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A CARVED PUMICE HEAD FROM PAPAMOA, BAY OF PLENTY

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A carved pumice head was found in a midden (U14/2844) at Papamoa in July 1995 (Figs 1 and 2). Worked pumice from archaeological contexts is not rare but is relatively under-researched. This paper briefly describes the head, its provenance and age.

Description

The head is carved on a small flattish and rounded pumice cobble. Its maximum dimensions are 87mm x 52 mm x 28 mm. An elongated face, with prominent eyes and mouth, is carved on one end of the cobble. The middle of the face is unclear, having been damaged in prehistoric times. The eyes are represented by two small raised oval areas (about 12mm by 10 mm) each with a narrow ridge across it. The mouth was formed by cutting into the pumice surface and removing a wedge of material about 10mm long. Swirls resembling a spiral are at the rear edge and overlap parts of the ventral and dorsal surfaces. Elsewhere on the artefact, on the rear and sides of the head, are patterns of linear incisions, some of which are near-parallel.

Provenance

The artefact was found in a midden located on the L.S. Johnston Trust subdivision. The subdivision is located 300 m behind Papamoa Beach in an area of old sand dunes, which run roughly parallel with the coast (Fig 3). The sand dunes were extensively gardened in prehistoric times and middens (U14/2832-2842, 2844, 2845) contemporary with the gardens are found at various places along the dunes (Gumbley and McFadgen 1995; McFadgen and Walton n.d.). Some of the middens have been well mixed into the garden soil, others such as U14/2841 (Fredericksen, Barber and Best 1995) are relatively undisturbed by gardening.

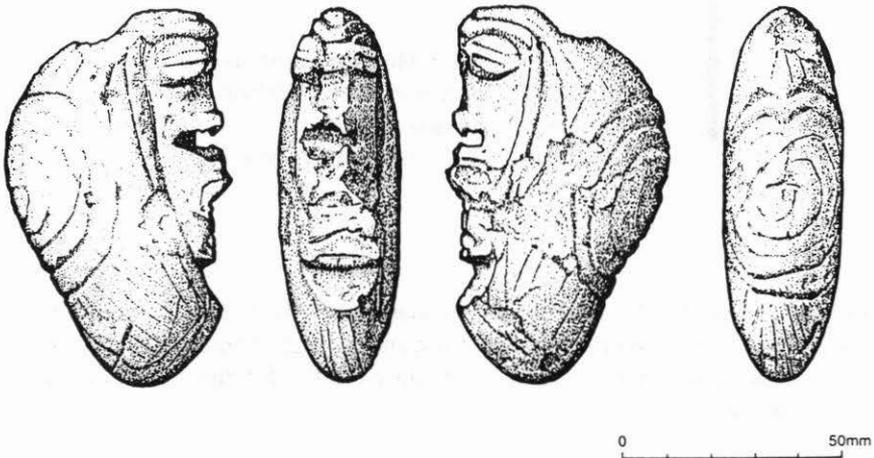


Figure 1. The carved pumice head from U14/2844 (from Fredericksen, Barber and Best 1995)

The area of the subdivision was investigated by the New Zealand Historic Places Trust (Warren Gumbley) and the Department of Conservation (Bruce McFadgen and Tony Walton) prior to development. As part of the investigations, trenches were mechanically excavated at intervals across the dune ridges and swales (Fig 4), and extensive exploratory mechanical excavation was undertaken at a large midden, U14/2844.

U14/2844 is a mosaic of shell lenses containing conspicuous quantities of fish remains spread along the south flank of a dune ridge for about 30 m. The dune has been gardened and the shell lenses are interspersed with the gardened soil. The shells are mostly tuatua (*Paphies subtriangulata*) and ostrich foot (*Struthiolaria papulosa*). The pumice head was found by Tony Walton at the base of the midden. The exact location of the find spot was recorded but the use of a mechanical excavator for the work precluded a more detailed identification of its original stratigraphic context.

Two other pieces of worked pumice were found by Fredericksen, Barber and Best (1995) during their excavation of a nearby midden (U14/2841). Both pieces were small, being less than 108 mm long. One piece has a curvilinear,

vaguely zoomorphic, design with three slash strokes across it, the other has a trapezidal motif formed by four incisions (Fredericksen, Barber and Best 1995:Appendix C).



