

ARCHAEOLOGY IN NEW ZEALAND



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PUKERANGIORA PA HISTORIC RESERVE: HISTORY AND ARCHAEOLOGY

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In 1910 an area between the Waitara River and Te Arei Road in north Taranaki was acquired by the Department of Lands and Survey under the Scenery Preservation Act 1908. The reserve is now the Pukerangiora Pa Historic Reserve, and is managed by the Department of Conservation. The centrepiece of the reserve is an early 19th century pa, but this is not the only historic site within the reserve. Sites dating to the First and Second Taranaki Wars also lie within the reserve boundaries. Parts of Pukerangiora pa and some later features, dating to the period of the Taranaki Wars, lie on neighbouring properties.

W.H. Skinner and S.P. Smith were prominent in the drive for acquisition (see Leach 1991 for background), and research into the early 19th century history of the pa by W.H. Skinner was published in Smith (1910). Features of the Taranaki War were also an important part of the reserve but have received less attention. By the 1970s the interpretation, by the Department of Lands and Survey, of some of the features of the Taranaki War period had become confused (Prickett pers. comm. 1995).

MAPPING PROGRAMME

Between 27 and 31 March 1995, two archaeologists from Science and Research Division, Department of Conservation, with assistance from New Plymouth Field Centre and a local volunteer, mapped the archaeological features in the reserve and on neighbouring properties at a scale of 1:1000. Features both within and without the reserve were mapped, as interpretation relies on having an adequate plan of the whole site. Mapping was done using plane table or tape and compass, depending on vegetation cover. The result is a new map of an important group of features.

Earlier maps had shown the most prominent features, usually at a small scale (see Table 1). The origin of the archaeological detail depicted on these plans is often unclear. The relevant fieldbook associated with SO 3575 (P497:16-21), for example, contains few archaeological details and much of this information must have been added to the plan by inspection. The most complete plan (which was confined to the reserve) was prepared by the

Department of Lands and Survey in 1972-3. This plan was drawn at 2 chains to an inch and was based on aerial photographs and fieldwork. Some details from earlier plans were also carried over for areas where vegetation cover hindered survey.

The 1995 survey was also hindered by vegetation cover. (For present vegetation cover see Jones 1994:175-177, 205; Jones and Simpson 1995:68-73.) The area on the cliff edge which has been fenced off was overgrown and mapping the rifle pits associated with the defence of Te Arei pa in 1861 proved impractical. There is, however, a 1963 plan by A. Buist which shows the locations of numbers of these pits. The terraces on the end of the headland (see Smith 1910:Plate 11) were explored but again mapping proved impractical. It is in this area that the biggest difference between the new map and with earlier maps occurs. A ditch shown on an earlier map was not located.

The mapping is part of an on-going project looking at a number of different aspects of management of the reserve. Numbers of oblique and near vertical aerial photographs have been taken by Kevin Jones since 1991. More recently, detailed topographical mapping of parts of the reserve has since been undertaken using GPS (25-28 June 1996). This work is being directed by Bruce McFadgen and will provide detailed baseline data for measuring long-term changes to earthwork features.

PRE-EUROPEAN (EARLY 19th CENTURY) FEATURES

History

Pukerangiora is said to be the 'great fighting pa of all Atiawa' (Smith 1910:362). The pa is particularly associated with the Pukerangiora hapu, a hapu with claims to the rangatira lineage of Te Atiawa. The pa is best known for having undergone two sieges: one in 1821-2, and another in 1831. Both sieges were significant events in the widespread warfare, increasingly dominated by the musket, of the 1820s and 1830s. Both events had ramifications far beyond north Taranaki. The Waikato chief, Te Wherowhero, who was later to become the Maori King, played a prominent role in these events.

1821-2

In 1821, a raiding party of Ngati Maniapoto led by Tukorehu was attacked by Te Atiawa and trapped at Ngapuketurua pa. Pukerangiora hapu helped Tukorehu's party to escape to Pukerangiora which was then besieged by Te Atiawa for seven months. The besiegers gave the pa the deliberately insulting name 'Raihe poaka' ('the pigsty'). A force from the Waikato sent

to lift the siege was caught by Te Atiawa at Motunui (1822) and badly mauled, but the defeated Waikato were allowed to join Tukorehu's party at Pukerangiora and from there the combined Waikato parties retreated homewards (Smith 1910:36). This Waikato defeat had the immediate effect of allowing Te Rauparaha to continue his migration south towards Cook Strait. It also led directly to the second siege in 1831.

