

ARCHAEOLOGICAL INVESTIGATIONS AT U14/157, ONGARAHU, AS PART OF DIY MARAE RESTORATION



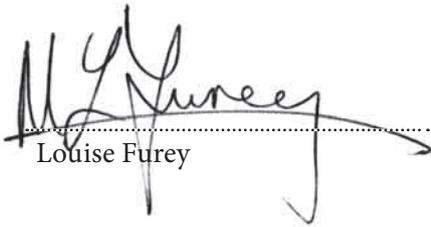
**REPORT TO
WESTERN BAY OF PLENTY DISTRICT COUNCIL
AND
PIRIRAKAU INCORPORATED SOCIETY**

LOUISE FUREY

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Matthew Campbell

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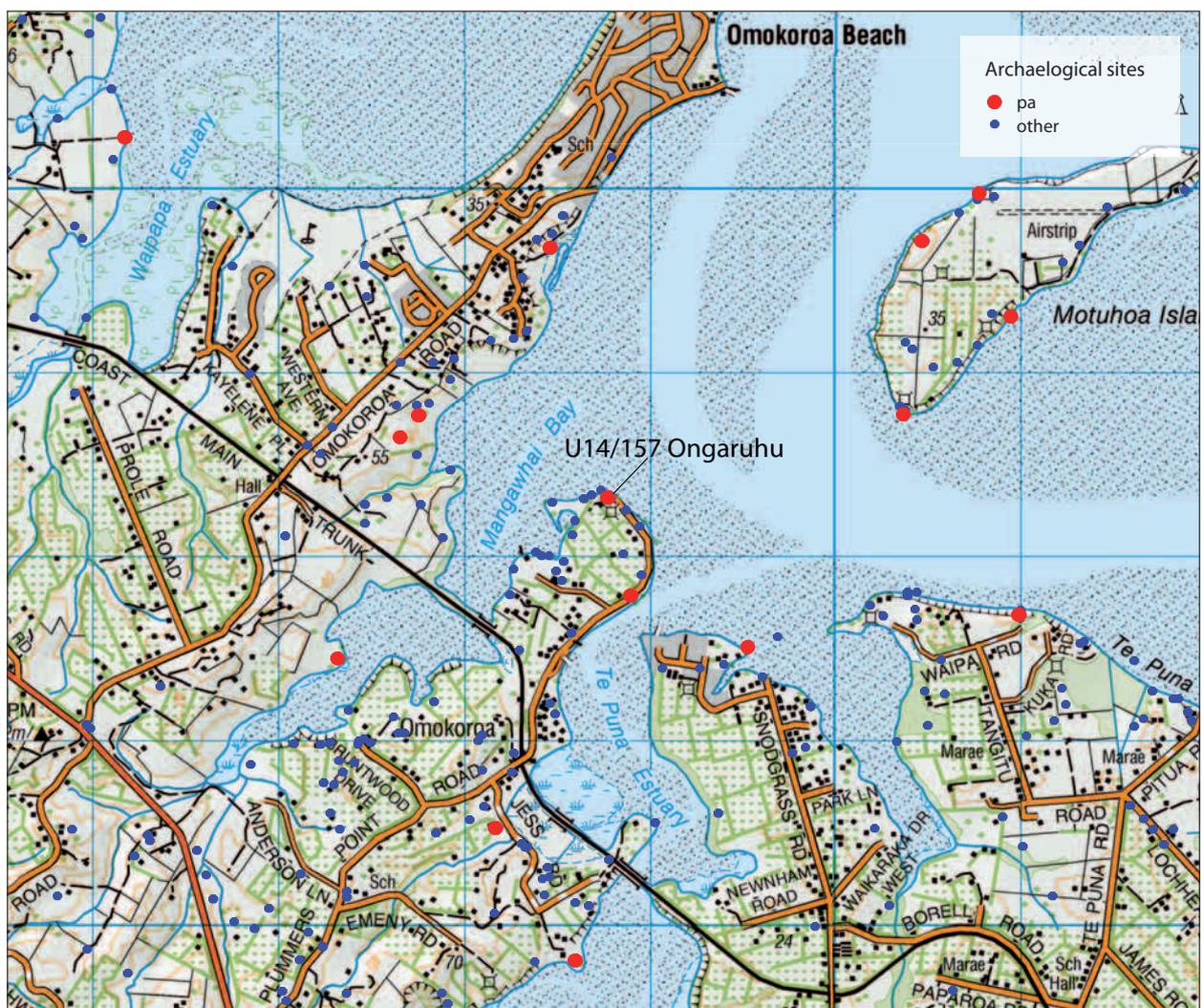
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LOUISE FUREY

