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CONTACT PERIOD MAORI OCCUPATION AT PIPITEA PA, WELLINGTON

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When the New Zealand Company settled Wellington in 1840 Te Ati Awa were in occupation at Pipitea pa on the Thorndon flat. The fenced pa covered roughly the area behind the railway station and north of Thorndon Quay as far as Hobson St and extended west as far as Murphy Street (Waitangi Tribunal Record of Documents, Wai 145 F1, Evidence of Neville Gilmore).

During the early 19th century the western side of Wellington harbour (Te Whanganui-a-Tara) including the flatland around Pipitea point was unoccupied, with settlement instead focusing on places such as Island Bay or the Miramar peninsula (Ballara 1990: 13). After the 1824 battle of Waiorua, Ngati Tama and Ngati Mutunga came across from the west coast to occupy the harbour. Ngati Tama settled the harbourside kainga of Tiakiwai, in the vicinity of present day Tinakori Road (Waitangi Tribunal, Wai 145 2003: 22–5). As Tama and Mutunga groups continued to move into Te Whanganui-a-Tara and the original people of the harbour were expelled, the Pipitea point area became a major focus of settlement.

Available evidence from early visitors to Wellington suggests that the Pipitea plateau from the beachfront to the base of Tinakori Hill was cleared and cultivated land. Ward (1929: 308) writes that Thorndon Flat was once covered with potato cultivations. Published recollections from the arrival of European settlement describe the intended town site at Thorndon as being "fairly clear ... what remained of the former bush were but the scattered tree trunks ... they were fairly plentiful with here and there a great deal of manuka scrub." (Evening Post, 17 April 1920). New Zealand Company draftsman Charles Heaphy visited the harbour in 1839 on the Tory. He recorded that there were Maori cultivations above the intended town site of Thorndon and that Thorndon Flat was covered in fern (Heaphy 1879, cited in McGill 1984: 23). Heaphy also drew a panoramic 'Birdseye view of Port Nicholson' which shows cleared land

around and back from Pipitea along with areas of scrub or trees inland (Heaphy 1839–40, reproduced in Maling 1999: Plate 135).

Two Old Land Claims hearings in 1842 also provide evidence into the nature of occupation at Pipitea pa: one made by Robert Tod based on a transaction conducted with Ropiha Moturoa and Te Wira Mangatuku (Heaphy 1879, cited in McGill 1984: 23); and another by Thomas Barker based on a transaction associated with Ngake and Reihana Rewiti.

Robert Tod was a Sydney speculator who came to Wellington in 1839 to acquire land before the expected arrival of the British Crown. Tod signed two deeds for two blocks of land in January 1840, one at Pipitea. The evidence given at the hearing of Tod's claim in 1842 reveals that Ngati Mutunga had cultivated the piece of land later transferred to Tod by Moturoa and Mangutuku. When Moturoa provided testimony during Tod's claim, he confirmed that he had been living at Pipitea and was cultivating land there when Ngake and the other Ngati Mutunga had gone to the Chatham Islands (OLC 465 Robert Tod 1842: Evidence of Ropiha Moturoa, 'Extracts from Evidence'). Tod's claim was upheld.

Thomas Barker was the captain of the Hokianga and had arrived in Wellington in June 1839. His claim was immediately to the south of Tod's and covered the area that was archaeologically excavated in 2008, 1–15 Pipitea St (Campbell 2009). During the hearing of Barker's claim, the vendor for the purposes of the Old Land Claim was Reihana Reweti (Richard Davis) who stated that he had first arrived at Port Nicholson in June 1839 and had been given some land by Ngake. Reweti was asked "What did you do with that land?" He replied "I planted it with potatoes first & then sold it to Barker... I do not know the size [of the land sold]. I sold it all to Barker." (OLC 635 Thomas Barker 1842: Evidence of Reihana Rewiti, 'Interpreters Notes'). Barker's claim was not confirmed by Old Land Claims Commissioner William Spain.

The Pipitea St excavations

In June 2008 we excavated the properties at 1–15 Pipitea Street ahead of an office block development. The land that Rewiti had gardened in 1839 had been progressively built on in the 19th century and into the 20th century. The archaeology of these historic buildings will be reported in full in a future issue of *Archaeology in New Zealand* (see also Campbell 2009, http://www. cfgheritage.com/2008_72pipitea.pdf). It is the earlier archaeology that concerns us here, though the 1863 house of John Elisha Smith at 3 Pipitea Street is important as its foundations cut the earlier features. Smith's house was built in three phases: the first visible as a 8.3 x 7 m grid of postholes, many containing remnant totara piles, measuring about 300 x 300 mm (12 x 12"); the second an

addition to the west measuring 8.3×3 m with smaller postholes; the third an 7.2 x 4 m addition to the south with a brick foundation. Beneath these three phases were three features that were unlike any others on site. While most of the historic features, with the exception of boundary fences, were oriented on the road, these features were oriented on the sea cliff. One was a darker soil measuring 11.5 x 4.5 m; another a pit measuring 6500 x 1400 mm and 700 mm deep; while the third was a row of five postholes running at right angles to the sea cliff, the only set of features to do so (Figure 1).



