

# Chatham Islands Conservation Management Strategy

AUGUST 1999



Department of Conservation  
*Te Papa Atawhai*

# Chatham Islands Conservation Management Strategy

August 1999

Published by:  
Department of Conservation  
PO Box 5086  
Wellington  
New Zealand

**Wellington Conservancy Conservation Management Planning Series No. 8**  
**ISSN 1172-9406**  
**ISBN 0-478-21894-X**

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# Foreword

The Chatham Islands environment is special; rich in its variety of indigenous plants and animals, historic relics and landscapes. Many of the plants and animals found at the Chatham Islands are unique and are found only there, making these islands particularly significant for conservation. The Chatham Island community has strong ties to its land and resources and a high awareness of conservation issues. Many of the islanders are actively involved in the guardianship of these natural and historic resources.

The Chatham Islands Conservation Management Strategy (CMS) which was prepared in accordance with Part IIIA of the Conservation Act 1987, recognises the special significance of the Chatham Islands and the need for the Department to work closely with the island community in achieving conservation results. It sets out the management directions for the Department in the Chatham Islands over the next ten years.

A conservation management strategy is a statutory document which implements general policies and establishes objectives for the integrated management of natural (including land and species) and historic resources. Its effects are quite important. Some activities on land administered by the Department can only take place by and in accordance with the conservation management strategy. Those preparing regional and district plans under the Resource Management Act must have regard to any relevant conservation management strategy. It must be noted however, that a CMS is generally a statement of intent and, although in itself a document having statutory backing, it does not override the provisions of legislation and general policy.

This CMS has been prepared in consultation with the Chatham Island Conservation Board and was available for public comment from May to October 1996, with a total of 26 submissions received. Formal hearings before representatives of the Conservation Board and the Department were held for nine submitters who spoke in support of their submissions. All submissions received are summarised in a separate document.

After considering all the submissions a summary of them was prepared and the draft CMS was revised. The revised draft CMS and a summary of the submissions were presented to the Chatham Island Conservation Board for its consideration. The Board requested further amendments to ensure that the document played due attention to public opinion as expressed through submissions and consultation.

In March 1999 the Board submitted the CMS to the New Zealand Conservation Authority for approval. A committee of the Authority met the Board on Chatham Island and discussed relevant issues with Board members. The Authority consulted the Minister of Conservation and requested further amendments. The amendments were made and this Conservation Management Strategy was subsequently approved by the New Zealand Conservation Authority on 12 August 1999.



Sir Duncan McMullin  
Chairperson  
New Zealand Conservation Authority  
August 1999

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# SECTION 1

## Introduction



# 1. Introduction

## 1.1 HOW TO USE THIS DOCUMENT

The Chatham Islands Conservation Management Strategy is a complex document. It can be studied by reading just those sections dealing with a specific place (see Part 5) or a specific issue (see Part 6). However, to get a fuller picture of the Department's responsibilities, wider reading of the document is needed.

The CMS contains seven major sections, setting out departmental management directions for the next ten years and schedules of the lands managed by the Department, which should be read in conjunction with Parts 1 to 7.

## 1.2 WHAT IS A CONSERVATION MANAGEMENT STRATEGY?

Conservation Management Strategies (CMSs) are a statutory requirement of the Conservation Act 1987 and are being prepared for each of the 13 conservancies administered by the Department of Conservation in New Zealand. Their purpose is to implement general policies<sup>1</sup> and to establish objectives for the integrated management of natural and historic resources, including any species managed by the Department, and for recreation, tourism and other conservation purposes.

In the past, the Department prepared separate management plans for areas and species. The CMS is a new approach that provides for the integrated management of all areas, species and activities managed by the Department within a wider area. The CMS provides an integrated picture of the Department's management and advocacy and a direction in which to develop over the ten-year span of the CMS. The Chatham Islands CMS answers the following basic questions:

- What are the conservation issues in the Chatham Islands?
- How will the Department liaise with individuals and groups to maximise conservation?
- What are the statutory obligations?
- What are the Department's priority tasks?
- What realistic objectives can be set for the next ten years?

How will the objectives be implemented?

The CMS covers all natural, historic and recreational resources managed by the Department within the Chatham Islands. All areas managed by the Department are identified in the Schedules to this CMS, in text and map form, as required by section 17D(7) of the Conservation Act.

The CMS also covers the management of protected species in all areas, the protection of freshwater fish (other than eels), marine mammal protection, and wild animal control across all land in the Chathams. This is because the Department has statutory responsibility for these matters, even when the Department may not be responsible for managing those areas.

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<sup>1</sup> The only current general policy that may be relevant to the Chathams being the New Zealand Walkways Policy (1995).

Raising public awareness and knowledge on conservation issues, both on and off areas managed by the Department, is an integral part of conservation and advocacy and is outlined in this CMS.

The CMS is linked to the preparation of annual business plans. The Conservancy business plan determines the relative allocation of resources between different activities of the Department for each business year. An important function of the business plan is to ensure that objectives and policies in the CMS are implemented.

### 1.3 FUNCTIONS AND ROLES

The New Zealand Conservation Authority functions include approving and reviewing conservation management strategies and advising on general conservation policy and its effectiveness. The Minister of Conservation approves all statements of general policy (except national park policy), which the Director-General then implements.

The function of the Chatham Islands Conservation Board is to recommend the approval of the CMS to the New Zealand Conservation Authority, to provide direction for any CMPs, to advise on their implementation, to propose new walkways and to advise the New Zealand Conservation Authority and Director-General on conservation matters generally. The Board may also pursue these interests at public forums and statutory hearings.

The Wellington Conservancy of the Department includes the Chatham Islands. The Conservancy Office is situated in Wellington and has an Area Office at Te One on Chatham Island. The Department's function is to manage the natural and historic resources entrusted to it and to advocate conservation generally.

### 1.4 RELATIONSHIP BETWEEN RESOURCE MANAGEMENT ACT AND CONSERVATION ACT

In comparison to mainland New Zealand, natural and historic resources in the Chathams are widespread, the Department's land holdings are comparatively small, and many key species, habitats and ecosystems are not on lands managed by the Department. Therefore, the Department cannot protect natural and historic resources simply through legislation over its lands; it must also depend on the community implementing its own controls. A principal means for community control is the Resource Management Act as implemented by the Chatham Islands Council. The aim of the Resource Management Act is to achieve sustainable management of natural and physical resources as set out in Part II of the Act (see Appendix 2).

'Sustainable management' under the Resource Management Act and 'conservation' under the Conservation Act involve two administering bodies (the council and the Department respectively) and the land and resources affected are largely separate. The council is preparing a single planning document covering all Resource Management Act matters on the islands and in the adjoining coastal marine area. The protection and preservation of natural and historic resources, including indigenous species and their habitats, under the umbrella of sustainable management, will be a key part of the council's Resource Management Act document. In the preparation of this document, the council must have regard to the CMS and consider how its policies and rules should apply to land managed by the Department.



# SECTION 2

## Chatham Islands



## 2. Chatham Islands

### 2.1 AN OVERVIEW

The Chathams, a group of islands with mainland New Zealand to the west, are as remote as the Subantarctic islands and the Kermadec Islands. They were the last islands to be permanently settled as people swept through and colonised the Pacific; the last islands to experience the full effects of human settlement on the Pacific's unique flora and fauna.

For all residents of the Chatham Islands, whether of Moriori, European or Maori descent, ancestral ties to the land and resources are strong. Isolation and difficult transport are now becoming history, though Pitt Island is still the most isolated rural community in New Zealand territory. Independence of thought and action is characteristic and is expressed by some as a desire for greater autonomy from New Zealand Government control. The call for more independence partly results from the history of government involvement in the Chathams, which at times involved heavy use of subsidies. In part this is already happening with new administrative and commercial systems now in place such as:

- a community-controlled Enterprise Trust currently running the airport, harbours and energy supply, and actively promoting development
- a regular, more efficient, unsubsidised shipping service
- regular airline services
- community initiatives such as a TV and a radio station
- modern telecommunication systems

The single local authority, the Chatham Islands Council, is also emerging from the effects of past Government control and is finding its feet within the requirements of new legislation (e.g., the Resource Management Act and the Biosecurity Act), but is struggling with limited resources. The council has a minimal history of resource planning (in some cases because of the lack of need) and barely meets its legislative functions compared with other New Zealand councils. While the council 'finds its feet', agencies such as the Enterprise Trust and the Department of Conservation are receiving some criticism for being perceived to be involved in traditional council roles.

Islanders' awareness of natural and historic resource loss, on both land and sea, is generally high. There is interest in exchanging and gaining, and protecting and restoring the islands' natural resources. This is significant, given that there are comparatively few reserves or conservation areas. Many threatened fauna and flora species and historic places are on private lands, including privately owned islands, and land holdings are comparatively few in number. The combination of the Chathams' settlement history, their distinctive population, and unique natural and historic values give a fascination to the Chathams for many, as seen in the growing number of visitors.

Government conservation agency management has moved from an initial Wildlife Service focus on some endangered species with limited community involvement, through a period of joint Wildlife Service and Department of Lands and Survey action with greater land and reserve acquisition, to the present and increased Department of Conservation presence.

MAP 1: CHATHAM ISLANDS



Regeneration within the Tuku Nature Reserve, a reserve gifted to the nation.



Alongside the Department is the Chatham Islands Conservation Board, the first such board for the Chathams (unlike the history of national parks boards and reserve boards elsewhere in New Zealand). Given the small population on the Chatham Islands, the Conservation Board has a very high participation rate. Many Chatham Islanders have iwi affiliations, and, like the board, iwi are exploring and developing their role with respect to the Department's responsibilities. The Pitt Island Reserves Committee was established to work with the Department. A significant result of community conservation involvement is the large number of protective covenants and kawenata volunteered over private land, and significant gifted reserve areas. The challenge for the Department and this Conservation Management Strategy over the next ten years is to read the patterns of change happening on the Chathams,

to become part of, or at least work well with, the islands' community, to encourage community responsibility for their unique resource, to support the practice of sustainable resource management, and to see retained for the world the unique natural and historic values of the Chatham Islands.

The opportunity exists for the Chathams to become a fine example of a community that cares for and protects its natural environment.

## 2.2 THE NEW ZEALAND CONTEXT

Table 1 lists features that illustrate how the Chatham Islands fit into the New Zealand conservation setting. The picture that emerges is of an area small in size and population but ranking highly for its natural and historic values and management issues.

## 2.3 THE LAND AND THE PEOPLE

The Chatham Islands are located about 860 kilometres due east of Christchurch, New Zealand at about latitude 44°S. They have a total land area of about 97,000 hectares, which is spread unevenly amongst some 40 different islands. Chatham Island (90,000 hectares) and Pitt Island (6,190 hectares) are the only two islands permanently inhabited by people. The other islands, islets and rocks are much smaller by comparison. Numerous reefs also exist.

The islands are located at the eastern extension of the Chatham Rise, which runs due west toward New Zealand and which, together with Campbell Plateau, Lord Howe Rise, Norfolk Rise and Three Kings Rise, is considered to be part of the ancient supercontinent, Gondwanaland.

The islands are the only part of the Chatham Rise above sea level. This results in part from block faulting initiated about 100 million years ago and exposing formations of older rocks of which the basement rock, Chatham Schist,<sup>1</sup> is the oldest, and in part from repeated episodes of basaltic volcanism in the last 80 million

TABLE 1: CHATHAM ISLANDS IN A NATIONAL CONTEXT

FEATURE	CHATHAM ISLANDS	PERCENTAGE OF NATIONAL TOTAL
Human population	760	0.02%
Land area (not including Te Whanga)	97,000 ha approx.	0.36%
Territorial sea area	934,000 ha approx.	9% approx.
Ecological districts	1	0.04%
Threatened <sup>1</sup> birds	14	20%
Threatened reptiles	1	5%
Threatened freshwater fish	7	8.5%
Threatened invertebrates <sup>2</sup>	5+	6%
Threatened plants	13	14%
Endemic seaweeds	7	0.84%
Animal pests	12	46%
Problem weeds	8	12%
Geopreservation sites	31	1.23%
Fire risk	Fire danger high in summer	Potential for extreme conditions
Land area managed by Department	7,129 hectares	0.09%
Reserves	18	0.45%
Forest Heritage Fund covenants/Nga Whenua Rahui kawenata	17+	n/a
Predator-free outlying islands	7	18%
Known bird extinctions	26 <sup>3</sup>	53% <sup>4</sup>

1. *'Threatened' includes category A, B species as listed in Table 18.*
2. *The Chathams' invertebrate fauna is far from fully recorded.*
3. *Some of these birds remain extant elsewhere in New Zealand.*
4. *Based on current understanding of species loss.*



years. Different formations of limestone and other associated sedimentary rocks indicate episodes and prolonged histories of marine submergence and emergence. This has largely been due to sea level changes associated with the ice ages from the late Pliocene era (two million years ago) through the Pleistocene to the present. The islands lie in the convergence zone of the colder (northbound) ocean currents from the south and the warmer (southbound) ocean currents from the north. Through fossil comparisons the islands are considered to have been located in this convergence zone for more than two million years.

Climatically, the islands reflect their mid-latitude oceanic setting. Temperate conditions predominate (around 20°C in midsummer and 5°C to 8°C in midwinter) with mists associated with the ocean current convergence, and strong prevailing north-west and south-west winds.

Today, both the flora and fauna indigenous to the Chathams are reduced to remnants as a result of land uses and practices since human arrival, and human-related events such as fires and pests.

The remnants are indicative of a very distinctive set of ecosystems that evolved under the conditions of isolation, convergence zone, climate and geology. These ecosystems and their species composition are well known for their endemism and diversity. The Chathams group has the highest level of plant endemism of any New Zealand biogeographic region. The Chatham Islands support two main coastal mixed broadleaved forest types, one dominated by kopi and the other by akeake, and one wetland shrubland community. Each of these communities comprises many endemic species. The islands have also seen the evolution of endemic fauna, both land and marine.

While now protected as reserves and undergoing habitat rehabilitation, Rangatira and Mangere islands were formerly being deforested and used for grazing. The other smaller islands now exist in a largely natural state.

Today the Chathams can be described as a unique set of landscapes in both New Zealand and international terms. Their remote, isolated marine setting and climatic influence, their physical make-up and their biological richness and diversity set the Chatham Islands apart in terms of their distinct natural character and values. The New Zealand geopreservation inventory (Kenny and Hayward, 1993) lists 31 sites of nationally important geological interest, and there are 11 plant, 16 bird and over 50 invertebrate and one lizard species endemic to the islands.

As with New Zealand's other outlying islands, the Chathams' visual character is as strongly influenced by the oceanic isolation and setting as by its physical characteristics. The Pacific Ocean is always physically and visually close anywhere on the islands. With the relatively open topography, both the sea and the sky are always a major physical and visual influence. Sea mists and rain squalls, and the changing light and moods of both the sea and sky are characteristic features of the Chathams' visual landscape.

The Chathams' population now is estimated to be about 760. The population structure reflects a predominantly middle-aged workforce. Teenagers and young adults attend mainland New Zealand schools and training institutions, and many remain away from the islands except for visits. Similarly, there are proportionately fewer older people on the islands than on the mainland.

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<sup>1</sup> Similar in composition, age and history to the greywacke and schist rocks of Otago and Canterbury (Campbell, 1993)

There is a growing community desire to support conservation projects, and opportunities for participation in such projects are expanding.

The Department needs to work well with the community and public agencies, such as the council and other Government departments, to clarify respective roles and develop partnerships and productive working relationships.

In terms of human occupation and settlement, the Chatham Islands have a unique history. Chatham Islands residents are descended from three cultural groups (Mori from about 1500 AD, and European and Maori from the late 1700s onwards). Settlement is now largely mixed in patterns that tend to reflect resource use. The larger communities are located at Waitangi, Owenga, Kaingaroa, Port Hutt, Flower Pot and Te One, where livelihoods are derived from the sea, and farming. Farming features significantly throughout Chatham and Pitt islands with the larger, more extensive farms on the more difficult peat areas of north and south Chatham Island, and generally smaller, more intensively run farms occurring on the middle, more fertile limestone-derived soils of Chatham Island and the fertile Pitt Island.

