



Motutapu Archaeological and Historic Landscapes

Heritage Assessment

Andy Dodd, Auckland Conservancy

MAY 2008



Department of Conservation
Te Papa Atawhai

Motutapu Archaeological and Historic Landscapes
Heritage Assessment

Compiled by Andy Dodd, Auckland Conservancy

Peer-reviewed by Janet Davidson

ISBN (web PDF): 978-0-478-14473-4

Cover: Motutapu island “©davidwallphoto.com” <http://www.davidwallphoto.com/>

Publ.info.

© Copyright New Zealand Department of Conservation

ISBN: 978-0-478-14473-4

CONTENTS

1. Site Overview	5
2. History description	5
3. Fabric description	6
4. Cultural connections	7
5. Context	8
6. National context and Historic significance	8
7. Fabric significance	9
8. Cultural significance	9
9. Significant themes & site types	9
10. Management recommendations	9
11. Management history	10
12. Work vision statement	11
13. Sources & reports	11
14. Evaluation of sources	17
16. Definitive photos	20
17. Chronology of events	23

Eroded ash block of Rangitoto ash from Sunde site exhibiting human and dog footprints.
Photo A Dodd



Sunde site today as viewed from the north-east with Rangitoto in background.
Photo A. Dodd



Artist's impression of the Sunde site prior to the Rangitoto eruption with Auckland isthmus in the background. Source: Diorama in 'Auckland Landscapes—Past and Future', Auckland Institute and Museum. Reproduced in Davidson 1984:43



1. SITE OVERVIEW

Occupation of Motutapu began early. Ngati Tai is the principal iwi with features of Arawa and Tainui traditions. Archaeological sites predate the c.1400 Rangitoto eruption. Subsequently, Motutapu was used for gardening — over 300 sites are recorded. European activity from 1840 includes farming, picnic excursions, and a defence fortification 1936-1958. (50 words)

The archaeological sites include one of the most acclaimed sites in New Zealand — the ‘Sunde site’ from which ash footprints have been excavated. The landscape is significant as one of New Zealand’s first systematic, archaeological site recording projects. The WWII military landscape survives relatively complete and includes the coastal defence battery, US Navy ammunition bunks, and a artillery camp. (66 words)

- » Motutapu Recreation Reserve
- » Administered from Auckland Area Office.
- » Access by causeway via Rangitoto wharf, or private boat
- » A moderately significant visitor site with an estimated 15,000 visitors per year.¹
- » Motutapu Archaeological and Historic Landscapes are actively managed historic sites.
- » Island area 1510.37 hectares.

2. HISTORY DESCRIPTION

Motutapu has an occupation history that encompasses virtually the full span of New Zealand settlement. It was one of the earliest places inhabited both by Polynesians, and later by Europeans in the Auckland region. The earliest evidence for occupation of Motutapu dates to before the eruption of Rangitoto in c.1400.² The eruption smothered Motutapu in ash and caused widespread deforestation, but also produced friable soils suitable for gardening. Archaeological deposits bracketing the ash suggest the eruption prompted a shift from broad spectrum hunting of forest birds to intensive marine exploitation and horticulture.³

Following the eruption, Motutapu is reported to have been visited by both *Arawa* and *Tainui* canoes and was subsequently settled by Tainui ancestors of Ngati Tai. c Tai⁴ maintained rights of occupation from that time until its eventual sale with only minor incursions from other groups. Ngati Huarere of Arawa descent claimed bird snaring rights over kaka by right of conquest, and from the 18th century reciprocal fishing rights were negotiated with Ngati Paoa on Waiheke.

In the 1820s many of the islands in the Hauraki Gulf, including Motutapu, were evacuated in response to the threat of Hongi Hika and Ngapuhi armed with muskets. Many Hauraki tribes retreated south, and Ngati Tai are said to have taken refuge at Maungatautari.⁵ Occasional ventures were made back to former territories in the gulf, sometimes not without

consequence, as with when a local fishing party was attacked at Motutapu by Ngapuhi with several casualties.⁶ From 1836 many of the evacuated territories were resettled, and the Ngati Tai remained on Motutapu until the northern part of the island was sold to Thomas Maxwell in 1840.

Maxwell had lived at Maraetai with Ngati Tai and was married to Ngeungeu the daughter of the principal chief, Tara Te Irirangi.⁷ From 1840-45 the northern end was leased out to James Moncur. The southern end was purchased by Williamson and Crummer in 1845, but subsequently granted to Robert Graham in 1857. The Reid brothers purchased the island in 1869-70 and retained ownership until 1943. A series of homesteads and outbuildings were built at Home Bay, the first between 1840-57, and the present Reid Homestead was built 1901-3. A homestead was built at Emu Bay c.1869-70, occupied by James Reid and demolished in 1976.

Work began on the Motutapu counter-bombardment battery in 1936.⁸ In May 1936 roads had been formed, and the battery and observation post were completed by June 1937. Guns were mounted by the end of August 1938, and a temporary camp established at Administration Bay in 1937. War broke out in September 1939 and the military population on the island went from 10 to 200, requiring the construction of additional buildings at Administration Bay and at the Observation Posts. Plotting rooms were constructed in 1941-2, and searchlights installed at Billy Goat point. The US Navy intended to use Auckland as a staging point into the Pacific and this led to the construction of deepwater wharfing facilities, and 50 ammunition magazines between 1942-3. The war ended in 1945, and within five years the entire complex had been abandoned.

3. FABRIC DESCRIPTION

Geologically Motutapu comprises Waipapa series greywackes, cherts and argillites, overlaid with Waitemata tertiary sediments, and blanketed in Rangitoto ash. The cultural landscape of archaeological sites includes pre-Rangitoto eruption archaic campsites and adze making sites, 13 pa, numerous open settlements, midden deposits, storage pits, and agricultural areas. In all 372 recorded sites and it is likely that many more subsurface deposits remain unrecorded.⁹ Some sites will have been damaged or destroyed by farming and military activity.

Sizes of recorded sites vary as might be expected over time, with fluctuations in demographics and blurring boundaries of a mobile population. Settlement sites are spread across the whole island, with some apparent clustering on the western leeward side of the island around the mountain and causeway stream catchments, and early archaic settlements at open stream mouths and adjacent spurs. Davidson notes that a clustering around stream mouths and the high number of distinct sites might suggest a rotational garden system.¹⁰

Pa sites are present on most of the easily defendable coastal headlands. However, the relatively small amount of habitable land enclosed within defensive earthworks compared to the area of occupied open settlements

leads Davidson to conclude some open settlements may have been pallisaded without earthwork defences, and that settlement on Motutapu was most likely a “peace-time horticultural based occupation, with periodic episodes of stress leading to fort construction and use”.

Stone sources exploited for tool manufacture were largely local greywacke found on Motutapu and nearby Motuihe, but included obsidians from Great Barrier and Northland, as well as Nelson argillites and basalts from Tahanga.¹¹ Other locally sourced rock used in tool production included jaspers for hammerstones and sandstone grinders.¹²

There are three main areas associated with 19th century farming, and these include associated remnant plantings. Home Bay retains homestead, plantings, seawall and graves. Emu Bay has foundations for four separate groups of buildings, remnant plantings and isolated Norfolk pines on high points of the island. No archaeological remains have yet been located at Station Bay where the remaining farm settlement is known to have been located.

The military structures on Motutapu comprise a largely intact WWII landscape including: the main 6” gun emplacement with three gun pits,



Aerial view of the Station Bay pa site, east coast Motutapu. NZAA website

underground magazines, shelters and stores; the battery observation post, engine and radar rooms; the Emu observation post and engine room for the anti-submarine defences; the ground level plotting complex with miniature range, plotting and generator rooms; the underground plotting complex with command exchange, radio, plotting generator, battery and fuel rooms, as well as access tunnels and corridors; the search light

emplacements and directing station; personnel camps at Administration Bay and the battery; the US Navy magazines north of the causeway and store at Home Bay; and numerous pillboxes to protect the battery from a commando assault. The landscape also includes a number of roads, wharves and quarries.



Test firing the Motutapu battery.

4. CULTURAL CONNECTIONS

Motutapu features prominently in both Tainui and Arawa traditions. According to Kawerau tradition, a mystical race known locally as Maewao occupied Motutapu, Motuihe and the adjacent mainland.¹³ Maruiwi came to settle the islands, and the Maewao were captured and destroyed when they persisted in raiding the Maruiwi cultivations.

When the Arawa canoe came to Waitemata, Kahumatamomoe, the son of Tamatekapua and commander of the canoe, took possession of Rangitoto and Motutapu. He placed two guardian lizards, one at Orawaho (Islington Bay) on Rangitoto, and one at Home Bay on Motutapu.¹⁴ While the

Arawa was still moored at Orawaho, Tainui arrived under the command of Hoturoa. A fight started between the two chiefs allegedly over Tamatekapua's inappropriate attentions to Hoturoa's senior wife. The pair were separated after Hoturoa gained the upper hand, and the adjoining volcano was declared tapu and became known as Rangi-i-totongoia-o-Tamatekapua — the day of bleeding of Tamatekapua.¹⁵ Although most Tainui continued eastwards following the duel, one tohunga, Taikehu, remained on the island and named it Motutapu after a peninsula on Rangiataea (Hawiiki?). The island became known as Te Motu Tapu a Taikehu or the sacred island of Taikehu to his descendants.¹⁶

Kawerau know the island as Te Motutapu a Tinirau, the sacred island of Tinirau, the son of the sea god Tangaroa. This name was said to have been bestowed on the island by Ihenga, a tohunga on the *Arawa* canoe. Tinirau presides over Te Puna i Rangiriri from where all fish life is said to originate. Accordingly Te Motutapu a Tinirau is said to be the source of fish in the harbour.¹⁷

Tamatekapua's descendants, Ngati Huarere, returned from Moehau, (Cape Collville in later years) to avenge his humiliation, and in doing so claimed many of the gulf islands including Motutapu.¹⁸ Rangitoto remained tapu and was used as an urupa. Later a Tainui chief living on Motutapu, Manawatere was drowned at Islington Bay, and his body dragged out to sea and washed up at Home Bay, which became known as Te Pehi-o-Manawatere — the bruising of Manawatere. When word of this reached Ngati Tai who were Tainui descendants, they came to claim possession of Motutapu and Rangitoto.¹⁹ The Ngati Huarere allowed the Ngati Tai to take up their claim to Motutapu and Rangitoto but they retained their right to the trees which were frequented by the kaka and continued to snare this bird in season.²⁰ From this time until the musket wars of the 1820s, peace was maintained as the Ngati Tai were surrounded by Tainui iwi, and were part of the larger Te Waiohua confederation.²¹

5. CONTEXT

The island has four known archaic period archaeological sites, and the ash block footprints excavated at the Sunde site at Northwest Bay have aroused international interest and have no known equivalent anywhere else in New Zealand. One of the largest, most diverse and easily accessible archaeological landscapes in the Auckland Region, Motutapu has been the focus of some of the earliest systematic archaeological survey and investigation in New Zealand. The archaeology on Motutapu has contributed to important syntheses of prehistory both at a national and regional level.²²

Motutapu, Browns, and Motuihe are some of the earliest European land purchases and farm settlements. Motutapu's counter-bombardment battery played an important role in the defence preparations for New Zealand's largest city during WWII, and the island was selected to be the fall-back location for the ammunition store for the US invasion of the Pacific.

