ARCHAEOLOGICAL SITE SURVEY OF SHOE ISLAND AND THE SLIPPER ISLAND GROUP

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SUMMARY

Twenty archaeological sites were recorded on Shoe Island and the Slipper Island Group. Of these, sixteen are new records.

Evidence of former Maori occupation is found in the form of pa, pits, terracing, midden, obsidian and other artifacts. With its ready access to fresh water, suitable agricultural areas, coastal resources, and excellent defensive positions, Slipper Island appears to have been permanently occupied by the Maoris.

INTRODUCTION

Descriptions of archaeological sites on the Slipper and Shoe Island Group were compiled during the A.U.F.C. Scientific Camp in August 1973. Records for Slipper Island, where the main camp was set up, are the most detailed. However, a two day trip to Shoe Island by P.R. Moore and one day trips to Rabbit and Penguin Islands by B.W. Hawyard and others provided observations testifying to their occupation by the Maori.

Although some detailed survey work was carried out, the main aim was to provide a more complete coverage of sites than was previously on file in the records of the New Zealand Archaeological Association (N.Z.A.A.). They would not only fill in a small gap in the growing record of sites on islands along the East Coast but would also provide a basis for any further work in this group.

PREVIOUS WORK.

Of the four islands mentioned above, only on Slipper Island has evidence been recorded of a resident Maori population prior to European contact. Cochrane1 mentioned that “Maori pa formerly occupied all four of the west coast headlands whilst a considerably larger pa covered the slopes of the 195 foot headland on the east”. His observations were confirmed by R.G.W. Jolly who visited the island in 1962 and lodged records with the N.Z.A.A. for three headland pa on the west coast and the pa on the east.

When commenting on the vegetation of Penguin, Shoe and Rabbit Islands,
Cochrane suggested that the islands were probably fired by Maori mutton-birding parties earlier this century, but did not mention any archaeological evidence for Maori occupation. However, the Department of Internal Affairs Report for 1967 does note signs of terracing on Shoe Island and obsidian on Rabbit Island.

**METHODS**

On all four islands a reconnaissance survey was made during which all sites found were briefly described and located on the map. (Figs 1 & 2) Although time was a limiting factor, this was followed on Slipper Island by a more detailed survey of the eight pa. All results have since been officially recorded in the N.Z.A.A. files permitting permanent site numbers (e.g. N49/20) to be assigned. Three pa, N49/45, N49/46 and N49/56, were measured with tape and compass, a complete compass traverse was made for N49/47, and a plane table survey was carried out on N49/20. Tape and compass were also used in the mapping of N49/21, N49/22 and N49/23, although the final drawings were actually constructed from an aerial photograph (Nelson Aerial Surveys No. AS4740 as flown 18.9.72). Cross-sections and earthwork profiles were also drawn for N49/20, N49/22 and N49/47 (Figs, 3, 6 & 8).

**CHECK LIST OF SITES.**

**SLIPPER ISLAND:**

Grid references in the following list e.g. (434358) refer to NZMS 1, Thames Sheet, N49, 3rd Edition, January 1967. Descriptions, in note form, are of the principal features; locations are given on Fig. 1.

N49/20 (434358) Ridge-crest pa at Fortress Point (Figs 4, 13 & 14). L-shaped ditch, several undoubted pits and a number of terraces. Obsidian and basalt flakes.

N49/21 (427352) Headland pa at south end of South Bay (Fig. 5). Single ditch system, central platform with terraces and a number of possible pits. Obsidian and some traces of shell midden.

N49/22 (423363) Headland pa, south end of Home Bay (Fig. 6). Two transverse ditches and several terraces, but no pits. Neither obsidian or midden recorded.

N49/23 (424357) Headland pa, northern end of South Bay. (Fig. 7). Double ditch and bank system with inner terraces surrounding a central platform. One pit outside the outer ditch (Fig. 8) and a number inside. Shell midden and obsidian.

N49/45 (425372) Ridge-crest pa, 150m north west of North Swamp, overlooking Home Bay (Fig. 9). Probably an L-shaped ditch associated with a number of terraces and pits. Midden which included both shell and fish remains.

N49/46 (433379) Pa at end of high spur with North Trig (142m a.s.l.), north end of Crater Bay (Fig. 10). Terraces and four pits plus two transverse ditches. Small quantity of fragmented shell midden.

N49/47 (431353) Headland pa on south east portion of island 400m east of N49/21 (Fig. 11). Two transverse ditches, platforms, terraces and at least one
Fig. 1. Locations of Archaeological Sites on the Slipper Island.
pit. Midden predominantly of fish bones with some shell. Obsidian flakes.

