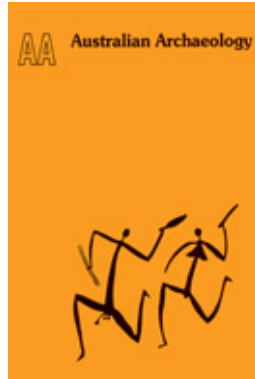


Australian Archaeology



Archived at Flinders University: dspace.flinders.edu.au

Full Citation Details:

Jones, R. 1979. A note on the discovery of stone tools and a stratified prehistoric site on King Island, Bass Strait. 'Australian Archaeology', no.9, 87-94.

A NOTE ON THE DISCOVERY OF STONE TOOLS AND A STRATIFIED
PREHISTORIC SITE ON KING ISLAND, BASS STRAIT

Rhys Jones

A short visit to Don Ranson's excavations at Sundown Point, northwest Tasmania, in January 1979, allowed me to take the newly established 'Executive Airlines' route from Wynyard to Melbourne via King Island. This initiative once more gives to the traveller the same access to King Island that earlier fliers enjoyed when bi-plane aircraft having much less range than the modern Fokkers or jets, had to stop at Currie for re-fuelling, the passengers being refreshed with afternoon tea in a small tea room on their way across the Strait (N.B. Tindale, field notes 9/4/1936).

No archaeological remains definitively attributable to the prehistoric period had ever been made on King Island, although I remember being present in Professor W.D. Jackson's room in Hobart during the 1965 ANZAAS Congress when a school teacher from Currie showed us a pale cream flake which he said had come from a large sand dune near the Currie School (see Jones 1977:348). When Baudin's expedition visited the island in 1802, no Aborigines lived there, the bush was unburnt and no traces of recent occupation were found. Yet King Island was once part of the Bassian Plain during the last glacial period when the sea was some 100m below its present level, linking the island both to Tasmania and the Australian mainland (Jennings 1971; Jones 1977) so that the eventual discovery of prehistoric remains on King Island has long been predicted. It was with these thoughts in my mind that I touched down on Currie airport on the evening of the 19th of January 1979.

The following rain-swept morning, I drove a hire car in a generally southerly direction, stopping occasionally to look at swamps and road-side sections where old dunes had been cut through. The almost universal propensity of King Island farmers to enclose their lush green cattle paddocks with electric fences meant that my off-road wandering was reduced to nil. By mid-morning I found myself in thick coastal heath on the end of the track called the Seals Rock Road in the extreme southwest of the island at a place known locally as 'The Petrified Forest'.¹ This is an area of eroded calcarenite (or calcareous aeolianite) perched some 60m on top of a cliff of Precambrian metamorphic rock which drops sheer to the sea below. This coast, fully exposed to the great westerly winds and swell, has claimed many lives, the most famous disaster

¹ Both Mr Charles Turner of Burnie and my taxi driver from the airport to Currie, Mr Peter Snodgrass, had suggested that this area might be worth looking at.

being the wreck of the emigrant ship *Cataraqui* in August 1845, when almost 400 people lost their lives. The Petrified Forest is located 5km south of Cataraqui Point, named after this event, and is only 5km north of the lighthouse at Stokes Point, the southernmost cape of King Island. The calcarenite itself displays cross-bedding indicating its origin as a wind blown sand dune, and it is similar to other calcarenites along the west coast of King Island, especially the massive deposits around Currie, and at Mount Cameron West in northwestern Tasmania where the famous rock carvings are cut into such rock. It is likely that these calcarenites were formed during some interglacial high sea level period in the middle or upper Pleistocene. At The Petrified Forest itself, calcareous solution tubes once formed around the roots of trees. These are now exposed by erosion and rise sometimes a metre or more from the calcarenite slabs and some overlying calcareous sands, forming a gnarled sylvan landscape that gives the place its apt name.