6. HISTORIC SIGNIFICANCE

The Hauraki Gulf Islands including Motutapu are believed to have been some of the earliest places occupied by Polynesian settlers in the Auckland region, and were extensively occupied during subsequent centuries. The island is important in the traditions of both Arawa and Tainui iwi, and it is home to prominent ancestors of several iwi and hapu associated with these wider tribal groupings.

The 1840 purchase of the northern part of Motutapu was one of the earliest European purchases in the Auckland area, and the island was at one time home to Robert Graham, who became Superintendent of the Auckland Province (1862-1865) while in residence there. Graham held popular 'Premier picnics' on the island at Home Bay, which made Motutapu possibly the most popular day visitor destination in the Hauraki Gulf, with visitor numbers of up to 10,000.



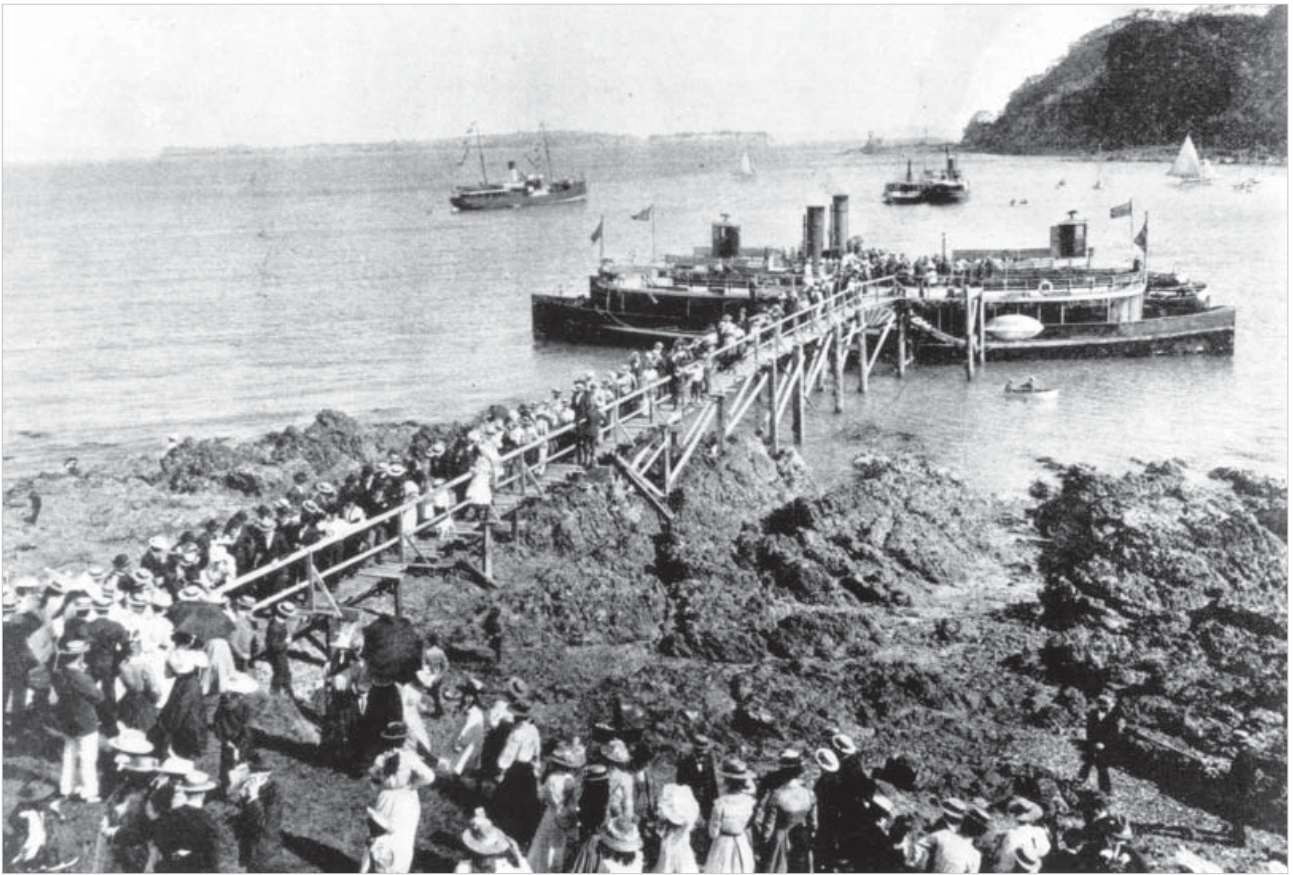
Administration Bay, Army camp.

Motutapu's counter-bombardment battery was an essential component in the defence of Auckland during WWII, one of the key defining events in New Zealand history. Over £500,000 was spent on construction during the period 1936-44, and the island accommodated up to 1000 personnel. Further, Auckland was selected to be the fall-back launch point of a US invasion of the Pacific, and Motutapu was selected as the location for the ammunition store.

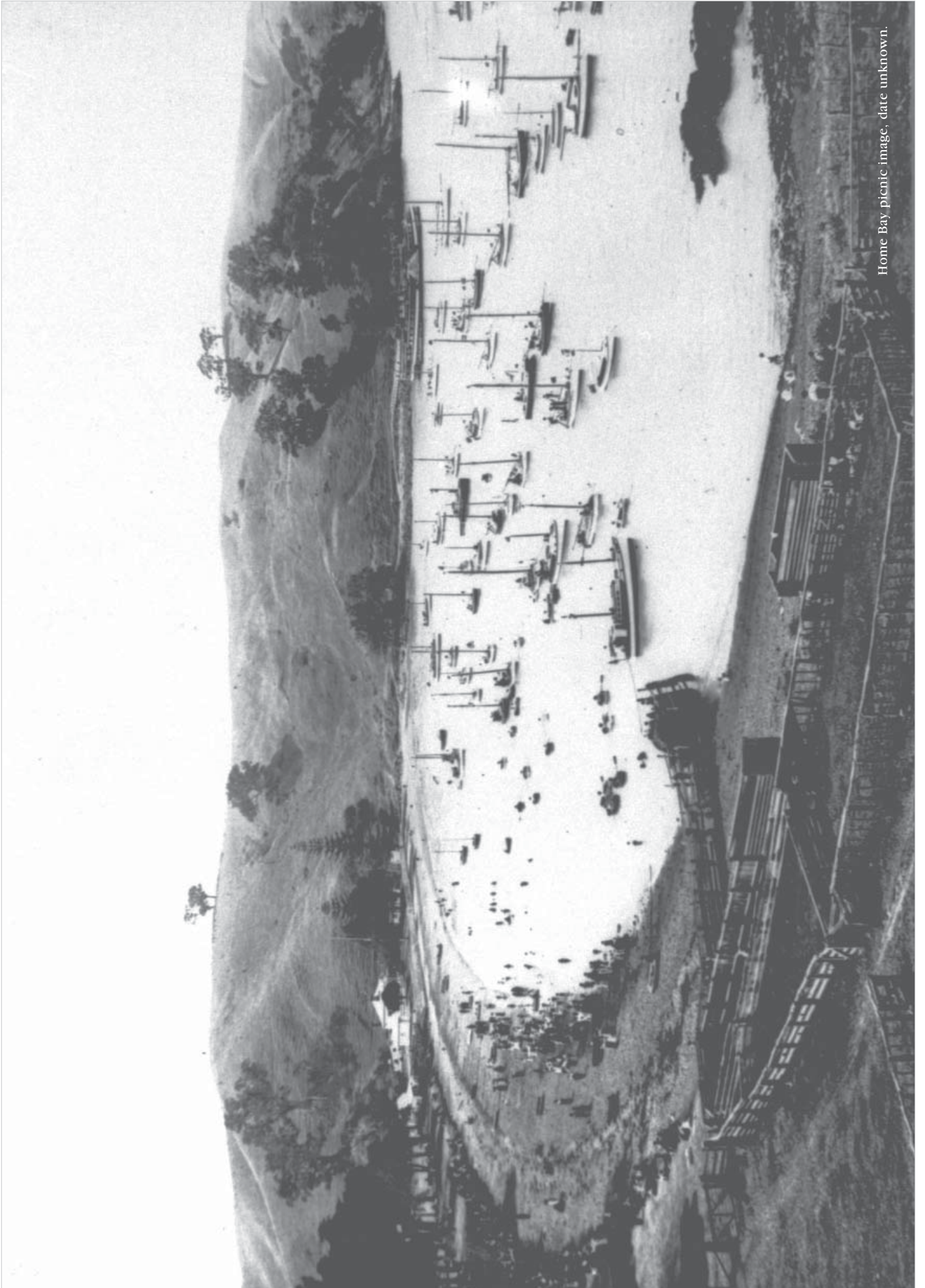
The island has also been significant in the development of archaeology as a discipline, providing a location for one of the earliest systematic survey and investigation projects in the Auckland region.



Reid Homestead
built 1901-3



Home Bay picnic images Top: Home Bay with ferry steamer at the wharf. Bottom: Motutapu from West side. Cooper Vaughan Collett, Auckland Museum, DU 436.1185 ENV2.



Home Bay picnic image, date unknown.

7. FABRIC SIGNIFICANCE

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

The Maori sites are part of a substantially intact and publicly accessible landscape of historic places dating from initial human settlement to WWII. Motutapu and Motukorea were settled much more intensively than other Gulf islands, because of the ash modified soils. Some of the most significant sites have been partially excavated, but the majority remain intact. No comparable archaeological landscapes remain on the mainland in the Conservancy. The earliest sites are unique because they are separated by a chronostratigraphic horizon (Rangitoto ash) from later occupation. The island [Motutapu] was visited by humans between ash showers and dog and human footprints have been preserved in the ash. Foreshore greywacke deposits were a regionally significant source of raw material for adzes.