## 2.4 BIODIVERSITY

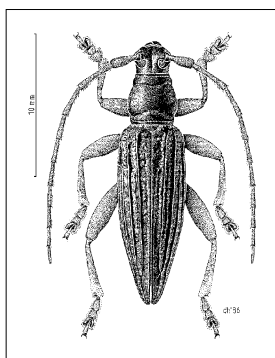
Biodiversity is the variety of all life on earth: plants, animals and micro-organisms, the genes they contain and the ecosystems they form. It is not a static concept, but recognises the interrelations of all parts of the biological world. Without a diversity of life forms to call on we could not adapt to changing environmental conditions. To maintain biodiversity is to maintain our future options. (New Zealand's Biodiversity: An Overview. Department of Conservation, 1994).

As described in 2.2 (The New Zealand Context) and Table 1, the islands are exceedingly rich in the variety of New Zealand's indigenous biodiversity. On a land area of less than half a per cent of the nation's total land area that is home to an even smaller percentage of New Zealand's population, a disproportionate and remarkable amount of indigenous biodiversity can be found.

In addition, the vast expanse of ocean that surrounds the Chatham Islands is rich in marine life supporting valuable fisheries resources, internationally significant populations of seabirds and nationally significant populations of whales, dolphins and seals. Te Whanga is one of the least modified coastal lagoons in New Zealand. The small size of the Chatham Islands within the surrounding seas means that marine/terrestrial interactions are of outstanding importance for the functioning of the island ecosystems; for example, plant species that are characteristic of bird-influenced high phosphate soils.

Many of the plants and animals, including marine species, found at the Chatham Islands are endemic, that is, they are found only at the Chatham Islands. Others are endemic to New Zealand, and still others are indigenous (found naturally in New Zealand, as well as in other countries). The Chatham Islands are also important in the life cycles of some migratory birds, from as far afield as Siberia.

Twenty percent of New Zealand's threatened birds (forest and seabirds) and 8.5 percent of threatened freshwater fish are found on the Chatham Islands, along with 14 percent of the threatened plants, and lesser but still significant percentages of threatened reptiles and invertebrates. These include the black robin, Chatham Island toetoe and speargrass, and the Pitt Island longhorn beetle (now considered extinct on Pitt Island).



Pitt Island longhorn beetle. (D. W. Helmore. Manaaki Whenua - Landcare Research.)

The large size and abundance of coastal fish and their near pristine habitat is a feature of the Chathams. Biogeographically the marine flora and fauna is unique with many species that are abundant or dominant in mainland New Zealand absent, e.g., intertidal crabs and barnacles. Several species of seaweed, sponges and shellfish and some fish are endemic to the Chathams. The ocean currents flowing between mainland New Zealand and the Chathams control the ability of larval forms to reach the islands and become established, hence the unusual assemblage of the species. The Department believes there are a number of other species, particularly invertebrates, that are yet to be discovered. In 1994 a new freshwater fish species, *Galaxias rekohua*, was discovered. Other species believed to have been extinct have been rediscovered in isolated populations, such as the seabird, taiko, rediscovered in 1978.

However, the Chathams' indigenous biodiversity (including the endemic species) has changed dramatically since the arrival of humans, as a result of hunting and fishing, loss of habitat and the introduction of new species.



Tapuaenuku (Little Mangere)  
from south-west Mangere.  
(Photo: Andrew Grant)

Endemic species have evolved as highly specialised forms of plants and animals, lacking the ability to cope with the changes introduced by human arrival. Many species now survive in small, localised populations, vulnerable to any disturbance. Some of these have been given taonga status by Iwi.

About fifty percent of the bird species present at the time of the first European contact are today either extinct, endangered or severely reduced in numbers.

Forest cover is now much reduced, with many of the formerly clad areas reclothed in bracken and umbrella ferns, or pasture. Many small remnant forest areas are under pressure from feral stock and wind damage (due to reduced canopy cover), and animal pests are also damaging these areas.

The Chathams' land ecosystems and indigenous vegetation types are not well represented in protected areas, compared to mainland New Zealand. Those areas left are depleted remnants, vulnerable and fragmented. Wetlands have suffered misfortunes similar to those affecting forest cover. While there are no marine reserves, there are 15 non-commercial fishing areas established by the local community and now recognised by legislation. Eleven of these are around Chatham Island (one of which is in Te whanga Lagoon) and four are around Pitt Island. Losses and damages to these habitats have contributed to the extinction and threatened status of much indigenous biodiversity.

Some of the animal pests and problem weeds found on mainland New Zealand are also found on the Chathams, although there are some differences in the invasive plant types.

A recent publication (Davis, Heywood and Hamilton, 1995), in choosing the Chathams as one of the 'Centres of Plant Diversity' in a worldwide context, highlights the international importance of the indigenous biodiversity of the Chathams.

There are some predator-free islands (helped to stay this way by stringent visitor rules), and work is ongoing to ensure some areas on the main islands are as free from predators, pests and weeds as possible.

## 2.5 HISTORY

The Chathams are rich in physical and cultural history. More than 700 archaeological sites are recorded on the islands, and many more remain unrecorded. These are legally protected under the Historic Places Act 1996, regardless of where they are situated.

Physical evidence of early Moriori occupation includes tree carvings such as at Hapupu, and occupation sites, burials and wahi tapu. These are found largely on Chatham and Pitt islands, and to a much lesser extent on the other islands. There are also culturally and spiritually significant areas which may not be physically evident but which are very important historically.

European historic sites relate to whaling, sealing, missionaries, pastoralism, horticulture and fishing. An important example of early European settlement (on land managed by the Department) is Glory Cottage on Pitt Island.

Evidence of Maori settlement is more recent, and largely intermingled with European settlement. Many historic Maori places are closely associated with spiritual significance, but with less physical evidence.

## 2.6 RECREATION

The Department manages only limited areas of land on the Chathams and these areas are highly valued for their natural and historic resources. Correspondingly, the recreation opportunities provided and facilities managed by the Department are limited. Those under its management include tracks to and within reserves (i.e., Hapupu, Nikau Bush, Henga and Thomas Mohi Tuuta – Rangaika reserves). No huts, shelters or camp-sites are provided at present, however, there are opportunities for recreation.

Presently, only about 750 visitors come to the Chathams each year, and most remain on Chatham Island. However, as travel costs become more competitive, visitor numbers are rising. The richness of the islands' natural and human history appeals to both organised tour groups and independent travellers.

As visitor numbers continue to increase, the Department will need to consider its facilities, such as basic camp-sites and access, depending on what facilities the community provides. The provision of general and visitor access information will improve, as demand increases.

## 2.7 BACKGROUND READING

The following texts are recommended for readers who want more information on the Chatham Islands, their history, community and present resource issues, (see also the bibliography for further references and publisher details for the following):

Sutton, D.G. 1994. *The Moriori in the Chatham Islands*.

Richards, R. 1982. *Whaling and Sealing at the Chatham Islands*.

Holmes, D. 1993. *My Seventy Years on the Chatham Islands*.

King, M. and Morrison, R. 1990. *A Land Apart, The Chatham Islands of New Zealand*.

Butler, D. and Merton, D. 1992. *The Black Robin, Saving the World's Most Endangered Bird*.

King, M. 1989. *Moriori – a people rediscovered*.

Royds Garden Limited. 1993. *Chatham Islands County Council Resources Management Scoping Report*.

*The Chatham Islands, Heritage and Conservation*. 1996.



# SECTION 3

## Kaupapa



# 3. Kaupapa

The aim of this section is to develop a common purpose for conservation matters in the Chathams that can be shared by all agencies and individuals operating in the area, including the Department of Conservation.

## 3.1 CHATHAM ISLANDS MISSION

*To foster a shared commitment to conservation, with an emphasis on the Chatham Islands' indigenous biodiversity, natural and cultural heritage, and to provide for compatible use and enjoyment.*

The Department operates within a wider biodiversity and social context. The natural and historic resources managed by the Department are only part of a greater mosaic of ecosystems and cultural landscapes that exist within the Chathams. Departmental management cannot be separated from the actions of the rest of the community. The development and implementation of the objectives that will guide the Department are dependent upon the input, co-operation and support of the Chathams community and the wider New Zealand and international communities. To provide a setting for the Department's CMS goals, the Department and the Chatham Islands Conservation Board have developed the above mission statement and a year 2009 conservation future that, it is hoped, can be embraced by the whole community.

Protecting what is indigenous to the Chathams is important, as the Chathams have many plants and animals found in the Chathams and nowhere else. Protection of natural and historic values is the cornerstone of conservation in the Chathams. It is the specific heritage, both natural and historic, that makes the Chathams the distinct landscape that is known and cherished.

Fundamental to achieving the mission is the fostering of a shared commitment to conservation by all the people and organisations in the Chatham Islands supported by the wider New Zealand and international communities. Sharing will result in two basic benefits: a greater understanding and appreciation, and a far better result. Commitment requires more than a vague notion of the need for conservation. Commitment requires action, and it is only through the actions of many that significant results will be achieved. The challenge for those who are managing the Chatham Islands' heritage is to foster everyone's understanding and appreciation so that people can enjoy natural and historic assets as an inseparable part of their daily lives. This is a challenge that must be addressed for the Chatham Islands.

## 3.2 CHATHAM ISLANDS CONSERVATION IN THE YEAR 2009

The Chathams' pre-settlement ecosystem state has gone. Limited resources are available to all groups working for conservation. Working over the next ten years, an improved future for conservation could emerge. We may be able to say, 'The

Chathams is a place where the community has accepted responsibility for the unique and irreplaceable values in its landscapes and is evolving a sustainable relationship that is a commendable model.'

### 3.3 CHATHAM ISLANDS: A FUTURE VISION

In the future, conservation in the Chathams may be able to be described as follows:

#### **People Partnership**

- The Chatham Islands community, the Department and others are working as one for conservation in the islands, with respect for each other's views on how this is to be achieved.
- The Department's workforce includes Chathams employees.
- Conservation relationships akin to partnerships are established with iwi that give effect to the Principles of the Treaty of Waitangi.
- Iwi and the Department have worked to clarify customary use rights with an outcome acceptable to the wider community and in accordance with the Treaty of Waitangi and relevant legislation.
- Chatham Islanders have a stronger sense of being part of Chathams conservation, while also managing their community and island resources.
- An effective Chatham Islands conservation network exists that provides for volunteers, school children and other persons to be involved in a range of conservation tasks.
- The Chatham Islands community, conservation groups, associate groups, children, teachers and landholders have a good understanding of the council's and the Department's roles in the management of natural and historic resources.
- Active implementation by the Chatham Islands Council of its Resource Management Act and other legislative functions has led to a clear public understanding of the council's and the Department's roles in the management of natural and historic resources.
- Most landowners are able to say that they have aided conservation by voluntary protection of some aspect of natural or historic value on their lands.
- Developments leading to an improvement in islander quality of life do not conflict with conservation and environmental protection.
- Scientists and conservation organisations in New Zealand and others with interests in the ecology of the Pacific are continuing their active contribution to Chathams conservation and are supportive of the Chatham community's role in conservation.

#### **Heritage**

- The existing protected natural area system has been extended to more adequately represent the Chatham Islands natural landscapes and ecosystems, and is well maintained.
- Landscapes that incorporate a range of values (natural, historic and/or other

cultural values) and which are highly valued by the community are appropriately protected or enhanced.

- Landscape integrity has been maintained or enhanced while maintaining natural and historic resources and providing for recreation and visitor facilities.
- Restoration has led to an improvement in the habitats and linkages between protected areas.
- There is a comprehensive ecological survey coverage for the Chatham Islands and this information has been made available for the use of land owners, the council and others.
- The recovery process for threatened species is improving the future prospects for animal and plant populations. These species are more abundant and more widely distributed over their former natural ranges.
- Pitt Islanders and the Department, with research input, have made significant progress in establishing indigenous plant and animal species on Pitt Island, within a predator-free ecosystem. This is providing multiple community and conservation benefits.
- The Department has continued to control plant and animal pests on its land where that control best contributes to retaining indigenous biodiversity.
- Controls are in place to prevent further introductions of plants and animals that may become pests to conservation values on the Chathams
- Improved technology has enabled joint action on, or serious consideration given to the eradication of certain animal pests such as possum and other rodent species.
- Protection has been extended to waterways and wetlands so that they contain sufficient flows/water levels throughout the year to sustain their life-supporting capacity for freshwater fish and wildlife.
- The Chathams community, conservation groups and the Department have:
  - Advocated the protection of significant aquatic ecosystems, including lagoons, lakes, rivers and streams and wetlands.
  - Sought to protect and enhance freshwater fish habitat, specifically spawning, and riparian areas.
- The marine environment is subject to ecosystem protection and sustainable use similar to that applied to the land environment.
- A range of community-proposed marine management and protection areas (such as rahui, taiapure, mahinga mataitai and marine reserves) have been debated and/or implemented.
- Marine mammal population recovery and their interrelationships with fisheries are better understood.
- Te Whanga has been retained as a healthy lagoon providing sustainable marine and 'freshwater' fisheries and wildlife habitat and community resources.
- International action has significantly reduced the fisheries by-catch death of seabird species.
- Ongoing departmental research is allowing more knowledgeable management of albatross and other oceanic bird species' populations and their island breeding ecosystems.



- Substantial cessation of illegal bird-harvesting has occurred through clarification of customary use issues and community support for threatened species protection.
- Historic features are as valued and protected as the Chathams' natural heritage and wahi tapu sites are managed according to their respective tikanga.

### **Recreation and Visitor Services**

- The increase in visitor numbers has occurred in a managed and unobtrusive way.
- The Department and the community have worked with concessionaires, the local community and the visitor industry to maintain a resource for ongoing appreciation.
- The Department has worked with the council and defined suitable public access to and along the coast, lakes and rivers, using a range of access methods.
- The Department, in conjunction with the community and tourism industry, has provided interpretation and other facilities for visitors in appropriate areas.
- The intrinsic natural and historic values of areas managed by the Department are not adversely affected by the impacts of visitor activities and related visitor facilities and services.

## **3.4 HOW CAN THIS BE ACHIEVED BY 2009?**

At all levels of human society, from global to local, and from government to community, a growing awareness that it is imperative to sustain, conserve and restore natural, historic and recreational diversity is apparent.

Increasingly, this trend has seen local groups and landowners seek and accept a greater responsibility for conserving natural and historic resources (e.g., by covenanting). No one person or organisation has a monopoly on conservation. It is clear that the job is too large and diverse for any one organisation to achieve. All sections of the Chathams and wider community need to be aware of, accept and take part in efforts to integrate and maximise conservation outcomes.

An improved conservation future will require substantial community support. The Department is part of the community, along with iwi, local government, individuals (including landholders) and those representing interest groups. Iwi are a major stakeholder in this process due to their relationship with the Crown under the Treaty of Waitangi and because of their links to the land, water and marine resources. The current role of conservation-related agencies and groups is summarised in Table 2.