Ongarahu Pa, recorded as archaeological site U14/157 in the New Zealand Archaeological Association site file, is on the end of the peninsula known as Plummers Point that projects into Tauranga Harbour. The pa is within Huharua Regional Park, jointly purchased by Western Bay of Plenty Council and Tauranga City Council in 2005. An archaeological assessment of the park area was carried out in 2004 and the removal of the Thorne house from within the pa defences was recommended (Furey 2004). This work subsequently took place in 2009 under the supervision of archaeologists from Opus Consultants Ltd. The Huharua Harbour Park Management Plan (2006) stressed the partnership and co-operative spirit



1. Location of Ongarahu Pa, showing other archaeological sites recorded in the general area. Note that the pa symbol on the topographic map is incorrectly placed.

2. Vertical view of Ongarahu Pa. The alignment of the ditch is clearly defined by vegetation. The corner of the ditch is under the canopy of the pohutukawa tree. The driveway access to the house (since removed) is the location of the footbridge.

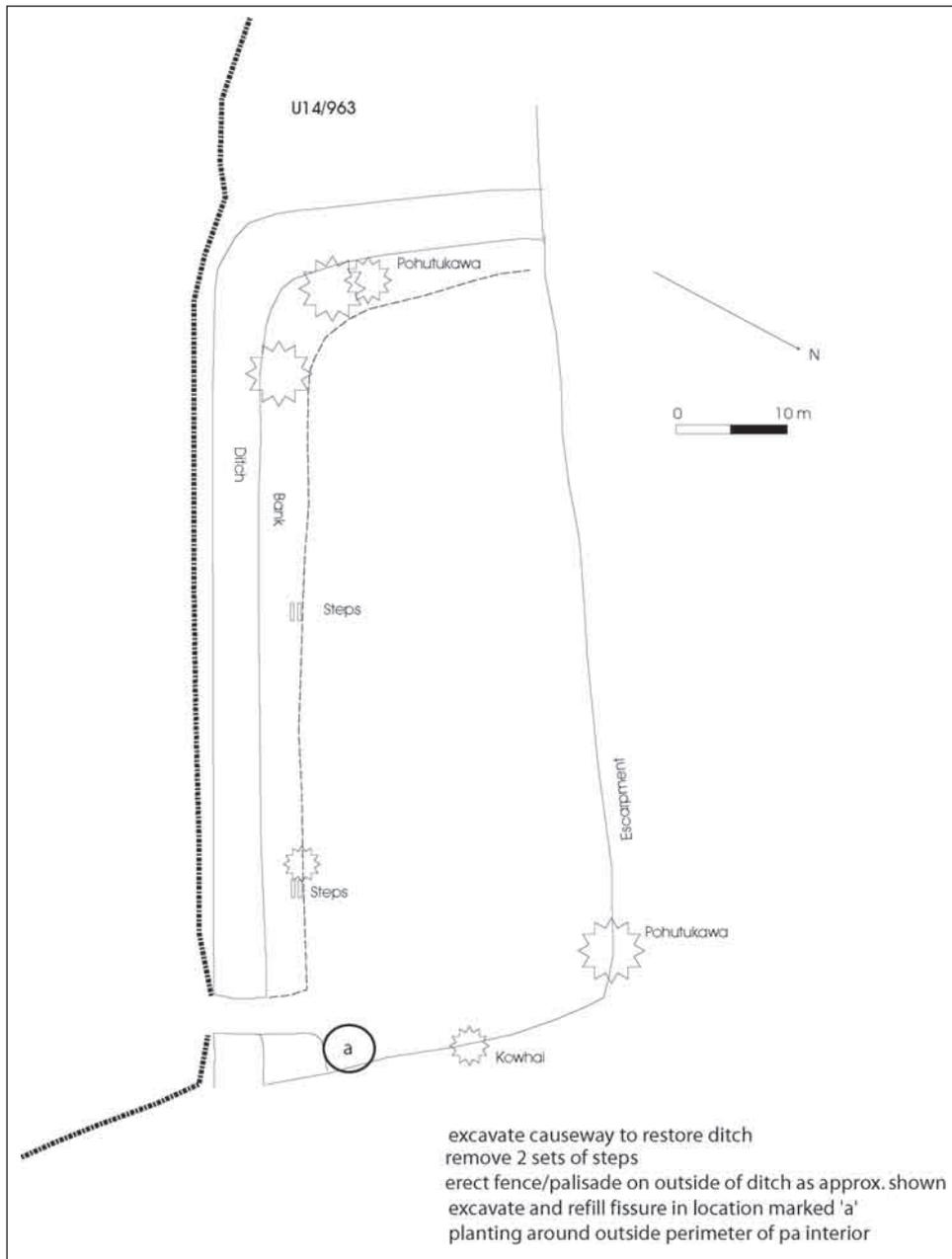


between Western Bay of Plenty Council and the hapu Pirirakau, and through this partnership restoration work on and around the pa was able to take place.

An L-shaped ditch with inner bank enclosed the living area of about 1800 m². High cliffs provided a natural defence on the remaining sides. During the time the Thorne family lived in the house, the interior of the pa was modified by landscaping and the planting of ornamental shrubs and fruit trees, and an access driveway was formed by filling in part of the defensive ditch and removing part of the inner bank.

