited prior to or subsequent to the Zeewyk survivors. This can be a critical advantage in analysing their food remains to determine their diet.

On Beacon Island, with a similar environmental and historical setting, the Dutch sites have been superseded by modern fishermen's camps. This has confused and complicated the archaeological record, whereas Gun Island offers a straightforward situation with excellent potential for a detailed midden analysis.

#### RECOMMENDATIONS AND OBSERVATIONS

1) In terms of formulating a practical excavation strategy, the most formidable factor will be reckoning the impact of the shearwaters on the deposit. This will call for precise and exacting excavation techniques.

2) There is excellent potential for qualitatively and quantitatively determining the diet of the survivors on Gun Island. This will require the assistance of malacologists, ichthyologists, and related specialists in the analysis of the midden materials.

3) Most important, there is a considerable amount of archival data relating to the Zeewyk incident and Gun Island's history. It is emphatically urged that prior to any field work, these data be collated into a coherent model. While researching, emphasis should be placed upon using primary references.

### CONCLUSION

Maritime Archaeology is a young and still developing discipline. Essentially it is concerned with explaining incidents from our past in human terms. This is done by synthesizing data from the archives, the ship itself, associated relics, and any related land sites.

In the past the first three sources of data have been primarily explored, but Gun Island provides an opportunity for a complete and thorough research programme. First a model or explanatory framework would be constructed from archival data; this would be followed by a co-ordinated programme of land and underwater excavations and, finally, the results would be integrated into a meaningful and coherent documentation of a colourful and exciting incident in W.A.'s early history.

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