'*BATAVIA'S* GRAVEYARD' -

A report on archaeological survey and excavations on Beacon Island, Wallabi Group, Houtman Abrolhos, Western Australia

by

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1. INTRODUCTION

Beacon Island, the main camp for the survivors of the wreck of the *Batavia* and later the venue for a mutiny, has been the subject of various professional and non-professional archaeological excavations since the 1960s. However, these investigations have generally occurred on an ad-hoc basis, were poorly executed and documented, and in the earliest period can be dismissed as little better than treasure hunting.

The lack of significant results arising from much of this previous research, particularly with regard to understanding the subsistence and organisation of the wreck survivors, was recognised in Green and Stanbury's (1988) report on land archaeological sites in the Abrolhos island group. Implicit in the statement of archaeological significance for Beacon Island (ibid: 6) was the need to develop a long term research design which would integrate the existing data and direct future investigations towards answering meaningful questions.

From 5-13 May, 1992, staff of the Maritime Archaeology and Materials Conservation Departments of the Western Australian Museum stayed on Beacon Island while undertaking various site management and wreck analysis projects on the *Batavia.* The author was invited to participate in the expedition as a volunteer and undertake a programme of land-based archaeological investigations. After a preliminary examination of the available literature on past excavations and discussions with museum staff, the 'brief' for the land archaeology project was broadly determined as:

a. establish a framework for systematic archaeological survey and excavation on Beacon Island;

b. determine a means by which the existing data and artefacts from earlier excavations can be most effectively integrated into this framework; and

c. assess the archaeological potential of Beacon Island and propose avenues for future research.

Limitations on time and access to most of the known archaeologically sensitive areas of the island prevented more than a cursory inspection of some physical elements vital to the above considerations of significance and potential. However, a series of eight test pits were excavated as a means of commencing the process of systematic investigation, with the results reported below.

This report examines various aspects of both the Dutch and modern history of island use including previous professional and non-professional archaeological investigations, together with their implications for future research and management. Partly because of the restrictions described, but mostly due to time constraints on the author in his capacity as an interested volunteer, this report can only hope to provide a preliminary evaluation of the issues. Rather than provide a firm framework for future investigation, the intention is to act as a more general guide to questions and issues which might be addressed as part of a future research programme.

2. ENVIRONMENTAL BACKGROUND

Beacon Island is a small coral island situated on the eastern side of the Wallabi Group, the northernmost of the Houtman Abrolhos. Part of the Morning Reef complex, it is composed of coral shingle and has a relatively low relief, mostly below two metres. The island is covered with sand and small pockets of guano to a depth of up to 0.5 metres, with a single small sand beach along the southern edge. The island has an approximate total area of about 5.25 hectares (Green & Stanbury, 1988), although much of this is bare coral strand, with the longest dimension being about 300 metres. No fresh water is available either on the surface or by digging.

Several species of scrub not yet identified now grow fairly vigorously on the island, rising to a height of about two metres in the centre and eastern side. A broad vegetation and faunal survey of the Wallabi group has been carried out by Storr (1965), and should be consulted in future surveys. Island residents and museum staff recall that during the 1960s there was less vegetation on the island and that it was much lower. It seems likely that the changed vegetation profile is the direct result of the human occupation of the island. A combination of past rubbish disposal on the island providing nutrients and changed wind patterns around the buildings may well provide sufficient encouragement to plant growth. Further work is required to gauge the changes over the last thirty years.

Beacon Island contains no permanent terrestrial fauna which might have been exploitable by the Dutch survivors, although there are several species of migratory seabirds which visit the island seasonally. The wedge tailed shearwater (*Puffinus pacificus*), commonly called the 'muttonbird', nests on the island between November and May, burrowing to a depth of up to half a metre (Storr 1966). Its significance as a disturbance factor for archaeological sites on

Beacon Island has previously been established by Bevaqua (1974b). During the current period of field-work (early to mid-May) a large rookery existed on the south-western side of the island, although evidence of old burrowings was visible in many other areas. Seals may have used the island in the past and although much diminished in numbers are still occasionally seen on some of the neighbouring islets. The marine life in and around the reef complex is, however, still extremely rich and accessible.

One of the issues raised during the field season on Beacon was in regard to morphological changes to the island since the Dutch occupation in 1629. While there is no documentary, visual or oral evidence of the island's shape prior to the last forty years, there remains the possibility that there have been modifications over the span of 360 years. For example, the western margin adjacent to Goss Passage is marked by a bare coral ridge and depression which appears to be of more recent (but undated) origin than the vegetated coral ridge which runs parallel to it about 20 metres inland. Changes to the island, the possible creation, loss, or even reworking of areas, particularly along the eastern margins, has important implications for both the preservation and understanding of the archaeological record. Although it was hoped that a geomorphologist would accompany the expedition, this did not eventuate. A proper geomorphological investigation may provide insight into Beacon Island at the time of the *Batavia*.

3. HISTORICAL BACKGROUND

The historical circumstances of the 1629 wreck of the V.O.C. retourschip *Batavia* and the subsequent mutiny are now well established in Australian popular history. Translations of the body of original documentation, and general accounts of the story have already been presented elsewhere (Drake-Brockman1957,1963; Edwards1966) and need not be repeated here. The finding of the wreck in the 1960s (Edwards 1966) and its archaeological evidence from its excavation during the 1970s have also been well documented (Green 1989).

While there has been some analysis of the central events and psychology of the mutiny (Tyler 1970b), the general patterns of activity of the survivors remains only minimally explored (Green & Stanbury, 1988). The survivors of the *Batavia* spent three and a half months (4 June–17 September = 105 days) on several islands of the Wallabi group prior to the arrival of *Sardam*. During this period they were divided into two main groups; those under the dominance of Cornelisz and the mutineers based on Beacon Island, and those with Weibbe

Hayes and the company soldiers on West Wallabi. After the arrival of *Sardam* and the re-establishment of control by Pelsaert there was a further month (to 15 November = 28 days) while the salvage of the wreck and the trials of the mutineers occurred.

There does not appear to have yet been an intensive and critical analysis of the two known contemporary historical accounts of the *Batavia* incident; Pelsaert's official journal and Bastienesz's letter (Drake-Brockman 1963). Although these accounts dwell almost exclusively on the events of the mutiny, a survey of this material does suggest that a reasonable amount of information can be extracted regarding the daily activities, subsistence and social organisation of the survivors . In addition, it appears possible to obtain a reasonable breakdown and chronology of population numbers and movements between the different islands.

The other major near-contemporary historical source are the various drawings accompanying the publications of *Ongeluckige Voyagie*. Although there is the possibility that the illustrator might have based his drawings on an interview with an eyewitness (Drake-Brockman 1963), the information value of the series has not been evaluated. There are various features of the drawings which suggest at least a familiarity with the events, although whether these were drawn from material available in the text, or from the mind of a survivor nearly 18 years after the events (when the story was first published in 1847), has not been determined.

Beacon Island, known to the survivors as '*Batavia'* s Graveyard', was the main campsite for the survivors, the venue for much of the mutiny, and the scene of the later interrogations and formal salvage activities. However, as previously noted, a variety of occupation and activity areas were spread over a number of islands. People and materials were moved between islands, structures were built in various locations, salvage of the wreck by the survivors was undertaken, and so on, creating the complex of inter-related sites.

A significant historical fact which separates the *Batavia* sites from those of the *Zeewijk* is Pelsaert's recovery or salvage, at the instruction of Governor-General Coen, of 'as much money and goods as can be found there'(Drake-Brockman 1963: 257). However, the extent of removal of material is still difficult to assess. In addition to searching the wreck for items as inconsequential as barrel hoops (ibid: 217), Pelsaert obviously combed the island for valuable items and sent men to recover articles (such as barrels of vinegar) which had drifted on to the shores of other islands (ibid: 215). Pelsaert, probably hoping to mitigate his own culpability with the company,

appears to have stuck by his orders and recovered any item deemed of possible value, until in repentant tones he reported his decision to depart the islands, 'wholly convinced that nothing more is to be found...seeing that all has been searched through and dived over'(ibid: 221).

This careful removal of all valuable or recoverable material will clearly obscure much of the fine-grained evidence of social organisation and activity areas which would have been potentially available through archaeological investigations. It will be the role of a future researcher to examine the full implications of this factor.

