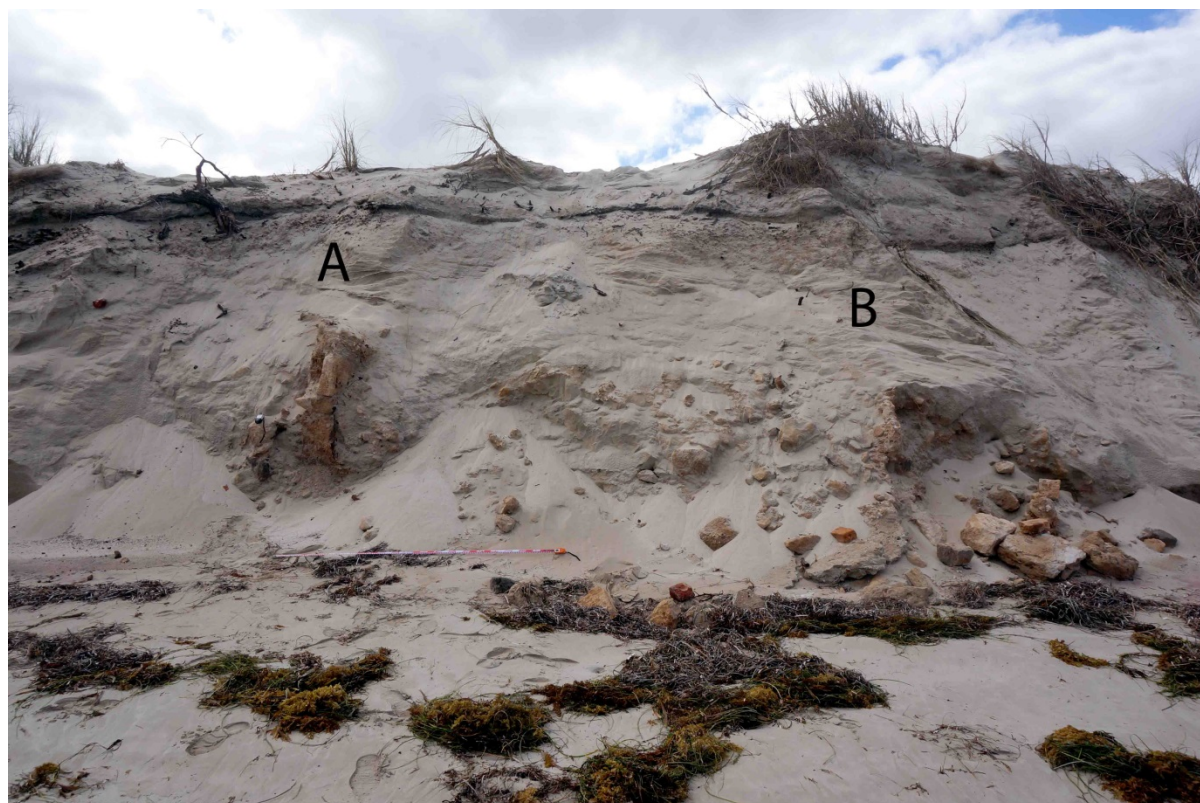


Pakington whaling station inspection, Port Gregory

12 June 2018



Ross Anderson

June 2018

Report—Department of Maritime Archaeology,

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**WESTERN
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Background

On 28 May 2018 Port Gregory resident Mr Greg Horsman reported to the WA Museum that storms and large swells had exposed historical materials on the beachfront at Pakington Whaling Station site, one kilometre north of Port Gregory. Significantly, whaling-related artefacts had become exposed, along with stonework from an intact wall on the beach and fore-dune not previously archaeologically recorded by Gibbs (1995) or Anderson and Rodrigues (2003) (Figure 1, Figure 2, Figure 3).



Figure 1 Stone wall exposed in foredune following storms in May 2018. Note render with tuck-pointing on front edge (Greg Horsman)



Figure 2 Dressed stone building blocks with render eroded from foredune, and lying exposed and scattered on beach in May 2018 (Greg Horsman)



Figure 3 Concreted iron whale oil ladle and copper 'scrap' ladle recovered in May 2018 (Greg Horsman)

The presence of an intact stone wall was considered significant as it would be one of the few surviving structures related to 19th century Western Australian colonial shore whaling, and an opportunistic inspection was immediately undertaken by WA Museum Curator Dr Michael McCarthy and Dr Howard Gray, Batavia Coast Maritime Heritage Association on 30 May 2018. Due to post-erosion dune collapse and natural beach sand replenishment the wall had become mostly reburied and was not able to be recorded, although some photographs of the area were taken (Figure 4, Figure 5). McCarthy and Gray noted extensive foredune erosion, and wrack deposition including seaweed and tree branches, indicating vegetated parts of the dune had been eroded. Occasional artefacts such as black glass sherds and burnt bricks were visible on the beach in the vicinity of the 4WD track, while the dune north of the track was undercut and unstable. Holes dug by fossickers to expose or remove historic materials were noted (McCarthy 2018).



