

KOHU PAWA.

Ohara Rd

RESCUE EXCAVATION ON A PA SITE NEAR OPOTIKI

vicinity.

G.R. means = IN THE EASTERN BAY OF PLENTY
GRID Reference.

G.R. 776123.

N78.

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N.Z. Historic Places Trust.

Second part of Vol II
around the back of
the house.
The excavation is at the

INTRODUCTION

In May 1981 the N.Z. Historic Places Trust granted an authority to destroy part of a pa site (N78/332) * near Opotiki in the eastern Bay of Plenty (Fig. 1b). A condition of the authority was that the destruction was monitored by an archaeologist. The pa was a terraced ridge (Fig. 1c), with circular pits, a rectangular depression and two banks. Two terraces on the ridge crest and the bank between them were bulldozed for a house platform; the second bank was destroyed by construction of an access track. This report describes the structures on the terraces and interprets the site as a defended settlement.

MONITORING METHODS

Topsoil was stripped from 1500 square metres of the site with an International TD 9B bulldozer with caterpillar tracks. On terrace 1 (Fig. 2) the surface of the subsoil was cleaned up with a spade and inspected for features. Features were easily seen but were difficult to identify because soil disturbance by the caterpillar tracks was difficult to clear away with a spade and better results were obtained on terrace 2 by scraping the surface of the subsoil with a blade mounted on the rear of a rubber-tyred farm tractor. Pits and postholes which were cut deeply into the subsoil showed up clearly, but fire places, which were generally found in the topsoil, had to be identified during the first scrape with the bulldozer by watching closely the gap between blade and tracks. They were then marked with brightly-coloured pegs and avoided during subsequent passes with the bulldozer.

STRATIGRAPHY

The pa was built on airfall volcanic ash several metres thick. Natural stratigraphy was a yellow-coloured subsoil overlain by a black topsoil 20-30 cm thick and structures dug into the subsoil were identified by the contrast of their darker coloured fill against the yellow subsoil. Structural remains were difficult to identify along the edges of the terraces, which had been built up with deposits of dark-coloured fill and in cooking areas, where the soil had been darkened by charcoal. Inter-cutting structures could not always be distinguished because their fills lacked contrast, and this possibly accounts for the odd L-shape of some rectangular pits.

