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Excavations at Raupa Pa (N53/37) and Waiwhau Village (N53/198), Paeroa, New Zealand, in 1984

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ABSTRACT

An exploratory excavation at the adjacent sites of Raupa and Waiwhau is described. The physical setting and history of the sites are outlined and archaeological work in the region is reviewed. A comparison is made with the renowned sites of Oruarangi and Paterangi. Similar time depth and importance are suggested for Raupa and Waiwhau. The threat from development is outlined and a plea for future salvage work is made.

Keywords: RAUPA, WAIWHAU, PA, EXCAVATION, SALVAGE, HAURAKI PLAINS, ORUARANGI.

INTRODUCTION

The sites of Raupa and Waiwhau are located on the bank of the Ohinemuri River, opposite the town of Paeroa, in the Hauraki Plains (Fig. 1). Raupa was known to be a pa and had been recorded in the New Zealand Archaeological Association files as N53/37 (T13/13). The existence of the other site, Waiwhau, subsequently recorded as N53/198 (T13/756), was in doubt. However, no surface features were now evident on either site, because of post-occupational disturbance.

The sites were in danger of being destroyed by the Hauraki Catchment Board who were developing the river edge as part of a flood-protection programme. The Catchment Board agreed to limit construction work in the 1984 season to a strip 50 m wide adjacent to the stopbank, thereby leaving the major part of the sites intact.

Preliminary investigation of test trenches and a study of historical records revealed that both Raupa and Waiwhau contained extensive cultural deposits. It seemed likely that the sites might be comparable to other important and complex pa sites on the lower Waihou River. Therefore, a two week exploratory excavation was devised involving a group of volunteers.

The goals of the excavation were: to determine whether there were two sites; gauge the size and state of preservation of the remaining archaeological record; attempt to establish the relationship of the sites to each other and to the changing river courses; and identify internal structure and activity areas (Phillips 1983). It was hoped that if these excavations confirmed the initial results a more extensive investigation could be mounted in the future.

PHYSICAL SETTING

The sites of Raupa and Waiwhau are situated at what was the junction of the Waihou and Ohinemuri Rivers, before the diversion of the Waihou River in 1913–18. The Waihou rises near Matamata to the south and the Ohinemuri near Waihi to the east. These rivers drain

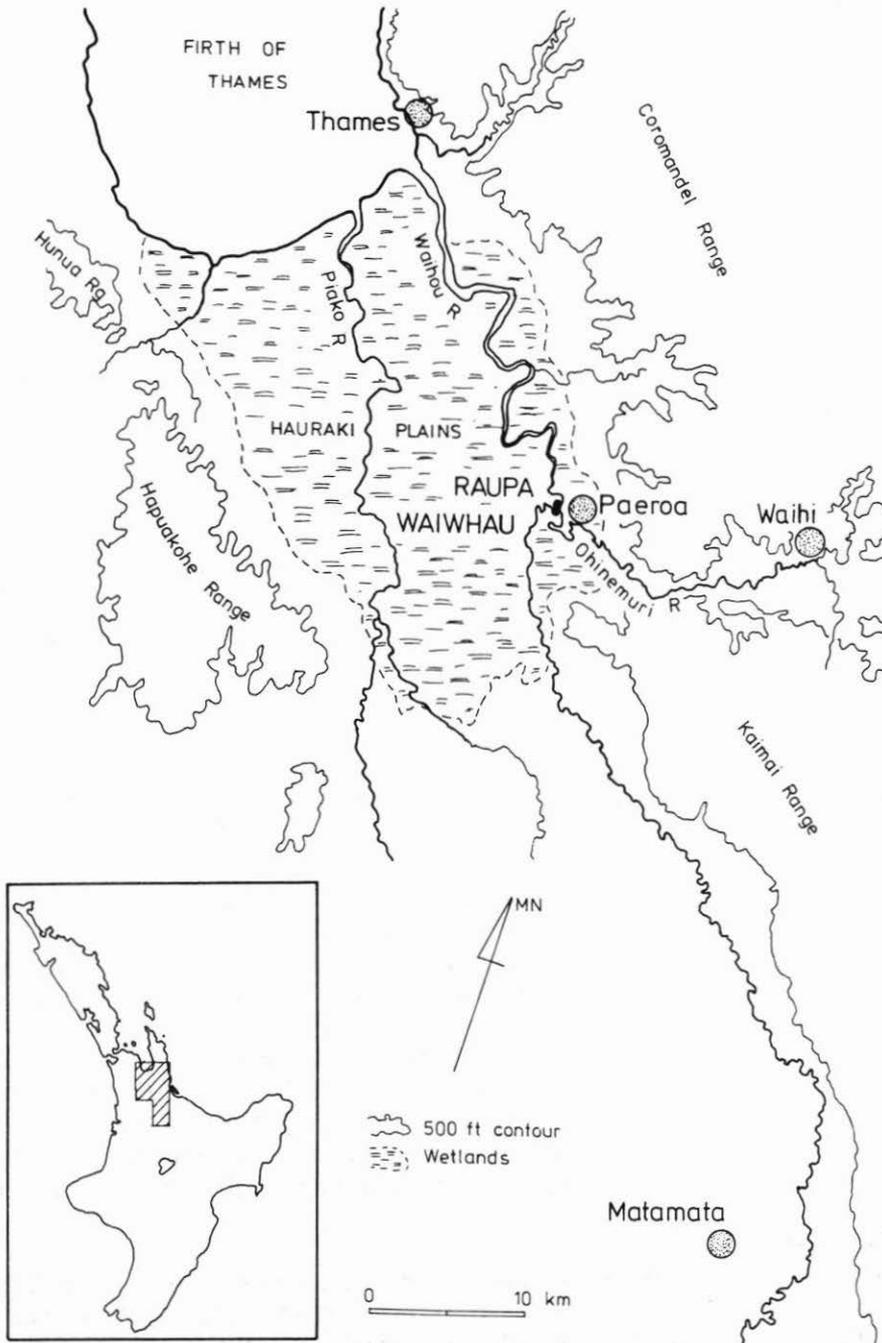


Figure 1: Location map (note: old course of Waihou River is shown).

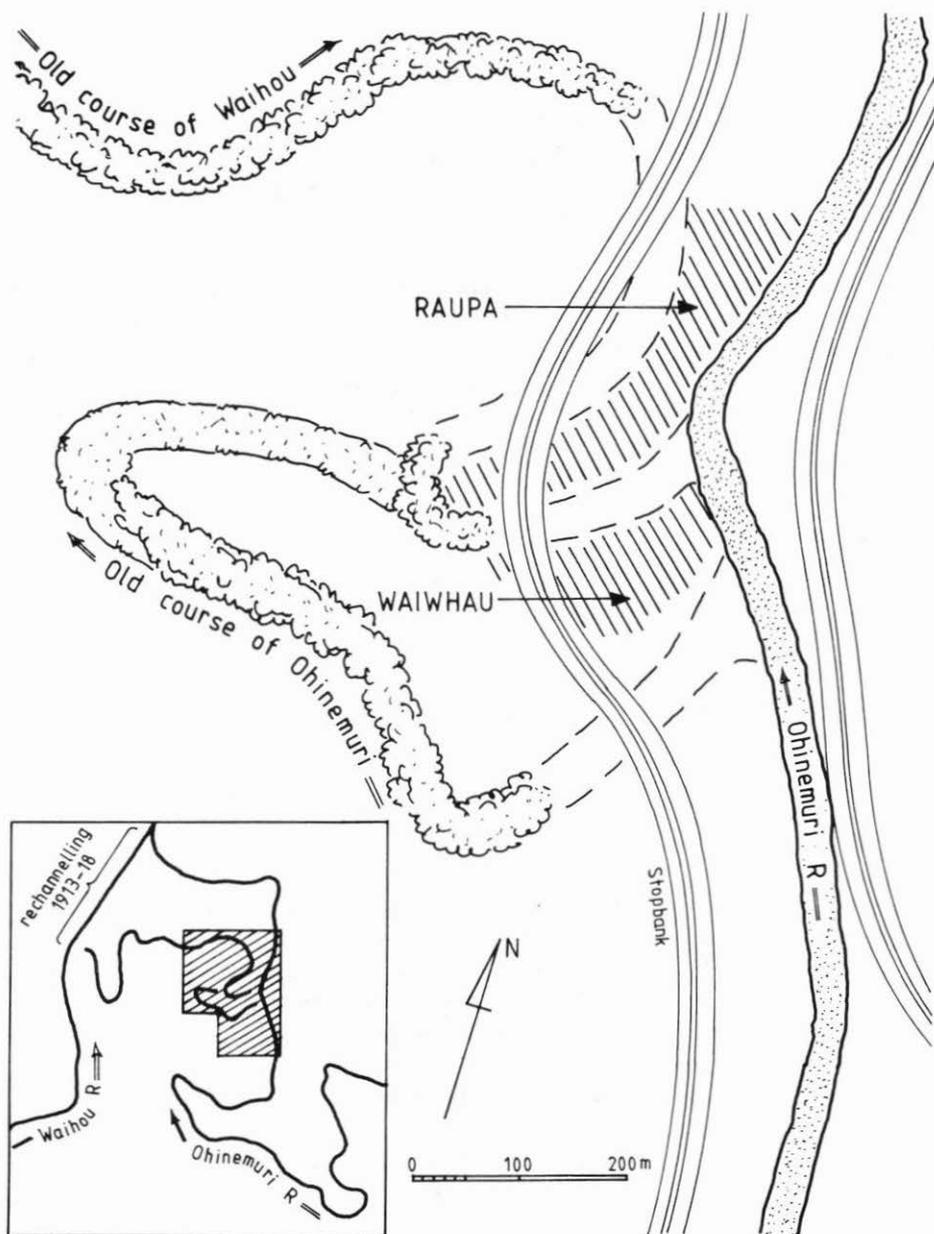


Figure 2: Changing river courses of the Ohinemuri and Waihou, based on aerial photographs.

the east side of the Hauraki Plains, which are bordered by the Coromandel and Kaimai Ranges to the east and the Hunua and Haupuakohe Ranges to the west (Fig. 1). The Plains represent the upper part of the downfault that extends out into the Firth of Thames. They

form a large, flat region: although the river junction is 35 km from the Firth, the land is only 4 m above sea level.