Having wandered over the tilted slabs, and in a deepening silent sea mist, admired the gothic formations, I was walking away towards the cliff edge, when I noticed a few pieces of white quartz on a sandy dune floor. These perfectly natural stones were out of place, but there seemed so many possible agencies such as birds or even modern tourists so as not to have to invoke the acts of ancient men. Over a period of about an hour, I came across several dozen pieces of white quartz and larger blocks of a dark grey metamorphic rock lying on the eroded sand dune deposit. They had definitely been transported here; the metamorphic rocks were too big for birds, and too angular for the stomachs of seals; and there were no commanding heights to the landward side from whence such stones might have been rolled down by water. Yet try as I might to conjure up flake scars, none of these stones showed any definite diagnostic features proving a human origin.

Eventually, I found two large weathered flakes of dark grey arkosic sandstone¹ with prominent bulbs of percussion and negative flake scars on their dorsal surfaces, which despite some chemical weathering which had eroded away the detail of the edges of the conchoidal scars, I was fairly sure would convince the greatest sceptic (Fig.1). I had been so engrossed in my search that I did not notice the wind swinging round to the west, but standing up I suddenly felt the cold blast of a massive squall with lightning coming in from the sea, too short a distance away for me to try and regain my car. I huddled behind a low tea-tree bush and in the following 15 minutes was so chilled that I shivered. When the squall passed however, I stood up, and all around me were literally scores of flakes, the sand washed clean from their surfaces and their wet conchoidal faces sparkling in the sun.

Albert Goede said in his paper to the 1976 ANZAAS Conference in Hobart that 'Archaeologists do not find archaeological sites, they are found by geomorphologists and farmers' wives'. For once, an archaeologist had found a site but like the wives and other honest tillers of the soil I also was at a loss to know what to do with it. I had not come prepared for any such eventuality, but felt that I had a responsibility to make an initial assessment of the authenticity and potential importance

¹ Identification by P. Hughes, M. Sullivan and J. McGee

of this site. I reported my work to the Director of the National Parks and Wildlife Service of Tasmania, Mr Peter Murrell, immediately on my return to Canberra, and an invitation from him to prepare a preliminary report on the site forms the basis of this paper.

The Petrified Forest site (K.I.T.P.F.1)

The main archaeological site (Locality 2),¹ located some 400m to the south of the tourist area, is backed by a wind-eroded arena approximately 80m long and 30m wide, cut into a series of sand units which display three main soil formations totalling about 5m in depth, all resting on the basal calcarenite.

The top sand resulting from modern instability rests on two yellow sand units, each topped by a weak soil formation. These, forming eroded faces totalling some 4m thick, rest on a grey-pink calcareous and weakly-cemented sand about 50cm thick. This cemented calcareous sand, being relatively resistant to erosion, forms three flat lobes, up to 97m long and 15m wide, from the top surfaces of which are found calcareous formations, probably calcified root casts of tea and other trees which once grew from a higher surface. Within this grey-pink calcareous sand, some 20 stone tools and many specks of carbonate-encrusted charcoal were seen *in situ* in the faces of various small eroded gullies. This calcareous sand rested on hard calcarenite which locally seems to impede the downward flow of water so as to form a water-table with a slippery algae-like material on its surface. Perhaps the degree of calcium carbonate deposition within the grey-pink sand unit may be partly influenced by this damming effect of the underlying calcarenite.

Analysis by Philip Hughes (Department of Prehistory, ANU, 4-7 August 1979) of a sample of the grey-pink calcareous sand, showed it to consist of 11% CaCO₃, the acid-insoluble residue consisting of 'well-rounded fine quartz sand - most clear and bleached white with a few yellow and reddish iron oxide stained grains', his conclusion being that it was a 'classic and somewhat bleached dune sand', the carbonate being all secondarily deposited. A carbonate concretion collected from the surface of this grey-pink sand proved to consist of 56% CaCO₃. A charcoal sample (3.9gm) obtained from this grey-pink sand has given a preliminary radio-carbon date of 7670 ± 150 BP (ANU-2189) (John Head pers. comm.).