Barring an unexpected discovery of a further detailed account of the incident, an investigation of the archaeological record of the islands is the only possible means of obtaining information of daily lifestyle and subsistence. Although it is not possible to explore here the relationship between the historical and archaeological records, one significant implication for future research should be pointed out. After the probable initial use of salvaged ship's stores, the survivors would have become increasingly reliant upon the results of their foraging on and around the islands. Given the lack of edible vegetation, the diet would have been protein rich; seals, wallabies, birds, fish, crayfish, etc. (Storr 1965). Bone is generally durable and presents us with the possibility that in an undisturbed context the archaeological record may well represent the complete dietary repertoire. In addition, discarded animal bone would not have interested Pelsaert during his salvage, or later seekers of relics.

The historical background to Beacon Island does not end with the departure of the *Sardam*. By the 19th century a new group of scientific and commercial operators were investigating the Abrolhos, although by this time it was believed that the *Batavia* had wrecked further to the south, resulting in the wrongly named 'Pelsaert Group' of islands. American and French ships cruised through the region, exploiting the whale and seal populations which frequented the archipelago (Whitecar 1860). Later on many of the islands were mined by colonial interests for the deposits of both soft and hard guano they contained (Green & Stanbury 1988), As Beacon appears to have negligible guano deposits, it escaped the wholesale removal of its surface which has scarred many other sites.

Lacking any other obvious attractions, including wood or fresh water, it is possible that Beacon Island would have seen few visitors. The main exception is in 1877, when the survivors of the wreck of the *Hadda* lived on Beacon Island for five days (Bevaqua, 1974a). These castaways, a later salvage team, or even scavengers may have been responsible for the stone structures and 19th

century artefacts discovered on the southeast coral spit. The other historically known visit was during A.J. Wells' survey of the Wallbi Group. During this stay the coral cairn or beacon was built on the highest point of the island, although no record exists that Dutch artefacts were seen at this time (Bevaqua 1974a).

The most significant phase of the Beacon Island's post-*Batavia* history, with particular relevance for the impact upon the archaeological record, has been the occupation of the island by crayfishermen. The fishing community is spread across the islands of the Abrolhos, mostly living in galvanised iron or asbestos shacks surrounded by an assortment of sheds and shelters to hold gear. Beacon has been occupied since (****), and currently has four camps. An occupation history of the island has not been undertaken. Further aspects of this most recent phase of island use are discussed below, together with its implications for the archaeology.

4. PREVIOUS ARCHAEOLOGICAL INVESTIGATIONS

Although the excavation history of Beacon Island has been discussed by Green & Stanbury (1988: 5-6), the level of disturbance to the archaeologically sensitive areas of the islands, particularly during the early period (pre-1970), would appear to be greater than initially suggested. A preliminary table of formal and informal excavations derived from soures available to the author has been included as an appendix to this report (Appendix 1). Below is a brief discussion of various notable aspects of this earlier work.

The first known discovery of material relating to the Dutch occupation of Beacon Island was in 1960, when 'Pop' Marten unearthed human bones near to Dave Johnson's hut (Edwards 1966). It was several months before these were confirmed as being human, and even then their association was initially thought to be with 19th century activities. Hugh Edwards, a journalist with Western Australian Newspapers visited the island in the same year and excavated in the hope that the discovery might be associated with the *Batavia* incident. His investigations, presumably in the same area as the skeleton, returned no identifiable artefacts but did uncover a large quantity of seal bones and the skeleton of a large seabird (Edwards 1966:104). Edwards, did not consider that the faunal material related to the Dutch occupation

Following the discovery of the wreck, 'land archaeology' became a regular feature of the island scene. Even allowing for literary license, Edwards'

(1966:188,189) accounts of the various controlled and uncontrolled excavations present a somewhat alarming picture of the extent of activity and the damage to the archaeological potential of the island (see Appendix 1).

> Digging strata trenches across the island and shovelling the sand through sieves produced less gruesome relics of the old Hollanders. There were fire-blackened bird, seal and wallaby bones by the barrow load.
>
> Everyone on the island caught the digging bug. The Bevilaquas turned out with shovels and old Pop Marten, who found the first skeleton in 1960, though he was in his 80s, was swinging a pick and turning over coral slabs with the rest of them. The army men, bored with inactivity on the boat, came ashore and tried their hand. There were fragments of glass and lead and brass, a piece of a pistol mechanism, a brass chain, and a seal stamp.

What these passages do suggest is that the excavations produced a diverse assemblage of material items and dietary remains. As will be discussed below, the question of provenance, how much material was recovered, the selection processes involved in retention of artefacts, and the fate of the material remains unexplored.

The extent of informal treasure-hunting outside of the realms of the various 'archaeological' investigations, particularly in the first few years after the discovery of the wreck, is impossible to gauge. For example, in the early period it appears that visitors to Dr Royce's would often occupy themselves with digging and collecting in and around his hut (M. Stanbury, pers. comm. 1992). Given the lack of protection or understanding of the potential damage being caused, it is unlikely that these were isolated events.

Virtually nothing is known of the methodology of the early 1960s excavations. Reports or records were not made of either procedure or findings, while the known photographic record appears remarkably scant. From the available material (Edwards, 1966; Sigmond & Zuiderbaan, 1979), digging was by shovel in irregular trenches, with the more sophisticated groups using seives of unknown mesh size. The quotes reproduced above (Edwards 1966) imply that only artefacts and known human bones were collected. All other faunal material was removed and presumably eventually re-deposited into the trenches.

> The thick bones of the seals, some still carrying old knife nicks, are legion in their fire-places. We emptied dozens of haunch and chop bones out of the sieves (Edwards, 1966:168).

The methods of excavation and the numbers of people involved would suggest that large areas of the relatively shallow sand, soil and guano covering the island would have been disturbed. Although some (possibly all) of the material collected by Edwards, was donated to the Western Australian Museum, the fate of artefacts recovered by individuals is unknown.

The first land excavations by the Western Australian Museum commenced in 1967 under the direction of Colin Jack-Hinton. It is uncertain how many archaeologists were involved in this, although it appears that a group of about twenty University students assisted. No formal report or photographs are known to exist from this field-work. The precise location of 'Site C' is not recorded, but would seem to have been located within the depression situated to the immediate east of Dransfield's house (B. Dransfield pers. comm. 1992). Surface collections of faunal material and artefacts were reported, although this appears inconsistent with the general lack of surface material noted for the rest of the island. The form of the excavations is also unknown, but most probably consisted of a series of pits and trenches within the general area. Various Dutch artefacts were found, but provenance details were not recorded.

During the 1970s, various land excavations were made on Beacon Island by WA Museum staff. At least four pits or trenches of unknown dimensions were excavated in 1973, possibly during periods when it proved impossible to proceed with the underwater recording and excavation programme. These were located between Johnson's and Bevilaqua's huts, as well as to the south of the island towards the jetty. All are recorded as being archaeologically sterile (Green & Stanbury 1988).

Bevaqua's (1974b) investigations are the first which appear to have followed standard excavation procedures and resulted in a formal report. His selection of a site was based on known artefact finds within the area between Johnson's and Royce's huts, the assumption that the flat sandy surface may have been a preferred camping area, and the hope that the dense vegetation would have protected the area from previous disturbance. His selection of the site is supported by a comment in Edwards, (1966:171) that Dave Johnson had prevented earlier diggers from disturbing the vegetation at the rear of his hut as it was acting as a windbreak to the area.

A trench of six one-metre pits (Test Trench One) was excavated on a roughly WNW orientation, using a combination of arbitrary spits (squares 1&2), and natural stratigraphy (squares 3-6). Section drawings were made along the 'south' face, showing the fairly simple three layer stratigraphy (sand, guano, coral) that was encountered in later excavation. Mention is also made of the intensive mixing from muttonbird burrowing, generally to a depth of 30 cm. Artefacts are recorded and discussed briefly (Bevaqua, 1974b). It is uncertain whether the single piece of butchered mammal rib noted (ibid) was the only faunal item located or, as with earlier excavations, was the only piece retained (because it was obviously artefactual) while all other bones were discarded.

The most recent excavation on Beacon Island was in 1980, when a further 6 m trench (Test Trench 2) was excavated parallel to Bevaqua's (1974b) pit. Arbitrary spits were used, with disturbance from muttonbirds and vegetation removal being noted. Artefact densities seem to have been similar to Trench One. Although a large number of fish and mammal bones are reported as being excavated, it appears that only those with clear signs of burning or butchering were attributed to the Dutch survivors. It is uncertain whether a total collection of faunal material was made, or if only those samples with the above characteristics were retained.

