



REPORT ON KAREWA POINT AIRPORT SURVEY,  
CHATHAM ISLANDS

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Introduction:

As a result of discussions between New Zealand Historic Places Trust and Ministry Works and Development an intensive archaeological site survey of the area to be disturbed by the new Chatham Islands airport on Karewa Point was undertaken. Total costs for this work came to \$1925.55 expenses being met by New Zealand Historic Places Trust and subsequently recoverable from Ministry Works and Development (see attached budget). The period of the survey was designed to fit with available air service timetables and any unexpected circumstances if they occurred. Work in the field commenced on 7/9/78 and concluded on 20/9/78.

Geographic Description: Karewa Point:

Land purchase by Ministry Works and Development Christchurch involves approximately 600 acres; much of this land is low lying, covered in dense bracken fern and swampy peat soils. Most of the lagoon margin has slightly raised "old" beach levels which support rich pasture. Small areas of Karewa Point have isolated stands of mixed bush, mainly kopi, ake-ake and matipo,<sup>1</sup> but these are restricted in area, heavily affected by livestock browsing and wind damage.

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<sup>1</sup> see appendix.

Karewa Point is the largest peninsula protruding into Te Whanga Lagoon, pointing in a general northeastern direction from the western shore. The area surveyed extended around and over Karewa Point from Oringi Creek to Titirangi Point.

Survey Procedure:

[A] Background - As much written information as was available was read prior to work commencing to acquaint with the area before arrival. Existing site record forms were studied and sites located onto large air photos (supplied by Ministry Works and Development) in the presence of the original surveyors (Dr B.F. Leach; Mr D.G. Sutton). The general layout plan (supplied by the Ministry Works and Development) was also studied and sites marked. It was hoped that using the larger scaled Ministry of Works & Development air photos that a greater accuracy in marking sites locations could be obtained. This proved to be the case and resulted in one of the earlier recorded sites being relocated and placed more accurately on the enlarged photo. Mistakes like this will continue to occur if verbal descriptions and grid references alone are used to plot sites onto maps of larger (and more accurate) scale.

[B] Procedure - Using the general layout plan as a guide to those areas to be disturbed by subsequent airport construction work and the specific locations and distribution of sites indicated by the earlier survey it was decided to concentrate efforts in the following manner:

- 1) All areas to be disturbed by works (runway, limestone borrow source, borrow area for grit and general fill, stockpile areas, access roads, drainage channels and building areas).

- 2) The lagoon margins and areas across "old" beach fronts, between margin of dense bracken fern and lagoon edge. Areas where creeks provide access inland were also followed.
- 3) All areas with existing bush and areas where recent bush cover could be seen to have existed.

To enable reasonable progress and to test the ground to check for sites in bracken and peat areas; and to test a recognised site in order to assess its importance Permit No. 1970/66 was issued by New Zealand Historic Places Trust. The procedure adopted was to remove 15 cm<sup>2</sup> turfs from "suspect" locations over the area being surveyed using a light garden spade. This procedure was found to be most effective when used in conjunction with "traditional" survey methods. The use of this procedure was applied with due discretion and restricted to *minimal* subsurface checking only. This procedure would best be restricted to "salvage" surveys or work in difficult areas where sites are under immediate threat.

A minimum of nine new archaeological sites were located, "tested" and plotted onto air photographs. Site record forms for the New Zealand Archaeological Association register have been filled out in the normal manner. All sites within the Airport area were marked at a central point by surveyors' poles approved by Ministry Works and Development.

[C] Problems - Two problems apart from the difficult peat, swamp and bracken fern were encountered. The first was the widespread occurrence of "natural/geologic" deposits of shell material in primary and secondary deposition across the limestone areas of Karewa Point. The second problem was the currently abnormally high levels of Te Whanga Lagoon which



made interpretations of previous site record forms difficult and in one case water covered much of the site (CH50). The lagoon opening at Te Awapatiki was cleared on 9/9/78 but the water level in the lagoon remained approximately five feet above normal throughout the survey period. Strong northeasterly wind and rain made conditions unpleasant throughout much of the survey.

### SITES

#### New Sites (see Ministry Works and Development maps)

- (i) Description: Situated on low "old" beach front along a small bay on the northeastern margin of Moutapu Point. This site extends approximately 50 m along lagoon shore and back 30 m from lagoon edge. The central area of the site composed of intact dense midden, with various light scatters of midden around the margins and elsewhere over Moutapu Point. Contents of the midden include: tua-tua, blue mussel, bird bone (various species), fish bone, chert flakes, oven stones and charcoal. This midden is extensive, rich and varied in content. N.B. This site is within the area designated for limestone removal by Ministry Works and Development for Karewa Point airport.
- (ii) Description: Situated 25 m north of Site No. 1. around the small bay between the northeastern margins of Moutapu Point and the point at which airbase road intersects the lagoon edge. Extent of the midden approximately 10 x 10 m.

