



NEW ZEALAND  
ARCHAEOLOGICAL  
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**NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION NEWSLETTER**



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A visit from Dr. H.W. Wellman was responsible for the digging of two trenches inland from, and perpendicular to, the lagoon edge, in an attempt to elucidate the stratigraphy, and detect the presence, if any, of more than one occupation layer. A representative profile consisted of, from the bottom upwards, well sorted, probably beach deposited, fine gravels, 18 inches of midden (charcoal and shell), 6 inches of silt, 3" of charcoal, 6 inches of comminuted shell (Chione), 8 inches of flood deposited soil. As the silt lensed out away from the lagoon and is probably a flood deposit, there is no justification for recognising two occupation layers separated by any length of time.

During the excavations we had several visits from members of the Rangitane tribe, who took a keen interest in the progress of the dig and who expressed approval of the way we went about exposing, recording, and re-interring the burials without the bones being disturbed. Marlborough Historical Society members also spent a day inspecting the excavations.

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## SITE SURVEY OF THE KAIKOURA PENINSULA

By Tony Fomison

### Introduction:

The value of South Island archaeology in isolating the Moa Hunter period of Maori Culture is widely recognised, yet it is only recently turning its attention to the subsequent developments of Maori culture, and it is in the hope of increasing this interest that I present the following account.

From the abundance of natural food on the Kaikoura Coast to-day, and the known suitability of its climate and geography to kumara growth, it is to be acknowledged as a region of major importance in

the pre-European economy of the South. Kaikoura Peninsula is the strategic centre of this area, and as such, was the seat of every tribe known to hold the "Crayfish Coast".<sup>1</sup>

First post-fleet people in possession were the Ngati Mamoe. They were closely followed by Ngai tahu who, in a series of sporadic skirmishes in the first half of the seventeenth century, ousted their less powerful predecessors. It appears that both people were branches of the one tribe, and culturally alike. From the advent of Ngai tahu till the arrival of Te Rauparaha's musket-armed horde, 170 years later, the Coast seems to have enjoyed virtual peace.

My choice of Kaikoura Peninsula was governed by the aim to record the evolution of the pa site in one geographically defined area. Not only is the Peninsula isolated - a tableland of dissected terrace 125' high - but it was known to have been occupied throughout every recorded phase of South Island pre-history. Also, its reputed importance indicated a sufficiently high density of sites to provide with minimum effort, good results to a small team.

#### RESULTS:

In the following list of sites recorded, Golson's pa typology is adopted. However, for a type which comes under Flat land, Variety C - the rectangular type anchored to cliff-edge or river-bank - I use the name "terrace edge"; and likewise, banks and ditches - any earthworks in which one part is formed from the spoil of the other - I term "units".

NO. 1.

S.49964913 : Kaikoura town.<sup>2</sup>

Terrace-edge pa "takahanga" (Ngai tahu).

Bank and ditch unit encloses against the terrace-edge

1. the following dates are arrived at from the works of Canon Stock, the main primary source of South Island tradition.

2. Hereafter all map references pertain to Sheet S.49.

6.

a rectangular area 660' x 140'. This large space is subdivided by a transverse unit. A roadway running along three-quarters of the unit of the longer side obliterates that unit, and with it the pa gateways. Both within and without the defences, platform terraces level the ground wherever it slopes.

NO. 2.

969901 : East End.

Terrace-edge pa "Nga Niho" (Ngai tahu)

Bank and ditch unit encloses three sides of a rectangular area 300' x 90'. Three evenly spaced breaks in the unit of the longer side would indicate gateways. Within the pa, platform terracing is to be found wherever slope occurs, and outside the defences at one end, 2 raised rim pits are dug into the terrace edge. See accompanying plan.

NO. 3.

980900 : East End.

Terrace-edge pa, name, tribe and history unknown.

Consists of four small platform terraces. Protective earthworks are absent, and would have been unnecessary, surrounded as the site is, by steep slopes on 3 sides, and cliffs on the fourth. Two raised rim pits lie outside the pa, further down-ridge.

