

# Tiwai Peninsula

preliminary cultural significance report

Photo credit: New Zealand's Aluminium Smelter (NZAS)



**Murihiku**  
**Regeneration**

January 2021

## Appendix C

### ARCHAEOLOGY AT TIWAI POINT

#### A Preliminary Report to the Southland Museum Trust Board (Inc.)

Tiwai Point is situated at the end of a long sandy tussock and scrub covered peninsula, which stretches for eight miles between Awarua Bay and Foveaux Strait. A channel, some half a mile wide, separates it from Bluff. The peninsula is comprised mostly of marine gravels and sand but, at the point, there are a number of volcanic and metamorphic rock outcrops which are related to the Bluff series. Amongst these are several seams of fine grained black argillite, and a low hill of grey-green coarser argillite.

Tiwai Point is the site chosen for the Comalco Aluminium Smelter. Since this became known to the public, in about 1961, several people with archaeological interests, including the author, have surveyed the peninsula to ascertain whether any sites were likely to be destroyed by the construction work. Unfortunately, none of them found any stratified deposits beyond a few eroding ovens. The conclusion was that there had been an occupation site but it had been washed away by the sea.

In April 1968, however, it became obvious that there was an extensive area of stone working and possible habitation still in situ. The Southland Museum requested that the Otago Anthropological Society should undertake excavations on its behalf. These excavations took some ten weeks, in three seasons, in May, August, and November/December 1968, and at Easter 1969.

The area chosen for excavation was a flat, relatively sheltered, area situated between the Awarua Bay and the swampy freshwater lagoon, adjacent to the hill of argillite, about one and a half miles from the point itself.

Over the three "seasons", two main areas were dug as well as a number of smaller ones.

The first area to be investigated, Area B, was almost a discrete working floor, where pieces of the local argillite and other rocks had been flaked in the manufacture of stone tools. In all, 115 square metres were excavated in this area. Besides a post-hole and a number of scoop hearths, the most noticeable feature was the evidence for the deliberate heating of argillite rocks. One large oven, in particular, was filled with charcoal and big angular pieces of rock. There was no sign of food remains or of the typical round water-worn hangi stones we had expected. No explanation is offered for this, at present, but it is hoped that some experimentation may produce an answer.

The second area, X, was situated 80 metres east towards the lagoon. This area, of some 150 square metres, was the more rewarding of the two and more time was devoted to it. It was discovered when a test pit was put down to try to explain the presence of an exotic boulder of granite. Just beneath the turf was a thick layer of flake material. When a larger area was turfed, several discrete working floors were revealed with a very high concentration of flake material. This area also contained one post-hole and a number of fire-pits.

The importance of Area X was its direct association with a dense, if shallow, midden deposit. The density of this material made excavation very slow, with the result that only a small area of midden was excavated.

In April 1969 the author was informed that a burial had been disturbed by a bulldozer, working near a quarry at the point, and asked to investigate. The body, lying in a trussed position on its right side, was that of a diminutive adult Polynesian woman, who must have been less than five feet high. In her right hand had been placed a small adze, probably of type 1A, and probably made of the local argillite. Unfortunately, it was "souvenired" by one of the construction workers and is, therefore, not available for study. The local Maori elders gave permission for the burial to be removed to Dunedin for study in the Medical School on the understanding that it will eventually be reburied at Tiwai.

Two circular depressions were excavated in the belief that they might have been pits, but they were shown to be natural sand hollows. An eroded oven on the sea shore was also excavated, as was an associated small eroding midden. The oven was filled with pieces of argillite and charcoal but no faunal material. The midden seemed to be different from that in Area X, in that it consisted almost entirely of fishbones.

Only one cultural layer was distinguished, though study may reveal evidence for horizontal stratigraphy. A very wide range of rock has been worked on the site. Besides the various local argillites, there were orthoquartzite, chalcedony, fossil wood, obsidian, rock crystal, granite, porcellinite, norite, and sandstone. A number of pieces of mica were also found - it was believed that mica occurs geologically with the rock crystal and was carried to the site inside a core. Serpentine, coal, quartz, pumice, and a possible nephrite were also present.

Very few artefacts were found. The only finished adze was a small quadrangular one with slight grip reduction. Several small finished chisels and a number of polished flakes attested to the polishing of artefacts on the site. Most of the adzes found were small roughouts (c. 10 cm.). A very high proportion of these were flake-adzes, often with very little secondary work. Some even showed weathered cortex on one side.

A small shank for a minnow lure, without the perforation for attachment of the line, a notched but unserrated Hjarno type C5a composite bait hook, and some drilled centres of one-piece fish hooks, suggest a wide variety of fishing tackle. Three small broken pendants and a possible serpentine cloak pin were the only ornaments found.

The midden material is still being studied, but preliminary identification suggests the presence of the following species in the Area X midden.

Molluscs:	Cockle, pipi, cats-eye, alcithoe, paua, oyster, limpet, and barnacle.
Other Fauna:	Moa, seal, dog, rat, sea birds, bush birds, and fish.

The presence of bush birds is surprising in an area where there is no bush today. Many moa vertebrae and foot bones were found. The presence of these bones has been used as a criterion to denote moa-hunting in the vicinity, rather than the transportation of "joints" from the kill site to the camp.

The eroded midden on the Awarua Bay side produced almost entirely pipi shells and fishbones, and one moa vertebrae. This is markedly different from the predominantly cockle midden of Area X.

By comparison of the midden material, with Lockerbie's Pounawea sequence, a date in the 14th-16th centuries is suggested but Tiwai is quite a long way from Pounawea so this must be very tentative. Radio carbon samples are, at present, being processed. The results of this test will give a much more accurate date.

The most time consuming, but the most valuable part of any excavation, is the processing of data after the actual excavation is completed. It will be a few years yet before all that can be learnt from the material is known. At present, this work is proceeding along a number of lines of approach. A study of the stone technology of the Tiwai Maori has been begun by the author. From this, it is hoped that a great deal of information will be obtained, which will have ramifications over a much wider sphere than Tiwai itself. Studies of the faunal and floral remains are being made by a number of colleagues. From these studies, valuable information will be obtained about the economy and ecology of the Maori population of this part of New Zealand.

In addition, studies to improve archaeological methods are being made using soil samples taken at Tiwai. In particular, chemical analysis of the soil, the first of its kind undertaken in New Zealand, promises to yield some very interesting results which will have far reaching implications.

Eventually, all material recovered will be deposited in the Southland Museum, as an archaeological reference collection, so that it will always be available for further study.

#### Acknowledgements

Shortly after the importance of the site was realised, a public appeal was launched by the Southland Museum. This received a magnificent response, including donations by Comalco, the New Zealand Historic Places Trust, and the Maori Purposes Fund Board. To all who contributed we owe grateful thanks.

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OTAGO MUSEUM

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