



# J. M. Barker (Hapupu) National Historic Reserve

## Conservation Management Plan

APRIL 2000



Department of Conservation  
*Te Papa Atawhai*

# **J. M. Barker (Hapupu) National Historic Reserve**

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This management plan for the J. M. Barker (Hapupu) National Historic Reserve has been prepared in accordance with the procedures set out under Section 40B of the Reserves Act 1977 and Section 17G Conservation Act 1987.

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# Preface

The J. M. Barker Reserve contains one of the few remaining concentrations of kopi forest with Moriori tree carvings/Raukau Momori on the Chatham Islands. The carvings remain as significant evidence of Moriori taonga and are of emotional and spiritual significance to Moriori. The cultural, historic and spiritual significance of this reserve is, therefore, very high. The Department recognises the role iwi Moriori have as kaitiaki, namely the spiritual guardians of these sacred taonga (iwi Moriori includes all people of Moriori decent).The Reserve is administered under the Reserves Act 1977, currently by the Department of Conservation. Historic reserves are an important part of the reserves system. They exist to protect and preserve in perpetuity places, objects and natural features or other things which are of historic, archaeological, cultural, educational or other special interest (Section 18, Reserves Act 1977).

To assist in this legislative responsibility, this management plan has been prepared. It contains a description and assessment of the Reserve, sets out objectives and policies, and identifies how these are to be implemented.

All inquiries should be addressed to: The Area Manager, Department of Conservation, Te One, Chatham Island, phone (03) 305 0098.



## CONTENTS

<b>1. Introduction</b>	<b>1</b>
1.1 Legal Description	1
1.2 Location and Access	1
1.3 Status	2
1.4 Management	2
1.5 Physical Characteristics: Topography, Geology and Climate	3
1.6 Vegetation	3
1.7 Wildlife	4
1.8 Historic Significance	5
1.9 History and Past Management	5
1.10 Adjoining Land Use	6
1.11 Reserve Evaluation	6
1.12 Conclusion	6
<b>2. Management Objectives</b>	<b>7</b>
2.1 Objectives	7
2.2 Legal basis	7
<b>3. Management Policies</b>	<b>8</b>
3.1 Administration	8
3.2 Plan Amendment and Review	8
3.3 Reserve Boundaries	9
3.4 Fencing	9
3.5 Adjacent Land Use	9
3.6 Protection of Tree Carvings/rakau momori	10
3.7 Removal of Carvings	11
3.8 Fires	11
3.9 Flora and fauna	12
3.10 Ecological Restoration	13
3.11 Access and Tracking	13
3.12 Signs and Interpretation	14
3.13 Interpretation and Educational Use	14
3.14 Buildings	15
3.15 Research and Monitoring	15
3.16 Concessions and other Authorisations	17
<b>Bibliography</b>	<b>18</b>
<b>Appendix 1</b>	
Checklist of indigenous and advenitve plants in J.M. Barker (Hapupu) National Historic Reserve	19

## FIGURES

<b>1. Location of J. M. Barker (Hapupu) National Historic Reserve</b>	<b>1</b>
<b>2. J. M. Barker (Hapupu) National Historic Reserve</b>	<b>2</b>

# 1. Introduction

## 1.1 LEGAL DESCRIPTION

The J. M. Barker (Hapupu) Reserve comprises Lots 1 and 2 D.P. 53087, and Section 1 SO34497, Block VIII, Rekohu Survey District, Chatham Islands.

Area: 30.1055 ha.

## 1.2 LOCATION AND ACCESS

The Reserve is reached by the Taia-Hapupu Road, running from the road to Kaingaroa. Access from the legal road to the signposted and tracked entry to the Reserve is across private land, being an open paddock. Vehicles currently cross this and park adjacent to the fenced reserve.