The farm settlement and homestead sites have been assessed separately:

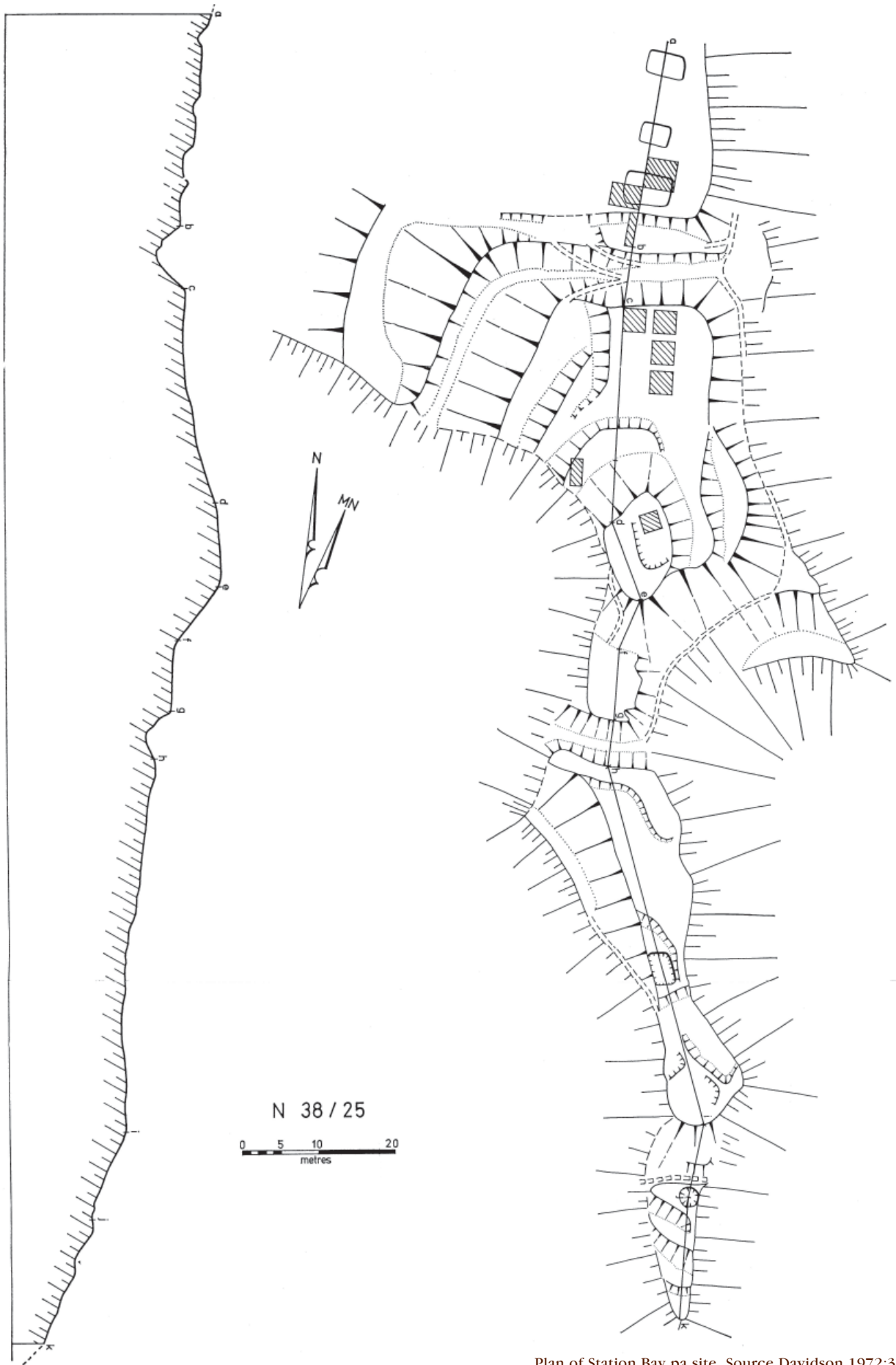
The Home and Emu Bay sites, with the remnant plantings & Reid homestead provide a tangible link with the island's European past and the opportunity to present this period to the visiting public... as part of a well preserved landscape of historic places associated with Maori and subsequently European occupation. Home Bay was probably once the most popular visitor destination in the Hauraki Gulf, with picnic parties of up to 10,000 people on occasions."

As have the military structures, described as:

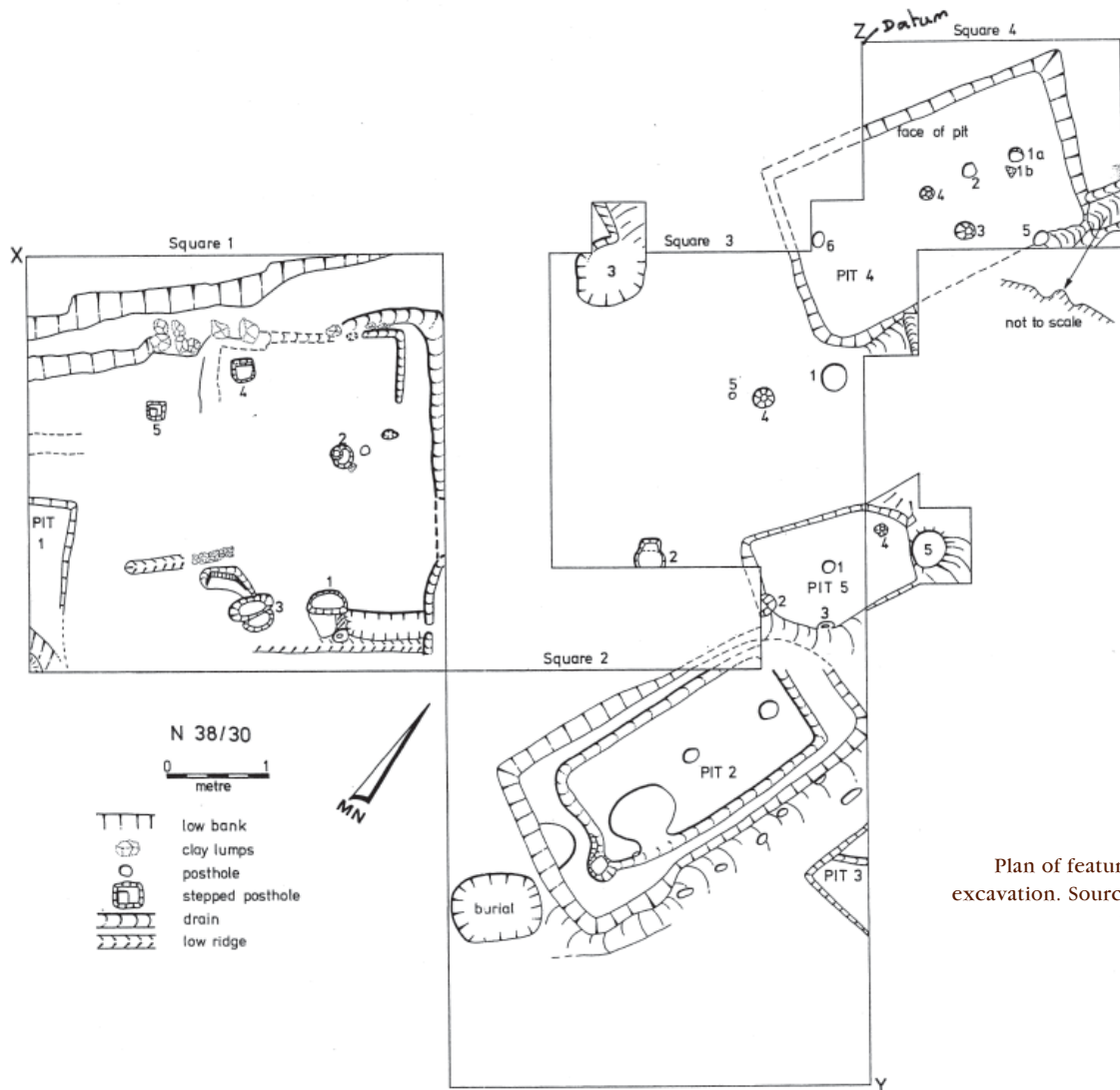
A major complex of structures & ruins which is well documented, accessible to the public, & presents a valuable interpretation/education opportunity. Part of network of coastal defences which included North Head & Stony Batter. More than £500,000 was spent constructing the military facilities, which once accommodated nearly 1000 personnel.²³

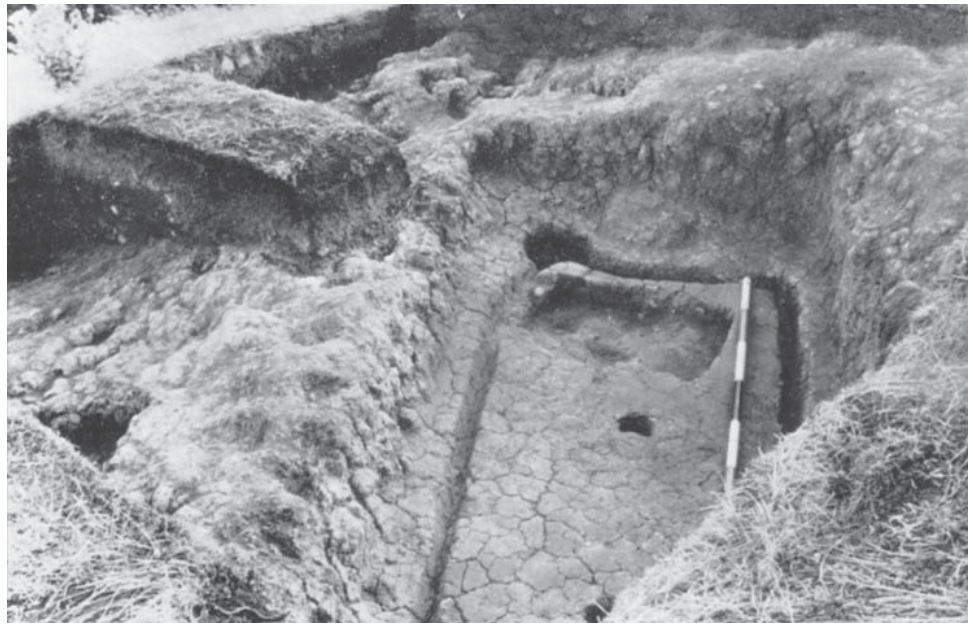
The significance of the Sunde site is reflected in its scheduling in the Regional Plan.

Coastal as a cultural heritage site for preservation (Schedule 1/134). The site and its environs are also scheduled as an Area of Significant Conservation Value (Schedule 3/64 and 3/124). There are 10 archaeological sites scheduled in the Auckland City Council Gulf Islands District plan,²⁴ and trees and graves are also scheduled.²⁵ Military structures on Motutapu and Rangitoto are listed in the Regional Plan Coastal as 798, and have been proposed for Registration as a Category I Historic Place.