1831

In 1831, a large Waikato taua descended unexpectedly on north Taranaki. Te Atiawa, weakened by recent emigration to join Te Rauparaha in the Cook Strait area, sought refuge at Pukerangiora. The pa was not stocked for a siege and after three months it fell, in December 1831, with possibly as many as 1200 people killed in the ensuing massacre (Smith 1910:465). The victory at Pukerangiora avenged the earlier Waikato loss at Motunui and forced many Te Atiawa to leave their lands and migrate south. Waikato followed up with an attack on Otaka or Ngamotu pa at New Plymouth but their attack failed and they retreated homewards.

It is significant that Pukerangiora fell in 1831, not to an assault, but because of the lack of provisions. At the beginning of the siege the Waikato attacked the Te Arei end of Pukerangiora but were driven off. Assaults were then directed against different parts of the pa but were also repulsed (Smith 1910:463-4). The pa fell only when starving defenders attempted a breakout and were driven back into pa. This was a period when the presence of muskets was re-shaping older patterns of fortification but Pukerangiora itself has no obvious adaptations to musket warfare. No provision has been made, for example, for fire along the line of the ditches.

Mapped Features

Pukerangiora occupies a narrow, elongated position with strong natural defences (Fig. 1, 2). The eastern flank is protected by steep, and in places almost perpendicular, cliffs which fall 100 m to the Waitara River. There are smaller, but defensibly usable, cliffs on the south side and, in places, on the west side. The pa is shaped like a reversed 'L' with the outer perimeter of artificial defences facing to the north and west. Those facing north are on rising ground (to an attacker); those facing west are on almost level ground. Pukerangiora pa, including Te Arei, covers just over 6.5 ha. The size of the pa indicates that it was a regional stronghold: a place for the wider population to congregate in order to offer combined resistance to large war parties. Although it underwent two sieges in the early 19th century, it was a difficult place to invest and numbers of parties were able to escape from the place during the 1831 siege (Smith 1910:464).



Figure 1. Oblique aerial photograph showing setting and some features mentioned in the text. Photo: K. Jones.

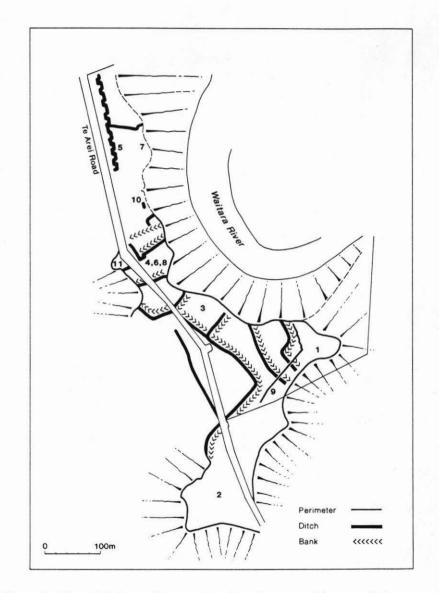


Figure 2. Plan of Pukerangiora pa showing the general layout of the pa and the location of features mentioned in the text.

Pukerangiora may be divided into a number of components. Four areas, predating European settlement, are labelled 1-4 respectively on Figure 2. Numbers 5-11 identify features of later occupation.

- (1) The headland, known as Matareinga (Smith 1910:Map 5). This area has strong natural defences except to the west where there are three lines of ditch and bank defences. There are a series of terraces on the steep slopes of the headland.
- The hilltop, known as Te Kaikatea (Smith 1910:Map 5). This area lies (2)to the SSW and also has strong natural defences. Te Kaikatea is incorporated within the pa by the outermost line of defences. This part of the pa is not as heavily defended as Matareinga. According to oral traditions, it was occupied during the siege of 1821-2 by Tukorehu's men. Two broad terraces are evident on the north side of the hilltop. There is a possible house floor on one terrace. Skinner's sketch plan (Smith 1910:Map 5) indicates the presence of defences at the top of the slope in some places around the south and west sides of Te The present field evidence suggests artificially steepened Kaikatea. scarps may have been present in places. Te Arei Road has removed any traces of defences on the ridgeline that descends from Te Kaikatea to the south. There is also evidence that suggests that Te Kaikatea may have been used as an urupa in the later part of the 19th century (F.A. Fenton: pers.comm., 8 November 1995).
- (3) A cliff-edge unit, known as Whakamarumaru o te Kapua (SO 3575). This area has strong natural defences on one side and artificial defences on three.
- (4)The Te Arei position, referred to as 'the north-west division of the pa' and 'the marae of the pa' (Smith 1910:463). The area is difficult to interpret because of the obliteration of earlier features by later events. This is particularly the case with the northern perimeter. Wells's (1978:246) reference to a high bank which once formed 'part of old Pukerangiora pa' suggests a probable continuity in the use of the earthworks at Te Arei. The interpretation of the northern perimeter at Te Arei is discussed further below (Section 6). To the rear of the position, two separate lines of ditch and bank defences appear to belong to a position centred on Te Arei. These almost certainly predate the events of the 1860s. There is a ditch and bank across a narrow part of the terrace land which can be traced on both sides of Te Arei Road. South of this, on the west side of Te Arei Road, is a second ditch and bank, which also faces south. The latter, in plan, lines up with the forward transverse ditch and bank of Whakamarumaru o te Kapua to the east of Te Arei Road. The two sections of defences face in opposite directions, however. It is likely that this western section of ditch and bank was once part of a continuous outer perimeter which defended the western side of the position.