Both rivers meander across the Plains, and at Paeroa there appeared to have been two river junctions formed by the changing course of the Ohinemuri. The course that existed before recent canal formation divides the two sites (Fig. 2). However, there is a wider loop, which is probably an older course of the Ohinemuri River, and which brings the junction of the two rivers further west (P. Black, pers. comm.). Before drainage and modern roads, the rivers provided the main transport routes, both south to the Waikato and east to the Bay of Plenty.

The eastern Hauraki Plains are composed of alluvium mainly deposited by the Waihou, combined with some local alluvium brought down the Ohinemuri. These deposits have formed undeveloped clays, with a pale subsoil underlying a friable brown, silty clay loam. The soils are highly fertile, though often waterlogged or prone to flooding. They would have supported a native vegetation of kahikatea (*Podocarpus dacrydioides*) forest. In parts the soils are overlain by a fine silt loam. This loam is a rock flour derived from crushing gold-bearing ore, which was dumped into the Ohinemuri River (D.S.I.R. 1954, 1968).

SITE HISTORY

The earliest mention of Raupa that I have found is recorded by Kelly (1945: 109). He refers to a tradition that Te Kahureremoa spent a night there while journeying from the west side of the Hauraki to the Bay of Plenty in approximately A.D. 1600.

In June 1820, Marsden wrote that he

... arrived in the evening at a settlement called Kowpah^[1], situated at the junction of two fresh-water rivers whose united streams form the Thames.

On a point of high land where the two streams meet, and by which it is surrounded, stands the hippah of the head chief. ... The hippah was very full of people. ... The natives' houses here were much larger and better built than any I had seen in New Zealand. The areekie appropriated one for us, which afforded lodging to us and the fifty natives who had attended the launch up the river (Elder 1932: 255).

Rihitoto refers to Ngati-Kahuwhitiki (?) from Waiwau (?Waiwhau) near the junction of Ohinemuri and Waihou (1893: 110) in battles occurring just before the Ngapuhi raids.

On acquiring guns, the Ngapuhi decided to come south to seek retribution for earlier incursions into their territory. In 1821, Mauinaina in Auckland and Te Totara near Thames were sacked (Kelly 1949: 350-5). Many tribes along the Waihou fled to the hills or inland, fearing further attacks. When the Ngapuhi returned "... they came up the Waihou River. Their approach was seen from Raupa. A fight took place there. Maeaeae and Toea chiefs of Ngapuhi were killed. Ngapuhi fled." (Rihitoto 1893: 111).

After this most of the Waihou people went to Maungatautari, near Cambridge, where the Ngati-Haua granted them land for cultivation. However, they and other Hauraki tribes, who were also refugees from Ngapuhi vengeance, overstayed their welcome. There were several feuds and the Waikato tribes joined forces for the battle of Taumatawiwi in 1830, after which the Hauraki people returned home (Kelly 1949: 380-6).

Raupa does not appear to have been reoccupied immediately. When Henry Williams visited Raupa in 1833 on his way to Tauranga, he found "No one here, nor any fences up to indicate a Fortress" (Rogers 1961: 346). He did note that land in the region had been cleared for cultivation and there were small parties of natives.

The Ohinemuri was opened up to gold mining in 1875 and a township established at Paeroa, at which time the sites appear to have been abandoned. Certainly after 1880 denudation of the hillslopes and the dumping of mine tailings in the Ohinemuri River resulted in the inundation of all low-lying land. Farming began after the 1890s with the sale of land to Europeans. Waiwhau remained in Maori hands and a portion that had been fenced off was marked on the land title as "Old Waiwhau Pa".

PREVIOUS INVESTIGATIONS

There have been numerous investigations of varying quality in the materially rich pa sites of the Hauraki Plains. These investigations, beginning in the 1930s, have ranged from collecting expeditions to site surveying, test excavation, and mapping.

ORUARANGI AND HAURAKI PA SITES

There have been several uncontrolled excavations along the Waihou River centring on Oruarangi pa. This site produced prolific artefactual material. Even though it has traditionally a long, complex history (cited in Best 1980: 68), the majority of artefacts are of Classic Maori style, and it has been used as the type site for the Classic Maori artefact assemblage in the North Island (Golson 1959: 54–8). Green pointed out that there was a predominance of artefacts of Classic form in the Hauraki Plains, whereas Archaic types were rare. He suggested that specialised techniques were needed to live in this swampland, and although in the early period it might have been explored and exploited, it was not settled permanently until population pressure caused movement into this less favourable area (Green 1970: 35). Groube, referring to the high percentage of European goods, proposed that much of the material found might be protohistoric (Groube 1964: 22). All workers bemoan the lack of areal and stratigraphic control in the early excavations.

It was partly to answer some of these problems that Simon Best undertook test excavations at Oruarangi in 1976. Best's investigations indicate that occupation began about A.D. 1500, on a natural core of raised ground. The site was subsequently expanded in stages with shell fill retained by wooden posts, and reached its greatest extent about A.D. 1650. The dates from the satellite pa, Paterangi, indicate that it was contemporary with the later stages of Oruarangi. Historic sources relate the supreme importance of Oruarangi in the area up to the early 1800s. Best refuted the idea that the Hauraki Plains were inhabited only in the Classic period. Citing his findings from Oruarangi where "... oral traditions, artefacts, radiocarbon dates and stratigraphy all indicate a site with a long and complex history" (1980: 79), he suggested that Oruarangi may hold regional information relevant to the tenuous Archaic/Classic boundary. It may also contain rarely recovered organic remains because of its low-lying, swampy position.

In 1979, Best, while investigating the importance of Oruarangi in the archaeological landscape, conducted a site survey on the east bank of the Waihou River below Paeroa. He found 10 flatland pa in this area, as well as two on the west bank, and noted the location of two others which he presumed were destroyed (Fig. 3). "All except one of these contained shell fill in varying amounts, becoming less the further upstream the site occurred" (Best 1980: 79). Best grouped the sites according to size. In his sub-category Va there were six sites 3,400–6,000 m² in extent; these occurred at the mouths of side creeks and had defensive ditches. Sub-category Vb contained four sites, 8,000–9,6000 m² in area. This group Best classified as satellite pa, since they were situated within 40–150 m of the two largest pa, and only one had defensive ditches. The largest sites, sub-category Vc,

had an area of 20,500 m². The pa occurred in groups around the Hikutaia Creek and the Kirikiri Stream.

RAUPA AND WAIWHAU

Kenny surveyed Raupa in 1893 (Fig. 4). He discussed his observations with Kelly (1945: 207). At that time there was little sign of erosion and the defences were well defined. The southern defence was the largest; the ditch was four feet deep (1.3 m) and was nine feet high (3 m) to the top of the bank. The interior of the pa, south of the main bank, was slightly higher than the land to the north and almost had the appearance of being artificially raised. There was a considerable number of cooking stones and beds of shell. A boom had been put across the Waihou River at the river junction to stop the Ngapuhi, from Northland, going upriver, and later to prevent the Ngati-rahiri, from Te Aroha, going down.

Kelly visited the site in 1945 and described the differences in its appearance (1945: 208–10). The Waihou River had been blocked, stopbanks erected, a great amount of erosion had taken place and a considerable portion of the original area had gone down the Ohinemuri River. The outer ditch and bank defence had nearly disappeared and the middle defence was indicated by a low bank. Fifty yards (46 m) further south was the main defence, the bank of which was still 4–5 feet (1.3–1.5 m) high, but the ditch had been almost completely filled. The interior of the pa was possibly 3 feet (1 m) higher than the land to the north. Flood deposits had covered the whole area. A stopbank had been erected parallel to the Ohinemuri River missing the majority of the site, except where it crossed the old bend of the Waihou towards the south. In this area earth had been borrowed for stopbank fill. In the sides of these borrow pits charcoal, firecracked stones and shells were exposed. Shallow depressions filled with water marked the old course of the Waihou River.

Kelly's description summarised the changes evident in 1945. By the time Best visited the area in 1983 the post-occupational activity had resulted in a total transformation of the landscape and all surface archaeological features had been obliterated. The effects of these changes are detailed in Phillips (in prep.).

THE EXCAVATION

The present investigations began in 1983, when Best was called in by the Hauraki Catchment Board to look at the fenced area called Waiwhau Pa Block, where they were constructing a berm, between the stopbank and the Ohinemuri River. Best could find no indication by probing that there was any habitation at Waiwhau. However, he did note the presence of the old Waihou channel on the aerial photograph (Fig. 2). North of this channel where the Catchment Board had started to work, patches of shell had been exposed and various artefacts retrieved (Best 1983).

The excavation of trenches (Trench A and B, Fig. 7) by mechanical digger, supervised by Best, established that there were two archaeological sites (see Figs 5 and 6). A review of the New Zealand Archaeological Association site record files and further trenching in the area of the ditches (Trench C and D) supervised by Susan Bulmer, suggested that Raupa Pa was in the area involved (Maingay 1983).

Bulmer called a meeting at Auckland University, at which she outlined the findings to date and invited participation in an excavation. The author volunteered her services as a director and prepared excavation proposals for the New Zealand Historic Places Trust (Phillips 1983).