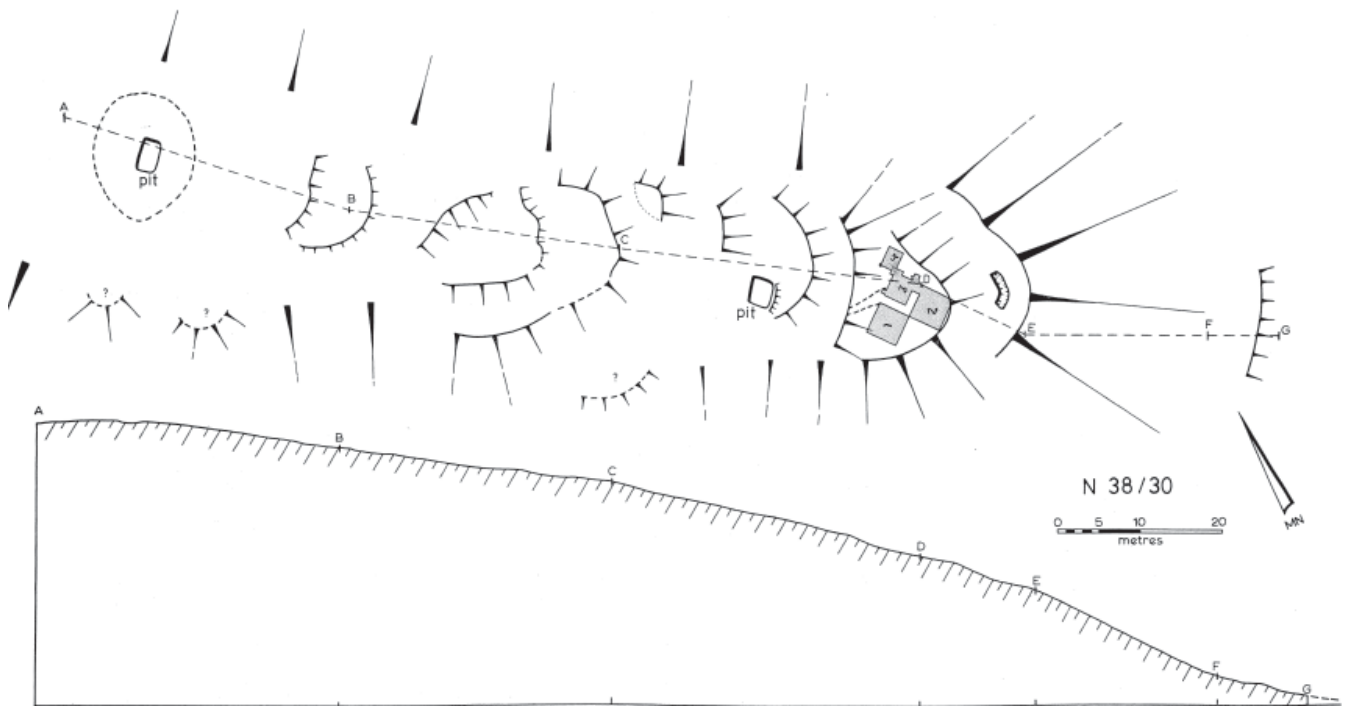


Plan of Station Bay pa site. Source Davidson 1972:3





Excavation of pit and terrace site R10/31. Leahy 1970:64



Site plan of R10/31 showing excavation. Leahy 1972:25

8. NATIONAL CONTEXT

Cultural significance of Maori sites should be determined by iwi, but Motutapu is clearly significant to Ngai Tai who maintain an active involvement with the island and its management. This is recognised in the 2005 Auckland Conservancy CMS which states one of the key objectives for Motutapu as to:

Actively protect and provide for the interests of Ngai Tai, in particular by facilitating their links with the island and its taonga and wahi tapu.

9. SIGNIFICANT THEMES & SITE TYPES

DOC website (www.doc.govt.nz) historic site topics:

Maori
Farming
Defending New Zealand

10. MANAGEMENT HISTORY

- 1840: Northern part of island purchased by William Brown and leased to James Moncur
- 1845: Southern part of island purchased by Williamson and Crummer
- 1857: Robert Graham awarded title to northern part and later acquires Williamson and Crummer title
- 1857: Public Reserve gazetted at Administration Bay
- 1869: Reid brothers purchase the island
- 1870s: Reids fence and clear much of the island of scrub, eventually allowing for 5000 sheep, 3-4000 cattle and 50-60 horses; Reids continue to stock the island with deer and wallabies, emus, buffaloes, and waterfowl also present
- 1890s: John Craig farm manager for Reid brothers
- 1936: Work begins on infrastructure for Motutapu counter bombardment battery
- 1938: Six inch guns mounted on Motutapu for counter bombardment battery
- 1939: NZ enters WWII. Motutapu managed by the Land Development Branch of Lands and Survey Department, Auckland.
- 1943: Reid brothers sell island
- 1943: 4252 sheep stocked on Motutapu²⁶
- 1949: Quarantine Station opened
- 1956: School started at Home Bay
- 1958: Army leaves Administration Bay
- 1959: Farm stocked with 10100 sheep; 1200 cattle on island (approximately 11,500 stock units)²⁷
- 1959: Auckland University excavations at Pig Bay archaic site - Goldson
- 1960: Auckland University excavations at the Sunde site — Scott and Green
- 1963: University site recording begins — Davidson, Leahy and Nicholls record 72 sites
- 1966: Farm stocked with 11726 sheep; 1416 cattle (approximately 13,000 stock units)²⁸
- 1967-8: Auckland Museum excavations at Station Bay — Davidson, Leahy and Sullivan²⁹
- 1967: Administration of island transferred to the Superintendent of Land Development, Whangarei

- 1967: Motutapu becomes part of Hauraki Gulf Maritime Park
- 1970: Farm stocked with 12235 sheep; 1194 cattle (14,000 stock units)³⁰
- 1970-1: Second season of excavation at Station Bay
- 1972-3: Systematic re-survey of Motutapu—Davidson records an additional 324 sites
- 1972-3: Excavation of N38/140 — Leahy³¹
- 1974: New school erected in Islington Bay
- 1975: Farm stocked with 6422 sheep; 2000 cattle (change in cattle/sheep ratio to combat eczema)³²
- 1977: Davidson and Leahy complete re-survey, and identify an additional 98 potential sites
- 1980: Responsibility for farm operations transferred to Commissioner of Crown Lands, Auckland
- 1981-2: Stock units at 15795 (40:60 ratio of sheep to cattle)³³
- 1982: Power cable laid between Waiheke and Motutapu
- 1987: Ownership transferred to Department of Conservation
- 1987: Law carries out check survey
- 1990: Brush-tail possums eradicated from Motutapu-Rangitoto confirmed 1996³⁴
- 1990: Brush-tail rock wallaby eradicated from Motutapu-Rangitoto confirmed 2000³⁵
- 1992: Draft working plan for Motutapu Island
- 1993: Public workshop for developing a strategy for Motutapu
- 1994: Restoration Plan developed for Motutapu
- 1994-5: Auckland University geophysical investigation and test excavation³⁶
- 1994-5: Auckland University archaeological survey in northern and southern quarters of island³⁷
- 1995-6: Auckland University geophysical investigations and test excavation³⁸
- 1996: Auckland University archaeological survey in central southern part of island³⁹
- 1997: Conservation Plan completed for military structures — Pearson
- 1997: Conservation plan completed for Reid Homestead — Sharley
- 1997: Identification and arboreal assessment completed for heritage vegetation — Arborlab
- 2001: Remedial and Maintenance specifications prepared for military structures - Salmond Reed
- 2003: Heritage Assessment completed for Administration Bay camp — Pearson
- 2003: Auckland City Council Inner Gulf Islands archaeological survey and significance assessment⁴⁰
- 2007: Heritage Assessment for archaeological landscape completed

11. RECOMMENDATIONS FOR MANAGEMENT OF THE ARCHAEOLOGICAL LANDSCAPE

The significance of the archaeological landscape on Motutapu has long been recognised, but often the driving focus for management has been on other competing values. A loosely defined farming concession has resulted in management decisions being made in response to the needs of the farm, rather than the farming concession used as tool to manage the island's intrinsic resources. The 1992 working plan provoked serious concern for the cultural and historic landscape, and the resulting restoration plan achieved a much greater balance. Since that time there has been considerable heritage work carried out relating to both built heritage and archaeological sites. The work of the Auckland University in the mid-1990s, and the upgrade and significance assessment funded by the Auckland City Council in 2003 have both sought to provide GIS quality data for site management, but the complexity of the archaeological landscape and problems with consistency of data have meant that management still remains largely reactionary in response to pressures of restoration planting and farm management.

Areas that have no sites or low density of features should be selected for revegetation rather than attempting to exclude large areas from planting, as this creates later problems with weed colonisation, and naturalising vegetation after they are closed off from grazing. Some re-fencing of the island will likely be required to demarcate areas for planting while leaving practical areas for grazing and access. Planting also requires areas to be left to grow to rank pasture to provide a suitable environment for planting. Prompt action will provide the greatest benefit.

Future farming concessions will need to be explicit in terms of their objectives, as well as clearly stipulate responsibilities for both the concessionaire and the Department, and constraints relating to stocking density need to be provided in detail to allow improved management of the archaeological resource and better transparency for the concessionaire. The concession is due for renewal in 2010.

The current classification is Recreation Reserve which is effectively the least restrictive and most enabling available classification. Consideration should be given to reclassify the island as Historic Reserve to reflect its primary values.

While this assessment goes some way towards addressing the need for a formal conservation plan, this should be given serious consideration. The complexity of the archaeological landscape, numerous and diverse management pressures, and reactionary nature of present advice are all good reasons for having a conservation plan in place. The preparation of a formal conservation plan would also provide opportunity for input from Ngai Tai and the New Zealand Historic Places Trust. This assessment compiles most of the existing sources of information and site data, but there is still a need for additional field work to ensure its accuracy, and to update information on site condition. Data consistency remains particularly important.

It is noted that interpretation of the island's features is already planned by refitting the Reid homestead as a Visitor Centre; the existing concept plan; and production of a DVD focusing on it's history.

12. WORK VISION SUMMARY

- » Complete the resurvey and assessment of pre-European archaeological sites (CMS 19.5.2).
- » Prepare a detailed conservation plan for the Motutapu archaeological landscape (CMS 27.1.6).
- » Prepare and implement an interpretation plan for historic features on the island.
- » Maintain sites under pasture or shallow rooting vegetation (CMS 19.5.3).
- » Control stock levels to minimise deterioration (CMS 19.5.3).
- » Manage weed growth on sites that are excluded from planting.
- » Minimise impact of fencing on sites (CMS 19.5.7).
- » Consult with Ngai Tai to identify, protect and manage significant sites (CMS 19.4.1-2).
- » Conserve vegetation survivals (CMS 19.5.4).
- » Transfer existing site data into GIS.
- » Proactively identify areas for planting that have minimal impact on archaeological sites.

