

# NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION NEWSLETTER



This document is made available by The New Zealand Archaeological Association under the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License. To view a copy of this license, visit http://creativecommons.org/licenses/by-nc-sa/4.0/. Shawcross, F. W. and Terrell, J.E.

"Paterangi and Oruarangi Swamp <u>Pas</u>" (manuscript in preparation)

Skinner, H.D.

1965

1921

"Culture Areas in New Zealand", Journal of the Polynesian Society, vol. 30, pp. 71-78

Terrell, J. E.

1965

Galatea Bay. The Excavation of a Beach-Stream Midden Site on Ponui Island in the Hauraki Gulf, New Zealand. (manuscript in preparation)

Willey, G. R. and Phillips, P.

1958

Method and Theory in American Archaeology The University of Chicago Press.

#### SITE RECORDING, KUAOTUNU POINT, COROMANDEL PENINSULA

A. G. Buist

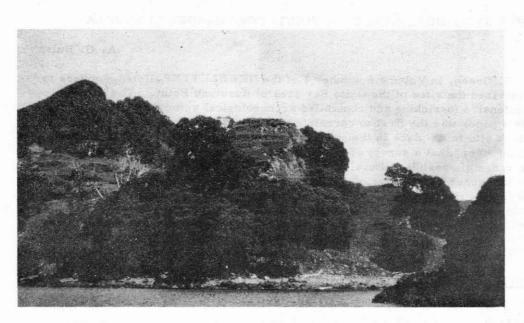
Dr R. C. Green, in Volume 6 number 1 of the NEWSLETTERAlloted numbers to and summarized the sites of the Opito Bay area of Kuaotunu Point. The bay had endured intensive fossicking and controlled archaeological activity over many years, but Green's paper was the first to correlate these various activities in an endeavour to allot each site to its place in the cultural sequence of the Auckland Province. It was felt, however, that a survey of the whole of Kuaotunu Point would provide a more complete range of possible cultural activities and would place the Opito-Mahinapua Bay area in clearer perspective. This paper summarizes the results of a fortnight's intensive field-work at the end of 1964. This work was made considerably easier by the help of Mr Alf Lee of Whitianga who generously provided his notes and maps of placenames. Whilst obvious middens were noted and recorded, no excavations were undertaken. An examination of the aerial survey photographs was undertaken during 1965.

### Historical Recordings of the Area:

Mercury Bay, the southern part of Kuaotunu Point, was named by Captain James Cook who landed there in 1769 to observe the transit of Mercury, and so to place New Zealand accurately on the map of the Pacific. Whilst there he visited Wharetaewa Pa (N44/21), noted the recent destruction of Whitianga Pa and also noted the sparsity and penury of the local population who lived in daily fear of raids both from the north and the south. Leslie Kelly (1953) quotes the accounts of Cook and Banks and relates some of the later history of the area, mentioning Rangihoua



1. Wharetaewa Pa (N44/21) and Wharekaho Pa (N44/22) from north.



Rangihaoua Pa (N44/20) terraces below platform.

2.

Pa (N44/20) as the refuge of the few Maoris in the area.

In the 1830's the agent of a timber company from New South Wales ran a mill near Whitianga and drew a plan of the area recording the names of the villages in which the Maori population was then living, presumably no longer living in pas.