A palisade and earthworks was constructed around Pukerangiora by the besieging Te Atiawa in 1821-2 (Smith 1910:364). This work was intended to keep pressure on the besieged and cut off food supplies and communications. No trace of this can now be positively identified but there is an unidentified linear feature about 200 m long which lies just to the west of Te Arei Road. This was first identified by F.A. Fenton in late 1995 and has been drawn on Fig. 1 from near vertical aerial photographs. Its interpretation is problematical.

There is generally very little visible evidence of occupation within the pa. Only a score of examples were found of house floors, rectangular storage pits, or rua. This may be due, in part, to the growing of pine trees on the site this century.

TARANAKI WARS FEATURES

History

The First Taranaki War took place between March 1860 and March 1861 (Prickett 1981, 1994). The Te Atiawa strategy was to build pa and invite attack. A notable success was achieved at Puketakauere in June 1860 but thereafter Government forces avoided frontal assaults on defended positions. In the closing phase of the war, a campaign was undertaken to destroy Te Atiawa strongholds south of the Waitara River. General Pratt, with a large force, advanced from Waitara and, under heavy fire, dug in. Fortifications were used to protect the line of advance and provide a base for operations against enemy positions. In all, a series of eight redoubts, and two stretches of sap, were built along the line of the advance towards Te Arei, where Hapurona had fortified a position on the edge of the bush. The advancing forces were funnelled by the terrain towards Te Arei where the pa blocked and commanded the line of advance. The bush to the rear made provision for the escape of the garrison if necessary. The sap against Te Arei, known as Pratt's sap, approached to within about 100 m of the outer defences when a ceasefire brought the war to an end on 19 March 1861. The First Taranaki War was unusual in the emphasis placed by Government forces on works for purposes of tactical offense.

The Second Taranaki War (1863-1866) was a desultory affair with limited actions spread over a large part of Taranaki. The war soon became a sideshow to the Waikato War and other campaigns. On 11 October 1864, Government forces under Colonel Warre took Te Arei. While one column approached the front of the position, a second column entered the pa from the rear unopposed (Wells 1878:246). A redoubt was built at Te Arei during the war and, a few years later, in 1869, a blockhouse was sited there as part of the policy of placing men of the Taranaki Military Settlers on the land

(Prickett 1981:222).

Mapped Features

Remains of Taranaki Wars period are:

- (5) Part (182 m) of the final section of Pratt's sap, including a demi-parallel. Two demi-parallels were dug as the sap was extended from No.8 Redoubt towards Te Arei (Cowan 1983:214-18, see also sketch by F.H. Arden reproduced in Prickett 1994: Fig.46). Nothing can be seen of the first demi-parallel, which lies about 75 m north of the reserve boundaries. The second, begun on 15 March 1861 to drive snipers from rifle pits on the left flank of the advance, survives in reasonable condition. This demi-parallel is depicted in a well-known plan published by Mould in 1863 (reproduced in Prickett 1994: Fig. 42). The plan is very misleading in its depiction of the orientation of the demi-parallel in relation to both the sap and the cliff edge. Mould's plan shows an angle of about 115° between the sap and the demi-parallel: this angle, as measured on the ground, is only about 72°. Mould's plan shows an angle of about 55° between the cliff edge and the demi-parallel; in reality it is about 120°.
- (6)Te Arei pa, the position occupied by Hapurona in 1860-61, and reoccupied by Te Atiawa in 1864. The earthworks of the 1864-7 redoubt and the 1869-71 blockhouse have obscured the archaeological evidence of the 1860-61 and 1864 defences but it is likely that each successive occupation made substantial use of the already existing works. The bastion on the cliff edge is unusual for a redoubt and may be part of the 1860-61 or 1864 defences. The pits may represent the remains of sunken 'bomb-proof' whares. There is also an anomalous section of ditch on the interior of the bank near the pits which may be a remnant of the 1860-61 or 1864 defences. The 1861 Arden drawing (Prickett 1994:Figure 46) shows a stockade on the brow of the hill extending the full width of the position but it is the trenches and underground bunkers, hidden from view, which were the crucial elements. Cowan's (1983 II:29) comments indicate that the defences of Te Arei were remodelled by Te Atiawa in 1864 to provide a false target. Colonel Warre produced two sketches of Te Arei (Prickett 1981:163). In one, his troops are shown advancing on the pa along the 1861 sap. The other depicts the defences and shows a light outer fence backed by massive earthworks, including firing trenches, and backed by a stockade (Prickett 1994:74). This is consistent with a description of the position containing 'two lines of palisading, with a considerable space between them, in which [there] were two lines of deep trenches, and a high bank which at one time formed part of old Pukerangiora pa' (Wells 1878:246).