The main problem with almost all of this work is locating where the activity took place. At best the locations of the known excavations are only approximately identified, sometimes related to what were then known features, most usually fishermen's huts. As might be expected, the nature, distribution and ownership of structures across the island has changed, further obscuring the locations. Most commonly the excavations remain completely unplaced, although the emphasis for almost all digging across the island appears to have been along the eastern third, now occupied by the various houses and sheds.

Although there has been limited listing and description of material from the later excavations (Bevaqua, 1974b; Kirkham, 1980), no artefact analysis has been undertaken. Apart from a cursory inspection, existing museum collections were not examined as part of this report. A summary and brief synthesis of the distribution of material into possible campsite, midden and activity areas based on supposed provenance has been presented by Green and Stanbury (1988).

Surface collections and other removal of material

Unlike sites associated with the *Zeewijk* survivors, Beacon Island does not appear to have ever exhibited an appreciable quantity of readily visible surface material related to the *Batavia* survivors. Some items are known to have been found prior to the discovery of the wreck, although the significance of these was not realised until after 1963. It is possible that any surface material discovered was originally dismissed as relating to the 19th century guano industry (Edwards, 1966: 99). Following the verification of the wreck, it is probable that visible and easily accessible material was quickly souvenired. As discussed above, the extent of informal collection of material is unknown.

The fishermen and their families currently resident on Beacon Island are all well aware of the significance of the island as part of the *Batavia* saga. Initial conversations with them appeared to confirm the story that apart from a few well known items, virtually nothing has been found. One of the older residents suggested that in earlier years there had been some surface material and quite a lot of 'small digging', and that their children (now mostly adult) used to regularly find artefacts (Mr B. Dransfield, pers. comm. 1992). The inhabitants of Beacon appear quite aware of the restrictions imposed by the Western Australian *Maritime Archaeology Act (1973)* and there is no suggestion that any more than isolated incidents of 'souvenir collecting' may still occur.

A more worrying aspect is the vulnerability of the island during the off-season when the crayfishermen are not in residence. The possibility of unrestrained fossicking on Beacon Island and the other islands during this period must be considered. This problem is highlighted by the recent return to the Geraldton Regional Museum of fragments of the Fort Batavia portico, complete with temporary accession numbers marked on the stones soon after raising. The means by which these pieces were removed from the island are not yet known.

Maritime archaeology

The archaeological investigation of the *Batavia* wreck has been well documented in Edwards, (1966) and Green (1989). The material remains recovered from the wreck basically comprise all of those items which were not salvaged by either the survivors or the divers from the *Sardam*. It must be considered that with the exception of some faunal material the assemblage of artefacts potentially recoverable from the land sites will effectively be a subset of the total assemblage available from the *Batavia* at the time of wrecking. Although some smaller amount of material may well have been derived from

the *Sardam*, it is unlikely that this is significant or detectable as a separate entity. The catalogue of artefacts and material recovered from the wreck provides the basis for a comparative analysis with the land archaeological deposits.

Associated Land Sites

In addition to the sites on Beacon Island, surveys and excavations have been made on other islands associated with the *Batavia* incident (Bevaqua, 1974a, 1974c). West Wallabi Island was found to contain stone structures and artefacts of Dutch origin and has been subjected to various excavations since the 1960s (O'Loughlin 1964, 1966). The history and nature of these investigations is similar to that for Beacon Island and has been summarised in Green & Stanbury (1988).

A casual visit to the West Wallabi structures showed little apparent change to the inland feature (Site 1). The more accessible feature near Slaughter Point (Site 2) appears to have suffered minor removal and replacement of coral slabs and possibly some fossicking. There has also been an increased vegetation growth in this area which may at a future point pose a threat to the structure.

Although Seals (Long) Island and Traitors Island were used for only short periods, West Wallabi was home to the 50 or so 'defenders' in Wiebbe Hayes' party for several months. After the arrival of *Sardam* it is also possible that the remaining survivors were removed to West Wallabi for the month during which the salvage of the wreck and the interrogation of the mutineers was undertaken. A considerable volume of dietary refuse could therefore be expected from such a sizeable population. The initial occupants of West Wallabi possibly carried a relatively small body of durable items, with the original party only expecting a short stay while finding water and the rest escaping the mutineers as quickly as possible. However, with the arrival of *Sardam* a new body of material would have been introduced for the use of the expanded group.

Even discounting the inland structure as relating to 19th century guano diggers (Green & Stanbury, 1988), it is probable that over the period of several months the Dutch occupation was spread over several areas and possibly did include an inland camp. However, while there have been surface surveys made over the west end of the island, excavations would appear to have mostly been limited to the immediate area in and around the 'Fort' (Site 2). While the selective nature of earlier excavations may mean that internal and

external areas about the structure merit re-investigation, the systematic sampling of a wider area is likely to produce further insight into the occupation of the island.

The Western Australian Maritime Museum holds collections of artefacts from the other *Batavia* sites, although these were not examined. It is not known whether these collections represent all or part of the material recovered.

The relationship between the various *Batavia* land sites and the significance for future research is discussed later in this report.

5. THE 1992 FIELD SEASON

Access to the Abrolhos Islands is extremely limited, and in this case the basis for undertaking archaeological research was as much opportunistic as determined by the concerns noted in the introduction to this report. Aside from the limited time available, the major constraint operating on the land archaeology was that the crayfishing season was in process. This meant that all of the fishermen with leases on Beacon Island, together with their helpers and families, were then resident on the island. Regrettably, survey or excavation in close proximity to any of the houses, sheds or yards was neither politic or possible. This almost completely precluded any opportunity to examine the known archaeologically sensitive areas along the eastern edge of the island (on which the dwellings are situated) in an attempt to determine a context for the various earlier excavations.

The archaeological field investigation proceeded as follows

a. A preliminary reconnaissance of the island was made to gain an impression of the landscape, visit known and accessible archaeological features and to attempt to roughly locate where previous excavations had taken place.

b. A north-south baseline was established and tied into the Australian Mapping Grid, based on the position of the historic coral beacon erected on the highest point of the island.

c. A series of eight test pits were excavated along the baseline at twenty metre intervals. This provided the opportunity to sample the archaeologically unexplored western side of the island.

Several of the fishermen who had been resident on the island for long periods were interviewed to determine whether they held further knowledge of the location of *Batavia* material, or indeed of the locations or details of some

of the earlier excavations. They were also questioned about other factors which may have affected the archaeological record including changes to the vegetation profile of the island, its morphology, and other factors relating to the occupation and use of the island by the crayfishermen.

The various aspects of the physical investigation of Beacon Island are discussed below.

Preliminary Archaeological Survey of Beacon Island

For the reasons outlined above, it was only possible to undertake a very preliminary archaeological survey of Beacon Island. This was generally limited to a casual inspection of accessible areas, including known surface features such as the various coral structures mentioned in earlier reports (Bevaqua 1974a). However, it is obvious that a comprehensive survey of the island is vital before further work proceeds.

The visible archaeological landscape of Beacon Island reflects its seasonal occupation by fishermen over the last (40) years. Foundations, structural material and other evidence of old campsites, jetties, former toilets, pathways, garden walls, rubbish disposal sites, washing lines and other activity areas, together with the currently occupied huts and sheds, are scattered across the length of the island. The main concentration is along the eastern margin in a band of approximately 30 metres width, with a lesser cluster of jetties, etc on the small sandy beach to the south.

It is clearly evident that there have been several phases in the modern use of the Beacon Island. Activity patterns have changed as a result of population growth, changing sanitary arrangements, and the introduction of various controls over the camps. In particular, it appears that the activity of the island was significantly re-orientated after the construction of the northern jetty. The fishing lifestyle of the Abrolhos deserves investigation in its own right, and although secondary to consideration of the Dutch material, some consideration for recording, if not preservation, must eventually be given.

As expected there was no visible indication of the Dutch occupation of Beacon Island, although there are several features constructud of coral which appear to have 19th century origins. Bevaqua (1974a) has previously described three coral features on the south-east spit of the island; a rectangular structure ('A'), a circular structure ('B') and a shallow depression with mounding to the north and west sides ('C'). The site has been popularly called 'Cornelisz's Prison' based on Edwards' (1966) description, although excavation suggests a

19th-century origin (or at least use), possibly associated with the *Hadda* survivors.