Figure 4 Location of wall in fore-dune and eroded stone blocks on beach reburied by collapsing dune sand cover on 30 May 2018, view south (Howard Gray/ WA Museum)



Figure 5 Location of wall in fore-dune and eroded stone blocks on beach reburied by collapsing dune sand cover on 30 May 2018, view south-east (Howard Gray/ WA Museum)

Site inspection 12 June 2018

A further inspection was undertaken by the author on Tuesday, 12 June 2018, between 10.30 and 11.15am. Following further strong north-westerly storms in the preceding two weeks the fore-dune had been further undercut and eroded significantly, exposing two main sections of partial remains of stone walls along with a large extent of collapsed rubble that all appeared to be related to the same structure (Figure 6). The two intact sections of wall are identified as wall A and wall B (Figure 7, Figure 8).



Figure 6 GIS map showing Pakington whaling station features recorded on 12 June 2018 overlaid onto December 2013 aerial photograph, indicating the extent of dune erosion where Walls A and B are currently exposed. The possible 'stone jetty' feature on the beach is now approximately 20-30m offshore (WA Museum)

Wall A is the northernmost section consisting of partial remains of an intact standing stone wall constructed of cemented dressed limestone, handmade bricks (or fragments of) and rubble 1.76m in height above the high water mark (HWM). The wall is broken/ collapsed at the top, with dimensions of 40cm thickness at the top section and original thickness of 76cm (indicated by render on both sides) across at the lower section.

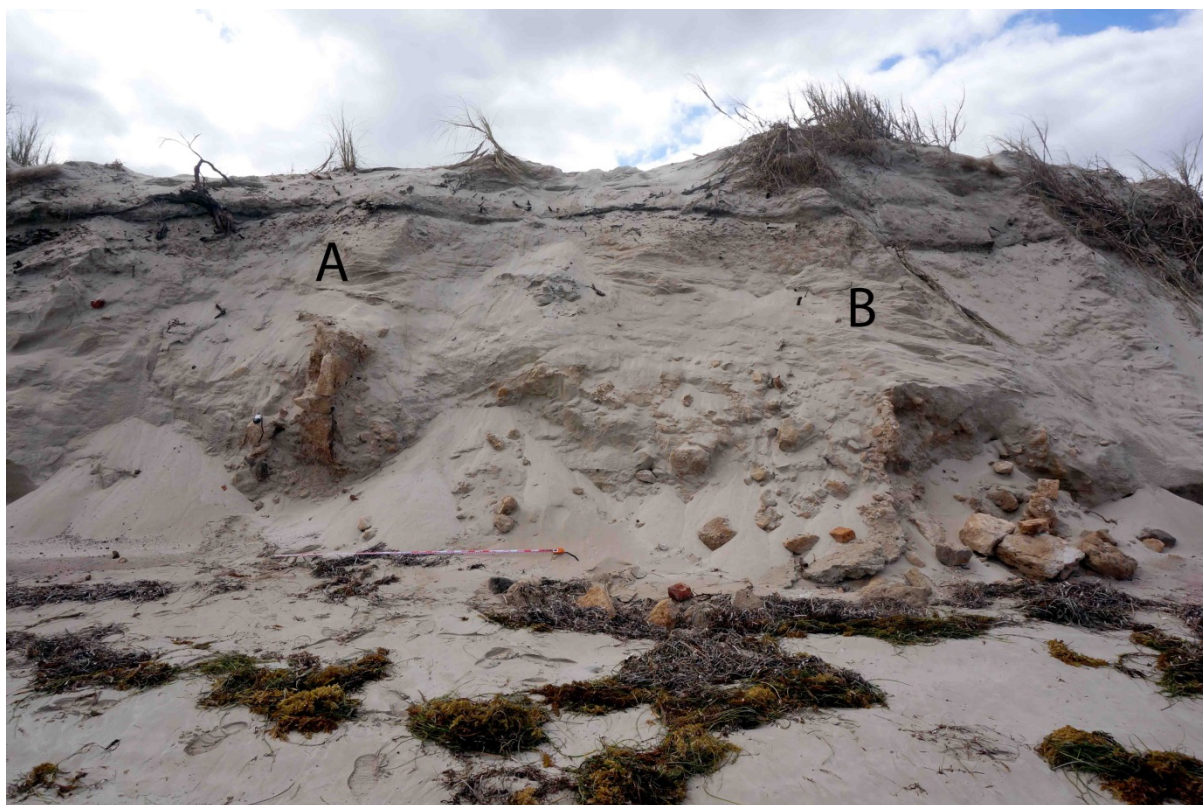


Figure 7 View east showing walls A and B, scale 2 metres (Ross Anderson/ WA Museum)