Figure 1:  
Location of J. M. Barker  
(Hapupu) National Historic  
Reserve

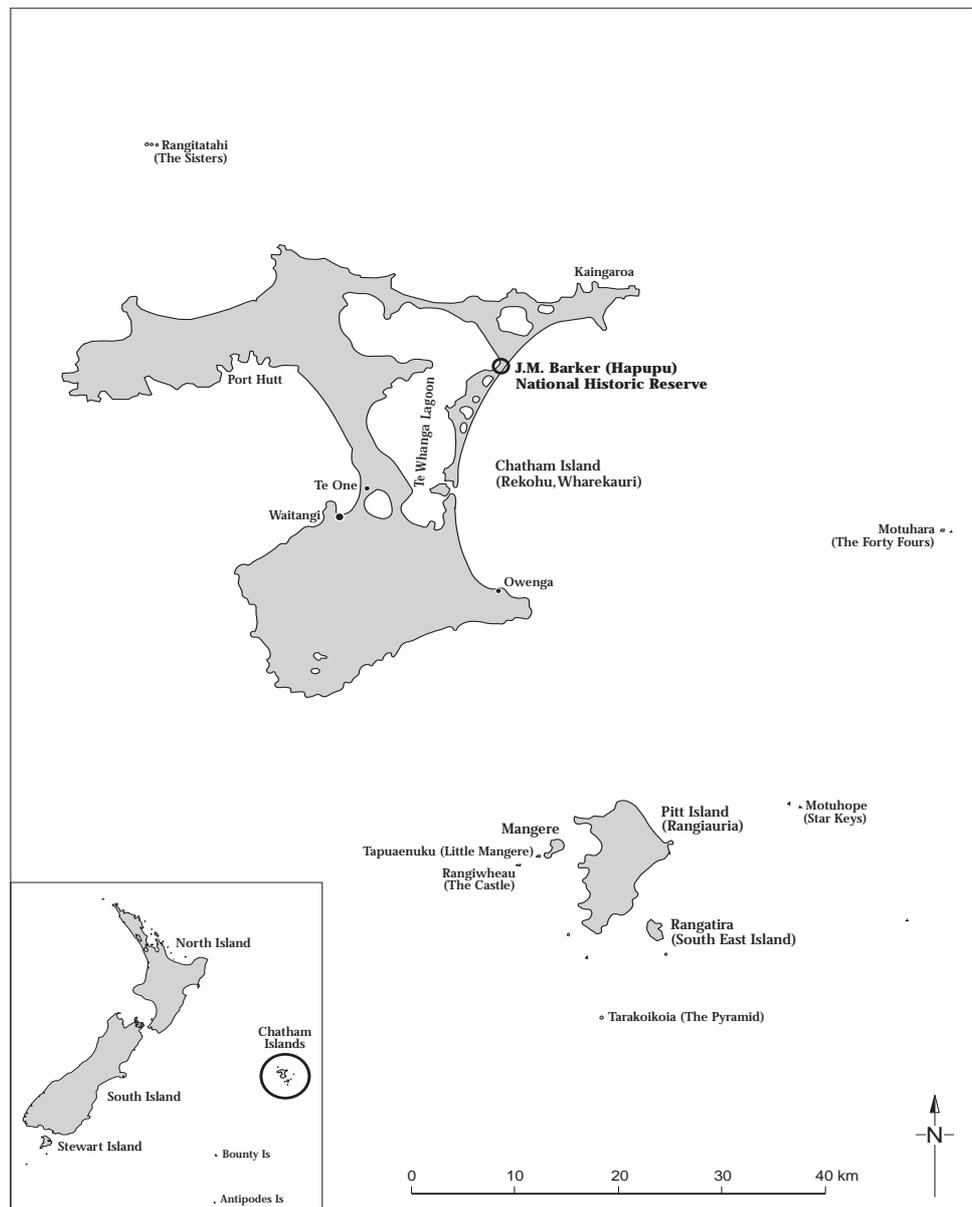
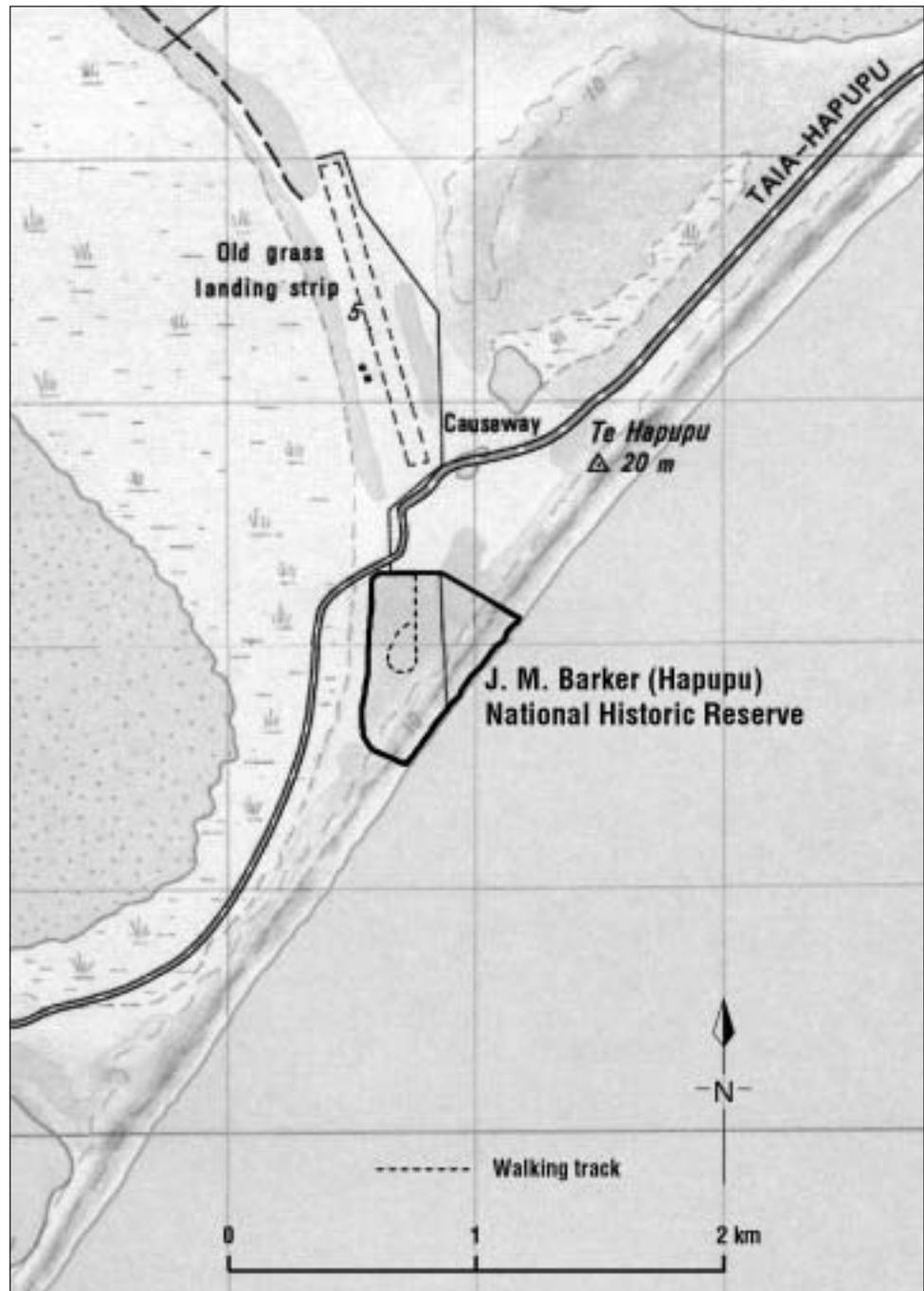


Figure 2:  
J. M. Barker (Hapupu) National  
Historic Reserve



### 1.3 STATUS

The Reserve is classified Historic Reserve (NZ Gazette 1990, page 2983 ). The Reserve was also declared a National Reserve ( NZ Gazette 1996 page 399). The only other historic reserve to receive this status is the Cook Landing Site National Historic Reserve in Gisborne. This reflects its special significance.

### 1.4 MANAGEMENT

The Reserve is currently administered by the Conservator, Department of Conservation, Wellington, under the provisions of the Reserves Act 1977. It is under the day to day management of the Area Manager, Chatham Islands.

