REPORT ON THE EXCAVATION OF SKELETON SK5, A VICTIM OF THE "BATAVIA" MASSACRE OF 1629, BEACON ISLAND, WESTERN AUSTRALIA

by

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1. INTRODUCTION

This report describes the excavation of a skeleton, designated Sk5, (pending accession by the Department of Maritime Archaeology, Western Australian Museum) from Beacon Island, Wallabi Group, Houtman Abrolhos, Western Australia, between 14th and 19th June, 1994. Although a brief historical background to the site and details of the 1994 excavation are recorded here, this report should be read in conjunction with the more comprehensive analysis of Sk5 and the other *Batavia*-associated human skeletal material prepared by Ms Bernadine Hunneybun as part of her B.Sc. (Hons) dissertation for the Centre for Archaeology, University of W.A. (1995).

2. BACKGROUND

The Dutch East India Company vessel *Batavia* was wrecked on Morning Reef in the Houtman Abrolhos archipelago in the early hours of 4th June, 1629. The ship had been en-route to Batavia (now Jakarta) with possibly as many as 341 passengers, crew and soldiers aboard, and a cargo including a considerable quantity of specie and valuables. Over two hundred people survived the initial wreck, making their way to several small coral islands near to the wreck, the largest of these being 'Batavia's Graveyard', now known as Beacon Island (Figure 1). In the three and a half months before the arrival of a rescue vessel, the number of survivors was more than halved as a result of a particularly bloody mutiny by members of the crew, including a number of the officers. The story of these events, based on contemporary historical documents, has already been described by Drake-Brockman (1963), Edwards (1966) and Goddard (1993), and have been summarised by Gibbs (1992).

Since the re-discovery of the *Batavia* wreck in 1963, archaeological research has been focussed on the marine sites and in particular on the removal and conservation of the surviving structure of the wreck itself. The associated terrestrial sites, where most of the events described in the various historical reports took place have, in contrast, been subject

to only minimal archaeological investigation. A brief history of the major professional and non-professional excavations and archaeological research on Beacon Island has already been provided in an earlier report (Gibbs 1992).

This current report forms the second contribution to an ongoing investigation into the archaeology of the land sites associated with the *Batavia*, including those on Beacon Island, West Wallabi Island, and other adjacent sites which have either been identified through historical research or reported as containing 17th century Dutch artefacts. The first phase of the project has included consolidating information on earlier investigations, brief examination of existing museum collections of artefacts (with the intention of a later, more intensive analysis), and limited test-pitting on Beacon Island to determine the extent of the survivor's camps. However, the specific aims and objectives of the 1994 field investigation were precipitated by a combination of circumstances which will be described below.

In 1992-93 the Department of Maritime Archaeology of the Western Australian Museum declared an amnesty under the *Maritime Archaeology Act (1973)* for the return or registration of items removed from historic shipwrecks. During the amnesty period a number of items from the *Batavia* land camps was presented, including an anonymous donation of a cutlass, in poor condition and needing immediate conservation treatment. The limited information provided regarding the cutlass was that it had been removed from an unidentified site several years earlier. Staff at the Museum had also received reports within the same time period about the possible discovery of another skeleton on Beacon Island, although preliminary investigations had failed to confirm this or obtain much further information.

In 1993 Philippe Godard's large format book on the *Batavia* story and sites was published. On page 237 he presented a footnote describing the four known discoveries of skeletal material on Beacon Island, which occurred in the initial phase of non-professional investigations between 1960 and 1964 (see also Gibbs 1992 Appendix 1). However, he also reported the following.

1990: Fifth skeleton uncovered by John Gliddon, while digging a hole for a septic tank near his house.

(Godard 1993:237)

The reputed discovery of another skeleton therefore appeared to be confirmed, with the probability that the sword and other associated artefacts had also been removed from this location. There was the further concern that, given the relatively precise location provided, further damage might be caused by fossickers seeking Dutch material.

The 1994 field season was therefore organised with the intention of investigating the nature of the disturbance to the burial site(s), based upon interviews with residents of Beacon Island and through physical investigation of the area. It was hoped that, following this, it would be possible to determine the extent of intentional and unintentional damage to the site and to formulate an appropriate conservation and management strategy. Included in the process would be the opportunity of talking with the Beacon island community regarding the future of the Dutch sites, and to present both the archaeological research programme and any necessary conservation and management strategies in a positive light.

INTERVIEWS WITH BEACON ISLAND RESIDENTS

During the excavation the Beacon Island fishermen and their families were actively encouraged to visit the site, look at the material, ask questions about what was happening, and discuss how they felt about the process.

Initially there was reluctance to provide any information regarding the skeleton(s) or fossicking on the island, although it was generally acknowledged that some casual collection did go on, and that many people possessed material. Many referred to a cartoon which had appeared in the Geraldton newspaper at the time of the amnesty, showing a fisherman holding out a single coin or artefact to an excited Museum curator, while behind the dune was a pile of treasure and other wreck items. However, the collection of artefacts mostly appears to be opportunistic with limited evidence of systematic fossicking, although several persons (including one of those involved in finding the latest skeleton) suggested that they were occasionally approached by persons wanting to know the location of sites.

Another concern which was expressed by the fishermen regarded the long-term fate of any material we were likely to recover. In particular there was the repeated question about whether it would be kept in Geraldton, relating the situation to a currently contentious issue regarding where *Batavla* material should be housed. In general the team responded that a storage area in Geraldton may be appropriate, or that eventual return to graves or a repository somewhere on the island was even possible, although it was clearly stated that the project team had limited influence in this regard.

It is important to note that during this time a number of comments also emerged regarding the perceptions held by the fishermen of the museum staff, or at least of persons they thought were museum staff. It would appear that any earlier relationships between the museum staff and the fishermen have been progressively weakened as a result of the changing island population. The older generation who may have been more aware of what was

being done and why has now retired, with their children or other new lease holders knowing little of the earlier archaeological work, or the need to protect the sites. The behaviour of associated non-professional groups who have dived on the wreck site or visited the island in the last several years may also be having a negative bearing upon the community's perception of 'museum' activities, and may indicate the need for stricter controls on such groups, a clearer identification of what is or isn't a W.A. Museum activity, and general education on the significance of the sites.

