# Tiritiri Matangi Archaeological and Historic Landscape

Heritage Assessment

Andy Dodd, DOC, Auckland Conservancy

OCTOBER 2008

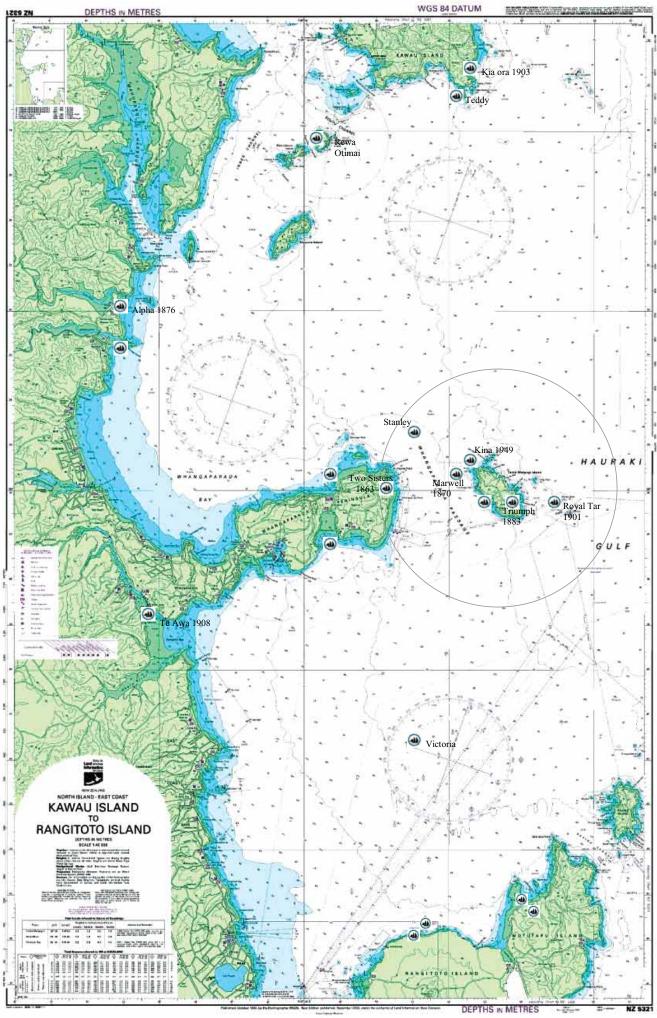




Tiritiri Matangi Archaeological and Historic Landscape Compiled by Andy Dodd, DOC, Auckland Conservancy Peer-reviewed by Robert Brassey ISBN (web PDF): 978-0-478-14472-7 Cover: Tiritiri Matangi Island Aerial, 1996. Publ.info. © Copyright New Zealand Department of Conservation

## CONTENTS

1.	Site Overview	5
2.	History description	5
3.	Fabric description	6
4.	Cultural connections	11
5.	National context	13
6.	Historic significance	13
7.	Fabric significance	15
8.	Cultural significance	17
9.	Significant themes & site types	17
10.	Management history	18
11.	Recommendations for management of the archaeological landscape	20
12.	Work vision summary	20
13.	Sources & reports	21
14.	Unpublished sources	24
15.	Evaluation of sources	27
16.	Location & site maps	28
17.	Endnotes	32
18.	Chronology of events	33



Known shipwrecks located in the vicinity of the Tiritiri Matangi lighthouse marked on marine chart 5321: source CHIM2007

#### SITE OVERVIEW

Maori occupied Tiri c.1400 to 1856, with Ngati Paoa and Kawerau being principal iwi. Particularly significant is the c.1400 archaic midden. European activities are farming 1854-1971, a historically significant lighthouse station established in 1865, and coastal defences 1940-45. The lighthouse is still operating, and it's station remains intact.

- » Official name: Tiritiri Matangi Scientific Reserve.
- » Administered from DOC Warkworth Area Office.
- » Access by private boat or ferry from Downtown Auckland or Gulf Harbour.
- » A popular visitor site with an estimated 34,000 visitors per year. 1
- » Tiritiri Matangi Archaeological Landscape is an actively managed historic site.
- » Island area 220.61 hectares.

#### 2. HISTORY DESCRIPTION

Tiritiri Matangi was originally part of the Ngao Oho complex. An area from Manukau to South Kaipara in the west and Takapuna to Mahurangi in the east.<sup>2</sup> This group later became known as Kawerau iwi and occupied the coast between Te Arai and Takapuna, including Tiritiri,<sup>3</sup> and built the Tiritiri Matangi pa that gives the island its name. Ngati Paoa came north from the Hauraki area for shark fishing, and built a small pa at the northern end of the island. Kawerau chief Maki destroyed it around the turn of the 18th century during his war against the Wai-o-hua of the Tamaki isthmus and their Hauraki allies. 4 Kawerau resettled the island until the 1820s, when along with many of the other Hauraki Gulf islands, it was evacuated because of the threat of Ngapuhi musket raids. In the 1830s Kawerau returned to Tiritiri, beginning with Taipau and his brother Whakapiki. The 19th century Maori occupation of Tiritiri came to an end with the death of Taipau in 1856. In 1867 Te Hemara appeared in the Native Land Court to claim Tiritiri Matangi citing Kawerau occupation,<sup>5</sup> but by this time the lighthouse settlement was already established and the case was disallowed by Judge Fenton in spite of the deed of sale not including the island.6

In 1843 Thomas Duder and David Rough visited Tiritiri Matangi to determine if it would be an appropriate location for a signal station, and in 1851 Rough's successor as harbour master, Captain Burgess, petitioned the government to erect a lighthouse there. The island was sold to Taylor, MacMillan and Campbell c.1854, who farmed sheep and pigs there. Encouraged by the change in ownership in 1855 Burgess repeated his request for a lighthouse, this time through the Superintendent of Auckland Province, and in 1857 he selected a location at the southern end of the island. Duder was issued a government lease to farm the island from 1861-66.

In 1861 Captain Robert Johnson produced a plan for 13 additional lighthouses around New Zealand which included one at Tiritiri Matangi. The Marine Board was established in November 1862. It was responsible for the construction and maintenance of coastal lighthouses, and over the next 3 years lights were erected at Tiritiri Matangi, Mana, Taiaroa Head, Godley Head and Dog Island. Twenty hectares of Tiritiri were reserved for lighthouse facilities in 1864, and on February 8 the lighthouse arrived on board the *Queen of the Deep*, along with engineer Richard Aylmer and his assistant. The rest of the island continued to be managed under a farm lease. In 1866 the board was replaced by the Marine Department.

In 1902 Everard (Johnny) Hobbs took over the farm lease, and he was succeeded by his son Jack Hobbs in 1938. In 1925 the light was automated, and the keepers were withdrawn in 1947. During WWII keepers around New Zealand assisted with coast watching detail, and Tirirtiri Matangi was occupied by the Ministry of Defence 1940-45. The stock were removed during the war, but returned shortly after and not finally removed until 1971.

#### 3. FABRIC DESCRIPTION

Geologically Tiritiri Matangi comprises a greywacke basement of the Waipapa terrane (TJw) overlain by sandstones and conglomerates of the Warkworth (Mwe) and Kawau (Mwr) subgroup towards the northern end.<sup>8</sup> Much of the island's sedimentary soil has suffered severe erosion exacerbated by the effects of 130 years of intensive farming, burrowing rabbits and seabirds. This erosion and burrowing has undoubtedly had a deleterious effect on the archaeological landscape.

Two pa, known as *Tiritiri Matangi* (R10/265) and *Papakura* (R10/287) have been constructed on the island, and are associated with Kawerau and Ngati Paoa respectively. In addition there are 13 pit/terrace sites, nine middens, find sites, burial sites and contact period horticultural remnants (*Allium vineale*). Settlement patterns, like other exposed Hauraki Gulf Islands, show a tendency towards the lee-ward south-western side of the island, with settlement sites on the north-eastern side clustering around more sheltered gullies. From time to time adzes have been found on Tiritiri and four have been deposited with the Auckland Museum. No.42868 found by Anne Leahy in 1964 on the road to the lighthouse 25m from the jetty; Z5074 found at northern end of beach near wharf; Z5215 found by Ian Price during track maintenance on the Fisherman's Bay track; adze found by Charlotte Hardy 15.12.2004 near the *Papakura* pa.