13. SOURCES & REPORTS

Publications (including background reading)

- Allo, J. 1970. Analysis of Midden from Two Sites on Motutapu Island, New Zealand, *Records of the Auckland Institute and Museum*, 7:83-91.
- Black, T.M. Nowell, S.B. Hayward, B.W. 1991. Inventory of Geologically-related Historical Sites and Features of International, National and Regional Importance, *Geological Society Of New Zealand Miscellaneous Publication, No.52*. Geological Society of New Zealand, Lower Hutt.
- Brothers, R.N. Golson, J. 1959. Geological and Archaeological Interpretation of a Section in Rangitoto Ash on Motutapu Island, Auckland, *New Zealand Journal of Geology*, 2(3):569-577.
- Campbell, J.L. 1881. Poenamo. Wilson and Horton Ltd, London (facsimile)
- 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
- Cottrell, N. 1986. A History and Bibliography of Motutapu and Rangitoto Islands, *Archaeological and Historical Reports, No.13*. Department of Lands and Survey, Auckland.
- Davidson, J.M. 1970a. Survey of Archaeological Sites on Motutapu Island, New Zealand. *Records of the Auckland Institute and Museum*, 7:1-12.
- Davidson, J.M. 1970b. Excavation of an 'Undefended' Site, N38/37, on Motutapu Island, New Zealand, *Records of the Auckland Institute and Museum*, 7:31-60.
- Davidson, J.M. Sep 1971. Fieldwork on Motutapu Island, Hauraki Gulf, *New Zealand Archaeological Association Newsletter*, 14(3):80-81.

- Davidson, J.M. 1972. Archaeological Investigations on Motutapu Island, New Zealand, *Records of the Auckland Institute and Museum*, 9:1-14.
- Davidson, J.M. 1974a. Radiocarbon Dates from the Sunde Site (N38/24), Motutapu Island, New Zealand, *Records of the Auckland Institute and Museum*, 11:9-10.
- Davidson, J.M. 1974b. Further Identifications of Sources of Obsidian Flakes from N38/37 on Motutapu Island, New Zealand, *Records of the Auckland Institute and Museum*, 11:11-12.
- Davidson, J.M. 1975. Archaeological sites in the Auckland Region, Auckland Regional Authority Planning Division
- Davidson, J.M. 1977. Final Report on Excavations at the Sunde Site, New Zealand Historic Places Trust, Wellington.
- Davidson, J.M. 1978a. The Prehistory of Motutapu Island, New Zealand: Five Centuries of Polynesian Occupation in a Changing Landscape. *Journal Of The Polynesian Society*, 87(4):327-337.
- Davidson, J.M. 1978b. 'Auckland Prehistory: A Review', *Records of the Auckland Institute and Museum*, 15:1-14.
- Davidson, J.M. 1978c. Radiocarbon Dates for Three Sites at Station Bay, Motutapu Island, *Records of the Auckland Institute and Museum*, 15:15-16.
- 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
- Davidson, J.M. 1987. Marks on a Landscape: Auckland's Volcanic Cones, in Wilson J. (ed) *The Past Today: Historic Places In New Zealand*, pp.6-13. Pacific Publishers Auckland.
- Davidson, J.M. 1987. Fourteen Years of Site Recording on Motutapu Island: A Cautionary Tale, *New Zealand Archaeological Association Newsletter*, 30(4):227-238.
- Debreceeny, J. 10 Sep 1991. A Checklist of Shipwrecks within the Auckland Conservancy Area up to 1945. Unpublished manuscript held by Department of Conservation, Auckland.
- Department Of Conservation June 1992. A Draft Working Plan for the Revegetation of Motutapu, Unpublished draft report, Department of Conservation, Auckland.
- Department Of Conservation March 2000. Motutapu Historic Heritage, Department of Conservation, Auckland Conservancy, Private Bag 68 908, Newton, Auckland.
- Dowdle, B. 1988. Motutapu Outdoor Education Camp: Teacher Resource Handbook. Department of Education.
- Fenton, F.D. 1879. Important Judgements Delivered in the Compensation Court and Native Land Court.
- Fergusson, G.; Rafter, T. 1959. New Zealand C14 Age Measurements - 4, *NZ Journal of Geology and Geophysics* 2(1):208-241
- Golson, J.; Brothers, R.N. 1959a. Excavation at Motutapu, *New Zealand Archaeological Association Newsletter*, 2(2):5-8.
- Golson, J.; Brothers, R.N. 1959b. Geological and Archaeological interpretation of a section in Rangitoto ash on Motutapu Island, Auckland. *NZ Journal of Geology and Geophysics* 2(3):569-577
- Grange, C. 1974. A Comparison between Shellfish Species seen Today and those Found at the Sunde Site, Motutapu Island, in Sullivan, A. (Ed) *Working Papers In Archaeology*, No.33 pp.53-56. Department of Anthropology University of Auckland.
- 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. 1921. Te Tuhi-a-Manawatere and other legends of Marei-tai, Auckland, *Journal of the Polynesian Society* 30:252-253
- Graham, G. 1922. Te Heke-o-Nga-Toko-Toru (The Migration of the Three), *Journal of the Polynesian Society* 31:190-192
- Graham, G. 1951. Tainui, *Journal of the Polynesian Society* 60:80-92
- Grattan, F.G. 1948. Official War History Of Public Works Department. Public Works Department, Wellington. *NZ Journal of Geology and Geophysics* 29:405-411
- Hawley, J. Dec 1993. Motutapu Restoration Working Plan, Department of Conservation, Auckland Conservancy, Auckland.
- Horner, T.J. ?1942. Map of Rangitoto, Motutapu and Rakino. Map 832 118a, Auckland Institute and Museum.
- Houghton, P. 10 Dec 1977. Prehistoric Burials from Recent Excavations on Motutapu Island, *Records of the Auckland Institute and Museum*, 14:37-43.
- Irwin, G. J; Ladefoged, T.N; Wallace, R. 1996. Archaeological Fieldwork in the Inner Hauraki Gulf 1987-1996, *Archaeology in New Zealand*, 39 (4):254-263.
- Irwin, G.J; Ladefoged, T.N; Wallace, R.T; Jones, M.D; Ross, S.C.L; Clout, S.D. Dec 1997. Experimental Geophysical Survey on Motutapu Island 1994-96, *Archaeology in New Zealand*, 40(4):pp.266-277.
- 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.
- Kelly, L.G. 1949. Tainui—The story of Hoturoa and his descendants. Polynesian Society, Wellington
- Law, R.G. 1975. C14 Dates from Rangitoto and Motutapu: A Consideration of Dating Accuracy, *New Zealand Journal Of Science*, 18:441-451.
- Law, R.G. 1987. Site Survey Methods and Standards: A Check Survey of Motutapu Island, *New Zealand Archaeological Association Newsletter*, 30(1):16-26.
- Leahy, A. 1970. Excavations at Site N38/30, Motutapu Island, New Zealand, *Records of the Auckland Institute and Museum*, 7:61-82.
- Leahy, A. 1972. Further Excavations at Site N38/30, Motutapu Island, New Zealand, *Records of the Auckland Institute and Museum*, 9:15-26.
- Leahy, A. 1986. Excavations at Site N38/140, Motutapu Island, Auckland, *New Zealand Archaeological Association Newsletter*, 29(3):160-166.
- Lough, S. 26 June 2001. US Navy Magazines—Motutapu Island, Lewis and Williamson.
- Lowe, D.; Newnham, R.; McFadgen, B.; T. Higham. 2000. Tephtras and New Zealand Archaeology, *Journal of Archaeological Science* 27:859-870
- Maddock, S.; Whyte, D. 1966. Islands of the Gulf. Collins, Auckland
- McFadgen, B. 1996. Re: Dating the Rangitoto Ash and its implications, *Geological Society of New Zealand Newsletter* 109:4-5
- Moore, P.; Tiller E. 1975. Radiocarbon dates for New Zealand archaeological sites, *New Zealand Archaeological Association Newsletter* 18(3):98-107
- Monin, P. Dec 1996. Wai 406 # 7. 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
- Murdoch, G.J. Dec 1991. He Korero Tawhito Mo Rangitoto: A Brief Outline of the Maori Historical Association with Rangitoto Island, Department of Conservation, Auckland
- Newman, K. 11 Nov 1991. GIS Maps Out Motutapu Reafforestation, *Computerworld New Zealand*, 239:26
- Nichol, R.K. 1981. Preliminary Report on Excavations at the Sunde Site, N38/24, Motutapu Island. *New Zealand Archaeological Association Newsletter*, 24(4):237-256.

- Nichol, R.K. 1982. 'Fossilised human footprints in Rangitoto ash on Motutapu Island' *Geological Society of New Zealand Newsletter* 55:11-13
- Nichol, R.K. 1988. Tipping the Feather Against the Scale: Archaeozoology From the Tail of the Fish. Unpublished PhD Thesis, Department of Anthropology, University of Auckland, Auckland
- Nichol, R.K. 1992. 'The eruption history of Rangitoto: reappraisal of a small New Zealand myth,' *Journal of the Royal Society of New Zealand* 22:159-180
- Phillips, C.A. 1995. Note on field school excavation at Motutapu, Fieldwork and other activities. *Archaeology in New Zealand*, 38(2): 78
- Prickett, N. (Ed). The First Thousand Years Regional Perspectives in New Zealand Archaeology, *New Zealand Archaeological Association Monograph No.13.*, Dunmore Press, Palmerston North
- Robertson, D. 1986. A Paleomagnetic study of Rangitoto Island, Auckland, New Zealand, *New Zealand Journal of Geology and Geophysics* 29:405-411
- Scott, S.D. 1970. Excavations at the 'Sunde Site', N38/24, Motutapu Island, New Zealand, *Records of the Auckland Institute and Museum*, 7:13-30.
- Smith, I.W.G. 1981. Mammalian Fauna from an Archaic Site on Motutapu Island, New Zealand, *Records of the Auckland Institute and Museum*, 18:95-103.
- Stokes, Captain J.L. 1855. New Zealand Defences Auckland Harbour Site for Submarine Mining Department.
- Sullivan, A. 1972. Excavation of a Pit at Station Bay Motutapu Island, *Records of the Auckland Institute and Museum*, 9:27-60.
- Terry, C. 1840. New Zealand, its advantages and prospects as a British Colony. Boone, London
- Turton, H. 1877. Maori Deeds 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
- Ward, G.K. 17 Dec 1974. Source of Obsidians from the Motutapu Undefended Site N38/37, *Records of the Auckland Institute and Museum*, 11:13-14.