In 2010 an idea was formulated to restore Pirirakau's relationship with the area as part of the raupatu claim progression, and to approach DIY Marae, a programme aired on Maori Television, for assistance with making this happen and to document of the process. The application in 2010 to DIY Marae stated that "Ongarahu is a marae in the truest sense being as ancient as any modern marae and a former living space for te tangata" and it was the hapu's wishes to use the area as a marae. The restoration of the pa environs was to cement Pirirakau's relationship with the local councils, in particular with Western Bay of Plenty Council. Plans were drawn up for a bridge access to the pa and landscaping of the approaches. Pirirakau's vision to reconnect with the pa and tupuna, and to ensure its long term protection, was at the forefront of the proposal to DIY Marae. The New Zealand Historic Places Trust (HPT) was involved because the site was protected under the Historic Places Act 1993. An authority 2011/283 was issued by HPT under section 14 of the Historic Places Act 1993 to allow limited modification to take place within the confines of the driveway area, the exterior of the pa, and the interior. This project was a significant first for the DIY Marae programme and crew in that it was centred on an archaeological site and had the involvement of HPT and an on-site archaeologist to monitor earthworks during the course of the four day event.

The proposal involved excavation of the driveway to expose the profile of the ditch and construction of a bridge over the ditch to access the interior of the pa. A path was to be built from the carpark to the bridge bordered by plantings and a whakaruruhou or shelter built over the path on the outside of the ditch. Inside the pa, concrete steps against the bank were to be removed, timber slab seating

