Report on the 2011 Jane Bay wreck site investigations August– September 2011

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Phillip Kendrick, Ningaloo Station manager holding a bunch of mulla mulla

INTRODUCTION

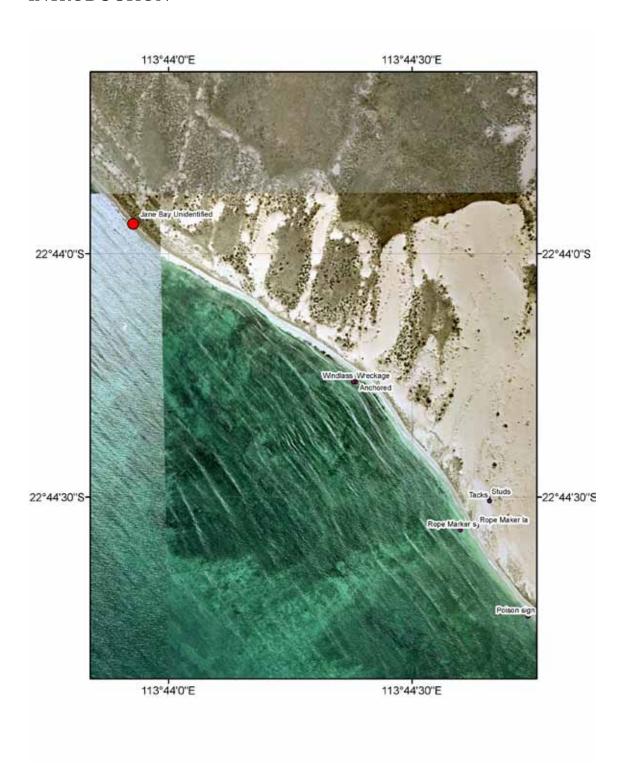


Figure 1. Plan of Jane Bay area showing sites investigated during 2011 expedition.

In September 2011 a WA Museum team visited Point Cloates to further investigate the Jane Bay One (JB1) site that was originally located in 2009 (see Green, 2011). It was intended to visit the area, with the Museum's work boat *Seaspray* and a large team, during the August–September Spring Tides and to attempt to uncover the remains of the vessel. Unfortunately due to staff commitments, it was not possible to mount a full-scale expedition so, rather than miss the Spring Tides, a small expedition was

undertaken. The objective was to try and uncover the Jane Bay One (JB1) Site during low tide and in addition, to investigate a new wreck report of wreckage south of the JB1 Site. The expedition team consisted of this author, Patrick Baker, Geoff Glazier from OmniStar, and Susan Green. Equipment included the Department of Maritime Archaeology Marine Magnetics overhauser magnetometer (to provide the option to carry out a magnetic survey); an ELSEC underwater metal detector; a MineLab SD2200 land metal detector; an OmniStar differential global positioning system (DGPS); a 6-m aluminium dinghy and outboard motor (to provide access to the beach, since there were no quad bikes available and the site was only accessible via the beach or by sea); a Leica total station; and, digging equipment. The team travelled up to Point Cloates on 27 August and camped at the Ningaloo Station beach shack, worked for five days and returned to Perth on 2 September.

JANE BAY ONE SITE

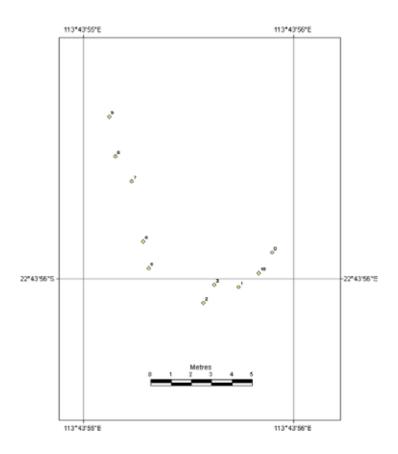


Figure 2. Site plan of JB1 made in 2009 using probe and metal detector showing the outline of the site.

In 2009, the JB1 Site was uncovered during a storm that occurred during Spring Tides. The site was discovered by Sam and Jeanette Gammon who unfortunately, at the time, did not have a camera to photograph the uncovered timbers. Returning the next day the site was once again covered with sand and by the time the expedition arrived a few months later it was under about 300–500 mm of sand. However, by digging and probing it was possible to determine the outline of the timber (Figure 2) and recover timber samples.



Figure 3. Probing JB1 site in 2011 (Photograph Patrick Baker).