#### Area of Survey:

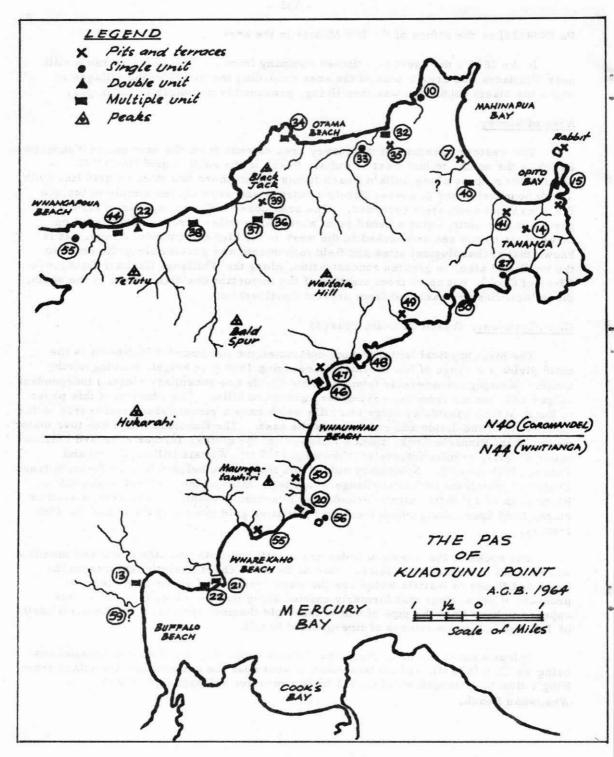
The western boundary of the survey area extends from the east end of Whangapoua Beach in the north, to just west of Buffalo Beach in the south - grid line 317E. A point about midway along Buffalo Beach forms the southern boundary on grid line 650N. These boundaries are of course purely arbitrary and were chosen simply to include the sites most adequately recorded. The area does, however, appear to form a physiographic entity being a broad point about three miles across, surrounded on three sides by the sea and backed in the west by the high Coromandel Range. It is known that archaeological sites and field monuments are present along the coast to the north and also, in greater concentration, along the Whitianga Harbour (Mangrove River of Cook); but apart from mention of the important obsidian source in the south, these localities are excluded from present consideration.

### Geo-physiology: (based on Colin Fraser)

The main physical feature which dominates the Coromandel Peninsula is the main divide - a range of low mountains averaging 1500 ft in height, running northsouth. Running transversely from the main divide are subsidiary ridges, independent ridges and, not far from the sea border, groups of hills. The concern of this paper is the Kuaotunu subsidiary ridge and hills which have a general trend transverse to the central rib of the divide and run towards the east. The Kuaotunu Ridge has four major peaks: first Pinnacle Rock, about a mile east of the divide; further eastward heights occur at fairly regular intervals: Hikurangi (935 ft), Waitaia Hill (1,032 ft) and Tahanga Hill (686 ft). Subsidiary ridges run from these heights in a north-south trend. The most prominent is Waitaia Ridge which terminates at the northern coast-line in Black Jack Hill (702ft) which overlooks the Kuaotunu township. Just west is another ridge, Bald Spur, along which there was intensive gold mining at the end of the 19th century.

The rocks of the Kuaotunu Ridge are mostly volcanic and afford outlines modified and rounded by subaerial erosion. One of the most characteristic features on the crest and flanks of Waitaia Ridge are the white terraces of siliceous sinter, the products of hot springs that formerly existed along its whole length. Black Jack appears to have been the pipe of one of these old thermal springs. On the coast north of Tahanga Hill is an outcrop of fine-grained basalt.

Independent of the main ridge are several isolated hills, the most conspicuous being Te Tutu (636 ft), and ancient volcanic vent near the north coast-line inland from Ring's Beach. Mangatawhiri (1,032 ft) is a massive volcanic pipe inland from Whauwhau Beach.



The physiographic divisions comprise coast and coastal lowlands as well as the rugged inland described above. The coastal division consists of rocky headlands, steep cliffs, narrow tidal beaches, outrunning reefs, outlying islets, short boulder beaches and larger sandy beached along the shores of the larger bays. The sandy beaches have foredunes with narrow or wide terraces behind. The lowlands form a very small portion of the area: narrow flats close to the sea-margin, and alluvial flood-plains of various streams.

The generally rugged and elevated character of the district precludes the existence of large streams, and most of them can be designated only 'creeks'. The water divide lies nearer the south-eastern than the north-western coastline, so that the larger streams are flowing in the latter direction, and are tidal for some distance from their mouths.

The upland division is now, for the most part, covered by a heavy growth of manuka scrub and second growth native bush. The southern slopes of the ridge of the Point were thoroughly milled for kauri and other native timbers up until the 1940's: this activity and its aftermath of burning doubtless altered the landscape considerably from that known to the early Maoris. There is only sparse second growth on the northern side at its eastern end, the heaviest cover being on the south and western end. This may indicate that the heavy procear forest was never supported by the soil on the north-east. Today the most tractable farmland lies in the west of the area of the survey, where there are small patches scrub and extensive areas of luxuriant Californian thistle, in season. This area, just west of the Kuaotunu township, Wharekaho Bay and Buffalo Bay, together with the lowlands of Otama, Mahinapua and Opito Bays, would have provided the only suitable land and soil for kumara cultivation.