* N.Z. Archaeological Association Site number, grid reference: N78/776123

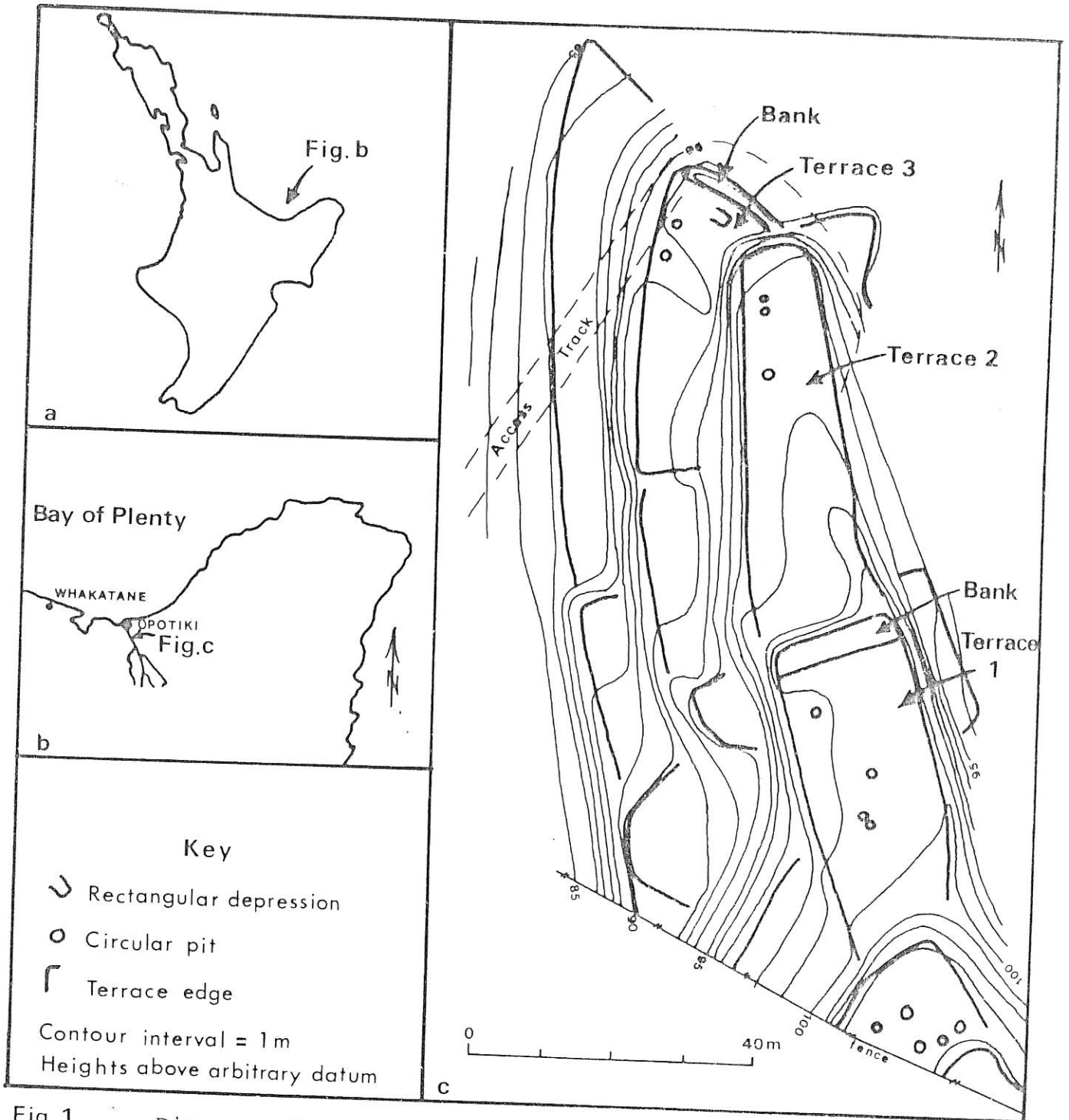


Fig.1 Diagrams for Site N78/332

Figs a and b: Locality diagrams

Fig c: Topographical plan of part site N78/332. Note that site continued south of fence but was not mapped.

A single layer of fill along the northeastern edge of terrace 2 indicates one phase of terrace construction and, except for 3 instances where other structures were stratified over rectangular pits, the structures on terraces 1 and 2 were quite separate and served complementary functions (Defence, shelter, food storage and cooking), strongly suggesting that they all belonged to a single occupation.

A contrasting situation was evident from a section seen in the side of the access track along the western edge of terrace 3:

| | cm |
|---|----|
| Brownish-black topsoil | 20 |
| Grey and yellow fill | 40 |
| Charcoal in a discontinuous layer | <1 |
| Black buried topsoil with occasional oven stones and charcoal | 20 |
| Grey-brown fill with yellow lumps and occasional charcoal | 50 |
| Yellow clay | |

Here, there were two layers of fill separated by a black buried topsoil with charcoal on top. The soil blackening did not stain the fingers like charcoal and it is thought to be due to the growth of bracken fern which is known to blacken volcanic ash (Birrel *et al* 1971). The two layers of fill are interpreted as two periods of occupation which, the buried soil and charcoal suggest, were separated by several years. Unfortunately, there is no correlation between either of the occupation layers on terrace 3 with the occupation of terraces 1 and 2.

STRUCTURES

The identification and delineation of structures was hindered by a general scarcity of postholes and an inability to distinguish patterns. The postholes found were between 20 and 60 cm in diameter and although smaller postholes no doubt once existed, they are thought to have been too shallow or too poorly defined to have survived the bulldozing and scraping.

Two rows of postholes found along the top of the bank on terrace 1 (Fig. 2) are probably from either a palisade or a fighting platform. Either structure on the bank would have provided a formidable barrier to movement along the ridge. There was, however, no sign of a palisade around the terrace perimeters, except possibly in the southeastern corner of terrace 1, but postholes could have been missed in the dark-coloured fill used to build up the terrace edges.

Houses are inferred from three rectangular stone-lined hearths, two on terrace 1 and one on terrace 2 (Fig. 2). Quantities of charcoal, burnt fibres and fire-reddened clay surrounded the hearths and probably result from the burning down of the houses. The hearths and charcoal were about 30 cm below the ground surface, which would suggest that the houses had sunken floors. Houses 2 and 3 had postholes nearby (Fig. 2), but not enough to determine the house dimensions.