Figure 8 View north showing walls A and B, scale 2 metres (Ross Anderson/ WA Museum)

The wall is thinner at its top section, and is rendered and tuck-pointed on the northern side. The thicker, lower part of the wall is also rendered and tuck-pointed. The southern side of wall A has a thin metal (iron) plate lining/ jacket or covering (Figure 9, Figure 10). Alternatively it may be the remains of a metal oil cooling tank. A piece of hoop iron was sitting loose on top of the wall. A loose thin piece of metal with a corner, possibly remains of a tin or else related to the iron lining was sitting loose next to the metal lining of the wall. Charcoal was visible in a section at the base of wall A about 40cm above HWM (Figure 9).

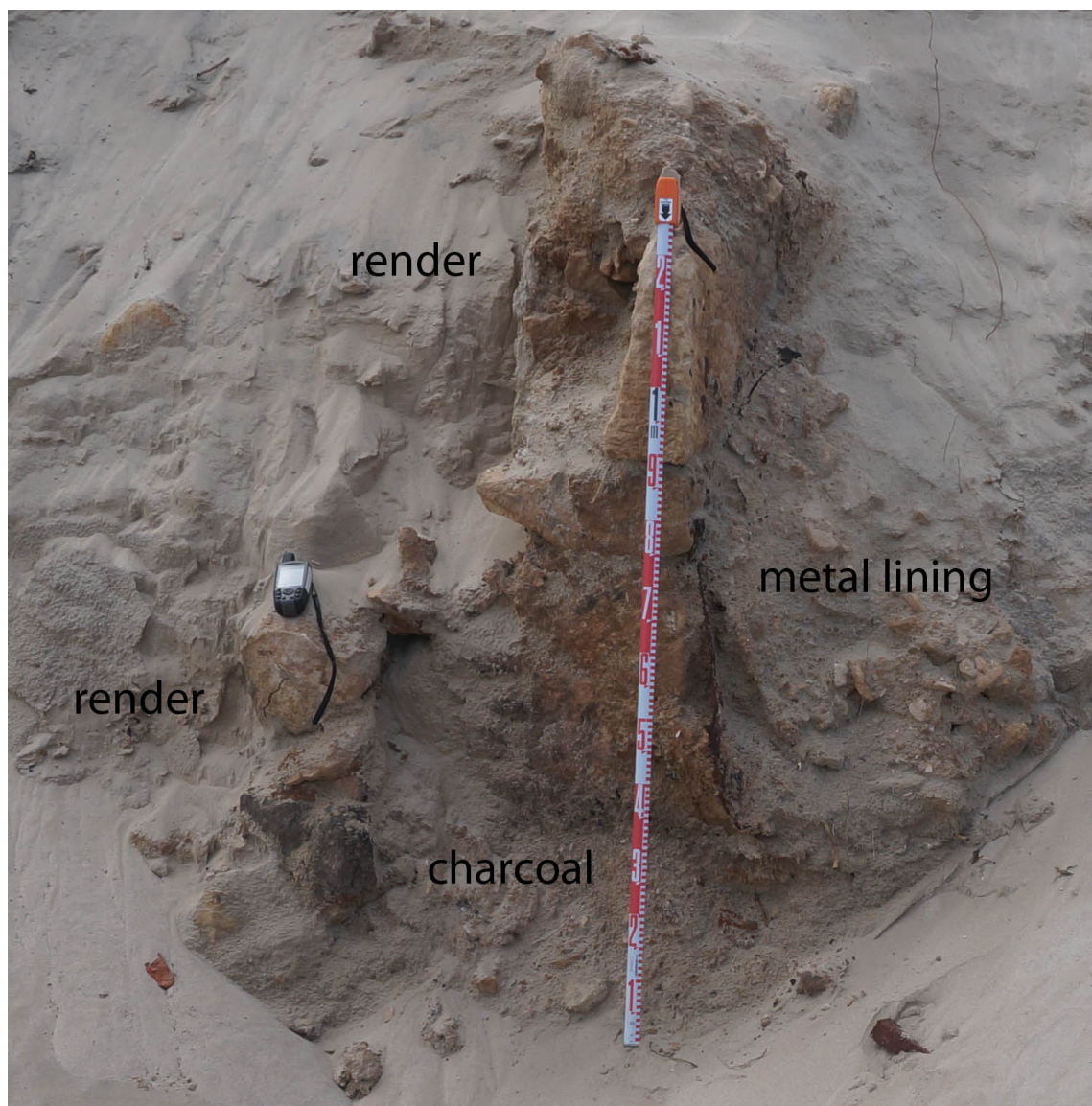


Figure 9 Detail of wall A construction, view east, scale 1.25 metres (Ross Anderson/ WA Museum)