Photographs and plans from the 1974 investigation (Bevaqua, 1974c; Green & Stanbury, 1988) show distinct structures, known to have been partially rebuilt by Edwards, (in 1964?) as part of a re-enactment of the *Batavia* story. However, only one structure, possibly the rectangular ('A') feature (Bevaqua, 1974c) is now readily visible. Vegetation growth since 1974 is probably covering the other features, although the height and definition of the visible coral walls appears to have diminished markedly since the 1974 photographs.

The 19th-century survey cairn after which Beacon Island has been named appears to have suffered little or no change since the earlier surveys (Bevaqua, 1974a). However, a concrete mounting for a plaque commemorating the 350th anniversary of the wreck (1979) has been fixed directly on to the lower east side of the beacon. While not currently presenting a danger to the structural integrity of the monument, the addition is unsympathetic and quite probably impossible to remove.

There are a variety of modern coral structures which have not been recorded. A series of small coral piles are also evident along the western margin of the island, possibly related to the 1980 topographic survey by the Curtin University maritime archaeology postgraduate diploma group. Other modern coral features along the western edge include various pits, clearings and mounds associated with the original 'dunnys'.

A number of points relevant to both the present cultural landscape of the island and the implications for future archaeological research are raised in the discussion section below.

Excavation

Given the limited accessibility of Beacon Island, the opportunity was taken to excavate a series of one metre square test pits along a north-south transect as the first step towards a systematic investigation. The decision was made to sample along the western side of the island, which appears to have been largely ignored in previous investigations.

To overcome the problem of relating excavations to structural features which are subject to alteration and eventual removal, it was decided to relate all locations to a fixed reference point and the Australian Mapping Grid. The only feature visible from most parts of the island and otherwise likely to remain unchanged over a long period of time is the historic coral beacon,

situated at the highest point of the island. In previous Museum surveys the end of the northern jetty appears to have been used as a datum. This will continue to be a useful secondary reference point, but should not be considered as a permanent feature for the purposes of long-term investigation.

The Australian Mapping Grid provides, in effect, a series of north and east running lines across the island which can be tied into a national system. Using the AMG references superimposed on the 1986 plan discussed above (Garrett, 1990b), the beacon was fixed as being at location 7/725/775 - 69/467/720, (although this should be checked). By drawing baselines across the island relative to the known position of the beacon, it should be possible to accurately place any feature on the island. To facilitate future work, it may be expedient to fix across the island a number of permanent survey pegs marked with their grid reference.

In this instance a point exactly 7.5 metres east of the centre of the beacon was chosen (AMG 7/725/785 - 68/467/720), as a single north-south baseline from this position would sample through a number of previously uninvestigated areas. Using a combination of theodolite and measuring tapes, a series of nine one metre square test pits were positioned at twenty metre intervals. The twenty metre points along the transect formed the north-west corners of the squares, with the point 7.5 metres east of the beacon forming the north-west corner of TP2. Individual AMG positions for each square have not been calculated. The southern top edge of the concrete memorial plaque fixed to the coral beacon was used a fixed height for the theodolite survey of the relative heights of the pits (see Appendix 2).

In the time available only eight squares (TP1 to 8, numbered from north to south) could be excavated, although a ninth square pegged just above the high tide mark of the southern beach had also been planned.

Standard excavation procedures were used, proceeding with 5 cm arbitrary spits unless a distinctive feature or layer was encountered. Larger spits of 10 cm and eventually 20 cm spits were used in the lower portions of the deposits after the likelihood of discovering an occupation layer had diminished. All of the spoil removed was seived through 6 mm screens, although a 3 mm screen was used for the artefact bearing deposit in TP 4. Sediment samples were taken for all visible layers in each square, with larger bulk samples taken only for TP 4. All pits were backfilled.

With the exception of TP 4 (see Appendix 3), there was only sufficient time available to take section drawings of the north and west walls of every trench.

The section drawings have been lodged with the Western Australian Maritime Museum. Photographs were also taken of the sections of each square.

A brief summary of each excavation follows. Further notes and details on spit depths, relative heights, etc. are contained in Appendix 2.

TP 1: Located in a small depression immediately south of the Fisheries Dept. (former Western Australian Museum) workshop. A very low section of the island, and possibly even storm washed. No immediate evidence of muttonbird disturbance. Humic layer on top with crushed shell/sand deposit. No guano layer visible. Excavated only to 10 cm depth (spit 2) before major coral intrusion prevented further work.

TP 2: Located 7.5 metres east of the beacon, on a continuation of the ridge on which the coral feature sits. The actual location of the pit is 'inside' (or underneath) of Dransfield's windbreak fence. Upper unit consisted of artificially deposited sand, giving way to a fairly deep guano unit. Large coral slabs (up to 40 cm on largest dimension) were removed at various depths to gain access to lower deposits. Excavated to 40 cm (Spit 6), which was an interface between the guano and a light yellow coloured sandy layer.

TP 3: Located at northern edge of depression which forms the area for 'Site C'. Apart from a thin humic covering, the matrix consisted of guano and coral. Large slabs were removed from Spit 2 to get at lower deposit of guano and smaller coral pieces below. Difficult to continue, so completed to Spit 3 (20 cm).

TP 4: Located towards the southern edge of the 'Site C' depression, and slightly north of the sandy ridge which covers the centre of the island. Extensive muttonbird burrowing visible from surface. Sand overburden, with underlying guano deposit. Possible Dutch artefacts and faunal material, but context was disturbed. Larger coral slabs intrusive at 30 cm. Excavated to depth of 50 cm.

TP 5: Located in bushes on the central sandy ridge of the island amidst high vegetation (approx 2 m) cover. Extensive muttonbird burrowing and root penetration. White coral sands with only small fragments of coral in the matrix. No guano layer evident. Spit One was 5 cm, but proceeded with 10 cm

spits below this. Some bird bones and shell, but no artefacts. Excavated to 60 cm.

TP 6: Similar to TP 5. Excavated to approx 60 cm.

TP 7: Also similar to TP 5, but in area of lower vegetation cover. Immediately adjacent to an active muttonbird (Shearwater) rookery. Excavated to 90 cm.

TP 8: Located to the southern end of the island in an area of low vegetation cover. Distinct from TP5-7, as apart from the upper layer of white sand, the deposit is densely packed coral in an orange sand matrix. Excavated to 60 cm depth.

In general, the three level stratigraphy of loose white sand, guano and coral rubble/sand described by Bevaqua (1974b) and Kirkham (1980), applied only to TP 2, 3 and 4. The other pits contained sands grading from white to orange, no guano deposits (unless this is responsible for the orange tinge to some sand layers) and varied coral content. Muttonbird disturbance was usually concentrated in the top 30 cm, but could extend to 60 cm depth dependent upon the nature of the deposit and particularly the presence of coral.

Test pits 1, 3, 5 - 8 proved sterile, with the exception of bird bones which were clearly the result of muttonbird burrowing, and shell material which would appear to be part of the natural matrix of the island. All of this material was retained for later analysis.

Only TP 4, apparently situated adjacent to the 'Site C' excavations of 1967 (Bevaqua, 1974a) produced artefacts and faunal material which suggested evidence of the Dutch occupation. A negative cast of a coin concretion showing traces of corrosion products was recovered from TP 2, although proximity to the former Museum camp (slightly south of the current field station) suggests that this is probably refuse from early conservation or analysis.

There was no clear indication that either TP 2, 3 or 4 had (or had not) been previously excavated as part of the 1967 field season. The material still available in TP 4, plus its position slightly higher than the main depression area, suggests that it may well have escaped previous 'archaeological' disturbance.

6. DISCUSSION

For historical and archaeological reasons Beacon Island presents a fascinating series of questions and problems, making the greatest difficulty in writing this discussion simply one of restraint. Before embarking on a general consideration of the archaeological and research potential of the island, it is necessary to briefly summarize the field-work undertaken.

While providing a limited body of artefactual material, the current series of test pits has resolved in part that occupation does not appear to have occurred along the central and western portions of Beacon Island. Although excavation on Beacon Island has generally been motivated by an antiquarian desire to find artefacts, the complete absence of material, both in these and some earlier pits (e.g. the 1973 excavations), provides a significant statement about land use patterns.