One evening at a social occasion held close to the end of the field season, the author was introduced to a young man who had been a deck hand at John Gliddon's camp. The following is an extract from the day's field book, written immediately after the meeting

Spoke to Steve, a former decky of John Gliddon, who assisted in the sinking of the sump and may have helped with the leach drain. These were dug possibly 6 years ago. At least one skeleton was found near the sump, and another (possibly two) near the leach drain heading back into the hedge/vegetation area (ie. 2b and 4b are in the right direction). He says that the skull from the sump area was intact, all teeth in lower and upper jaws, and with a sword wound on the cranium. Tom (McGuire? -now deceased) who was also helping dig took the (at least one) skull and mandible. He suggested that Beryl, Tom's widow, may still have the skull (although he didn't know). He says they dug the drain and found one, possibly two other skeletons, after which they stopped digging. I'm pretty sure that he also made the comment that they either left these bones alone, or put them back.

Steve denied any knowledge of the removal of the cutlass or any other materials other than the skull(s). As he was employed at a camp on another island, it was not possible to question him any further during the fieldtrip. Given the time elapsed it did not appear that he could recall much further detail, although he was able to indicate the general location of the skeletons disturbed while digging the leach drain. This assisted in narrowing the target area for the final two days of excavation, and explains to some extent the nature of the archaeological deposits, which will be described below.

4. BURIALS AND SKELETAL MATERIAL ON BEACON ISLAND

The documentary evidence resulting from the interrogation of the mutineers provides a detailed insight into the atrocities which took place in 1629 (Drake-Brockman 1963). Based upon an analysis of these accounts, Hunneybun (1995) has suggested that at least 30 men, women and children (19 male and 11 female) were murdered on Beacon Island. However, as the documentary record records that some corpses were thrown into adjacent waters rather than buried, the actual number of interments may be significantly less. In addition to the population on Beacon Island, passengers and crew were also slaughtered on nearby islands, although no skeletal material from other *Batavia* sites has been reported at this time.

Since 1960, at least four skeletons (including miscellaneous bones) have been discovered (and reported) on Beacon Island, as a result of building construction or other incidental activities associated with the fishermen who now occupy the island. All of these sites, as well as the current finds, have been situated within fairly close proximity in the area around Johnson's (now Powers') and Gliddon's (formerly Bevilacqua's and now Ashplant's) camps. (In the numbering system currently employed by the Department of Fisheries and Wildlife, these are numbered Camps 3 and 2 respectively).

LOCATION

The new sites are situated along the southern edge of Gliddon's camp, on a line eastward from the toilet to the back gate of the yard (Figure 3). Despite the Godard (1993) reference to a skeleton being found near the septic tank, the location initially indicated by the occupants of the camp was closer to the back gate, beneath a set of crayfish pens stacked along the edge of the vegetation, and directly south of the 'Hills Hoist' washing line. (As described earlier, it was subsequently discovered that there was skeletal material in both areas).

EXCAVATION

The 1994 field season allowed only five days of excavation, with one day at the start for survey and one at the end to take any final measurements and backfill the site. The 1992 season's survey baseline was re-established (which runs north-south through a point 7.5 m directly east of the centre of the beacon and calculated to be at AMG 7/725/785E - 68/467/720N), with a new point from which to base the excavation grid fixed within Ashplant's yard at approximately 27m east of the 70m mark on the baseline (calculated as AMG 7/726/12E - 6/846/702N). This formed the southeast corner of Square 1 and the northeast corner of square 2 (see Figure 3).

The excavation grid was based upon 1 metre squares, divided into halves to accomodate the nature of the yard; e.g. A1 indicating the northern part of square 1 and A2 being the southern part. In some instances only half a square was actually excavated (see Figure 3). In the absence of detectable stratigraphic changes, arbitrary spits of five or ten centimetres were excavated. All material was seived through 5mm and 3mm nested sieves, and any possible cultural material bagged for analysis. Bulk soil samples were also taken from each spit.

The excavation area was extended in such a way as to attempt to detect increasing densities of smashed bone fragments across the site. it was hoped that this would lead back to the location of the remaining and hopefully in-situ body elements. This strategy proved partially successful, although the extent of post-depositional disturbance and the limited time available meant that the final decision as to which squares to continue excavating was based upon a variety of factors. The extent of the excavation was also limited by the worsening weather conditions, and reluctance to expose the skeletal material to rain and wind. A detailed account of the progress of the excavation is provided in the field diary included as an appendix to this report.

Fortunately, the two squares chosen for more intensive examination proved to contain what appeared to be two skulls situated side by sid with several other large bone fragments. With less than one day remaining, it was decided to focus on the northern skull, leaving the other in-situ for later investigation. The skull, proved to be only the upper part of the cranial cap, smashed open by a shovel, and with modern material both mixed with and below it, highlighting the disturbance. The other skull, while only partially uncovered, appears to be in better condition, although a mutton bird hole had undermined it and needed to be filled to provide support.

It is difficult to determine the original orientation of these skeletons, although it is suggested that they extended south from the area where the skulls were uncovered. A maximum depth of 35 cm was reached during the excavation, although as the extent of the trench disturbance has not been established, fragments may well extend for some depth below.

All squares were backfilled, with a layer of sand over the remaining skull. The flat coral slabs were used to create a low vault to prevent any further damage from the heavy crayfish pens being placed over top, and to discourage further mutton bird burrowing through the deposit.

STRATIGRAPHY

All excavations took place within a uniform layer of white coral and shell sands, without detectable stratigraphic changes. Disturbance from mutton bird nests was clearly visible along the southern section of the excavation adjacent to the fringing vegetation, which continually slumped into the pit. The northern section showed no clear signs of mutton bird infiltration, although residents of the camp stated that nests were not uncommon through the

yard, and that the area was continually raked clear and filled with sand as necessary. As a result of this filling the surface was relatively level at the commencement of excavation.