Pits were circular and rectangular. Some of the circular pits were seen as surface depressions 0.5 m deep and 1-2 m in diameter before bulldozing and are thought to be collapsed bell-shaped ruas. There were 9 on terrace 1 and 3 on terrace 2 (Fig. 2) and they appear to have been

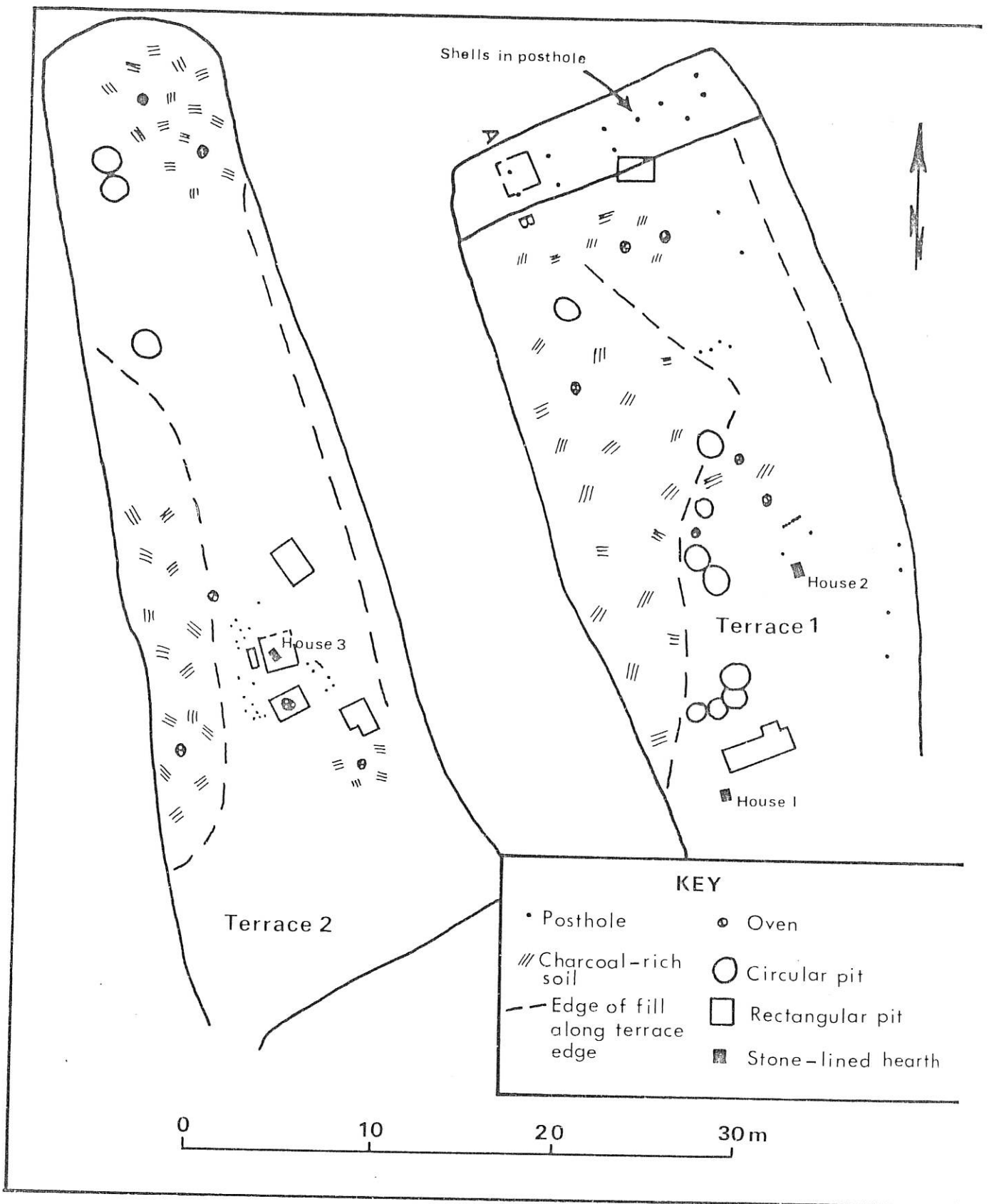


Fig. 2

Plans of archaeological remains found on Terraces 1 and 2. Houses 1, 2 and 3 inferred from stone-lined hearths (hearth 1 = intact, 25 x 40 cm; hearths 2 and 3 damaged, ca. 30 x 30 cm). Note that hearth 3 and nearby oven overlie rectangular pits. A-B = cross-section in Fig 3.

associated with cooking areas since they occurred either within or close to them.