There are no leases or licences over the Reserve. The Reserve is to be managed in accordance with its historic classification.

The tree carvings/raukau momori and associated occupational remains are archaeological features within the meaning of the Historic Places Act 1993. Section 10 of this Act provides for the protection of archaeological sites and states:

*“(1) Except pursuant to an authority granted under section 14 of this Act, it shall not be lawful for any person to destroy, damage, or modify, or cause to be destroyed, damaged or modified, the whole or any part of any archaeological site, knowing or having reasonable cause to suspect that it is an archaeological site.*

*(2) Except as provided in section 15 or in section 18 of this Act, it shall not be lawful for any person to carry out any archaeological investigation that may destroy, damage, or modify any archaeological site.”*

## 1.5 PHYSICAL CHARACTERISTICS: TOPOGRAPHY, GEOLOGY AND CLIMATE

### 1 Altitude

The Reserve lies between 0 to 30 metres above mean sea level.

### 2 Topography

The Reserve runs from Mean High Water Mark along Hanson Bay and includes the secondary dune ridge. This is considerably higher than the seaward dune. The Reserve extends inland to the gravel bank bordering the Te Whanga Lagoon wetlands.

### 3 Climate

The climate of the Chatham Islands is typically oceanic with windy and cool conditions.

The Reserve is open to the prevailing southwest winds along its western edge. Being located on the northeastern side of Chatham Island, the Reserve has less rainfall and more sunshine than other parts of the island. The main rain-bearing winds are southeasterlies, and the southern tablelands provide the northeastern areas some orographic shelter from these winds (C. S. Thompson, 1983: The Weather and Climate of the Chatham Islands, Ministry of Transport).

## 1.6 VEGETATION

Fifty one plant species have been recorded in the Reserve (see Appendix 1, Nelson Botanical Society Checklist). Thirty one of these species are indigenous, nine of which are endemic to the Chatham Islands, and twenty one of the identified species are adventive.

Several of the plant species found in the Reserve are of conservation concern to the Department. These include Chatham Island nikau *Rhopalostylis* aff. *sapida* (subspecies *chathamii*), the most southerly palm in the world, and hokataka (*Corokia macrocarpa*) which have been identified as threatened species by the Threatened Plant Committee of the Botanical Society (see Appendix 1).

Kopi (*Corynocarpus laevigatus*), or karaka as it is known in New Zealand, forest covers the majority of the Reserve. It is suggested that Kopi trees may have been introduced to the Chatham Islands by Moriori, as the berries were an important source of food (Atkinson and Millener 1990).

The kopi forest is found on immature podzols soils and windblown sand which are deficient in plant nutrients and may respond to fertiliser. The understorey and open glades in the forest are dominated by Chatham Island mahoe (*Melicytus chathamicus*). The kopi stands on the flat reach to a height of 10-15 metres. Towards the crest of the inner dune, and at the western and southern boundaries, mahoe assumes dominance. Towards the dunes, isolated akeake (*Olearia traversii*) trees grow between the kopi forest and dunes. The forest retains reasonably good canopy integrity as a whole, with the exception of the southern boundary, where there are grass enclaves and “dead” kopi (some of which are now suckering from the bases of their trunks). The exotic plant marram grass (*Ammophila arenaria*), which is considered a plant pest, is found on the dunes in the Reserve along with scattered native shrubs and herbs.

Beneath the canopy of the main kopi stand, it is relatively open with a ground cover of soil, litter and areas of native herbs including nettle.

The forest canopy is relatively simple in composition and has suffered from some storm damage. It is typical of the rear dune forest that would have once been much more extensive in the general area. It is not known how much longer the kopi will live under the present environmental conditions, especially given the vulnerability of the canopy to the salt-laden winds of the frequent storms. In many other parts of the island, grazing combined with wind damage has destroyed the kopi forests containing tree carvings/raukau momori.

## 1.7 WILDLIFE

In 1989 a series of bird surveys in the Reserve identified a range species present including sparrow, fantail, blackbird, chaffinch, redpoll, starling, waxeye, goldfinch, weka, dunnoek (Grant, Andy 1989 Unpublished Data, Department of Conservation). Kakariki have also been observed in the Reserve (Stephen Barker, unpublished site observation).

While reasonably widespread, Chatham Island fantail are still vulnerable due to their small population size.

Buff Weka were re-introduced to the Chatham Islands from Canterbury in 1905, they had been present earlier (possibly introduced by Moriori or Maori ) but had become extinct on the island before 1868 (Oliver W.R.B, 1930, New Zealand Birds Revised and Enlarged Edition).

The Reserve may become an important site for other threatened species, including parea (Chatham Island pigeon), which is critically endangered but is expected to extend its range north to feed on the kopi berries in the Reserve when its population increases in size.

The forest in the vicinity of the Reserve was the last place on Chatham Island that the Chatham Island click beetle was seen.

There are no mustelids present in the Chathams group but possums and rats are present.

## 1.8 HISTORIC SIGNIFICANCE

The presence of the carvings on living kopi trees, known to Moriori as raukau momori and scientifically as dendroglyphs, are of emotional and spiritual significance to Moriori, a distinct group of Polynesian people who have evolved their own unique culture. Moriori are the only Polynesian people known to have carved the bark of living trees.

The Department acknowledges the role iwi Moriori have as kaitiaki – the spiritual guardians – of these sacred taonga.

