

ARCHAEOLOGY IN NEW ZEALAND



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SOME PROBABLE HORTICULTURAL EVIDENCE FROM WAIPATIKI BEACH, HAWKE'S BAY

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While in Hawke's Bay on holiday in January 2006, I chanced upon some residential developments occurring at Waipatiki Beach, north of Napier. Seeing piles of earth and areas of bare ground in places in the narrow valley behind the beach, I took a camera and a GPS unit and went to have a closer look. One area of earthmoving proved to be of particular interest (Figure 1). It was located in a swale behind a dune at the foot of slope on the north eastern side of the valley. The dune runs parallel with the beach and the swale is about 250 m inland. In the swale a set of features in plan were evident in an area stripped of topsoil.

Twelve circular features about 60 mm diameter had been exposed in plan in the subsoil (Figure 2). There were also smaller circular holes, generally about half that diameter or smaller. The fill of all the features was raw white sand and this stood out against the grey sand substratum in which they occur (Figures 3 and 4). The features appeared to conform to a pattern but the view was too restricted to be sure what the layout might be. Nothing was seen to indicate what the features might look like in section and there was nothing to indicate their antiquity. A horticultural function seemed probable, but I only had a camera to record the details.

The features are similar in appearance to the circular features containing sand exposed at sites in the Waikato (Gumbley et al. 2004). Those features were exposed after the topsoil was removed and were interpreted as evidence of kumara growing. They were laid out to a very regular pattern. The Waipatiki examples are larger than those uncovered in the Waikato so, while similar in some ways, they appear to be different enough to require a different interpretation. Photographs were shown to a number of archaeologists



Figure 1. Setting. The photo was taken from the top of the dune looking up the valley. The area of earthmoving and the site is in the centre of the photo. Beyond is work going on for a new residential subdivision.



Figure 2. A view of a cluster of features, some large, some small.



Figure 3. A view of one of the larger features, with Garmin GPS, 145 x 50 mm, as scale.



Figure 4. A view of another of the larger features, with Garmin GPS, 145 x 50 mm, as scale.

(Louise Furey, Warren Gumbley, Kevin Jones, Garry Law, Bruce McFadgen, Elizabeth Pishief, Lynda Walter) and a horticultural interpretation was generally favoured on the limited evidence available.

The location of the Waipatiki features in a swale may indicate that they were associated with taro growing. At Anaura Bay in 1759 Monkhouse described taro planted in "circular concaves" (Salmond 1991: 164). This or similar methods are described in the historical ethnographic accounts collected by Best (1976: 236–243). Taro was grown in basin-like holes (parua taro) and use was made of sand and gravel to fill the holes and to scatter beneath the growing plants. Best describes the larger parua taro as about two feet (600 mm) in diameter. His writings also make it clear that many of the taro gardens were located on the flats just behind beaches. On this interpretation then, the Waipatiki Beach features are the dish-shaped pockets scooped out for the roots of the plants and filled with raw sand. The sand would have been available from the adjacent dune. This hypothesis is testable, particularly now that taro starch grains can be identified from archaeological deposits. As Furey (2006: 47) notes, archaeological confirmation of ethnographic descriptions of gardening is rare and the finding of features that match ethnographic descriptions of taro growing is unusual enough to warrant further effort and research.

No evidence of midden or ovens or oven rake-out was seen in the immediate vicinity. Four other sites have been recorded in the valley, or on the hills on either side. A midden (W20/1) was recorded by Sue Menzies and Mary Jeal in 1976, along with a pa (W20/2) on the headland above the beach. Another midden (W20/12) and terraces (W20/13) were recorded in 1978 based on information from a local resident. The use of the valley floor in prehistory for a range of activities, including horticulture, might be expected.

The site has been recorded as W20/58. GPS readings (Garmin 12 XL) taken just a few metres apart gave E 2852834 N 6204104 and E 2852831 N 6204104. These readings plot within a recreation reserve managed by Hasting District Council. The existence of the site was brought to the attention of the New Zealand Historic Places Trust. The area excavated was subsequently filled in and is now maintained in grass without any further investigation being undertaken.

References

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