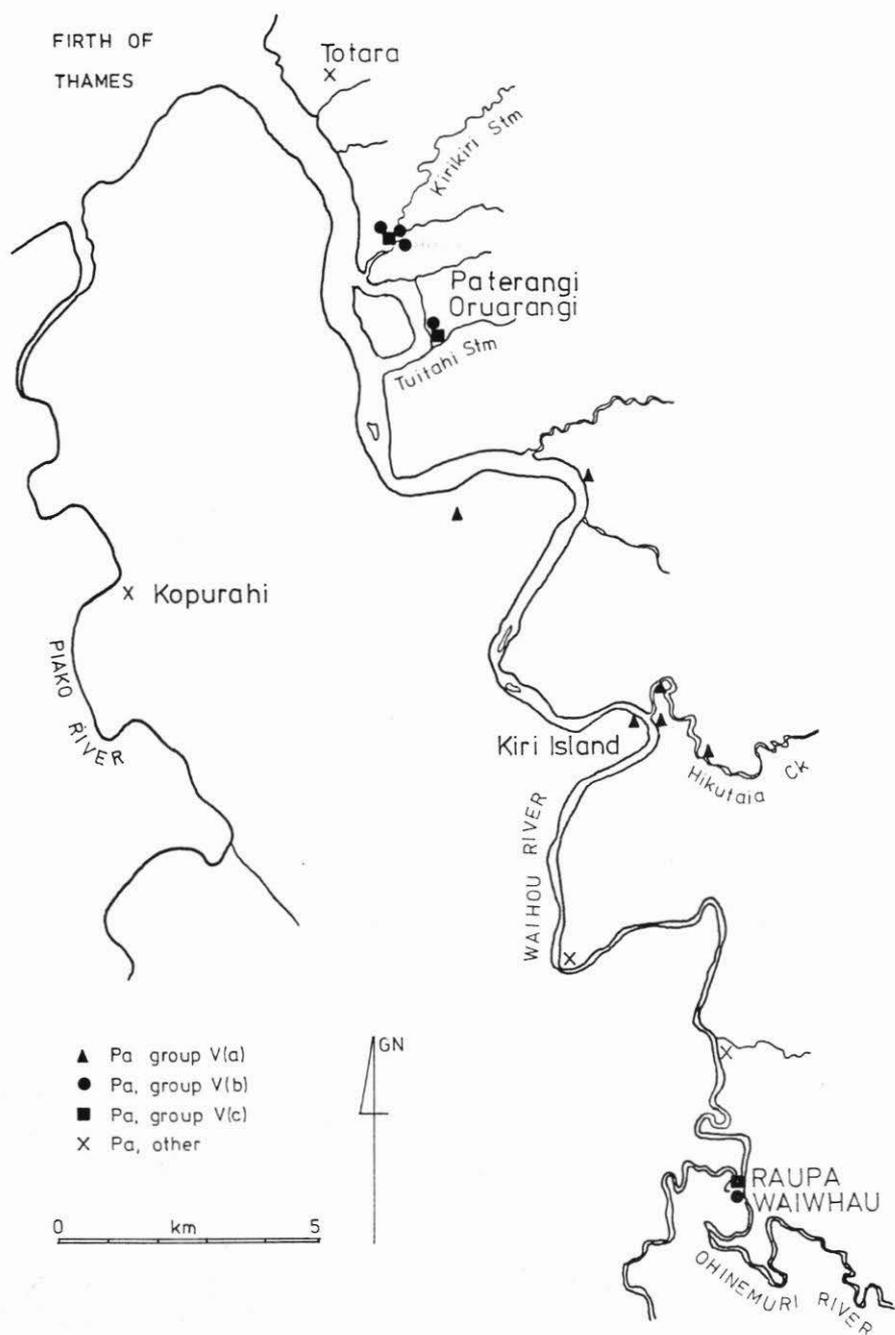


Figure 3: Location of flatland pa along the Waihou River (after Best 1980: 80, Fig. 5). Pre-1880s river courses are shown.

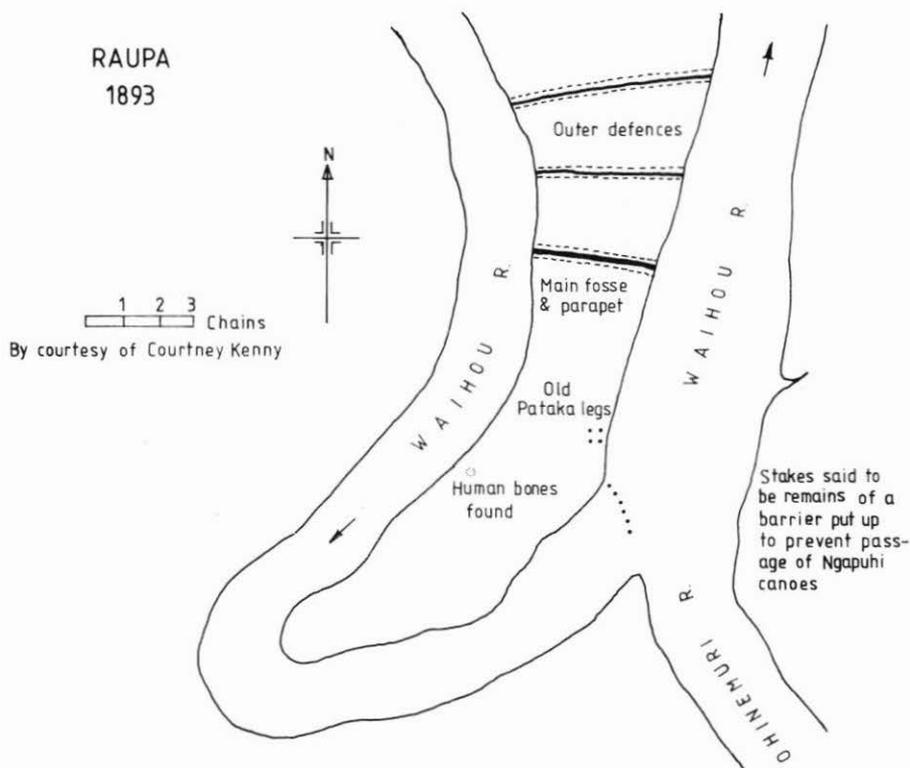


Figure 4: Survey of Raupa by Kenny in 1893 (after Kelly 1945).

The proposed field methods mainly involved trenching to observe and record the stratigraphy, especially at the site/river boundaries. A machine was hired to cut two long trenches (Trench E and F) to intersect part of the sites and the old Waihou River channel. The rest of the excavation was by hand. Small areas were opened up in order to gain some idea of the structural relationships. Laboratory analysis was beyond the scope of this type of investigation; therefore the soil was not sieved for micro-artefacts or economic material. Detailed plans and sections were drawn to record all features and artefacts. An accurate map of the sites was constructed using a theodolite and tilting level. All survey points, natural features, trenches, drains, all major features and excavations were plotted and are relocatable using the permanent bench marks (Fig. 7). The techniques and findings are described in Phillips (in prep.).

RAUPA

Initially work was concentrated at the north end of Raupa Pa (Fig. 8). The aim was to discover the position, alignment and state of preservation of the three lines of defences referred to by Kelly. Three trenches and drains had recently been machine-cut in this area, and much of the surface had been scraped by machinery, leaving a layer of wind-blown, water-washed debris about 10–20 cm thick. Teams of excavators cleaned down the trench faces to locate the ditches, and followed the sides out along the scraped surface.

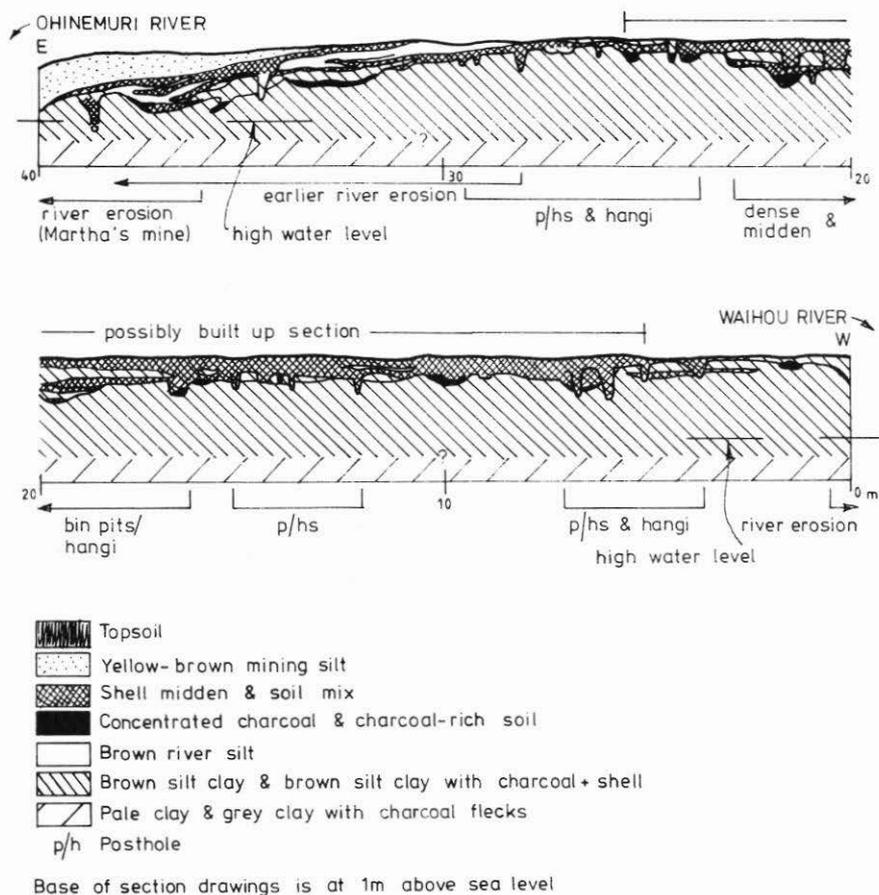


Figure 5: South face of Trench A, Raupa (based on section drawn by Maingay and Taiaroa 1983). Note: key also applies to Figures 6, 10, and 15.

The three ditches cut across the peninsula formed by the curve in the Waihou River. The outer ditch had been almost completely scraped away, and was hard to locate. Its maximum size was 1.8 m wide and 0.8 m deep. The middle ditch followed a twisting path. It measured 3.3 m wide and 0.6 m deep. Both these outer ditches currently fill with water at high tide (tidal rise and fall is estimated at 1.5 m). The inner ditch was the deepest and was less disturbed by the Catchment Board. It was 4.4 m wide and 1.2 m deep. All traces of an inner bank have disappeared (although possible palisade postholes were located on the internal side of the ditch).