Figure 1. Plan of contact period Maori features at Pipitea St. The foundations, external drains and well of Smith's house are shaded grey. The lot boundaries are also shown.

The soil

The soil, Feature 15, was aligned north west–south east at right angles to the sea cliff and, where it was excavated, up to 220 mm deep into the clay subsoil. It was a well dug topsoil, standing out as a darker grey yellow against the brown yellow natural soils (Figure 2), incorporating gravels that seemed to be imported, that is they were not the angular chunky gravel that underlay the clay layer. A 1 x 1 m sample square was excavated which showed that the feature was shallow and its sides sloped gently down to its base. The gravel was not evenly spread through the soil but distributed in lenses consistent with being dug in. Soil samples were taken from across the feature for microfossil analysis. Samples were also taken for particle size analysis to determine the nature of the added gravels from both within the feature and the natural matrix adjacent to it.



Figure 2. The Feature 15 soil during excavation with the foundations and drains of John Smith's house visible cutting it.

The pit

The pit, Feature 77 was located 2.6 m to the south west of, and aligned at right angles to, the soil. The northern 3800 mm of the pit was excavated (Figure 3). The fill of the pit was a chunky mottled yellow brown soil that became increasingly dark towards the base. A soil sample was taken from the base for microfossil analysis. This pit had heavy round postholes rebated into the walls. They were generally 280 mm in diameter, situated at each corner and halfway along each side. The fill at the base of each had been rammed forming a raised collar around the top of each posthole (Figure 4).



Figure 3. The pit after excavation showing the fill profile.



Figure 4. The large, round postholes in the northern end of the pit showing the raised collars of rammed earth around their bases and the gravelly natural stratigraphy visible in the end wall.

Analysis

Microfossil analysis did not reveal any pollens or starches of Maori or European cultigens.

Four soil samples of approximately 5 litres each were taken for analysis. Samples 1 and 2 were taken from the Feature 15 soil. Samples 3 and 4 were control samples taken from the natural soils: Sample 3 from the natural soil adjacent to Feature 15 and Sample 4 from the soil beneath Feature 15. Samples were analysed to determine if the gravels in the soil were native to the site or brought in from elsewhere to improve soil quality for gardening.

The samples were dried, weighed and wet sieved through a 2 mm screen to remove all clay. The residue was then sieved again through 3 and 5 mm screens. The residue from the 5 mm screen was laid out on mm square graph paper and sorted by hand into 5 mm size categories. Each size category

	2 - 3	3 – 5	5 – 1 5	15-30	30 mm	
Sample	mm	mm	mm	mm	+	total
1	6.8	12.9	13.8	4.6	2.5	40.6
2	2.2	3.7	1.8	2.2	2.1	12
3	0.5	0.4	0.1			1
4	7.1	15	22.2	7.5	5.6	57.4

was weighed and its percentage of total dry weight was determined. Summary results are given in Table 1.

Table 1. Percentages of gravel size classes by dry weight of total sample.

Sample 3 contained a very low percentage of natural gravels, all of which were less than 5 mm. Sample 4 contained almost 60% gravel. The very gravelly nature of the lower natural layers can be seen in the walls of the pit (Figure 4). The gravel is predominantly derived from greywacke which forms a common basement material across the Wellington region. The vast majority of the gravel is sharply to moderately angular. Less than 1% is rounded or spheroid.

The gravels in Samples 1 and 2 are derived from greywacke similar to Sample 4. Though overall there was less gravel in these samples, noticeably greater proportions of finer grained material were present. All size categories of gravel in Samples 1 and 2 were predominantly rounded (water rolled) but with a low amount of moderately angular pieces also present. A few individual pieces of quartzite/chalcedony-type mineral gravel were evident in Sample 1. No equivalent material was found in either of the control Samples 3 and 4.

The higher proportion of finer grained material in the Sample 1 and 2 gravels, its predominantly water rolled nature and the presence of small quantities of quartzite/chalcedony suggests that these gravels were introduced into the soil from an off-site context, not from the natural soil in the immediate vicinity. This context is quite likely to be the beach gravels that would have been available on the coastal flat below the site, less than 100 m distant, though these gravels were not tested by us (they are probably inaccessible, buried beneath reclamation fill). They could also originate in a river bank or river mouth.