It should be noted that the three layer stratigraphy of white or yellow sands and orange guano over coral which was encountered in earlier excavations (Bevaqua 1974, Kirkham 1980, Gibbs 1992) was not visible in this instance. This almost certainly results from a combination of shallow excavation depth, mutton birds churning over the deposit, and modern disturbance. Modern material was found throughout the deposit, including below and intermixed with the main skeletal elements excavated. As with previous excavations, the pH of the sand was alkaline, favouring bone preservation.

Figure 5 presents a representative excavation section, from the west face of Square 1B. Other sections will be prepared for the final report.

ARTEFACTS

Skeletal material was retrieved almost immediately below the surface within Spit One, and would also appear to be scattered through the loose surface sand in the areas immediately south of the excavation, below the bushes. The bone and other artefacts were plotted insitu and then removed onto acid-free paper for drying. The density and distribution of bone in the excavated squares is represented in Table 1.

The human bones recovered generally represent parts of the upper bodies of more than one adult and includes substantial numbers of fragments of skull, teeth and jaw, cervical and atlas vertebrae, humerus fragents, tarsal/carpal bones, phalanges and fragments of ribs (Table 2). A comprehensive analysis of the skeletal material is presented in Hunneybun's (1995) thesis.

No other artefact which could be clearly associated with the Dutch occupation was recovered from the excavation. Modern material was found throughout the deposit

CONCLUSIONS

Based upon the archaeological and oral evidence collected, the following conclusions can be reached:

 At least three and possibly as many as five skeletons were disturbed during the excavation of the septic tank and leach drain, c1990.

- 2. The status of the skeletons disturbed while digging the septic tank is not known, although the disturbance is likely to be severe. The skull(s) of at least one and possibly both of the skeletons encountered in this area were removed and kept by one of the persons who disturbed them.
- 3. The leach drain has destroyed or seriously damaged the upper bodies of the two skeletons encountered (and which were the subject of the current excavation). At least one of the skulls was smashed, although the other may also have been damaged by the shovels. It appears that these skulls and larger bones were placed back in the trench. However, it has not been clearly established whether the leach drain was installed and is still beneath the level reached during the archaeological excavation, or whether the trench was abandoned when the two skeletons were encountered.
- 3. The test pits showed a highly disturbed stratigraphy, resulting from both the trenching and subsequent mutton bird burrowing, with modern materials intermixed with the human bone. There is no firm evidence for the original depth of the skeletons, although it is likely that they were originally encountered at depths of less than 50cm below surface level. Further excavation is necessary to establish this.
- 4. It is probable that the remaining elements of the disturbed skeletons remain at the site, and are possibly not far beyond the edge of the trench dug in 1990 (i.e. they are insitu, possibly slightly south of the 1994 excavation). The possibility of further skeletons in the immediate vicinity cannot be dismissed.
- 5. No other artefacts which could be clearly associated with the Dutch occupation were encountered during the excavation. It is probable that when the skeletons were encountered, particularly the first two associated with the septic tank, any visible material was removed. The possibility that further fossiking along the rest of the bodies took place cannot be dismissed. There appears to be little doubt that the site is the origin of the cutlass returned during the amnesty.
- 5. All skeletal material so far recovered on Beacon Island has been located within a narrow band between camps 2 (Gliddon's/Ashplant's) and 3 (Johnson's/Powers'). There is therefore a high probability of further skeletal material in the intervening areas. Whether this indicates a formal burial area, or a space between two camps where bodies were dumped by the mutineers is unknown. However, it should be borne in mind that major deposits of domestic material was located approximately 50m north and 50m southeast of this belt.

- 6. The current island population are aware of the story associated with the Batavia, but have limited understanding of the fragile nature and archaeological isgnificance of the sites themselves. The island is also being increasingly exposed to visitors beyond the fishing community, and it is probable that the locations of specific finds have, or will, be identified. The safety of the sites in the absence of either a programme of education, limits to the activities of visitors and tours, or even further knowledge of the extent and nature of the sites, suggests that further damage is inevitable.
- 7. The 1994 discoveries further highlights the need for a systematic investigation of Beacon Island, if only to establish the parameters and extent of the site(s) as a means of ensuring both a sample of material is available for further research, and to be able to better formulate management recommendations. Research questions which address the nature of the Dutch occupation must also be an integral part of any excavation or further investigation. Further investigation and recovery of the two disturbed skeletons, and of the disturbed area adjacent to the septic tank is recommended, although this should only take place;
 - a. Within the framework of a larger prgramme of research on the site
- b. If adequate time, resources and expertise are available to undertake both
 the field and laboratory components.
 - If the approval of the site lessee ia and any other appropriate authorities is granted.

This latter recommendation is made on the basis that the excavation would be best effected outside of the cray fishing season, both to minimise disturbance to the lives of the camp occupants (remembering that the site is immediately adjacent to their toilet), and to reduce the number of persons observing the excavation process, although this must be weighed against the possible educational and PR aspects of inviting visitors to view the process.

It is estimated that a <u>minimum</u> of three weeks must be allowed for the excavation. Laboratory time is difficult to determine, but will require specialist assistance from a physical anthropologist, possibly with forensic skills to assist in dtermining cause of death, although all other avenues of investigation including pathology should nt be neglected.

In general the recommendation for further investigation of the skeletons in the short term is made on the basis that the sites have been seriously disturbed and that their locations are now well known.

MANAGEMENT

This report does not constitute a conservation and managment plan for Beacon Island. However, most of the recommendations made in the 1992 report which bear upon the future preservation and investigation of the sites are still appropriate, summarised as follows

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

While the 1990 disturbance of the skeletons was accidental, and any subsequent removal of artefacts and skeletal material opportunistic, the site has now been clearly identified. The Abrolhos sites are being visited much more frequently by a variety of groups, with the wreck sites and survivor camps an integral part of these tours. There is an obvious need for establishing a long-term awareness programme for the island residents which both reestablishes the significance and sensitivity of the sites, and re-introduces them (and possibly the rest of the Wallabi Group fishing community) to the aims of the Museum.