With the Dutch occupation of Beacon Island clearly focussed along the eastern margin, it appears probable that maximum advantage was being taken of the limited topographic relief and vegetation to escape the worst of the weather. Further investigation of the weather and wind patterns during the period when the island was occupied (June to November) should clarify whether it was this or some other factor which influenced the distribution of activities. It is interesting that the modern fishing camps currently occupy almost exactly the same areas as the known distribution of Dutch material.

As discussed above, it did not prove possible to undertake test excavations adjacent to earlier sites as a means of either interpreting or giving context to the pre-1974 excavations. However, even given the problematic nature of most of the early 'archaeological' investigations, some patterns of the Dutch use of the island have already been proposed. Based on artefacts recovered, there would appear to be a series of encampments (sites E.S."C", TT1&2), middens ('Site C') and burial areas spread along the eastern axis of Beacon Island (Green & Stanbury, 1988: 6). A more intensive archaeological investigation should be able to more accurately define the extent and nature of these and other activity areas.

With regard to the social organisation on the island presumably reflected in the archaeological record, the limited nature of the historical data has already been discussed. While it is known that there were separate camps (Drake-Brockman, 1963) probably initially based on a modification of the shipboard structure, the later demands and ideals of the mutineers, together with changing demography, would have ensured alterations. The various historic

and modern disturbance factors will almost certainly obscure any attempt to more accurately define or identify which groups were associated with different areas.

Future Archaeological Research

As outlined in the introduction, this report is intended only as a guide to some of the issues which require further consideration, rather than a framework for future investigation. Although Beacon Island has suffered a long history of disturbance, there is obviously still potential for productive archaeological work if pursued within a well structured research design. The following points are offered with regard to both the archaeological potential of the island and future research.

1. Historical research and analysis.

Prior to undertaking further physical investigation, the existing body of historical and archaeological information about Beacon Island, and hopefully all of the other associated *Batavia* sites, must be consolidated. The first stage of this process is ensure that the primary historical documentation has been adequately analysed to retrieve the maximum available information about land based activities, demographic changes, etc. In an expanded study this might also include a consideration of the wider context of Dutch social organisation, food technology and other factors which may have affected the patterns of land use.

The second stage of this research is to develop a comprehensive history and understanding of the extent and nature of the earlier excavations and collections. Although there has been some effort to obtain further information and material from principal participants in the earlier investigations, there has been only limited success. It would seem that the next avenue is to pursue material (photographic, documentary, oral accounts, etc) from the more peripheral persons involved; the students, army/navy personnel, volunteers, island residents). It is also possible that this activity might encourage the return of some materials taken during the early period.

2. Archaeological Survey.

It is essential that an archaeological survey of Beacon Island preceed any further excavation. Identifying former and extant features on the island will provide an understanding of the past and present impacts of modern activity on the archaeological record. This includes both the industrial and domestic aspects of the island's occupation by the fishermen, as well as the various professional and non-professional archaeological works.

The first step towards this process has already been taken with the development of two 1:500 scale plans of the island derived from aerial photography in 1964 (Garrett, 1990a?) and 1986 (Garrett, 1990b?). This encompasses a crucial period from the point when the wreck was discovered and the island was relatively sparsely occupied, up to the somewhat more crowded situation of the near-present. Unfortunately no earlier or intermediate period aerial photo runs across Beacon are known to exist, as these would have allowed further insight into the development of the island. Although there have been various new buildings and changes since 1986, it is unlikely that the increasing restrictions on island usage will allow significant new construction to occur. The 1986 plan therefore provides an ideal baseplan for archaeological survey, particularly as the Australian Mapping Grid (AMG) has been superimposed upon it.

In addition to the above plans, the topographic survey of Beacon Island undertaken in 1986 by students of the Diploma in Maritime Archaeology course is also at the 1:500 scale and can be readily superimposed upon the baseplan if necessary. This will be important for future interpretation of the nature and spatial distribution of the Dutch occupation.

The next step in the survey process is to consolidate existing data on the locations of features by ensuring that all evidence visible on the aerial photographs has been transferred to the baseplan. As noted above, this should include all past and present structural and non-structural features. Contemporary photographs, documentary sources, etc. should also be consulted, although it is important to differentiate on the plan which features can be accurately positioned (those taken from the aerial photographs) versus those of less certain location (those taken from land photography).

In the first instance the actual archaeological survey will consist of ground-proofing features from the aerial photography and identifying further features not visible on the aerial runs. Structures and features should be identified, described, dated if possible and systematically numbered. Changes to the groundplans of buildings, as well as past and present activity areas (such as the former museum camp), should also be indicated. Oral information from older

island residents should be incorporated both on the plan and in the descriptive key.

In the long term a more detailed recording of some of the modern features should be made. The occupation of lifestyle of the crayfishermen has changed over time and the physical record of these earlier periods deserve consideration in their own right.

As discussed above, the locations of many of the professional and non-professional archaeological excavations on Beacon Island have been recorded in relation to contemporary structures or features. It should not only be possible to position known excavations on the base plan, but also to use the plan(s) as memory aids when questioning earlier investigators and island residents as to the locations of their other works (see Appendix One). It is probable that most of the pre-1970 excavations can only be given approximate locations, but this will provide at least some form of context.

3. Excavation.

There has clearly been extensive disturbance along the archaeologically sensitive eastern margin of Beacon Island, both as a result of deliberate fossicking and the seasonal activities of the fishermen. The disruption of almost all free sand and soil (and therefore potentially artefact bearing areas) by muttonbirds further reduces the likelihood of a undisturbed stratified deposit. There may, however, be less disturbed areas which might be identified as a result of the island survey. It has, for instance, already been noted that the deposits beneath the earlier huts and sheds are likely to have escaped at least the later human ravages (Green & Stanbury, 1988). These areas will be a valuable resource should the structures eventually be removed.

Given appropriate consideration there is still potential for further excavation and research in most areas of the island.

The short period of occupation and deposition resulting from the *Batavia* incident represents in archaeological terms almost a single 'event'. Even with a relatively large population, it is unlikely that there was sufficient time or material for significant stratification to occur. The continued vertical 'churning' of the deposit by muttonbirds may therefore be seen as having far less impact on the possible interpretation of the deposit, although it is not known how far smaller items may have been displaced horizontally. However, normal excavation procedures must still be followed in the possibility that fine-grained stratigraphic differences may be detectable.

The selective collection strategies of earlier land investigations would also suggest that previously excavated areas might be productively re-examined to recover the faunal material discarded. Although care will need to be exercised to discriminate the historic material from both modern and 'natural' (i.e. bird or seal) deposited remains, attributing only obvious butchered or burnt bone to the Dutch survivors appears to be needlessly cautious. Given the faunal record of the occupation is likely still largely available (if disturbed), an investigation of the subsistence strategy of the survivors is likely to be one of the more productive areas of the land research. Excavation in and around previously investigated areas should also be undertaken as a means of determining some form of stratigraphic context for the earlier works and collections.

Although the current research detected no occupation materials along the mid-west side of the island, all areas of the island must still be systematically sampled. As noted above, the negative evidence of sterile areas should be considered as significant in determining the overall pattern of island use.

4. Artefact Analysis

A full analysis of artefacts taken from the *Batavia* land sites is a priority for future research. In particular, appropriate identification and quantification will be the key to establishing the probable patterns of the Dutch use of the island and surrounds. The probable selective nature of collection by early excavators has already been discussed, with the current museum holdings probably representing only some proportion of the obvious cultural (or at least non-faunal) material from each pit. However, analysis should commence with these items prior to further excavation.

As described earlier, it must be considered that the assemblage of artefacts potentially recoverable from the land archaeology will effectively be a subset of the total assemblage available from the *Batavia* at the time of wrecking. The catalogue of artefacts and material recovered from the wreck provides the basis for a comparative analysis with the land archaeological deposits.

5. Associated land sites.

Although Beacon Island can be studied as an entity, it should ideally be seen as one component of a complex of several closely inter-related sites Any research design developed should be extended to encompass the other land

sites (i.e. Long Island, West Wallabi, Traitors Island) associated with the *Batavia* incident, and in the long term incorporate the wreck as well.

The above comments regarding re-investigation of earlier excavations should also be applied to the other associated land sites, particularly the Slaughter Point sites on West Wallabi Island. In the case of the 'fort' (Site 2), systematic excavation away from the immediate area of the structure may still locate relatively undisturbed deposit.