Past surveys of these tree carvings/raukau momori show that they were once quite extensive on the island. With the development of sheep and cattle farming, many of the forested areas have been removed along with their carvings. The tree carvings/raukau momori were generally associated with Moriori occupation, as noted by Christine Jefferson (1956). Michael King (1989) records:

*“No one knows the exact nature and function of the Moriori dendroglyphs on the kopi. The groves may have served a ritual similar to that of marae or meeting houses (midden outside the circles of trees – but never inside – suggest a tapu/inoa division). They could have been associated with the practice of each person having his or her own tree, and the human images carried on them may have represented those people after their death. This would have been consistent with the widespread Polynesian belief that ancestors were among the atua or gods who controlled and protected the lives of living descendants. Other motifs that appeared on the kopi and on the limestone walls alongside Te Whanga – flounder, seals, albatross – are likely to have represented a deification and hence a protection of the food resources central to Moriori survival.*

*The spirituality of the Moriori is nowhere more apparent than in the surviving dendroglyph groves of kopi. They have a quiet cathedral-like atmosphere: their relative luxuriance silences the otherwise ever-present wind, light strikes the eye and the ground through the leaf canopy in an effect not unlike that produced by stained glass, and the eyes of the dancing Polynesian figures – many of them still vital after two hundred years – look inwards at the human observer. Of such things was the mental soil of the Moriori built up, mulched up layers of metaphorical association. They were, as even the Maori said of them, a very tapu people.”*

## 1.9 HISTORY AND PAST MANAGEMENT

The presence of tree carvings/raukau momori was first reported in European literature in 1876 by W Travers; subsequent references were made by A. Dendy (1901), A. Hamilton (1903), H. Skinner (1923), and Skinner and Baucke (1928). C Jefferson published her monograph in 1956 which reported her extensive field work in the late 1940s. D R Simmons carried out further work in the mid 1960s. The importance of retaining the Reserve was recognised by the previous owner, Barker Bros Ltd, and negotiations for its protection were initiated in the early 1970s. The desirability of the Crown acquiring the area was highlighted by a survey of potential reserve areas on the Chathams in the mid 1970s. Support was also expressed by the NZ Historic Places Trust (NZHPT) (particularly following G S Parks's report in 1976), the NZ Archaeological Association, and the Chatham Islands County Council. In 1979, Barker Bros Ltd generously donated the land to the nation

as a reserve. Council agreed to the closure of the legal road through the Reserve and the road area being added to the Reserve. In 1980 the site was fenced. In recent years iwi Moriori have expressed a concern for their taonga such as the kopi tree carvings/raukau momori, and a desire to be more directly involved in management as a Department Treaty partner in terms of Section 4 of the Conservation Act. Recent policy of NZHPT requires relevant iwi approval before any authority is issued for archaeological investigation in terms of section 10(2) of the Historic Places Trust Act.

## 1.10 ADJOINING LAND USE

The Reserve is part of a long, narrow strip of forest that runs along the northeastern coast of Hanson Bay at the rear of the sand dunes. The forest strip has recently been fenced as a conservation covenant area. The coastal boundary follows the high tide line and is adjacent to the primary dune. The western boundary is adjacent to farmed pasture and a zone of rush land along the edge of Te Whanga Lagoon.

## 1.11 RESERVE EVALUATION

### **1 Historical**

The tree carvings/raukau momori remain amongst the most tangible evidence of tipuna Moriori, and classification of this reserve as National Historic is therefore justified. The Reserve contains one of few concentrations of remaining kopi forests where tree carvings/raukau momori occur on Chatham Island. The carvings have significantly diminished in number over the last 100 years. The key issues are how long active management of the Reserve will protect the carvings, given the kopi will eventually die of old age or storm damage. Further growth of tree trunks and suckers may also diminish carving visibility.

### **2 Botanical**

This reserve contains one of the few remaining areas of kopi forest on Chatham Island; it protects a significant portion of the remaining kopi forest on the island. Nine plant species that are endemic to the Chatham Islands have been recorded in the Reserve, as well as several nationally threatened plant species. Protection of the native flora reinforces protection of the tree carvings/raukau momori.

Generally maintaining the health of the native flora, principally by exclusion of stock, will also benefit the tree carvings, as this removes harmful influences such as the browsing of the understorey, which in turn magnifies the damaging impact of the wind.

## 1.12 CONCLUSION

The primary value of this reserve is historic and cultural, and management emphasis should be placed on retaining the kopi forest in order for the tree carvings/raukau momori to be retained, and Moriori taonga respected.

# 2. Management Objectives

## 2.1 OBJECTIVES

To provide guidance for the overall management of this reserve, the objectives are:

- i To preserve the Moriori tree carvings/raukau momori on the kopi trees for as long as possible.
- ii To involve iwi Moriori in the management of the Reserve and ensure appropriate tikanga is observed.
- iii To survey, record and monitor all tree carvings/raukau momori in the Reserve.
- iv To preserve other historic places in the Reserve.
- v To protect and enhance other natural features in the Reserve, particularly the native flora and fauna.
- vi To provide for public use of the Reserve, in a manner which increases public awareness of the historic and cultural values of the Reserve, providing that this does not conflict with the objectives above.

## 2.2 LEGAL BASIS

The basis for each of these objectives may be found in Section 18 of the Reserves Act 1977, the Historic Places Act 1993, and section 4 of the Conservation Act 1987.

### **Reserves Act 1977**

Section 18. Historic reserves:

“(1) ...the appropriate provisions of this Act shall have effect, in relation to reserves classified as historic reserves, for the purpose of protecting and preserving in perpetuity such places, objects, and natural features, and such things thereon or therein contained as are of historic, archaeological, cultural, educational, and other special interest.

(2) ...that, having regard to the general purposes specified in subsection (1) of this section, every historic reserve shall be so administered and maintained that –  
(a) The structures, objects, and sites illustrate with integrity the history of New Zealand.”

### **Historic Places Act 1993**

The Historic Places Act 1993, Section 11 provides for the protection of archaeological sites and states:

“(1) Any person wanting to destroy or damage or modify the whole or any part of any archaeological site, shall first apply to the Trust for an authority to do so.”

Sections 10 to 20 apply to all archaeological sites and deal with investigations, powers of the Trust, conditions of entry on to a site and review of those conditions. Section 21 deals with rights of entry.

### **Conservation Act 1987**

Conservation Act 1987 provisions which are relevant to the Reserve include Section 4 which requires that the Act will be interpreted and administered so as to give effect to the Principles of the Treaty of Waitangi, and Part IIIB which provides for concessions.