Figure 2. Stereogram of the carved head from U14/2844 (Photograph: B. McFadgen).

Dating

There are no radiocarbon dates for the midden in which the head was found. The garden soils are more or less continuous and the middens occur in, under and mixed into the soil. It is, therefore, a reasonable inference that the middens and gardening were contemporaneous. Radiocarbon dates for nearby middens stratigraphically associated with the gardens should, therefore, give a guide to when the head was dropped or deposited in the place it was found.

Seven dates on shells from two nearby middens are available. Four dates (Wk 4189-4192, Table 1) are from midden U14/2841 (Fredericksen, Barber and Best 1995:17, Appendix A) immediately west of the midden with the head, and three dates (Wk 4493-4495, Table 1) are from midden U14/2844 about 100 metres to the east.

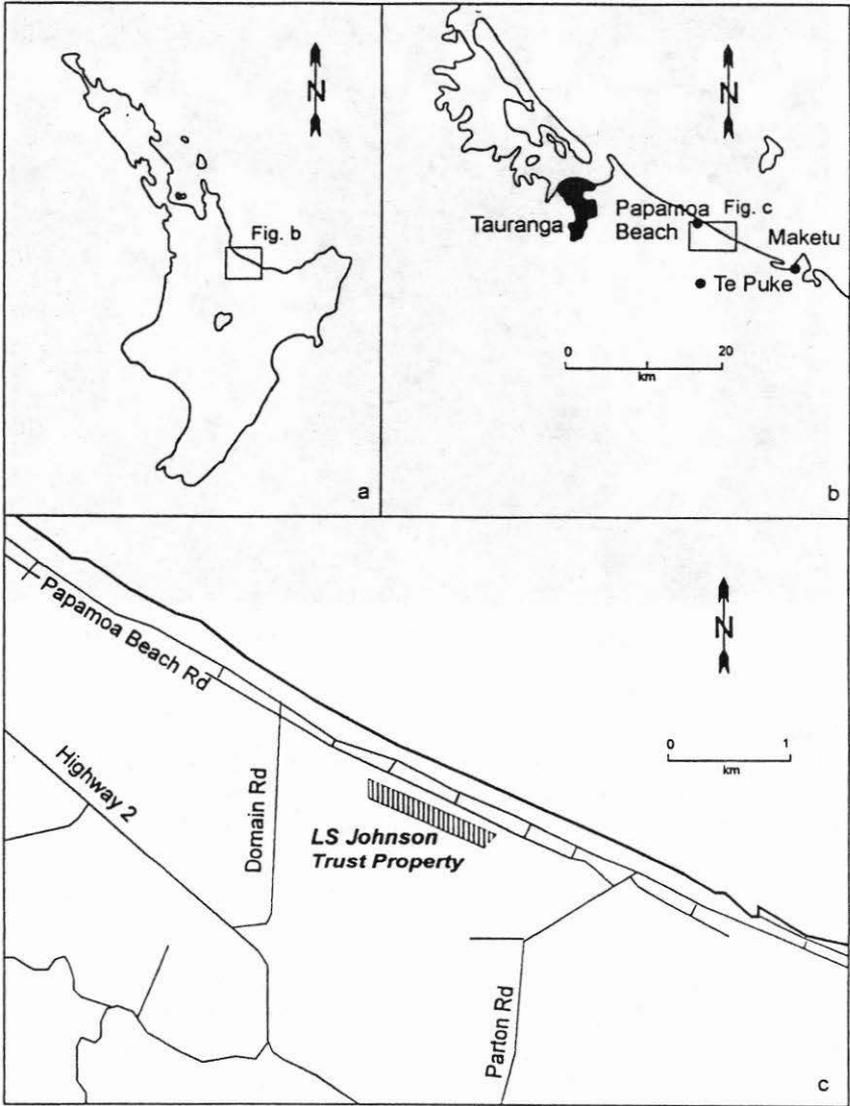


Figure 3. Location of Johnston Trust subdivision, Papamoa.