For non-resident visitors, it may be necessary to establish signage or other information which provides general interpretation while actively discouraging interference or damage to the sites. These warnings should not be couched too obliquely, but point out that any disturbance would destroy an irrepaceable part of the heritage of Australia, and that serious penalties are involved. These interpretation signs should not point out or direct the visitor to any specific areas or sites.

This is not the place for consideration of the long-term, future of the fishing camps on Beacon island. The sites on the island may well have suffered from the continuing occupation of the island by the crayfish fishermen. However, it is still the case that their presence during the crayfishing season, the period of maximum potential visitation, actively deters any extensive fossiking by either the fishing community or their visitors. The current

programme of limiting further development, stricter regulations for rubbish disposall, and other aspects of the island management plan will progressively limit the possibility of acidental disturbances. However, it may still be necessary to introduce new regulations to prevent any further ground disturbance.

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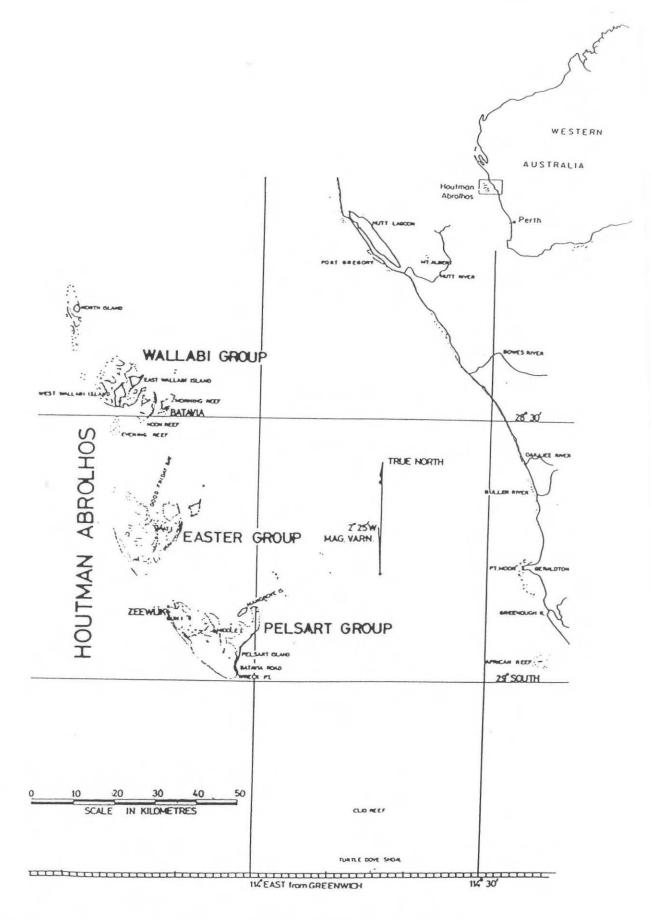


Figure 1. Location of Houtman Abrolhos and the Batavia Wrecksite

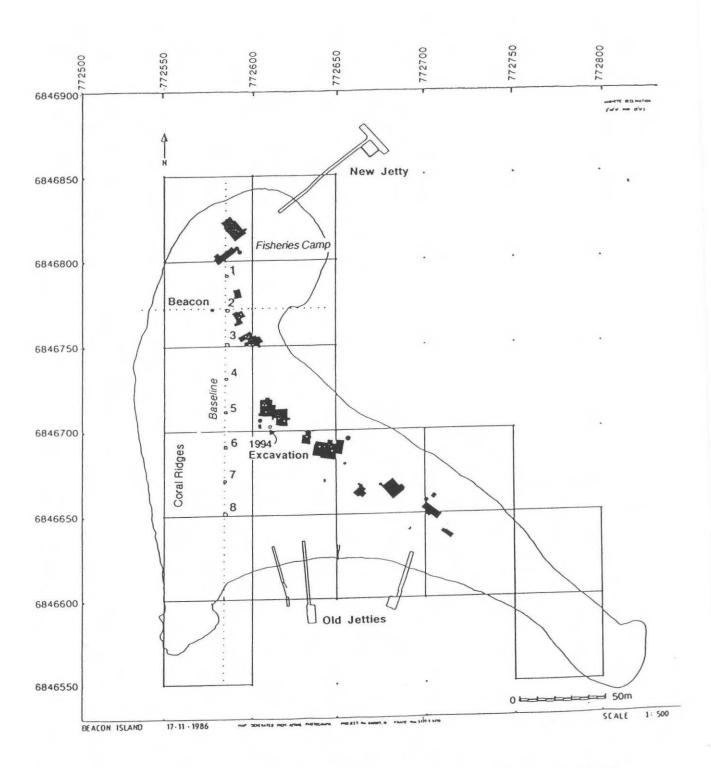


Figure 2. Beacon Island showing position of baseline and locations of 1992 and 1994 excavations.