Rectangular pits, none of which were seen before the bulldozing, were between 0.5 and 1 m deep and contained well-mixed fill indicating that they had probably been deliberately filled in. There were 3 on terrace 1 and 4 on terrace 2 (Fig. 2) and they were quite separate from the cooking areas. Like similar rectangular pits found on other sites (Fox 1974), they are interpreted as kumara storepits.

Extensive areas of charcoal-rich soil and burnt stones are interpreted as cooking areas. Ovens, all less than 0.5 m in diameter, were identified from discrete deposits of fire-cracked stones and charcoal within the cooking areas. There was no shell midden.

The three structures which were stratified over rectangular pits were: (1) the bank on terrace 1; (2) the stone-lined hearth of house 3; and (3) an oven near house 3. In each case the time between the infilling of the pit and the appearance of the new structure seems to have been short. There was no topsoil formed on the fill of the rectangular pit under the bank (Fig. 3a) indicating that the bank was probably built very soon after the pit was filled in. It could not be seen if a soil had formed on the pits before the hearth and oven were made because of the coarse excavation methods used, but an indirect indication of time is provided by the post-holes near house 3 (Fig. 3b). The postholes contained either a light-coloured fill like that of the pits beneath the hearth and oven, or a dark-coloured fill with charcoal like the deposits over the house floor. If similar coloured fill indicates contemporaneity, then the earlier post-holes are the same age as the pits and the later postholes the same age as the house. Both sets of postholes had a similar alignment and overlapped suggesting that the later postholes were dug soon after the earlier posts were removed.

That the earlier structures were rectangular storepits may be significant and indicate a change in the use of the terraces from food storage to habitation and defence, but it has been suggested that rectangular storepits were readily abandoned and filled in after a short period of use (Groube 1965), and since the time between the earlier and later structures appears to have been short, it is also possible that the stratified structures represent changes in the locations of some structures during occupation. While the terraces may therefore have been used initially for storage, they were also lived on and, accordingly, the pa is interpreted as a defended settlement.

ARTIFACTS

The only artifacts found were six obsidian flakes: two on terrace 1, two on terrace 2, one in the hearth of house 1, and one on the floor of house 2. All flakes were coloured green and are probably from Mayor Island.

DATE OF OCCUPATION

Samples for radiocarbon dating (Table 1) were taken from charcoal around the stone-lined hearth on terrace 2 and from shells found in a post-hole on the bank on terrace 1. The charcoal gives a close date of less than 250 years BP (NZ 5528) for occupation of terrace 2, the shells gave a minimum date of less than 250 years BP (NZ 5427) for construction of the bank.