### Signs of Maori Occupation:

The following is a summary of the site recording in the area. It must serve as an introduction and is in the nature of an interim report as no excavations were undertaken during the survey. More detailed reports may be found in the files of the N.Z. Archaeological Association Recording Scheme. Middens, working floors, terraces and <u>pas</u> were recorded, but no village site was found with certainty. The map indicates the sites of terraces and pas.

#### Middens:

Almost every bay, large and small, has a sandy beach and every beach has midden. Some of the middens are confined to a small area in the foredunes, but others extend along the entire beach front. It is probable that the recently determined extent of midden is a reflection of local exposure from erosion rather than a true indication of local habitation: in those bays where there has been relatively greater erosion into the foredunes by wind-blow or inland streams, there is a greater exposure of midden; whilst in the less eroded bays only localised areas of midden are visible. The impression left with one is that it was only necessary to scratch a foredune to find a midden. The earlier reports of Opito-Mahinapua Bays, summarized by Green (1963) limited to nine middens, gave no indication that the entire beach front of some  $2\frac{1}{2}$  miles in fact exhibits a midden scatter - the sites recorded are simply those where digging has taken place, by design or good fortune. Similarly the entire fronts of Whauwhau, Waitaia, Sandy and Matapaua Bays revealed midden scatter, with more visible depth at the eroded banks of streams. The only midden concentration on Whauwhau Beach was found in a stream eroded valley through the foredunes, but erosion has not been marked in this bay and in fact some midden scatter was present wherever the terraced edge to the beach has been disturbed.

Most midden is apparently stratified, with clearly visible seashell and heat fractured stone on the surface of the dune and either a concentrated or redeposited horizon beneath the surface (exposed in the sea front bank of the dune) and a further horizon at beach level at the base of the dunes. The latter is a constant feature of the bays just mentioned, and in Sandy Bay it appears also just below high water mark on the beach itself.

Surface inspection of the middens indicated that the sea-shells one would expect were invariably the major component, with heat-fractured stones, charcoal, obsidian flakes and basalt flakes apparently from the local 'tahanga' source. One very handsome flake struck from opalized wood was exposed in an Opito midden. The impression gained was that the uppermost midden (like that of the <u>pas</u>) contained only the black obsidian of the local source, whilst the obsidian of the lower and earlier middens was predominantly from Mayor Island sources. The analysis of a surface collection gathered during lunch at N40/1 revealed that of the 243 flakes gathered, 196 are green (Mayor Island) and only 39 grey-black. The probable source of the greyblack obsidian is a thick dyke on the ridge behind Cook's Beach, grid. N44/240605; the Maori source was probably the detritus in the valley below, grid, N44/24163.

The fine-grained basalt occurs in all middens, but decreases in amount the further the distance from the source. It has been struck into flake knives and scapers as well as adzes and rough-outs. These latter occur most frequently at Opito Bay as indicated by a previous report, (Shaw 1963), but were also found right down to the southern part of the area. Crosby (1963) reports similar material from Whiritoa Beach, which lies in the south of the peninsula.

#### Working Floors

It is of course possible that various middens will, on closer examination, be working floor components of different phases as indicated by Green for some middens at Opito. Distinct from the middens, however, are two localities which were clearly devoted exclusively to flaking the local basalt. The first lies behind the foredunes of Opito Bay (N40/8, N40/42 & N40/43). The first is a quarry reported by Shaw (1963) to be halfway up the western side of Tahanga Hill. The basalt seam outcrops on the beach front in a low promontory and on either side are areas covered with heaps of rocks apparently gathered from the basalt outcrop and from the beach: these rock heaps are designated N40/42 on the west side and N40/43 on the east side. These rock heaps are working floors. Dr W. A. Watters, Geological Survey Petrologist states (personal communication) that "the rock from Tahanga Hill is a very fine-grained



1. Opito Bay from the pa. Tahanga Hill, with basalt outcrop on shore below, is the prominent peak on the left side of the photograph.



2. Opito Pa (N40/15) from the west. Note eroded midden in foreground. PLATE II basalt; under the microscope it shows numerous thin lathy crystals of plagioclase feldspar up to  $\frac{1}{2}$ mm. long set in a dense granular groundmass made up of minute crystals of pyroxene and an opaque mineral, probably ilmenite. It is finer-grained than most basalts. The rock was unusually hard to grind for the thin sections."