Beacon Island Expedition 1994

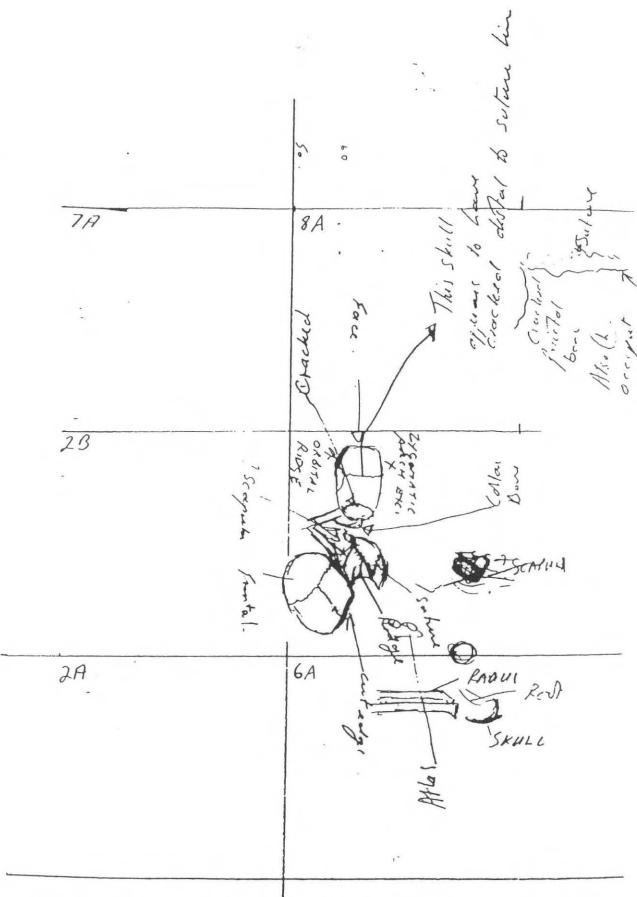


Figure 4. Field sketch of relative positions of crania (after Hunneybun 1995)

Square	Spit No.	Spit depth	No. of fragments
1B	1	0-5	0
	2A	0-10	3
	2B	10-17	2
	3	17-20	2
	4	20-25	3
	5	25-30	9
2A	1	0-7	- 0
	2	7-18	2
	3	18-22	2
	4	22-29	12
	5	29-33.5	6
2B	1	0-5	1
	2	5-12	8
	3	12-17	4
	4	17-22	10
	5	22-27	2
	6	27-32	15
		27-02	- 13
3B	1	0-2.5	1
	2	2.5-8.5	1
	3	8.5-16.5	4
	4	16.5-24.5	3
	5	24.5-29.5	11
	3	24.3-29.3	
4A	1	0-5	2
44	2	5-10.5	3
	3		2
	4	10.5-17.5	
\rightarrow	5	17.5-26.5	15
-	2	26.5-31.5	7
40	1	0.10	
4B	1	0-10	3
	2	10-15	9
	3	15-20	7
	4	20-25	3
5B	1	0-5	1
6A	1	0-5	2
7A	1	0-10	7
	2	10-20	18
	3	20-25	15
8A	1	0-10	3
	2	10-20	6
	3	20-25	1

Table 1. Number of Bone Fragments by Spit Depth (after Hunneybun 1994)

Date	No. of pieces	Description	Square	Spit Level	Location/Notes
16/06/94	3	1 x Long Bone Fragment	1B	2A	
		1 x skull?	18	2A	
		1 x scapula? cut sufaces	18	2A	
16/06/94	2	1 x very small frag bird bone?	1B	28	
		1 x very small long bone bird bone?	1B	2B	1mm thick; 10mm long
16/06/94	2	1 x nasal?	1B	3	21 x 12 mm
		1 x skull bone? near suture?	1B	3	13 x 12 mm
16/06/94	3	1 x bird bone?	18	4	14 x 9 mm
		1 x flat bone?	1B	4	27 x 13 mm
		1 x distal end of femur- small	18	4	29 x 19 mm ?human- possibly child
16/06/94	9	1 x unid	1B	5	31 x 27
		1 x artic. surface end of long bone?	1B	5	25 x 21
		1 x long bone frag.	1B	5	31 x 8
		1 x ?skull bone frag.	18	5	17 x 16
	i	1 x long bone frag.	18	5	6 x 16
		1 x long bone frag.	18	5	7 x 10
		2 x cancellous bone frag.	1B	5	9 x 7: 5 x 5
		1 x very small frag.	18	5	1 x 2
16/06/94	1	vertebra- possibly cervical	2A	2	
· hu 41 ***	1	rib frag.	2A	2	61 x 15
T. 127.51	1	Part of maxilla- Left with canine in situ	2A	3	Tooth worn on incisal edge
1 10 11	1	tooth premolar	2A	3	cusps very worn
	- 1	1 x right side temporal including			
16/06/94	12	styloid process, auditory canal etc	2A	4	
		1 x skull bone ? what	2A	4	34 x 28
		7 x rib frags	2A	4	122
		1 × unid frag	2A	4	19 x 11
		1 x skull frag		4 .	18 x 27
	Dec 200	1 x ?sheep tibia part	2A	4	
		a		4	AND THE STATE OF
16/06/94	6	2 x bird bones?	2A	5	
		1 × skull frag.	2A	5	23 x 15
		1 x shell frag?	2A	5	1.6 2 3
		2 x rib frags	2A .	5	
17/06/94	- -	Gib		- +	
18/06/94	8 :	first rib 1 x vertebra part	2B 2B	1 2	
10/00/94		2 x rib frag.	28	2	
	- 4	5 x very small frags.	28		
18/06/94	2	1 x nasal frag.	28	2	NAME OF TAXABLE
10/00/34		1 x orbital/nasal frag?	2B	3	
+	2	1 x skull frag. with suture	28	3	Fits with frags from spit
i		1 x skull frag	28	3	6
19/06/94	1	skull-?sphenoid/ethmoid	2B		skull 5?
	1	molar	2B	4	very worn skull5?
	1 ;	vertebra- part of axis	28	4	skull 5?
i	6	skull frags.	28	4	skull 5?