N49/48 (427356) Shell midden extends along South Bay sand dunes. Species include *Cellana radians*, *C. ornata*, *C. denticulata*, *Cominella adspersa*, *Haliotis*, *Perna*, *Chione* and *Amphidesma australis* and the land snail *Rhytida greenwoodii*. Obsidian.

N49/49 (429360) Three boulder strewn terraces some 20m long, facing southwards over the swamp.

N49/50 (430369) Stone wall 1m x 1.8m in the now drained part of the swamp. May possibly be of European origin.

N49/51 (425371) Shell midden above boulder beach where swamp drains into sea north of Home Bay.

Fig. 2. Locations of archaeological sites on Shoe Island.
N49/56 (427371) Possible swamp pa. 200m inland from where North Swamp drains into the sea.

PENGUIN ISLAND.
- N49/53 (420347) Terrace on north part of island extending to the north east.

RABBIT ISLAND:
- N49/54 (415337) Faint terrace near south coast.
- N49/55 (413342) Transverse ditch 3m wide and 3m long, across northern 'headland'.

SHOE ISLAND:
For this island the Grid references refer to NZMS 1, Whitianga Sheet, N44, 3rd Edition, January 1966. Site locations are given in Fig. 2.
- N44/72 (394436) Terrace. Two possible terraces 7m x 1.5m to north of stream and three small terraces 10m x 15m to the south. Midden of which the most common species noted were *Thais orbita* and *Amphidesma australe*. Rounded cobbles, obsidian and one roughout basalt adze.
- N44/73 (496431) Terrace 20m south of trig. Shell midden. May possibly be a pa site.
- N44/74 (394431) Small eroded terrace plus shell midden above boulder beach.
- N44/75 (394430) Possible terrace and sparse shell midden. Polished basalt adze with broken blade.

SITE LOCATION AND DISTRIBUTION.
The site survey of Slipper Island revealed a marked concentration of sites on its south and west coasts. The majority of pa sites and the only extensive area of midden are to be found in the southern half of the island. Pa in this southern area are much larger in size and have good views of at least one or more neighbouring pa.

All habitation sites located on Slipper were coastal with the exception of N49/56 (Swamp pa) and N49/49 (Terraces). Beaches on the southwestern half would provide safe landing in contrast to those on the east coast above which rise precipitous cliffs.

Most of the sites are within easy reach of fresh water, swamps and sea. Flax (*Phormium tenax*) is found near or on all of the pa sites with the exception of N49/56. The sheltered valley in the northern half of the island appears to be suitable for cultivation. This area is scattered with boulders of various sizes but the only obvious man-made structure was the small portion of stone wall, located in a now drained part of the swamp. This differs from some of the other offshore islands, on which stone facing of terraces seems to have been common, such as Ohena, Great Mercury and the Aldermen Islands which lie to the north.

One of the most striking features of Slipper Island is the apparent lack of sites in the north-east between N49/46 and N49/20.

Three of the four sites located on Shoe Island were found on the west coast facing the mainland. Shoe, like Slipper has precipitous cliffs on the east.
These slope away to the west but even here landing sites are poor. Two valleys with a good water supply are present and as previously noted for Slipper, both would have been suitable for cultivation, especially the northern valley. No evidence for stone work was found.

Those sites located were in extremely poor condition compared to the grassed sites of Slipper owing to the activities of the rabbits and petrels and the burning of the vegetation. Moore mentions the possibility that site N44/73, on the highest point of the island, is a pa which suggests that some permanent occupation, if only of a minor extent was likely.

Rabbit and Penguin Islands are much smaller in size, lack good water supplies and do not appear to have the agricultural potential of Shoe and Slipper. However like the others they do have a large population of petrels. This together with the nature of the sites located suggests temporary occupation by mutton-birding parties.

A number of shallow rectangular shaped pits, with other possible examples were found only on Slipper Island. Vegetation and burrowing may have obscured others which may have been present on Shoe.

Midden deposits were found on all islands except Rabbit. The species found in them were noted for those of Shoe and Slipper Islands. Only the dunes bordering South Bay on Slipper Island was midden reasonably extensive.

Shells found here reflect use of both the island shores and the mainland. Because no estuarine mud is found on the shores of Slipper, species such as
Fig. 4. Fortress Point Pa, N49/20, Slipper Island.
Fig. 5. Headland Pa, N49/21, South Bay, Slipper Island.
Fig. 6. Headland Pa, N49/22, Home Bay, Slipper Island.
Fig. 7. Headland Pa, N49/23, and Beach Dunes, N49/48, South Bay, Slipper Island.
SLIPPER ISLAND  CROSS-SECTIONS

EXPOSED SECTION OF PLATFORM OF N49/20 FROM THE NORTH. (See Fig 4 for location.)