The 1997 excavation of a limited area at the wharf site, uncovered what is likely the earliest occupation on the island. All phases of the occupation dating to a fairly short period (based on radiocarbon and obsidian hydration samples) of between 10 and 110 years, beginning between 1380 and 1420 AD — about the time of the Rangitoto eruption. The earliest layers suggested a temporary seasonal encampment, as no postholes indicating whare or other structures were found, but there were



Earliest photo of Lighthouse 1899 AJHR H15.

Auckland Museum C31606

fire scoops for cooking and in the midden the remains of large species such as a sea lion, a bottle nosed dolphin, a large shark, a ray, and at least five dogs. There was also a moa, New Zealand king shag (now regionally extinct, and confined to islets off the Marlborough Sounds), and other coastal and bush birds. The fish was predominantly snapper, and there was also some tuatara bone. There were quite a few artefacts, including large obsidian flakes from Mayor Island, and Te Ahumata on Great Barrier Island, and greywacke waste flakes from adze making. After this, the site was deliberately covered with fill, and signs of more permanent occupation occur, with stone walls and postholes indicating substantial whare or other buildings. There were scatters of artefacts and some food remains — dog, fish bone, rocky shore shellfish species, and for the first time kiore. The next layer was characterised by several fire scoops with oven stones, and above this was a fine gravel layer that was a natural beach deposit, and is thought to be the result of a tsunami or major storm, which may have been caused by the Rangitoto eruption in c.1400. Above that was further evidence of cooking, with several more fire scoops.

The excavation was limited to only 9m<sup>2</sup> and the larger remaining portion has been capped beneath the concrete area near the wharf.<sup>9</sup> Narrow coastal flats occur at Wharf Bay and along the coastline



Lighthouse settlement 1902, Winkelmann collection 1445. Auckland Museum C17896



Tiritiri Lighthouse Station c.1912 Alex Turnbull Library, FF3265½



Tiritiri Lighthouse Station 1921. Breckon, Auckland Museum



Roberts family at Lighthouse c.1918 J.Bates



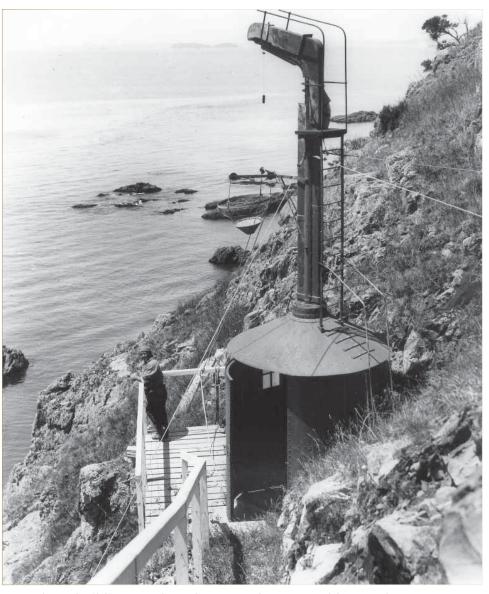
1946 Lighthouse station, King. New Zealand Herald



Lighthouse station c.1965. Taylor collection

northwest, as far as Hobbs Beach. The presence of intermittently extensive archaeological midden deposits, which are infrequent elsewhere on the island, suggest that these coastal flats may have been a primary focus of prehistoric occupation on Tiritiri Matangi. There is some evidence that these narrow coastal flats, which are old raised beach deposits, were once somewhat wider than they are today.

The island also contains sites relating to early farming mostly centred around Hobbs beach which, at that time, provided landing access to Tiritiri Matangi. A valuation report in December 1908 described a house,



Slaughters-gun-cotton foghorn, 1921. Breckon

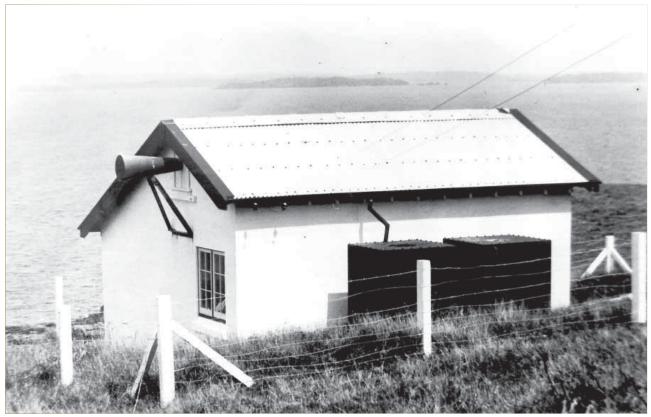
several outbuildings and a sheep yard, presumably on the escarpment behind Hobbs Beach. The last of the buildings at Hobbs beach were destroyed and the foundations bulldozed away in the 1970s.

The lighthouse complex provides the most complete assemblage of surviving historic buildings. In 1864 the settlement comprised the lighthouse, flagpole and two keepers' cottages.

The lighthouse tower was originally bright red. 10 It was painted white in 1947. By the turn of the 19th century in photos and early survey plans



Morse House in 1913. Tiritiri archives. Graphic



Diaphonic foghorn c.1935. Tiritiri archives. Auckland Star

reveal a larger signal mast and two other ancillary structures. In 1908 a small shelter was constructed for those on lookout duty. It was replaced in 1912 with the present day signal station. An assistant keepers cottage was relocated onto the island in 1913, and the two earlier keeper's cottages were replaced with the present day cottages in 1918 based on designs of the keeper's cottage at Cape Brett.

Associated structures on Tiritiri were a Slaughters-gun-cotton-foghorn and store (1898), diaphonic foghorn building with boiler inside (1935), and the workshop/generator shed (1950s). Structures built during WWII, include the Port War Signal Station to the south of the lighthouse, and the Fortress Observation Post

Numerous shipwrecks have occurred in the vicinity of Tiritiri since the lighthouse was established, most notably *Marwell* 1870, *Triumph* 1881, and *Royal Tar* 1901.

#### 4. CULTURAL CONNECTIONS

Tiritiri features prominently in Ngati Paoa and Kawerau traditions and these iwi maintain an ongoing association with the island. The name Tiritiri Matangi is derived from one of the pa on the island of Kawerau association and has the meaning looking to the wind or wind tossing about. A third translation is 'blown in the wind' making reference to the island's apparent ability to move about and appear in different places. 11 As one of the Hauraki Gulf Islands, Tiritiri is significant as one of the floats of the ancestral fishing net of the explorer Toi te-tuatahi. Both Kawerau and Ngati Paoa have been recognised in the naming of tracks constructed through the restored area. Histories and traditions collated during land court proceedings emphasise the seasonal use of the island — fishing and fern root gathering, and this is likely to have been a reference to the important shark fishing grounds to the north in the Whangaparoa-Kawau area. 12 Burials have been uncovered in modern times through erosion and excavation, and these have been reinterred on the island.

The name Chinaman's Bay relates to the crew of the steamer *Triumph* which was wrecked at the southern end of the island in 1883. The officers were taken off the island, but the Chinese crew was left there for two months.<sup>13</sup>

With assistance from the Supporters of Tiritiri Matangi group there has been a successful restoration through re-planting the island in natives. They also have been actively involved in guided tours, reintroduction of threatened species, control of weeds, and restoration of historic structures. The island has a regular ferry service, and is easily accessible to small boat users.



1921, near pa site. Lola Lord collection



Principal signalman's house from signal tower 1938. J. Dunnet

#### 5. NATIONAL CONTEXT

Hauraki Gulf Islands including Tiritiri Matangi are believed to have been some of the earliest places occupied in the Auckland region by Polynesian settlers, and extensively occupied during the subsequent centuries. Along with the Sunde site on Motutapu, the 'archaic' site on Tiritiri Matangi is one of few sites nationally that contain a chrono-stratigraphic marker, namely the beach gravel deposit in R10/279.