During investigation of the defences various internal features were located. No attempt was made to discover any others that might exist, since they were outside the immediately threatened area.

The main area investigated was at the southern end of the site. The mechanical digger cut a trench (Trench E) 103 m long, 1.25 m wide with a depth varying between 0.7 m and 1.5 m (Fig. 9). (Note that for ease of description the trench is regarded as running

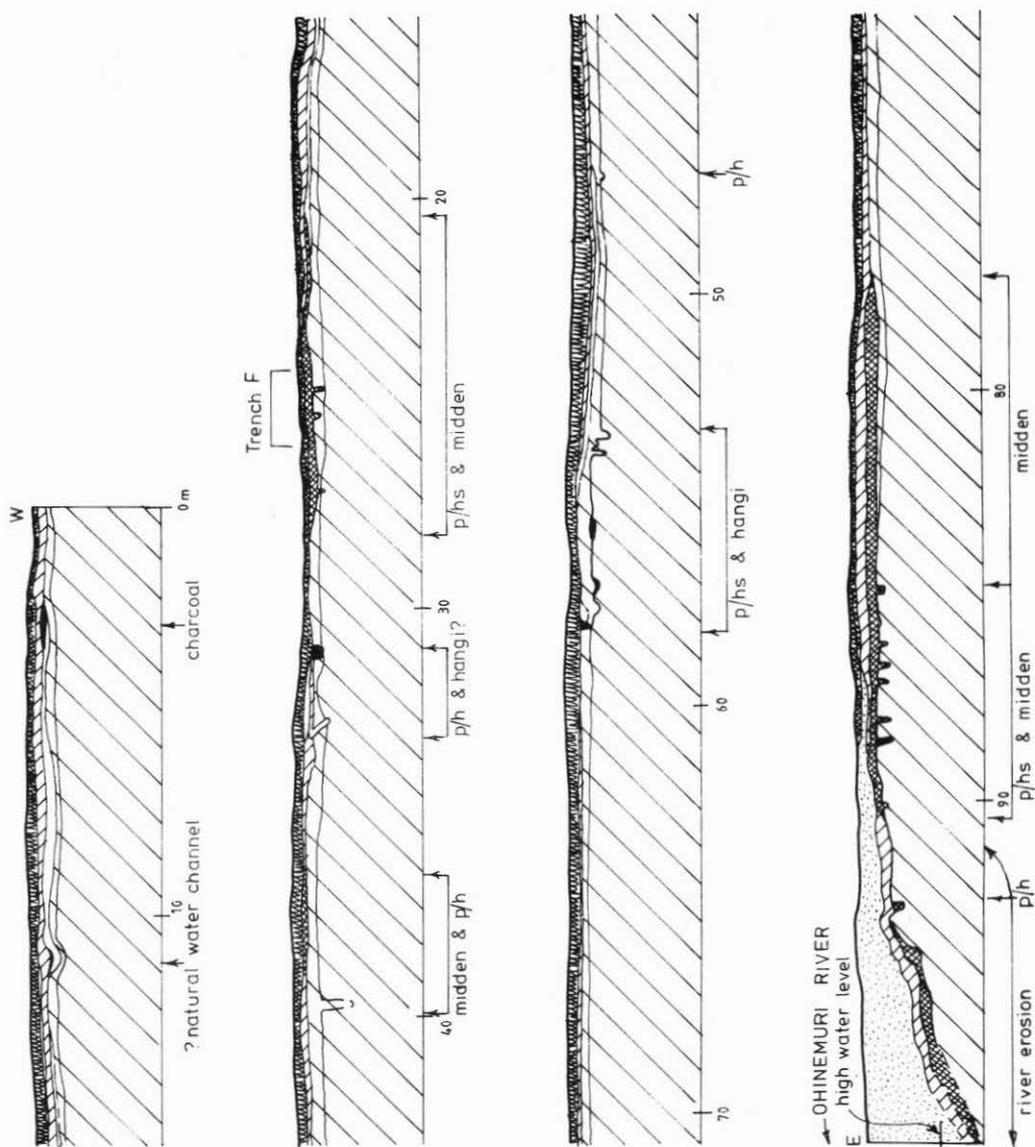


Figure 6: South face of Trench B, Waiwhau (based on section drawn by Rickard and Frederickson 1983). See Figure 5 for key.

north-south). Initially the east face of the section was cleaned and drawn (Fig. 10). The stratigraphy in Trench E reflected a sequence of up to 9 successive periods (Fig. 11).

Three areas in the section were judged worthy of further investigation by area excavation. These were unfortunately covered by a 40 cm thick white clay, which had been deposited to provide a base for an access road used by heavy machinery. Consequently it

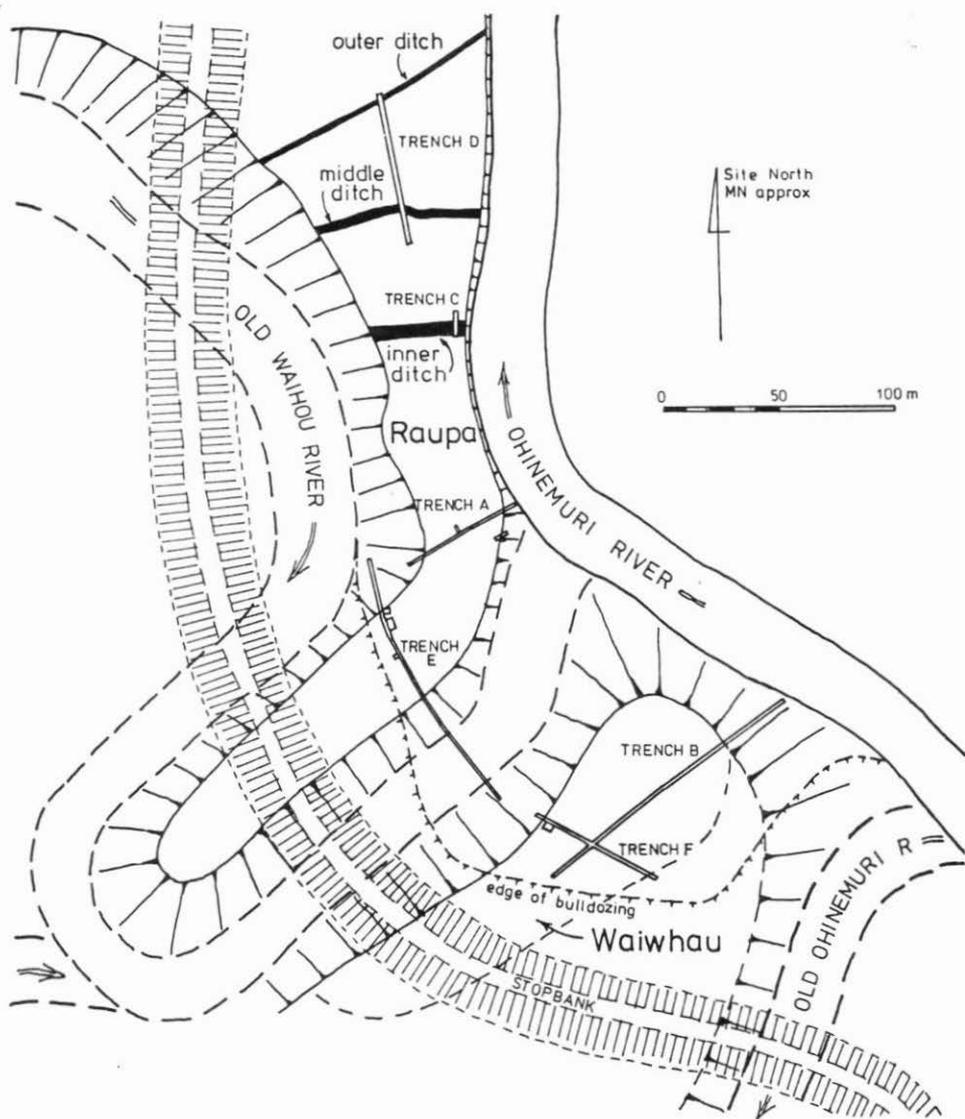


Figure 7: Map of Raupa and Waiwhau, based on surveyed maps (other details were plotted subsequently by tape or derived from the aerial photograph).

was compacted almost solid, and much of the available time was taken up in removing it by hand.

Area 1 was opened up in order to trace what appeared to be a double line of substantial postholes running parallel to the river edge of the site. In an area only 1×0.5 m, eight postholes and stakeholes were uncovered. No artefacts were found *in situ*, although obsidian and chert flakes, a sheep's tooth and a blue glass bead were found in a disturbed upper layer.