TABLE 2: CHATHAM ISLANDS ASSOCIATES AND ROLES

G R O U P	R O L E
Iwi Moriori Iwi Maori <sup>1</sup>	Iwi authorities
Ministry for the Environment	Crown resource management overview
Department of Conservation	Crown conservation management and advocacy
Chatham Islands Conservation Board	Conservation policy advice to Department of Conservation
New Zealand Historic Places Trust	Historic conservation and advocacy
Ministry of Fisheries	The sustainable utilisation of fisheries and fishery resources
Ministry of Agriculture and Forests	Pest control and sustainable agricultural promotion
Chatham Islands Council	Sustainable management of water, riverbeds, coast, discharges, land use, subdivision management and reserve management
Crown Research Institutes/universities, other research institutions and researchers	Science and research programmes
Nature Heritage Fund Committee	Funding the protection of natural ecosystems on Maori (including Moriori) and private land
Nga Whenua Rahui Committee	Funding (Maori and Moriori owner) protection of important lands
Queen Elizabeth II National Trust	Independent conservation agency to help landowners with landscape protection
Pitt Island Reserves Committee	Advice on Pitt Island conservation management
Chatham Islands Visitor Promotion Board	Co-ordination of tourism industry development
Conservation groups, e.g., Forest and Bird, Greenpeace	Conservation advocates/education volunteers/conservation managers.
Landcare groups/landowners	Farming sustainability
<i>Private enterprise</i>	Conservation sponsor

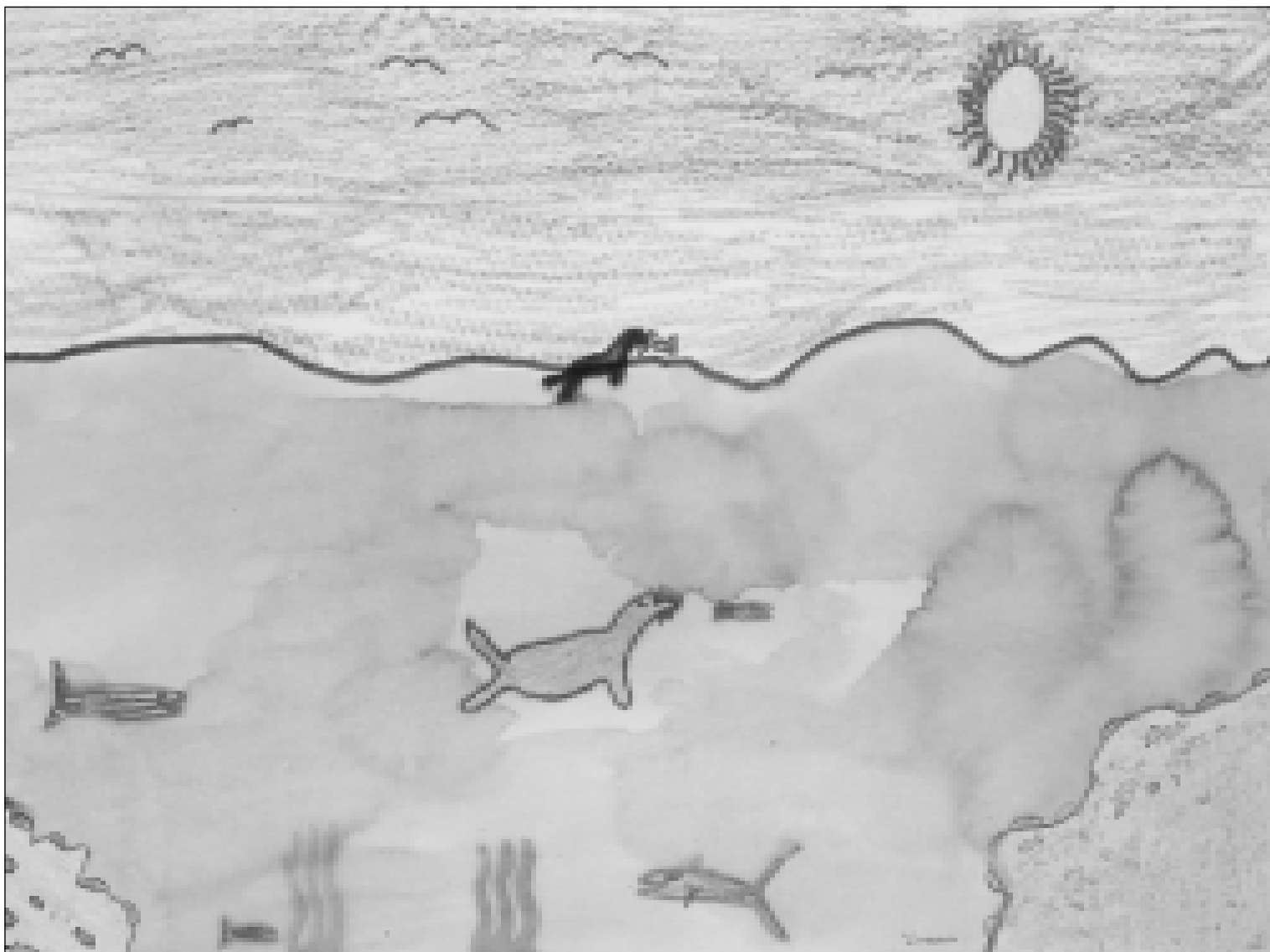
<sup>1</sup> *Throughout the CMS, Moriori and Maori are referred to in the chronological order of their settlement of the Chathams. This order in no way should be taken to suggest any predetermined priority between the iwi in respect of the Department's relationship responsibilities under the Treaty of Waitangi. In all cases the Department will consult with appropriate iwi to the situation.*





# SECTION 4

## CMS Goals and Priorities



# 4. CMS Goals and Priorities

## 4.1 DEPARTMENTAL MANAGEMENT GOALS

The Department is the leading Crown agency devoted to management and advocacy for conservation in the Chathams, but the job of conservation is too large and too important for one organisation alone. The Department must use its Crown funding to maximise the conservation benefits that are achievable in the ten-year time frame of this CMS. Other organisations and individuals have made significant contributions and will likely continue to do so. Some difficult choices and clear conservation priorities must be made to optimise what can be achieved.

The following goals will guide the Department's management and advocacy in the Chathams over the next ten years. The detailed implementations to achieve these goals are set out in Chapters 5 and 6.

### **Heritage**

- To manage areas and natural resources, as defined by the Conservation Act, under the Department's guardianship generally for their contribution to indigenous biodiversity conservation.

The Department is responsible for 50 areas managed for conservation purposes and for the conservation of important natural resources generally. It is necessary to prioritise management to maximise the benefits for nature conservation, using biodiversity criteria. Some areas will be managed with a historic or recreational focus, depending on their values. In all cases management will be subject to the underlying land status (see Schedules).

- To identify and work towards the protection of freshwater, marine, land and other natural resources for their contribution to indigenous biodiversity in the Chatham Islands.

Natural or intrinsic values of many areas are not adequately protected in the Chathams. To meet the goal of protecting the Chatham Islands indigenous biodiversity, it is necessary to identify and, where agreed, to seek formal protection of representative areas not already adequately protected. The wider task of advocating for conservation/or sustainability of natural resources elsewhere is also necessary.

Practical conservation work and advocacy on projects, such as fencing, planting, weeding and pest control will also help to retain biodiversity in the Chathams.

The Department, with others, will identify the land, freshwater and marine ecosystems in the Chathams, outline their representativeness to the Chathams' natural area system, and develop guidelines for protection priorities.

- To conserve, protect or preserve indigenous biodiversity in the Chatham Islands by targeting threat control into areas where significant natural resources are at risk, and achievable conservation objectives can be met, using the most effective and efficient methods.

Some of the land managed by the Department is at risk from a variety of threats including plant pests, wild animals, animal pests (see Section 6.2.8) and fire. It is therefore necessary to prioritise and identify achievable conservation objectives that optimise biodiversity outcomes. Particular attention will be paid to pre-emptive action to avoid further threats developing in future.

Except where it is possible and desirable to achieve extermination, animal pests, wild animals and plant pests will be controlled to the level necessary to achieve intended conservation outcomes.

- To identify, protect, enhance and contribute to the protection of the Chatham Islands' distinctive natural landscapes.

The Chatham Islands landscape reflects the interaction between natural features and human-induced changes and attitudes. The Chathams' landscape is very distinct in the New Zealand context. Only a small proportion of the landscape is protected. In aggregate, landform elements such as the coastline, islands, lakes and lagoons, volcanic cones and the Chatham Island tablelands are central to the identity and sense of place on the Chathams.

The Department will work with landholders and the council to identify and assess significant landscapes in the Chathams, with a focus on protecting landscapes that contribute to indigenous biodiversity and geopreservation.

- To identify, protect and manage the cultural and historic resources of the Chatham Islands with a focus on land managed by the Department.

Since the discovery of New Zealand, successive Moriori, European and Maori peoples have settled in the Chatham Islands, leaving their cultural imprints. It is important that these features are protected so that future generations know of their history, lifestyle, cultural artifacts and legends. The Department will seek to ensure that a range of these features is adequately protected. The Department will focus its management on land it manages. The New Zealand Historic Places Trust is expected to target its work towards the protection of historic resources on private land.

### **Treaty of Waitangi**

- To further establish, develop and maintain a relationship akin to partnership with iwi to give effect to the Principles of the Treaty of Waitangi.

Both Moriori and Maori are the Crown's Treaty partners with respect to the Chathams. Giving effect to the Treaty requires all parties to consult and act reasonably and in good faith towards each other. The Department, as a Crown agency, is also required to actively protect iwi interests as they relate to the Department's management responsibilities. The Department acknowledges that Moriori and Maori claims to the Waitangi Tribunal have yet to be resolved and hence will require some CMS flexibility to take on board claim outcomes.

The Department will work to achieve long-term goals on matters of significance to iwi where the Department has a statutory responsibility, within areas such as:

- natural and historic resource protection
- taonga species recognition
- habitat maintenance and enhancement
- traditional freshwater fisheries
- other mahinga kai
- cultural aspects of conservation
- customary use and management

## **Community Liaison and Involvement**

- To develop and facilitate a shared commitment to conservation by the Department and the wider community through consultation and information-sharing.

The Department can play an important role in furthering the wider appreciation and understanding of conservation in the Chatham Islands community.

The Department will undertake to raise awareness by maximising opportunities through research reports, publications, interpretation panels, school programmes, talks, displays, potential visitor programmes and general public relations. A high public awareness of conservation issues and the Conservation Board's and the Department's roles will be achieved by good communication and the integration of advocacy and conservation work.

- To encourage the community to share in the active guardianship of natural and historic resources entrusted to the care of the Department and others.

Conservation is a community responsibility, and while the Department is the responsible Crown agency and is expected to demonstrate clear leadership, it cannot maximise conservation gains without other individuals and organisations. A shared approach on both public and private land between the Department, the Conservation Board, the Chatham Islands Council, iwi, land managers, conservation/recreation groups and community restoration projects will foster this partnership.

## **Recreational and Visitor Opportunities**

Consistent with the understanding, enjoyment and protection of the Chatham Islands natural and historic heritage:

- To encourage and assist in the provision of a range of appropriate recreational opportunities on land managed by the Department.
- To provide or make provision for a suitable range of visitor facilities and services, both commercial and non-commercial, appropriate to their impacts, level of use and recreational importance.

Even though the Department's land holdings are few and of high value for protection of natural and historic resources, there are opportunities for compatible recreation, ranging from hunting wild animals and visiting reserves with few facilities, through to potential overnight-stay opportunities and observation facilities (e.g., bird hides). The Department will encourage recreational use, provided adverse effects are avoided, remedied or mitigated.

Commercial recreation offers opportunities for people to take part more easily in some activities (e.g., nature tourism). Demand for commercial opportunities is likely to increase. Commercial recreation has the particular ability to generate significant educational and awareness opportunities but must also be managed at a level that is compatible with the protection of other natural and historic values. The educational and public awareness opportunities provided by the concessionaires will be fostered.

## **Non Recreational Uses**

- To manage and allow appropriate non-recreational commercial and community uses compatible with the protection of natural and historic values.

A range of non-recreational commercial and community uses (e.g., communication facilities) can be accommodated on land managed by the Department, provided they are compatible with the protection of the natural and historic resources for which those lands were set aside. The onus will be on applicants to demonstrate that the necessity and the impacts of their proposed uses, both in magnitude and significance, will be compatible with the conservation features affected, and that the uses cannot be accommodated off land managed by the Department.

## **Departmental Management**

- To set high-quality standards for the Department's management of its responsibilities and dealings with the community.

The Department will develop programmes and procedures that seek to consistently result in effective and efficient conservation management and advocacy, such as:

- regular public participation opportunities
- regular meetings with key associate groups
- promptness and responsiveness to public and Conservation Board inquiries
- efficient, effective and accountable use of Crown and other funding
- motivated, healthy and satisfied staff
- conservation training for staff
- corporate services that effectively support conservation outcomes

The aim of departmental management is to provide an excellent conservation management and advocacy service to the public. The Department will seek to continually improve its performance, both by making more efficient use of resources (staff, finance, infrastructure) at its disposal, and by improving relations with its neighbours, the council, visitors and conservation/recreational supporters.

## **4.2 PRIORITIES**

Consistent with 4.1 (Departmental Management Goals), the Department has prepared objectives and implementation statements for places (see Part 5) and activities (see Part 6) in the Chathams.

Within each activity section key priorities have been identified in accordance with the criteria outlined in the implementation statements. These priorities are to be put into effect in a number of places and are summarised in table form within each place and activity section.

Key priorities, therefore, are both Chathams-wide priorities and priorities for the management of the particular place issues. They are summarised in Table 3, which lists the key activities the Department intends to undertake and where they will be implemented. This table illustrates the stepping stones the Department needs to set in place if it is to realise the improved conservation vision for the year 2009.



Ellice Point wave platforms,  
Waitangi.



TABLE 3: OVERVIEW OF KEY CONSERVATION PRIORITIES SOUGHT BY PLACE UNIT

KEY RESULT AREA	ALL PLACES	CHATHAM ISLAND
6.1.2 Treaty Relationships	<ul style="list-style-type: none"> <li>• Implement Crown settlements</li> <li>• Full consultation</li> <li>• Joint development of databases</li> <li>• Support the preparation of tribal management plans and policy statements</li> <li>• Interpretation input</li> </ul>	
6.1.3 Community Liaison and Involvement	<ul style="list-style-type: none"> <li>• Conservation Board information exchange and public contact</li> <li>• Conservation Board and community representation on species recovery groups</li> <li>• Landowner information exchange and access approval</li> <li>• Council contact, information, advice</li> <li>• School/community information provision and Department staff access</li> <li>• Departmental project involvement</li> <li>• Media information</li> </ul>	<ul style="list-style-type: none"> <li>• Te Whanga management</li> <li>• Beach habitat protection</li> </ul>
6.2.2 Landscape	<ul style="list-style-type: none"> <li>• Identify significant landscapes and values with the council and others</li> <li>• Maintain and make available database</li> <li>• Promote landscape understanding and development integration</li> <li>• Planning and design standards</li> </ul>	<ul style="list-style-type: none"> <li>• Seek inventory, protection and enhancement</li> </ul>
6.2.3 Land Ecosystems	<ul style="list-style-type: none"> <li>• Protect representative areas using a wide range of mechanisms</li> <li>• Reduce forest deterioration through protection, fencing, stock and possum control</li> <li>• Consolidate and link protected areas and those with a range of habitat types</li> <li>• Explain protection options to landowners</li> <li>• Restore habitats through seeding and planting of natives, especially threatened species</li> <li>• Maintain adequate fencing and remove/control stock</li> </ul>	<ul style="list-style-type: none"> <li>• RMA advocacy for sustainability</li> <li>• Seek that developments avoid, remedy or mitigate adverse effects</li> <li>• Promote extreme care with any peat-mining</li> <li>• Encourage tree planting for firewood, shelter and riparian protection</li> </ul>
6.2.4 Freshwater Ecosystems	<ul style="list-style-type: none"> <li>• Information on and compliance with regulations for fish passage</li> <li>• Control introduced freshwater species</li> <li>• Public awareness, surveys and advocacy</li> <li>• Significant habitat protection</li> </ul>	<ul style="list-style-type: none"> <li>• RMA advocacy for sustainability</li> <li>• Seek that developments avoid, remedy or mitigate adverse effects</li> <li>• Promote extreme care with any peat-mining</li> </ul>
6.2.5 Marine Ecosystems	<ul style="list-style-type: none"> <li>• Advocacy, Ministry of Fisheries liaison, permits and rescues for marine mammals</li> <li>• Contingency planning for oil spills and oiled wildlife treatment</li> </ul>	<ul style="list-style-type: none"> <li>• Encourage community awareness</li> <li>• Freshwater fish spawning habitat surveys and protection</li> <li>• Te Whanga riparian protection and marine reserve consultation</li> <li>• Information to iwi and the council re Te Whanga</li> <li>• Beach habitat protection</li> </ul>

PITT ISLAND	MANGERE AND RANGATIRA	OTHER ISLANDS
<ul style="list-style-type: none"> <li>• Pitt Island Reserves Committee</li> <li>• Maintain staff presence</li> <li>• Pitt community consultation</li> <li>• Media information and interest group involvement</li> </ul>	<ul style="list-style-type: none"> <li>• Management programme participation</li> <li>• Rangatira management visits</li> <li>• Information distribution</li> </ul>	<ul style="list-style-type: none"> <li>• Contact with island owners</li> <li>• Respect tikanga</li> <li>• Information/research findings provision</li> <li>• Chatham Islands Conservation Board involvement for public</li> </ul>
<ul style="list-style-type: none"> <li>• Monitoring of animal effects in Waipaua block</li> </ul>	<ul style="list-style-type: none"> <li>• Continued revegetation</li> <li>• Monitor revegetation and threatened plant welfare</li> </ul>	<ul style="list-style-type: none"> <li>• Work with owners on management</li> <li>• Appropriate RMA controls</li> </ul>
<ul style="list-style-type: none"> <li>• Promote Tupurangi wetland protection</li> </ul>		