NO. 4.

984900 : Avoca St., East End.

Extensive beach-flat village. Name, tribe and history unknown. Famous as the place of the first recorded find (by Robert Palmer in 1859), of a Moa Hunter burial. Pakeha settlement has largely destroyed surface indications, but recent digging by local boys has disclosed 2 distinct layers, the lower of which yielded moa midden bone, semi-prone burials, and tools and ornaments of standard Moa Hunter types. An examination of the collection unearthed by the boys confirms the presence of cultural sequence on the site.

NO. 5.

984894 : Armer's Beach.

Group of 6 raised-rim pits. Name, tribe and history

unknown. Two lines with each 3 pits end to end, dug 1 line above the other into the steep slope of the terrace. Between them and the terrace top above, at least 4 platform terraces cling to the slope. Faces north; overlooking a creek mouth.

NO. 6.

991892 : Armer's Beach.

Promontory Pa. Name, tribe and history unknown. On small spur running off the terrace edge. The area of the citadel, protected at the inner end by a short ditch, initially or eventually proved too small, and a bank and ditch unit cuts off a second portion nearer the terrace (see accompanying plan). Internally, the pa is transversely terraced into habitation platforms, and a group of terraces with a raised-rim pit lie below the pa on one side.

NO. 7.

992891 : Armer's Beach.

Village site on small bay - flat below the terrace edge. Surface features indefinite, but site's stratigraphy is revealed in the road bank crossing the flat as a thin midden layer. Name, tribe and history unknown.

NO. 8.

993890 : Armer's Beach.

Promontory Pa. Name, tribe and history unknown. Transverse defence is met by a bank at the inner edge of a natural dip. As the bank progresses, the natural slope increases, changing it to a scarp, and eventually eliminating it as unnecessary altogether. A gap in this transverse defence, just above the head of a small gully leading down to the flat, indicates a gateway. The most interesting feature of the pa's flat interior is its bisection by a system of low baulks. Habitation outside the pa is indicated by a group of 8 pits on a sub-promontory just below the pa. They range from incipient raised-rim to shallow level-rimmed; but the inference that they were all raised-rim originally is strong.

8.

NO. 9.

975883 : Atiu Point, South Bay.

Promontory Pa. Name, tribe and history unknown. Bank and ditch unit cuts off 350 yard-long Atiu Point. Internal features are lacking, even though terracing would have been necessary over much of the interior, to make it habitable. Also, the transverse unit is extremely shallow - the pa is probably unfinished.

NO. 10.

967891 : South Bay.

Promontory Pa. Name, tribe and history unknown. Transverse defence is provided by a bank and ditch unit: all other sides except one is de-limited by terrace-edge. The exception has the apparently inadequate protection of a gully, and is reinforced by a lateral bank, which, as the gully steepens, declines to a scarp. On the outer side of the gully a slighter unit demarcates an extension of the pa. Gateways are indicated by a break in the transverse defence, and by 2 interesting variations in the extension unit. Interior is flat and so not terraced.

NO. 11.

966892 : South Bay.

Promontory Pa. Name, tribe and history unknown. Transverse bank and ditch unit cuts off a projecting area of terrace edge, 375' x 60' : it is long, and broken by 4 evenly-spaced entrances. Interior is flat and so not terraced. However, it contains 4 pits, one of them definitely raise-rimmed.

NO. 12.

962900 : South Bay.

Composite Promontory Pa : Ngai tahu.

Sited on flat promontory which divides at its end in 2 sub-promontory. Parent headland is protected by a transverse bank and ditch unit, and so is each of the inner promontory; one of the latter's defence is assisted in addition, by a lateral bank. Outer area is approximately 375' x 160'; and lengths of the inner areas are 450' and 300'. Gateways appear in the outer unit as 2

evenly spaced breaks, and as three such gaps, in the transverse and lateral units of one of the inner promontories. With the other promontory, however, access was at one end of its unit, where the bank turns inward along a passage between it and the cliff-edge. Internal evidence is provided by 5 raised-rim pits and numerous platform and lateral terracing.