The Petrified Forest site is situated some 60m above sea level close to the edge of a cliff which plunges down almost perpendicularly to the sea, and then below to a depth of some 25 fathoms (45m), reaching a depth of 35 fathoms (64m) only 1km offshore. There are few parts of the present Australian coastline that are so close as this to the presumed coast during substantial

¹ Locality 1, a surface site only, is where the initial discovery was made, about 200m west of the tourist area.

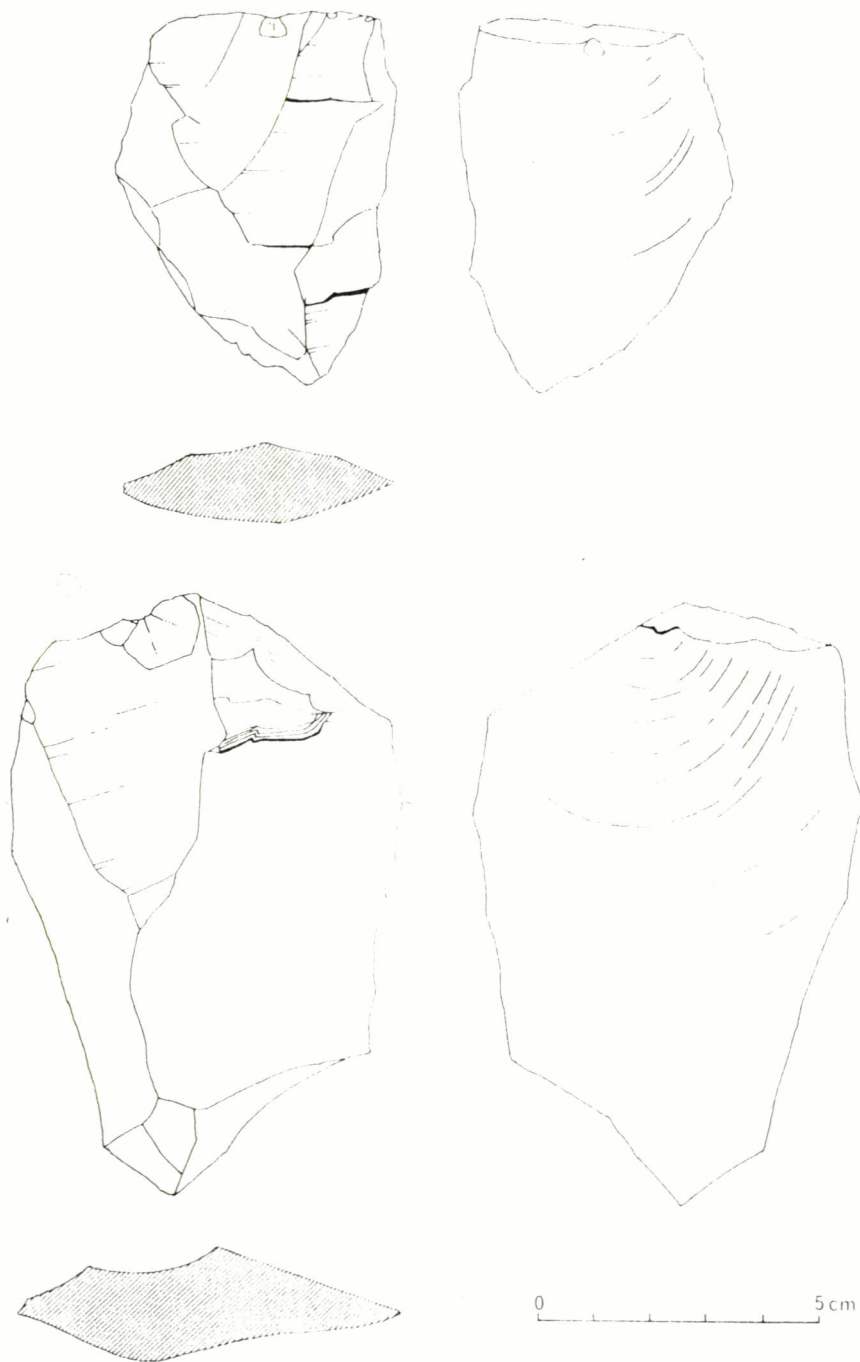


Fig 1

periods of the last glacial low sea level. The question arises as to the source of the sand which had blown up onto the cliff and thus formed the site. The C14 date, if confirmed by other more controlled samples, would indicate that the sand of the grey-pink calcareous unit was blown up as the sea reached the foot of the present cliffs in the final phases of the sea-level rise, when more sand was being piled up in the transgression than dissipated by wave action. This date and the general stratigraphical context corresponds well with those obtained by Orchiston and Glenie (1978:130) in the Palana site on the north coast of Flinders Island in the eastern part of the Bass Strait. It will be interesting to compare these dates with the results of samples now in the ANU Lab from the Swashway Saddle site on Erith Island (Jones and Lampert 1978).

The stone assemblage

From the hundreds of stone tools lying on the surface, a small representative collection was made, as discussed above, for corroboration and analysis. The assemblage seems to consist of the following main elements.

1. There are many large unifacial and bifacial choppers flaked off pebbles or slabs of rock, including quartzite. These correspond in size and general rough flaking characteristics to the choppers of Kangaroo Island as described by Tindale (1939) and more recently by Lampert (1977).
2. There are 'horse hoof' core-scrapers of a somewhat rough nature, mostly on quartzite.
3. Steep edged scrapers on a variety of materials including quartz.
4. Large, lightly retouched flakes of quartzite, or hard grey calcrete.

In addition to the above large elements there are also small tools made exclusively from white quartz.

5. There are many tiny and very well worked 'thumb-nail scrapers'.
6. Also in quartz are many bi-polar flaked 'pièces écaillées' or 'scalar pieces', which might have been either tools in their own right or more likely cores for the manufacture of small quartz flakes (White 1968).