Beyond an investigation of the 'historical' nature of the *Batavia* incident, future research on the sites must consider what these sites represent in terms of the psychology of both survival and salvage. On a wider scale the *Batavia* survivors camps should be compared to other wrecking events, most notably that of the *Zeewijk* (1727) in the Pelsaert Group of the southern Abrolhos. There is also the possibility of comparative work with other VOC sites, such as Oudepost 1 in the Cape Province of South Africa (Cruz-Uribe & Schrire 1991).

Throughout this report I have referred to the development of a systematic approach to any future investigation of the *Batavia* land sites. This should be interpeted at several levels as it applies to:

a. the formulation appropriate research questions regarding the Dutch occupation of Beacon Island (and by extension the other associated wreck and land sites).

b. the development and implementation of a single integrated research design which addresses the research questions being asked of the sites. This should incorporate as far as possible the existing data from earlier investigations, and may include a further programme of survey and excavation.

Given the significance of the *Batavia* survivors camps, there should be wide consultation among the various specialist fields who may ultimately become involved as to the best manner of proceeding.

Further research will also be required to determine the nature of the past island landscape and environments. As proposed earlier, the vegetation profile and nature of the island appears to have changed in the recent past as a result of continued human occupation. There is the additional possibility that the shape of the island itself has changed in the last three hundred and sixty years, so that the Beacon Island of 1629 may have been different to that seen today.

The work on the *Zeewijk* survivors camps on Gun island (Ingelman-Sundberg, 1979) is the closest comparable exercise in terms of the type of site being examined. The programme of systematic sampling across the undisturbed areas of the island were successful in answering a series of broad questions regarding the occupation of the island, while geological and botanical surveys were made to give a further dimension to understanding the past environment. However, apart from the possible identification of the *Sloepie* construction site, the treatment of the artefact material remained unsophisticated and limited. The *Zeewijk* study provides some insights into a possible methodology, but should really be seen only as a starting point. Other survivor camp studies such as for the *Sydney Cove* (Strachan 1988) should also be examined for ideas.

Finally, with regard to the general conservation and management of the archaeolgical resource on Beacon Island, the recommendations made by Green and Stanbury (1988) are still seen to be appropriate, although it may be necessary to clarify the extent of allowable digging and disturbance with both relevant authorities and island residents.

During the preliminary survey a series of small coral piles were noted along the western margin of the island, possibly related to the 1980 topographic survey by the Curtin University maritime archaeology postgraduate diploma group. If these reference points are no longer required they should be removed to prevent future misunderstandings about their origin. Other modern coral features along the western edge such as the various pits, clearings and mounds associated with the original 'dunnys' should be noted but allowed to remain as indicators of the early fishing lifestyle of the island.

7. SUMMARY OF RECOMMENDATIONS

a. An intensive historical analysis of the contemporary accounts including illustrations should be undertaken to extract as much information as possible about post-wreck activities on and around the islands.

b. A history of the modern occupation of Beacon Island must be established. All past and present structures and non-structural features should be identified and marked on a base plan to establish likely areas of disturbance.

c. A comprehensive history of past professional and non-professional archaeological must be established. Both existing formal and informal data

must be consolidated and further documentary, photographic and oral information sought, particularly for the earlier period (pre-1974). Known and supposed locations of previous excavations and finds should be marked on the base plan.

d. No further excavation should take place until a suitable long-term research design has been formulated. The research design should include not only Beacon Island, but all of the land sites associated with the *Batavia* incident.

e. Appropriate analysis and conservation of both new and existing collections of artefacts must be included as an integral part of any future research.

8. APPENDICES

APPENDIX 1. Chronology & Summary of Excavations on Beacon Island:

Year	Exc Name	Details
1960	-	About 8 ft (2.4 m) from the south side of Bevilaqua's (later Bingham's) Hut, 'under the clothes line'. Skeleton located at 16-18 inches depth. The area around this sifted but no artefacts found. Found by 'Pop' Marten and dug out by Dr Roylance.
1960	-	Location(s) unknown. Digging on island producing only two bones from a large seabird and 'so many bones that were obviously of dead seals' (Edwards, 1966:104). Exc. by H. Edwards.
1963	-	Location uncertain. Skull located while sinking posthole. Possibly same skeleton excavated by Edwards & Haimson,1963: see below) Exc. by D. Johnson (Edwards, 1966:112)
1963	-	Location unknown. Area adjacent to skull located by D. Johnson? Dug by shovel and seived. Dutch artefacts recovered (Edwards, 1966:112). Possibly one of the three excavations by M & G Cramer in July 1963 which preceeded the Edwards expedition (Bevaqua,1974a)
1963	-	Sand Spit on S.E. corner of Island. Coral structure with four eight foot walls and door in one corner (possibly Cornelisz's prison'. Dug out to depth of four feet, contained 'earth and old timber'. Exc. by M. & G. Cramer (Edwards, 1966:172).
1963	E.S."C"	Exact location unknown, but believed to have been to the north and west of Bevilaqua's hut. Dutch artefacts found at 3-18 inches. Exc. by H. Edwards (Green & Stanbury, 1988).
1963	T.T.A.	Trench dug between the houses of Mr Bevilaqua and Johnson. No artefacts found. Three trenches (A, B & C) also 'sterile'. Exc. by H. Edwards (Green & Stanbury, 1988).
1963	-	East corner of Johnson's house. Skeleton lying in north-south alignment (possibly Andries de Vries). (Possibly skeleton located by D. Johnson in 1963: see above.). Exc. by H. Edwards & Dr N. Haimson (Edwards, 1966; Green & Stanbury, 1988).
1963	-	Location not indicated. Skeleton found in association with pistol shot in ribs, a purse and two copper coins. Exc. by H. Edwards & Dr N. Haimson. (Edwards, 1966; Green & Stanbury, 1988).
1963	-	Locations unknown. Various excavations by local residents and Army personnel associated with the Edwards, expedition (Edwards, 1966:169).
1964	-	East corner of Johnson's Hut. Skeleton of male(?) immediately adjacent to 'Andries de Vries' (beneath the foundations). Possibly the same as above. Presence of other skeletons in immediate area also indicated by Mr Johnson. Exc. by H. Edwards (1966:166)
1967	Site "C"	Exact location uncertain (possibly in depression immediately west of Dransfield's house). Surface collection in area included butchered

		animal bones and artefact material. Exc produced various Dutch artefacts. Exc. by C. Jack-Hinton, WAM. (Green & Stanbury, 1988).
1967		Cornelisz's Prison (S.E. sandspit). Artefacts from excavation suggest late 19th century. *Hadda* survivors? Exc. by C. Jack-Hinton, WAM. (Bevaqua, 1974a).
1973	-	Between Johnson's & jetty on south side of island, (three trenches). Between Johnson's & Bingham's (fmr Bevilaqua's) houses on east side of island (one trench). All trenches 0.5 m wide by 0.5 m deep. Lengths unknown. All pits sterile. Exc. by J. Green, WAM. (Green & Stanbury, 1988).
1974	Test Tr. #1	Between Johnson's & Royce's huts (S.E. side of Island). Trench of six one metre squares. Relatively dense deposit of artefacts and faunal material recovered. Surface recording of coral features on S.E. point of island (Cornelisz's Prison) 'Site 4'. Exc. by B. Bevaqua, WAM. (Bevaqua, 1974).
1980	Test Tr.#2	Located parallel and adjacent to the N.E. side of Test Trench One. Also produced a dense deposit of artefacts and faunal material. Exc. by L. Kirkham and M. Stanbury, WAM. (Kirkham 1980).

APPENDIX 2 - DAY BOOK NOTES

A copy of the day book I kept on Beacon Island has been included here as it contains information regarding the excavations and other ideas discussed on the island but not incorporated into the main body of the report. A separate fieldbook was kept during the day, with the information transferred into the daybook at night. To ensure that a complete record of the excavations is available, photocopies of the original field notes have also been lodged with the Western Australian Maritime Museum.

***Batavia* Land Archaeology – Day Book**

TUESDAY 5 MAY 1992

Reviewed existing plans of island and excavation notes brought by Myra. Spoke to she & Jeremy regarding earlier excavation work and finds across the island. No base plan currently exists of either. Most of the pre-1980s work can only be located to general areas. As a priority there is a need for a base plan showing:

a. past excavations (both professional and amateur); and

b. discoveries of skeletal material etc. and any other material both surface and sub-surface.

Most descriptions of where excavations took place, etc., seem to be located in relationship to structures, some of which are no longer extant, or may have been rebuilt.