### SYNTHESIS OF RESULTS:

#### 1. THE PA.

Sited at the cliff-edges above the bay flats, and on the points between them, the Kaikoura pa falls invariably into either the terrace-edge or promontory types. The latter predominate, and range from an extreme simplicity, to the size and complexity of the composite variant of the type. Variation is obvious in the terrace-edge pa also, from a cluster of platforms to the large sub-divided, unit-enclosed area of Site One.

This size range could surely be indicative of population growth, for the Peninsula pa spans a period of at least 170 years. The increasing use of terrace flat which such expansion would have involved, must also have meant a decrease in natural defence, and so could be synonymous with the development of earthwork defence. Thus size comparison may be able to provide a relative chronology, and demonstrate the evolution of pa defence. However, I found that the major draw-back with Kaikoura Peninsula was its low proportion of traditionally known sites; and for the want of traditional dating to bear out this theory, recourse would be necessary to radio-carbon dating.

#### Defensive earthworks:

The nine pa recorded describe every stage of development, excepting the final one of musket adaptation. In No. 3, there are no wholly defensive earthworks at all - just a group of habitational platform terraces whose sole protection would be a single, linking palisade. With No. 6, however, habitational terracing is supplemented by some minor earthworks -

10.

a short ditch, a small bank and ditch unit, and a little lateral scarping (see plan). No. 10 uses the full range of earthworks employed on the Peninsula: bank and ditch, bank and scarp, terrace and scarp. Maximum complexity recorded for the area is reached in the largest pa (No. 12), with 3 transverse bank and ditch units, one lateral bank and scarp, and widespread use of scarping, both lateral and transverse.

This, and the 2 other large pa (Nos. 1 and 2) are known to have been built or strengthened in anticipation of Te Rauparaha, and although the size of the defensive units - unusual in South Island pa - testify to the fear his tribes inspired, no sign of musket influence is obvious (See plan of Site 2). It's recorded, however, that the Kaikoura Maori had had no experience of musket warfare previous to the raid in which these pa were stormed, and possessed themselves only 2 at the time of the attack. So, although adaptations may have been present in the timber defences, that the earthworks remained pre-musket is to be excused.

Use of the bank and ditch unit typifies earthwork defence of the Peninsula pa, and as such meets the minimum requirements of topography. Most units are small, vertical heights from bottom of ditch to crest of bank average 5', and reach 10' only in the 3 pa mentioned above. But not even in the musket scare did the Ngai tahu unit approach in size those in recorded use by the North, in the time of Cook 50 years earlier.<sup>2</sup> Also notable is the overall simplicity of the Peninsula earthwork - the successive lines of complex defence recorded for the Northern pa are here entirely absent. Such simplicity, while it indicates the comparative security the region enjoyed, makes it impossible to define any local preferences of a cultural nature.

Access:

Commonly indicated by breaks in the bank and

ditch unit, though here care is needed, to distinguish the undug baulk and gap of the genuine entrance, from the modern stock-track cut.

Access breaks in promontory pa occur normally half-way along the transverse unit (4 cases), but where the unit is of any length, by several evenly spaced (2 cases). The smallest promontory-pa unit recorded (Site 6 - see plan), has no break, and as Golson instances for Paeroa Pa,<sup>4</sup> access must have been gained at a point in the lateral palisading. Another example of access through lateral defences does occur, but in the lateral unit of a pa also possessed of a transverse break (one of the inner pa, Site 12). Access with terrace-edge pa was apparently solely through the lateral unit.

The most interesting methods were recorded for Sites 10 and 12. With the former, the extension bank and ditch unit is broken by 2 evenly spaced gaps, into 3 equal sections. These sections are staggered, so that at each gap, the unit on one side is displaced sideways from that on the other, i.e. the 2 gateways are at right-angles to the defences. That this was aimed at easier defence of the gateways, rather than screening them from musket fire, is apparent when I point out that if, in each case, the outer unit's palisade was extended along the outside tip of the other's ditch, the gateway approach would have been confined to a narrow lane along the ditch, palisaded both sides.