Similar rock heaps occur over an area of coastal lowland between the high ridge west of N44/20, extending from the north end of Wharekaho Beach to Whauwhau Beach. The local rock outcrops here, however, is of poor flaking quality but probably produced serviceable crude knives and scrapers, if not adzes. The heaps vary in size from a few beach pebbles together with a hundred or so flakes from the outcrop, to large similarly mixed heaps extending about 20-30 yards. On N40/50, which consists of a group of rectangular surface pits without defences, one medium sized heap lies between two pits; but most of the heaps are isolated and not associated with other structures.

### Terraces:

In this category are placed those few terraces which have no ditch and bank defence. Sites clearly defended by ditch and bank may, indeed usually do, contain terraces and are placed in the <u>pa</u> category. It is probably wiser to place terraces without ditch and bank in a simple category "terraces", without the interpretive qualification "undefended", since it cannot be determined whether terracing was undertaken to increase the habitation area of a slope or whether it was done to provide scarps for defences. On the evidence of the present survey it would appear that an element of defense entered into the siting of the majority of these terraces: all but N40/47 can be seen to be placed in positions with natural defences, though two of them, N44/55 and N44/58, would have been vulnerable from the upland without artificial protection.

Terraces were found in seven localities, spaced fairly evenly around the coast. The following brief descriptions may be supplemented from the local recording files.

- N40/14: consists of a series of terraces built up with boulders, around the three sides of the rounded top of Tahanga Hill, Opito Bay. As such, it could also be called probably quite correctly a hill <u>pa</u>. The site provides an excellent view of the bays to the north, Mercury Bay in the south and the off-shore islands, but has little else to commend it.
- N40/35: small rocky hill at east end of Otama Beach.
- N40/41: steep ridge below N40/14 and above the working floors N40/42 & 43.
- N40/47: beach front, Waitaia Bay with pavement.
- N40/49: low ridge end, Horse Shoe Bay.
- N44/55: steep spur east of Akeake Stream, Wharekaho Beach with 5 descending terraces.
- N44/58: low ridge below N44/21 which, being outside the padefences is graced with a separate number. (The relationship between the two cannot be demonstrated without excavation.

It is likely that many scrub-covered spurs hide further terracing, so far undetected and unrecorded, but at least the terraces so far recorded are widely scattered throughout the area.

### Pits:

Without a thorough and long-term survey of any locality, isolated pits are difficult to discover. In the course of this present field work only three groups were found. The interesting thing about the three sites located is that each comprised rectangular pits with sloping sides and a depth of approximately 3-4ft., even though they were in widely different parts of the Point.

N40/39:		on a hill-top north of N40/36 (Kuaotunu Pa) -4 pits.
N40/15:		a group on the cliff tops just south of Opito Pa.
N40/50:	14	on a small ridge peak south of Whauwhau Beach - 4 pits.

An examination of stereo pairs of the aerial survey photographs showed a group of deep surface pits on the east side of Rabbit Island which lies less than  $\frac{1}{4}$ ml. off-shore, north of Opito Pa.

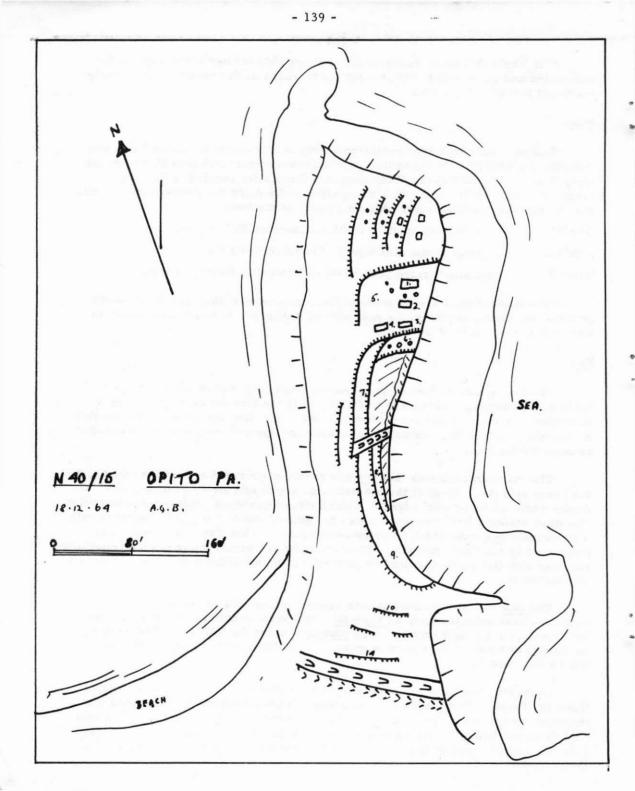
#### Pas:

The accompanying map of the area has been prepared by reducing the scale and combining NZMS maps N40 and N44 at the line indicated. To avoid confusion and overcrowding, only terrace sites, pit sites and pa sites are plotted. As mentioned, each bay contains middens so that specific reference is not made to these on the map.

