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EXCAVATION OF A 'RAISED-RIM PIT' (S37/61), BARRYTOWN FLATS, WEST COAST

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During a recent site survey of the Barrytown Flats (Fig. 1), a possible raised-rim pit (S37/61, grid reference 839236) was identified (Nichol 1990). This site, along with others on the Barrytown Flats, is under threat from a proposed ilmenite mining venture. The future of the sites is currently the subject of negotiations between the NZ Historic Places Trust and Westland Ilmenite Ltd.

Middens, one of which (S37/22) has been radiocarbon dated to 450 ± 30 BP (NZ7026A) (McFadgen pers. comm. 1991), form the main evidence of prehistoric occupation on the Barrytown Flats. Other sites recorded on the Barrytown Flats are gold mining remains such as water races, tailing dumps, and prospecting pits.

The raised-rim pit is an anomaly because it is well beyond the generally accepted southern limit for storage pits and kumara gardening (Law 1969). The Barrytown Flats have, however, relatively mild conditions (Nichol 1990: 2) and the possibility of kumara growing could not be excluded *a priori*. If there was one pit then there could be others. This raised the possibility of a different pattern of land use to that usually indicated for the West Coast (Anderson 1982). It was crucial to the assessment of the archaeological significance of the area to test the identification of the raised-rim pit by excavation.

THE SITE

The Barrytown Flats are a narrow strip of lowlands between the Paparoa Ranges and the sea. The Flats consist of a series of gravel and sand ridges running parallel to the coast. Suggate (1989) outlines the postglacial shoreline sequence on the Barrytown Flats and identifies 10 shorelines, not counting the present one. He argues that shorelines 5-10 formed in the last 1000 years. The pit is on the outer flank of the sand ridge associated with Suggate's shoreline 8. This ridge is less than about 450 years old (McFadgen 1978, pers. comm. 1991). It is broad and low-lying and the swales on either side are very wet. The part of the ridge where the site is located is under a cut-over podocarp-broadleaf coastal forest.

The pit is about 3.5 m by 2.25 m wide and 0.5 m deep. A network of tree roots extends over the ground surface.

The excavation (NZHPT Permit Number 1990/34) was carried out on 9-10 January 1991.

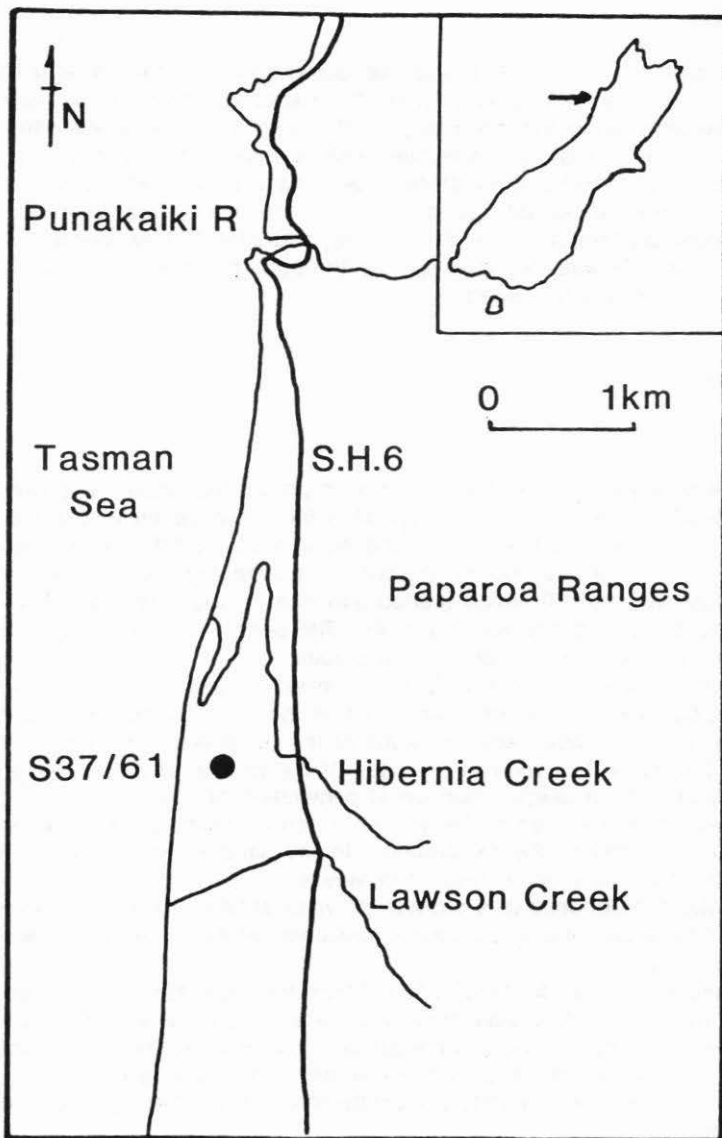


Fig. 1. The northern end of the Barrytown Flats showing the location of S37/61. State Highway 6 roughly marks the landward margin of the Flats.

METHOD

An area 3.9 m by 2.5 m was laid out over half of the pit, and litter and vegetation removed with trowels (Fig. 2). Excavation then concentrated on a 1 m wide strip along the north baulk. The topsoil was removed with trowels. The 'floor' was completely excavated with spades and trowels and a narrow trench dug with spades through the sides of the pit to obtain a cross-section (Fig. 3). Finally, a test pit was dug in the base of the depression.

A possible terrace, some 25 m away, was also test excavated. A 6.6 m by 0.4 m trench was cut with spades through the scarp at the rear of the 'terrace' and across the 'tread'.