A similar effect is obtained in an entrance of Site 12 (see under "Site 12"). At the end of one of this site's internal units, while the ditch continues to the terrace-edge, the bank turns at right-angles, and stops just short of the edge a few feet down-spur. No baulk crosses the ditch.

#### Internal Features:

The internal subdivision of pa seems here more

<sup>4</sup> J.P.S., 1957, 66:p.98.

a requirement of habitation than defence, yet, in the occurrences noted (Site 12) it's not unreasonable to suppose they were palisaded.<sup>5</sup> More definite defensive sub-division was found at Site One, which is separated into two areas by a lateral bank and ditch unit. But this pa-takahanga was traditionally used for at least 170 years, and what now appears as a sub-division is more correctly an original part of the perimeter defence, absorbed by subsequent population growth.

Most usual feature is the secondary terracing of habitation areas into small house platforms, enabling the occupation of areas of slope both inside and immediately outside the defences. Scarp heights commonly range from 9" to 2' and present no access problems, but where heights of up to 5' were recorded, ladders must have been employed.

Internal features of an unusual nature were examined on Site 8. The flat interior of this pa is broken up with a system of low baulks, enclosing and linking a variety of rectangular and other shapes. Possibly the complexity of enclosures and housing recorded for the pre-European pa by early observers has here been preserved by a practice of earthing these features up.

#### SUMMARY ON THE PA.

The Peninsula pa are characterised by the sole occurrence of promontory and terrace-edge types, making primary use of the bank and ditch unit in earthworks defence, and frequent use of platform terracing for accommodation.

That these characteristics are regional is as obvious as the fact that they are wholly topographi-

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5. That this was not invariably so is demonstrated by Golson for the Taylors Hill Pa - J.P.S., 1957, 66: p.75.

cal. Nowhere is a defensive tradition indicated: the Peninsula, involved in only two brief periods of strife, seems never to have evolved its pa to the stage where such a tradition could be expected to emerge. Its pa are defended in the simplest possible way, irrespective of size. This is clearly illustrated by a comparison of Site One with the South Kaipara Head pa N.37/4, appearing in Auckland's last Newsletter. Both are about the same size: but the southern pa, on an exposed terrace-flat, is protected by a mere bank and ditch unit, while the northern example, in conditions of good natural defence is protected nevertheless by an elaborate unit of bank, scarp, ditch and bank.

In all respects then, although Kaikoura Peninsula stands forth as a centre of prehistoric settlement surpassing perhaps some parts of the North Island, its pa obey the basic principle of the decline of Classic Maori culture progressively southward. Their simplicity underlines the simplifying effect which a harsher climate and resultant food-supply restriction, must have exerted on all aspects of Maori culture in the Southern regions.

## 2.- THE PIT:

Prevalent type is the raised-rim.<sup>6</sup> It ranges in state of preservation from shallow and oval to deep and rectangular and varies likewise in dimension and proportion. However, most fall within this size range (measured from the rim-crests): 10'-13' x 16'-19'

Less common is the rimless pit. It is represented by a few small, shallow, oval depressions which could conceivably be the surviving floors of badly weathered raised-rim ones.

Distribution of the raised-rim pit is wide,

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6. Standard term, coined by B.Palmer: J.P.S., 1956, 65: ps. 342-355.

occurring on or near six of the Peninsula pa, and in one case far enough from neighbouring sites to be considered a site in its own right (Site 5). This site provides the best instance of a feature, noted in three other cases, of pits placed end to end, separated by common rims.

The raised-rim pit's appearance on cliff-edges, terrace-edges, and scarps is consistent with the theory of store-pits, sited for drainage. However, raised-rim pits excavated by the Canterbury Museum elsewhere on the Kaikoura Coast have proved habitational, and the case for housing with the Peninsula pits is strong. Their positions suggest to me a secondary housing type, the product of population expansion within an established pa, and so naturally built on the edges, or sandwiched between, existing pa features.