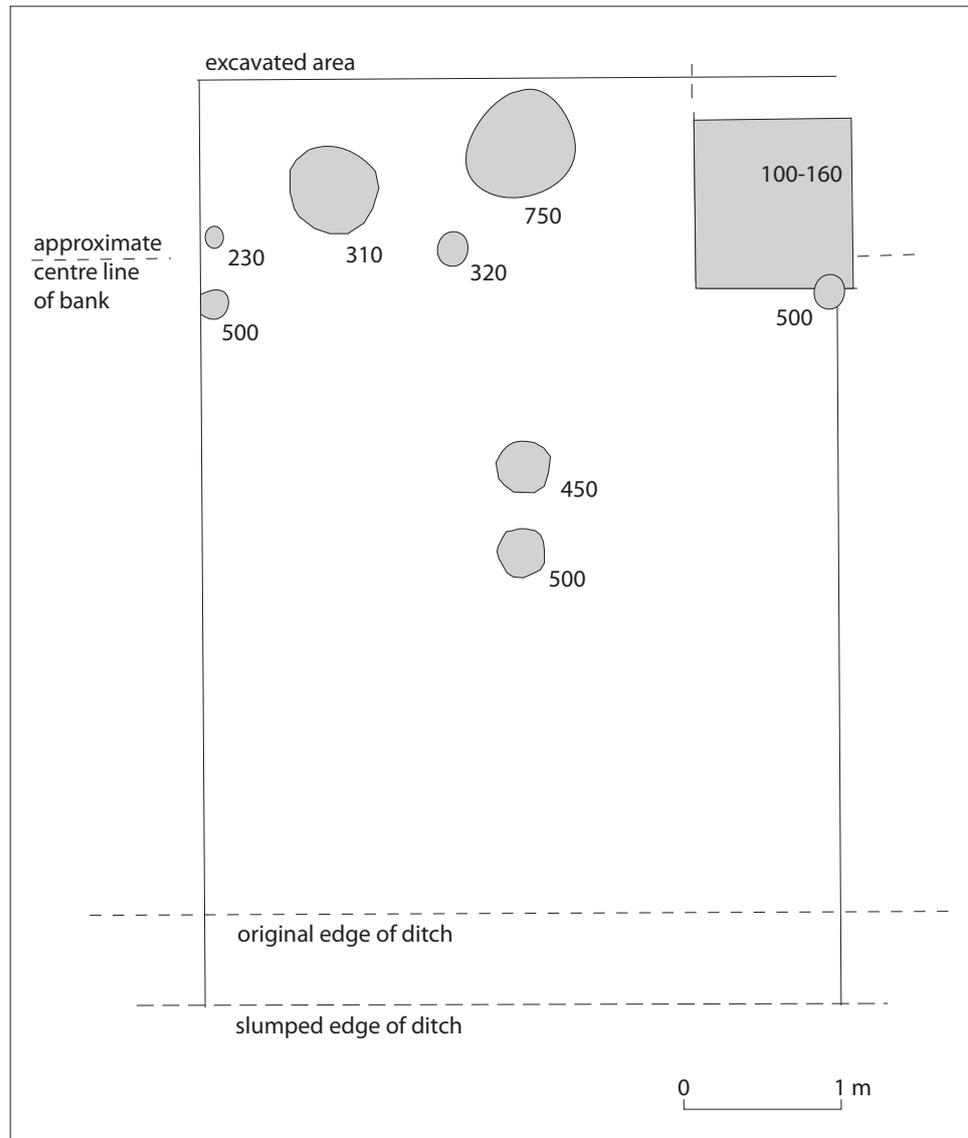


3. Ongarahu Pa at the time of the archaeological assessment (2004).

installed on the ground surface and planting done in selected areas including in the corner where the ditch and bank took a right-angle. Topsoil and large rocks were to be imported and placed on geotextile cloth placed on the existing ground surface. Outside the ditch a fence of manuka poles was to be constructed to give the impression of a palisade. This fence was to be parallel to the outer edge of the ditch and continue in a straight line to the scarp to also enclose an urupa (U14/963) adjacent to the short leg of ditch.

Preliminary work took place on 25 March 2011 to prepare the ground for the concrete abutments for the bridge across the defensive ditch, with the main DIY Marae project between 14–18 April 2011.

Previous modifications for the driveway had included removing part of the inner defensive bank and pushing it into the defensive ditch. As the bank to the



4. Plan of features uncovered under the bank when the bridge abutments were constructed. Depths of each feature are indicated in mm.

east of the driveway was of lower height to the remainder of the bank it is likely this also had been reduced in height. During work on 25 March a hydraulic excavator was used to scrape off the driveway surface from the interior of the pa. Beneath the driveway fill and the remaining topsoil, eight postholes and the floor and lower walls of a storage pit showed up as darker loam patches on the yellow-brown natural subsoil. All of these features were within the alignment of the bank, but it is not known which (if any) of the postholes were associated with the bank and pa defences, or pre-dated them. The fill of the features was removed by hand, a plan drawn and photographs taken. The section through the bank on the eastern side was not recorded although it was evident there was original topsoil under the bank deposits – there was extensive root infiltration of the bank and cutting back further into the bank was not an option as the philosophy of Pirirakau driving the work (and archaeological investigation) was to minimise intervention and cause no unnecessary damage.

The storage pit which was only 100 mm deep and ran into the northern and eastern baulks, had obviously been truncated by other activity and therefore predated

the bank. The infilled pit was intersected by a later posthole. Two of the postholes were large: 500 x 600 mm and 600 x 650 mm, the latter being 750 mm deep. This was a substantial posthole but as only 4.2 m width under the bank was excavated, it can't be said whether the larger postholes were part of the defences, or predated them.