(7) Rifle pits, used in conjunction with the main position. The rifle pits on

the edge of the cliff were used to bring flanking fire to bear on the sap. In response, Government forces dug demi-parallels in an attempt to drive Maori from their position.

- Te Arei Redoubt, built in October 1864 during the Second Taranaki War. (8) Government forces took Te Arei on 11 October 1864, with the defenders retiring into the bush. The redoubt was completed by the end of the month. It was probably abandoned in 1867 (Prickett 1981:162). The shape of the redoubt is not known with any certainty. It is likely that use was made of existing works in laving out the redoubt and the north face almost certainly follows the line of the Maori entrenchments. The redoubt is depicted in an early survey (DOSLI Fieldbook W1:17), and on the c.1897 Waitara IX Block Sheet (10 chains to the inch), with flanking angles on the NE and SW corners. An unknown artist sketched the redoubt (reproduced in Prickett 1981:159), probably in early 1866, but the drawing shows clearly only the probably unrelated earthworks at the NE corner. (The origin of this bastion is discussed above.) More recent surveys (SO 3575, Prickett 1981:164) have identified flanking angles on both the NW and SW corners of the redoubt. The western side has suffered considerable damage and interpretation of the remains is now difficult. This face was probably thrown down when the blockhouse was erected (Prickett 1981:163-4). Prickett's (1981:164) plan, with flanking angles on NW and SW corners. is consistent with the surviving surface evidence.
- (9)A rifle trench crossing the main defensive lines of Pukerangiora pa. The trench runs some 150 m inside the 1821-1831 defences; it consists of a shallow .2 to 1 m deep trench, about 1.2 m wide, with returns along its length as it approaches the cliff edge. Older plans suggest that early this century this feature could be traced further west than is now the case. It is possible that the trench was dug by Maori in 1861 or 1864, perhaps to cover a possible retreat from Te Arei. An alternative interpretation is that it is a sap, designed to protect an advance by Government forces from the western slopes. The trench crosses or lies behind the old ditch and bank defences and could have prevented their use as cover against an attack from the north. From its northern turn, deep within the ancient defences, the trench contains distinct returns which suggest a need for protection from fire from the cliff edge. No historical records have been found (Prickett: pers. comm., 1995), however, to suggest that the trench was dug by Government forces.
- (10) A large pit in front of Te Arei has usually been identified as a rifle pit. It is not like other rifle pits nearby, however, and it has some characteristics which are suggestive of a saw pit. The pit has raised level banks around it, and is long and narrow in plan. The construction of the redoubt, and associated settlement in the vicinity, provides a possible context for the need for a saw pit.
- (11) A blockhouse moved to Te Arei in March 1869. The site occupies the

left flank of Te Arei and is now on private land across the road from the reserve. The site was selected in March 1869 and the abandoned Manganui Blockhouse was moved and re-erected there in March and April. The position was permanently abandoned in late 1870 or 1871 (Prickett 1981:221-2).

CONCLUDING DISCUSSION

The detailed survey of a well-preserved pa complex, along with correspondingly detailed traditions and New Zealand Wars history, allows comment on two issues that have interested archaeologists and historians. The first is the speed with which, and process by which, Maori adapted premusket fortifications to the arrival of guns, and indeed the whole issue of the rapidity with which guns came into circulation outside of the Nga Puhi (northern) region. The second question was much debated in the 1860s and, more recently, by historiographers of the New Zealand Wars (e.g. Belich 1986). Was there sound military sense behind Pratt's reliance on saps in the campaign against Te Atiawa?