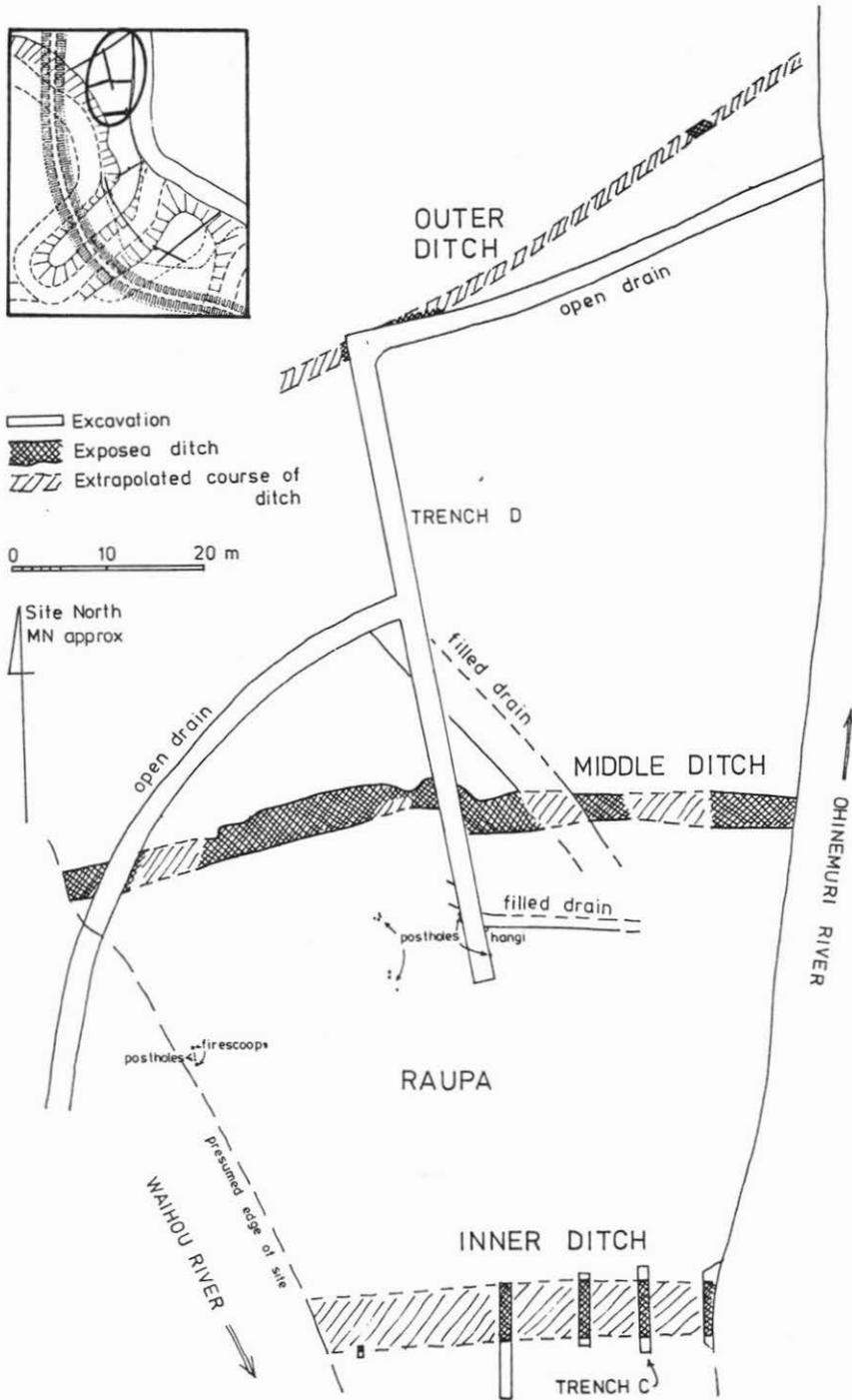


Figure 8: Plan of Raupa defences and other features.

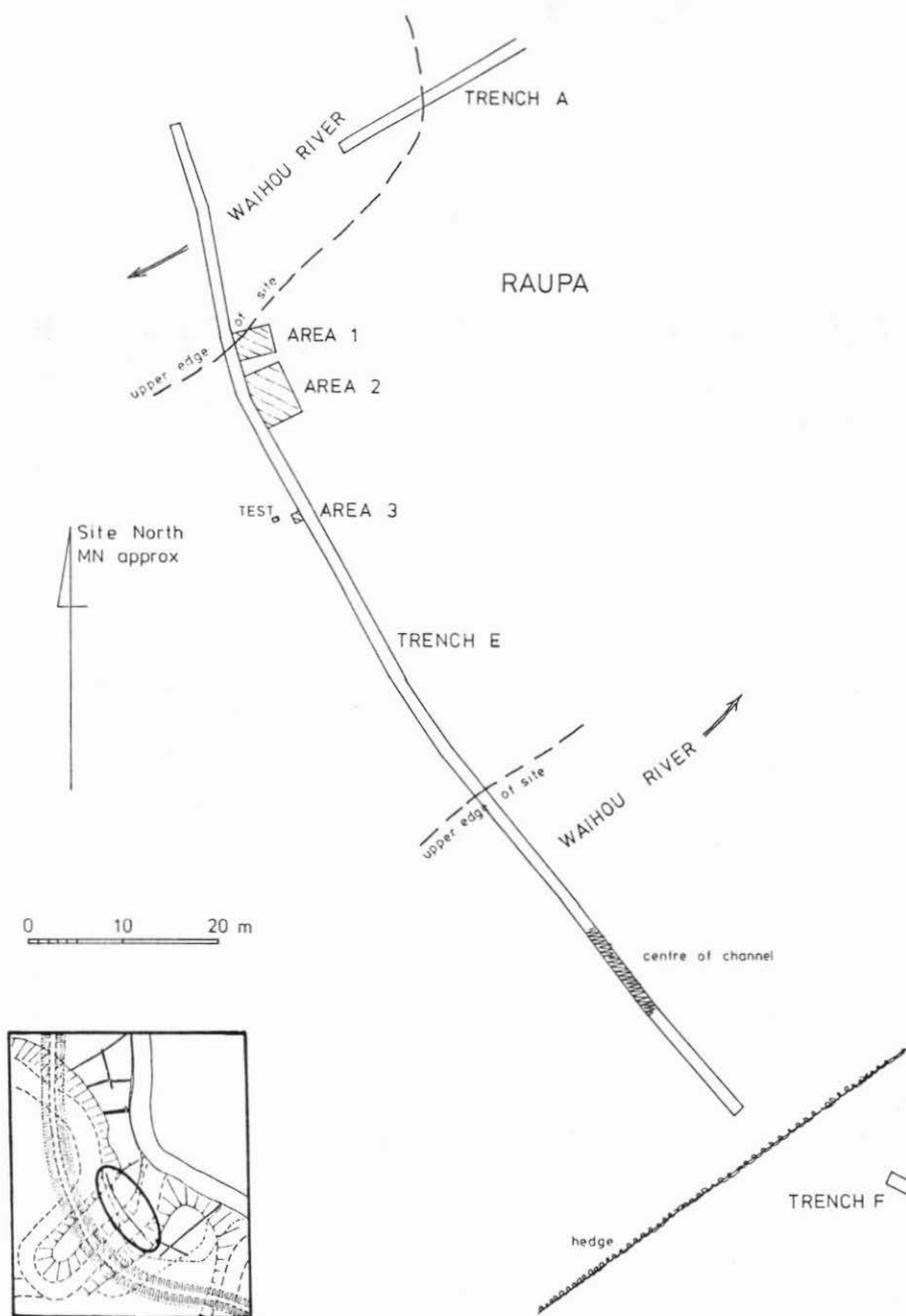


Figure 9: Plan of Trench E and area excavations, Raupa.

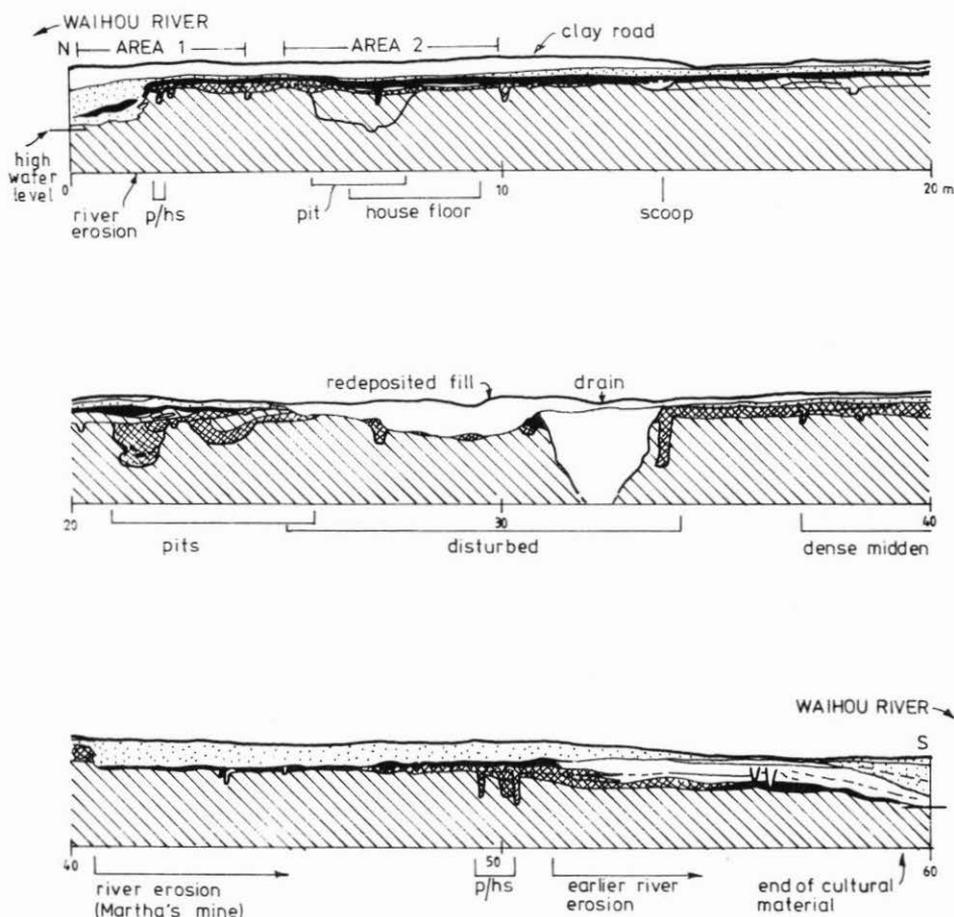
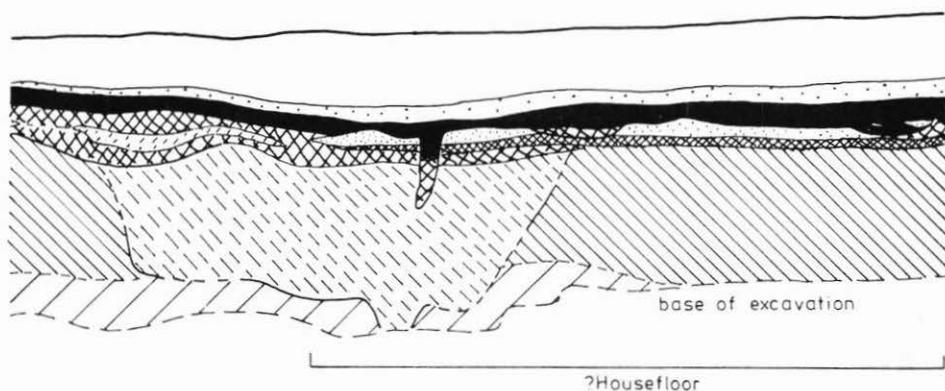


Figure 10: East face of Trench E, Raupa. See Figure 5 for key.