Table 2. Identification of Bone Fragments (after Hunneybun 1994)

	1	rib frag	2B	4	!
	1	right scapula	28	5\6	
	1	humerus-distal end	2B	5\6	
	1	humerus shaft	28	5\6	
	2	rib frags.	28	5\6	
	1	radius proximal and shaft	2B	3\6	
	1	ulna	28	3\6	
19/06/94	1	temporal zygomatic process	28	4\5	
	1	very small frag.	28	5	
	1	occipital frag	28	6	Skull 6 loose piece came away during excavation of skull 5
	1	vertebra- atlas	2A/B	6	skull 5 mini square
	1	frontal part of skull	2A/B	6	skull 5
	1			6	skull 5
		occipital part of skull	2A/B		
	1	skull frag. fits with left side of occipital suture	2A/B	6	fits with above spit 3 frag skull 5
	1	skull piece -2 pieces joined by suture fits	2A/B	6	fits with above spit 3 skull 5
		with above piece on left side of skull mastoid area	2A/B	6	skull 5
	1	skull frag. left side of foramen	2A/B	6	skull 5
	1	skull frag- ?fits	2A/B	6	skull 5
	1	vertebra- atlas	2A/B	6	skull 6
16/06/94		skull bone	20	1	A 1 4
16/06/94	1	* * * * * * * * * * * * * * * * * * * *	3B		
17/00/04		unid	3B	2 3	
17/06/94	4	rib frags	38	. 4	
	1	bird bone	38		
	2	rib frags	3B	4	
	6	very small frags rib?	38	5	
	1	vetebra	3B	5	
	1	skull	3B	5	100
-4.	3	unid	3B	5	14-4-

16/06/94	2	unid frags-flat	4A	. 1	
	3	unid frags	4A	2	
17/06/94	1	phalange	4A	3	
4774	1	tooth?-unid	4A	3	
	4	tarsal/carpal bones	4A	4	
	11	flat unid frags	4A	4	
	7	frags. unid	4A	5	
	3	unid frags	4B	1 loose	
18/06/94	1	second rib	4B	2	
	4	bird bone frags?	4B		
	4	unid human	4B	2	
	1	articular surface tibia	4B	3	
	4	unid frags.	48	3	(
1,140	2		******	3	1.5
19/06/94	1	bird?	4B 4B		
19/00/94		ramus	A 1 amount 4 44	4	
	1	carpal/tarsal	4B	4 1	
	1	flat small unid	4B	4	

Table 2. Identification of Bone Fragments (after Hunneybun 1994)

17/06/94	1	lower jaw frag	5B	surface 1	280
·	1 :	second rib	6A	loose 1	
	1	tooth with root	6A	loose 1	
18/06/94	3	skull frags.	7A	1	
	1	mandible frag.	. 7A	1	
	3	unid small frag.	7A	1	
	1	?first rib	7A	2	
	1	distal phalange	7A	2	
	1	?skull	7A	2	
	15	unid frags	7A	2	1
The state of the s	1	bird bone	7A	3	
	2	skull	7A	3	
7	5	bird bones	7A	3	***
	1	? human	7A	3	
	6	unid frags	7A	3	
	3	unid frags	8A	1 1	5 / 55 / 6
1	1	?tarsal bone	8A	2	*171 (100) (100)
-14.00	4	unid frags	8A	2	(**) (***)
	1	bird bone	8A	2	
0 (4	1	skull frag. with suture	8A	3	2 24 1

Table 2. Identification of Bone Fragments (after Hunneybun 1994)

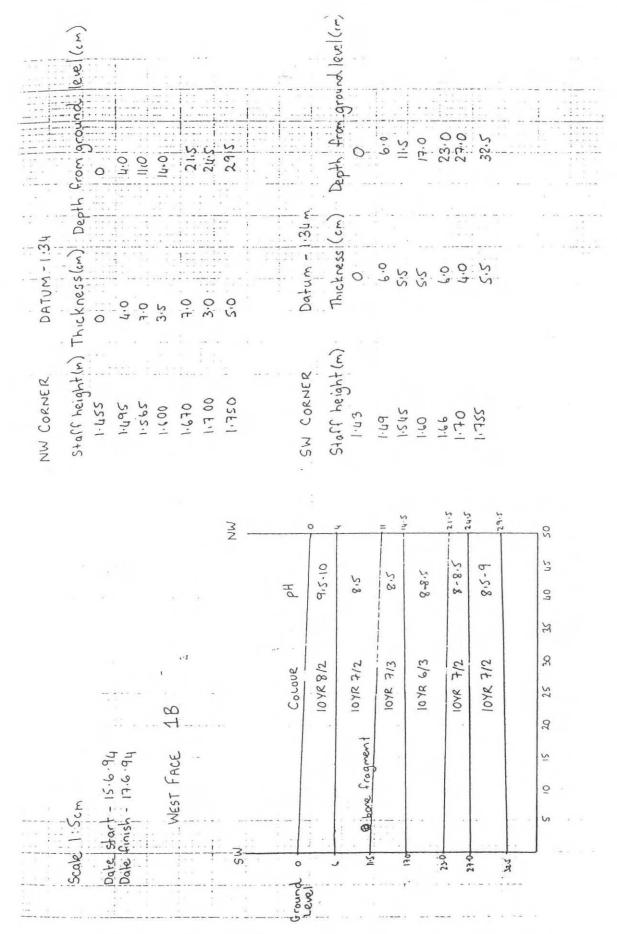


Figure 5. Excavation Levels - Square 1B (after Hunneybun 1994)

12. APPENDIX ONE

BEACON ISLAND Martin's Day Book

13 - 20th June 1994

The purpose of the expedition is to recover a skeleton located on the south edge of the yard of what was formerly Gliddon's camp. The skeleton was located by one of Gliddon's deckies, who was digging a trench from the toilet (the SE corner 6m west). There are no details of what he saw, although it was also suggested that there may have been a second skeleton in the immediate vicinity. Some information, possibly inaccurate, has been published by Goddard (1993).

Despite the disturbance, this will be the first skeleton excavated in a controlled manner. All of the others were removed in the 1960s, with varying amounts of photographic coverage. This will act as control, and with luck will give us some idea of in-situ preservation, allow us to take soil samples from in and around the bones (although as far as possible all soil will be left attached to the bones until we get to Perth), look at what items are preserved with the body, and so on.

The members of the expedition include myself, Ph.D. student, Archaeology, U.W.A., Myra Stanbury, Maritime Archaeology, W.A. Museum, Jenny Potts, archaeology student (U.W.A.) and assistant at the museum, and Bernie Hunneybun, honours student at Archaeology, U.W.A., who is analysing the other skeletal material from the island

Monday 12th June was spent driving up to Geraldton, and Monday 13th June in travelling to Beacon Island in the Fisheries Dept. vessel McGlaughlin (check sp.)