# 3. Management Policies

A range of policy statements considered relevant to this reserve have been prepared to cover features of the Reserve and its use. These policies have been grouped as far as possible according to subject matter.

*Policies related to reserve administration and historic protection*

## 3.1 ADMINISTRATION

### **Policies**

- 1.1.1 To retain administration and management of the Reserve as the responsibility of the Conservator, Department of Conservation, Wellington, and the day to day management as the responsibility of the Area Manager, Chatham Islands, in accordance with the Reserves Act 1977, the Conservation Act 1987, the Historic Places Act 1993, and other relevant legislation.
- 1.1.2 To involve iwi Moriori in the management of the Reserve and to ensure that appropriate tikanga is observed.
- 3.1.3 To maintain liaison with scientific experts and interested parties including the NZ Historic Places Trust, over the appropriate management of the Reserve.

### **Explanation**

It is appropriate that the management of this reserve remain, as it was gifted to the nation and is a national reserve, with the Conservator to be managed in terms of this management plan in consultation with other appropriate groups. It is particularly important that iwi Moriori are involved in the management of the Reserve, given their cultural and spiritual association with it. It is also important that management of the Reserve is carried out in accordance with appropriate tikanga.

### **Implementation**

- 1 The Department to administer the Reserve, involving iwi Moriori in its management, and liaising with scientific experts and interested parties as required.

## 3.2 PLAN AMENDMENT AND REVIEW

### **Policy**

- 3.2.1 To review the management plan as necessary and generally at ten-yearly intervals.

### **Explanation**

Management plans are kept under continuous review to ensure continued relevance for management of the Reserve.

## **Implementation**

Review and amendment of the plan will be carried out in accordance with the procedures outlined in Section 41 of the Act (as amended by the Conservation Law Reform Act 1991).

### **3.3 RESERVE BOUNDARIES**

#### **Policy**

3.3.1 To retain the existing boundaries of the Reserve.

#### **Explanation**

While there are more tree carvings/raukau momori on the kopi trees to the north of the Reserve, the majority of these are now protected by way of a covenant under the Reserves Act. Accordingly the existing boundaries are appropriate.

#### **Implementation**

No action needed.

### **3.4 FENCING**

#### **Policies**

3.4.1 To maintain in good condition the existing fence around the Reserve.

3.4.2 To monitor the appropriateness of the type of fencing.

#### **Explanation**

The existing fence was erected in 1980. By excluding stock, the existing forest has been protected against browsing and ring barking. Regeneration of the forest protects the existing kopi bush and in turn prolongs the life of the kopi trees on which the tree carvings/raukau momori are carved. Whilst the existing fence is in good condition, the type of fencing in the future may need to be reviewed.

#### **Implementation**

The fence will be regularly inspected, at least twice annually by Department staff and the appropriateness of the type of fence will be assessed.

### **3.5 ADJACENT LAND USE**

#### **Policy**

3.5.1 To work with the adjoining land owner and encourage land management practices that are sympathetic to the Reserve and its values, including checking on stock and fences.

### **Explanation**

The adjacent land is currently owned and farmed by Barker Bros Ltd. from whom most of this particular reserve has been gifted. North and south of the existing forest is a continuation of this type of bush which contains further tree carvings/raukau momori (although the bush is not all to the same depth as that at the Reserve). These bush areas have recently been protected by way of a conservation covenant under the Reserves Act (1977). With the fencing of these areas, this will form extra buffer areas for the protection of the Reserve.

Adjoining landowner management will help keep a check on stock and boundary fencing.

### **Implementation**

- 1 Day to day contact between the adjoining land managers and the Department's Area staff based at Te One.
- 2 As and when necessary, liaison between the adjoining landowner and the Department's Wellington Conservancy Office.

## **3.6 PROTECTION OF TREE CARVINGS/RAKAU MOMORI**

### **Policies**

3.6.1 To recognise the provisions of the Historic Places Act 1993 and to cooperate with the NZ Historic Places Trust in the Reserve management.

3.6.2 To consult with iwi Moriori, scientific experts and interested parties to seek views on carving preservation options.

3.6.3 To maintain the visibility of the carvings as appropriate.

3.6.4 To give consideration to duplication of carvings by iwi Moriori.

### **Explanation**

The Reserve is a Historic Reserve, and the provisions of the Historic Places Act 1993 also apply. Co-operation with the NZ Historic Places Trust is required. Trust staff (1992) have indicated the possibility of using techniques to assist in the retention of the carvings. The merits of this needs to be investigated and agreed to by all interested parties (DOC, iwi Moriori, NZHPT, with appropriate scientific advice).

Moss grows naturally on the trees and covers the carvings. For those carvings that are visible from the walking track, it is desirable that the moss is kept clear of the carvings to maintain their visibility. Clearance of moss must be managed carefully and should be monitored so that the tree carvings are not damaged. For example, damage could potentially be caused by the carvings drying out if they are overexposed or inappropriate methods are used to remove the moss. Fencing of the Reserve has led to suckering of the kopi. In some cases this is hiding or could over time destroy the carvings. This growth should be trimmed where appropriate so that it does not destroy the integrity of the carvings.

### **Implementation**

- 1 DOC (Wellington) to maintain liaison with the NZ Historic Places Trust.

- 2 The Department will consult with iwi Moriori and scientific experts seeking to action an agreed outcome on the following options:
  - (a) Do nothing to preserve the carvings.
  - (b) Consider the partial restoration of some of the carvings.
  - (c) Aim to preserve all of the carvings.
- 3 Moss will be cleared from the carvings visible from the current walking track as appropriate. Suckers growing off the trunks of the kopi trees that may hide or distort any of the known carvings will be trimmed where appropriate. These actions will be the responsibility of the Department's Area Office.
- 4 Consideration will be given to allowing Moriori to duplicate the carvings on uncarved trees, once clearer outcomes on preservation options are known (see 2 above). Any duplicate carvings should be identified and recorded in the same manner as the original carvings so their origin can be readily identified.