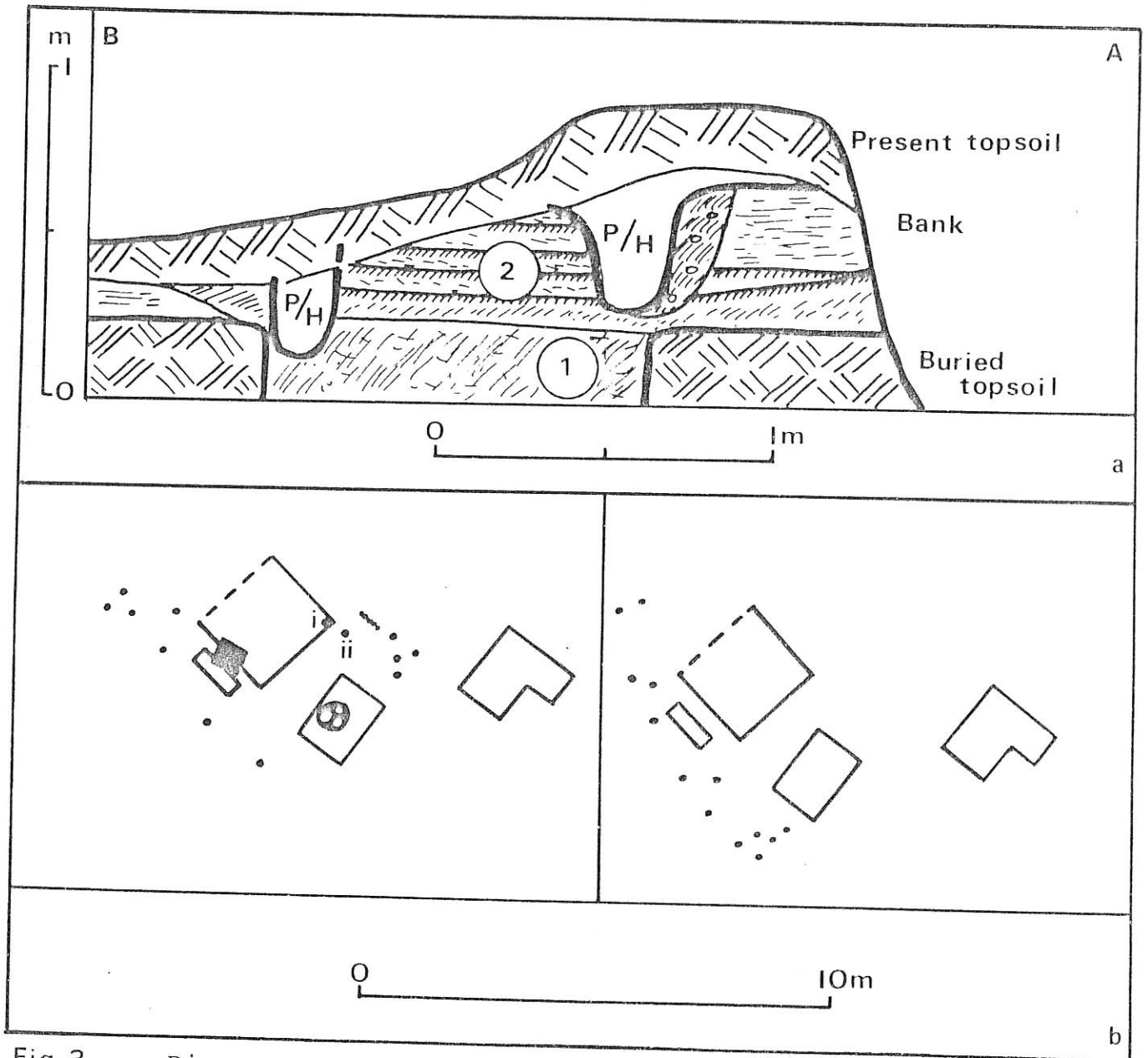


Fig.3 Diagrams for stratified structures.

Fig a: Cross-section A-B in Fig 2 showing infilled rectangular pit (=1) overlain by bank (=2). P/H = postholes. Note absence of buried topsoil overlying pit fill.

Fig b: Postholes adjacent to House 3 (key as for Fig 2). Left hand diagram shows postholes with dark-coloured fill similar to deposit around hearth and oven and postholes that were empty (=i, ii). Pits shown for comparison with right hand diagram. Right hand diagram shows postholes with light-coloured fill similar to the fill of the pits beneath the hearth and oven.

Table I

RADIOCARBON SAMPLES

| <u>NZ no.</u> | <u>Material and Species dated</u> | <u>Source of Samples</u> | <u>Date (Years BP)</u> |
|---------------|---|---|------------------------|
| 5528 | Charcoal sticks (less than 1.5 cm diameter) of red matipo (<i>Myrsine australis</i>), coprosma (<i>Coprosma sp.</i>), tree tutu (<i>Coriaria arborea</i>), five finger group (<i>Pseudo-panax arboreus/colensoi</i>), puriri (<i>Laurelia novae-zelandiae</i>), putaputa-weta (<i>Carpodetus serratus</i>), unidentified. | House 2 (around hearth). | < 250 |
| 5427 | Pipi shells (<i>Paphies australis</i>). | Fill of posthole in between terraces 1 and 2. | < 250 |

Despite the young carbon dates, no European artifacts were found and occupation probably occurred more than 150 years ago.

CONCLUSIONS

1. Structures on the terraces were used for cooking, food storage, shelter and defence and the site is therefore interpreted as a defended settlement.
2. Occupation probably occurred between about 250 and 150 years ago (1700 and 1800 AD).

ACKNOWLEDGEMENTS

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