Returning to the site in 2011, although there was a good GPS position of the site (Figure 1 on page 1), probing failed to make contact with the ship's timbers at a depth of 2 m and metal detecting failed to detect the bronze bolts that had been detected previously (see Green, 2011 fig. 119). It was obvious that the beach sand had built up and it was, therefore, decided to abandon the plan to uncover the site as it would entail an enormous amount of work, well beyond the capabilities of the team.

JANE BAY TWO SITE (JB2)

On our arrival at Point Cloates, the manager of the station, Phillip Kendrick (see cover picture), advised us that an anchor and some wreckage had been sighted in the shallows about one kilometre south of the JB1 site and he had marked the spot with a sign. The team proceeded to the new site the day after abandoning the JB1 excavation. Snorkelling around the area the site was quickly discovered. It appeared to be a windlass and some iron fittings. The site was photographed (Figure 4) and the GPS coordinates recorded. Visibility was not particularly good at the time, but the windlass appeared to be about 2 m long, and some other wreckage was noted in the area. Since we did not have diving equipment, it was decided to note the position of the site on the GPS and leave it for a future expedition.



Figure 4. JB2 Site underwater showing what is thought to be a windlass (Photograph Patrick Baker).



Figure 5. Underwater view of JB2 Site showing windlass (Photograph Patrick Baker).

THE SAND DUNE SITE

During the expedition to Point Cloates the team visited Sam and Jeanette Gammon, who had reported the JB1 site to the Museum in 2009. During this visit they reported that they had found a land site about two kilometres south of the JB1 site, where there were the remains of glass bottles, metal tacks, copper alloy nails and stone tools. The team met the Gammons at the site and investigated the area (Figure 6). It consisted of a large sand blow-out, with a scatter of artefacts and the remains of turtle shells (Figure 7) around the area. There was no evidence of any building or structure and the artefacts were widely scattered. Discussion later with Jane and Billy Lefroy indicated that there was once a shed at that location, possibly part of an out station. There was evidence of water near the surface and it is likely that both Aborigines and Europeans had occupied the site.



Figure 6. A general view of the Sand Dune Site, note the small shoreline dune, the area directly behind this is where water was noted, the higher dunes on the left appear to be eroding (Photograph Patrick Baker).



Figure 7. Remains of turtle shell on the Sand Dune Site (Photograph Patrick Baker).



Figure 8. Metal tacks and copper alloy nails and bolts collected by Gammons from the Sand Dune Site (Photograph Patrick Baker).



Figure 9. Stone flakes collected by Gammons from the Sand Dune Site and said likely to be of local origin and chalcedonic silica types (Alex Bevan pers. comm. 19 October 2011, Photograph Patrick Baker).

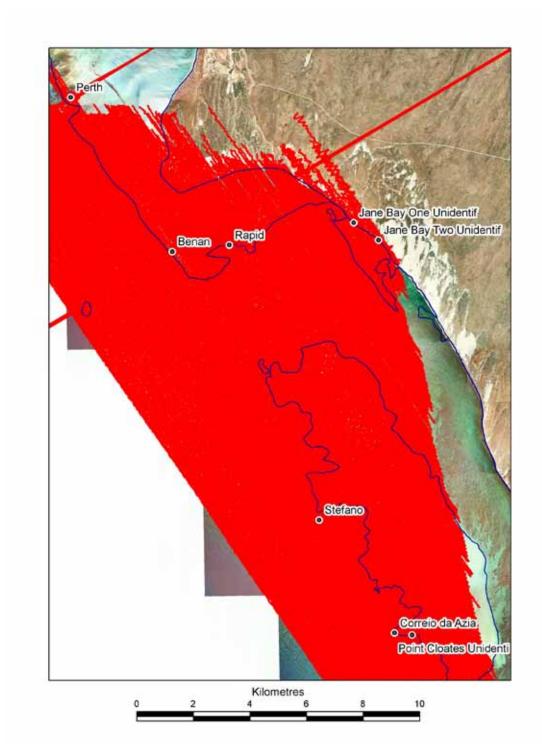


Figure 10. The original 2004 Fugro aerial magnetometer survey.