### 3.7 REMOVAL OF CARVINGS

#### **Policy**

3.7.1 To remove carvings if the host tree is dying or dead.

#### **Explanation**

In the past, sections of the trunks of kopi trees bearing the carvings have been removed to New Zealand and are found in museums in Auckland, Canterbury, Otago, and Okains Bay. In the future their retention in the Chathams will be sought unless exceptional reasons exist. Removal when the trunk is deemed dead does enable the carvings to survive, but obviously is a poor alternative to retaining the carvings *in situ*.

While most of the tree carvings/raukau momori are genuine, there is a small number where it is difficult to decide whether they are of natural or cultural origin.

#### **Implementation**

- 1 To determine, in consultation with iwi Moriori and scientific experts which tree carvings are genuine tree carvings/raukau momori and should be removed for protection when the tree dies. Removal of those carvings where the origin is uncertain will be decided on a case-by-case basis
- 2 Removals will be actioned by the Department in conjunction with iwi Moriori, and subject to any required Historic Places Act approvals.
- 3 Iwi will be notified prior to any tree carvings/raukau momori being removed from the Reserve.
- 4 Any tree carving/raukau momori removed from the Reserve will be documented and its destination recorded.

### 3.8 FIRES

#### **Policies**

3.8.1 Generally oppose any proposal for the the lighting of any fires, including barbecues, within the Reserve. (See Section 94(1)(a) Reserves Act.)

3.8.2 To maintain tight control through permits on the lighting of any open fires, within 1.0 km of the Reserve.

3.8.3 To assist in extinguishing or bringing and maintaining under control any fire in the vicinity of the Reserve which threatens it.

### **Explanation**

Under the Forests and Rural Fires Act 1977, the Department of Conservation is responsible for fire control within the Reserve and a 1 km wide fire safety margin around it. Permits are required to light fires in this area. It is essential that fires be controlled to protect the kopi and the carvings. While the lighting of fires within the Reserve will generally not be approved, section 94 1(a) of the Reserves Act does envisage that approval could be sought to light a fire.

### **Implementation**

- 1 In the event of a fire in the Reserve or any threatening fire in the fire safety margin, the Department will take immediate steps to extinguish the fire in accordance with the operative fire plan, with assistance sought from the Chatham Islands Volunteer Fire Brigade if required.
- 2 Permits for fires within the fire safety margin will only be issued if no threat to the Reserve is possible.

## **3.9 FLORA AND FAUNA**

### **Policies**

3.9.1 In accordance with the Reserves Act 1977, Section 18(2)(c), to aim for the preservation of indigenous flora and fauna.

3.9.2 To control possums in the Reserve.

3.9.3 To control the presence of wekas, cats and rats as appropriate.

3.9.4 To control ecologically threatening plant pest species.

### **Explanation**

The Reserve is administered in terms of Section 18(2)(c) of the Reserves Act 1977, whereby indigenous flora and fauna in the Reserve are to be preserved as far as possible. Pest control is essential to protect and enhance the species diversity and forest structure of the Reserve, and in turn protect the tree carvings/raukau momori. It is recognised that possums have a significant affect on kopi forest, so possum control is an important component of the Reserve management.

Plant and bird species have been surveyed in the Reserve and those present are identified in and sections 1.6 and 1.7 and Appendix 1.

The forest in the vicinity of the Reserve is the last place on Chatham Island that the Chatham Island click beetle was seen, if there are still populations of the click beetle, weka would be one of their main predators.

### **Implementation**

- 1 Possum control will be undertaken as per the Chatham Island Possum Control Plan
- 2 To monitor the biota in the Reserve.

- 3 To undertake regular monitoring of the Reserve for ecologically threatening plant pest species.
- 4 To prepare and implement a pest control plan for the Reserve.
- 5 To carry out a fauna survey in the Reserve

### 3.10 ECOLOGICAL RESTORATION

#### **Policies**

- 3.10.1 Where necessary, to introduce and plant in the Reserve only those seed or nursery stock grown from nearby ecologically appropriate native Chatham Island plants.

#### **Explanation**

The Reserve already supports considerable biological resources in terms of species and communities. However, there may be some species worthy of re-introduction. Also some species may benefit from enhancement plantings e.g., Chatham Island nikau. Revegetating stable grass areas will also help enhance the forest cover. If planting is to occur, native species from the locality and ecologically appropriate for the Reserve should be used.

#### **Implementation**

- 1 Prepare a list of plant and animal species that are appropriate for restoration to the Reserve.
- 2 Identify threatened species for which the Reserve is an appropriate locality for restoration plantings.
- 3 If appropriate, follow up pest control with a revegetation programme.

### 3.11 ACCESS AND TRACKING

#### **Policies**

- 3.11.1 That only foot access be allowed within the Reserve.
- 3.11.2 To maintain a walking track within the Reserve so that the tree carvings/ raukau momori can be viewed, and the impact of visitors on the Reserve is minimised.
- 3.11.3 To ensure that there is legal access between the formed legal road and the Reserve entrance through consultation with the adjacent landowner, as required.

#### **Explanation**

The Reserve can be reached from the Taia-Hapupu formed road, which diverges considerably from the legal road. An alternative vehicle track, which avoids the often flooded causeway through a pond to the north of the Reserve, more closely follows the legal road and 'skirts' the northern edge of the Reserve. Both routes provide access to the signposted reserve entry, though both are over private land. No specific area is marked for parking. Given the low number of visitors to the

Reserve, estimated to be about 1,000 per annum, this informal arrangement may be appropriate.

The existing foot track is currently maintained with the mowing of the grass to the entrance to the Reserve. The edges of the track in the bush are currently marked by small logs. These need to be maintained to provide definition to the track.

### **Implementation**

- 1 If necessary the Department will seek, by way of an easement or other method, to formalise legal access to the Reserve entrance.
- 2 Continue to maintain the Reserve's foot track.
- 3 To maintain the fence around the Reserve to keep out vehicles.

## **3.12 SIGNS AND INTERPRETATION**

### **Policies**

- 3.12.1 To provide such signs as are necessary to identify the Reserve and interpret its features.
- 3.12.2 To encourage the interpretation of the tree carvings/raukau momori as tangible records of Moriori culture.
- 3.12.3 To provide interpretation on the biological values of the Reserve.
- 3.11.4 To develop interpretation material in consultation with iwi Moriori and Barker Bros Ltd.