Evidence indicates R10/279 was inundated by the sea during a tsunami or severe storm event. The site faces Rangitoto and the possibility that a tsunami generated during the Rangitoto eruption was considered at the time of discovery. However this was subsequently thought unlikely when dates for the site were obtained. These suggested a 16th Century date for the event, compared with the probable 15th Century (ca 1400) date generally attributed to the Rangitoto eruption. McFadgen (2007) has since reviewed evidence for the age of the eruption and raised the possibility that the events may in fact be related. His conclusion, based on acceptable minimum and maximum radiocarbon ages from above and below the Rangitoto Tephra, indicates a bracket age in calendar years of between AD 1410 and 1550 for the eruption. The Tiritiri event is bracketed at 95% confidence levels between AD 1440 and 1640 (Wk 5803; Wk 5868).

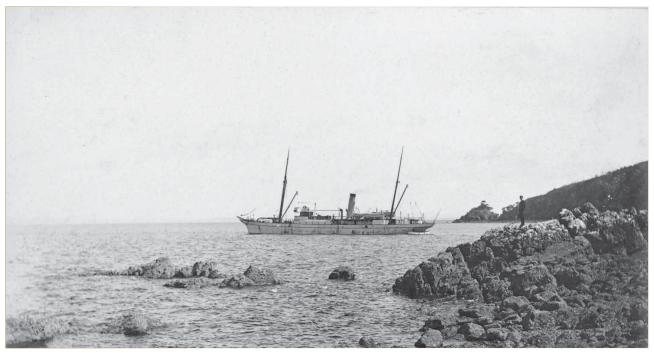
Tiritiri lighthouse was the third to be constructed in New Zealand, and the first light to be constructed on the approach to Auckland, and it is believed to be the oldest operating light in New Zealand. 15 It was also the first light to be constructed by the central government under the auspices of the newly established Marine Board, the earlier lights at Pencarrow and Nelson Boulder Bank were financed by their respective provincial governments.

#### 6. HISTORIC SIGNIFICANCE

Tiritiri Matangi is believed to have been one of the earliest places in the Auckland region occupied by Polynesian settlers, and was extensively occupied during subsequent centuries.

The historic significance of the lighthouse complex is outlined in Michael Kelly's 2003 national thematic work on New Zealand lighthouses: "Very significant as the first lighthouse completed by Marine Dept., and the earliest Auckland light. Construction was difficult, particularly the movement of materials. The MSA states that this is the oldest continuously operating lighthouse in New Zealand". The lighthouse was, with the installation of the Xenon light in 1965, one of the most powerful lighthouse beams in the world operating at 11 million candle power.

Tiritiri was also an important part of Auckland's coastal defence during WWII. As the use of marine radio communication was forbidden, the Port War Signal Station was an important part of a signal relay network used to ascertain if approaching vessels were hostile or friendly. The



GSS Hinemoa. Auckland Museum 412-1



Hinemoa's boat leaving Hobbs beach, 1904. Auckland Museum C34728

island was also important as the location of an advance observation post which relayed commands to the guns at Whangaparoa, and controlled the minefield in the Tiritiri channel.

#### 7. FABRIC SIGNIFICANCE

The significance of the Tiritiri Matangi archaeological landscape is outlined in the Auckland Conservancy Actively Managed Historic Places Register:

The only remaining Kawerau tribal area on the DOC estate which contains largely unmodified sites. Component of the WWII coastal defence network.

It is worth noting, however, that while the archaic midden (R10/279) is regionally rare and comparatively unmodified the remainder of the site types on the island occur commonly within the Auckland region. The 1997 excavation of a small portion R10/297 revealed a lot about the nature of occupation of one of the sites on the island, and about the environment of the island at the time. There was an initial focus on seasonal hunting of 'big game species', including moa which had been brought over from the mainland. After this settlement was more permanent, with a focus on smaller food species, including the kiore, which was introduced to the island by the 16th century but was not there in the earliest period. Charcoal analysis shows that the forest cover had already been modified, perhaps by deliberate burning, at the time of the earliest occupation, as samples were dominated by species regrowth.

Further targeted archaeological research could reveal more about the nature of the ecology, settlement and subsistence on the island through time.

The lighthouse complex has been assessed separately:

The Tiritiri complex is one of 3 lighthouse 'settlements' surviving, & the only one accessible to the public which has retained evidence of its technological development... [It is] one of the earlier lighthouses built in New Zealand, the first being Pencarrow (1859). The lighthouse once featured one of the most powerful lighthouse beams in the world, with an intensity of 11 million candle power.

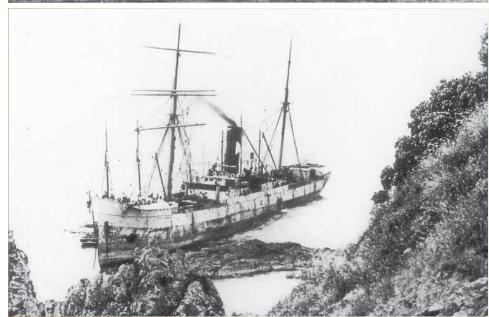
Michael Kelly ranks the complex first in the country in overall significance, and second after that of Dog Island in Foveaux Strait in terms of preservation. <sup>16</sup> His statement of fabric significance is as follows:

This light, made in Britain, is the 'twin' of Cape Egmont. Its second light was, on installation in 1954, one of the world's strongest and technologically advanced lights. Tiritiri is also significant for the survival of its associated buildings, including a keeper's residence.<sup>17</sup>

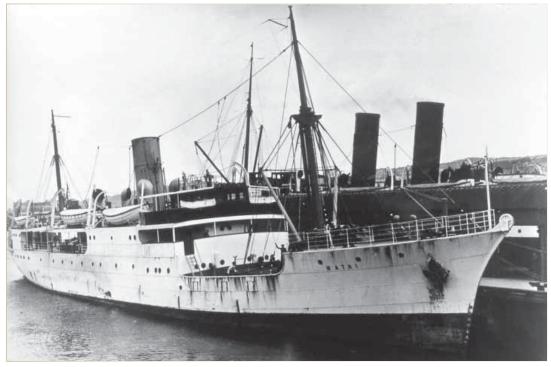
The significance of the Lighthouse settlement is reflected in its scheduling by the Historic Places Trust as a Category 1 historic place and scheduling in the District Plan. It is also scheduled in the Auckland Regional Plan: Coastal as a cultural heritage site for preservation (Schedule 1/134).



Royal Tar. Special Collections Auckland City Libraries (NZ), Buchanan Album 36-2 pg142



Triumph on rocks 1883. Special Collections, Auckland city Libraries (NZ), 4-1439



Government lighthouse tender *Matai* 

The island has also been the focus of a successful native revegetation project and in that regard is a useful model to build on with respects to the impact of planting around archaeological features.

#### 8. CULTURAL SIGNIFICANCE

Cultural significance of Maori sites should be determined by iwi, but Tiritiri is clearly significant to Ngai Paoa and Kawerau who maintain an active involvement with the island and its management. This is recognised in the 1994 Auckland Conservancy CMS which states one of the key objectives for Tiritiri as to:

Consult with tangata whenua about the appropriate management of the heritage values of the island.

And more generally:

Protect the historic integrity of sites associated with Maori habitation, and the lighthouse complex.

The cultural significance of the lighthouse complex is summarised by Michael Kelly, in his national thematic study of lighthouses:

The island is visited by tens of thousands of people every year and the lighthouse is a significant highlight of the visit. This is one of New Zealand's best known lights because of the extent of its beam and public recognition.<sup>18</sup>

Also of significance is that the island represents one of the first successful community-led ecological restoration projects, and is frequently used as a model for other island restoration projects.