### 3.- MIDDENS:

Three middens were located: two scattered down the hillsides below Sites 6 and 8 are essentially external features of those pa, and only the third (Site 7) indicated a separate site. Midden contents are mainly shell and in the types reflect faithfully the Peninsula's present shore-line.

Site 7 was the only one detected on a bay flat below the terrace, but this is due more to the closeness with which European settlement now covers these flats, and is no real indication of the extent of prehistoric occupation. Site 4, it will be recalled, is a bay-flat village, and two more traditionally existed at the Lyell Creek mouth, and at South Bay settlement - signs of the latter have been discovered by building operations.

### SUMMARY:

The survey has undoubtedly shown Kaikoura

Peninsula as a type area of considerable importance. It revealed a full range of site types, and in its confirmation of both Moa Hunter and Fleet Maori occupation, indicated an area where excavation should define, culturally and chronologically, the span between them.

Pa sites varied considerably in size, and were found to illustrate a complete evolution in pre-European defence. A possible relationship of size to age in the pa can only be tested by excavating for radio-carbon dating material.

\* \* \* \* \*

It was during Canterbury Museum excavations at Kaikoura that I was able to carry out most of this survey, and of this, and the generous loan of equipment, I record my gratitude. Mr. W.M. Dowle of Goose Bay I thank for accommodation, and to Messrs. A. Neilson, J. Sherrard and J. Spence I owe information which led to the location of most of the sites.

(Tony is continuing his work south of Kaikoura, e.g. at Peketa and Omihi.

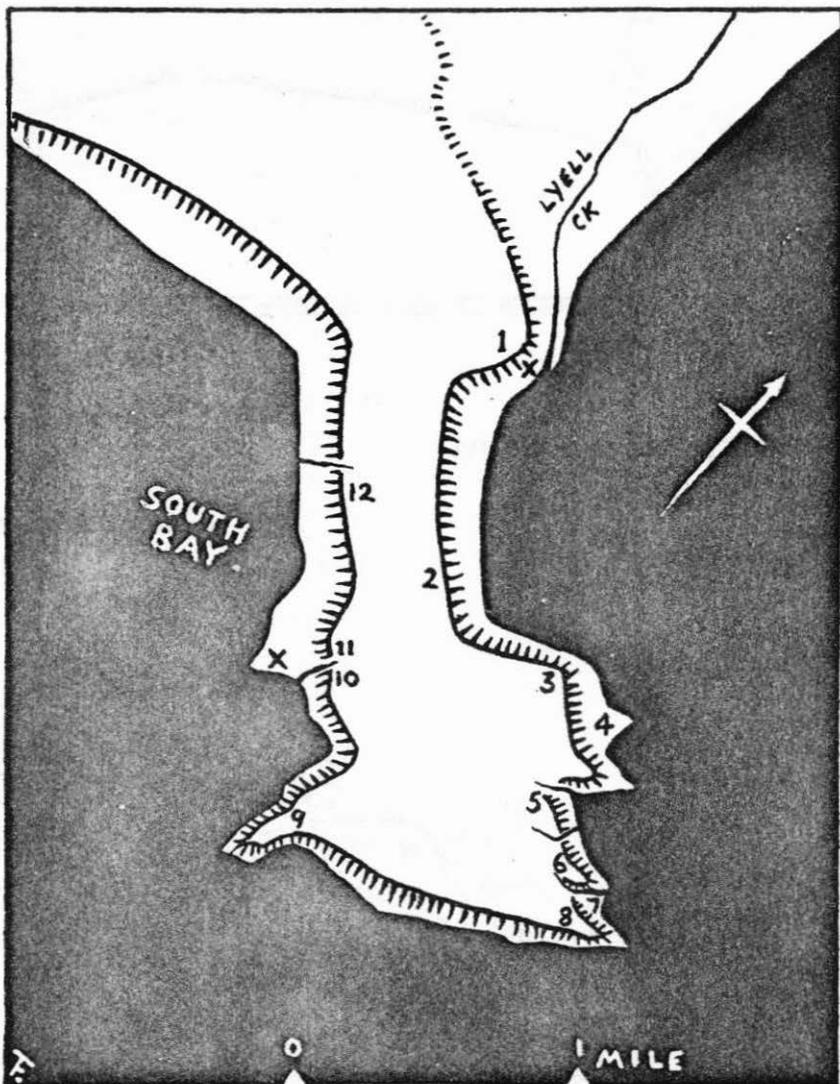
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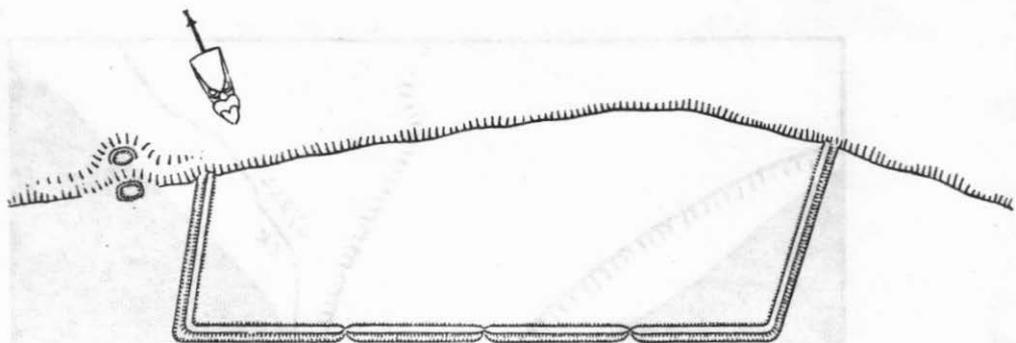
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# KAIKOURA PENINSULA