Of these tool types, choppers, thumb-nail scrapers, and scalar pieces were all seen *in situ*, suggesting strongly that we are dealing with a single stratified assemblage.

This assemblage reminds me of that from Pigs Waterhole on Kangaroo Island (Lampert pers. comm.), having smaller choppers than those at The Petrified Forest but also well-developed small scrapers and bipolar pieces mostly of quartz. In terms of the latter two

elements, the Petrified Forest assemblage is also similar to that from Green Gully of an approximate age not much older than 8000 BP in the Maribyrrong Terrace, Keilor, some 200km to the north/north-east (Wright 1970:92). The limited stone assemblage from Cave Bay Cave on Hunter Island, dated to between c.18,000 and 20,000 BP, consisting of one quartzite horse-hoof type core-scraper and about seven scalar pieces and a thumbnail scraper of quartz would fit into the Petrified Forest collection (Bowdler 1979).

In general terms, the assemblage would fit into the Australian Core Tool and Scraper Tradition, as outlined by Lorblanchet and Jones (in press). I must admit that typologically, I would have placed it into a general 15,000-25,000 year old bracket rather than the 7500-8000 one which the single carbon date seems to indicate. Either the date is wrong or the assemblage on King Island is already typologically 'archaic' or retarded compared with contemporary developments elsewhere both in northwest Tasmania (Rocky Cape lowest levels, Jones 1971) and southeastern Australia (Green Gully, Clogg's Cave, Seton site).

For what it is worth, my initial impression of the Petrified Forest assemblage is that it has a stronger Kartan 'feel' to it than any other surface assemblage I have seen on the Tasmanian mainland or in my excavations there.

Implications

If the radiocarbon date is confirmed subsequently then people were living on King Island some 2000-4000 years after it was separated from Tasmania (Jones 1977:359-60). This separation occurred relatively rapidly with the rise of the sea from minus 30 fathoms (54m) to minus 25 fathoms (45m). We thus seem to have the same situation as that suggested by Orchiston and Glenie (1978) from Flinders Island. My previous suggestion that King Island was totally abandoned just as the point of its insulation seems refuted by this C14 date. Clearly before further theoretical discussions are embarked upon, we need a systematic investigation of this site.