The map demonstrates that <u>pas</u> are evenly distributed around the coast and the lower uplands. Most of the coastal sites are headlands or promontories, although some occur on cliff edges. Upland sites are ridges, ridge-peaks and hills. The most striking first impression was the size of some of the <u>pas</u> compared with the Taranaki <u>pas</u> with which I was more familiar. This first impression was confirmed by the final analysis. The situations and construction did not cause any surprise although erosion from both natural and mammalian forces was somewhat disheartening.

The pas will not be listed in this report, but details of two are included because I have selected them as type-pa. The first, containing 19 units of construction, is a multiple unit pa, type opitean: Opito Pa N40/15. The second, containing at least 23 construction units, is a multiple unit pa, type otamean: Otama Pa, N40/34.

Opito Pa: headland pa, occupying Opito Point on the north-east corner of Kuaotunu Point. The headland rises steeply from its narrow junction with the mainland so that the point is in fact a high peninsula (see photograph). The east side is steep, being for the most part a cliff to the rocky shore below. The west side is a rather more gentle slope to the sea and this slope has been terraced in every part possible.



The top of the eastern side is also the highest part of the <u>pa</u>, but this is a very narrow rocky ridge at the south end, being from 4 ft to 6 ft wide only. The northern half widens to accommodate the main part of the pa. On approaching from the south, the first feature noted is a 16 ft wide transverse ditch with eroded outer bank, at the foot of the steep south slope of the headland. This slope has three discontinuous terraces, only the lowest one being of any width suitable for habitation. On the top of the headland the 30 ft wide part of terrace 9 is entered, this terrace running laterally at a lower point than terrace 8 for 150 ft. Both these terraces in their lateral parts are 10 ft wide. The north end of these terraces stop in the abrupt scarp of the 10ft deep 18 ft wide transverse ditch which has been cut in solid rock effectively dividing the <u>pa</u> in two and providing the striking feature of the site when seen from afar. The ditch terminated in the lateral terrace 7 which is 6 ft to 10 ft wide. The cliff-top edge continues as a narrow strip for about 100ft until it broadens enough to accommodate terrace 6.

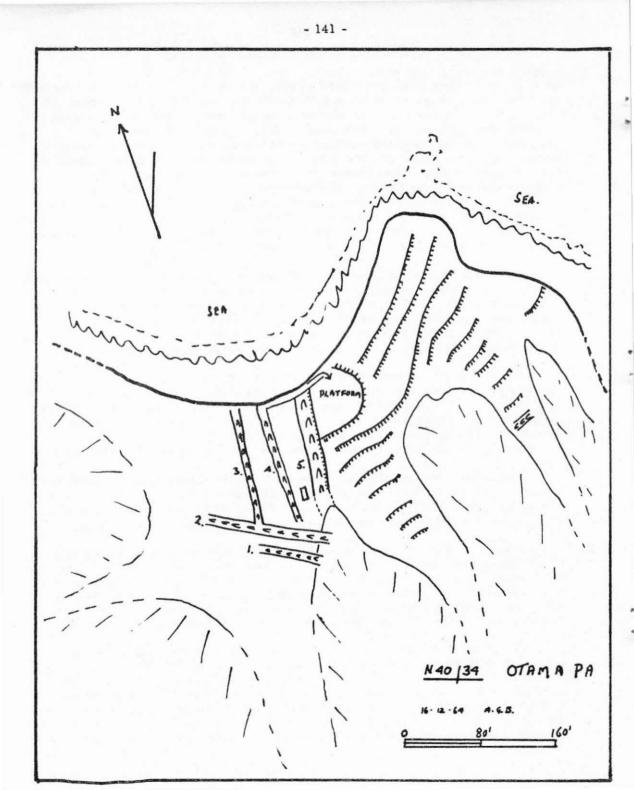
The remainder of the broad top is divided into a series of terraces with steep scarps to the different levels. Most of these terraces have rectangular pits but the largest of these (19 ft x 12 ft x 3 ft - 1 on the plan) is somewhat apart from the rest, occupying a central position and having what appears to be a rim: it is surrounded by a group of five or more circular pits which probably indicate collapsed subterranean bell-shaped pits. The other pits are both rectangular and circular.