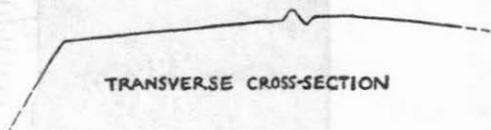
X - SITES DESTROYED  
 NUMBERS - SITES RECORDED IN THE SURVEY



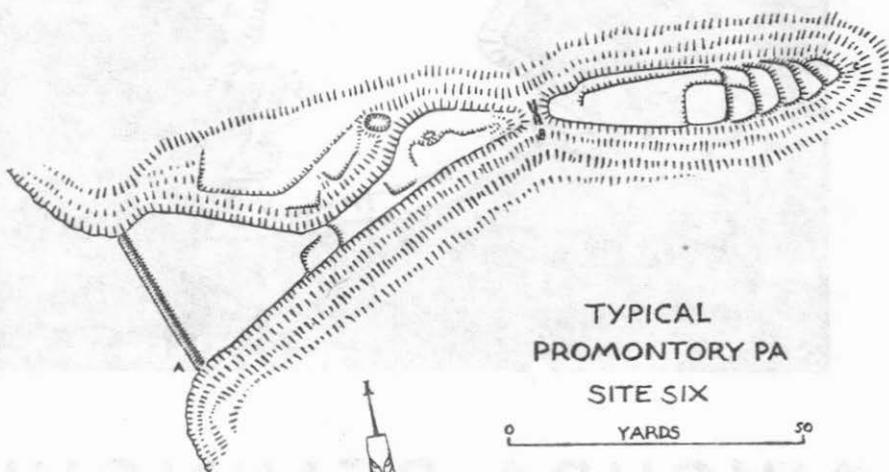
TYPICAL TERRACE-EDGE PA

SITE TWO  
NGA NIHO

0 YARDS 50



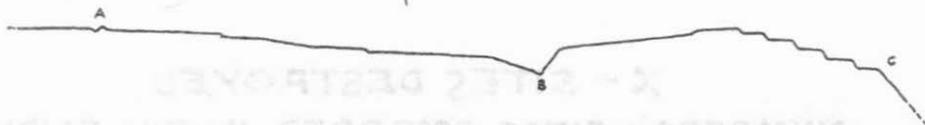
TRANSVERSE CROSS-SECTION



TYPICAL  
PROMONTORY PA

SITE SIX

0 YARDS 50



A

B

C