### **Explanation**

The Reserve is identified on a road sign and on maps. A reserve sign and interpretative panel is at the Reserve entrance, and assists to some extent in understanding the historic value of the Reserve.

### **Implementation**

- 1 The Department will upgrade the current interpretation panel to reflect the cultural significance of the carvings and the area.
- 2 The Department will provide on site interpretation material to raise awareness of the biological importance of the Reserve.
- 3 To develop interpretative material for the Reserve in consultation with iwi Moriori and the Barker Bros. Ltd. (the Reserve donor).

## **3.13 INTERPRETATION AND EDUCATIONAL USE**

### **Policies**

- 3.13.1 To encourage an understanding of the historic and cultural significance of the Reserve as a tangible example of the presence of the Moriori and their activity in the area.
- 3.13.2 To provide an information leaflet that reflects current understanding of the historic nature of the Reserve.

## **Explanation**

Protection of the historic value of the Reserve is the prime consideration in the Reserve management. Location of the Reserve is widely known. It is one of the places to see on the Chatham Islands by visitors. Whilst no monitoring is undertaken of visitors, discussions with locals and tourist operators suggest that the Reserve is a place a visitor should go to visit and appreciate. Current visitor numbers are estimated at fewer than 1000 per annum. The current low key approach is seen as appropriate, given the significance of the Reserve.

An information leaflet was prepared in the early 1980s. This is now not readily available and photocopies are used. It is appropriate to update it and have it available for distribution, or replace it with an alternative pamphlet.

## **Implementation**

The Department will initiate the update of the current explanatory leaflet or the replacement of it with an alternative pamphlet. This will be undertaken in consultation with Iwi Moriori.

### **3.14 BUILDINGS**

#### **Policy**

3.14.1 To generally oppose the erection of buildings on the Reserve, with the exception of considering the possibility of toilets on the grassed edge of the Reserve.

#### **Explanation**

There are no buildings within the Reserve and none are seen as desirable, unless at some time in the future the level of visitor use justifies the provision of toilets.

#### **Implementation**

- 1 To currently oppose any proposal for the erection of buildings on the Reserve.
- 2 The Department will assess the need for toilets at the Reserve on an ongoing basis.

### **3.15 RESEARCH AND MONITORING**

#### **Policies**

3.15.1 To fully record and monitor the carved trees within the Reserve.

3.15.2 To undertake and encourage appropriate research into the ecology and health of the kopi and the understanding and protection of the tree carvings.

3.15.3 To initiate or encourage appropriate research into the ecology of the kopi to maximise their longevity.

3.15.4 To establish a programme to record the growth of the kopi.

3.15.5 To encourage the retention of existing records, papers, photographs, maps and other records made in the past of the carvings.

3.15.6 To encourage non-invasive archaeological investigations into the significance and understanding of the carvings.

3.15.7 To monitor the Reserve to evaluate the condition of the biota.

### **Explanation**

Recordings of the carvings have been undertaken by Skinner, Jefferson and Simmons in 1913, 1947 and 1963-4. In 1976, G S Parks from the Otago Museum provided a report on the necessary protection of the carvings. In 1997 the Department re-recorded the carvings and tagged all carved trees located.

Jefferson's work is largely a stylistic analysis of the art motifs contained in the carvings. Her descriptions of the locations and groupings of the carvings are not very clear.

D R Simmons's expedition in 1963-4 looked at the problem of preservation of the carvings, and studied their distribution and relationship to settlement history. Simmons recorded the problem of relocating trees in the bush.

Parks noted the difficulty of distinguishing at first all but the clearest examples and the impossibility of accurately locating the exact location of each carving.

Accordingly, it is very difficult to match past recordings with what is actually there now. By using satellite technology, a very accurate fix to within one metre can be made of individual trees and the carvings within the Reserve. Complementing this with both photographic records and other means of identifying sites, will all assist in long term research. Proposals to implement this are being investigated.

Current understanding of the significance of the tree carvings/raukau momori is based on field work carried out in the 1940s and 1960s. There appears to be a dearth of on-site archaeological investigation to help assist in either confirming views and information recorded by Skinner, Jefferson and Simmons, in light of today's understanding and scientific techniques. Given the significance of the carvings, an ongoing investigative programme is merited.

Little appears to be known about the kopi, its age, what conditions ensure its continued survival. It is important that work of this nature is undertaken.

Parks, in his 1976 report to the NZ Historic Places Trust, raised the question of existing records. He noted that:

*"Jefferson's work survives only in the form of her monograph. The drawings published therein represent only a small number of the total she made, and there were presumably also sketch maps showing locations. Miss Jefferson died recently, and her papers have not been able to be traced. Neither the Polynesian Society nor Canterbury Museum, both of which institutions were connected with her work, have any material. It is greatly to be hoped that her records do survive somewhere.*

*Simmons's work was full and detailed, but only brief accounts have been published. As has been acknowledged, Simmons made his notes available for the present survey, but it is to be hoped that those and his extensive photographic records will be available in a published form in the not too distant future."*

### **Implementation**

- 1 The Department will record and map the location of the carvings in the Reserve, using GPS survey techniques.
- 2 Numbered metal tags will be used to identify the location of kopi with carvings.

- 3 A monitoring programme will be actioned as soon as practical after the above recording has been completed. Fixed photograph points will be established to monitor selected carvings.
- 4 The Department will regularly monitor the condition of the biota in the Reserve (for example using the existing vegetation monitoring plot).
- 5 Current knowledge of kopi ecology will be sought and if necessary research initiated to gain a better understanding of the kopi, their survival and the protection of the tree carvings.
- 6 The Department will approach museums, the Polynesian Society and other organisations to locate and support the retention of existing records.