The slopes of the western side has discontinuous terraces without any visible sign of pits, and there appears to have been some slumping in the lower parts. Golson (1957:91) has inferred that these 'scattered half-moon "linchets" that cling perilously to the precipitous slopes', are probably for habitation, and are not defensive. The <u>pa</u> terminates in the north in a bluff to the rocky coast below. Outside the pa to the south, on the cliff tops, is a further group of rectangular pits.

Otama Pa: large multiple unit ridge pa occupying part of a large headland into the sea north-east of, and below the high peak "Black Jack" on the north coast of Kuaotunu Point, Coromandel Peninsula. The terminal part of the headland has five ridge spurs and four of these have been enclosed, in part, to form the pa.

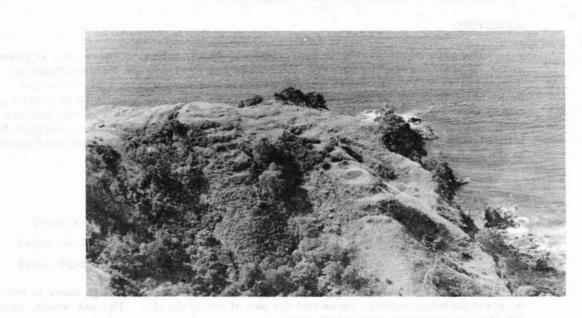
The site is a dominating one overlooking the coast to the west and the long Otama Beach to the east. A small stream runs to the sea at the east base and there appear to be springs in the eastern gullies. The seaward side falls steeply to a rocky coast along which no landfall could be made. The only inland approach, along a spur running down from the 696 ft high 'Black Jack' hill, is strongly defended by ditches. The site has a thin cover of soil over a rotten rock base.

The platform occupies the highest part of the pa. Both rectangular and circular (collapsed subterranean bell-shaped pits) are present within it; chert (cores and points), rock crystal points, 'tahanga' basalt flakes and black obsidian are exposed in the eroded north edge midden scatter. The 50 ft long north side, bounded by the steep slope to the sea, has an entrance track which commences in ditch 4 (see plan). The 56 ft west side ends in the scarp of ditch 5. The 62 ft east side and 40 ft south side end in a low scarp beneath which run the uppermost terraces of the spurs.





1. Otama Pa N40/34. Aerial view from south-east.



Otama Pa, aerial from the south.

2.

## PLATE III

The ridge continues approximately 60 ft wide along the top of the cliffs, and small terraces extend along its 180 ft length. The spurs leading off this top are also terraced across their width. The most accessible spur has been cut by a transverse ditch at its lowest point.

The west side of the pa has been subdivided by a series of ditches, some narrow and apparently uncompleted. The areas enclosed, all on gently sloping ground, are featureless except for one 20 ft x 3 ft pit on the south side of the most easterly terrace. The following are the dimensions of the ditches as on the plan:-

Ditch 1	63 ft long,	6 ft wide,	5 ft deep	
Ditch 2	120 ft "	9 ft "	7 ft "	
Ditch 3	116 ft "	6 ft "	3 ft "	
Ditch 4	100 ft "	4 ft "	3 ft "	
Ditch 5	100 ft "	18 ft "	12 ft "	

Both in area and total units, this pa is the largest in the Kuaotunu Point locality. Kuaotunu Pa, N40/36, lies on the south side of 'Black Jack' a mile and a half away, and is a little smaller in area. Opito Pa, N40/15, is some five miles to the east and considerably smaller in actual occupation area.