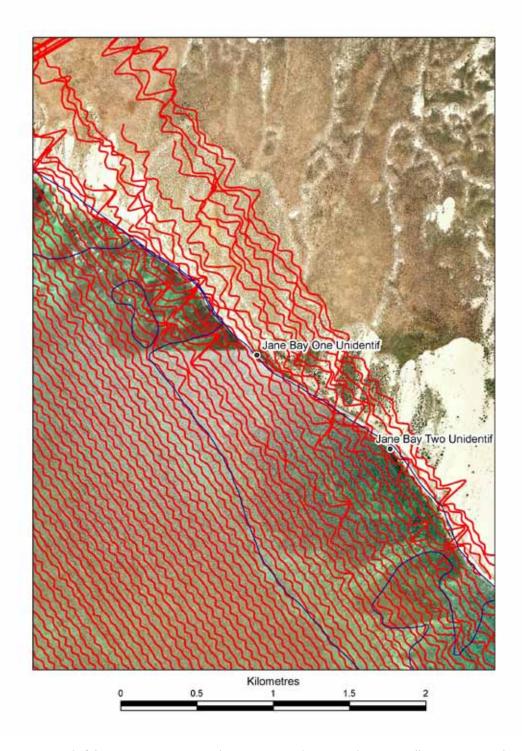


Figure 11. Detail of the 2004 Fugro Survey in the Jane Bay wreck site area showing small magnetic anomalies.

During the expedition to Point Cloates, the aerial magnetic survey carried out by Fugro in 2004 was re-examined (Green, 2003). The survey included an area of the coast in Jane Bay, in and around the JB1 site. Although in the north-eastern area of the Fugro survey there was a lot of geomagnetic activity which would tend to obscure small wreck sites, it was possible that some of the anomalies to the north of JB1 could be wreck material rather than geomagnetic. On the last day of the expedition a magnetometer

survey was carried out over the area where the Fugro survey indicated anomalies. The aluminium dinghy was set up with a MacBook Pro laptop computer running VMFusion Windows emulator. The magnetometer and OmniStar DGPS were linked to the Marine Sonic software that allowed the magnetometer field intensity and the GPS position to be recorded while tracking the path of the survey vessel in real time. This was not an ideal way of conducting a survey, because, in an open dinghy, there is no shade and the computer screen was difficult to read. However, it was possible to carry out several tracks (Figure 12) that indicated quite strong magnetic anomalies in two places (Lat -22.73320° Long 113.72940° and Lat -22.7304° Long 113.7279°).

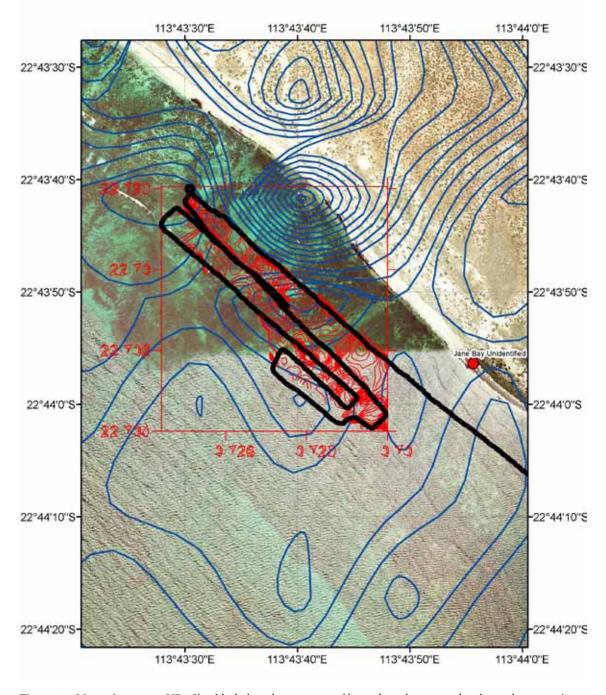


Figure 12. Magnetic survey of JB3 Site, black dots shows course of boat, the red contour plot shows the magnetic anomalies found in 2011 ad blue contour plot is the 1994 Fugro aerial magnetic survey.

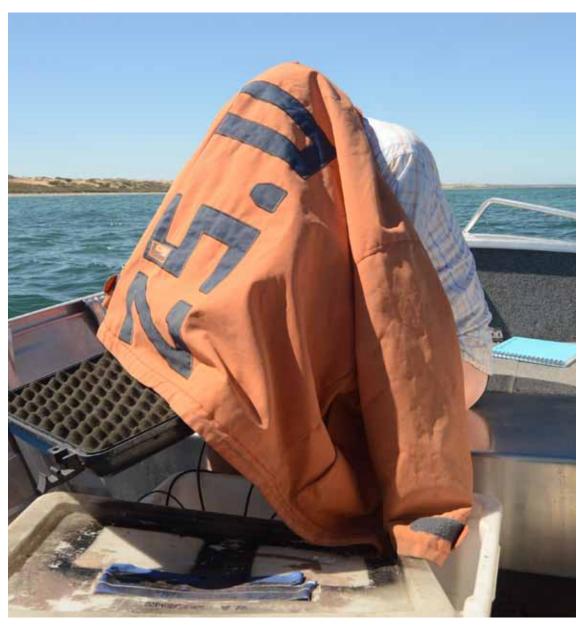


Figure 13. Non-ideal survey proceedure on the JB3 Site (Photograph Patrick Baker).