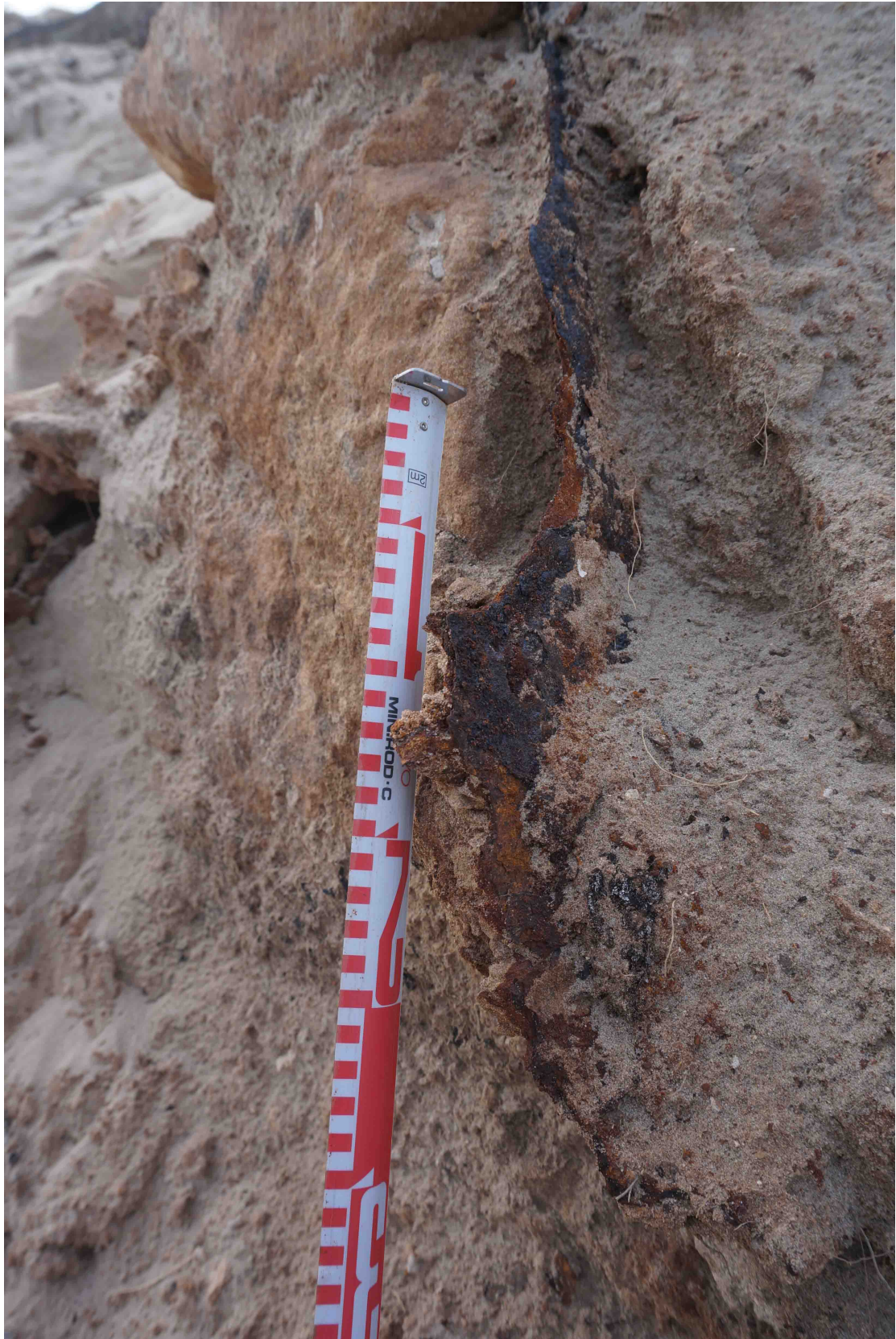


Figure 10 Detail of metal lining on south side of wall A, view north (Ross Anderson/ WA Museum)



Figure 11 Wall A view south, scale length 1.2 m (Ross Anderson/ WA Museum)



Figure 12 Detail of rendering and tuck-pointing on wall A northern side, view south (Ross Anderson/ WA Museum)

Wall B consists of remains of a collapsed wall of 1.9m thickness, although this is a bit indeterminate due to the state of collapse, but approximates to the same thickness as Wall A's 1.76m. Wall B stands a height of 1.4m above the HWM, and is constructed of dressed limestone, handmade bricks (or fragments of) and cemented stone rubble. Collapsing remains of a cement floor were made of a conglomerate of primarily cement with broken brick and stone fragments, including burnt brick, with an average thickness of 12cm (Figure 13). An unidentified bone (possibly bovine) was cemented into the underside of one cement floor fragment (Figure 15). The southern side of an intact section of the wall was rendered and tuck-pointed (Figure 16). A piece of brick with metal attached to one side was also observed in this area.