#### ANALYSIS:

The area of the survey is approximately 22 sq. miles. There are, at present count, 23 pas recorded in the area. Of these one (N44/59, Te Wahine Moera ki Taputapuatea Pa) is destroyed and, although it was known to be a pa, it cannot be included because its type is unrecorded. One other is known to be present inland from Opito Bay but because of difficulty of access it wasn't visited nor has been recorded. A further pa recorded in the scheme lies inland of Mahinapaua Bay, N40/27, but its type is not noted. The remaining 21 pas may be subdivided according to the method already published (Buist 1965:75)

Single Unit pas	7				
Double Unit pas	1				
Multiple Unit pas	13	pukearuan	5	(3-9 units)	
		opitean	7	(10-19 units)	
		otamean	1	(20-29 units)	

The greatest number of pas are situated on the coast, although there is really no great distance between these and the pas of the lowlands. The pas would, to all intents and purposes, serve both zones. Coastal:

single unit	7			Lower Upland:	single unit	0
double unit	1			The state of the	double unit	0
multiple unit	9	p.	3		multiple unit	t5p.2
		op	.4			op. 3
		ot	. 1			ot. 0

Total 5

### Total 16

It can be seen that there is a preponderance of multiple unit <u>pa</u> and, appropriately, that the opitean is in the majority. These larger <u>pas</u> are present on all parts of the coast except the rugged strip between the south-east point to the south at Whauwhau Beach: this area is for the most part heavily covered in native bush and scrub, and it is possible that larger sites are obscured by this cover, to be discovered only by a painful exploration up the ridges. Each of the larger bays have at least two <u>pas</u> close at hand. Rather surprisingly, the bay which is the largest, has the most exposed midden and the most extensive archaeological history not to say pre-history, has only one <u>pa</u> of any size - Opito Pa: which though not extensive in terms of possible occupation area, is about four times the size of N40/40 which occupies very narrow spurs only, with terraces of small size. These two <u>pas</u> together would not accommodate a very large population, but the terraces N40/14 and N40/41 would allow for some increase.

The largest and most spectacular <u>pa</u> is Otama, N40/34, situated on the top of cliffs with an extensive view in all directions and occupying a central position on the north coast.

The styles of construction of the <u>pas</u> do not vary greatly. As in <u>pas</u> elsewhere, the platforms are the most strongly defended parts, and the associated terraces simply utilize the available slopes within the defences to the best advantage. In only one, Wharetaewa Pa, N44/21, is there an inner bank of any size: this may be a reflection of the depth of the ditch from whence the dirt came rather than of any change in construction. There is, again, no clear indication that the smaller single unit pas are of a period later than the larger more complex pas.

### Comparison with North Taranaki:

In the previous area-examination in Taranaki (Buist 1964), 64 square miles were examined and the density of 2 pas to the square mile was discovered. In this area of 22 sq. miles the density is 1 to the sq. mile. In North Taranaki the single unit predominated, suggesting a dispersed manner of population distribution, whilst in Kuaotunu Point the multiple unit predominates, suggesting that the local mode, at least with respect to fortified sites, was towards nucleation. Another possible interpretation is that the warning of enemy approach was more readily detected than in Taranaki, allowing time to retreat to the local pa, as all hostile approaches would have been from the sea. This second interpretation is given some weight by the greater occupation utilization of the sites of Kuaotunu Point. On any particular site every slope that could hold a scarp has been terraced, whereas in North Taranaki only the gentler slopes have been modified leaving the steeper part of the ridge or headland unmodified and presumably unoccupied. A measure of this differing utilization is the variation in pa types: roughly 1/3 of the 104 in North

Taranaki are multiple unit pas, and none of these contain more than 9 units (<u>pukearuan</u>), whilst at Kuaotunu Point nearly 2/3 of 21 are multiple units with a preponderance of those with over 10 units. It is obvious that the Maoris rather than build a small <u>pa</u> as in North Taranaki, utilized a particular site situation more completely.

The clustering of sites in Kuaotunu Point does not appear to be striking apart from the mentioned association of two or more pas to a beach. The marked clustering about rivers in North Taranaki doesn't occur, simply because there are no rivers or other natural features apart from beaches.

The occurrence of midden and portable artifacts is very marked in this area. Nearly every <u>pa</u> yielded at least one flake of obsidian from its surface, and flaked 'tahanga' basalt was even more common, whereas in North Taranaki midden on <u>pas</u> or elsewhere was very scanty and the total flaked stone material found filled only one paper bag. The explanation for this difference does not spring readily to the mind, though it should be noted that it was the frequent occurrence of Kuaotunu Point artifacts that first drew Golson's attention to Mahinapua Bay.

#### Comparison with Other Areas:

Two other areas have received attention. Ponui Island, which lies on the west side of Coromandel Peninsula at about the same latitude is Kuaotunu Point, has been partly recorded by Janet Davidson (Davidson 1963: 36). Similar middens, pits, terraces and <u>pas</u> occur. The <u>pas</u> are all multiple unit and all lie on the coast. There are no obvious differences and the Island occupation may be, then, directly comparable with Kuaotunu Point.