Although the musket came rapidly into use in the 1820s and 1830s, the defences at Pukerangiora were not specifically adapted to musket warfare. The layout of the pa, and the form of the defences, are not untypical of pa in this sort of terrain and reflect the pattern of fortification in the pre-musket era. As was usual, the pa had a strongly defended inner area, with numbers of lines of defence. The fact of successful resistance against assault in 1831 suggests that old-style fortifications could be effective against muskets if both sides had them, if the attacking party lacked predominant numbers, or if the attacking side did not adapt their tactics to make the best use of the new weapon. When Pukerangiora fell in December 1831, it was because of a lack of provisions and not a weakness in the defences. As a result of the fall of Pukerangiora, many Te Atiawa migrated south to join Te Rauparaha. When the Pakeha settlement of Taranaki began in the 1840s, the area had thus largely been de-populated. The subsequent return home of many groups of Te Atiawa led to growing tension and, in the 1860s, to war between Maori and Pakeha.

In 1860-61, part of the Te Atiawa strategy was to erect strong fortifications and invite attack, with a good chance of thereby inflicting heavy losses on the enemy (Belich 1986; Prickett 1994). This strategy was effective against an enemy who sought a decisive battle, but after their losses at Puketakauere (27 June 1860), and with Major-General Pratt in command, such assaults were avoided thereafter. Government forces were successful in inflicting significant losses on Te Atiawa's Waikato allies in an open engagement at Mahoetahi (6 November 1860) and when Pratt advanced from Waitara in December 1860 against well defended positions, he dug saps and

built redoubts to protect his line of advance. Belich (1986:116) dismisses the case for sapping as 'utterly unconvincing' but it effectively negated part of the Te Atiawa strategy, and frustrating enemy intentions is an important part of war. Pugsley (1996) also takes issue with Belich's view of the attack on Te Arei.

Nonetheless, the approach taken was costly to the Government forces in men, time, and material: some 70 casualities were incurred in the sapping operations, while Maori casualities were about 30 (Belich 1986:111). A major Government success occurred when heavy losses were inflicted on a party which launched a frontal attack on the No.3 Redoubt (23 January 1861). Te Atiawa were able to keep up a continuous campaign against the enemy because of the flow of men and supplies from their former enemies in the Waikato. The result was that the war ended in a stalemate. As Pratt recognised, however, the only answer was 'not to confine war to this province, but to make aggressive movements into the Waikato's own country' (Belich 1986:114). Waikato's involvement in the war provided a pretext for a wider conflict.

Te Arei was described in a records of the 12th Regiment as 'the strongest and best defended pah in the country' (Belich 1986:113). It was built with the entrenchments 'covered over and guite invisible' and this helped to counteract the superiority in armaments and numbers of the Government forces. Colonel Carey claimed that 'none of the positions taken up by the natives were of the slightest importance to them or to us' (Carey 1863:89, cited in Prickett 1994:81) but the Te Arei position was defended throughout with great tenacity and, for that reason alone, there is little doubt that its loss would have been perceived by its defenders as a significant defeat. It is possible that even if Te Arei had been captured, Pratt's advance would have been barred by yet another line of defence (Belich 1986:112-113). Nonetheless, the fight was being carried to Te Atiawa and the ground gained was being held through construction of redoubts. As in many other wars, civilian critics were impatient with the military, disparaged the fighting aualities of both their own forces and those of the enemy, and advocated frontal assaults on prepared positions as a way to break through (Keegan 1994). Whatever his failings, Pratt understood the tactical superiority of defence over offence, appreciated the limitations of the 'moral element', and did not underestimate the enemy. Any offensive action, even by sapping, inevitably exposed the attacking side to the risk of higher casualties than the defending side. Pratt's approach of keeping pressure on enemy strongholds, and taking and holding territory was, arguably, a sensible response to the Te Atiawa strategy. Bohun (1994:155) suggests that Pratt's strategy 'was more effective than the settlers were willing to admit."

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TABLE 1: Maps of Pukerangiora Pa

Pukerangiora Pa. Sketched by W.H. Skinner, drawn by W.F. Gordon. In Smith 1910: Map 5. Scale: 6 chains to an inch.

S.O. 3575. Pukerangiora Pa, Plan of Sec. 267 Huirangi District. T. Sole, 10 January 1910. Scale: 5 chains to an inch.

Pukerangiora pa. Scale: 5 chains to an inch. Based, with additions, on S.O. 3575.

Te Arei Pa and Saps. A.G. Buist, 1963. Tape and compass. Scale 1:1000. Copy with N.Z.A.A. Site Record Form Q19/70.

Topographical Plan of Pukerangiora Pa Historic Reserve. Prepared by Department of Lands and Survey August 1972, amended November 1973. Scale: 2 chains to an inch.