Figure 13 Collapsed cement floor and hand-made brick (Ross Anderson/ WA Museum)



Figure 14 Dressed stone with broken hand-made brick in area of rubble collapse (Ross Anderson/ WA Museum)



Figure 15 Bone embedded in base of cement floor (Ross Anderson/ WA Museum)

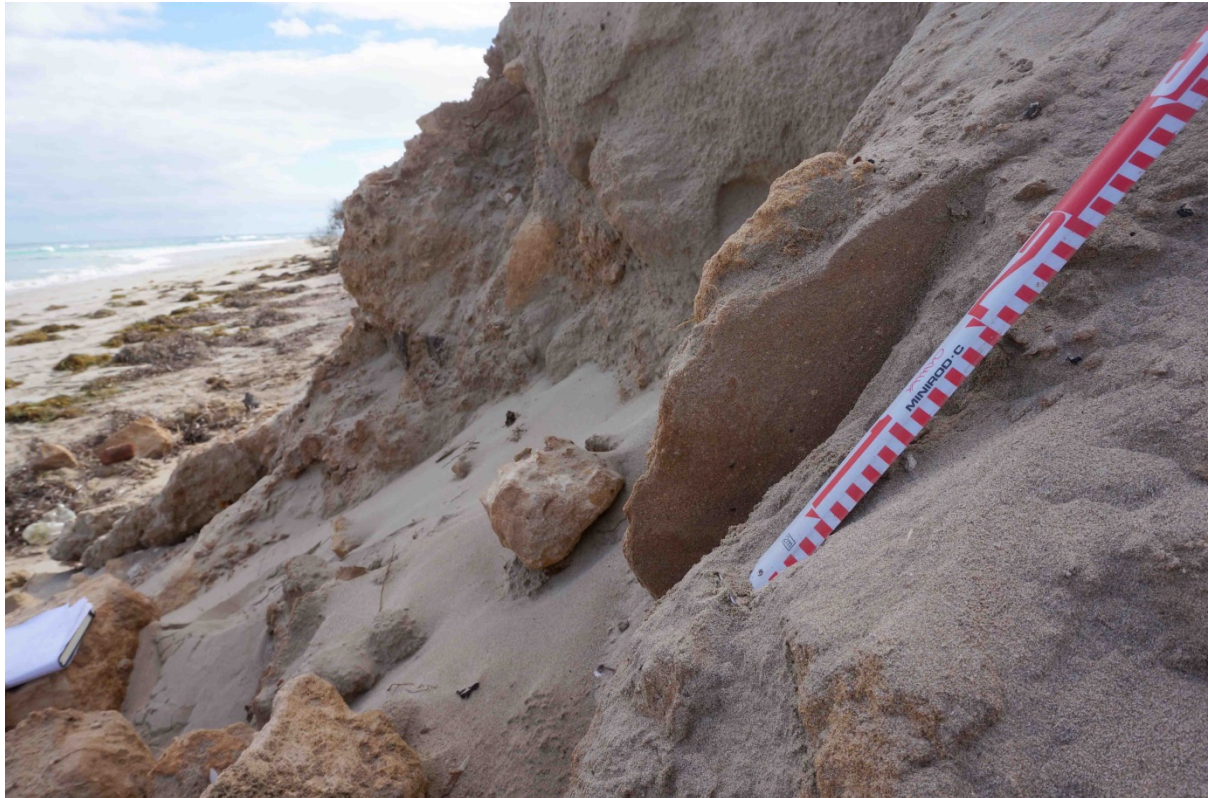


Figure 16 Detail of rendering on south side of wall B, view north (Ross Anderson/ WA Museum)

The distance between the inner/ southern edge of wall A and the inner/ northern edge of wall B is 2.7m. Between wall A and wall B is an amorphous extent of stone/ rubble collapsing out of the dune, concentrated closer to wall B. Both walls A and B are wider at their bases, apparently due to their upper walls collapsing.

The fore-dune is currently a steeply-fronted and slope-backed parabolic dune (Figure 17). The top and rear of the dune were inspected for any further signs of structure or artefacts, with none seen.