KEY RESULT AREA	ALL PLACES	CHATHAM ISLAND
6.2.6 Indigenous Species	<ul style="list-style-type: none"> <li>Habitat protection</li> <li>Predator control</li> <li>Establish new populations</li> <li>Species monitoring</li> <li>Captive rearing/nursery populations</li> <li>Research</li> </ul> <p>Quantify monitoring, research and review requirements should customary use take be approved</p> <ul style="list-style-type: none"> <li>Prepare and implement recovery plans and strategies</li> <li>Encourage landowner participation</li> </ul>	<p>All threatened species as set out in Table 18</p> <ul style="list-style-type: none"> <li>Freshwater aquatic surveys</li> <li>Invertebrate surveys</li> </ul>
6.2.7 Historic Resources	<p>Survey, record, assess and monitor fence and stock control; field information retrieval.</p> <p>Wahi tapu and ko-iwi recording, visitor control and management with iwi consultation</p> <p>Recording, consideration and protection of historic resources through other Department projects; identify and monitor conditions of indicator areas</p>	<p>J.M. Barker (Hapupu) Historic Management Plan and visitor information</p> <p>Monitoring at Henga, J.M. Barker (Hapupu), Taia bush, Lake Kairae, Cannon-Peirce, Wharekauri, Taia and other sites and wahi tapu and ko-iwi as identified with landowners and iwi</p> <ul style="list-style-type: none"> <li>Appropriate revegetation or vegetation control</li> <li>Prepare representative historic place information</li> </ul>
6.2.8 Animal Pests and Wild Animals	<ul style="list-style-type: none"> <li>Meet legislative control and eradication requirements</li> <li>Community co-ordination and advocacy</li> <li>Encourage regional pest strategy</li> <li>Implement and upgrade rodent contingency plan</li> </ul>	<ul style="list-style-type: none"> <li>Eradicate rabbits if present</li> <li>Fence Tuku Nature Reserve</li> <li>Work with iwi re kiore</li> <li>Investigate possum eradication</li> <li>Fencing and pest/wild animal control</li> <li>Good neighbour communication</li> </ul>
6.2.9 Plant Pests	<p>Meet legislative control and eradication requirements</p> <ul style="list-style-type: none"> <li>Prepare plant pest control plan</li> <li>Control or eradicate problem plant pests</li> <li>Community co-ordination and advocacy</li> <li>Encourage regional pest strategy</li> </ul>	<ul style="list-style-type: none"> <li>Good neighbour communication</li> </ul>
6.2.10 Fire	<ul style="list-style-type: none"> <li>Staff training and fire planning</li> <li>Assistance to landowners</li> <li>Fire control agreements with the council</li> </ul>	<ul style="list-style-type: none"> <li>Fire breaks and fire permit control</li> <li>Camp-fire control and prohibition</li> </ul>
6.3 Visitor Services	<ul style="list-style-type: none"> <li>Community involvement</li> <li>Iwi consultation on interpretation</li> </ul>	<ul style="list-style-type: none"> <li>Improve public access to priority Department lands</li> <li>Co-ordinate access information</li> <li>Enforce permit and provide for controlled entry to Tuku Nature Reserve</li> <li>Environmental and Water Care codes</li> <li>Manage visitor activities and impacts</li> <li>Improve facilities and upgrade signage</li> <li>Provide for public safety</li> <li>Information provision to any visitor centre</li> <li>Maintain/upgrade access to eight areas</li> <li>Liaison/provide basic camping facilities</li> <li>Support community on northern/southern or similar track development</li> <li>Control inappropriate activity on wahi tapu/ko-iwi.</li> </ul>

PITT ISLAND	MANGERE AND RANGATIRA	OTHER ISLANDS
<ul style="list-style-type: none"> <li>All threatened species as set out in Table 18</li> <li>Freshwater fish surveys</li> </ul>	<p>All threatened species as set out in Table 18</p> <ul style="list-style-type: none"> <li>Quarantine and screen any species introductions</li> </ul>	<ul style="list-style-type: none"> <li>All threatened species as set out in Table 18</li> <li>Integrate landowner and Department knowledge</li> <li>Seabird fisheries by-catch action</li> </ul>
<p>Glory Cottage conservation plan, and visitor information</p> <ul style="list-style-type: none"> <li>Appropriate revegetation or vegetation control</li> <li>Careful facility location</li> </ul> <p>Community/council care at Flower Pot</p> <ul style="list-style-type: none"> <li>Waipaua site investigated and protected</li> </ul>	<ul style="list-style-type: none"> <li>Manage revegetation</li> </ul>	<ul style="list-style-type: none"> <li>Follow landowner and NZHPT requests re historic place care and recording</li> <li>Notify owners and NZHPT of any newly found places and place condition</li> </ul>
<ul style="list-style-type: none"> <li>Predator-proof fences</li> <li>Predator species eradication</li> <li>Investigate mouse eradication</li> <li>Islander involvement</li> </ul>	<ul style="list-style-type: none"> <li>Strict controls through permit-only entry and Department worker conditions</li> </ul>	<ul style="list-style-type: none"> <li>Seek landowner support for rodent contingency plan methods</li> </ul>
<ul style="list-style-type: none"> <li>Fire permit control</li> </ul>		<ul style="list-style-type: none"> <li>Assistance to landowners</li> </ul>
<p>Improve public access to priority Department lands</p> <ul style="list-style-type: none"> <li>Co-ordinate access information</li> <li>Environmental and Water Care codes</li> <li>Manage visitor activities and impacts</li> </ul> <p>Improve facilities and upgrade signage</p> <ul style="list-style-type: none"> <li>Provide for public safety</li> <li>Visitor information pamphlet</li> </ul>	<p>Minimise access by strict permit-controlled entry</p> <p>Invite management programme participation and Chathams community involvement</p> <p>Limit activities for which permits will be granted</p> <ul style="list-style-type: none"> <li>Manage visitor activities and impacts</li> </ul>	<ul style="list-style-type: none"> <li>Encourage visitor-control checklist system</li> </ul>

KEY RESULT AREA	ALL PLACES	CHATHAM ISLAND
6.4.1 Other Commercial and Community Use	<ul style="list-style-type: none"> <li>• Performance conditions</li> <li>• Monitoring/bonds</li> <li>• Fencing/stock control</li> <li>• Co-siting</li> <li>• Controls on taking</li> </ul>	
6.4.2 Military Use	<ul style="list-style-type: none"> <li>• Liaison with the New Zealand Defence Force</li> <li>• Activity conditions</li> </ul>	
6.4.3 Customary Iwi Use	<ul style="list-style-type: none"> <li>• Contribution to national policy development</li> <li>• Freshwater fish consultation</li> <li>• Customary use allocation</li> <li>• EIA</li> <li>• Iwi consultation</li> <li>• Encourage nursery sources</li> <li>• Promote research</li> <li>• Develop gathering and distribution protocols</li> </ul>	
6.5.2 Statutory Land Management	<ul style="list-style-type: none"> <li>• Promote range of protection funding sources</li> <li>• Encourage council protection on their reserves</li> <li>• Maintain database and field data</li> <li>• Determine land boundaries</li> </ul>	
6.5.3 Compliance and Law Enforcement	<ul style="list-style-type: none"> <li>• Observation</li> <li>• Public awareness and public information</li> <li>• Iwi consultation on marine mammal parts distribution</li> </ul>	<ul style="list-style-type: none"> <li>• Criteria for nature reserve permit entry</li> </ul>
6.5.6 Survey, Monitoring and Information Management	<ul style="list-style-type: none"> <li>• Survey priority species and invertebrate populations</li> <li>• Broad ecological surveys</li> <li>• Historic surveys to gain full Department land coverage</li> <li>• Monitoring in all Department projects</li> <li>• Priority species and historic monitoring</li> <li>• Establish baseline data for potential visitor use areas</li> </ul>	

PITT ISLAND	MANGERE AND RANGATIRA	OTHER ISLANDS
		<ul style="list-style-type: none"> <li>• Island owner consultation</li> <li>• Research and monitoring</li> <li>• Information provision</li> <li>• Implement management systems should any harvest be legalised</li> </ul>
<p>Work with lessee and reserves committee</p> <ul style="list-style-type: none"> <li>• Negotiate and resolve access</li> <li>• Lease exchanges</li> <li>• Greater reserves committee management</li> </ul>		<ul style="list-style-type: none"> <li>• Support additional protection option</li> </ul>
<ul style="list-style-type: none"> <li>• Criteria for nature reserve permit entry</li> </ul>	<ul style="list-style-type: none"> <li>• Maintain Department presence</li> <li>• Increase community support</li> <li>• Consider prosecution or other alternatives</li> </ul>	

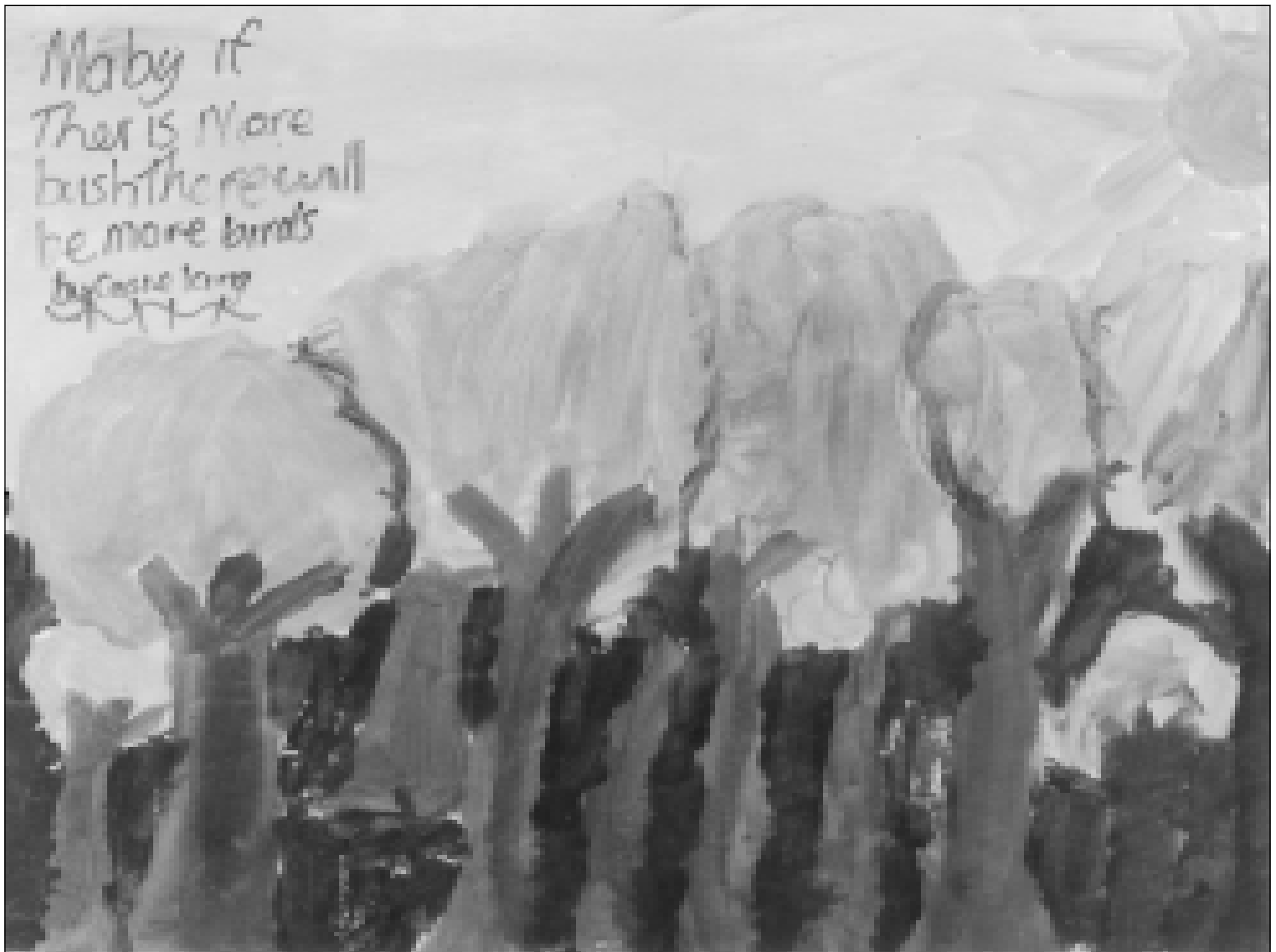




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## SECTION 5

### Place Objectives and Implementation



# 5. PLACE OBJECTIVES AND IMPLEMENTATION

## 5.1 Introduction

### 5.1.1 PLACES

The Chathams have been divided into four places for detailed treatment in this CMS (see Figure 1). The CMS places reflect differences in natural values, local communities and land ownership. They are:

- Chatham Island
- Pitt Island
- Mangere and Rangatira islands
- Other islands

These unit boundaries are used for CMS purposes only. They may not coincide with other statutory, scientific or commonly used boundaries.

#### *Chatham Island (Rekohu/Wharekauri)*

The Chatham Island unit includes all land managed by the Department on the island. It also includes all other parts of Chatham Island as part of the Chatham Islands ecological region and the near shore marine areas, including Te Whanga.

#### *Pitt Island (Rangiauria)*

The Pitt Island unit includes all the land managed by the Department on the island. It also includes all other parts of Pitt Island as part of the Chatham Islands ecological region and the near shore marine areas.

#### *Mangere and Rangatira (South East Island)*

The Mangere and Rangatira unit comprises the total area of these two islands, being nature reserves managed by the Department, and includes the near shore marine area.

#### *Other Islands*

The Other Islands unit includes the islands Tapuaenuku (Little Mangere), Rangitutahi (The Sisters), Motuhara (The Forty-fours), Tarakoikoia (The Pyramid), Motuhope (Star Keys), Rangiwheao (The Castle), Houruakopara, and other small islets, and their near shore marine areas. Also included are the small islets in Te Whanga to ensure their existence is recognised for their conservation values. While none of these islands contains any land managed by the Department, they are the habitat for a range of seabirds, plant species (many being endemic and/or threatened Chathams species) and marine mammals.

## 5.1.2 PLACE PRIORITY SETTING

### **Introduction**

The natural and historic character of each of the places (e.g., Chatham Island) and the current conservation efforts of the community, the Department and other agencies, create issues that require resolution in the next ten years. Many of the specific objectives for the Department are outlined in Part 6 (Activity Objectives and Implementation) and will be implemented in each place on an ongoing basis. Examples include animal and plant pest control programmes, landowner liaison, recreational facility maintenance and historic management.

### **Issues**

However, other issues have particular significance in each place and are a Department priority for attention. They may also involve a range of different activities, with a requirement for multiple focus of Department effort. The issues that require special effort from the Department over the next ten years have been identified as key priorities.

### **Priorities**

Each priority is described, outlining the issue requiring resolution, a set of objectives, and a statement of how they are to be implemented. The place section table outlines these priorities, the conservation results sought, and cross-references the place issue back to the relevant activity priorities. Each priority for departmental action in that place has an equivalent priority in Part 6. These are summarised in Table 3. It is important to note the cross-referencing and to understand that no one section of the CMS can be read, taken or actioned in isolation.

### **Limitations**

Priorities have been selected according to the Department's assessment of their importance in meeting Department-wide objectives and in order to resolve place issues in an integrated fashion. There will be other natural, historic and recreational actions that the Department will not be able to undertake over the next ten years, given present resources and technology. Where activities will be affected by constraints, these are described. Interested individuals and groups are encouraged to contribute in these areas and to make their own conservation initiatives to help achieve conservation goals.

## 5.2 Chatham Island (Rekohu/Wharekauri)

### INTRODUCTION

Chatham, at about 90,000 hectares, is the principal island in the Chathams group. Its character is as varied as its landscape and history.

The island's population is about 760 people, mostly concentrated in the five main settlements: Waitangi, Te One, Kaingaroa, Owenga, and Port Hutt. The rest are scattered mainly in the northern half of the island and the eastern and north-western parts of the southern half of Chatham.

Being an island, the sea and coastal zone are key elements both in the life of every resident and for conservation on the island.