#### 9. SIGNIFICANT THEMES & SITE TYPES

DOC Historic Heritage Internet pages topics:

Maori Maritime Nature conservation

Thematic categories: 19
Peopling the land
Transforming the environment
Developing the New Zealand economy
Governing New Zealand

#### 10. MANAGEMENT HISTORY

- 1861: Thomas Duder licensed to run sheep for five years
- 1864: Lighthouse and keepers' cottages constructed
- 1865: Lighthouse lit
- 1867: Maori Land Court decision vests title with the crown
- 1874: Island declared a lighthouse reserve
- 1885: Underwater cable laid between Tiritiri and Whangaparoa
- 1894: Joseph Schollum of Puhoi granted seven year lease to run sheep
- 1896: Lease transferred to Francis Buchanan Dennis
- 1900: Rabbits eradicated
- 1901: Lease transferred to Everard John Hobbs
- 1912: Auckland Harbour Board set up signal station
- 1924: Gun cotton fog horn built
- 1925: Light automated, Marine Department keepers withdrawn leaving only signal staff
- 1926: Wireless communication for the island
- 1940: Port War signal station established by Navy with 12 staff on island, Marine Department signalmen are withdrawn
- 1941: 3-storey concrete watchtower constructed
- 1942: Port War signal station buildings shifted to the centre of the island and minefield placed at the southern end of the island
- 1945: Port War signal station disbanded and Auckland Harbour Board signal staff return
- 1947: John Norman Hobbs takes over farming lease
- 1947: Marine Department keepers return
- 1951: Hobbs running 350 sheep, 50 cattle and 2 horses
- 1955: MoW starts building airstrip near the centre of the island (used twice)
- 1957: Radio beacon discontinued
- 1970: 142ha of island included in Hauraki Gulf Maritime Park
- 1971: Cottage and stockyard at Hobbs Beach demolished and stock removed from island
- 1975: Additional 64ha added to Hauraki Gulf Maritime Park
- 1977: Woolshed removed
- 1981: Wynne Spring-Rice carries out first archaeological survey
- 1982: Hauraki Gulf Maritime Park Board decides to revegetate Tiritiri with funding from World Wildlife Fund
- 1983: Planting starts
- 1984: Lighthouse automated
- 1993: Kiore eradication
- 1994: Revegation planting completed
- 1997: Construction of wharf in vicinity of 'archaic' site R10/178
- 2005: Construction of visitors' centre in vicinity of 1864 cottages (HPT Authority No.2003/98)
- 2008: Historic Inventory completed



Port War signal station c.1940. Kay collection



Army Fortress Observation post c.1942.
Alves collection



1955 aerial from the north. Geosmart Ltd 37160

# 11. RECOMMENDATIONS FOR MANAGEMENT OF THE ARCHAEOLOGICAL LANDSCAPE

The significance of the archaeological landscape on Tiritiri Matangi has been recognised, but often the driving focus for management has been on other competing values. The island has been the focus of a successful native revegetation project, and while archaeological sites were excluded, these areas are still subject to slow encroachment and succession to woody plant species. The establishment over some of the sites, of native grass *microlaena stipoides* which forms a dense sward inhibiting growth of other species, appears to be working well, but the areas probably still require regular inspection and removal of weeds. With the exception of the Tiritiri Matangi pa, earthwork features remain largely obscured.

With planting, track network, and construction of the visitor centre already completed, threats to archaeological deposits on the island are now predominantly natural (e.g. coastal erosion, vegetation growth) and the sites at equilibrium, there is no need for a formal conservation plan. In hindsight this may have been of benefit prior to the restoration getting underway. The preparation of a formal conservation plan would have also provided additional opportunity for input from Ngai Paoa, Kawerau and the New Zealand Historic Places Trust to specifically address the issues of archaeological site management on the island. There is also a need to update the remaining 13 of 28 recorded archaeological sites not visited in last 10 years (Dodd 2006:37-8, 57-58)

At present on-site interpretation is limited to guided tours, and an interpretation plan is currently deferred while Supporters of Tiritiri Matangi are developing the visitors centre.

Many of the historic management objectives in the 1994 Conservation Management Strategy have been completed, but require a continuing commitment in terms of maintenance and on-going research. There is also a necessity for vigilance to prevent unintentional damage to heritage sites from earthworks or inappropriate modification of buildings.

#### 12. WORK VISION SUMMARY

- » Continue to maintain and restore lighthouse settlement buildings in accordance with 1997 conservation plan (CMS 14.5.1)
- » Prepare and implement an interpretation plan for historic features on the island
- » Maintain unplanted archaeological sites under grass or shallow rooting vegetation, and prevent succession to woody species (CMS 14.5.4)
- » Consult with Ngati Paoa and Kawerau to identify and conserve sites of significance to them (CMS 14.4.1)
- » Identify and conserve heritage vegetation survivals
- » Update remaining 13 of 28 recorded archaeological sites not visited in last 10 years
- » Transfer existing historic and archaeological site data into GIS and AMIS

- » Maintain open space setting and view-shafts from lighthouse precinct
- » Preserve gun cotton foghorn and store and associated path and railing, and provide visitor access
- » Continue to collect and archive oral history sources for the island
- » Document and maintain heritage trees

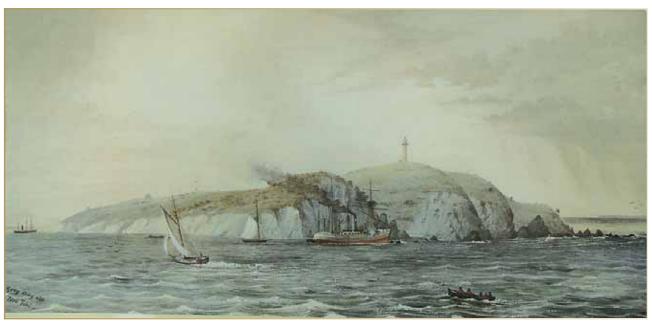
#### 13. SOURCES & REPORTS

#### Publications (including Background Reading)

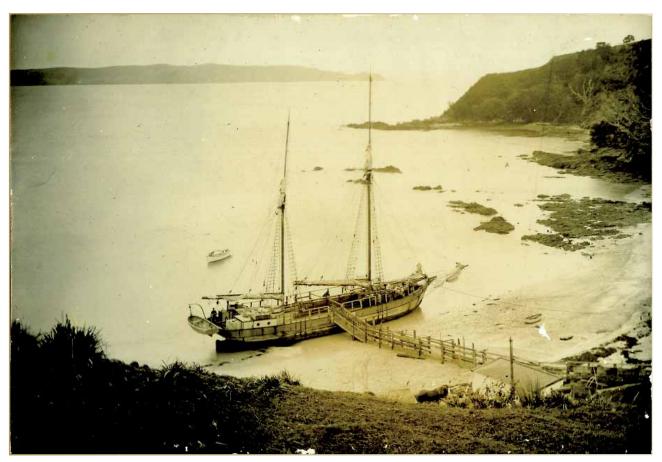
- Churchman, G. B. 1989. New Zealand Lighthouses. Government Printing Office, Wellington
- Clark, T. 1963. The Sea is my Neighbour. Whitcombe and Tombs, Auckland p.15
- Cooke, P. 2000. Defending New Zealand: Ramparts on the Sea 1840-1950s. 2 volumes, Defence of New Zealand Study Group.
- Corbett, P. 2003. A First Class Defended Port: The History of the Coast Defences of Auckland its Harbour and Approaches. *Auckland Conservancy Historic Series no.17*, Department of Conservation, Auckland
- Davidson, J.M. 1975. Archaeological sites in the Auckland Region. Auckland Regional Authority Planning Division
- Davidson, J.M. 1981. The Polynesian Foundation, In Oliver, W.H.; Williams, B.R. (Eds) The Oxford History of New Zealand, pp.3-27.
- Davidson, J.M. 1982. 'Auckland' in Prickett, N. (ed) The First Thousand Years Regional Perspectives in New Zealand Archaeology. *New Zealand Archaeological Association Monograph No.13.* Dunmore Press, Palmerston North pp.28-48
- Davidson. J.M. 1984. The Prehistory of New Zealand. Longman Paul, Auckland
- Debreceny, J. 1991. A Checklist of Shipwrecks within the Auckland Conservancy Area up to 1945. Unpublished manuscript held by Department of Conservation, Auckland.
- Department of Lands & Survey 1982. 'Human History of the Islands Archaeology' in Tiritiri Matangi Island Working Plan. Department of Lands & Survey, Auckland. pp11-14
- Department of Lands & Survey 1985. Revised Tiritiri Matangi Island Working Plan. Department of Lands & Survey, Auckland.
- Edbrooke, S.W. 2001. Geology of the Auckland Area. Institute of Geological and Nuclear Sciences, Lower Hutt
- Fenton, F.D. 1879. 'Tiritiri Matangi June 1867' in Important Judgements Delivered in the Compensation Court and Native Land Court. Government Printer, Wellington pp.21-26
- Gibbons, A.; Sheenahan, G. 1991. Leading Lights: Lighthouses of New Zealand. Hazard Press, Christchurch
- Graham, G. 1920. 'The wars of Ngati-Huarere and Ngati-Maru-Tuahu of Hauraki Gulf' *Journal* of the Polynesian Society 29:37–41
- Graham, G. 1918. 'Maki, A chief of the Wai-o-Hua Tribe' *Journal of the Polynesian Society* 27: 221
- Graham, G. 1925. 'History of the Kawerau tribe of Waitakere' *Journal of the Polynesian Society* 34: 20
- Grattan, F.G. 1948. Official War History of Public Works Department. Public Works Department, Wellington.
- Jones, K.L.; Simpson, P.G. Sep 1995. Archaeological Site Stabilisation and Vegetation Management. Case Studies 2: Auckland and Northland, Otago and Canterbury, and Wellington. *Science and Research Series, No 90.* Department of Conservation, Wellington.