Of interest were two broken handmade bricks observed eroding out of the dune both at a height of 2.0m above HWM—higher than the exposed, visible wall structures—4.8m north of wall A (Figure 18). One brick with evidence of burning was recovered as a sample (Figure 20). If the bricks are from an upper part of the structure since collapsed, they could be possible evidence for a fire which reportedly destroyed Captain Sanford's try-works in the 1858 season (*The Perth Gazette and Western Australian Journal*, 13/8/1858: 2).

A number of large, loose stones including dressed stones—all limestone—are scattered southwards down the beach between the walls and south of the 4WD track. One dressed stone had iron/ concretion attached (Figure 19). These appear to have originally been part of the structure that were eroded and redeposited southwards as the result of the recent storm events.

A distinctive large rectangular dark patch was observed in water on a sandy bottom about 2-3 depth about 15-20m offshore which may be the submerged 'reef' of whalebone or 'stone jetty' previously reported.



Figure 17 View of top and rear of foredune in area of structure (Ross Anderson/ WA Museum)

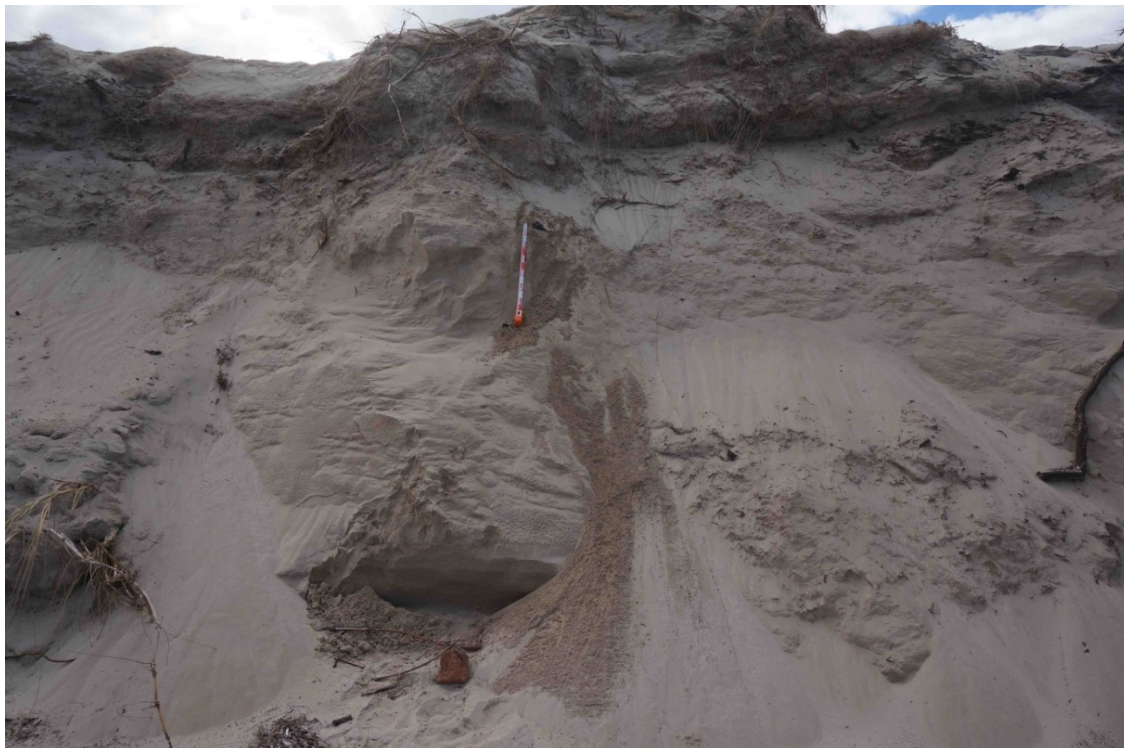


Figure 18 Top of scale located next to burnt brick eroding out of top of collapsing sand dune (Ross Anderson/ WA Museum)



Figure 19 Dressed stone with iron concretion attached lying on beach south of structure (Ross Anderson/ WA Museum)



Figure 20 Burnt brick sample (Ross Anderson/ WA Museum)

Two artefacts handed into the Geraldton Museum by Mr Greg Horsman were collected and transported back to the WA Shipwrecks Museum, Fremantle. These

were a large 30cm diameter concreted iron whale oil ladle in a fragile condition, and a smaller 13cm by 13cm ladle made of worked copper sheet, such as would be used for removing scrap blubber from a try-pot during the trying out process. The large iron oil ladle appeared to have been a mass manufactured item, while the smaller ladle appears to have been simply made using materials to hand i.e. copper sheet.