The island group's isolation from the New Zealand mainland is part of the attraction for most of the island's residents, but isolation also generates problems and challenges.

The history of exploitation and modification has also had consequences on the endemic biota with many extinctions and species populations being reduced to mere fragments of what they were in the past.

The shape and composition of Chatham Island contributes significantly to its character, accessibility and settlement patterns. Its greatest east-west width (57 kilometres) is in the north. It narrows in the centre (9 kilometres) and widens again in the south. The island is about 48 kilometres in north-south length. There are numerous lagoons and lakes. Te Whanga adds about an extra 18,600 hectares to the total island area, increasing it to 108,600 hectares.

Despite the island's overall subdued height, its local height variations and shape mean that most parts of the island, the coastline lakes and lagoons, and the open sea are highly visible.

Four major character areas can be distinguished on Chatham Island. They are easily defined in terms of geographical location – the north, south, central and lagoon (Te Whanga) areas – but can also be more precisely defined in terms of their physical geography. This is derived from the geology and the human influence (through land use and settlement patterns) on these areas.

### **Northern Chatham Island**

This rolling northern area, mostly under 100 metres in height, is largely peat country derived from an abundance of tarahinau or bamboo rush dominated vegetation. It has developed since the last glaciation under the prevailing wet, cool climate and poor drainage. Sometimes up to 10 metres deep, peat blankets limestone formations and the basement schist. The rolling peat country is broken by basaltic hills, some of which are rugged in outline (Maunganui, Rangitahi and Mount Chudleigh) while others are perfectly conical in shape (Matakitaki and Mount Dieffenbach) and seemingly regular in their linear spacing.

Much of the coastline is highly indented. Offshore islets and reefs are composed of the island's oldest basement schist rock type, which is only exposed along the narrow coastal fringe. Larger sandy beaches with associated dune complexes are located between the major and more elevated headlands, with smaller beaches at bay heads of some of the more indented coastline.

Relatively little forest vegetation remains. Much of the land area is now under secondary growth dominated by bracken fern and the endemic swamp heath. These shrublands are typical of the very extensively grazed gently undulating and poorly drained peatlands. Remnants of kopi and/or akeake-dominated broadleaf forest exist in various stages of health in pockets along the northern coastlines. They are also associated with the more fertile and intensively farmed lands on back dunes and as riparian forest along streams running into volcanic country. These forest remnants have often been used for stock grazing and shelter and, with virtually no natural regeneration occurring, the chance of survival of many of these remnants, unless stock is removed, is negligible.

### **Southern Chatham Island**

By contrast, southern Chatham Island is higher and has the appearance of a dissected tableland that slopes generally from the high coastal cliffs in the south. Formed from layers of basaltic lavas (in the south) and marine deposits of volcanic ash (in the north), the southern area is characterised by a well-developed drainage pattern, largely flowing out from the area's second highest point, Maungatere Hill, at 294 metres. Numerous small lakes have originated in the deep peats.

The coastline, from north of Tuku-a-tamata River to Cape Fournier, is rugged, comprising steep cliffs up to 200 metres high, offshore reefs and islets, blow holes, stacks and caves. A massive slump (of up to 160 hectares) at Te Awatapu is a local landmark feature and one of several that has separated from the flat surface of the plateau. From this point eastward to Cape Fournier, the coastal cliffs are fringed by boulder beaches and rock platforms at their base.

Further north (in the west around Point Durham and in the east, north of Manukau Point) the coastal belt consists of low, undulating country where softer, red ash beds have been largely removed by wave erosion during a former higher sea level. Basalt boulder beaches occur in a narrow strip. Further north still, especially around Point Weeding and south-west of Waitangi, the coastline is characterised by bays and headlands of the red calcareous ash (Red Bluff Tuff).

The predominantly lower northern regions of southern Chatham Island are more intensively farmed with relatively few areas of remnant vegetation left. These areas reflect mainland New Zealand settlement and land use patterns. The southern tablelands, however, are more distinctive with some larger areas of remnant mixed hardwood and tarahinau forest secondary growth, shrubland and 'clears' (bamboo rush and swampheath) associated with the peat country of the south-east, and some extensive pastoralism.

### **Central Chatham Island**

Central Chatham Island is a narrow strip of land linking the other character types. Accordingly, it is influenced by and grades into each of the others. It too has sufficient distinguishing features to be regarded as a separate landscape area.

Composed of red tuff and different grades of limestone, the general topography is relatively level with typical sinkhole-type undulations and the occasional rocky outcrop. The lakes in the north are believed to have formed from infillings of the larger sinkholes in the limestone.

Petre and Waitangi bays define the western boundary. Well-developed dune systems (of up to 1.5 kilometres in width) characterise the coastal edge. These dunes are prone to blow outs, both within the dunes and along the eastern edge where stock grazing has been too severe and sand encroachment on to farmland is evident.

Akeake-dominated coastal broadleaved forest co-exists within the more stable part of the dune system and marram grass is a dominant introduced species in the southern and northern areas of the dunes.

Further inland, remnants of kopi forest exist in various states of degradation among more intensively managed farmland. As with the northern areas, farmers have tended to use these forest remnants for stock grazing and shelter. Consequently the forests have become overgrazed. In some cases these forest remnants have been reduced to pure stands of dead and dying kopi trees.

### **Te Whanga**

Te Whanga and small lakes are very distinctive features of Chatham Island. Te Whanga, a shallow lagoon 24 kilometres in length and about 18,600 hectares in area, is central to the island. To the west and south it is bounded by old sea cliffs cut in limestone and tuffs. To the north and east it is confined by long, low-lying sand bars. The lagoon's water level varies due to both natural and artificial processes. The water body can also build up in the direction of the prevailing wind.



Waikawa Island and the outlet to  
Te Whanga.

When the lagoon level falls, the outlet channel silts up and the north-easterly winds further build up the offshore sand bars at the mouth, thus preventing any reduced flows from the lagoon from escaping. This natural process results in the lagoon level rising again in time to either escape naturally or to be artificially released.

Remnants of kopi-mixed broadleaved forests, featuring kowhai, are found in association with the older, more stable dune areas on the south or western limestone country. Elsewhere wetland rush species are adapted to the brackish waters associated with the lagoon's fluctuating water levels.

Introduced and endemic bird species inhabit these shrubland and lagoon areas and fish life is rich and diverse. The lagoon is still extensively used as a food source, especially for flounders.

## FEATURES AND ISSUES

### **People Partnership**

Mori were the first people of Rekohu (Chatham), arriving sometime between 450 and 1000 years ago (King, 1989; McFadgen, 1994; Sutton, 1994; Wai 64 evidence). After a long period of perhaps deliberate isolation, the Mori-inhabited islands were found by chance by Lieutenant Broughton in 1791 as he sailed from New Zealand to Tahiti. European-American settlement followed in 1806 with whalers and sealers followed by farmers, fishers and a variety of other groups hoping to make their fortunes. Mori settlement started later, in 1835.

In the past, Mori relied primarily on marine mammals and, to a lesser extent, seabird populations, fish (sea and freshwater) and land birds for food, clothing and other needs. Because of reduced or low populations and legislative protection many of these resources are now not available to local Mori.

One of the main conservation issues is to address appropriate and sustainable customary use.

The sea and coastal zones are very important to the economy of the Chathams and are very important parts of all island residents' lives. These zones also have important natural and historic resource protection needs.

The majority of land on Chatham Island is privately owned and only a small proportion is managed by the Department. Conservation issues relating to habitats, habitat restoration, pest control and indigenous species management are very much in the hands of landowners and the council, either directly or in partnership with the Department. Where Department staff wish to visit private land the Department's national field rule of seeking landowner approval needs to be followed.

### **Heritage Conservation**

Most of the natural habitats have disappeared, those that are left are disappearing, indigenous species populations are either in a precarious state or declining. Those species, populations and habitats that are left, are being ravaged by introduced predators, browsers and pests. Only 7,500 hectares of indigenous forest cover is left on the island, approximately ten per cent of the original cover. Sixteen bird species have disappeared from Chatham (seven are now extinct, six are now either endangered and/or found only on outer islands) and the huge colonies of nesting seabirds originally distributed throughout the island have virtually disappeared. There are 37 species of plant endemic to the Chathams; at least fifty per cent of these are under threat and inadequately protected. Chatham's long isolation from any other land mass has resulted in a high degree of endemism (species found only on the Chathams).

This situation is the result of the island's long history of settlement and exploitation removing or modifying most of the habitat assemblages and the introduction of predators and competitors in the form of rats, cats, possums, pigs and stock, which have gone feral, and weeds.

Because of the island's long isolation and resulting high degree of endemism and its positioning in an area where two ocean currents converge, Chatham has a natural environment that is unique. Conservation of flora, fauna, habitats and marine ecosystems are very important aspects of the Department's commitment to maintain biodiversity and the future of the Chathams' character.

Continuing pressures are exerted on the natural values through the island community's need to maintain itself in respect to energy supply, economic viability and new demands on the natural resources (e.g., sphagnum).

### **Historic**

Evidence of Moriori occupation on Rekohu includes middens, burials, limestone cave carved figures of seals and birds, and tree carvings. These resources (with the exception of the cave figures) are represented on land managed by the Department such as the J.M. Barker (Hapupu) National, Taia Bush and Lake Kairae historic reserves, Henga and Cannon-Peirce scenic reserves, and Wharekauri conservation area. There are other areas not on land managed by the Department, including Te Awapatiki (a kawenata area), the basalt columns, the blowhole at Cape Young, and Manukau, to name a few, which continue to have great cultural and spiritual significance to Moriori people. These places may lack physical evidence of their cultural significance but are no less important historic places. The physical historic evidence of Moriori culture such as the cave and tree carvings are vulnerable and many have disappeared, the latter through forest loss, kopi tree growth, and past carving/tree bark removal practices for in-museum preservation. Of relevance to Moriori settlement, the coastal sand dunes and their ability to be dated have enabled researchers to add to the knowledge of settlement chronology and the impacts of humans on the natural environment.

European settlement brought a colourful history of whaling, sealing, missionaries, pastoralism, horticulture and fishing. Some evidence of this past is still present in the form of places with historic features, buildings, memorials and shipwrecks. Many of these are in disrepair or deteriorating through weathering and lack of protection, e.g., from stock trampling. Ten historic buildings on Chatham Island have been registered by the New Zealand Historic Places Trust, but none of these are managed by the Department.

Maori settlement from 1835 was or has become intermingled with European settlement, hence historic Maori places are in places associated with the European ones (e.g., the Waitangi area). Some areas of spiritual significance do exist, though most have no physical evidence other than the natural character of the area.

Iwi and wider community concern is often expressed for protecting historic resources. Most resources, however, are not on land managed by the Department and primary responsibility for these lies with landowners, iwi, the New Zealand Historic Places Trust and the community.

### **Recreation and Visitors**

Recreational opportunities on the island are limited and involve organised community social and sporting events, food-gathering, and family-based camping trips. Facilities exist for community-based social events and organised sports, and families have private, basic facility camp sites. Apart from some recently constructed walking tracks no recreational facilities are available on land managed by the Department.

There are growing numbers of visitors to the island, and many of these are keen to visit sites of natural and historical importance and reserves. There is a growing tendency for these people to be part of organised tour parties.

Although currently there is little demand for concessions to operate commercial activities on land managed by the Department, there are indications that this demand will increase to reflect the growing number of visitors.



## AREAS MANAGED BY THE DEPARTMENT

The following key areas managed by the Department are described in more detail in Schedule II. Six reserves have been gifted, the donors' names given in brackets.

### **Nature Reserve**

- Tuku (Manuel and Evelyn Tuanui)

### **Scenic Reserves**

- Henga (John and Denise Sutherland), Te Awatea, Ocean Mail, Cannon-Peirce (Harold and Madeline Peirce), Harold Peirce (Harold and Madeline Peirce), Thomas Mohi Tuuta [Rangaika] (Thomas Mohi and Annie Tuuta).

### **Historic Reserves**

- J.M. Barker [Hapupu] – a National Reserve (Barker Bros Ltd), Taia Bush (S.W. and E.F Hough), Kairae.

### **Conservation Areas**

- Wharekauri, Te Whanga, Hanson Bay, Point Durham marginal strips; Tangepu, Chudleigh, Nikau Bush, Wharekauri [Green Swamp] conservation area.



**TABLE 4: KEY PRIORITIES FOR CHATHAM ISLAND**

NAME	ISSUE
5.2.1 Community Liaison and Involvement	<ul style="list-style-type: none"> <li>• Community support and initiatives needed</li> <li>• DOC as community member</li> </ul>
5.2.2 Landscape Protection	<ul style="list-style-type: none"> <li>• Lack of inventory and recognition</li> <li>• Need to consider landscape during habitat protection</li> </ul>
5.2.3 Habitat Re-establishment and Protection	<ul style="list-style-type: none"> <li>• Habitats reduced; species restricted and under threat</li> <li>• Limited land acquisition opportunities</li> <li>• Scope for range of protection methods</li> </ul>
5.2.4 Coastal Management of Te Whanga	<ul style="list-style-type: none"> <li>• Sustainable management</li> <li>• Shoreline bird habitats and freehold title to mean high water mark</li> <li>• Freshwater fish habitat protection</li> <li>• Te Whanga remarkably intact and strong</li> <li>• iwi/community interest in it</li> <li>• Lack of information</li> </ul>
5.2.5 Indigenous Species Protection	<ul style="list-style-type: none"> <li>• Declining species</li> <li>• Arresting decline factors</li> <li>• Species reintroduction</li> <li>• Community support</li> </ul>
5.2.6 Historic Resources	<ul style="list-style-type: none"> <li>• Historic resource loss</li> <li>• Lack of updated inventory</li> <li>• Respect for wahi tapu tikanga</li> <li>• Community and NZHPT responsibilities</li> <li>• Reactive research to prevent information loss</li> </ul>

METHOD	RESULT SOUGHT	ACTIVITY
<ul style="list-style-type: none"> <li>• Use Area Office for community/DOC information exchange</li> <li>• Regular contact with the council and others</li> <li>• School programmes</li> <li>• Information exchange with landowners</li> </ul>	<ul style="list-style-type: none"> <li>• Department a recognised member of community</li> <li>• Natural and historic resource protection supported by community</li> </ul>	6.1.3 Community Liaison and Involvement
<ul style="list-style-type: none"> <li>• Seek inventory, protection and enhancement</li> <li>• Integrate landscape with other natural and historic resource protection</li> </ul>	<ul style="list-style-type: none"> <li>• Landscape awareness and management improved</li> </ul>	6.2.2 Landscape
<ul style="list-style-type: none"> <li>• Protection encouragement</li> <li>• ID protection options</li> <li>• Fencing and pest control</li> <li>• Reintroduced plants and animals</li> <li>• Fire prevention and control</li> </ul>	<ul style="list-style-type: none"> <li>• As much as possible of remaining indigenous habitat protected</li> </ul>	6.2.3 Land Ecosystems 6.2.4 Freshwater Ecosystems 6.2.5 Marine Ecosystems 6.2.6 Indigenous Species
<ul style="list-style-type: none"> <li>• Encourage community awareness</li> <li>• Freshwater fish habitat surveys and protection</li> <li>• Te Whanga riparian protection</li> <li>• Consult on marine habitat protection and reserve proposal</li> <li>• Information provision to iwi and the council re Te Whanga management</li> <li>• Seek landowner and council support for beach habitat protection where freehold</li> </ul>	<ul style="list-style-type: none"> <li>• Coastal marine area sustainably managed</li> <li>• Threatened bird and freshwater fish habitat protection promoted</li> <li>• Marine reserve proposal considered by community</li> </ul>	6.2.3 Land Ecosystems 6.2.4 Freshwater Ecosystems 6.2.5 Marine Ecosystems 6.2.6 Indigenous Species
<ul style="list-style-type: none"> <li>• Action species recovery plans and threatened plants and species strategies</li> <li>• Encourage landowner participation</li> <li>• Re-establish and reintroduce plant and bird species</li> <li>• Surveys of freshwater aquatic species and terrestrial invertebrates</li> </ul>	<ul style="list-style-type: none"> <li>• Further extinction of species prevented, and restoration of habitat assemblages achieved</li> </ul>	6.1.2 Treaty Relationships Community Liaison and Involvement 6.2.6 Indigenous Species
<ul style="list-style-type: none"> <li>• Undertake surveys etc. to develop inventory for Department land</li> <li>• Support whole island inventory and community awareness</li> <li>• Monitor indicator areas at kopi, coastal dune and wahi tapu areas</li> <li>• Appropriate revegetation or revegetation control</li> <li>• Care in facility location</li> <li>• Work with iwi to respect tikanga</li> <li>• Prepare Reserve Management Plan for J. M. Barker (Hapupu) National Historic Reserve and provide visitor information</li> <li>• Prepare representative historic place information</li> <li>• Consult iwi</li> <li>• Control visitor use</li> </ul>	<ul style="list-style-type: none"> <li>• Comprehensive inventory developed Department, NZHPT and community working together</li> <li>• Management appropriate to iwi concerns instigated</li> <li>• Management focused by monitoring results</li> <li>• Specific management focused by management plan</li> <li>• Visitor adverse impacts minimised</li> </ul>	6.1.2 Treaty Relationships Community Liaison and Involvement 6.2.7 Historic Resources 6.5.5 Research 6.5.6 Survey, Monitoring and Information Management