The Cape Farewell site (?)

While engrossed on the stratigraphy of the above site, I missed my plane connection back to Melbourne and being forcibly reminded that I was on an island, I had to stay another day on King. Spending some time visiting the northern tip near the Cape Wickham lighthouse, I wandered about 2 or 3km to the southwest to Cape Farewell, where there was again some calcarenite overlain by more recent sand dune deposit. A few minutes observation revealed a schist stone tool¹ *in situ* in one of these

¹ Ron Lampert is not convinced that this object is a tool.

deposits which from a brief inspection, seemed to have less carbonate in its material than that at the Petrified Forest. However, there was no charcoal or other obvious material to be dated.

It seemed a long time ago since a few days previously when I was reading in a hire car, its radio blaring, Robert Hughes' review (*Time*, January 22, 1979) of a Ben Nicolson exhibition of paintings made in another sea-surrounded land that I once knew well:

'The mild light of the peninsula, sometimes as crystalline as the Aegean, and its rolling antique contours of moorland and coast...that green ledge of land shelved with granite and glittering in marine air'.

Acknowledgements

I thank Nic Green who drew the flakes in Figure 1. Philip Hughes carried out the soil analysis and John Head gave me the preliminary results of the C14 date. Maureen Johnson typed the text. All tools and other materials will eventually be forwarded to the Tasmanian Museum and Art Gallery. Photos and field notes are held in the Department of Prehistory Archives. I appreciate my conversations about King Island with Jim Allen, Don Ranson and Charles Turner. I should also like to thank Ken Dorofeeff and the King Islanders for their hospitality.

*Department of Prehistory
ANU, Canberra*

References

- Bowdler, Sandra 1979 Hunter Hill, Hunter Island. Unpublished PhD thesis, Department of Prehistory, ANU, Canberra
- Jennings, J.N. 1971 Sea level changes and land links. In D.J. Mulvaney and J. Golson (eds) *Aboriginal Man and Environment in Australia*. Canberra, pp.1-13
- Jones, Rhys 1971 Rocky Cape and the problem of the Tasmanians. Unpublished PhD thesis, University of Sydney
- Jones, Rhys 1977 Man as an element of a continental fauna: the case of the sundering of the Bassian bridge. In J. Allen, J. Golson and R. Jones (eds) *Sunda and Sahul: prehistoric studies in Southeast Asia, Melanesia and Australia*. Academic Press: London, pp.317-86

- Jones, Rhys and R.J. Lampert 1978 A note on the discovery of stone tools on Erith Island, the Kent Group, Bass Strait. *Australian Archaeology* 8:146-9
- Lampert, R.J. 1977 Kangaroo Island and the antiquity of Australians. In R.V.S. Wright (ed.) *Stone Tools as Cultural Markers: change, evolution and complexity*. AIAS: Canberra, pp.213-8
- Lorblanchet, M. and Rhys Jones (in press) Les premiers fouilles à Dampier (Australie de l'ouest) et leur place dans l'ensemble Australien. In J. Garanger (ed.) *La Préhistoire de l'Océanie*. Paris
- Orchiston, D. Wayne and R.C. Glenie 1978 Residual Holocene populations in Bassiania: Aboriginal man at Palana, Northern Flinders Island. *Australian Archaeology* 8:127-41
- Tindale, N.B. 1937 Relationship of extinct Kangaroo Island culture with cultures of Australia, Tasmania and Malaya. *Records of the South Australian Museum* 6:39-60
- White, J. Peter 1968 Fabricators, outils écaillées, or scalar cores? *Mankind* 6:658-66
- Wright, R.V.S. 1970 Flaked stone material from G.C.W-1. *Memoirs of the National Museum of Victoria* 30:79-92