Kauri Point Peninsula, which lies on the east coast, some 40 miles south of Kuaotunu Point (Green 1964: 11), cannot be compared directly owing to the different nature of the report. However the summary of the site survey "gives the impression of three distinct clusters of sites on the peninsula, each including defended and undefended dwelling components, midden components of both beach and dry land type ... Each locality seems to have one or more pa site as the nucleus for the cluster, but in the best recorded locality, the impression is very strong that settlement was not confined solely to these well defended centres, but was dispersed within the locality." It is apparent that much the same association of components occur, though there are no dry-land shell middens noted at Kuaotunu Point. (It may perhaps not be out of place to mention that such middens occur extensively inland on the south side of Mercury Bay). However there is not the same suggestion of clustering of Kuaotunu sites about a pa nucleus, but rather about the geographic features which have some ecological attraction. Whilst isolated groups of pits may indicate a similar dispersed mode of living as suggested for Kauri Point, a clearer knowledge of period is necessary before too firm a conclusion can be drawn: pa and pits may each be a component of separate periods or even phases.

Whilst no mention of <u>pa</u> types is made by Davidson in the report, comparison with Kuaotunu types has been made by consulting the site record files. The Kauri-Ongari Point area of some 4 square miles has 8 <u>pas</u> recorded: a density comparable to North Taranaki, and greater than Kuaotunu Point. It appears that 3 are single units, 1 a double unit and the remaining 4 are <u>pukearuan</u>, having from 3 to 8 construction units. This is a marked contrast to the analysis of <u>pa</u>-types at Kuaotunu Point, but is again strikingly similar to the analysis of North Taranaki <u>pas</u>.

So much for the visible evidence of occupation and occupational patterns. It should be noted, however, that the evidence revealed by excavation of <u>pas</u> within the three areas compared here proves that within the <u>pa</u> itself there are no such differences. Parker (1962) discussed the similarities between pit types at Skipper's Ridge (N40/7) and at Kumara-kaiamo (N109/9) in North Taranaki. Birks (1960) details similar findings at an excavation in Sarah's Gully Pa (N40/10). Ambrose (1962) and Golson (1961) at Kauri Point Pa (N53/5) and finally Shawcross (1964) at Ongari Point Pa (N53/10), discuss the preliminary assessment and implications of pit types and sequence of occupation, which show alarming similarities in all three areas.

### SUMMARY:

An area of 22 square miles of the Coromandel Peninsula has been surveyed and the various components of prehistoric occupation recorded. The evidence of the <u>pa</u>building period of Classic Maori Phase has been given some attention and comparisons made between this area and three other areas elsewhere in the North Island. Whilst it is not necessarily implied that Kuaotunu Point is the navel of New Zealand archaeology (this actually lies in South Taranaki), never-the-less it is hoped that this study will provide a small supplement to the gradually accumulating knowledge of New Zealand prehistory and will, furthermore, supplement the summary of sites of the area already published by Green.

In conclusion it is a painful task to note that the area will soon be lost to archaeological research as the spread of "holiday homes" is becoming rapid, large areas of the coast having already been purchased by speculators. The occupation, commenced by itinerant East Polynesians, settled by moa-hunters, developed by Maoris to the <u>pa</u>-building period, visited by the first Europeans in 1769 and then by timber merchants and gold-seekers, will conclude with the roar of bull-dozers obliterating the past.

### **REFERENCES:**

Ambrose, W.	1962	N.Z. Arch. Assn. Newsletter, Vol. 5, no. 1
Birks, L.	1960	N.Z. Arch. Assn. Newsletter, Vol. 3, no. 2
Buist, A.G.	1964	"Archaeology in North Taranaki", N.Z.A.A.
Crosby, E.	1965 1963	Monograph no. 3 N.Z. Arch. Assn. Newsletter, Vol.8, no. 2 N.Z. Arch. Assn. <u>Newsletter</u> , Vol.6, no. 1
Davidson, J.	1963	N.Z. Arch. Assn. Newsletter, Vol.6, no. 1
Fraser, C.	1907	Geology of the Coromandel Subdivision, N.Z.G.S. Bulletin no. 4
Golson, J.	1957 1961	Journal of the Polynesian Society, Vol. 66, no. 1 N.Z. Arch. Assn. Newsletter, Vol. 4, no. 2