In Area 2, 13 features were located, including postholes, stakeholes and firescoops cut into the ash lens, which was presumed to be a house floor. Artefacts found in the midden overlying the floor and filling the features included obsidian and chert flakes.

Area 3 investigated a storage pit, possibly bell-shaped, with an entrance step. This pit extended below the level of the trench (Fig. 12). The portion of the pit that was in the trench was emptied out first, and was found to have been filled with a midden that included many artefacts. Material recovered included a dog-tooth pendant, bone awl, obsidian and chert flakes, a stone pounder, a stone anvil, a hammerstone; and midden incorporating shells, fishbone, fire-cracked stones, charcoal, charred tree fern trunk and wood, palaeofaeces, a dog skull, ochre and human bone. Other artefacts which probably derived from the pit and were found nearby in the trench spoil heap, included two broken adzes and a bone toggle (Fig. 13).



- | | | | |
|---|----------------------------------|---|---------------------|
|  | White clay |  | Post- and stakehole |
|  | Fine yellow-brown silt |  | Shallow scoop |
|  | Charcoal-rich, black silt |  | Fire-cracked stone |
|  | Ash lens | | |
|  | Concentrated shell lens | | |
|  | Shell midden with charcoal | | |
|  | Brown silt with charcoal | | |
|  | Brown silty clay with some shell | | |
|  | Brown silty clay | | |
|  | Grey clay with mottles | | |
- 0 m 1
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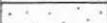
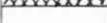
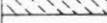
| PERIOD | | INTERPRETATION |
|--------|---|--------------------------------------|
| 9 |  | redeposited for road |
| 8 |  | mine tailings deposited during flood |
| 7 |  | mixed cultural material & silt |
| 6 |  | midden |
| 5 |  | posthole & scoop |
| 4 |  | river silt from flood? & housefloor |
| 3 |  | midden |
| 2 |  | pit fill |
| 1 |  | pit construction |
| |  | B horizon |
| |  | C horizon |

Figure 11: Section of part of east face of Trench E, Raupa, and interpretation of sequence.

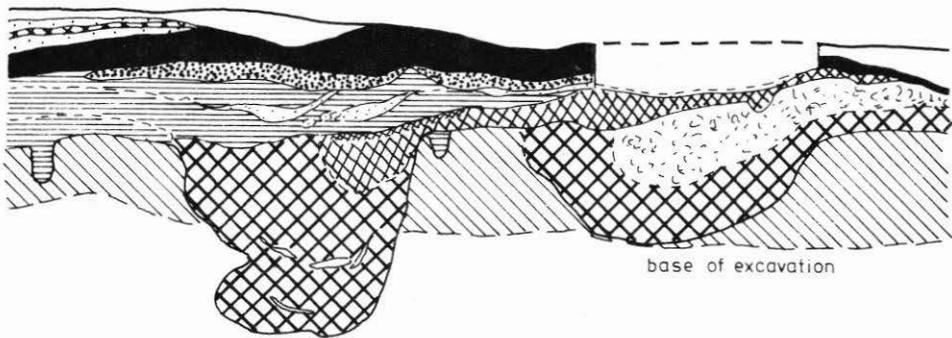
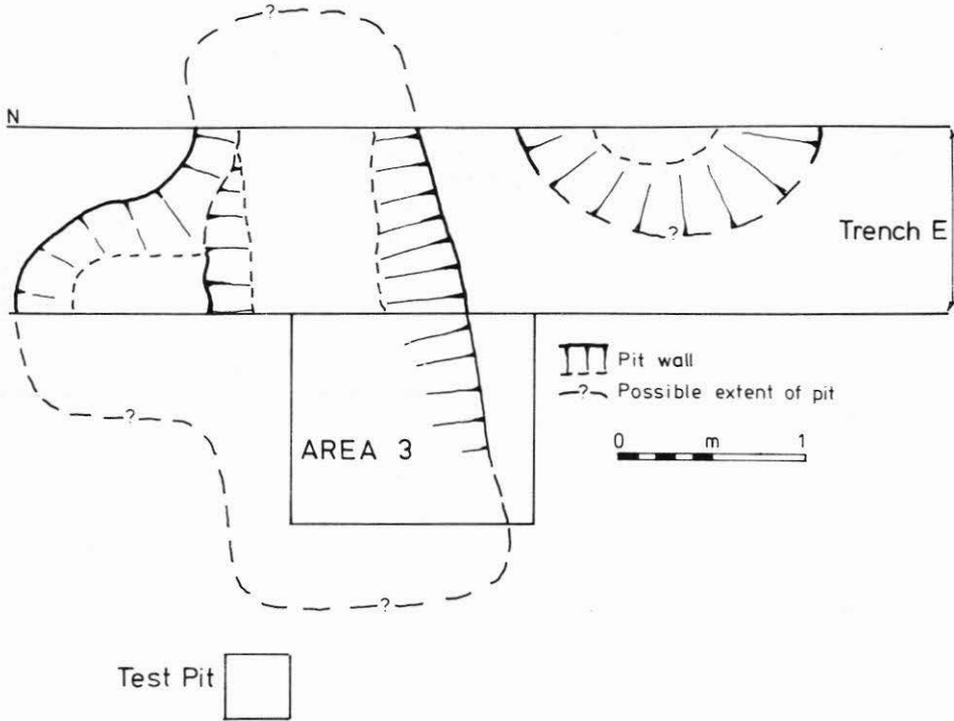


Figure 12: Plan of pits and section along east face of Trench E, Raupa.

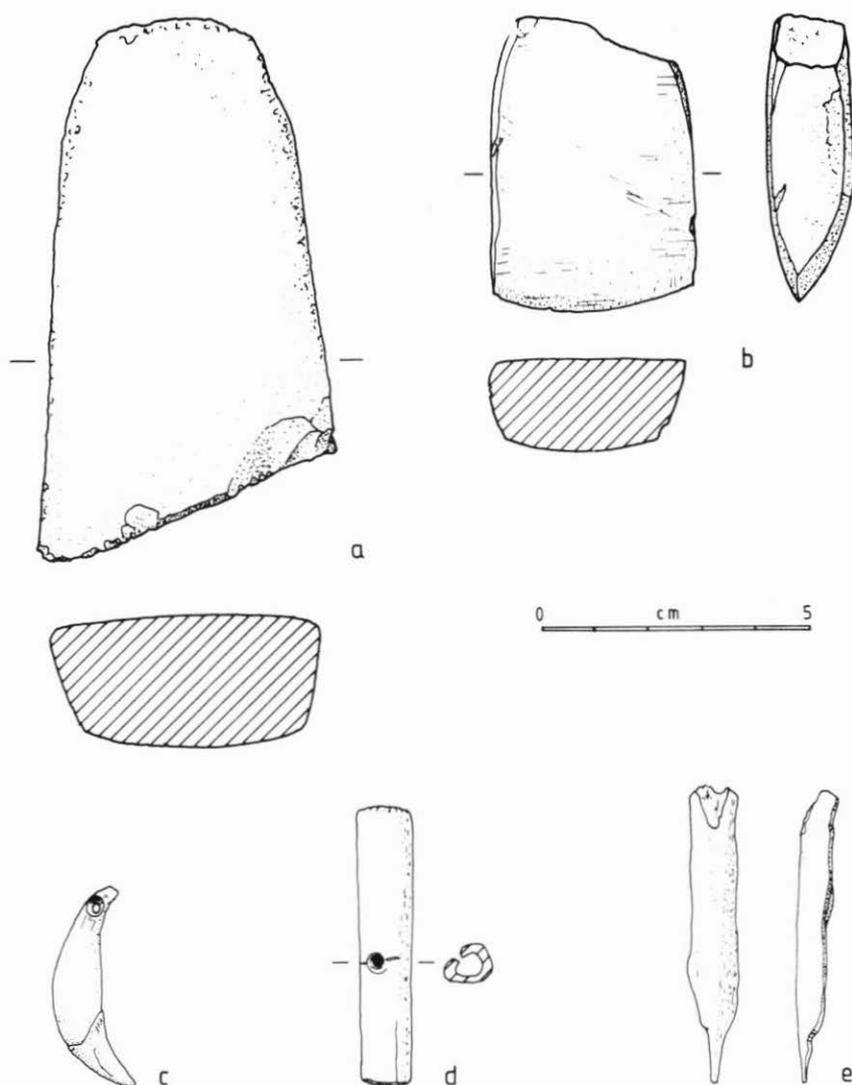


Figure 13: Artefacts from pit, Area 3, Raupa: a. greywacke adze. b. basalt adze. c. dog-tooth pendant. d. bone toggle. e. bone awl.

WAIHOU RIVER CHANNEL

The course of the Waihou delineated part of the boundaries of both sites. During excavation of the ditches at Raupa, the edge of the old Waihou River channel was found to be much further to the east than originally thought from the aerial photograph. So a series of short trenches were hand-cut on Raupa approximately 15 m apart at right angles to the channel. These excavations showed that the edge of Raupa had been eroded by backwash up the Waihou during times of heavy flooding down the Ohinemuri. Further south, the old

Ohinemuri channel forms the southern boundary of Waiwhau, as seen in the bulldozed edge (Fig. 14).

Various artefacts were found in the mine tailings that largely filled the channel. They included: wood, metal cable, green bottle, brown bottle glass and obsidian flake. Previously the Catchment Board had recovered two posts with sharpened ends. These have been identified as kahikatea (*Dacrycarpus dacridioides*) (R. Wallace pers. comm.).