### 3.16 CONCESSIONS AND OTHER AUTHORISATIONS

#### **Policy**

- 3.16.1 To ensure the values of the Reserve are not compromised by activities in the Reserve which require a concession or other authorisation.
- 3.16.2 To ensure that applications for concessions and other authorisations are considered in accordance with the management objectives of the Reserve.
- 3.16.3 To ensure that concessions and other authorisations are issued in accordance with appropriate tikanga.

#### **Explanation**

Most activities, such as the taking of plants, animals or geological material, the landing of aircraft, or conducting a trade, business or occupation within the Reserve, will be required to obtain a concession or other appropriate authorisation issued under the Reserves Act. This includes the taking of photos or filming for commercial purposes.

#### **Implementations**

- 1 Applications for concessions within the J. M. Barker (Hapupu) National Historic Reserve will be processed in accordance with the Reserves Act, Conservation Act, Conservation Management Strategy, and taking into account the management objectives of the Reserve.
- 2 The Department will consult with iwi Moriori over applications for any new concessions or other authorisations within the Reserve.
- 3 Concessions will be monitored to ensure compliance with the conditions and to ensure that any adverse effects on the natural and historical values of the area are kept to a minimum as a result of the activity.

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# Appendix 1: Checklist of indigenous and adventive plants in J.M. Barker (Hapupu) National Historic Reserve

The following plant checklist was prepared by the Nelson Botanical Society (compiled by Graham Jane 1997). Some additions have been made from herbarium specimens and botanical reports about the Reserve. Nomenclature follows de Lange *et al.* (1999).

Fifty one plant taxa have been recorded in J. M. Barker (Hapupu) National Historic Reserve. Thirty one of those are indigenous plant species and twenty are adventive. Six species are listed as nationally threatened species (the status is taken from Cameron *et al.* 1995).

LATIN NAME	OTHER NAME	STATUS
<b>Gymnosperm trees and shrubs (0)</b>		
None		
<b>Monocotyledonous trees and shrubs (1)</b>		
<i>Rhopalostylis</i> (aff. <i>sapida</i> )	Chatham Island nikau	Vulnerable
<b>Dicotyledonous trees and shrubs (13)</b>		
<i>Coprosma acerosa</i>	sand coprosma	
<i>Coprosma chathamica</i>	Chatham Island karamu	
<i>Corokia macrocarpa</i>	korkio, hokotata, whakatata	Rare
<i>Corynocarpus laevigatus</i>	karaka, kopi	
<i>Leucopogon</i> aff. <i>parviflorus</i>		Local
<i>Macropiper excelsum</i>	kawakawa	
<i>Melicytus chathamicus</i>	chatham Island mahoe	
<i>Myrsine chathamica</i>	Chatham Island mapou	
<i>Olearia traversii</i>	akeake	Rare
<i>Pimelea arenaria</i>	autetaranga, sand daphne	Rare
<i>Pseudopanax chathamicum</i>	hoho	

LATIN NAME	OTHER NAME	STATUS
<i>Solanum aviculare</i>	poroporo	
<i>Solanum laciniatum</i>	poroporo	
<b>Monocotyledonous lianes (0)</b>		
None		
<b>Dicotyledonous lianes and related trailing plants (2)</b>		
<i>Calystegia tuguriorum</i>	NZ bindweed	
<i>Muehlenbeckia australis</i>	pohuehue	
<b>Psilopsids, Lycopods &amp; Quillworts (0)</b>		
None		
<b>Ferns (2)</b>		
<i>Pteris tremula</i>	turawera, shaking brake	
<i>Pyrrosia eleagnifolia</i>	leather-leaf fern	
<b>Orchids (0)</b>		
None		
<b>Grasses (7)</b>		
* <i>Agrostis capillaris</i> ( <i>A. tenuis</i> )	browntop	
* <i>Ammophila arenaria</i>	marram	
* <i>Anthoxanthum odoratum</i>	sweet vernal	
* <i>Dactylis glomerata</i>	cocksfoot	
* <i>Holcus lanatus</i>	yorkshire fog	
<i>Lachnagrostis billardiarei</i>		
* <i>Lagurus ovatus</i>	harestail	
<b>Sedges (4)</b>		
<i>Carex ventosa</i>	sedge	Insufficiently known
<i>Isolepis nodosa</i>	wiwi, leafless sedge	
<i>Uncinia rupestris</i>		
<i>Uncinia uncinata</i>	watu	

LATIN NAME	OTHER NAME	STATUS
<b>Rushes and allied plants (0)</b>		
None		
<b>Monocotyledonous herbs (1)</b>		
<i>Phormium</i> aff. <i>tenax</i>	Chatham Island harakeke	
<b>Daisy-like herbs (7)</b>		
* <i>Achillea millefolium</i>	yarrow	
* <i>Cirsium vulgare</i>	scotch thistle	
* <i>Crepis capillaris</i>	hawkesbeard	
<i>Leptinella potentillina</i>	crenate-leaved pin cushion)	
* <i>Senecio</i> aff. <i>glomeratus</i> ( <i>Erechtites quadridentatus</i> var. <i>traversii</i> )	fireweed	
* <i>Sonchus oleraceus</i>	sow thistle, puha,puka	
* <i>Taraxacum officinale</i>	dandelion	
<b>Dicotyledonous herbs other than Composites (14)</b>		
* <i>Acaena novae-zelandiae</i>	red bidibid,piripiri	
<i>Apium prostratum</i>	native celery	
<i>Australina pusilla</i>		
* <i>Cerastium glomeratum</i>	annual mouse-eared chickweed	
* <i>Galium aparine</i>	cleavers	
* <i>Geranium molle</i>	dove's foot, crane's bill	
<i>Hydrocotyle novae-zeelandiae</i>	common pennywort	
* <i>Medicago sativa</i>	lucerne	
<i>Pratia arenaria</i>	pratia	
* <i>Stellaria media</i>	chickweed	
<i>Tetragonia implexicoma</i>	New Zealand spinach	
* <i>Torilis nodosa</i>	hedgehog parsley	
* <i>Trifolium repens</i>	white clover	
<i>Urtica australis</i>	southern nettle	

\* indicates species is believed to be adventive to Chatham Islands.