Tuesday 14 June 1994

Sunny and fine

Re-established baseline as per 1992: i.e. from a point exactly 7.5m east of the centre of the beacon. This previously formed the NW corner of TP2. Dransfield's hedge had grown over the area. Set up dumpy 0.5m north of this, and sighted over to the southern picket, which was still in place (although the iron is already deteriorating).

Fixed a point 70m from the datum (NW corner of TP2), which is slightly west of Gliddon's yard. Using an optical square we ran a line over the bushes (which are the highest on the island), and into the yard. The NE corner of the craypots which apparently lie directly above the skeleton are exactly 22m east of the baseline. We also ran another line east 22m from the 80m mark, to give another point to work from if necessary. This actually lands on the western edge of the track from Gliddon's which runs approximately N/S to the beach. (The skeleton is located more or less on the west side of the head of this track, just inside the yard). Given time we might continue this latter line and plot in (former) Johnson's hut, and the positions of the earlier skeletons.

Started to make a survey plan of Gliddon's backyard, but light was falling and the natives were restless, so we will recommence tomorrow. Hopefully can grid out and commence by late morning.

Wednesday 15th and Thursday 16th

Sunny and fine

Myra is recording most of the extra detail, so I'll concentrate on the excavation data.

Layed out squares to the NW and SW of the 70mS, 22mE point (squares 1 and 2), although digging only the southern portion of 1 (100cm x 50cm, labelled 1b), and the northern portion of 2 (100cm x 50cm, labelled 2a). Excavated levels as follows

1b		2a	
spit 1	5am	spit 1	5am
spit 2a	5cm	spit 2	10cm
spit 2b	5cm		
spit 3	5cm	spit 3	5am
spit 4	5am	spit 4	5cm

The depths are equivalent, although the base of 2a spit 4 is currently a little bit lower than that of 1a. Human skeletal material has been coming out in small pieces since spit 2, mainly from the western side of both squares. Almost all of it appears to be cranial, including the atlas, a section of maxilla with one incisor in place, another loose incisor, and various skull fragments. There are some smaller loose pieces from the eastern side. Left a

large and as-yet unidentified fragment in the SW corner of 2a. Also a large coral fragment in the base of 1b.

Decided to open the adjacent squares, so strung out and commenced exc of 3b (west of 1b) and 4a (west of 2a). Extremely heavy mutton-bird burrowing along the area of 4b. Levelled the two squares so that they will also fitt into the excavation levels of 1b and 2a. Also took out a spit 2 (5cm) from both. Cranial fragments coming from the loose surface (spit 1) fill, so it may pay to remove and sieve the top 5-10cm of surrounding squares if there is time. Obviously all this is a combination of what was dug through and thrown aside, and what the birds had thrown up from burrowing.

Current guess is that the pipe-trench passed through the body and the skull, which is spread a little east of the rest of the bones. We'll probably be able to tell by tomorrow lunchtime whether we'll find any intact sections.

Information from John Glidden passed to us by Rayna is that the men laying the trench were not aware what they had done until later. Unfortunately both have died. There is still no certain connection between this trench, the skeleton, and the sword handed back to the museum.

FRIDAY 17TH

Sunny and fine

Spent the first hour or so clearing the loose sand from the area of 2b, 4b, 5b and 6a, to try and slow down the spill into the pit. This is probably the equivalent of spit 1, although we didn't measure down to a fixed 5cm level. Some human material came out of this loose coral sand, probably a combination of spoil from the kicked out by the mutton-birds and

Continued 3b and 4a to the same level as 1b and 2a, the level that several larger pieces of bone were protruding from 2a. (Exc levels; spit 1-3 =5cm each, spit 4 = 10cm). Various small skull, vertebrae and rib fragments, although most of the layers seem heavily disturbed. We then proceeded to take all four half-squares down a further 5cm (poly-rope still appearing from base). However, an ulna, radius, and a fragment of lower cranium exposed in the SW corner of 2a. Will excavate 2b and 4b tomorrow.

Spoke to Steve, a former decky of John Gliddon, who assisted in the sinking of the sump and may have helped with the leach drain. These were dug possibly 6 years ago. At

least one skeleton was found near the sump, and another (possibly two) near the leach drain heading back into the hedge/vegetation area (i.e. 2b and 4b are in the right direction). He says that the skull from the sump area was intact, all teeth in lower and upper jaws, and with a sword wound on the cranium. Tom (deceased) who was also helping dig took the (at least one) skull and mandible. He suggested that Beryl, Tom's widow, may still have the skull (although he didn't know). He says they dug the drain and found one, possibly two other skeletons, after which they stopped digging. I'm pretty sure that he also made the comment that they either left these bones along, or put them back.

SATURDAY 18th & SUNDAY 19th

Sat: sunny and fine, but becoming overcast later (showers o/night)

Sun: Overcast with high winds and some showers. Heavy showers in evening.

[note: the datum has stayed constant throughout the excavation at 1.34m, taken from the SW corner of the wooden platform on which the southern water tank in Glidden's/Ashplant's camp stands. Surface level has varied, but is generally at 1.45m. Where there has been loose sand removed from the surface of surrounding squares, this has been cleared down to 1.50m, which is equivalent to spit 1 in the excavated squares. All spits in 5cm or 10cm levels.]

In summary, we extended the excavation half a metre to the south, to include squares 7a (behind 2b), and 8a (behind 4b). Excavated these in 10cm spits with levels equivalent to those used in the earlier squares. Continued to find small fragments of cranium and vertebrae, and at least a couple more teeth. Continued on Sunday by levelling all squares (about 35cm depth, but will check the excavation sheets). In the base of 2b I uncovered two crania about 20cm from each other. Because there are already four Batavia skeletons (or components thereof), we designated these as No. 5 (the northern cranium) and No.6 (the southern cranium). The dumpy reading from the top of No. 6 was at 1.735 cm (approximately 28cm below the surface, but check exc. sheets), with No. 5 being three centimetres lower than this.