A hydraulic excavator was used in several places along the alignment of the palisades about 3 m out from the ditch edge to ascertain whether there were any features which might be damaged by the erection of the fence. Topsoil was removed from three areas to expose the underlying yellow-brown subsoil: two scrapes 1.2 m wide and 3 m long revealed natural subsoil under the topsoil, but in the third scrape (the westernmost) the outlines of two storage pits were visible under the topsoil. The westernmost end of the third scrape lined up with the outer extent of the canopy of the large pohutukawa tree growing in the corner of the defensive bank. As the disturbance would be restricted to a posthole 300 mm wide, it was decided to not investigate further and accept that a small amount of damage would occur. It is noteworthy however that archaeological features are present outside the defended area and should be taken into account if any further landscaping is intended.

During the main part of the DIY Marae restoration work in April, all ground disturbances were monitored in accordance with the archaeological authority. Each of the 300 mm diameter postholes for the new palisade fence on the outside of the ditch was inspected. The new fence alignment was placed between 2.4 and 3 m from the outer edge of the ditch. Several of the postholes, particularly towards the western end of the ditch, had evidence of a disturbed soil profile but, given the limited soil profile exposed, no further information could be gained.

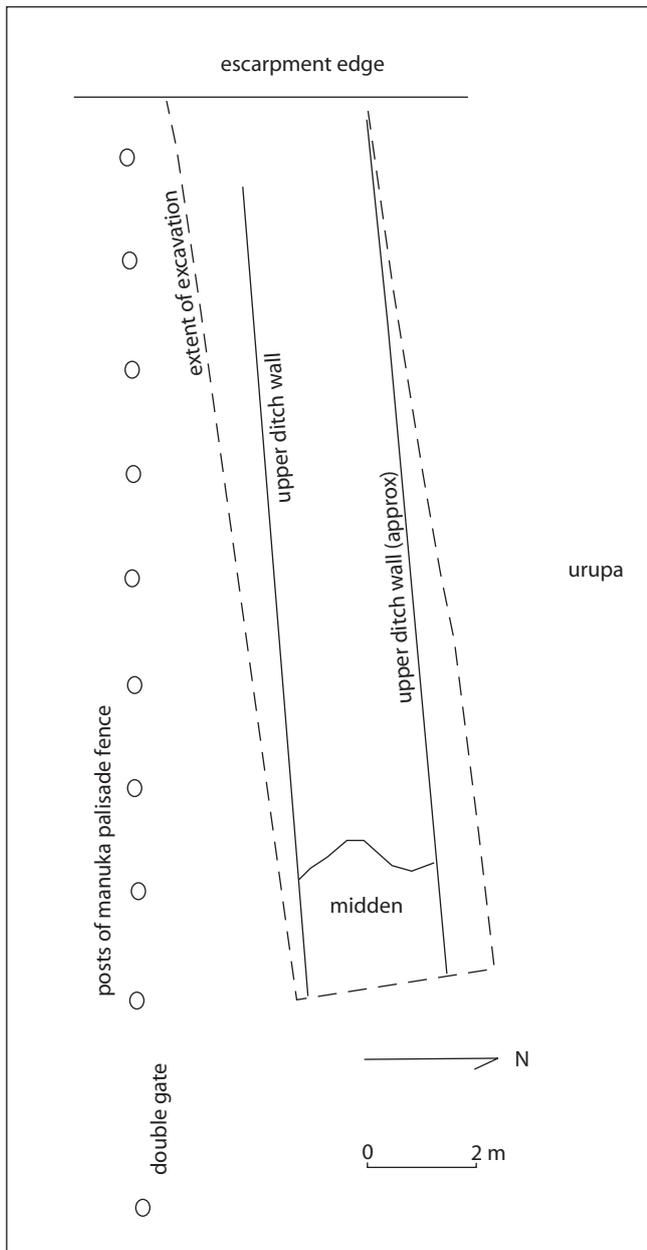
Monitoring of augured postholes for the fence to the west of the existing ditch, adjacent to the urupa, revealed a different soil profile where the yellow-brown subsoil was not present in the soil removed from the 1.2 m deep postholes. A distinctive dip in the surface contours at the cliff edge, in line with the postholes, was suggestive of an infilled defensive ditch profile. After consultation with Julie Sparham and Rawiri Kuka of Pirirakau, Peter Watson of Western Bay of Plenty Council and Rachel Darmody of Historic Places Trust, a decision was made to dig a trench 900 mm wide across what was thought to be the ditch alignment, but only to the extent of confirming whether a ditch was present. A small digger was used to scrape off topsoil to a depth of approximately 500 mm, revealing a layer of shell midden on top of ditch fill and the vertical southern side of the ditch cut into the natural subsoil. After further discussion it was decided to follow the ditch alignment from the western edge of the new gateway in the palisade fence and uncover the surface of the ditch fill as far as the cliff edge – the resultant depres-



5. The features at the northern end of the exposed area. The dotted painted line indicates the approximate centre of the defensive bank.