Unpublished sources

- Arborlab, 1997. Historic trees—Motutapu Island. Unpublished report A10172 prepared for Department of Conservation
- Brassey, R. J.N. 1992. An Archaeological Survey of Historic Places Associated with European Settlement on Motutapu Island 1840-1935. Unpublished draft report, Department of Conservation, Auckland.
- Bulmer, S.; McDonald. J. 1981. Archaeological sites of the Hauraki Gulf Maritime Park. Unpublished report to the New Zealand Historic Places Trust 1981/7
- Byrne, D. 1973. Prehistoric Coprolites: A Study of Human and Dog Coprolites from Prehistoric Archaeological Sites in the North Island of New Zealand, Unpublished M.A. Thesis Department of Anthropology University of Auckland.
- Clark, C.; Duff L. 1979. 'Midden remains collected from an eroded block of Rangitoto ash, Sunde site, N38/24 Motutapu.' In Sullivan (ed.) Unpublished Class Projects. Anthropology Department, Auckland University
- Collen, M. 1983. Erosion Protection; Sunde Archaeological Site, Motutapu Island. Unpublished M/S, Ministry of Works and Development NP24/6
- Collen, M. 1984. Erosion Protection; Sunde Archaeological Site, Motutapu Island. Unpublished report, Ministry of Works and Development NP24/6

- Coster, J.; De Lambert, R. 1987. Proposed Management of Former World War II Magazines, Motutapu, Hauraki Gulf, Report prepared for the Hauraki Gulf Maritime Park, Department of Conservation, Auckland.
- Coster, J.; Spring-Rice, W. 1984. History, Archaeology and Site Management on Motutapu and Rangitoto. Unpublished Report, Department of Lands and Survey, Auckland. Department of Lands and Survey, Auckland.
- Dave Pearson Architects, 1997. The Military Installations of Motutapu Island: A Conservation Plan, Report prepared for the Motutapu Island Restoration Trust. Dave Pearson Architects Limited Auckland.
- Dodd, A. 2002. Mullet Bay Restoration Planting, Motutapu, Hauraki Gulf. Unpublished report to the New Zealand Historic Places Trust.
- 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
- Dogherty, M. 1996. Motutapu Revisited. Unpublished MA Thesis, University of Auckland
- Downie, J. Captain Of The HMSS *Coromandel* 1821. A Sketch of the River Thames in New Zealand Showing the Coast Explored in HMSS *Coromandel*.
- Elliot, M. 1995. Motutapu Island Late Holocene Vegetation History. Unpublished report to the Department of Conservation, Auckland Conservancy
- Law, R.G. 1973. 'Prevention of Wave Erosion of an Archaeological site, Motutapu Island' Unpublished report to Department of Lands and Survey on file NP 24/6-39
- Mckay, J. 1982. Motutapu, Sunde Site. Unpublished M/S on file HHA-02-01-02-07, Department of Conservation
- Nichol, R.K. 1983. 'An assessment of the Archaeological Importance of the Sunde Site, N38/24, at West Point on Motutapu Island'. Unpublished M/S on Department of Lands and Survey File NP 24/6
- New Zealand Historic Places Trust 2000. Historic Place Assessment Under Section 23 Criteria. Unpublished assessment prepared by the New Zealand Historic Places Trust.
- Reid Associates 1999. Adaptive re-use strategy Motutapu Outdoor Education Centre (Administration Bay buildings), Reid Associates.
- Ross, S.C.L 1994. Image Classification of Archaeological Geophysical Data, unpublished Masters Dissertation. Department of Anthropology, University of Auckland.
- Salmond Reed Architects 2001. Military Structures, Motutapu Island, Hauraki Gulf. Series of 14 unpublished reports for repairs, remedial and cyclical maintenance work prepared for the Department of Conservation, Salmond Reed Architects.
- Sharley, H 1997. Reid Homestead, Motutapu Island: Conservation Plan for the Motutapu Island Restoration Trust.
- Simmons, D.R. 1984. Motutapu. Appendix to Coster, J.; Spring-Rice, W. 1984. History, Archaeology and Site Management on Motutapu and Rangitoto. Unpublished report. Department of Lands and Survey, Auckland.
- Woodhouse, J. 1984. Motutapu Landscape Study, unpublished report prepared for the Hauraki Gulf Maritime Park Board.

Departmental files and archival sources

Department of Lands and Survey files

4/850, 40/1

Department of Conservation files

DOC 010-40

HHA-02-01-02-01

Plans

OLC 164 (06/11/1857)

OLC 293 (29/08/1876)

OLC file 332

SO 17788 (25/06/1914)

SO 28037

SO 35227 (1948)

Auckland Deeds

6D Folios 456-7 (20/11/1857)

10G Folios 191-2 (29/08/1870)

7A/365, 17A/719, CT 64/110, CT 136/48, CT 702/281, CT 708/165,
166

Maori Land Court Records

Auckland Minute Book I - Otata Islands

Orakei Minute Book I — Orakei

National Archives files

D4/123 Vols I, II

D4/1360

Auckland City Council GIS

Auckland Regional Council CHI

New Zealand Archaeological Association site records⁴¹

Newspapers and periodicals

Auckland Weekly News

09/03/1901

18/02/1902:3

27/02/1902:3 (or 18th?)

07/01/1904:7

The New Zealander

23/08/1845:1(2)

The New Zealand Gazette

1871:220

01/10/1936

NZ Graphic

Vol.20 1898:245

New Zealand Herald

12/02/1927 Supplement - Some Maori Folk Lore

19/02/1927 Supplement - Legends of the Maori Era

22/04/1958

30/04/1958

21/07/1973:11

20/05/1995 s.1:24

06/05/1998 s.A:11

06/05/1983 s.2:1

19/06/1996

11/01/1997

02/11/1005 s.1:1

The Southern Cross

23/09/1843

10/08/1857

11/08/1857

30/10/1860:2

The Weekly News

30/01/1908

Friends of the Hauraki Gulf

Issue No. 8 March 1992

Finn scrapbook

Scrapbook No.23 pp.7; 65

North Shore Times

24/10/1995

Photographic Collections

Department of Conservation, photographic collection

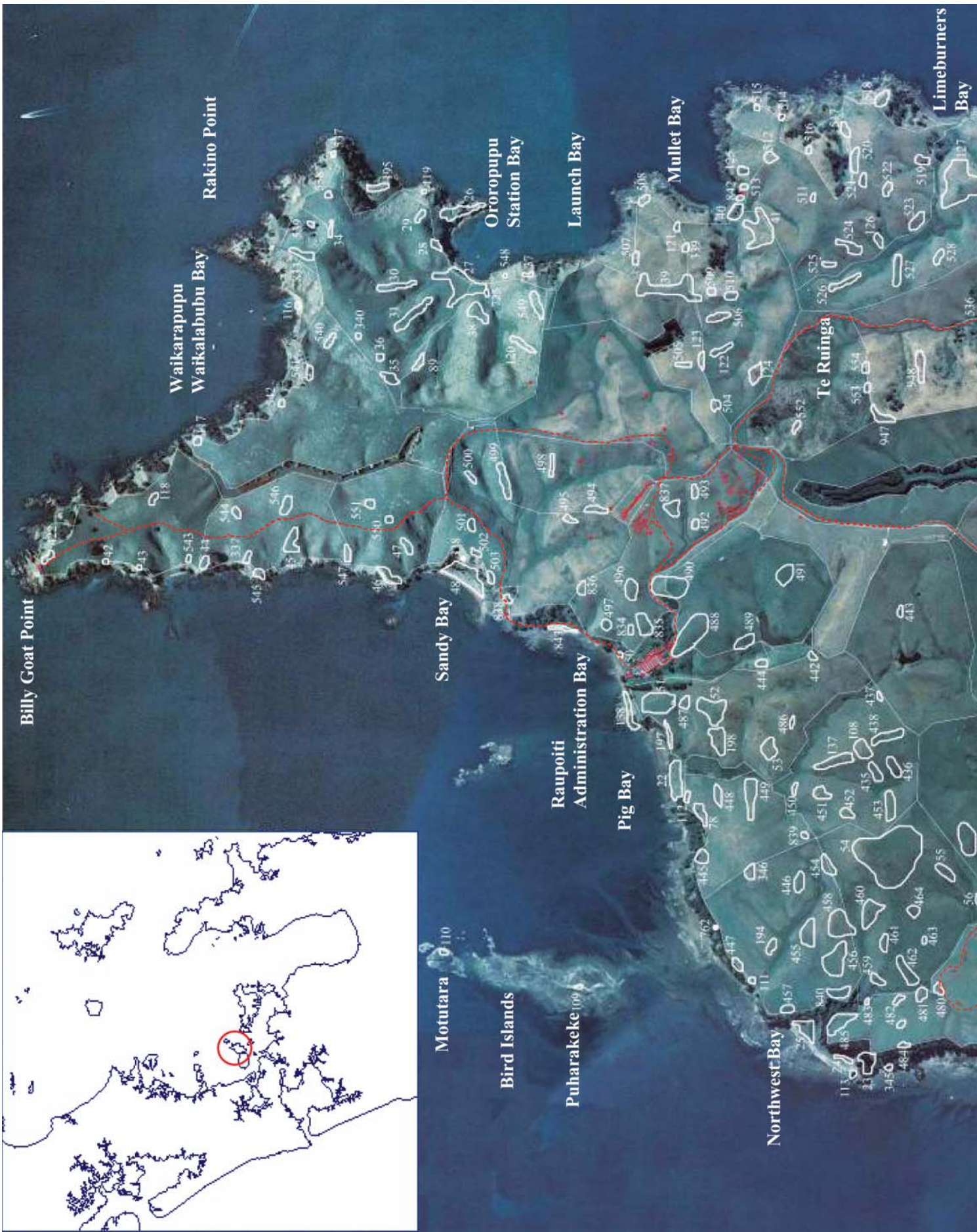
Auckland Institute and Museum photographic collection⁴²

14. EVALUATION OF SOURCES

A considerable amount has been written on the history and archaeology of Motutapu. Several Maori traditions cited in this assessment were originally derived from the Auckland and Orakei minute books of the Maori Land Court. Much of this information was made more publicly accessible with the addition of further oral traditions by Graham,⁴³ and Kelly,⁴⁴ with more recent syntheses by Simmons,⁴⁵ Murdoch⁴⁶ and Monin.⁴⁷ Early European accounts⁴⁸ contain a considerable amount of information, but few focus specifically on Motutapu, and for the early historical period information is largely derived from survey plans, newspapers and early photographs. Unpublished local histories and extensive bibliographies compiled for Motutapu and Rangitoto are available in Department of Lands and Survey reports.⁴⁹