NAME	ISSUE
5.2.7 Animal Pests and Wild Animal Control	<ul style="list-style-type: none"> <li>• Destruction of vegetation</li> <li>• Tuku Nature Reserve and other areas not fully fenced</li> <li>• Fence maintenance</li> <li>• Wild animal populations for hunting</li> <li>• Goat problem potential</li> <li>• Combined impacts of range of current and potential pests</li> <li>• Iwi concern re kiore</li> <li>• Source for rodent spread to other islands</li> </ul>
5.2.8 Plant Pests	<ul style="list-style-type: none"> <li>• Habitat and landscape modification</li> <li>• Priority control situations</li> <li>• Avoidance of new plant pest species</li> </ul>
5.2.9 Visitor Services	<ul style="list-style-type: none"> <li>• Increasing visitors</li> <li>• Few facilities on Department managed land</li> <li>• Potential visitor centre</li> <li>• Visitor behaviour</li> <li>• Physical and legal access restrictions</li> <li>• Tuku Nature Reserve visitors</li> <li>• Potential northern and southern coastal walks</li> </ul>
5.2.10 Customary Iwi Use	<ul style="list-style-type: none"> <li>• Lesser resource availability</li> <li>• Legislative controls</li> <li>• Few island populations remaining</li> <li>• Community, national and international viewpoints</li> </ul>
5.2.11 Sustainable Resource Management	<ul style="list-style-type: none"> <li>• Potential adverse effects of development on natural and historic resources</li> <li>• Community need for some development</li> </ul>

METHOD	RESULT SOUGHT	ACTIVITY
<ul style="list-style-type: none"> <li>Fencing and associated animal pest/wild animal control</li> <li>Negotiate to fence around and beyond Tuku reserve</li> <li>Good neighbour communication</li> <li>Work with iwi re kiore</li> <li>Investigate total possum eradication</li> <li>Work to prevent a feral goat population</li> <li>Advocacy to prevent further pest introduction and existing pest control</li> <li>Implement rodent contingency plan</li> </ul>	<ul style="list-style-type: none"> <li>Reserves and key conservation areas well-fenced and containing minimal wild animals</li> <li>Further pests and wild animal introductions discouraged</li> <li>Spread of pests and wild animals to other islands prevented</li> </ul>	<p>6.2.3 Land Ecosystems</p> <p>6.2.8 Animal Pests and Wild Animals</p>
<ul style="list-style-type: none"> <li>Advocacy to prevent potential plant pest introduction</li> <li>Plant pest control programme on Department land</li> <li>Encourage plant pest control throughout island</li> <li>Good neighbour communication</li> </ul>	<ul style="list-style-type: none"> <li>Impact of current plant pests minimised</li> <li>Further plant pest introductions discouraged</li> </ul>	<p>6.2.3 Land Ecosystems</p> <p>6.2.9 Plant Pests and Exotic Plants</p>
<ul style="list-style-type: none"> <li>Maintain/negotiate/clarify access to 8 reserves/conservation areas</li> <li>Maintain/develop routes and signs in 4 reserves</li> <li>Liaise on/provide basic camping facilities</li> <li>Provide information for visitor centre</li> <li>Promote/develop care codes and access information</li> <li>Require permits and landowner approval for Tuku reserve entry</li> <li>Clearly advise on Tuku reserve access</li> <li>Support community on northern and southern or similar track development</li> <li>Control inappropriate activity on wahi tapu and ko-iwi</li> </ul>	<ul style="list-style-type: none"> <li>Visitors enabled to experience natural and historic values on Department land while protecting those same values</li> <li>Public access to key natural and historic values and coast, lakes, and rivers identified is provided</li> </ul>	<p>6.1.2 Treaty Relationships</p> <p>6.3 Visitor Services</p> <p>6.5.2 Statutory Land Management</p>
<ul style="list-style-type: none"> <li>National policy development</li> <li>Research/monitoring on seabird populations and relocation/recolonisation</li> <li>Any approved customary use accompanied by research/monitoring</li> <li>Information sharing with iwi</li> <li>Protocols on gathering and distribution of natural material</li> <li>Iwi consultation on whale strandings</li> </ul>	<ul style="list-style-type: none"> <li>Seabirds, marine mammals and other indigenous species protected while allowing for any approved customary use</li> </ul>	<p>6.2.6 Indigenous Species</p> <p>6.4.3 Customary Iwi Use</p> <p>6.5.5 Research</p> <p>6.5.6 Survey, Monitoring and Information Management</p>
<ul style="list-style-type: none"> <li>Promote that developments have no significant adverse effects</li> <li>Promote sustainable activity</li> <li>Promote extreme care with any peat-mining and potential pest/weed introducing proposals</li> <li>RMA advocacy</li> <li>Encourage tree plantings</li> </ul>	<ul style="list-style-type: none"> <li>Natural and historic resources on land managed by the Department to protect their values</li> <li>Avoidance, remedy or mitigation of adverse developmental effects promoted</li> </ul>	<p>6.1.3 Community Liaison and Involvement</p> <p>6.2.2 Landscape</p> <p>6.2.3 Land Ecosystems</p> <p>6.2.4 Freshwater Ecosystems</p> <p>6.2.5 Marine Ecosystems</p> <p>6.2.8 Animal Pests and Wild Animals</p> <p>6.2.9 Plant Pests and Exotic Plants</p>

## KEY PRIORITIES

### 5.2.1 COMMUNITY LIAISON AND INVOLVEMENT

#### **Issues**

Chatham Island is the main population, administration, commercial, community, school, landowner, accommodation, visitor and inward/outward transport locality for the Chathams. The Department's Area Office at Te One is beside the main road, central to the island, and adjoins the Whakamaharatanga marae and the Chathams' largest school. As seen elsewhere throughout the CMS, the Department's activities and the protection of natural and historic resources are in many ways reliant on community support and initiatives. There are strong benefits in ensuring that community actions continue to develop and that the Department is seen as a valuable part of the Chatham Island community.

#### **Objectives**

- To be recognised as a positive and contributing member of the Chatham Island community.
- To build further support for natural and historic resource protection by maintaining a positive relationship with the community.

#### **Implementation**

The Department will:

1. Use the opportunity afforded by the new Area Office and reception to increase community interaction with the Department, by providing information on Department and community conservation activities and access to research and other study reports.
2. Maintain regular contact and information exchange with the Chatham Islands Council and other administrative and commercial organisations.
3. Provide Department information and local educational material to schools, and opportunities for Department staff/researcher visits and joint field projects.
4. Promote and provide opportunities for information exchange to, from and between landowners on protection and management of natural and historic resources.

### 5.2.2 LANDSCAPE PROTECTION

#### **Issues**

The arrival of humans on Chatham Island resulted in major landscape changes, particularly in the last 200 years. Despite distinctive elements in the landscape (e.g., volcanic cones and limestone outcrops, the settings of historic places) there is now less overall variety. There is also a lack of a formal landscape inventory and landscape recognition. This should largely be addressed through the council's



The historic German mission house in its dramatic, private land setting at Maunganui.

resource management document process. In negotiating habitat protection the Department needs to be aware of landscape character and integrity when determining fenceline routes, firebreaks, facility locations and revegetation patterns.

### **Objective**

- To improve landscape awareness and management.

### **Implementation**

The Department will:

1. Seek improved protection and enhancement of significant landscapes, assisted by an inventory of them.
2. Seek to conserve and enhance landscape character and integrity when protecting other natural and historic resources.
3. Seek greater public, particularly landowner, and Department awareness of landscape character and integrity.

## **5.2.3 HABITAT RE-ESTABLISHMENT AND PROTECTION**

### **Issues**

Chatham habitats are a fraction of what they were; species populations are restricted and are often under threat; unique habitat types are disappearing (and those that remain are in need of protection). There are limited opportunities for further Department acquisition of the predominantly freehold land but wide scope for additional covenants/kawenata, and some gifting. Physical protection from fire is an essential management task, the extensive 1994 Ocean Mail Reserve fire demonstrating the reality of fire hazards.

### **Objectives**

- To protect and enhance as much of the remaining indigenous habitat as possible on land managed by the Department.
- To promote the protection and enhancement of remaining indigenous habitat on land not managed by the Department.

### **Implementation**

The Department will:

1. Ensure that reserves and key conservation areas are protected from threats such as possum browsing and predators, and that fences are maintained.
2. Exercise the full range of the Department's fire prevention and control authorities (see 6.2.10 Fire).
3. Encourage and facilitate the ongoing protection of habitat on private land by providing details of various options for land protection and, where appropriate, provide resources to enable protective measures to be carried out.



4. Protect significant habitat and corridors between habitats, for their own sake and for threatened species of flora and fauna, through agreements, covenants/kawenata, reserves etc.
5. Where appropriate, reintroduce habitat components, plant, animal and ecosystem processes, to both land managed by the Department and private land, where negotiated.

#### 5.2.4 COASTAL MANAGEMENT AND TE WHANGA

##### **Issues**

Sustainable management of the sea and coast is essential for the long-term survival of the island's unique character and resources and the community's involvement with these areas. The seashore and Te Whanga provide breeding and feeding habitats for bird species. For much of the island, freehold titles extend to the mean high water mark. Te Whanga, other lagoon estuaries and stream and river mouths are habitat for freshwater fish species. Te Whanga is a remarkably intact marine lagoon ecosystem – few of which are left in New Zealand. Iwi interest in the management of the lagoon is high, with strong community feeling that it be a non-commercial fishery area. As for most of New Zealand, there is a lack of information on coastal and marine resources and ecological processes and information on the effect of marine/land interactions and flows of nutrients.

Chatham Island has eleven non-commercial fishing areas which are recognised in legislation. The areas are at Waitangi, Whangamoe, Waitangi West, Mairangi, Wharekauri, Taupeka, Kaingaroa, Owenga, Manukau, Karen Inlet, and Te Whanga Lagoon. Commercial fishing is prohibited within these areas.

##### **Objectives**

- To promote sustainable management of the coastal marine area through the Resource Management Act processes.
- To promote the protection of habitat for threatened bird and freshwater fish species.
- To promote community consideration of a marine reserve.

##### **Implementation**

The Department will:

1. Encourage community awareness of coastal management issues, through information exchange and the council's preparation of its resource management document.
2. Undertake surveys to identify key freshwater fish habitats (e.g., spawning sites) within or adjoining the coastal marine areas (e.g., Te Whanga and Te Awainanga and Nairn River catchments) and seek the protection of these areas.
3. Seek protection of riparian areas around Te Whanga (see 6.2.3 Land Ecosystems for protection mechanisms) for habitat, water quality maintenance, and public access purposes, as the opportunity arises.
4. Consult with the Chathams' community and Ministry of Fisheries on marine habitat protection and consider any application for a marine reserve.

5. Provide ecological and hydrological information and advice to iwi and the council to assist their Resource Management Act or other management of Te Whanga.
6. Seek landowner and council support for beach habitat protection at Chatham Island oystercatcher sites, where freehold land extends to the mean high water mark.

### 5.2.5 INDIGENOUS SPECIES PROTECTION

#### **Issues**

Of the indigenous species a number of endemic species have become extinct and many of those that are left are threatened. It is necessary to reverse the decline of species remaining on Chatham, and when factors causing their demise are rectified, other endemic species can be reintroduced to portions of the island they once occupied. Several options for species recovery are available, from intensive management of an individual species to a holistic habitat or ecosystem approach. The island community's support is essential for the success of these programmes. The Department and other agencies and individuals are involved with ongoing research, and re-introduction and recovery programmes, on both private land and land managed by the Department.



Parea, Chatham Island pigeon.

#### **Objective**

- Endeavour to prevent further extinctions of species and restore habitat assemblages.

#### **Implementation**

The Department will:

1. Undertake actions detailed in all species recovery plans, and the Chathams section of the former Canterbury Conservancy threatened plants strategy and Chatham Islands species conservation strategy, once these plans and strategies are completed.
2. Encourage landowner participation in species conservation through raised awareness of the issues and through habitat protection, revegetation programmes and stock and animal pest control.
3. Re-establish populations of threatened plants in protected areas by transferring from unprotected sites.
4. Where appropriate, reintroduce species that are now extinct on the Chathams e.g., brown teal, paradise shelduck and New Zealand shoveler.
5. Establish programmes to monitor species that may decline rapidly e.g., Chatham shag and Chatham Island tui.
6. Undertake a programme to fully establish the status of freshwater aquatic species and terrestrial invertebrates and, if necessary, take actions to safeguard species.

## 5.2.6 HISTORIC RESOURCES

### **Issue**

The Department's primary responsibility lies with those historic resources on land that it manages. Elsewhere primary responsibility lies with the council, the New Zealand Historic Places Trust and landowners. Some of these resources are slowly disappearing through the processes of erosion, stock interference, revegetation and weathering. It is important to maintain accurate records of these resources, protect what can be protected, and undertake information recovery research where resources cannot be protected (e.g., due to unavoidable erosion).

Current knowledge, e.g., as identified in Sutton (1994) and McFadgen (1994), will assist in identifying key management areas and research tasks. Equally important is the appropriate management of all historic resources, including respecting the tikanga of wahi tapu and ko-iwi (burial sites).

For resources not on land managed by the Department, the Department's role becomes an advocacy one, working with the New Zealand Historic Places Trust and the community.

### **Objectives**

- To protect historic places on land managed by the Department.
- To promote community, council and New Zealand Historic Places Trust care of historic places not on land managed by the Department.

### **Implementation**

The Department will:

1. Undertake surveys, recording and assessments to continue to develop and maintain the historic resources inventory for land managed by the Department.
2. Support a wider historic resources inventory for the whole island, along with increased community awareness of historic resource management issues.
3. Monitor to assess resource condition changes at indicator historic resource areas, including:
  - kopi and other vegetation regrowth with the Moriori tree-carving reserves at Henga, J.M. Barker (Hapupu), Taia Bush and Lake Kairae
  - coastal dune research areas on Department land at Cannon-Peirce Reserve, Wharekauri and Taia and, with landowner approval, at other sites
  - wahi tapu identified in conjunction with iwi
4. Undertake and encourage appropriate revegetation of eroding historic places. In some coastal situations storm wave or tsunami erosion cannot realistically be prevented and site information retrieval may be required.
5. Avoid inappropriate (e.g., forest) revegetation of vulnerable historic places and control natural revegetation where necessary. Accept that kopi growth and regeneration is a natural process and that in time many tree carvings will be lost.
6. Locate tracks, fencelines and other facilities so as not to disturb historic places.
7. Work with iwi to develop management practices and to ensure appropriate tikanga is observed at all times for iwi historic places, especially appropriate iwi, in managing burial sites.

8. Prepare a reserve management plan for the J.M. Barker (Hapupu) National Historic Reserve and provide visitor information for the reserve.
9. Prepare interpretative information for visitors for other representative historic places identified in consultation with the community and iwi.
10. Consult with iwi when a proposed action by the Department involves a place special to them and take their requirements into account.
11. Seek iwi involvement in the management of historic resources, and where appropriate, discuss the possibility of vesting control or management in iwi.
12. Control or discourage visitor use or potential visitor activities at physically unstable historic resources (e.g., eroding archaeological sites) or wahi tapu and ko-iwi as identified by iwi. This control could include signage, diverting visitor facilities, or by seeking Reserves Act by-laws.