Contents include tua-tua, bird bone, fish bone, chert flakes, ovenstones and charcoal. It is difficult to assess the cultural relationship between sites 1 and 2. N.B. This site is within the area designated for limestone removal by Ministry Works and Development for Karewa Point airport.

- (iii) Description: Situated under a small kopi grove 350 m northeast of the point where Airbase Road intersects the lagoon edge. This site is 20 m north of Ch.49, and is situated on the bank of a small stream, approximately 25 m from present lagoon edge. Much of the midden is intact but some light surface scatters occur over 5-6 square metres. Contents include tua-tua, fish bone and chert flakes. This site appears to be outside the area to be disturbed by airport development.
- (iv) Description: Situated amongst two lines of limestone outcrops on the northern side of a kopi grove approximately equidistant between Karewa Point and the end of Airbase Road. This site is about 50 m north of Ch.50 and 15 m from present lagoon edge. The midden is quite dense and intact, extending over an area approximately 15 x 15 m. Contents include paua, tua-tua, bird bone and charcoal. N.B. This site appears to be within an area designated for stockpiles by Ministry Works and Development.
- (v) Description: Situated on "old" beach front between bracken and present lagoon edge about 100 m south of large stand of mixed bush (kopi, ake-ake, matipo)

towards the end of Karewa Point on southeastern side. This site is approximately 150 m north of Ch.50. The midden is intact with some surface scatters of tua-tua, fish bone and charcoal. This site appears to be outside the area to be disturbed by airport development.

- (vi) Description: Situated on "old" beach front about mid-point between bracken margins and lagoon edge; amongst the southern margins of large mixed bush stand towards north end of the southeastern side of Karewa Point. This site is about 60 m north of Site No. 5. Intact midden extends over an area of 5 x 10 m. Contents include tua-tua, fish bone, ovenstones and charcoal. This site appears to be outside the area to be disturbed by Karewa Point airport.
- (vii) Description: Situated in a small basin area at northern margin of a large mixed bush stand towards the northern end of Karewa Point on the southeastern side. Intact midden extends over an area 15 x 20 m. Contents include tua-tua, fish bone, bird bone, oven stones and charcoal. This site appears to be outside the area to be disturbed by airport development.
- (viii) Description: Situated approximately mid point along a clear paddock between two mixed bush stands on the northeastern side of Karewa Point approximately equidistant lagoon edge and bush margin. Midden extends over an area of approximately 5 x 5 m. Contents mainly tua-tua. This site appears to be outside the area of the Karewa Point airport development.



(viii) Description: Situated on "old" beach front in the middle of second kopi grove on northeastern side of Karewa Point. Extending over a 5 x 5 m area, with the central midden intact but widespread (30 m<sup>2</sup>) scatters. Contents include tua-tua, paua, charcoal and ovenstones. This site appears to be outside the area of Karewa Point airport development. However this site may be affected by subsidiary runway development.

#### PREVIOUSLY LOCATED SITES

- Ch.49 - Some difficulty was encountered in relocating this site, due to high lagoon levels. This site appears to be outside the area designated for airport development.
- Ch.50 - When relocated and plotted onto more accurate air photographs it was found that this site had been mistakenly placed too far in a northerly direction along Karewa Point on previous maps. N.B. This site extends across an area immediately adjacent to the area designated for stockpiles by Ministry Works and Development.
- Ch.51 - This site appears to be outside the area to be disturbed by airport development.
- Ch.52 - Some difficulty in relocating this site due to swampy conditions as a result of high lagoon levels. This site appears to be outside the area to be disturbed

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by airport development.

Ch.722 - Unable to relocate this site. It appears to be outside the area to be disturbed by the airport development. *However* it may be disturbed by subsidiary runway development.

Find Spot: A Polynesian cranium was located on the surface of the peat swamp area between Ch.49 and Site 3. A slight possibility exists that there may be more human skeletal material in this area which the survey did not reveal.

#### RECOMMENDATIONS

A total of four archaeological sites appear to be directly threatened by the various airport construction activities. As yet only the general layout plan has been used to assess the threat to sites. We recommend that if any extensions or alterations to the existing general layout are intended or happen, and if these alterations extend beyond the area surveyed then the new area affected should also be surveyed. The two activities associated with the Karewa Point airport development which appear to threaten sites are limestone borrow areas and the stockpiles of fill or construction materials.