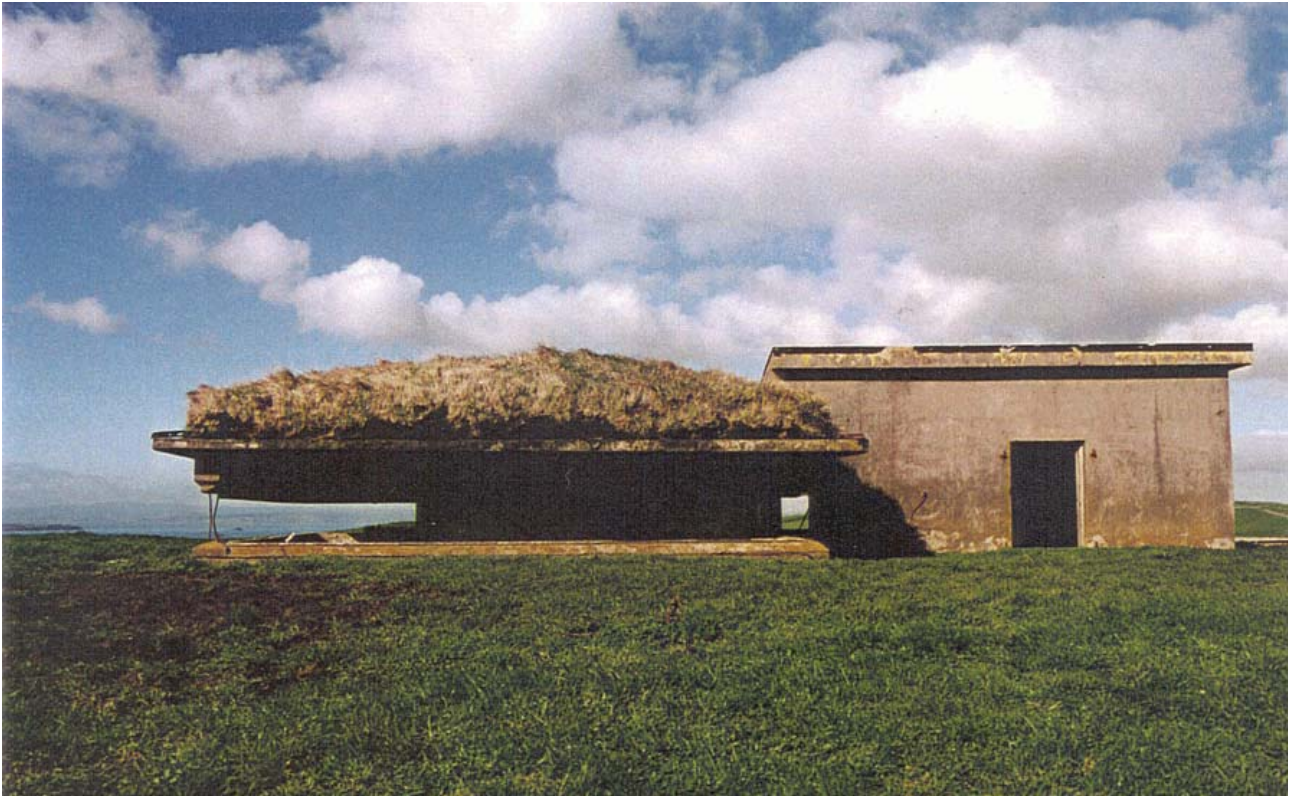
The 1960-70s archaeological survey and investigation on Motutapu have been well published in the records of the Auckland Institute and Museum and the New Zealand Archaeological Association (NZAA) Newsletter. The publications include accounts of excavations,⁵⁰ dating,⁵¹ analysis of faunal remains,⁵² lithic assemblages,⁵³ human remains,⁵⁴ and site recording surveys,⁵⁵ as well as prompting initial attempts at erosion control.⁵⁶ They have been summarised on a local scale specific to the island,⁵⁷ and incorporated into both regional⁵⁸ and national context.⁵⁹ The discovery of the Rangitoto ash footprints during a 1980s excavation of the Sunde site⁶⁰ rekindled and furthered discussions on dating,⁶¹ and prompted assessments of significance,⁶² and renewed attempts at site management and stabilisation.⁶³ In the 1990s it was the prospect of re-forestation proposed in the 1992 draft working plan that sparked renewed academic interest. Numerous submissions⁶⁴ were received requesting that cultural values be given higher priority. A public workshop was held in 1993,⁶⁵ and a restoration plan developed in the following year.⁶⁶ University of Auckland field survey, geophysical prospecting and excavations were undertaken between 1994-6 to assist in the management of the archaeological landscape,⁶⁷ and the island was included in case studies for archaeological site stabilisation and vegetation management.⁶⁸ More recently the Auckland City Council's Inner Gulf Island project for the revised district plan,⁶⁹ and the NZAA upgrade project⁷⁰ have provided the stimulus for updated information. Field assessments undertaken by Departmental archaeologists⁷¹ for routine farm management and restoration planting include a significant amount of information on individual sites and their location, but as these have been of a frequent and ongoing nature individual references have not been included here.

Historic research, and archaeological survey and assessment of the 19th century farming was undertaken,⁷² and followed by identification and proposed arboreal treatment for significant vegetation at Home Bay and Emu Bay.⁷³ The Reid Homestead and associated plantings are subject to a Conservation plan.⁷⁴ The military history of Motutapu is part of a wider system of Auckland's coastal defence and publications have typically dealt with Motutapu in this wider context.⁷⁵ The structures are subject to a Conservation Plan which also includes a detailed history and bibliography,⁷⁶ and to remedial specifications and maintenance specifications.⁷⁷





Location of recorded archaeological and military sites. Accurate as of October 2007



Battery observation post and radar room. D. Pearson, 1997

ENDNOTES

1. Not confirmed, DOC Visitor Asset Management System estimate is based on Home Bay campsite and MOEC numbers, with the expectation that many other people will be accessing the island on day trips via Rangitoto or on private boats
2. The dating of the Rangitoto eruption has been subject to review since it was originally published. Davidson's review of the dates from the Sunde site in 1974 and Law's in 1975 suggested a late 14th century date on the basis of two charcoal dates NZ1898 and NZ1899. However since that time the problems with in-built age in wood samples have become apparent. Nichol reviewed the dates in 1992, and included evidence from thermoluminescence (AD1400-20) and paleomagnetic (1420) dating. These together with NZ1167 and NZ6954 which suggested AD1400 was the earliest possible date, led him to conclude a date of c.AD1400. This was also supported by McFadgen (1996), and the additional average dates from 6 obsidian hydration samples published in 2000 by Lowe et al. Elliot's pollen dates from swamp deposits on Motutapu putting the eruption pre-Kaharoa at c.1200 BP are inconsistent with the greater body of evidence (Elliot 1995).
3. Davidson 1978; 1984:42. Another significant component of the local diet appears to have been fibrous plant food such as bracken root, as evidenced by severe tooth wear in burials dating from the 15th-18th centuries (Davidson 1984:51, 55-6).
4. Ngai Tai is the modern version of Ngati Tai.
5. Auckland Minute Book 1, Folio 26, Maori Land Court Records as cited in Coster and Spring-Rice 1984:8; Murdoch 191:12
6. Fenton 1879:61-74 as cited in Coster and Spring-Rice 1984:8
7. Turton 1882:561 as cited in Coster and Spring-Rice 1984:10; see also Campbell, J., 1881. Poenamo Williams and Norgate, London p.254
8. Pearson 1997:16-21
9. Register of Actively Managed Historic Places Auckland Conservancy
10. Davidson 1978
11. Davidson 1981:111-2
12. Davidson 1982:31
13. According to the tradition, the Ngati Kui were the first to occupy Te Ika-a-Maui including Motutapu. They were driven beneath the earth by the Tutumaio who were in turn supplanted by the Turehu. The Turehu or Patupaiarehe who occupied Motutapu, Motuihe and the adjacent mainland were known locally as Maewao (Murdoch 1991:5 citing Graham 1927 citing Ngati Kahu elder Wiripo Potene).
14. O-moko-nui-o-Kahu 'the great lizard of Kahu' was placed on Rangitoto in Inslington Bay and Moko-nui-o-Hei 'the great lizard of Hei' was placed at Home Bay. Coster and Spring-Rice 1984:7
15. Murdoch citing Graham 1951:82
16. Murdoch citing Kelly 1949:2
17. Simmons 1984:56; <http://www.teara.govt.nz/EarthSeaAndSky/OceanStudyAndConservation/TangaroaTheSea/3/en>
18. Graham in *New Zealand Herald* 19/02/1927
19. Ibid
20. Ibid
21. Murdoch 1991:10
22. Prickett 1982
23. A more detailed assessment of significance for the military landscape is contained in Pearson 1997:70-2
24. Sites in the Auckland City Council District Plan include R10/22, 25, 26, 31, 32, 41, 54, 90, 112, 127 Schedule B3 3.16-25
25. Schedule B1 1.32-3; B2 2.26
26. Figures from Annual review: Motutapu Farm Park's farming operations 1981-2 Department of Lands & Survey file 40/1
27. Ibid
28. Ibid
29. N38/30, 37, 25 (Leahy 1970:61-82; 1972:15-26; Sullivan 1972:27-60; Davidson 1972:1-14)
30. Ibid

31. Leahy 1986:160-66
32. Figures from Annual review: Motutapu Farm Park's farming operations 1981-2 Department of Lands & Surveyfile 40/1
33. Ibid
34. Invasive species specialist group database held at Auckland University
35. Invasive species specialist group database held at Auckland University
36. R10/410 (Irwin et al 1997:266-77)
37. Irwin, Ladefoged and Wallace 1996:254-8
38. R10/22; 39; 47; 496; 497; R11/1277 (Irwin et al 1997:226-77)
39. Irwin, Ladefoged and Wallace 1996:254-8
40. Carried out by Clough and Associates data available from Auckland City Council GIS
41. Numbers pertaining to Motutapu are (R10/): 22-48; 50-59; 78-79; 89-90; 99; 108; 111-27; 137-38;194-98; 213-14; 231; 337-49; 396; 400-12; 416-19; 422; 435-78; 480-574; 703; 722-25; 738; 761-62; 774; 833-43; 914-15; 934; 947-48; 1028 and (R11/): 115; 144-47; 161-64; 202; 218-19; 670-73; 961; 1203-80; 1396; 1479-92; 1663; 1743-48;
42. B2590, 2593, 2595, 2607 (1903); DU436.1185 (1904); C6430 (1920)
43. Graham 1920; 1921; 1922; 1951
44. Kelly 1949
45. Simmons 1984
46. Murdoch 1991
47. Monin 1996
48. eg. Campbell 1881:254; Terry 1840
49. Cottrell 1984; Coster and Spring-Rice 1984
50. Davidson 1970b; 1971; 1972; 1977; Golson and Brothers 1959; Leahy 1970; 1972; 1986; Nichol 1981; Scott 1970; Sullivan 1972.
51. Davidson 1974a; 1978c; Law 1975; Moore and Tiller 1975
52. Allo 1970; Clark and Duff 1979 (unpublished); Grange 1974; Smith 1981
53. Davidson 1974b; Ward 1974
54. Byrne 1973; Houghton 1977
55. Davidson 1970a; 1987; Law 1987
56. Law 1973
57. Davidson 1978a
58. Davidson 1975; 1978b; 1982; Bulmer and McDonald 1981 (unpublished)
59. Davidson 1984; Prickett 1982
60. Nichol 1981; 1982; 1988
61. Nichol 1992; McFadgen 1996; Lowe 2000
62. Black, Nowell and Hayward 1991; McKay J 1982; Nichol 1983
63. Coster and Spring-Rice 1984; Collen 1983; 1984
64. ICOMOS NZ 1992
65. Proceedings held on file in Auckland Conservancy office
66. Hawley 1993
67. Irwin, Ladefoged, and Wallace 1996; Irwin, Ladefoged, Wallace, Jones, Ross, and Clout 1997; Phillips 1995
68. Jones, and Simpson 1995
69. Copies of material held on file in Auckland Conservancy office
70. Dodd 2006
71. HHA-02-01-02-01; DOC010-40
72. Brassey 1992
73. Arborlab 1997
74. Sharley 1997
75. Cooke 2000; Corbett 2003
76. Dave Pearson Architects 1997
77. Salmond Reed Architects 2001