- Locker, R. 2001. Jade River: A History of Mahurangi. Friends of the Mahurangi Incorporated, Warkworth p.84
- Locker-Lampson, S.; I. Francis 1995. The Wreck Book: Rediscovered New Zealand Shipwrecks. pp.89–90
- Lowe, D.; Newnham, R.; McFadgen, B.; T. Higham. 2000. 'Tephras and New Zealand archaeology' Journal of Archaeological Science 27: 859–870
- Maddock, S.; Whyte, D. 1966. Islands of the Gulf. Collins, Auckland
- Moore, P; E. Tiller. 1975. 'Radiocarbon dates for New Zealand archaeological sites' New Zealand Archaeological Association Newsletter 18(3): 98–107
- McFadgen, B. 2007. Hostile Shores: Catastrophic Events in Prehistoric New Zealand and their Impact on Maori Coastal Communities, Auckland University Press, Auckland
- Monin, P. 1996. The Islands lying between Slipper Island in the south-east, Great Barrier Island in the north and Tiritiri-Matangi in the north west. Report for the Waitangi Tribunal on the Hauraki Gulf Islands. *Wai 406 # 7*
- Nichol, R. 1992. 'The eruption history of Rangitoto: reappraisal of a small New Zealand myth' Journal of the Royal Society of New Zealand 22: 159–180
- Prickett, N. (ed) The First Thousand Years Regional Perspectives in New Zealand Archaeology.

  New Zealand Archaeological Association Monograph No.13. Dunmore Press, Palmerston
  North
- Rimmer, A. 2004. Tiritiri Matangi: A Model of Conservation. Tandem Press, Auckland
- Ross, J.O'c. 1975. The Lighthouses of New Zealand. Dunmore Press, Palmerston North
- Smith, S. 1910. Maori wars of the 19th century. Whitcomb and Tombs, Auckland. P.457
- Sporli, K.B.; Mcalister, L.M. 1995. 'Structural geology of the greywackes of Tiritiri Matangi.' in Tane 35:95–112
- Stone, R.C. 2001. From Tamaki-Makau-Rau to Auckland. Auckland University Press, Auckland p.21
- Turton, H. 1877. Maori Deeds of Land Purchases in the North Island of New Zealand. Government Printer
- Turton, H. 1877. Plans of Land Purchases in the North Island of New Zealand. Government Printer
- Turton, H. 1882. Maori Deeds of Old Private Land Purchases in the North Island of New Zealand. Government Printer
- Turton, H. 1883. An Epitome of Official Documents Relative to Native Affairs and Land Purchases in the North Island of New Zealand. Government Printer



*Triumph* on rocks below Tiritiri lighthouse *A Grey Day off Tiritiri*, 1883. Alfred Sharpe. Source: Auckland Art Galley



Vesper at Hobbs beach. D. Burrell

#### 14. UNPUBLISHED SOURCES

- Brassey, R. 1996. Archaeological Assessment, potential visitor centre sites at Tiritiri. Unpublished report on file HHA 02-02-04-01
- Brassey, R. 1998. Excavation of the Tiritiri Matangi Wharf site. MS of paper delivered to the New Zealand Archaeological Association Conference, Picton 16 April 1998
- Brassey, R. n.d. Excavation of the Tiritiri Matangi Wharf Site. Paper delivered to the NNew Zealand Archaeological Association Conference, Picton 16 April 1998
- Brown, A. 2000. Tiritiri Matangi Island. Search for the remains of the military occupation of the island from 1939 to 1945. Army 9<sup>th</sup> Heavy Regiment FOP and Radar, Naval RNZVR, and PWSS. MS held on file DOC 008–40
- Brown, A. 2002. Maureen: A memory of Tiritiri Matangi in the war years 1939-45 MS on file DOC 008-40
- Brown, A., 2002. Timeline Tiritiri Matangi 1840-2001. MS on file DOC 008-40
- Bulmer, S.; Mcdonald, J. 1981. 'Archaeological sites of the Hauraki Gulf Maritime Park.' Unpublished report to the New Zealand Historic Places Trust 1981/7
- Corbett, P. 1996. Tiritiri Matangi Lighthouse Research Project. Unpublished MS on file DOC 008-40
- Coster, J. 1987. Report on inspection of Damage to Archaeological site R10/274 (N38/265) Tiritiri-Matangi 15 December 1986.
- Dodd, A. 2003. Tiritiri Matangi cowshed and Tractor shed: Historic Assessment. Unpublished report on file HHA 02-02-04-01
- Dodd, A. 2005. Archaeological Report on the earthworks for the Supporters of Tiritiri Matangi visitors' centre, Tiritiri Matangi Island. Authority 2003/98: Report to the New Zealand Historic Places Trust.
- Dodd, A. 2006. Solar Array and Wind Turbine sites, Tiritiri Matangi. Unpublished report on file HHA 02-02-04-01
- Dodd, A. 2006. NZAA Site Recording Scheme Upgrade Project: Department of Conservation Auckland Conservancy. Stage 1 Review. Unpublished report prepared for the Department of Conservation and New Zealand Archaeological Association
- Holman, D. 1999. Rodney District Heritage Study. Rodney District Council. Report prepared for RDC May 1999
- Locker, R. 1991. A General History of Mahurangi. MS on file DOC008-40
- Macready, S. 2006. Tiritiri Matangi Workshop/Generator Shed: Historic Assessment and Management Alternatives, unpublished report on file HHA 02-02-04-01
- Pearson, D. 2000. Specification for Remedial Work to Lighthouse Precinct Structures & Workshop, Tiritiri Island
- Pearson, D. 2000. Tiritiri Matangi Island Lighthouse Settlement Buildings: Cyclical Maintenance Plan
- Pearson, D. 2001. Historic Structures Tiritiri Island: Bunkhouse and Rangers House. Condition Report and Outline of Remedial Work
- Pearson, D. 2001. Historic Structures Tiritiri Island: Slaughters-Gun-Cotton-Fog Signal and Store. Condition Report and Outline of Remedial Work
- Pearson, D. 2001. Historic Structures Tiritiri Island: Workshop Building. Condition Report and Outline of Remedial Work
- Pearson, D. 2001. Historic Structures Tiritiri Island: Diaphonic Foghorn Building. Condition Report and Outline of Remedial Work
- Spring-Rice, W. 1981. Final archaeological report Tiritiri Matangi Island. Anthropology Department, University of Auckland

```
Spring-Rice, W. 1984. Archaeological report on Tiritiri Matangi Island Scientific Reserve — February 1984.
```

Spring-Rice, W. 1985. Management of archaeological sites on Tiritiri Matangi

Spring-Rice, W. 1986. Interim Report to the Tiritiri Matangi Island Management Committee on Archaeological and Historical work accomplished in 1986 and proposed work for 1987.