It appears that the material mostly occurs on an axis (drawn SE from the beacon). The area around 'Johnson's House' and Dr Royce's House' seems to have a particularly high density of finds. Story related of people finding some surface material, as well as digging in around these buildings.

Initial walk over island with Myra shows a far greater number of structural features past and present than suggested by maps derived from aerial photographs, particularly around the south-east end of the island. Adjacent to 'Pop Marten's House' are concrete foundations, signs of a former wash-house

made of beer bottles, old toilets, etc. The 'prison' structure on extreme SE is not plotted on aerial photo plan.

Orientation of island use appears to have changed since the construction of the northern jetty. Tracks etc. shown on earlier plans are now unused and may not be visible.

A building history of the island is required, as well as further plotting on the base plan. Points to consider:

a. Identify all features past and present. Need to give all structures a number which transcends ownership and use changes. Possibly extend the current Fisheries numbering system (although this seems inconsistent … check with Randell).

b. Identify previous toilet pits. [Not only subsurface disturbance, but material removed from the pits thrown outwards.]

c. Former trackways across island...etc.

d. Given known distribution of finds, eventual removal of conrete pads should give access to possibly undisturbed deposits. As part of building history, establish approximate dates of construction, do survey of current foundations of structures and any other features...

1986 base plan has AMG references on it which should allow site to be gridded - try to fix several known points to AMG references. End of jetty seems to be the standard point fot the MADWAM surveys, if used as a cross reference/bearing.

Possible future sampling along a SE baseline (unfortunately runs through most of the houses and yards. Jeremy suggests excavation along the west and south-west of the island. This is a well vegetated area, away from the houses (which seem to have been the focus of activity). There is fairly heavy mutton bird disturbance, but this is throughout island. Run a base line from the beacon due south? Check tomorrow. Possible probe survey to establish soil depths across various areas. Options for excavation programme:

a. North-south baseline from beacon (west side of island). Previously unexcavated areas, but good depth of soil?

b. South-east baseline through axis of island.

c. Sample pits adjacent to (or at least in the supposed area of) previous diggings to try and get some context for the existing collections. [General impression is that best value can be made if of previous work if treated as sampling of various areas....]

Stray bits:

a. wind direction varies.

b. offloading point for wreck salvage ? SW beach? Distribution form a node...who controls distribution.

c. early separation into various group structures, similar to shipboard? Account suggests several camps.

d. do breakdown of changing population structure.

WEDNESDAY 6 MAY 1992

Fixed position of beacon as AMG ref 7/725/775 - 68/467/720, according to 1: 500 scale (1 cm=5 m) map derived from aerial photograph (1986). Had to do a bit of fooling around to calculate positions, etc. The small scale makes it a bit difficult.

The north-south transect line is taken from AMG ref 7/725/785 - 68/467/720, which is a point 7.5 m directly east of the beacon. Established the baseline by theodolite, using star pickets at several unmeasured distances to give something to align with (although vegetation actually limits visibility between). The baseline passes through several different areas, but there appears to be a reasonable depth of soil all along. Just south of the datum is a very low area (swale) with low vegetation which is the probable area of the 1963 'Site C' (possible protection from wind?). This rises to a higher, sandy area with higher vegetation and dense muttonbird disturbance. Moving towards the south end of the transect the vegetation falls again, but the area is also currently active as a nesting area for (terns?). Most southerly square is in vegetation just above beach.

Established points for test pits at twenty (20) metre intervals from datum:

a. One pit north of the datum (backsighted towards the museum shed).

b. Seven pits to the south of the datum.

Cleared vegetation with Myra and Claire. Because of the location of the datum adjacent to the backyard of a hut (set up in a gap in a fenceand therefore difficult to clear either side), it is not possible to excavate at that point. Given time, it would be worth digging a pit slightly offset from the baseline.

Strung out the first three squares along the north end. The 20 m point on the baseline is the north-west corner of the squares. Cheated by using a metal one-metre square to set corners. Very difficult to get pegs in because of coral fragments. Will start excavating tomorrow as soon as I can get initial heights (and find a permanent bench mark for heights... maybe an edge of the beacon?).

Have not decided on square/pit numbering system as yet. While it would be best to use the AMG grid ref, it would probably be easier for now to simply give test pit numbers (north to south, with TP2 being teserved for the proposed pit next to the datum).

If time allows, it would be worth taking a transect eastward from the baseline, moving towards the area between Johnson's and Dr Royce's houses where the higher concentrations of material have been found.

THURSDAY 7 MAY 1992

Cleared a square at the axis of the baselines (TP2). Unfortunately this also involved removing some of Dransfield's windbreak hedge. Established the dumpy half way between the beacon and the axis (about three metres east). The fixed height is taken on the top southern edge of the concrete plaque holder attached to the beacon. There doesn't appear to be any other easily visible (and durable) points which might be there in several years time.

Started excavations in TP1 - 3 (north to south). Decided on five centimetre arbitrary spits. Rough outline of excavations here, but need to check notebook for details.

Fixed (datum) height = 7.40. Height of dumpy = 1.61 m

Problems with excavation:

a. Guano and sand generally unconsolidated, sides of pit slumping inwards.

b. Heavy cocentrations of coral within the pit (slabs make levelling etc. without removal very difficult.

Test Pit 1 (TP 1).

Initial heights: NW-2.44, NE-2.42, SE-2.50, SW-2.55, MID-2.48

Joshua and Claire

Low vegetation, no immediately obvious mutton bird disturbance. Humic layer at top, with crushed shell sand deposit beneath, but no guano visible (may be lower). Very low section of island, possibly storm washed? Completed to spit 2 (10 cm, but may dig by shovel to see if change occurs lower.

Test Pit 2 (TP 2).

Initial heights: NW-1.79, NE-1.81, SE-1.78, SW-1.78, MID-1.82

Myra and Ross (morning). Myra and Ian in afternoon

Upper layers badly disturbed in over-enthusiastic vegetation removal. Artificial shell/sand mix gave way to relatively deep guano deposit. Slabs of coral (largest up to 40 cm+ on some dimensions) removed in about Spit 3 to allow further digging. Problem with depth of spit 3 due to over-enthusiastic digging (fell to about 24 cm).

Completed square to spit 6 (40 cm), at interface with a light sandy coral layer ('bedrock').

Only interesting find was the negative of a coin in concretion, possibly discarded from an early museum expedition.

Test Pit 3 (TP3).

Initial heights: NW-2.56, NE-2.65, SE-2.67, SW-2.60, MID-2.65

Martin

Fairly low vegetation. Into guano (increasingly dark) and coral. Large slabs in Spit 2, removed to get at deposit below, but still guano with (smaller) coral pieces below. Completed to Spit 3.

In theory, the presence of the large slabs of coral should give the lowest possible point that Dutch material might be found (not including things falling between the cracks), i.e. I can't see how the slabs got there later... except, there is guano above AND below... how does <u>that</u> happen?? Quick talk with Patrick and Jeremy who suggest it is simply filtration through the loose coral.

Bill Dransfield visited and confirmed that site 'C' was in the low lying sand area southeast of TP3; recalled digging, and something about 44 gallon drums being used but could't elaborate on how the digging was done or other details. Also told how (Maeve Dransfield) found a seal skeleton under coral slabs, towards edge of the coral shelf in the same area. Meat storage? Also asked hime about casual collecting and digging. Says only a few pieces on surface, but at one stage quite a lot of small digging about.

Talked to him a bit about history of fishing and the various changes to people and the camps. Says that there has already been a photo survey. Says

that high vegetation only recent. Formerly low (like current low areas). Relationship between human activity and vegetation growth.

FRIDAY 8 MAY 1992

Commenced excavation of TP 4 and 5 (morning) and TP 6 in afternoon. I drew sections for TP 1-3 (north and west sides only). Moved dumpy level further south (actually south-west of original position. For extra details on pits, etc., see notebook.

Fixed height (datum) = top: 0.5, Midddle= 0,285, bottom=?

Initial heights:

TP4 NW=1.87, NE=1.87, SE=2.06, SW=1.91, MID=1.935

TP5 NW=1.55, NE=1.575, SE=1.57, SW=1.59, MID=1.50

TP6 NW=1.64, NE=1.73, SE=1.85, SW=1.77, MID=1.74

NOTES:

Test Pit 4 (TP4)

Directly on muttonbird mound. Five centimetre spits, although Spit two was done to level (volunteers misunderstood that the spit was to be excavated to contour. Finished to base of Spit 3 and started slightly on Spit 4 (a little bot of overexcited digging into Spit 5. Yielding material (bone and metal fragments). In Spit 3 there was a copper(?) pin and some larger bones, including a rib which may be seal. Over-digging into spit 5 shows further large bones.