Figure 21 Large 30cm diameter concreted iron whale oil ladle (Ross Anderson/ WA Museum)

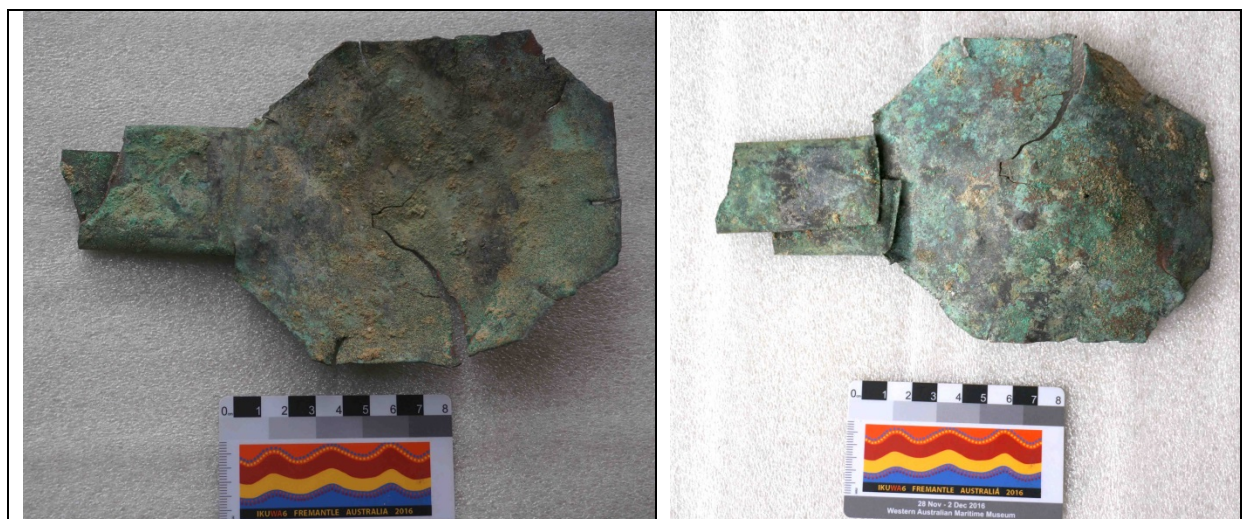


Figure 22 Top and reverse sides of scrap ladle manufactured from copper sheet

Discussion

The location of the structure on the beach facing Gold Digger Passage entrance in the known location of Pakington whaling station, and the presence of charcoal, burnt bricks and whaling-related artefacts indicates the structure has a function related to

whaling-related industrial activities, and is possibly a try-works. The Port Gregory whaling station was the site of two whaling operations that for at least three seasons between 1857 and 1860 operated concurrently, one led by Captain Henry Sanford (with David Ronayne in 1854 and with Joshua Harwood from 1855 to 1860) and another led by John Bateman between 1857-1875 (Gibbs 1995: 373).

The presence of dressed stone, cement and rendering with tuck-pointing is an indication that the structure was built with some care, and had an intended long-term life span. It also appears to be archaeological evidence that the structure is contemporary with the construction of the Lynton Convict Hiring Depot (established 1853) and Lynton Station, both built using convict labour, and where quarrying and lime-burning activities were being undertaken to construct the Hiring Depot buildings. While there is no documentary evidence for Port Gregory's whaling structures having been built by convicts, the Lynton Hiring Depot was intended to support a strategy of colonisation by providing labour to support private individuals such as pensioners and the pastoral elite (Gibbs 2007: 57). Apart from quarrying, convicts also spent much of their time building roads to the Geraldine mines, and the road and causeway to Port Gregory—thus locally sourced building materials, labour and transport were available.

One of the pastoral elite was Captain Henry Sanford, brother of artist and architect William Ayshford Sanford, Western Australia's Colonial Secretary between January 1852 and July 1855. Captain Sanford had been appointed as the Assistant Superintendent of the Lynton Hiring Depot, but was forced to resign his position in November 1854 following allegations that he had misappropriated government stores and convict labour to construct his neighbouring homestead Lynton Station (Bain 1996: 22; Gibbs 2007: 60). Although it was illegal for convicts to work on shore whaling stations due to the risk of their escaping aboard vessels, Gibbs (2007: 61) regards it as likely that convicts worked at Sanford's Port Gregory whaling station as 'ticket-of-leave men were employed on the mines, and on various properties throughout the area assisting with construction, agricultural and pastoral activities, including at Sanford's Lynton Station'. Overall, the use of convicts to obtain and transport materials to construct buildings at Pakington whaling station would have been entirely consistent with Captain Sanford's historically documented behaviour of misappropriating government stores and convict labour for his own enterprises.

Dimensions of try-works found on 19th century Western Australian shore whaling stations range between 2.10m width at Cheyne Bay (Gibbs 1995: 437), 3 x 2m at Barker Bay, King George Sound (Gibbs 1995: 421) and 2.5 x 1.5m at Castle Rock, Geographe Bay (Gibbs 1995: 406). The Port Gregory structure is larger than all of these with the exteriors of Wall A and Wall B (as taken from rendered wall edges) located around 6m apart, so it is comparatively large if it is a try-works structure.