Spring-Rice, W. 1986. Report to the Hauraki Gulf Maritime Park Board on the 1985 Routine Post-Planting annual inspection of archaeological sites

Spring-Rice, W. 1988. Report to the Tiritiri Matangi Island management committee on archaeological and historical work accomplished between Nov 1986 and Nov 1987, and proposed work for 1988.

Treadwell, J. 1997. Conservation Plan for the Tiritiri Matangi Island Lighthouse Complex. Unpublished report to Department of Conservation

#### Departmental files and archival sources

#### Department of Lands and Survey files

NP 27/3 vols.1-2 (1981-83; 1983-84)

NP 27 vols. 1-3 (1905-76; 1976-84; 1984-88)

NP 27/1 vols.1-2 (1918-67; 1967-88)

NP 27/2 vols.1-2 (1974-83; 1984-88)

NP 27/4 vol.1 (1983-87)

NP 28 vols.1-2 (1987-88; 1987-89)

NP/36/2

#### Marine Department files

M 7/1 Lighthouse keepers Service Book 1865-1912 (held National Archives)

M1 8/8/16

MD 284 (1879) Drawing of paraffin burner

MD 420 (1864) Plans for Lighthouse

MD 558 (1864) Plans for Keepers cottage

MD 734 (1883) Light to shine red over Flat Rock

MD 3204

MD 4400 (1918) Buildings including new keepers houses and carpenters shop

#### Department of Conservation files

DOC 008-40

HHA-02-01-05

#### **Plans**

SO 13854 (1906) Plan of Lighthouse Reserve H W Haszard

SO 19961 (1918)

SO 20243 (1918)

SO 23207 (1924)

SO 47016 (1971)

SO 50358 (1975) Formerly sec 1 pt sec 3 Lighthouse Reserve

SO 59238 (1985) Survey traverse at wharf SO 59438 (1985) Lighthouse Reserve

#### **Aerial Photos**

70372-5 (23/04/1940) 1952/36-39 (28/03/1951) 1565/C 15,16 (1963) 5041 A/3 (1968) SN C2842 A/1,2 (25/01/1975) 4639/16-18, 4640/23-25 (1976) SN 5783 F/26-28 (1981) Gazette 1874 p.876

#### Maori Land Court Records

Auckland Minute Book 1. Folios 42,43,53-101 Evidence of Matini Murupaenga, Te Hemara, Te Keene, Hetaraki Takapuna, Paraone Ngaweke, Paora Tuhaere and others

#### Photographic Collections

Department of Conservation, Auckland Conservancy photographic collection

Department of Conservation, Tiritiri Matangi archival collection Auckland Institute and Museum photographic collection<sup>20</sup>

Royal New Zealand Naval Museum, Devonport photographic  $collection^{21}$ 

Alexander Turnbull Library photographic collection<sup>22</sup>
Auckland Public Library collection<sup>23</sup>

#### Oral History sources

Maureen Webster 2002 George Kroening

#### Newspapers and periodicals

Auckland Star	11/04/1949	p.4
	18/04/1949	p.15
New Zealand Herald	03/02/1870	The regatta of 1870
	12/02/1870	Enquiry into wreck Larceny
	27/11/1901	p.5 c.3-5
	30/04/1947	
	20/08/1954	
	30/07/1954	
	10/06/1961	
	13/03/1965	
	17/04/1993	p.16 Tribe upset at rat reports
	13/01/1995	p.18

	04/03/1995	letter to editor
New Zealander	08/08/1864	p.3
	22/11/1865	p.3
	03/01/1865	p.4
	04/02/1865	p.4
North Shore Times Adver	rtiser	
	29/11/1994	
	27/05/1994	p.3
The Southern Cross	22/02/1850	
	18/06/1863	p.3
The Weekly News	4/01/1865	p.13
	23/10/1935	
Wellington Evening Post	19/12/1931	p.28 Ships and Sea

#### GIS and site record files

Rodney District Council heritage inventory<sup>24</sup>
Auckland Regional Council CHI<sup>25</sup>
New Zealand Archaeological Association site records<sup>26</sup>

#### 15. EVALUATION OF SOURCES

Despite early land claims for Tiritiri appearing before the Maori Land Court in 1867, very little pre-contact Maori history has survived. Archaeological excavations have significantly added to our understanding of the early settlement of the island. The island and its Maori inhabitants are mentioned occasionally in the accounts of George Graham published in the *Journal of the Polynesian Society* from 1918.

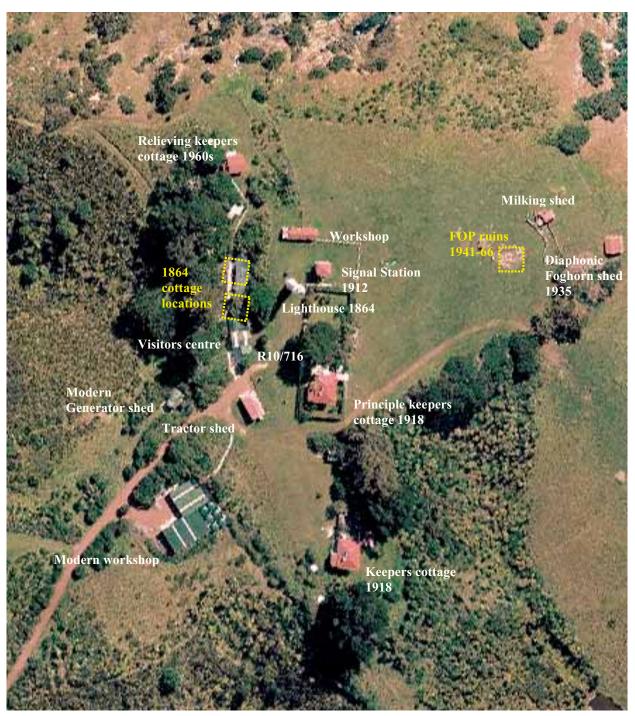
Department of Lands and Survey files date back to 1896, and a considerable collection of early survey plans and photos, as well as aerial photos has been compiled by the Department of Conservation. In addition, oral histories were collected from early lighthouse keepers.

Considerable research into the wartime occupation of Tiritiri was undertaken by Annette Brown, including an oral history with Maureen Webster. Detailed accounts of post 1840 history of Tiritiri Matangi including aspects of farming, lighthouse and coastal defence structures are available in Rimmer 2004 and Treadwell 1997. Recent national context studies of lighthouses are available in Kelly 2003 and Beaglehole 2006.