17. CHRONOLOGY OF EVENTS

C. 14TH CENTURY		Probable date of initial Maori settlement, occupation of Sunde site Sandy Bay and Pig Bay	Davidson 1978
C.1400		Eruption of Rangitoto	
C. 16TH CENTURY		Likely date of pa construction	
1820	June	Samuel Marsden visits Motutapu on the <i>Coromandel</i> , and sloop is dragged through the channel between Motutapu and Rangitoto with the assistance of local Maori as there is not sufficient water to get through	<i>Cottrell 1984:18 citing Marsden's third journal 1820:1; Elder 1932:311</i>
1821		Arrival of Ngapuhi armed with muskets	
1825		Local fishing party attacked by Ngapuhi at Motutapu	<i>Fenton 1879:71; NLC Auckland MBI 1866:18</i>
1826		Motutapu inhabitants flee to Maungatautari to seek refuge with Tainui relatives	Murdoch 1991:12
1827		Dumont D'Urville reports seeing no inhabitants between Whangarei and the Tamaki River	<i>Wright 1950:151-156 as cited by Coster and Spring-Rice 1984:8</i>
1828	July	Ngati Paoa and Ngati Tipa defeat Ngapuhi war party on Motutapu	<i>Coster and Spring-Rice 1984:8 citing Rogers 1961:68,137,339 citing H Williams</i>
1832		Trader John Cowell visits Motutapu and reports it to be deserted	<i>Orakei Minute Book 1, Folios 66,67,69, Maori Land Court Records as cited by Coster and Spring-Rice 1984:8</i>
1832		George Weller attempts to purchase Rangitoto and Motutapu	<i>Terry 1840 as cited by Cottrell 1984:8</i>
1833	27 Nov	Henry Williams camps on Motutapu	<i>Brassey MS</i>
1836		Waikato chief Te Wherowhero leads Manukau, Tamaki and Kaipara people back to their lands. Ngati Tai return to Motutapu.	<i>Coster and Spring-Rice 1984:9; Murdoch 1991:12 citing Native Land Court Auckland Minute Book 1 1866:16</i>
1840	11 Jan	Sale of 2560 acres comprising the northern part of Motutapu sold to Thomas Maxwell by Tara-te-Irirangi, Te Haua, and Te Waru of Ngati Tai	<i>Turton 1877:222; 1882:319, 561;</i>
1840	04 Mar	Treaty of Waitangi signed at Karaka Bay, Tamaki River Mouth	<i>Southern Cross 11/08/1857:1</i>
1841	21 Jul	Maxwell's Motutapu claim advertised for hearing	<i>Murdoch 1991:12</i>
1842	Jan	Maxwell presumed lost on route to Port Nicholas	<i>Southern Cross 11/08/1857:1</i>
1843	22 Mar	Maxwell's Motutapu claim re-advertised for hearing	<i>Angas 1847:293; Southern Cross 11/08/1857:1</i>

1843	01 July	Maxwell's claim investigated and disallowed for failure to appear	<i>Notes on Land Claim 332 as cited by Coster and Spring-Rice 1984:10; Southern Cross 11/08/1857:1</i>
1844	28 June	Governor Fitzroy demands a court hearing in favour of Maxwell's children	<i>Southern Cross 11/08/1857:1</i>
1844	29 July	Hearing takes place, Te Irirangi claims he never received payment	<i>Southern Cross 10/08/1857</i>
1844	21 Aug	Commissioner Fitzgerald authorises a grant to Maxwell's children upon payment of £20 to Te Irirangi, but grant was never issued	<i>Turton 1883:155; Southern Cross 11/08/1857:1</i>
1845	22 Apr	Williamson and Crummer apply for a waiver of the crown's right of pre-emption for the northern part of Motutapu comprising 1448 acres	<i>Southern Cross 11/08/1857:1</i>
1845	23 Apr	Deed of sale to Williamson and Crummer for "unsold" portion of island (north of line between Pehimatawha Te Ruinga and Raupoiti)	<i>Southern Cross 11/08/1857:1</i>
1846	21 Nov	Williamson and Crummer begin to stock island	<i>Southern Cross 11/08/1857:1</i>
1846	15 Dec	Governor informs Williamson and Crummer that an injustice has been done to Maxwell orphans and that their earlier claim would be approved	<i>Southern Cross 11/08/1857:1</i>
1848	14 Jul	Commissioner Matson reports Maxwell's original claim upheld	<i>Southern Cross 11/08/1857:1</i>
1849	23 June	Williamson and Crummer refuse a government grant of 86 acres	<i>Southern Cross 11/08/1857:1</i>
1853	21 Nov	Williamson and Crummer application for permission to buy the 2700 acres in their claim, but is disallowed	<i>Southern Cross 11/08/1857:2</i>
1854	17 July	Maxwell children's claim upheld, and Williamson and Crummer's disallowed (except 86 acres).	<i>Southern Cross 11/08/1857:2</i>
1856	1 Mar	Ngatai give evidence that Maxwell had not paid in full, and sale had not been for whole island, and supported boundary from Pehimatawha to Raupoiti	<i>Southern Cross 11/08/1857:1</i>
1857	6 Nov	Survey plan shows a Homestead at Home Bay, a cottage above Islington Bay, and stables and a hut at Emu Bay (Homestead presumed built by Williamson and Crummer)	<i>OLC Plan 164; AIM C6288; APL A1643</i>
1857	20 Nov	Commissioner Bell orders that 2200 acres to be awarded to Williamson and Crummer, and 1448 to Robert Graham, with a 80 acre public reserve set aside in the Administration Bay area	<i>AJHR 1863 D14 p.25; Southern Cross 11/08/1857:3; NZ Gazette 1871:220</i>

1857		Graham acquires Williamson and Crummer's 2200 acres, while owner Graham establishes considerable areas in pasture, and imports pedigree sheep and cattle, and introduces game including deer, rabbits, quail and pheasants	Cottrell 1984:14 citing Wilson 1930:52; Cruickshank 1940:48
1858		Graham purchases Motuihe	http://www.teara.govt.nz/1966/G/GrahamRobert/GrahamRobert/en
1860	Oct	Graham Auckland Representative in the General Assembly	Coster and Spring-Rice 1984:11 citing Platts 1971:223-5 and Carter 1866 Vol II:154
1860	27 Oct	40 gentlemen and 15 ladies from the General Assembly attend a lunch on Motutapu at the invitation of Graham arriving via the steamer <i>Emu</i> . At the end of the day after picking up some of the party from Kai Moriria Bay the vessel strikes a submerged rock and sinks. Kai Moriria renamed Emu Bay, and the previously uncharted rock becomes Emu rock	Platts 1971:223-5
1862		Graham Superintendent of the Auckland Province (1862-1865)	Coster and Spring-Rice 1984:11 citing Platts 1971:64
1869	Sept	Graham sells Motutapu to brothers William, John and James Reid. John lives at Home Bay and James at Emu Bay	Deeds index 7A/365; Brassey MS
1870		Reids acquire northern part of island from Maxwell's descendants	Brassey MS
1870S	Late	Second homestead in Home Bay	Brassey MS
1897		William Reid dies	Cottrell 1984:15
1899		John Reid dies	Cottrell 1984:15
1900S		James Reid marries Eliza Craig, daughter of John Craig the farm manager.	Cottrell 1984:15
1901		Present Reid homestead built	
1902		First homestead replaced by another dwelling; second homestead also removed	<i>Auckland Weekly News</i> 18/02/1902:3; 07/01/1904:7
1908	22 Jan	James Reid dies aged 71 and is buried at Home Bay	<i>Weekly News</i> 30/01/1908; headstone epitaph
1916	Feb	Third Infantry regiment has Territorial camp on Motutapu	Cottrell 1984:16
1935	20 Feb	Reids sign agreement with the Crown to use island for defence purposes and to build a fort, roads, a quarry, yard and wharf	CT 708/165, 166 20/02/1935; SO28037 (05/1935)
1936		Reserve at Administration Bay reclassified for defence purposes	NZ Gazette 01/10/1936
1938		Guns mounted at battery site	Coster and Spring-Rice citing Major George Salt pers. com

1939	03 Sept	NZ enters WWII	
1942		Construction of US Navy magazines begins	Coster and Spring Rice 1984:13
1942	01 Nov	Eliza Reid (nee Craig) dies aged 62 and is buried at Home Bay	Headstone epitaph; Coster and Spring Rice 1984:12
1943	Sept	Additional 3212 acres of land acquired under proclamation for Defence purposes. Purchase is for £50000 and excludes homestead block	Proclamation and CT 708/165
1943		Island farmed by the Land Settlement Board on an agency basis for the Defence Department. Farm managers: R. C. Bull (1944-8); N. Bruncker (1957); L.G. Bedford (1957-9); S. Voyce (1959); N. Burrell (1959-63); M.R. Bennett (1963-65); M.W. Robertson (1965-69); A.J. McLean (1970-6); I.H. Wilson (1976-80); R. McCabe (1980)	Annual Review: Motutapu Farms 1981-2.L& S file 40/1
1944		Homestead block acquired by Crown for defence purposes for £10200; excludes half acre private cemetery at Home Bay.	Cottrell 1984:17 citing National Archives D4 123 Vol.2
1949		Quarantine station opened, former Andrew Craig cottage used for accommodation	Coster and Spring-Rice 1984:14
1958		Prefabricated classroom transported to Home Bay	Coster and Spring-Rice 1984:14
1958		Army vacate Administration Bay	Coster and Spring-Rice 1984:14
1967		Motutapu becomes part of Hauraki Gulf Maritime Park.	
1974		Relocateable school room erected at Islington Bay	Coster and Spring-Rice 1984:14
1976		Emu Bay cottage demolished by Lands and Survey	Brassey MS
1980	01 Jul	Farming operations transferred to management of Commissioner for Crown Lands, Auckland	Annual Review: Motutapu Farms 1981-2.L&S file 40/1
1987		Administration of Motutapu transferred to Department of Conservation	
1992		Motutapu Restoration Trust begins island restoration and revegetation programme	