6. The infilled ditch after removal of the topsoil and recent fill.





7. Plan of the ditch and relationship to the new palisade fence.

area have revealed occupation evidence in the form of postholes, cooking areas and storage pits before the places were defended (e.g. Kauri Point Pa, Ongari Point Pa and others not reported in the archaeological literature). Work also revealed a shallow ditch, possibly defining the original defended area which was then reduced in size when part of the ditch was made deeper and wider, and a short addition dug which made the ditch an L-shape.

Two radiocarbon samples were submitted to the Radiocarbon Laboratory, University of Waikato (Table 1). A charcoal sample from the floor of the truncated storage pit under the driveway was identified by Dr Rod Wallace of the Anthropology Department, University of Auckland as twig wood from tutu (*Coriaria arborea*), mapou (*Myrsine australis*), puriri/tarairi (*Vitex lucens/Beilschmiedia tarairi*) and supplejack/kareao (*Ripogonum scandens*). A second sample, cockle shell, from the

sion would then be grassed and used as an interpretive feature of the park.

The ditch was approximately 800 mm deep from the surface of the fill and was on the same alignment as the existing defensive ditch. It was, however, much shallower so that its depth from the surface was about 1.2–1.3 m. Shell midden on the surface of the ditch fill indicated that it had been filled in by Maori as the shell was confined to the infilled ditch and not widely scattered. The previous landowner (Thorne) was not aware of its presence and the family had not been responsible for filling it in.

Although only a small part of the ditch was investigated, its common alignment with the longer length of the deep existing ditch suggests the ditch from cliff edge to cliff edge was originally one feature. During what was probably a contemporary event, the western end of the ditch was infilled and the remaining part of the ditch was widened and deepened and a short section at right angles to the original dug out to the northern cliff edge. The effect of this would reduce the interior area of the pa by approximately 15% but make the defences stronger through having a deeper ditch and having high cliffs as the natural defence (the western end of the infilled ditch ended at an escarpment at the rear of the bay below the pa and which could be easily scaled). Archaeological investigations on other pa in the area (e.g., U14/712 at Lynley Park, Omokoroa), have revealed that defences were remodelled and ditches dug and infilled during different occupations.

The limited archaeology at Ongaruhu revealed pre-defended activity in the form of a storage pit and several small postholes. This prior activity is also not unusual or unexpected – pa in the wider Taurangamoana

Sample	Material	Age estimate BP	Calibrated range AD 68.2% confidence	Calibrated range AD 95.4% confidence
Wk 31086	Charcoal	220 ± 31 BP	1663–1680 (12.2%) 1732–1802 (56%)	1645–1707 (25.9%) 1721–1810 (62.2%) 1837–1847 (1.4%) 1858–1879 (2.3%) 1925–1953 (3.6%)
Wk 31085	Shell	615 ± 38 BP	1625–1770 (62.4%) 1785–1805 (5.8%)	1530–1851

Table 1. Radiocarbon dates, Ongarahu. Wk 31086 is from the pit fill under the defensive bank and Wk 31085 is from shell sealing in the ditch fill.

surface of the infilled ditch would provide an end date for the filling of the ditch. These were the earliest and latest dateable features observed on the pa.

Radiocarbon dating cannot give the year of occupation. A sample gives a range of radiocarbon years within which the material being dated died. Shellfish in a midden, or short-lived twigs burnt to charcoal, are therefore proxies for the date of the occupation. The amount of ¹⁴C in the atmosphere or sea has changed over time, and the radiocarbon age is calibrated to historically dated material in order to obtain a calendar date. These results are presented at 68.2% and 95.4% probability levels. The time interval in calendar years does not mean that a site was occupied for that period of time; rather it means that the event being dated occurred sometime within that range of years. Variation in atmospheric ¹⁴C might mean there are several possible age ranges – the higher the probability, the greater the statistical chance of the event occurring within that period.