Comparison of photographs taken prior to, and during this inspection clearly show that there has been further significant erosion in the intervening two week period. Figure 1 shows rendering on the front edge of Wall A which was intact when initially exposed, but has subsequently collapsed. Given that the fore-dune has eroded significantly further since 28 May 2018, and is steep and continuing to collapse with more wall structure exposed, the structure and any associated artefacts are currently at risk from further damage/ collapse due to storm erosion.

The discovery of the structure provides further evidence to assist in answering questions about the layout and operations of the Port Gregory/ Pakington whaling stations, and the possible use of convict labour in the construction and operation of the station. At this stage it is considered most likely that the structure is related to Captain Sanford's whaling station for the following reasons:

- 1) Captain Henry Sanford arrived at Port Gregory prior to John Bateman, and would have had an advantage over Bateman by occupying this prime location opposite Gold Digger Passage, which was the most strategic and accessible position to enter and exit Port Gregory, and tow whales inshore for processing;
- 2) the comparatively grand nature of the construction and materials compared with other post-1840s Australian shore whaling stations, made with dressed stone and rendering with tuck-pointing, strongly suggests a link with the similarly constructed Lynton Hiring Depot and Lynton Station complex where quarried stone, concrete and convict labour for transport and construction were available; and,
- 3) there is historical evidence for Captain Sanford's misappropriation of government stores and convict labour to build Lynton Station, resulting in his dismissal from the office of Assistant Superintendent of the Lynton Hiring Depot in November 1854, and supporting the case that he similarly misused government stores and labour to build (and possibly operate) Pakington Whaling Station.

Based on the above it appears most likely that the structure would have been built in 1854 during Captain Sanford's first year of setting up Pakington whaling station, and prior to his dismissal as Assistant Superintendent of the Lynton Hiring Depot.

Recommendations

- 1) That the State Heritage Office and Shire of Northampton are notified of the recent discovery of this historic structure and materials at Pakington Whaling Station;
- 2) That the Pakington Whaling Station is nominated to be placed on the State Heritage Register as a significant part of the Port Gregory heritage landscape including the Lynton Convict Hiring Depot, Lynton Station and SS *Xantho* (1871) shipwreck, and protected by the *Heritage of Western Australia Act* 1990;
- 3) That the site is monitored closely over the coming 2018 winter season, especially following any further northwest storms, to record any other structures, features and artefacts that may become exposed.

Appendix A: GPS points

Description	Latitude	Longitude
Wall A	28.18682	114.24033
Wall B	28.18688	114.24037
Stone on beach south of Wall B (extent of main collapse)	28.18691	114.24040
Burnt brick eroding out of sand dune	28.18676	114.24032
Loose stone on beach	28.18716	114.24068
Loose stone on beach	28.18713	114.24062
Loose stone on beach	28.18723	114.24072
Loose stones (5) on beach (centre)	28.18721	114.24098
Large dressed stone on beach	28.18723	114.24100
Dressed stone with iron concretion on beach	28.18724	114.24105
Loose stone on beach	28.18726	114.24116
Loose stone on beach	28.18727	114.24141

(Datum GDA94)

References

Anderson, R. and Rodrigues, J. with contributions from M. McCarthy, 2006, Pakington whaling station, Report—Department of Maritime Archaeology, WA Museum, No. 214, Fremantle. (http://museum.wa.gov.au/maritime-archaeologydb/sites/default/files/no.214_port_gregory_2.pdf)

Bain, M.A., 1975, *Ancient landmarks—a social and economic history of the Victoria District*, WA, University of WA Press, Nedlands.

Gibbs, M., 1995, The historical archaeology of shore-based whaling in Western Australia 1836–79., PhD thesis, Volume 2 Appendices. University of Western Australia, Crawley: 373-377.

Gibbs, M., 2007, Lynton: convicts, landscape and colonisation strategies in Midwest Western Australia, *Australasian Historical Archaeology*, 25: 57-69. (http://www.asha.org.au/pdf/australasian_historical_archaeology/25_04_Gibbs.pdf)

McCarthy, M., 2018, Beachfront erosion at Pakington Whaling Station, Port Gregory, Site inspection report 30 May 2018, WA Museum, unpublished report.

McIlroy, J., 1987, Whaling stations survey, unpublished draft report.

The Inquirer, Western Australia, 9 June 1859.

The Perth Gazette, Western Australia, 3 August 1858.

The Perth Gazette and Western Australian Journal, Port Gregory whaling furnace fire 13 August 1858, p.2.