RESULTS

Pit

The stratigraphy was relatively uniform across the square and four 'layers' were identified. Layer 1 was the topsoil, a thin band generally less than 10-15 cm thick. It contained many large and small roots, some of which penetrated into the surface of the underlying layer. Beneath the topsoil were two grey sands (Layers 2 and 3) which graded into one another. Beneath them was a grey sand containing pebbles (Layer 4). The sand and pebbles were found at the same level all the way across the square.

Layer 2 was the most variable, at least in appearance. It had a very similar appearance under both banks but, in the pit, it contained many patches of brown sand. These were the result of the penetration and decay of roots. Layer 3 formed a thin band in the base of the pit but, in places, its presence was obscured by a deeper than usual penetration of roots.

A test pit in the base of the depression encountered groundwater about 20 cm below the limit of the excavation. In the sand at this depth were found quantities of well preserved twigs and leaves.

Features diagnostic of a storage pit were absent. There was no trace of a floor, side walls, drains, postholes, charcoal, artefacts, or any other sign of human activity.

There was no evidence of material from the depression having been piled up to form a rim. Nor was there any trace of a drain which is sometimes associated with the rim (see, for example, Fox 1978: 18-20). The 'sides' and 'rims' proved to be banks of sand of apparent natural origin.

No evidence was found to indicate that the pit had been dug by gold prospectors.

Terrace

The trench across the nearby terrace revealed no trace of human construction or use. The topsoil, which was about 10 cm thick, overlay raw sand.

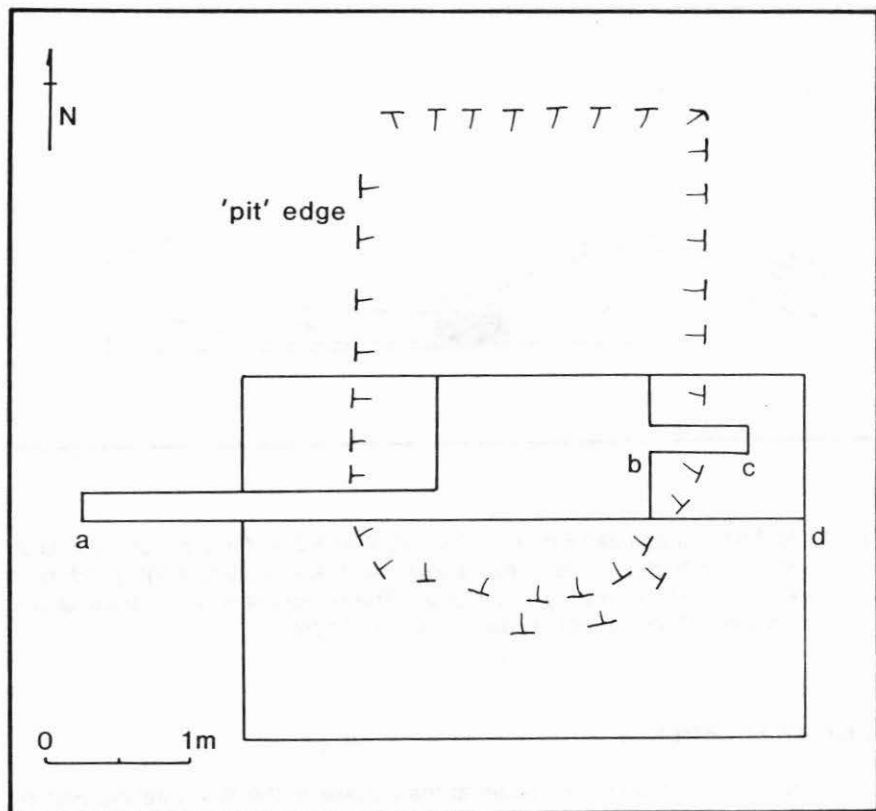


Fig. 2. S37/61. Plan showing area stripped of litter (large rectangle) and the position of trenches and areas excavated in relation to the edge of the depression.

CONCLUSIONS

Interpretation of the pit as a kumara storage pit was not supported by excavation. The test excavation of a possible terrace also produced no evidence of human construction or use.

The investigation has a wider significance. It was a test of current views on the southern limit of the distribution of storage pits. The conventional wisdom, at least for now, stands.

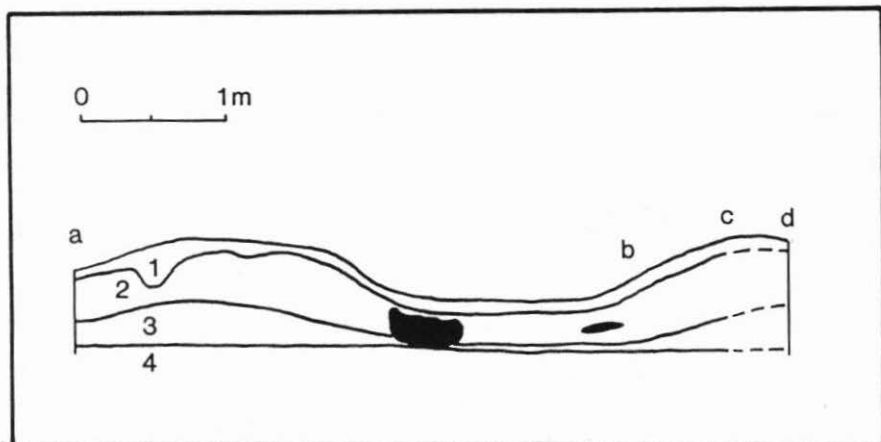


Fig. 3. S37/61. Cross-section. 1 = Topsoil, 2 and 3 = Grey sands, 4 = Grey sand with pebbles. The areas shown as black represent the patches of brown sand found mostly in Layer 2. The broken lines are extrapolations. Excavation stopped just below the top of Layer 4.

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