Table 1 and Appendix 1 shows a large variation in possibilities for pre-defended occupation. However the higher the probability the greater the likelihood that a particular range is dates can be considered. Clearly pre-defended activity in the period 1925–1953 can be eliminated and 1858–1879 is unlikely as the site does not appear on historic maps nor is it referred to in historic accounts of the area. In addition, the result from the shell date is clearly too broad an age range. If the archaeological interpretation is correct the pre-defended occupation should predate the infilling of the ditch. The common area of overlap of the two samples at 68% confidence level is a period in the middle decades of the 18th century. This was only a short time prior to the visit of Captain Cook in 1769 when he noted the coastline from Rangitaiki Plains to Maketu in the Bay of Plenty had numerous fortified villages visible from out at sea, and was well populated (Salmond 1991: 189). Although he only sailed close to the coast near Maketu, his observations could also be extended to the Tauranga area if the number of archaeological sites are any indication of the density of population.

The pa is now clearly defined by the ditch and the outer palisade fence (Figure 8). The depth and scale of the ditch and bank defences are highly visible from the bridge over the ditch. In addition, the uncovering

8. New palisade fence composed of post and rails with manuka poles attached to the rails.



of the surface of the infilled ditch allows another layer of the story to be interpreted to the public, namely that the pa was originally larger and of a different shape to the present form.

Although this project started out as an exercise in monitoring and compliance with conditions of the Historic Places authority, even in the small area investigated there were benefits gained in interpretation of the pa from its earlier undefended form to the final defended shape. Archaeology gained exposure with a wider audience through the DIY Marae programme and was able to show that archaeology can contribute positively to the history of a site and its inhabitants.

Acknowledgements

Thanks to Julie Sparham of Pirirakau and Rachel Darmody of the New Zealand Historic Places Trust for my involvement in this project. Scott Parker of Western Bay of Plenty Council coordinated the work on the abutments. Rod Wallace of University of Auckland identified the charcoal.

References

- Furey, L. 2004. Assessment of archaeological sites within proposed park, Plummers Point, Tauranga Harbour. Report to Western Bay of Plenty District Council.
- Golson, J. 1961a. Investigations at Kauri Point, Katikati, Western Bay of Plenty. *New Zealand Archaeological Association Newsletter* 4 (2): 13–41.
- Shawcross, W. 1964a. Archaeological investigations at Ongari Point, Katikati, Bay of Plenty. A report on the first season of excavations. *New Zealand Archaeological Association Newsletter* 7(2): 79–98.
- Shawcross, W. 1966. Ongari Point – second season. *New Zealand Archaeological Association Newsletter* 9(2): 53–71.
- Salmond, A. 1991. *Two Worlds. First Meetings Between Maori and Europeans 1642–1772*. Penguin Books, Auckland.

The University of Waikato
Radiocarbon Dating Laboratory

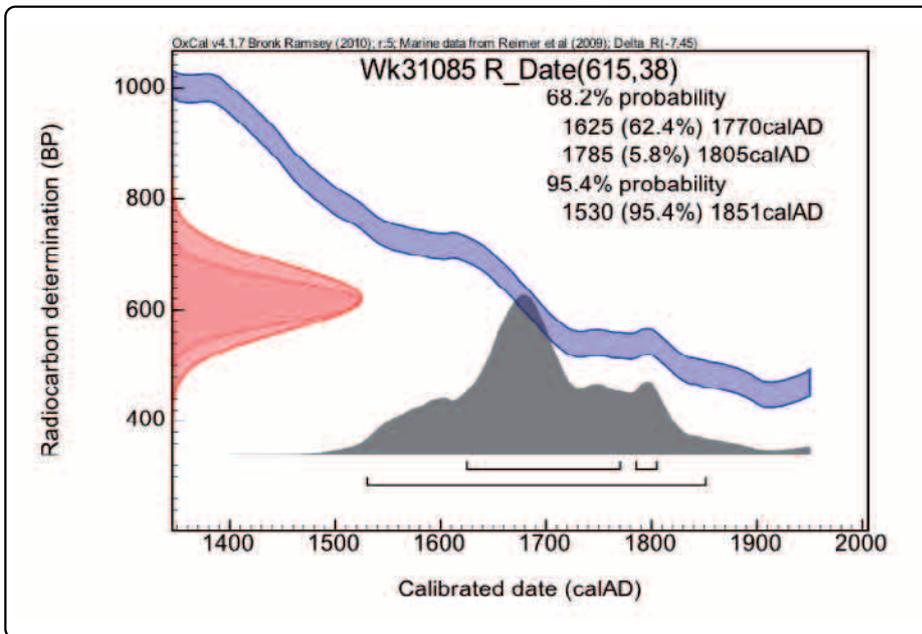


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Report on Radiocarbon Age Determination for Wk- 31085