## 5.2.7 ANIMAL PESTS AND WILD ANIMAL CONTROL

### **Issues**

In southern Chatham Island there are large populations of feral sheep, feral cattle and wild pigs. These animals have a devastating effect on the indigenous habitats and eventually cause the disappearance of the indigenous vegetation cover. Indirect damage by browsing animals is just as serious. By removing the understorey, the continual, strong, salt-laden winds of the Chathams penetrate the bush and progressively destroy the canopy. The damage, once started, is very difficult to reverse. The Tuku Nature Reserve is fenced only on its eastern and north-eastern boundaries; its other boundaries are part of the mass of indigenous forest cover in central southern Chatham Island. Intensive animal control has controlled feral stock in the eastern areas of the reserve. There is, however, a constant influx of animals replacing those removed.

Northern Chatham Island has wild pigs and limited numbers of feral stock. Reserves in the northern region are all fully fenced but farmed stock regularly break through or vault fences. Conservation areas are not as well fenced. Constant vigilance is required to maintain fences and quickly remove any stock that enter reserves.

Wild animal populations, especially pigs, are important to island residents for recreational hunting and food. Careful management is required to control wild animal levels so that both indigenous species protection and island residents' needs are satisfied, although natural and historic resource protection must be the priority on land managed by the Department.

Goats are present on the island but no feral population has established yet. Goats have the potential to develop wild populations rapidly and cause great damage to indigenous habitats.

Animal pests and wild animals are quickly changing the nature of indigenous habitats and the Chatham Island landscape. Not only are natural resources being affected but also farm productivity. They prey on natural resources, compete with native species and destroy their habitat. On Chatham Island they are:

- predators – feral cats, possums, hedgehogs, rats (Norway, kiore and ship) and mice
- competitors for food and nesting areas – rats, mice, possums, hedgehogs and starlings
- habitat destroyers – possums and rats



Possum – is eradication feasible?

Mori Mori have expressed concern over kiore deaths within predator control programmes (e.g., at Tuku). In a document on the management of kiore on New Zealand islands (An approach to Island management where kiore (*Rattus exulans*) occur, 1995) Chatham Island has been identified as an island where kiore populations will not be removed through any Department initiative in the foreseeable future in consideration of their cultural and scientific value (e.g., research on first people settlement and spread in New Zealand). Given the small

areas of predator control programmes within the total area of Chatham Island, the future of kiore is assured.

Some pest species, if introduced to Chatham either accidentally or deliberately, would be devastating, not only to conservation but to farming as well. Such animal pests include rabbits, mustelid species (ferrets, stoats, weasels), hares, wasps and Australian blowfly.

Chatham Island has the potential to be the source for rodent spread to other islands of the group unless preventative measures are implemented.

### **Objectives**

- To maintain, in conjunction with adjoining landowners, good functional fences around all reserves, and conservation areas where necessary, and aim to reduce wild animal numbers to lower densities in these fenced areas as appropriate.
- To discourage any further animal pest or wild animal introductions to Chatham Island.
- To prevent the spread of animal pests or wild animals to other Chatham islands.

### **Implementation**

The Department will:

1. Construct and maintain appropriately designed fences (e.g., by using electric or extra-height fences to exclude wild cattle) around all reserves and significant conservation areas, and eradicate all feral sheep and cattle from these areas.
2. Reduce pig numbers in reserves and conservation areas to levels at which they will not threaten the natural or historic values at risk and eradicate, where appropriate, after consultation.
3. Negotiate the fencing of as much of the south-western bush as possible so that the Tuku Nature Reserve, as part of this, is completely enclosed by fence.
4. Target hunters to wild animal priority areas.
5. Advocate and work with land owners to prevent the establishment of feral goat populations, and destroy any feral goat at large on land managed by the Department.
6. Maintain good neighbour communication to ensure fences are maintained in good condition and any wandering stock are quickly retrieved.

7. Control cat and possum and other predator numbers in the Tuku Nature Reserve and adjoining Tuku and Awatotara covenant areas to the very low levels necessary to protect the parea and taiko.
8. Work with iwi to collect, if needed, any kiore caught in predator control programmes, for customary use or research.
9. Investigate the feasibility of eradicating possum from the whole island.
10. Strongly advocate, in conjunction with the Conservation Board, the council and the community, to put into place mechanisms to prevent introductions of other potential animal pest species.
11. Encourage council and landowner control of existing animal pests throughout the island.
12. Implement relevant parts of the Department's rodent contingency plan (see also 6.2.8 Animal Pests and Wild Animals), in particular:
  - (i) Co-ordination with offshore island landowners and fishing boat owners.
  - (ii) Maintenance of bait stations at harbours and the airport.
  - (iii) Maintenance of rodent-proof facilities for stores and equipment.
13. Assist relevant agencies to prepare a brochure advising of the risks of introducing animals that may become pests.

#### 5.2.8 PLANT PESTS

##### **Issues**

Plant pest species such as gorse, broom, blackberry, marram, old man's beard, boxthorn, Chilean guava and Himalayan honeysuckle change the landscape and modify the composition of habitats as well as affecting farm productivity.

Some plant species, if introduced to the Chathams either accidentally or deliberately, could be devastating, not only to conservation but also to farming or other community values as well. Some of these plant pests are spartina (impact on Te Whanga), heather, tree lupin and Spanish heath. Other species, such as Chilean guava, are unknown as plant pests on mainland New Zealand, but are currently posing a serious invasive threat to Chatham Island plant communities.

A range of garden plants exotic to the Chathams have been or are being brought in for home gardens or retail. Species that are capable of becoming pests, such as cotoneaster, sweet brier and banana passionfruit, should be discouraged.

##### **Objective**

- To minimise the impact of plant pest species on indigenous habitats and species and discourage any further plant pest introductions to Chatham Island.

##### **Implementation**

The Department will:

1. Strongly advocate, in conjunction with the Conservation Board, the council and the community, to put mechanisms into place to prevent introductions of other potential plant pest species.

2. Develop a comprehensive plant pest control programme for land managed by the Department to protect those habitat types most vulnerable to weed encroachment and infestation, e.g., scrub communities, coastal habitats and wetlands.
3. Encourage council and landowner control of existing plant pests throughout the island.
4. Maintain good neighbour communication to ensure plant pest encroachment and spread is minimised.
5. Assist relevant agencies to prepare a brochure advising of the risks of introducing plants that may become pests.

### 5.2.9 VISITOR SERVICES

#### **Issues**

Transport and accommodation are improving and there are growing numbers of visitors. Many of the destinations sought are on lands managed by the Department. These areas were established when few visitors came to the Chathams and few facilities are available for the visiting public. Most reserves are difficult to get to and move around in, and provide no interpretive information for visitors. Access to many reserves is over private land and requires landowner approval.

An Island Visitor Information Centre has been proposed by the Chatham Islands Visitor Promotion Board and others; the Department being seen as possibly providing this centre.

Basic facility (e.g., toilet, water supply) camp-sites and picnic areas are appropriate in some areas. Island residents are concerned about visitor behaviour, such as waste disposal, trespass, and fire. Iwi are concerned at potential offence to tikanga and need to be consulted for their cultural input into signage and interpretation material.

Many natural and historic features, including parts of the coast, lakes and rivers, are on private land or require access over private land to reach them. Public access routes such as unformed legal roads are not well recorded or signposted.

The Tuku Nature Reserve, gifted to protect a large forested area, is the key habitat of the threatened parea and taiko, and is an intensive research and management area. Practical access is via the adjoining private land at the landowner's discretion. Permits are required to enter a nature reserve.

Nature reserve is the most protective reserve classification and imposes specific legislative responsibilities on the Department. These include primary attention to preservation of the natural state and the indigenous flora and fauna, ecological associations and natural environment; the extermination of exotic flora and fauna; the control of persons wishing to enter a reserve, and the management where compatible with other natural and historic values.

The Chatham Islands Visitor Promotion Board is considering possibilities for northern and southern coastal walking tracks using private accommodation and possibly passing through Ocean Mail and Thomas Mohi Tuuta (Rangaika) reserves. Both would be spectacular walks.

## **Objectives**

- To enable visitors to experience the natural and historic values of Chatham Island as represented in the lands managed by the Department while still protecting those values for which the reserves and conservation areas were established and ensuring appropriate tikanga is observed.
- To encourage the identification and provision of public access to key natural and historic features and to and along the coast, lakes and rivers.

## **Implementation**

The Department will:

1. Maintain, or negotiate for, suitable public foot access arrangements across private land and/or clarify with adjoining landowners where access is along unformed legal road to the following priority reserves and conservation areas:
  - Cannon-Peirce
  - Harold Peirce
  - Chudleigh
  - Wharekauri
  - Tangepu
  - Lake Rotokawau
  - Henga
  - Thomas Mohi Tuuta (Rangaika)
2. Maintain or develop walking routes and appropriate signs for the following priority reserves:
  - J. M. Barker (Hapupu)
  - Thomas Mohi Tuuta (Rangaika)
  - Nikau Bush
  - Henga
3. Maintain contact with the Chatham Islands Visitor Promotion Board to assess what basic camp-site or picnic facilities are being provided by the community.
4. Provide basic camp-site or picnic facilities on land managed by the Department as the need is perceived to avoid adverse environmental effects or to foster recreation. Fireplaces will not be provided, and camp or picnic fires will be prohibited, the alternative of gas cooker or gas barbecue being encouraged.
5. Assist with the development of a visitor centre for the island, and visitor information at the airport by providing natural and historic resource information and displays. This will be done in conjunction with the Chatham Islands Enterprise Trust, the Chatham Islands Visitor Promotion Board, the council, iwi, and private developers.
6. Work with the Chatham Islands Visitor Promotion Board and the council to:
  - promote the New Zealand Water Care Code (1995) and New Zealand Environmental Care Code (n.d.) to visitors (see Appendix 3);
  - develop a Chatham Island visitor access information pamphlet or system to identify public access routes, landowner contacts should private land access be desired, and an access code of behaviour.



7. Control visits within Tuku Nature Reserve in the following way:
  - entry only by permit in accordance with sections 20(2)(c) and S57(1) of the Reserves Act 1977
  - permits can be applied for through the Chatham Islands Area Manager, subject to delegation from the Minister to this management level being approved
  - permit to contain conditions covering
    - (i) extent of reserve area able to be visited
    - (ii) protection of fauna, flora and habitats
    - (iii) non-introduction of animals, plant material or any debris of any kind (except approved dog entry for pig hunting)
    - (iv) firearm control
    - (v) fire prevention control
    - (vi) protection of management and research facilities and equipment
    - (vii) visit reports and monitoring
    - (viii) Crown indemnity
    - (ix) permit compliance
    - (x) Access to the reserve (see Implementation 8)
8. Control access to Tuku Nature Reserve by advising that while easiest access is through private land, access permission must be sought from the land owner if moving off the formed, legal Waitangi – Tuku Road which ends at the Tuku River.
9. Allow concessions for guided visits within the reserves and conservation areas where appropriate.
10. Support the establishment of northern and southern or other similar coastal walking tracks, either as private ventures (e.g., Banks Peninsula track in Canterbury) or as public facilities (e.g., as a walkway under the New Zealand Walkways Act 1990), where there is community support for such proposals.
11. Minimise or control inappropriate recreation activity (e.g., camping) on wahi tapu and ko-iwi sites within land managed by the Department by the use of:
  - (i) guidance through signs to alternative facility/site provisions or
  - (ii) by-laws sought under section 106 of the Reserves Act 1997 for reserves, or
  - (iii) in critical situations, to allow by-law control, land status change from marginal strip to reserve.
12. Iwi will be consulted on the development of relevant signage and interpretation material.

## 5.2.10 CUSTOMARY IWI USE

### **Issues**

Indigenous species use has been and remains an important aspect of life on Chatham. Dramatic reductions in species populations and the introduction of legislation to protect species has meant these resources are less readily available.

There are island resident calls to legalise the taking of species such as akoko/titi (muttonbirds) and hopo/toroa (albatross), although for the latter there is also strong local feeling for its continued protection. There was a limited take of beach-cast albatross authorised for the 1991 Chatham Island bicentenary celebrations, though no birds were subsequently found. There is also a demand for traditional sources of raw material such as whale and seal bones and teeth and seal skins for various customary uses.

Most sources of these species are now restricted to a handful of islands and islets (see 5.5 Other Islands). Due to the widespread effects of human activity all of the huge Chatham Island colonies are now gone with only small remnant populations of some species surviving. The degree of vulnerability of these populations is not fully known.

Many issues are encompassed within this customary use area, some requiring resolution at a national level, others at community level. One issue is the extent to which legislation allows for or envisages customary use. There are also international issues, given that some species range widely through the southern and Pacific oceans.

As on the New Zealand mainland, a number of species are available to take (weka, black swan, grey duck, mallard and pukeko) pursuant to Chatham Islands (Wildlife) Notice 1977. Unlike mainland New Zealand, few restrictions apply and no licence is required. Weka are included within the Notice as they were introduced to the Chathams. The Draft weka recovery plan identifies the Chatham Islands as a source of buff weka for South Island recovery programmes.

## **Objective**

- To ensure the protection of seabird, marine mammal and other indigenous species whilst managing any authorised customary use.

## **Implementation**

The Department will:

1. Contribute to national policy development on customary use, ensuring that species protection, iwi perspectives and the diverse land status of the Chatham Islands are properly considered.
2. Promote research to determine the population dynamics of remnant titi populations on Chatham Island.
3. Continue research to develop relocation and recolonisation techniques for seabird colonies on Chatham Island.
4. Promote the development of monitoring techniques to gain an understanding of seabird populations that may in the future be subject to authorised taking.
5. Ensure, should any approved customary use of titi occur, that it is accompanied by adequate research and monitoring, or undertaken in accordance with any departmental national policy.
6. Consult with iwi to share information on customary use harvesting and monitoring techniques.
7. Develop, in consultation with iwi Moriori and Maori, protocols for the gathering and distribution of plant and animal materials (including whalebone) and minerals for customary use from land and of species managed by the Department.
8. Consult with iwi on whale strandings and disposal of whalebone to iwi.

## 5.2.11 SUSTAINABLE RESOURCE MANAGEMENT

### **Issues**

Chatham Island is the primary site for land resource development in the Chathams. With the island's widespread natural and historic resources most developments will have the potential for adverse environmental effects. Equally, the island needs some development to provide for the community's social, economic and cultural well-being, some of which may directly affect land managed by the Department. Current or potential developments include farm land development, forestry, limestone-/road metal-/peat-mining, hydro power generation, fish factories, waste discharges, sphagnum harvesting, marine farming and new species farming/breeding.

### **Objectives**

- To manage the natural and historic resources on the land managed by the Department to protect their natural values and the character of Chatham Island.
- To promote avoiding, remedying or mitigating any adverse effects on natural and historic resources by any development proposal on land not managed by the Department.

### **Implementation**

The Department will:

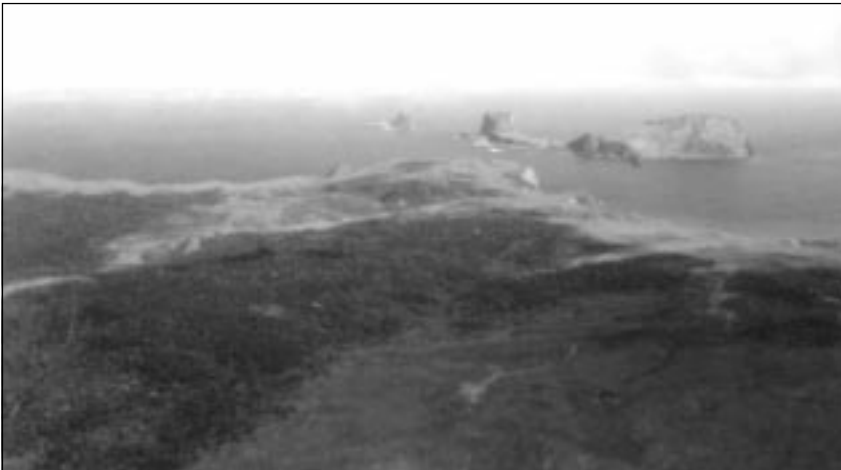
1. Not oppose hydro development proposals that are not on land managed by the Department and have no significant adverse effects on freshwater resources and other natural and historic resources.
2. Not oppose any wind-power electricity generation proposals developed to avoid significant adverse effects on landscape, natural and historic values.
3. Promote that any sphagnum harvesting is carried out in a manner that allows sustainable harvesting and protects some natural areas of sphagnum, and which will not compromise any significant habitat or the dynamics of any hydrological system.
4. Promote that any peat-mining or any industry based on peat undergoes a thorough EIA and, if consent is granted, is subject to such conditions that will ensure minimum damage to habitat complexes and hydrological systems.
5. Consider critically any application for the introduction of any species that may escape and have the potential to develop into a pest or disease vector, e.g., ferrets (polecats), chinchilla, rabbits (all types and forms), hares, all deer species and potential problem plants.
6. Encourage appropriate fast-growing tree plantings, that would not result in wilding tree pest problems, on areas of low conservation value, to provide for sustainable firewood gathering as an alternative to use of indigenous wood, to provide shelter and to protect riparian margins.
7. Consult with the council during the preparation of their resource management document to seek consideration of natural and historic resource protection.
8. Assess relevant resource consent applications for adverse effects on conservation values.