With regard to those sites directly affected our recommendations are:

- (1) That the sites on Moutapu Point being intact and archaeologically significant (diverse, inland, lagoon shore middens) should be left intact and the limestone borrow



area be redesignated to ensure the future security of these sites. If this area must be included in the limestone borrow area then site 1 and 2 should be excavated as representative sites of a specific Moriori economic adaptation. An area of about 10 m<sup>2</sup> would need to be excavated to ensure these sites were adequately "tested". It must also be noted that because of the damp, soft nature of the shallow peat soils in which the midden lies heavy machinery crossing these sites would *destroy* them.

(2) That the sites 4 and Ch.50 that occur respectively within and adjacent to the areas designated for stock piles and would be destroyed by this activity. To ensure the future security of these sites the area designated for stockpiles should be altered to exclude these sites. Like Sites 1 and 2 these sites would also be destroyed by the passage of heavy machinery across the surface of the site area. If the stockpile areas cannot be redesignated then we recommend a second smaller excavation at Site 4 (less than 5 m<sup>2</sup>), to test this site. It appears that there may be dwellings in this area.

Recommendations for Sites in the General Area:

Now that the sites have been plotted onto a larger scale air photograph the remainder of the sites, regardless of their state should be avoided by various construction activities. Care should be taken to ensure that drainage channels and machinery does not destroy these sites.

It became apparent during this survey that the archaeological

sites tended to occur in two "favoured" locations along this lagoon shore. The first was in sheltered areas "across" the "old" lagoon beach fronts between the bracken fern margin and the lagoon edge. The second was amongst the stands of kopi and ake-ake.

It would be desirable that during the airport construction these areas be disturbed as little as possible.

That all contractors working on the airport construction be given clear instructions as to the specific locations, legal status and importance of all archaeological sites in the vicinity.

That the New Zealand Historic Places Trust consider the idea of putting an information board on the side of Airbase Road adjacent to the bay between Te Hiti and Waikato Points; supplying information about the location and anthropological significance of petroglyphs on the limestone outcrops in the area. This idea has been previously suggested for the Hapupu Airport dendroglyphs by G.S. Park (Park 1976:18).

Public Relations:

Paul and myself always attempted to clearly and carefully explain the nature of our work and the aims and objectives of the Historic Places Trust. The Chatham Islands people we met were without exception interested and helpful.

Acknowledgements:

We would like to thank the following Ministry Works and Development staff for their assistance and advice, Mr D.

Brittain and Mr G. Radburnd Christchurch, and Mr Robbie Mead Chatham Islands. We would also like to thank Mr Pat Phillips and Mrs Ali Phillips for their assistance and companionship.

References:

LEACH, B.F.

1978 Pers. comm. and site record forms. Anthropology Department, Otago University.

PARK, G.S.

1976 The Dendroglyphs and Petroglyphs of the Chatham Islands. Anthropology Department, Otago University. *Working Papers in Chatham Islands Archaeology* 3.

SUTTON, D.G.

1978 pers. comm. and site record forms. Anthropology Department, University of Otago.

APPENDIX

Kopi/Karaka - *Corynocarpus laevigatus*  
 Ake-ake - *Olaeria traversi*  
 Matipo - *Myrsine chathamica*



BUDGET

<u>Advance Payment</u>	<u>\$.</u> <u>c.</u>	<u>Expenditure in Field</u>	<u>\$.</u> <u>c.</u>
Accommodation Allowance		Accommodation: 1 night	
21 night @ \$24.00.	504.00.	Wellington & 12 nights	369.50.
Equipment	100.00.	Chathams (2)	369.50.
Incidentals	100.00.	Equipment:	
Vehicle hire & mileage	387.00	6 rolls film	17.82.✓
<u>Travel:</u>		2 lamp batteries	5.14.✓
Wellington-Chathams (2)	132.00.	Stationery, markers,	7.32.✓
Christchurch-Chathams (2)	176.00.	Xerox material	1.08.✓
Dunedin-Wellington (1)	49.00.	Groceries & supplies	4.07.
Auckland-Wellington (1)	41.00.	Toll calls	4.56.✓
Christchurch-Dunedin (2)	56.00.	Landrover hire	243.76.✓
		Diesel	5.30.
		Airfares	454.00.✓
<b>TOTAL:</b>	<b>\$1,545.00.</b> =====		<b>\$1,112.55.</b> =====

1113.59

Refund \$433.55.

*We must accept the small amountals  
for which there are no receipts  
Total should be \$1113.57  
Refund should have been \$431.45  
So the now needs to be paid \$2.15*

*Proceeding*