Submitter	L. Furey
Submitter's Code	U14/157 surface ditch fill
Site & Location	Plummers Point, western Bay of Plenty, New Zealand
Sample Material	Cockle
Physical Pretreatment	Surfaces cleaned. Washed in an ultrasonic bath. Tested for recrystallization: aragonite.
Chemical Pretreatment	Sample acid washed using 2 M dil. HCl for 60 seconds, rinsed and dried.

$\delta^{13}\text{C}$	$1.2 \pm 0.2 \text{ ‰}$	Comments
D ¹⁴ C	$-73.7 \pm 4.4 \text{ ‰}$	
F ¹⁴ C%	$92.6 \pm 0.4 \%$	
Result	615 ± 38 BP	



Alan Hogg

18/07/11

- Result is *Conventional Age or Percent Modern Carbon (pMC)* following Stuiver and Polach, 1977, Radiocarbon 19, 355-363. This is based on the Libby half-life of 5568 yr with correction for isotopic fractionation applied. This age is normally quoted in publications and must include the appropriate error term and Wk number.
- Quoted errors are 1 standard deviation due to counting statistics multiplied by an experimentally determined Laboratory Error Multiplier.
- The isotopic fractionation, $\delta^{13}\text{C}$, is expressed as ‰ wrt PDB.
- F¹⁴C% is also known as *Percent Modern Carbon (pMC)*

The University of Waikato
Radiocarbon Dating Laboratory



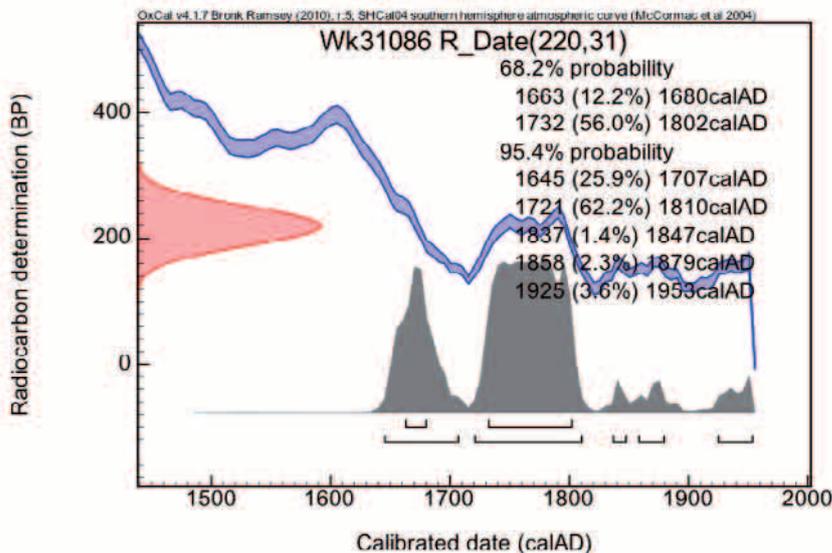
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Report on Radiocarbon Age Determination for Wk- 31086

Submitter	L. Furey
Submitter's Code	U14/157 under defensive bank
Site & Location	Plummers Point, western Bay of Plenty, New Zealand
Sample Material	tutu, mapou, puriri/tarairi twig and supplejack.
Physical Pretreatment	Possible contaminants were removed. Washed in ultrasonic bath.
Chemical Pretreatment	Sample washed in hot 10% HCl, rinsed and treated with hot 1% NaOH. The NaOH insoluble fraction was treated with hot 10% HCl, filtered, rinsed and dried.

$\delta^{13}\text{C}$	-27.2 ± 0.2 ‰
D ¹⁴ C	-27.0 ± 3.7 ‰
F ¹⁴ C%	97.3 ± 0.4 %
Result	220 ± 31 BP

Comments



Alan Hogg

18/07/11

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