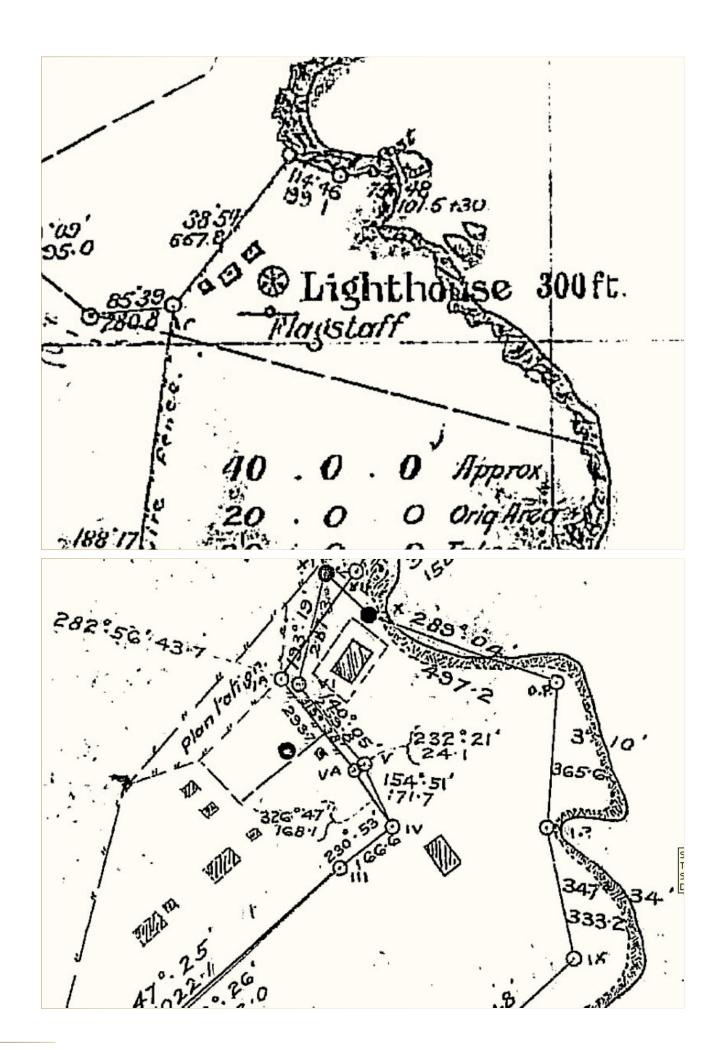
## 16. LOCATION & SITE MAPS

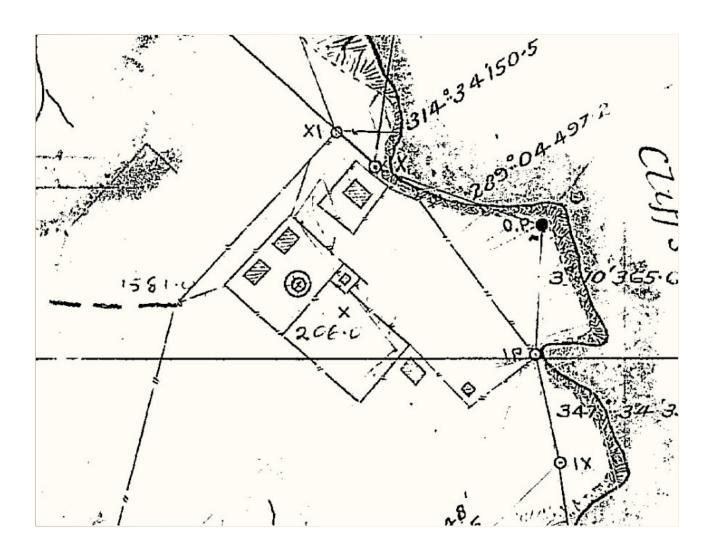


Archaeological site locations (all R10) marked on 2003 aerial



Lighthouse complex deposits associated with 1864 settlement recorded as R10/596





Top left: Part SO 13854, 14 August, 1906

Bottom left: Part SO 19961, 11 March 1918

> Above: Part SO 20243, 17 October 1918

#### 17. ENDNOTES

- Not confirmed, VAMS (DOC Visitor Asset Management System) estimate is based on water taxi and ferry ticket sales, and estimated numbers of private boat users
- <sup>2</sup> Stone 2001:21
- <sup>3</sup> Graham 1925:20
- <sup>4</sup> Graham 1918:219-22
- <sup>5</sup> Auckland Minute Book No.1 Folios 42,49,53-101
- <sup>6</sup> Turton 1877; Fenton 1879:21-26
- <sup>7</sup> Kelly 2003:26
- 8 Sporli and McAlister 1995:95-8; Edbrooke 2001:24-25
- 9 Brassey R. n.d.
- <sup>10</sup> Daily Southern Cross 24/11/1864 p.4 Shipping Intelligence
- <sup>11</sup> Simmons 1987:85
- Auckland Minute Book No.1 Folios 42,49,53-101
- <sup>13</sup> Rimmer 2004:38
- <sup>14</sup> McFadgen 2007
- <sup>15</sup> Kelly 2003:16
- <sup>16</sup> Kelly 2003:42
- <sup>17</sup> Kelly 2003:42
- <sup>18</sup> Kelly 2003:42
- McLean 1996, cited in Clayworth 2008 Historic Heritage Thematic Frameworks: Their use as tools for management and interpretation. Department of Conservation, Wellington
- Du 436.1189: 2380, 4092-5, 19294 (Refer Corbett 1996 for details on file DOC 008-40)
- <sup>21</sup> GN 2540 92 L98; GN 2543 92 L98; GN 2557 92 L98; GN 2552 92 L98; GN 2564 92 L98; 058/5 (Refer Corbett 1996 for details on file DOC 008-40)
- <sup>22</sup> 108927½; F289294½; F32650½ (Refer Corbett 1996 for details on file DOC 008-40)
- <sup>23</sup> APL 1439, 1442, 1443; A6898; BIN224 (Refer Corbett 1996 for details on file DOC 008-40)
- <sup>24</sup> Holmann 1999
- Sites recorded in the CMA around Tiritiri and entered into the CHI are 292 (Duder shipbuilding, site of construction of Six Brothers) 300 (shearing shed piles, Hobbs beach); 311 (landing, and stock loading ramp); 514 (cargo jettisoned off *Triumph* wrecked 1883); 732 (*Waitemata* wrecked 1898); 9458 (*Royal Tar* wrecked 1901); 9459 (unidentified scow); 14107 (*Kina* wrecked 1949). Other sites included in the CHI are the lighthouse settlement buildings: 399 (foghorn); 16220 (gun cotton store); 16221 (slaughters fog signal); 16222 (signal station); 16224 & 16226 (1918 keepers houses); 16225 (diaphonic foghorn building); 16230 (electronic foghorn); 16231 (signal mast base).
- Numbers pertaining to Tiritiri are (R10/):107; 262-287; 393-395; 430-432; 596 623; 701-702; 716

# 18. CHRONOLOGY OF EVENTS

14TH (	CENTURY	Probable date of initial Maori settlement	
c.1400		Eruption of Rangitoto	
c. 16th Century		Likely date of Tiritiri Matangi pa construction	
c. 18th Century		Papakura pa constructed by Ngati Paoa destroyed	Graham 1918:221
1821		Arrival to Hauraki Gulf of Ngapuhi armed with muskets	
1821	19 May	HMS <i>Coromandel</i> sails through Tiritiri channel and anchors at Waiwera. Capt James Dowie marks island as TeereTeere Matangi	
1827		Dumont D'Urville sails through Tiritiri channel and marks the island as Tiri Tiri Matangui	Wright 1950:151-156 as cited by Coster and Spring-Rice 1984:8
1837		Taipau and his brother Whakapiki return to Tiritiri with their families	MLC Auckland Minute Book 1. Folios 42,43,53-101
1841	13 Apr	Crown purchase of land from Takapuna to Te Arai from Ngati Paoa, does not include Tiritiri	Turton 1877:255
1843		Thomas Duder (signalman at Mt Victoria) and David Rough (harbourmaster) visit Tiritiri to ascertain possibility of establishing a signal station there	
1844		Shearer Rock marked with buoy	
1851		Captain Burgess (harbourmaster) petitions government for a light on Tiritiri	
1853	1 Nov	Mahurangi purchase with Parioro etc	Turton 1877:255
1854		Henry Taylor, Duncan Campbell, and MacMillian running sheep on island	
1855		Second request from Captain Burgess for a light to be placed on Tiritiri	
1856		Taipau dies, Maori occupation ends	MLC Auckland Minute Book 1. Folios 42,43,53-101
1859	1 Jan	Pencarrow lighthouse first lit	Beaglehole 2006:281
1861		Captain Robert Johnson submits plan for additional 13 lighthouses around New Zealand (to be adopted by the Marine Board in 1863)	Kelly 2003:14
1862	4 Aug	Nelson boulder bank lighthouse lit	
1862	Nov	Marine Board established by Marine Board Act	
1863		Light apparatus ordered from Change Brothers, England	
1864	8 Feb	Lighthouse apparatus arrives on board <i>Queen</i> of the Deep with engineer Richard Alymer to supervise construction	