Given limited time (the equivalent of one and a half working days), and worsening weather, we discussed several factors with regard to possible removal:

- 1. Although these were possibly only the caps of destroyed crania, they might also be intact and from undisturbed skeletons.
- We would not have sufficient time to adequately remove two, or even one complete skeleton, particularly in high winds and rain. (so if the decision was made to remove, did

we take only the crania, or these and whatever bones could be exposed within the existing squares, etc.).

3. If left in place, there was the possibility of further disturbance (i.e., the location is now known without doubt), so was removal warranted as a protection strategy? and so on.

A further 10cm spit was removed within a 35cm (n/s) by 60 cm (e/w) area including skull No.5 and the radius and ulna. A variety of other bones were exposed, including a scapula, atlas, and the occipital region of a skull (initially thought to be a third cranium). The radius and ulna turned out to be snapped a bit more than 3/4 along their length, while there was a third long bone visible, split along its length in what was obviously a modern fracture. Sk 5 also show recent fracturing, with a large, straight break along its rear. These markings and the clustering of the bones would suggest that these had all been disturbed and probably roughly thrown back together, which is consistent with Steve's account. There was modern material, including boot leather, iron fragments, and a piece of styrofoam cup mixed into the deposit in and around these.

Sk.6 would appear to be a more complete cranium, although there are several fractures across it. Although we intended to take cranial measures without removal, this had to be halted. A mutton-bird hole (about 15cm diameter) opened on the west side of the skull, actually passing below and slightly through the base, and continuing southeast on a slightly declining angle for at least 50cm. Using my arm I was able to feel bones for at least 20cm+ (including the base skull, but not necessarily a mandible), and with a probe there appeared to be other items (although possibly coral) for some distance beyond. The area seemed in danger of collapse, particularly if further weight was applied n the immediate vicinity of the mutton-bird burrow. I have poured sand into the hole, and used the probe to push it down some way, to try and provide a base for the skull at least, although it was quite difficult to push the sand back down the hole and over all I do not think it is very stable.

We decided to remove Sk5 once it was clear that it had been disturbed, as well as taking all loose bones within the 60cm by 35cm spit. Both the Sk5 cranium and the occipital piece immediately west of this were lifted out with all soil in place within them. Once this was done (with most of the island inhabitants spectating), another fragment of recently split long bone could be seen underlaying Sk6 (which in turn was immediately above a clavicle), suggesting that it too had been disturbed and re-deposited. However, at this point there is no plan to remove this. Gavin Ashplant has given permission to come back at a later date if necessary. Tomorrow we will backfill, placing a layer of sand and then black plastic over Sk6, followed by more sand and a layer of coral plate. This should act

as a deterrent for anybody trying to dug through to the skeletons, and hopefully spread any pressure on the skull. We will replace the crayfish holding pens over top of the surface.

The body count to date is;

- 1. One skeleton in vicinity of the sump. Skull removed by T.M.
- 2. Fragments of cranium (mostly parts of a maxilla?), and some pieces of rib and vertebrae in varying quantities recovered from loose sand and near surface spits on area of squares 1-8. Also one epiphysis of a femur?
- 3. Two crania in square 2B. The lower portion of Sk5 is not present, suggesting that the other fragments may belong to this, is not Sk6

No other artefacts associated with the skeletons or the Dutch occupation in general have been found.

There is no certainty what lies in the other squares in the next spit down, although I would think that there is a high probability that other bones would found within the next 20cm. It will almost certainly be necessary to extend the trench further east and possibly south, the latter requiring removal of the adjacent vegetation. Although there is modern disturbance throughout the deposit, we still have not found clear evidence of the leach drain, described by John Glidden as being an open piece of PVC pipe, which he indicated as being maybe 15cm diameter, covered with coral pieces. There is no clear sign of this disturbance within the cross-section, and even while digging the texture and nature of the matrix changed little between areas, except due to moisture differences. Jenny dug a sondage in square 3b to a further 20cm depth, at which point the poly-rope which had penetrated the deposit came free. She also probed n/s along the west wall of 3b, 4a and 4b, but could find nothing conclusive. If the drain is deeper, it may still have skeletal fragments mixed into the spoil.

MONDAY 20TH

Heavy rain and strong winds last night. Bernie and Myra reconstructing the skull Sk5, which appears to be all there, except for the face, although parts of that may be the more fragmented bits.

Returned to the site, which had filled with water and had to be bailed out. Covered Sk6 with sand, and placed a dymo (plastic) tape with "BAT EXC W.A. MUSEUM SK6 20-6-1994", with a similar tag noting the position of Sk5 in the adjacent depression. Placed a further ID tag in the NW side of 3b, and then covered the floor of the trench with plastic.

Put approximately 20cm of sand over the whole area. Used coral slabs to build a small shield around and over Sk6, and then placed flat coral slabs throughout the square. The hope is that this may deter any casual diggers, either because they'll think it is 'bedrock', or because they will be too lazy to go through and down to the plastic.

We also placed a metal peg wrapped in green string in the southwest corner of square 8a, This is slightly beneath the surrounding vegetation, and is not otherwise visible. All the soil was compacted and raked, and the cray holding pens brought back over the top, although Sk6 is probably just north of the edge of the most eastern pen.

Packed everything and cleaned up the camp. Took various slide photographs around the island, although it was only a 35mm 'snap-o-matic' type camera, with a fairly narrow field. We currently (4:30pm) have Rod & Bev Dransfield and Dan and A (?), Ian Power's deckie. Later tonight we have John Gliddon and Ian Ashplant and the other six people currently at their camp coming over for dinner. We depart on the fisheries boat at excatly 7:00am tomorrow, so we'll have to be awake by 6:00 am or earlier to vacuum and lock up the microwave and other goodies into the middle shed.