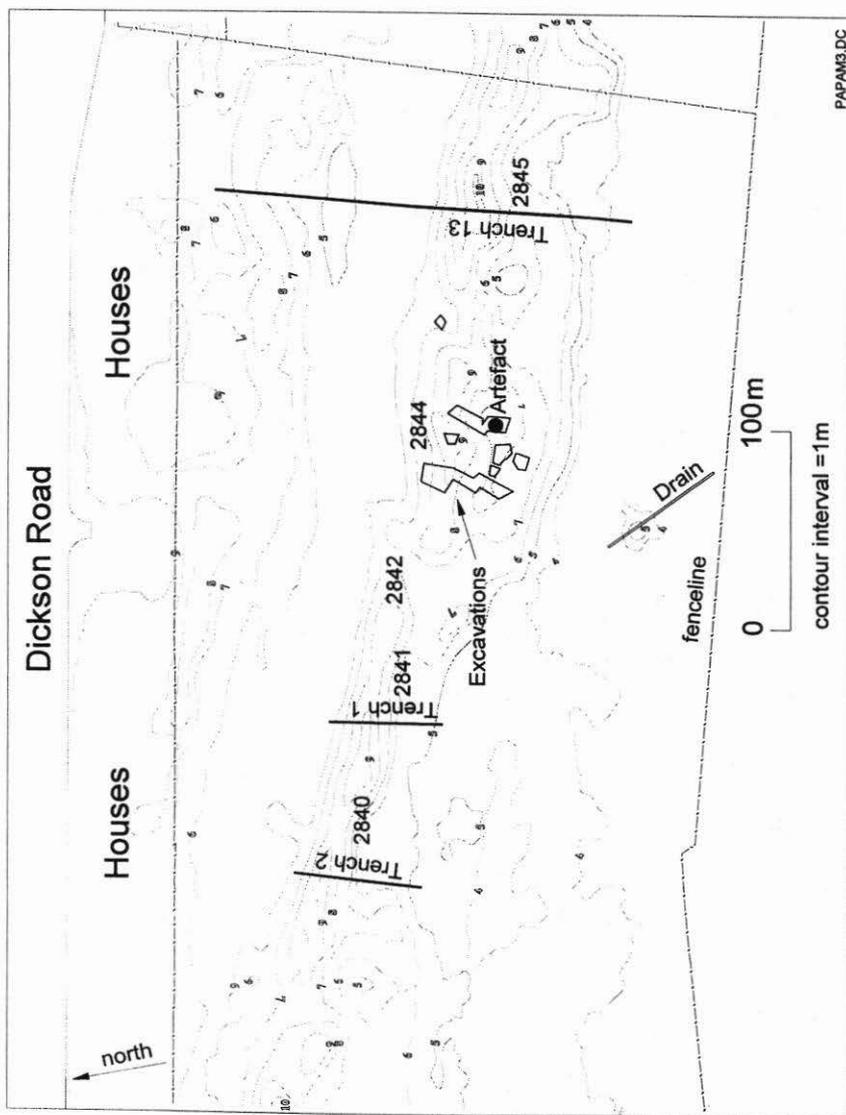


Figure 4. Plan of part of Johnston Trust subdivision showing location of U14/2844 and other sites referred to in the text.

Lab. No.	CRA	CAL Age (95% CL)	Species Dated
Wk 4189	800 \pm 50	522-335	<i>Paphies subtriangulata</i>
Wk 4190	730 \pm 50	476-293	<i>Paphies subtriangulata</i>
Wk 4191	840 \pm 50	557-393	<i>Struthiolaria papulosa</i>
Wk 4192	760 \pm 50	495-308	<i>Paphies subtriangulata</i>
Wk 4493	750 \pm 40	480-315	<i>Paphies subtriangulata</i>
Wk 4494	730 \pm 40	466-302	<i>Paphies subtriangulata</i>
Wk 4495	710 \pm 40	451-291	<i>Paphies subtriangulata</i>

Figure 5: Radiocarbon dates for shell middens in close proximity to where the head was found.

The seven dates are not significantly different. Following Ward and Wilson (1978), $T' = 5.6$ ($c^2_{0.95} = 12.6$, $df = 6$), and the CRAs have a weighted mean of 754 ± 17 . The calibrated age of the weighted mean is 470 to 380 calendar years BP (95% confidence limit). It is therefore likely that the head was dropped or deposited in the midden sometime during the late 15th or early 16th century AD.

Acknowledgements

The authors thank Clayton Fredericksen for permission to reproduce Figures 1 and 3 and Kelvin Day for background information on the frequency of the occurrence of worked pumice pieces in archaeological contexts. Most of the middens in the subdivision were originally recorded by Ray Hooker in November 1994.

References

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