CONCLUSIONS

The 2011 expedition was a successful expedition, locating two potential new wreck sites. Although it was not possible to uncover the JB1 Site, the position is known from the 2009 expedition and awaits further investigation. The two new sites again raise some interesting questions that were discussed by Stedman (2011). Firstly, it is now becoming clear that the report by Walcott in 1876 and his map showing four wreck sites on the beach is in fact correct.

Walcott described the scene when he arrived at Point Cloates on 7 June 1876 after being dispatched in the schooner *Victoria* to investigate the loss of the *Stefano*:

On 8th June at 6 a.m. left ship...Made a minute examination of the different wrecks or parts of wrecks and from differences of wood and size of spars I came to the conclusion that no less than four—possibly five vessels of considerable tonnage had been wrecked within seven or eight months. The wreck of the *Stefano* was pointed out by the natives...This wreck, since it verified beyond a doubt

as the *Stefano* appeared to us the oldest wreck on the beach...In her immediate neighbourhood on each side within ¼ mile of her were two other vessels, or sides of vessels partially buried in the sand...One of them was Indian built—hard wood—I should judge about from 300 to 500 tons burthen. The other was oregon pine, and apparently American built—about the same size. Further up the beach S. Westerly was the deck of a softwood ship...A little further south westerly on the beach, just awash was the side of a very large vessel—apparently lately wrecked (hard wood very like teak) copper fastened and coppered. I should judge her to be a vessel of about 1000 tons. I noticed the other side of apparently the same vessel afloat about ¼ mile from the beach (P. Walcott to R.J. Sholl, Cossack 21 June 1876 quoted in Henderson and Henderson,1988: 178–80).

The Gammons and Annie Boyd (pers. comm. 13 July 2009) reported timbers being washed up on the beach. Some of these timbers were analysed by Ian Godfrey (Stedman, 2011: 139–41) who found two examples with an identifiable provenance: Southeast Asian teak (*Tectona grandis*); a yellow pine type native to North America. Some of the timbers indicate that they have recently come off a wreck, since they show evidence of flat unabraded surfaces. It would appear, therefore, that a recent storm or cyclone has uncovered sections of a wreck which are now in the process of disintegrating and washing up on the shore.

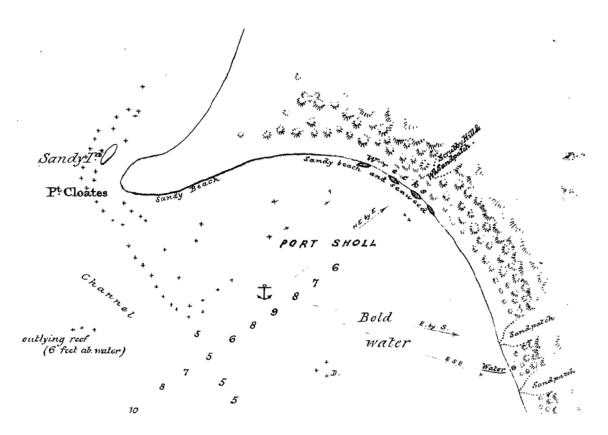


Figure 14. Walcott's 1876 chart of Point Cloates showing four wrecks on the beach.

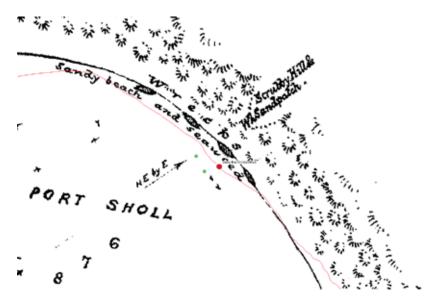


Figure 15. Detail of Walcott's chart showing position of JB1 and the current coastline (red).

Some urgency is therefore required to locate these sites before they are totally washed away. In addition, the 2004 Fugro survey should be reexamined to determine if some of the small magnetic targets are in fact sites.

ACKNOWLEDGEMENTS

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