Interpretation

The grain size analysis of the soil samples shows that imported gravels were added to the gardened soil. This is typical of Maori cultivation practice (Furey 2006) and indicates a Maori origin for these soils. The microfossil analysis was unable to indicate what plants were cultivated in these soils – we had hoped to find starches of Maori cultigens, particularly kumara, or of white potato or other introduced European cultigens such as turnip, but no starches were found. The historic evidence is quite clear that the general area was

cultivated by Maori living at Pipitea pa prior to the New Zealand Company settlement and that white potato was one of the crops. This evidence is located in Town Acre 544, which was not included in the Maori Tenths reserves, and so these cultivations are unlikely to post-date 1840. The soil and pit were direct evidence of the contact period occupation of Pipitea pa.

Discussion

Maori gardening in the 19th century was significantly altered from pre-European gardening by changes in settlement patterns, economy and society combined with new crops and technologies. Maori grew crops to trade with Europeans, supplying wheat and potatoes to whalers and then the emerging New South Wales and Victoria markets. Some of these gardens were, compared to pre-European gardens, quite large, and marked by ditch and/or bank fences to keep out introduced animals such as pigs, sheep and cattle (Furey 2006). Such sites should be quite visible, but a general lack of archaeological interest in sites from this period (Bedford 1996) means few have been investigated. Cassells and Walton (1992) reported the investigation of banks without ditches but with postholes on or through the banks indicating fences. They were unsure whether these features were Maori or European in origin. Grieg and Walter's (2007) overview of recorded ditch and bank fences in New Zealand indicated that most were European in origin though where historic records are available they could be linked to Maori settlements with more certainty (e.g. Wilkes n.d.).

Anaura Bay on the North Island East Coast was Captain Cook's first landfall in New Zealand in 1769 and the Maori gardens there are very well described in the journals of Joseph Banks. Horrocks, et al. (2008) undertook a programme of coring and test pitting to obtain microfossil samples from these gardens. They found pollen and starch evidence of pre-European crops – kumara, taro, yam and paper mulberry – but also European introductions – maize and potato – at depths below the surface indicating that these were also grown by Maori at Anaura Bay in the historic period. Leach (1984: 101) records that potatoes, turnips and cabbages were grown by Maori in the Bay of Islands as early as 1801 and the range of garden vegetables as well as fruit trees increased rapidly in the early 19th century.

The archaeology makes it clear that the soil of Feature 15 was gardened prior to, at least, 1863 and also that the modified soil is typical of Maori gardening practices. Despite Reihana Rewiti's evidence before the Old Land Claims Commission that he gardened on 1–15 Pipitea St in 1839, we could not say that Feature 15 was specifically Rewiti's garden. It is, however, best interpreted as a garden associated with Pipitea pa. The pit was less easily interpreted but its spatial and temporal relationship to the soil indicated that it was a storage pit. Pre-European storage pits have a line of posts down the centre of the pit to support a ridge pole. Some smaller pre-European pits may not have had postholes but posts were not normally set against pit walls to the exclusion of centre posts – where they are found, posts against pit walls are more often interpreted as retaining walls. Postholes down the sides of the pit indicate the support of a roof-frame. The adoption of this introduced European technology has the obvious advantage of clearing the centre line of the pit and making it easier to move around.

The only source of doubt is that no microfossils were found to support the interpretation. Because of this the attribution of the soils to Maori gardening might be regarded by some as robust rather than definitive. However, if we did not have the scientific test of soil microfossils available to us we would have far less hesitation in accepting that the soil represents historic period Maori gardening. The archaeology tells its own story and we are, perhaps, too reliant on outside techniques to tell us what we already know. Corroborating evidence might be nice, but is hardly necessary.

As far as we are aware these are the first such features described for early historic period Maori. This is rather surprising, as Maori, in the North Island and upper South Island at least, were horticulturalists; gardening was central to their way of life well into the 20th century. Pre-European garden soils are commonly recorded, especially where they are modified by the addition of gravel mulches and soil conditioners; that is how the soil at Pipitea St was recognised. In combination with the history, which places Maori at the site in the early 19th century, we are able to interpret the soil as a historic period feature. Without the history we may have been quite puzzled by the pit; it is not a 'standard' storage pit and we are left wondering how many similar features have gone unrecognised in the past. It may be that pits like this are a local innovation and not found elsewhere, but they are evidence of Maori readily adapting European technologies to traditional ends and similar, if not necessarily identical, practices would have been widespread. We suspect that archaeological evidence of these practices is simply not recognised as such and that a reassessment of the evidence may yield surprising results.

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