WAIWHAU

The mechanical excavator cut a 60 m long trench (Trench F) through Waiwhau, beginning at the edge of the old Waihou channel in the north and finishing at a depression in the south end (Fig. 14). (Note that for ease of description Trench F is regarded as running north-south). The east face of the trench was cleaned down and drawn (Fig. 15). It showed a stratigraphy incorporating up to 7 periods (Fig. 16). Artefacts recovered included obsidian and chert flakes, bone, and wooden posts.

Trench F intersected the previously excavated Trench B at right angles. The trenches showed little cultural evidence in the south-west quadrant beyond a charcoal mixed soil (Figs 6 and 15). The depression appeared to mark the end of the cultural deposits in Trench F. However, subsequent grading work south and east of the trenches exposed midden, indicating that the site extended further than originally thought.

An area 4 × 3 m was opened up on the west face of Trench F where a group of postholes appeared in the section. The area was scraped down and parallel bands of mine silt were observed crossing the square (Fig. 16). These have been interpreted as the result of early ridge and furrow ploughing, which affected the top 40 cm of the site. Artefacts recovered in the disturbed layer included 283 obsidian flakes and cores, of which 42 have obviously worked edges, as well as chert flakes, ochre fragments and a bullet. The first undisturbed layer revealed a fire-pit, and 12 postholes and stakeholes, including the base of one of the posts. These were plotted, but again there was not enough time to investigate this apparent house floor thoroughly.

DISCUSSION

SITE FINDINGS

The old course of the Waihou River was intersected at several places, with the result that the stream course can be traced fairly accurately. The river bisected the two areas that were investigated, proving that they are two separate sites. The site of Raupa had been described by Marsden, its location had been fixed by Kenny and reported by Kelly. The location of the three ditches and the old course of the Waihou River confirm the earlier identification on the present altered landscape. The extent of Waiwhau was unknown before the investigations in 1984; the only clue was the fenced area. The course of the old Waihou provided the northern boundary, and the Ohinemuri the eastern one. The old course of the Ohinemuri could have marked the southern boundary. Trenches B and F showed that the main concentration of activity had been in the north-east sector. However, estimations of the size of Waiwhau remain tentative.

It was hoped that study of river sediment layers would enable a relative chronology between Waiwhau and Raupa to be established. However, it was discovered that Waiwhau was significantly higher (50 cm) along the E-F trench section than Raupa, and was therefore affected differently. The length of occupation of both sites could not be established.

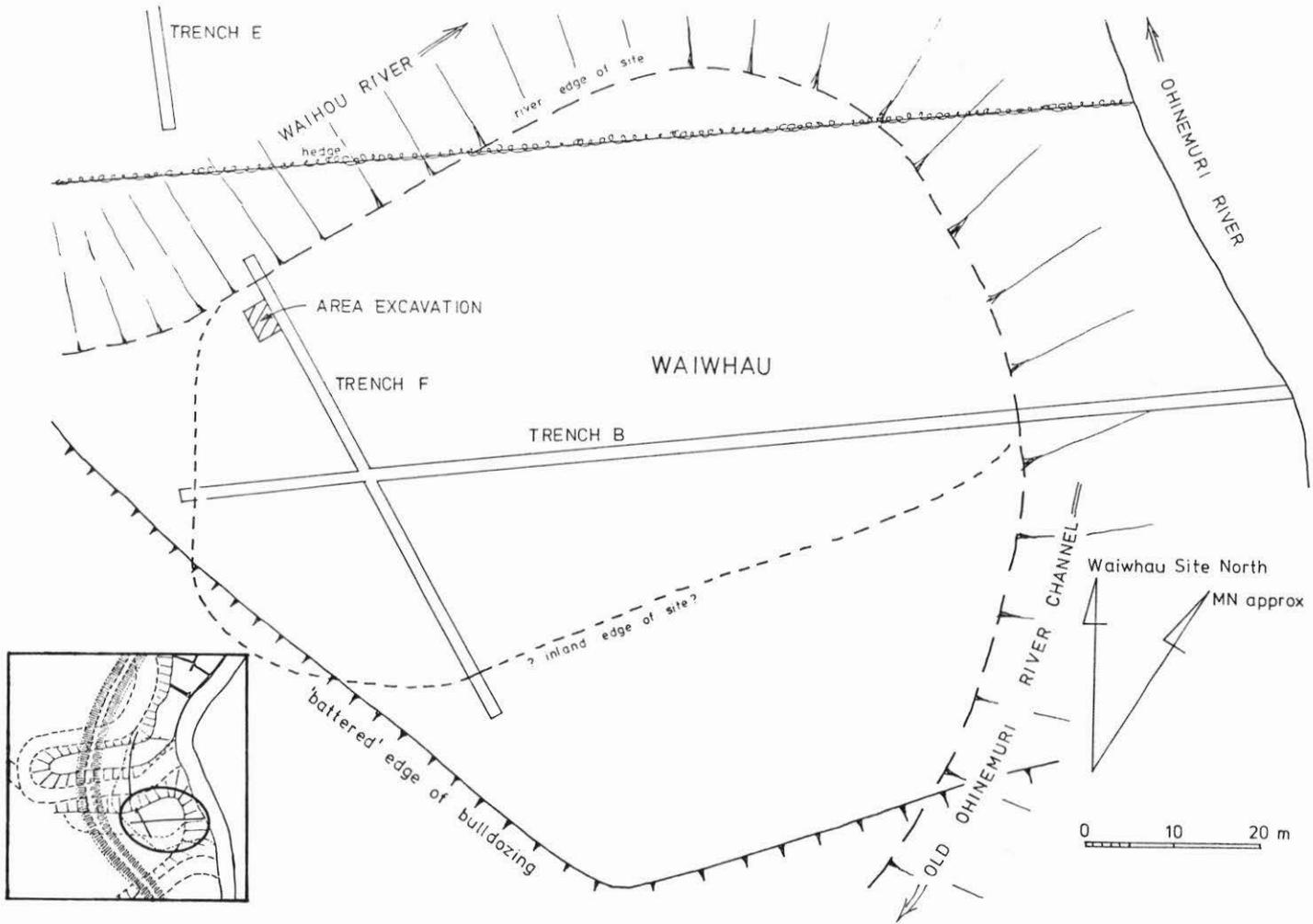


Figure 14: Plan of Waiwhau, showing Trenches B and F and area excavation

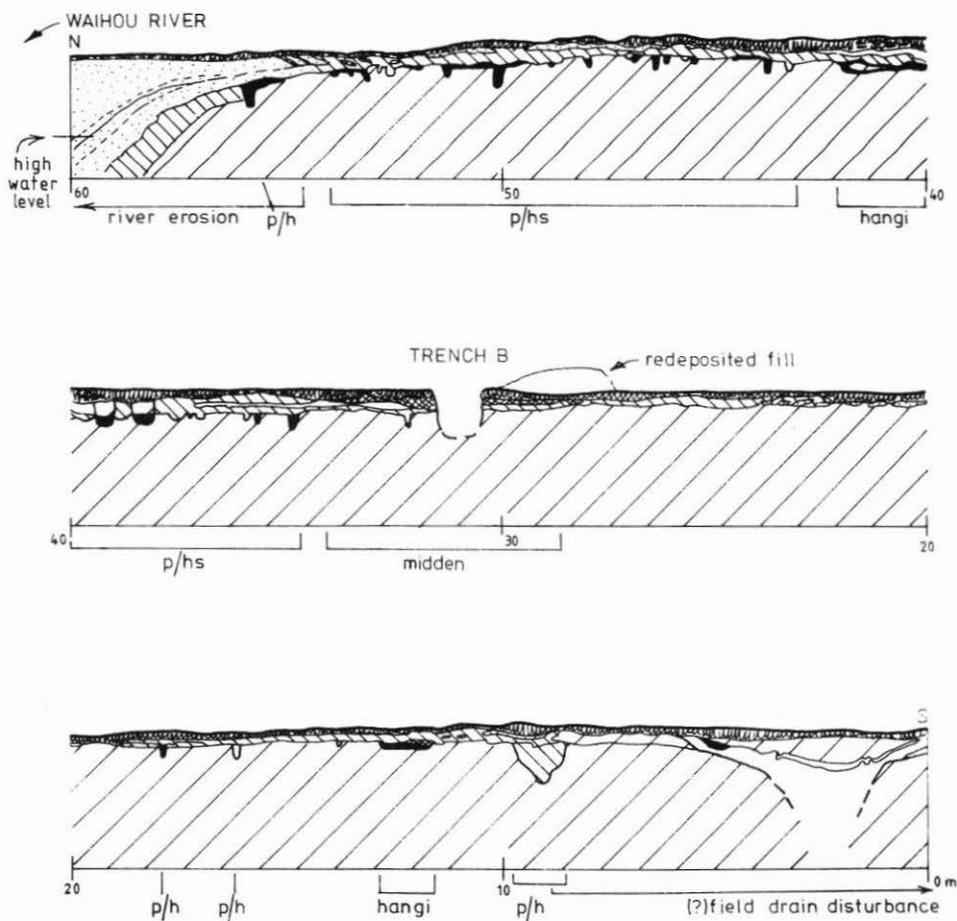


Figure 15: East face of Trench F, Waiwhau. See Figure 5 for key.

Some European material was found in the uppermost layers, whereas none was found in the others. The basalt adze found at Raupa (Fig. 13b) was similar to that placed at the earlier end of the Oruarangi sequence by Best (1980: 72), whilst the greywacke adze (Fig. 13a) resembled those from the later end of the same sequence (Best pers. comm.). From this scanty evidence and the intricacies of the section, a history spanning well over 200 years is considered possible.