KEY

- TURF LAYER
- WEATHERED CLAY FILL
- SANDY CLAY FILL WITH CHARCOAL
- SANDY CLAY FILL WITH CHARCOAL & SHELL
- SAND LENSE
- BEDROCK

EXPOSED PIT SECTION ON OUTER DEFENCES OF N49/23 FROM THE NORTH-WEST (See Fig 7 for location.)

Fig. 8. Cross-sections through archaeological deposits on Pa 49/20 and N49/23.
Fig. 9. Pa N49/45 on slopes above north swamp, Slipper Island.
Fig. 10. Pa N49/46 on spur north of Crater Bay, Slipper Island.
SLIPPER ISLAND SITE N49/47

LEGEND

Escarpment
Pit

Fig. 11. Pa N49/47 on south coast, Slipper Island.
Fig. 12. Maori artifacts from Slipper Island.
Chione and Amphidesma australe were gathered on the mainland, possibly near Tairua. This also applies to midden on the Shoe where Chione, Amphidesma australe and Glycimeris laticostata were collected. Another feature of the midden besides the limited size of deposits, was the relative abundance of fish remains.

**ARTIFACTS**

Artifacts found included obsidian flakes, adzes, basalt flakes and a flaked piece of chert or siliceous rhyolite. Four small flakes of black obsidian (green in transmitted light) and two larger flakes of green, a broken adze roughout and polished broken adze blade plus the flaked chert were all collected by Moore. A large number of obsidian flakes, the majority of which appeared to be black and some basalt flakes were found on Slipper, while black obsidian only was found on Penguin and Rabbit Islands. No quarries are to be found on any of the islands mentioned. Nearly all the flakes appeared green in transmitted light and are likely to be from Mayor Island sources. The basalt, of a fine grained texture and grey in colour is similar to that found at Tahanga Hill, Opito.

In addition to the artifacts mentioned these islands yielded the following:

(a) One broken patu found in the stream below N49/23 (Figs 7 & 12a),
(b) Seventeen adzes including a Duff IV and two IA and forty-seven pieces of fish hooks now housed in the National Museum and
(c) Five adzes and a flake in the Auckland Museum (Fig. 12 b-g).

**DETAILED DESCRIPTIONS AND MAPS OF PA**

N49/20: Situated on the ridge-crest at Fortress Point, this site shows signs of erosion along the coastal section. Bordered by 60m cliffs on the coastal side, the site slopes away to the west where a bank and ditch system are to be found (Figs 4 & 5).

One 6.5m x 3m platform is surrounded on two sides by a small terrace. Seven small terraces, the bottom one of which possesses a shallow rectangular pit, and three large terraces lie below this. Two of the larger terraces are L-shaped and have rectangular pits to the south. A 5m long ditch lies at right angles to the lower of these two terraces. A third terrace, some 55m long is bordered by an L-shaped ditch varying in depth from 1m in the north to 5m in the south. A bank 1m wide runs parallel to the ditch and where it lies at right angles to the coast falls away to a second ditch.

On the south side, outside the terraces and ditches seven more rectangular pits were located. While no midden was found obsidian and basalt flakes were noted. Stake holes and pits were seen in cross-section (Fig. 8).

N49/21: The headland pa at the southern end of South Bay is cut off from the island by a single transverse ditch, to the east of which runs a path. A central platform is surrounded by a number of terraces (Fig. 5) the greatest number of which lie to the north and west.

Shell midden and obsidian were found on the northern terraces. No definite pits were observed.

N49/22: This site, on the headland south of Home Bay is surrounded on three sides by cliffs and on the landward side by a transverse ditch. Two platforms
bordered by northward facing terraces are separated by a second ditch and bank
system (Fig. 6). Midden, obsidian and pits were absent.
N49/23: At the northern end of South Bay the headland is cut off from the
island by a double ditch system (Fig. 7). The large central platform is
surrounded by terraces, the majority of which are to be found on the west and
east. Although no shell midden was noted, some obsidian was found.

N49/45: This site is located on the southward facing slopes above North Swamp, adjacent to the sea cliffs (Fig. 9). Of the many boulders on the pa most are to be found on the south side.

The features of the pa, although hard to distinguish at close range, do stand out when viewed from a distance.

Running parallel to the west coast are two ‘terraces’. These appear like two ditches from a distance but the ground has been well trampled by stock and the outer bank, if present, is difficult to find in both cases. The inner ‘terrace’ is some 35m long and the outer 47m. These are joined at right angles at the southern end by a third ‘terrace’ 32m long.