Joshua and Ross

Test Pit 5 (TP5)

Directly on muttonbird digging, but sandy material. 5 cm spit (one), but spit two was 10 cm (completed to this level. Some bird bones and shell, but no artefacts.

Myra and Pat (Ian after lunch)

Test Pit 6 (TP6)

Also in sandy disturbed area. 10 cm spit one, and one quadrat of spit two. No artefacts found.

Had to finish early to prepare for trip to Big Pigeon island (social club).

Need to put dymo tags into bags (currently only Artline on outside.).

Need to finish all three squares tomorrow. [Four days left, two days for each two squares.]

Some thoughts:

Easiest way to do historic structures survey is to trace buildings etc from 1986 aerial photo plan and do corrections, notes etc. Take down current numbering system, and describe;

a. foundations;
b. current wall & roof structure (materials);
c. estimated date of construction; and

d. new and extra features.
etc., etc.

Might be best to ask Myra to supervise digging, take an assistant and do this all one evening.

SATURDAY 9 MAY 1992

Conitinued TP 4-6. Interest of volunteers generally flagging. During the afternoon only Myra and myself were digging. Possibly a function of the night before... I know that I feel the effects.

Fixed Height: 0.34

TP 4: NW=2.17, NE=2.19, SE=2.24, SW=2.255, MID=2.23

Commencing Spit 5.

TP 5: NW=1.92, NE=1.90, SE=1.97, SW=2.00, MID=1.965
Commencing Spit 7 (10 cm)

TP 6: NW=1.83, NE=1.86, SE=1.95, SW=1.88, MID=1.90
Commencing Spit 3.

Check notebook for main details.

TP 4: Continues guano deposit. Spits 4-6 (5 cm) producing bone and material. Spit 6 contained fish hook.

TP 5: Base of Spit 7 is interface with a more yellow sand unit. Mutton bird holes run along this division. Still not producing artefacts. Base of Spit 9 quadrat in SW corner.

TP 6: Coral sands, grading into yellow sands.

NOTES:

TP 5 and 6 are sterile sands, over the slightly more yellow (sterile) sands. Hard to know whether there has been major sediment build-up since 1700s, and the occupation level is simply lower. Occupation areas (Johnson's etc) are only about thirty metres (perhaps less) east of these pits, so it seems likely that these sandy sections would have been used. Later vegetation has acted as sediment trap?? It may be worth simply continuing to dig.

SUNDAY 10 MAY 1992

Continued excavations, TP 4, 6, 7 and 8.

Problem with initial datum reading. Set up dumpy on south end of the island, but could not see the staff on the beacon (staff has only 0.5 cm increments, with no colour blocks or 'E's' to indicate 10 cm or 1metre divisions, so it has only a very limited visibility). I therefore do not have a relative height for TP 7 and 8, (although I could calculate it from the previous day's readings in other pits, 4, 5, 6).

Datum Height: ***

TP4: NW=, NE=, SE=, SW=, MID= (NOT VISIBLE FROM DUMPY)
TP5: NW=, NE=, SE=, SW=2.18, MID=2.20 (BASE OF SPIT 9)
TP6: NW=, NE=, SE=, SW=2.05, MID=2.07 (BASE OF SPIT 5)
TP7: NW=1.70, NE=1.73, SE=1.85, SW=1.735, MID=1.77 (SURFACE)
TP8: NW=1.43, NE=1.58, SE=1.54, SW=1.56, MID=1.64 (SURFACE).

NOTES:
TP4: Continued to produce artefacts (nails) to spit 7, and excavated down to base of Spit 8, depth of 60 cm(?). Guano continuing, but had to remove increasingly large pieces of coral without definite artefacts (although some small bone fragments). Have taken bulk samples from spits 4-8 (although from 7&8 I did sort out larger artefacts).

TP5: Still sandy. Did south-west corner, but no sign of artefacts, and no significant changes in sand layer, although increasingly 'yellow'. Completed to spit 9

TP6: Completed to spit 7 (70cm). Similar to above.

TP7: Sandy square, in area of intense burrowing. Low vegetation cover. (spit 1 = 10 cm), spit 2 = 20 cm deep). May have to clean sides of pit to bring to square.

TP8: Sandy square (similar to above). Spit 1 =20 cm. The sandy matrix in the lower half of this spit seems relatively firm.

There seems to be an increasing number of previously unreported items, incidents etc. being brought to light through casual converstaion, especially with Bill Dransfield.

a. after sying that virtually no Dutch material was found on the surface in earlier days (1960s), he then told of how his children used to run around the yard playing with/throwing musket balls and other items, and nobody thought anything of it (could be a bit of exaggeration).

b. The Johnson's had a chopping block reputedly made from a section of Batavia mast (on south end of island, at or near to terminus of path at jetty, possibly currently under a large bush.

c. The finding of a seal skeleton under coral slabs, adjacent to the depression area we were working in (reputedly given to Museum).

d. The finding of a spar on Long island(?). (Reputedly given to museum; Graeme Henderson actually came up and removed it?).

e. People were coming and digging around Johnson's House (because the skeleton had been found under it), until he poured a concrete slab to stop them.

Discussed with Jeremy, Pat and Myra the need to do comprehensive plan of features, compile from all sources (official and private) a comprehensive set of pictures of the island, vegetation, etc. and an oral history of the early work,

including getting people to pinpoint (or at least locate) where things were found, talk about island use, etc.

MONDAY 11 MAY 1992

Visited West Wallabi Island in morning. Saw both stone structures ('forts'). The beachside structure ('Weibbe Hayes's) has been recently cleared of vegetation and shows signs of fossicking. There are, however, wallaby bones in the sand inside. Walls have been reconstructed, but are still only about 1 m high. No doorway apparent, divider between the 'rooms'. strikes me simply as a habitation – probably as the base for a 'v' tent (i.e. canvas roof over top. Still, what about a door? Did not visit the wells to the (east?) of the site.

Second structure on limestone; regular walls and doorway, but no sign of artefacts (only thin layer of sand inside, and none around it. Possible wells (gnamma holes with water) within 20 m of structure.

Picked up wallaby bones (*Macropus eugenii*?) on island for comparative collection. Also turtle bones on beach. Claire picked up a dried python, about 2 m long.

Afternoon commenced section drawings, finished up to TP6. In TP 7 Myra excavated to about 1 m in north-west corner to check soil structure. Continues throughout as clean white coral sands, with no medium or large coral pieces

TP 8 has a completely different profile of orange sands (guano mixed in?) with dense concentrations of coral down to about 60 cm.

Probably will not get time to commence TP9.

Will take soil samples from all pits (10 or 20 cm depths). Key in to stratigraphic drawings.

No datum (out of range). Calculate difference from other pits.
Initial depths.

TP7: NW=2.44, Mid=2.43.
TP8: NW=1.69, NE=1.70, SE=1.69, SW=1.70, MID=1.72
(base of spit 1 at 20 cm; spits 2&3 also 20 cm each.)

TUESDAY 12 MAY 1992

Excavated TP8 down to plate coral (approx 15 cm??). continued heavy density of coral pieces.

Levels: SW=2.23, MID=2.22

Completed section drawings for TP6-8. Took soil samples (approx 10 cm intervals) in all pits. Often very difficult to get material and from right positions due to collapse from higher levels, coral coverage in section, etc., etc. In TP 8 was not able to take lower levels (under about 40 cm because people had begun filling in the pit a bit early. Approximate sample locations are marked on the section drawings.

The difference between the sections in TP 7 and 8 is very marked. The former consists mostly of very white coral sands with only small fragments in matrix (less than 0.5 cm), while the latter, apart from an upper level of white sand, is densely packed coral in an orange sand matrix.

Volunteers filled all pits. Had to remove the star pickets from the axis and in the bushes along the baseline, although I left the most southerly picket in place. It should be possible to re-establish the baseline relatively easily (north/south from a point 7.5 m directly east of the beacon).

Will need to copy field notebook and section drawings for museum, as well as prepare the sections at some point in the future (possibly as an appendix of the main report).

APPENDIX 3 - SECTION DRAWINGS

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