1864	21 Oct	Lighthouse construction started	
1864		Two keepers' cottages built	
1864	21 Dec	Light lit experimentally for first time	
1865	1 Jan	Tiritiri Matangi lighthouse first officially lit	Weekly News 14/1/1865:13
1866		Marine Board replaced by Marine Department	Kelly 2003:17
1866	8 Dec	Matini Murupaenga claims Tiritiri in Native Land Court, but is denied by Judge Fenton, and title is vested in the crown	Fenton 1879:21-26
1870	2 Feb	Cutter <i>Marwell</i> wrecks on Bollons Rock in Tiritiri channel	
1874		Tiritiri declared a lighthouse reserve	NZ Gazette 1874:876; AJHR 1876 H-26
1879	Nov	Doty burners installed to convert lighthouse from colza oil to paraffin	MD 284 18/07/1879
1881		By this date all New Zealand lighthouse burners adapted to paraffin	
1883	23 Feb	Barque <i>Thames</i> stranded on Tiritiri	
1883	6 Apr	Cutter <i>M'Liss</i> sank off Tiritiri while being towed to Whangarei	
1883	29 Nov	Steamer <i>Triumph</i> stranded on reef on the SE corner of Tiritiri	Johnson 1981; AIM MS 660
1884	29 Jan	Schooner <i>Result</i> strands on northern end of Tiritiri and later capsizes in Rangitoto channel	
1894		Joseph Schollum takes over farm lease	NP 27 18/8/1896
1896		Extensive repairs to 1864 houses	AJHR H-15
1898		Telegraph installed	
1898		Slaughters-Gun-Cotton-Foghorn and store erected on SE cliffs	AJHR H-15
1901		Barque Royal Tar wrecks on Shearer Rock	
1902		Everard Hobbs takes over farm lease	NP 27 04/08/1906
C.1906		Flagstaff erected	Archives NZ Map M1 8/8/16
1908		House woolshed fencing and yards constructed in Hobbs Bay	NP 27/26/11/1908; 19/12/1908
C.1911		Fire destroys much of the bush on Tiritiri	
1912		Signal station and chief signalman's house built	NZ Herald 1947
C.1913		House moved onto island from Auckland	Archives NZ Map M1 8/8/16 pt.1
1916	22 Feb	Chances patent incandescent burner installed	

	Two additional keepers' houses and two new sheds built by William Stephenson of Auckland	Brown MS
	1864 keepers' houses demolished	SO 20243
	Automatic fog signal installed	AJHR D-1
	Second big fire during historic period	
30 Apr	Tiritiri lighthouse automated acetylene light installed and keepers withdrawn	Kelly 2003:16
	Lighthouse repainted	AJHR D-1
	Foghorn apparatus condemned by the Marine Department	Brown 2002
	Diaphonic foghorn replaces Slaughter-gun- cotton-foghorn, and radio beacon installed	Brown 2002
	Diaphonic foghorn concrete shed erected over machinery, finally operational in 1937	AJHR 1936 D-1
5 Sept	Royal Navy reservists arrive on Tiritiri	Rimmer 2004:47
April	Post War Signal Station established (Ministry of Defence) on eastern side of island	Greenfield; Brown MS
14 Jun	German raider <i>Orion</i> in the Hauraki Gulf laying mines between Bream Head and Great Barrier	
19 Jun	Niagara strikes mine and sinks off Bream Head	
	Stock removed	Rimmer 2005:50
29 Apr	Marine Department responsible for foghorn	Brown 2002
Dec	Army Fortress Observation Post established	Rimmer 2004:49
Dec	Post War Signal Station moved to centre ridge	Rimmer 2004:49
	Controlled mine field laid across the Tiritiri channel	Greenfield
1 Nov	Ministry of Defence leaves and control of signal station restored to Auckland Harbour Board	
	Stock returned	
Apr	AHB closes signal station, and removes staff	<i>NZ Herald</i> 30/04/1947
1 July	Lighthouse keepers reintroduced	M 1/8/53/7 (03/07/1947)
9 Apr	Kina wrecks in Tiritiri channel	Auckland Star 11/04/1949:4
	5 Sept April 14 Jun 19 Jun Dec Dec Theorem 1 Nov	new sheds built by William Stephenson of Auckland  1864 keepers' houses demolished  Automatic fog signal installed  Second big fire during historic period  Tiritiri lighthouse automated acetylene light installed and keepers withdrawn  Lighthouse repainted  Foghorn apparatus condemned by the Marine Department  Diaphonic foghorn replaces Slaughter-guncotton-foghorn, and radio beacon installed  Diaphonic foghorn concrete shed erected over machinery, finally operational in 1937  5 Sept  Royal Navy reservists arrive on Tiritiri  April  Post War Signal Station established (Ministry of Defence) on eastern side of Island  German raider Orion in the Hauraki Gulf laying mines between Bream Head and Great Barrier  19 Jun  Miagara strikes mine and sinks off Bream Head  Stock removed  29 Apr  Marine Department responsible for foghorn  Dec  Army Fortress Observation Post established  Dec  Post War Signal Station moved to centre ridge  Controlled mine field laid across the Tiritiri channel  Ministry of Defence leaves and control of signal station restored to Auckland Harbour Board  Stock returned  Apr  AHB closes signal station, and removes staff  1 July  Lighthouse keepers reintroduced

1950\$		Workshop/generator shed built	
1954		Light converted to electric and new radio beacon installed	
1955		Diesel generator installed	
1955		Principal keeper's house destroyed	
1957		By this date all manned lighthouses electrified	Kelly 2003:25
1965		Relieving keeper's quarters built	
1965	12 Mar	Davis Marine light donated by Sir Ernest Davies and installed	NZ Herald 13/3/1965
		Demolition of concrete FOP	Archives NZ TR 1 25/43
1967		Underwater mains power cable across Tiritiri channel	
1967		Hauraki Gulf Maritime Park Board established	
1970		142 ha designated as recreation reserve	
1971		Hobbs farm lease not renewed, stock removed from island and farm buildings pulled down	
1972		Marine Department absorbed into Ministry of Transport	Kelly 2003:26
1974		Korean fishing vessel strikes Shearer Rock	
1975		Remaining 64 ha included in recreation reserve	
1976		Automatic fog detector installed	AJHR H-15
1978		Woolshed at Hobbs beach demolished	
1979		Happy Runner strikes Shearer Rock	
1980		Marine advisory committee recommends Tiritiri Matangi lighthouse be automated and de-manned	Kelly 2003:27
1980		Reclassified scientific reserve	
1981		Wynne Spring-Rice carries out first archaeological survey	Spring-Rice 1981
1983	6 Sept	Minato Maru 102 strikes Shearer Rock and sinks north of Noises	Ingram 1990:470
1983	20 July	First meeting of Tiritiri committee of HGMPB	Rimmer 2004
1983		Nursery established, 1200 trees planted	Rimmer 2004

1984		Light automated with quartz iodine light, electronic foghorn established, lighthouse keeper position withdrawn	Gibbons and Sheenahan 1991
1984	25 Feb	22 Curvier saddleback released	Rimmer 2004
1987		DOC established	
1987		6 brown teal released, an additional 8 released 08.07.1990	Rimmer 2004
1988		Supporters of Tiritiri Matangi formed	Rimmer 2004
		Mains power lost for third time, island reverts to diesel generator	
1989	3 Sept	40 whitehead release, an additional 40 released 29.05.1990	Rimmer 2004
1990		Lighthouse solar powered, and reduced to 300,000 candle power	Brown 2002
1990		HGMPB abolished	
1991	26 May	2 takahe released	Rimmer 2004
1992	12 Apr	44 North Island robins from Rotorua released	Rimmer 2004
1992		Lighthouse complex classified A by Historic Places Trust	
1993	4 July	10 little spotted kiwi released	Rimmer 2004
1994		283,000 trees planted (approximately 30,000 since 1984)	Rimmer 2004
1995	3 Sept	37 stitchbirds from Little Barrier released	Rimmer 2004
1996		Erosion uncovers early 'archaic' settlement site near wharf	Brassey 1998
1997	10 Aug	3 kokako released, an additional 4 released 21.03.1998	Rimmer 2004
1998		New wharf built excavations reveal three habitation layers, including one dating to the eruption of Rangitoto c. AD1400	Brassey 1998
2001	June	13 fernbirds released	Rimmer 2004
2003	25 Oct	60 tuatara from Middle Island released	Rimmer 2004
2004		32 Tomtits from Hunuas released	Rimmer 2004