At least two L-shaped terraces lie inside the structures mentioned (Fig. 9) in association with a platform which is eroding away along the cliff face.

On the southern slopes adjacent to the coast there are further terraces, only some of which are clearly defined.

A pit was seen in the eroding cliffs to the north and several other possible pits noted. A small midden deposit containing shell and fish bone was found on one of the lower terraces.

N49/46: Facing northwest towards the Aldermen Islands, this site is in a fairly good state of preservation. The pa consists of a number of terraces and platforms which extended 110m along the ridge and onto a headland carrying a trig situated at 142m a.s.l. The pa is surrounded by steep cliffs and the sea except on the south west perimeter. A continuous track runs along the southern side of the ridge. The first structure encountered is a platform 12.5m x 3m on the headland side of which lies a 1m x 5m outer ditch and 4m x 5m inner ditch (Fig. 10). Terraces and platforms are found along the ridge beyond this.

On the summit of the headland is a small platform, where the trig station now stands. Two small terraces lie to the north of this and a large, Y-shaped terrace upon which five pits were found, encloses them. Wider terraces are found to the north and south sides of the headland but it is only on the southern ones that a few fragments of scattered midden were found.

N49/47: This headland pa faces south and is cut off from the island by two ditches (Fig. 11). The outer bank of the 4.5m wide and 26m long ditch is 2.5m high and the inner one 2.3m. A bank 0.5m wide runs parallel to the ditch and a 1.3m scarp rises above the terrace which curves northwards to give access to the pa. In contrast the inner ditch is 14.3m wide with an outer bank of 9m and an inner one of 5m although it is also 26m in length.

Two small adjacent terraces lie between the 15m x 7.5m platform and inner ditch. The platform has a shallow pit in the southwest. Beyond the platform a 3m scarp borders a large 16m x 4.5m terrace to the south of which lies a narrow, second terrace.

Fish midden, with some shells and obsidian were noted.

N49/56: This is a large platform situated on a narrow strip of land that projects into the swamp. Unfortunately bulldozing has destroyed some of it (pers. comm. Mr D. Norman) but a fairly pronounced scarp still borders it on the three sides surrounded by swamp. Two extremely small triangular terraces are found lying adjacent to a third on the eastern side of the platform near the land approach.
DISCUSSION

No two of the eight pa sites described are identical but there are some similarities between them. Of the seven coastal pa five are situated on headlands and two on ridgecrests. Size, location and numbers of platforms and terraces also differ from site to site.

Platforms range in size from 5m x 6m on N49/46 to 49.5m x 3m on N49/23. Most are reasonably rectangular in shape with the exception of N49/21 which has a triangular one. Not all platforms are located on the summit e.g. on N49/46 four platforms are found along the ridge and one on the headland and on N49/22 and N49/23 there is a second platform between ditches. Central platforms surrounded by terracing on all sides are found only on N49/23 and N49/21.

Terraces range from 5m x 1m (N49/47) to 55m x 2.8m (N49/20) but the largest are to be found on N49/21, N49/23 where there are terraces over 50m in length and up to 20m in width. Numbers of terraces vary from five on N49/47 to nine on N49/20. Not all terraces face in the same direction e.g. those on N49/22 face northwards and N49/47 north, south and southwest.

Ditches are clearly defined on six of the sites. All ditches except for those on N49/20 are to be found on the narrow strips of land joining the headlands to the island. One of the pa, N49/21, has a single ditch but double ditches are to be found on N49/46, 20, 22, 23 and 47. No two double ditches are the same. Those on N49/22 for example are separated by a platform and two terraces while those on N49/23 by a small platform only. Two banks are found in association with ditches on N49/22 whereas there is only one on N49/47 and none on N49/21 and N49/23. The inner ditch on N49/47 is 14.3m wide, 26m long with outer and inner banks of 5m and 9m respectively and although it is the largest on the island, defends a smaller area.

The largest number of pits were found on N49/20 where seven were located inside the defenses and seven outside. Here most were facing south whereas the five located on N49/46 were facing north. Of the remaining sites only one pit was found on N49/47, 45 and 23 but it is considered that there were possible pits on N49/21, 45 and 23.

Obsidian was found on N49/20, 21, 23 and 47 and nearly all is likely to be from Mayor Island sources. Basalt flakes were found only on N49/47.

All sites are close to fresh water supplies and with the exception of N49/46, are close to areas in which activities associated with procuring food could easily be carried out.

It is considered that the reasons for the above differences may be due to the type of land occupied for defense; methods of defensive devices other than earthworks employed, and cultural preferences dictated by origin, organisation or the specific function of the site at the time of construction.

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89
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