At the points where Trenches E and F cut the sites there was no evidence that they had been artificially raised. At Raupa it is possible that only the central area had been elevated. Marsden recalled Raupa as a point of high land; Kenny reports it as looking artificially raised, and Kelly estimated it (after floods had deposited silt on the low-lying land) as being as much as 3 ft (1 m) higher. The central area had been intersected by Trench A (Fig. 5). The section shows the layers at the eastern side sloping up towards the centre and there is a 20 m long portion which contains a matrix over 50 cm thick composed mainly of shells. It is therefore possible that a central part of the pa (estimated 70 × 20 m) was

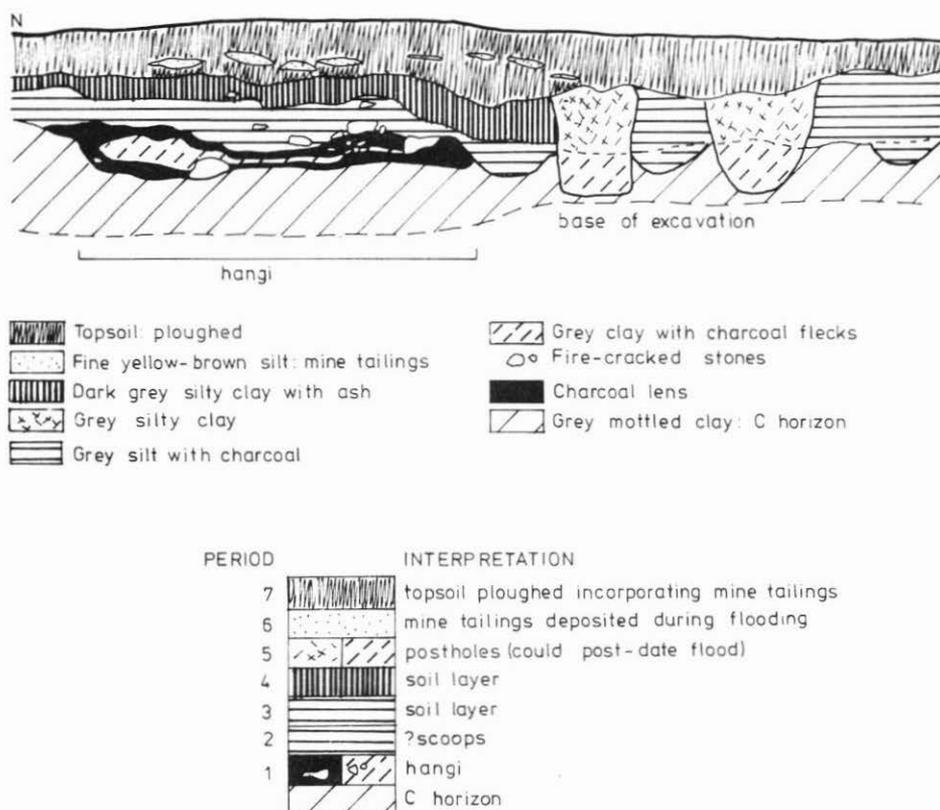


Figure 16: Section along east face of Trench F, Waiwhau, with interpretation of layers below.

raised a further 1 m by accumulating midden (Fig. 17). This represents only seven percent of the total site area, and although much of the upper layers have been bulldozed away, the underlying layers deposited before and during initial build-up still remain. Waiwhau shows no sign of being raised in either trench excavated, and seems unlikely to have been so.

It was hoped that different activity areas could be located, which might indicate that there was a distinct pattern of settlement at both sites. At Raupa the 55 m long cultural section, seen in Trench E, was disturbed by river erosion and a drainage ditch, leaving only 29 m intact. At the northern end there was an area with postholes, a "house floor" ash lens, firescoops and a midden lens. Moving south along the section, 10 m separated these features from the storage pits. There was a further 10-m-long disturbed area before a section of dense midden. This seems to indicate separate housing, storage and cooking/dumping areas (Fig. 10). At Waiwhau the first 22 m of Trench F showed many postholes, a hangi and charcoal lenses. Moving south, there was 5 m containing midden, a further 8 m showing only some charcoal, and the next 11 m contained few features. The last 8 m was disturbed by the depression, possibly a field drain (Fig. 15). Again there seems to be a distinction between the area containing houses and cooking, and that where midden was dumped.

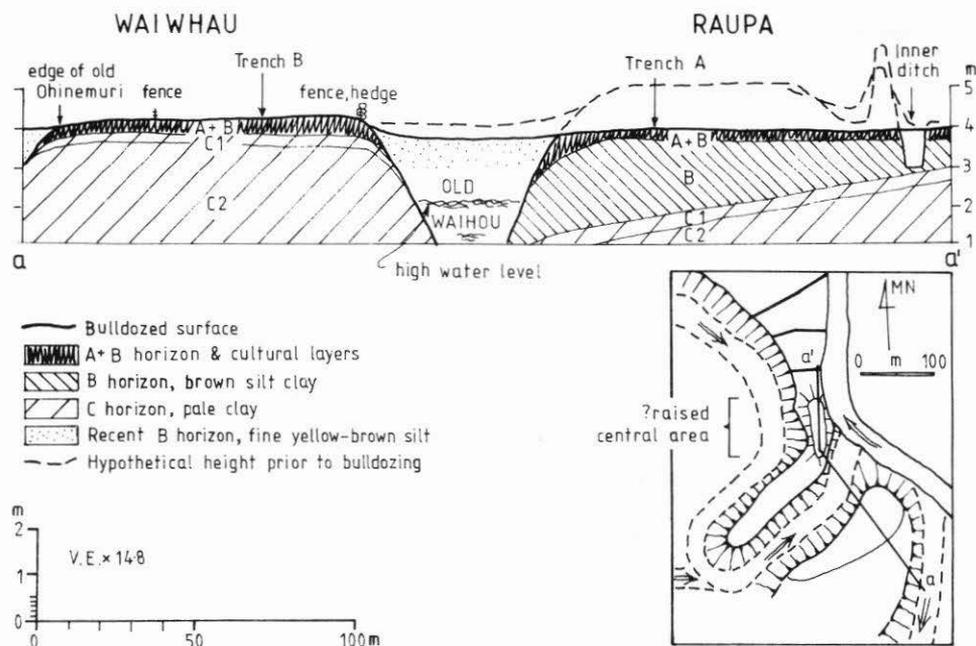


Figure 17: Reconstructed section through the centre of Raupa and Waiwhau, showing the presumed original height of Raupa. (Note that the height is greatly exaggerated.)

The site location, size and the artefacts found suggest that Raupa and Waiwhau represent permanent settlements of long standing. The sites lie at the junction of two major rivers that give access from the Firth of Thames inland to the Waikato and the Bay of Plenty. The strategic nature of this location is referred to by Kelly (1945). The size of the sites indicates a large population. At Raupa the outer ditch defended an area 2 ha in extent, and the three ditches possibly represent extensions over time. The artefacts at Raupa suggest that the inhabitants were employed in a wide range of activities, and the large amount of obsidian at Waiwhau is interpreted as a working floor.

SITE CONTEXT

There are similarities between the Raupa/Waiwhau complex and the Oruarangi/Paterangi complex. These include site size and location; artefact richness, range and survival; depth and complexity of deposits. Best's studies showed that there were distinct differences in the pa sizes in the lower Waiwhau. Oruarangi belonged to the largest group, which was apparently associated with the next size bracket as exemplified in Paterangi. Raupa is in the same size grouping as Oruarangi (2 hectares) and Waiwhau is estimated to be 0.8 hectares, which is similar to Paterangi. Oruarangi and Paterangi were situated on low-lying, swampy river flats at a bend in the Waiwhau and were separated from each other by a branch of the Matatoki Stream. Raupa and Waiwhau are also located on low river flats. The Ohinemuri River provides the eastern boundary, and the Waiwhou River separated the two sites. The artefacts, especially those from the pit in Raupa and the obsidian from Waiwhau, are well represented in other Hauraki Plain sites from which there are large

collections (Green and Green 1963). The adzes are judged by Best (pers. comm.) to be very similar in material and form to those from Oruarangi. Since all these sites are low-lying, the probability of recovering organic material is very good; note the amount of wood found in this excavation. The depth of deposits ranged from 0.3 m to an estimated 1.8 m at both sites. At Oruarangi the test pits excavated by Best showed deposits up to 1.7 m deep. The possibility that Raupa was artificially raised is another point of similarity with the other flatland pa sites, which were elevated above the mud with shell imported from natural deposits.

CONCLUSIONS

This excavation established that two distinct sites existed at the junction of the Waihou and Ohinemuri Rivers. One site was a fortified pa, while the other may have been an open, satellite village. The extent of both sites was ascertained (though less certainly for Waiwhau). A complex sequence of events was identified in the sections and a wide range of artefacts recovered. The state and amount of surviving evidence was calculated. A detailed map was constructed of both sites, showing all previous workings and excavations.

Along the Waihou River there appear to have been several large foci of settlement. The Oruarangi/Paterangi complex has an undoubted importance on traditional, material culture and stratigraphic grounds. Raupa and Waiwhau have been shown to share many traits with the former sites and are certainly equally important.

In the greater region of Auckland, Waikato and Coromandel, the early period is poorly represented apart from the east coast Coromandel beach sites. Apparently "Archaic" evidence underlying the large "Classic" site of Oruarangi indicates that early occupation also occurred on the west side of the Coromandel Range. It is very probable that the strategically located Raupa also contains evidence of early occupation which, if carefully excavated, could cause a total re-evaluation of the region's prehistory.

Raupa and Waiwhau are unusual in that they are located inland, in a flatland, riverine environment; a situation that has seldom been examined archaeologically. Examples of this type of environment include the Rangitaiki/Tarawera Rivers in the Bay of Plenty, the Lower Waikato River, and the Piako/Waihou Rivers in the Hauraki Plains. Wetland environments have the added bonus of preserving a great amount of valuable organic material, which is not normally recoverable. Raupa and Waiwhau are situated 42 km inland as the canoe paddles. Most archaeological excavations in New Zealand have been carried out in coastal sites.

These large, flatland sites are now rare, since others of this type appear to have fallen under the bulldozer's blade, the stopbank, the plough, or the fossickers' pitchfork. Raupa and Waiwhau are probably unique, possessing some of the last information relating to the prehistory of this region in a reasonably intact form. It is considered imperative to conduct a careful area excavation before this irreplaceable evidence disappears forever.

NOTE

1. Kelly commented that there is a close resemblance between Marsden's handwritten K and R, and that elsewhere he clearly referred to the site as Rowpah.

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