## 5.3 Pitt Island (Rangiauria)

### INTRODUCTION

Pitt is the only other large (6,326 hectares) inhabited island in the Chathams group. Although it is situated only 19 kilometres south-east of Chatham Island it is quite different from Chatham in its physical and biotic components, as well as its social structure and community perspective.

The island is a product of both its geological make-up and its human influences. The geology divides the island's character quite neatly into two zones, a northern zone of predominantly sedimentary rocks and a southern one of volcanic basalt. The northern end of Pitt is characterised by low, rounded undulating country of high fertility that is reflected in the lush green pastures – a product of weathering on the soft carboniferous sandstones. In the north-east, pasture dwindles away to restricted sand dunes and sandy beaches. A belt of highly modified swamps and a



View over Waipaua reserve block and farmland, the hill Waihere, and Mangere offshore.

lake, resulting from ponding of the Tupuangi stream caused by the build up of sand dunes, and a swamp in the Waipaua block make up the total wetland habitat (about 50 hectares). On the north coast, steep cliffs interspersed with sandy beaches predominate. Between Tarawhenua Point and Flower Pot these cliffs are limestone and from Flower Pot to Motutapu Point they are of tuffaceous materials. In some

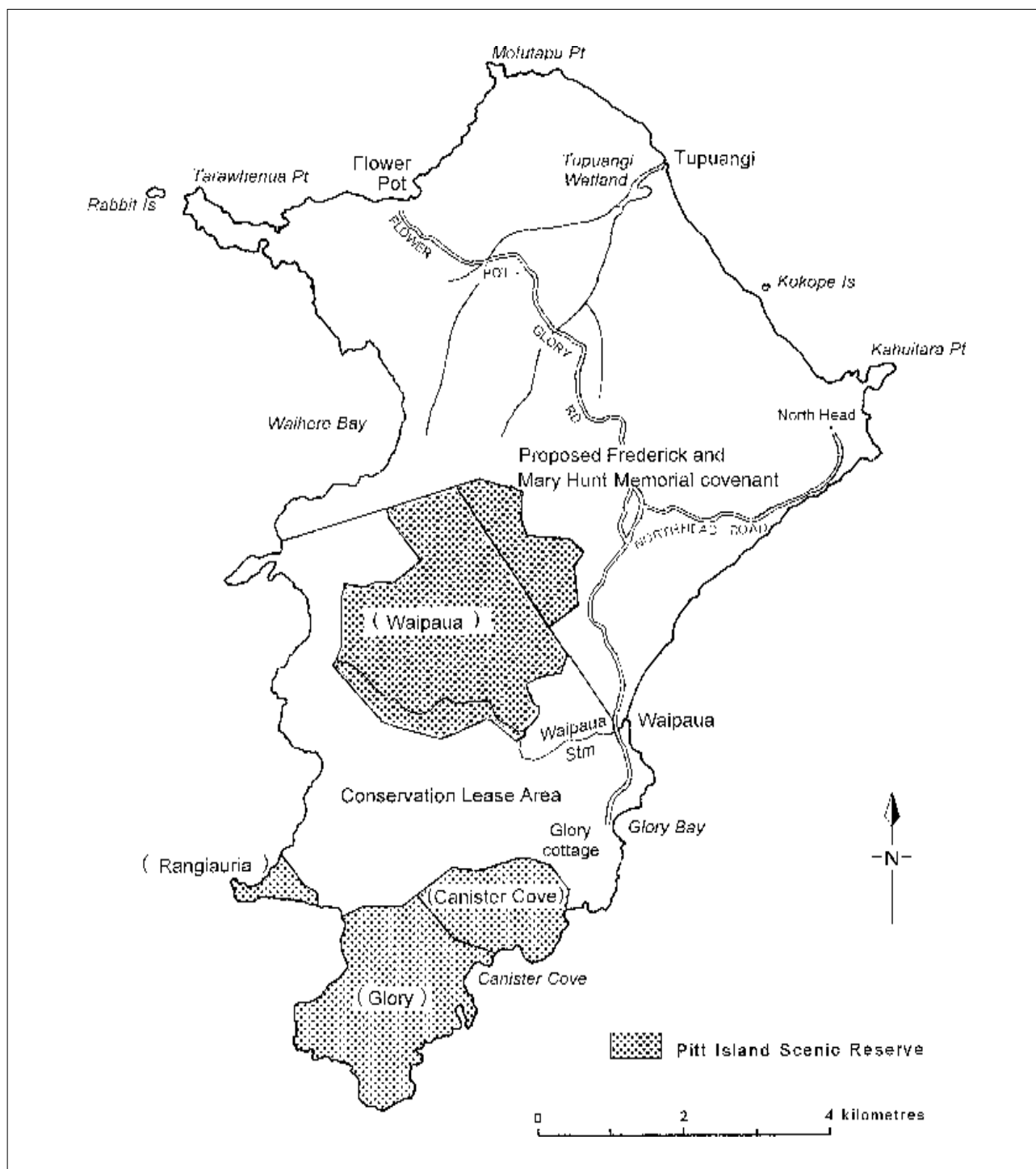
areas, such as Waihere Bay, the carboniferous limestone has been undercut and the overhanging tuff and limestone has crashed down on to the inner edge of the beach. This has resulted in the characteristic sandy beaches backed by a mass of slumped material at the foot of the high cliff.

The southern zone is similar to southern Chatham – a dissected plateau. Characteristics of the plateau are patches of indigenous bush, open scrub and bracken-covered country. From Kahuitara Point, where there are some cliffs, to Glory Bay, the coastal features consist of platforms and sandy beaches with belts of fixed dunes. However, from Glory Bay southwards and up the west coast to Waihere Bay the coast is steeply cliffed, with offshore reefs and islands, stacks, causeways and caves – a product of the volcanic agglomerates. Soil fertility is poorer and pastures rough.

Land managed by the Department in this southern zone includes: the Pitt Island Scenic Reserve, comprising the Waipaua block encompassing most of the central scrubland, peat lands and indigenous bush; the three southern blocks, Rangiauria, a huge volcanic cone with steep, roughly vegetated cliffs, Glory Bay and Canister Cove, which are bush, cliff-top assemblages and sheer cliffs; and the conservation (lease) area between the reserve blocks.

These reserve areas were established in 1973 as part of an agreement between the seller, the Crown and the lessee. The lessee agreed on donating the reserves out

MAP 3: PITT ISLAND



of the lease area and foregoing the right of purchase, enabling the reserves to be created, and retained the ongoing lease of the adjoining area (see 5.3.8 Lease Area Management). The offshore seller had bought the land four years previously without most Pitt Islanders' knowledge. This created a sense locally that the land had been unfairly removed from islander control, especially the pastoral land. Human settlement has seen the transformation of the landscape from its former indigenous forest cover to rich green pasture in the north and, to the south, rough scrub and pasture, and highly modified indigenous bush. Introduced weka, pigs, cats and stock that have become feral are affecting the remaining bush and species populations. Although mice are present, a combination of good luck and islander

management has meant there are no rat species on Pitt. Possums and mustelids are also absent.

The island is home to about fifty people with the unique lifestyle offered by an isolated island. Most of the commercial activity is centred around fishing and farming.

Apart from the obvious importance to its residents, Pitt is a key to the future of Chathams conservation because of its size, absence of any of the three rat species, absence of possums and the wide representation of significant Chatham Islands habitats.

Pitt Island has four non-commercial fishing areas which are recognised in legislation. These areas are at Flower Pot, Waipaua, Waihere, Kahuitara. Commercial fishing is prohibited in these areas.

## FEATURES AND ISSUES

### **People Partnership**

The inhabitants of Pitt form the most physically isolated rural community in New Zealand. This isolation means that there has been difficulty maintaining transport linkages and at times the economic viability for some traditional forms of livelihood such as farming and fishing. There are strong ancestral ties to the island and, like many rural areas, a desire by some islanders to develop added employment options such as providing visitor services.

Because of the importance of Pitt to the overall protection of indigenous Chatham Island species, and because two-thirds of the land is in private ownership, it is important that the community is supportive of the Department's aims. The long-term enhancement and maintenance of natural and historic resources on Pitt is a responsibility of the community, in conjunction with the Department.

The isolation and potential predator-free habitat and relatively small size of the Island makes issues and people partnership perhaps different from anywhere else the Department deals with. The Department needs to continue to seek adequate solutions to the unique Island problems enabling this vital habitat to reach its potential. Because of local involvement in the creation of the reserves and covenants and the important social and economic significance of the areas owned by the Crown, local feelings and interests need to be understood and given priority. In recognition of the closer relationship needed between the Department and the Pitt Island community, the Minister of Conservation initiated the establishment of a Pitt Island Reserves Committee under section 9 of the Reserves Act 1977. The function of this committee is to provide advice to the Minister on:

- native flora and fauna and wild animal management issues
- recreational and visitor activities that may be promoted for the reserve
- any research proposals
- any other matters that are part of the relationship between the Department and the Pitt Island community

The committee has been active in giving such advice since its establishment in 1993.

The Pitt Island community has a role in the protection of the nearby nature reserve islands for which they are the closest neighbour.

## **PITT ISLAND – A FUTURE VISION**

It is the year 2009:

- The Pitt Island community is continuing to support conservation on the island, e.g., the Pitt Island Reserves Committee has given direction and support to Department work programmes.
- The historic Glory Cottage and other historic resources have been restored or protected.
- Islanders have been directly involved in work programmes, e.g., pig and sheep control, monitoring of wildlife.
- Sheep in the agreed reserve block are being managed to levels that allow regrowth of native plant species – the bush is flourishing and rare plants are regenerating in many places; predator-proof fenced areas contain no sheep.
- Pigs in reserve blocks are managed to levels that allow regrowth of native plant species – the bush is flourishing and rare plants are regenerating in many places; the predator-proof fenced areas contain no pigs.
- The process of restoring seabird colonies has already increased numbers of titi and broad-billed prion on the southern cliffs – there is now talk of introducing toroa and maybe even taiko.
- Bird species such as black robin, Forbes parakeet, parea and shore plover are thriving on the island.
- Wild cat and weka populations have been removed from predator-proof fenced areas and, if community agreement has been reached, removed from the whole island.
- A small number of visitors are coming to Pitt Island as guests of islander-run visitor services that operate co-operatively with the major conservation programmes.
- Procedures are in place for excluding rats and other pests from the island, including invasion contingency plans.
- Action has been completed to enable a Statutory Pitt Island body to control and manage the lease area.

The following 'Pitt Island – A Future Vision' is the hoped-for result of the special relationship between the Department and the community. The foreseen outcomes can only be achieved successfully by the two parties working positively together.

## **HERITAGE CONSERVATION**

Pitt Island is, after Fiordland's Secretary Island, the next largest rat-free island in the world's temperate zone. It has no possum population, and has representative examples of many Chathams habitat types. It does, however, have feral cat, pig and weka populations, all introduced predators. Because most of the Chathams species either do not have sufficient predator-free habitat (Chatham Island being predator-occupied), or have reached the carrying capacity of suitable habitat (on Rangatira), Pitt has the potential to be the key site for the long-term survival of most Chatham Island threatened species. To fulfil this role it is necessary to remove predators from the island. If this is not possible then predators will need to be eradicated from southern reserve blocks or other areas as negotiated with land

owners or held at acceptable levels within the Waipaua reserve block. There is tremendous potential for endemic species populations on Pitt once predators have been removed. Seabird populations would recolonise the southern headlands. Birds from the seabird-saturated Rangatira and Mangere nature reserves currently attempt to establish nests on Pitt but are quickly preyed upon. Following the eradication of cat, pig and weka populations, self-recolonising of other species would also take place. Some would come from the nearby nature reserves, such as New Zealand shore plover, Chatham Island snipe and Forbes parakeet and some would come from Pitt itself, such as parea. Some species would need to be reintroduced, such as black robin, Chatham petrel, northern royal albatross and additional parea. Species would also benefit from the removal of weka but their recovery could be hampered by the presence of mice.



Frederick Hunt and his wife Mary (née Preswood) at Flower Pot in 1873. He was then 56 and she was 60 years old. This photograph was taken by Samuel Barker whose family subsequently ran the Kaingaroa Station on Chatham Island. (Photo: Canterbury Museum.)

## HUMAN HISTORY

Moriuri had an early and long period of occupation as residents on Pitt, both as part of regular cycles to gather food and to use Pitt as a stepping-off point for the other islands as part of food-gathering expeditions. Substantial past settlement sites (e.g., Waipaua) are in evidence. Recorded named Moriuri residents were Purehe, and later Koche, who had fled to Pitt to escape the Maori invasion parties. Dieffenbach (n.d.) noted 12 Moriuri on Pitt in 1840 – Koche was part of this group. Frederick Hunt (below) recorded a Moriuri couple living on Pitt. European settlement began when Fredrick Hunt moved his family onto the island in 1843. The Hunts cleared areas around Flower Pot harbour and established pastoralism on the island. The fortunes of the Hunts fluctuated as they made a living by producing fresh food supplies for whaling and sealing ships as well as for export to Australia. Mrs Hunt is recorded (Robertson, 1883) as being ‘diligent’

in examining imported plants to ensure the non-introduction of pest insects. The physical evidence of Pitt’s past includes numerous, mostly Moriuri, historic places, an historic building at Glory Cove (Glory Cottage) and the remains of a gaol hewn into the limestone cliff at Flower Pot. Some historic places and the Glory Cottage are on land managed by the Department; the gaol is on council-administered esplanade reserve.

## RECREATION AND USE

As with Chatham, recreational activities are community-based or involve food-gathering activities such as pig hunting, shooting feral stock, fishing and diving. Growing interest in the Chatham Islands will see increased visitors to Pitt. The Department’s role is to ensure that such activities will not adversely affect natural and historic values on land managed by the Department. The community is responsible for ensuring the industry is developed to fit in with what they feel is appropriate to their community requirements and expectations.



TABLE 5: KEY PRIORITIES FOR PITT ISLAND

NAME	ISSUE
5.3.1 Community Liaison and Involvement	<ul style="list-style-type: none"> <li>• Essential liaison need</li> <li>• National interest</li> </ul>
5.3.2 Habitat Protection	<ul style="list-style-type: none"> <li>• Some significant habitats not protected</li> <li>• Legally protected areas still under threat from stock and wild animals</li> </ul>
5.3.3 Species Protection	<ul style="list-style-type: none"> <li>• Pitt is a key area for many threatened birds and plants</li> <li>• Predator control essential</li> <li>• Freshwater fish fauna little known</li> </ul>
5.3.4 Historic Places	<ul style="list-style-type: none"> <li>• Range of historic places on Department and other lands</li> <li>• Important sites at Tupurangi and Waipaua</li> <li>• Damaging impacts</li> <li>• Respect for tikanga</li> <li>• Two important structures at Glory and Flower Pot</li> </ul>
5.3.5 Predator Eradication	<ul style="list-style-type: none"> <li>• Need for predator control</li> <li>• Islander support</li> <li>• Whole island or parts thereof</li> <li>• Mouse eradication potential</li> </ul>
5.3.6 Pest Contingencies	<ul style="list-style-type: none"> <li>• Retaining rat/possum-free status</li> <li>• Preventing introduction of other pests</li> </ul>
5.3.7 Visitor Management	<ul style="list-style-type: none"> <li>• Lack of access to and within reserve</li> <li>• Likely visitor number increase</li> <li>• Development largely in community hands</li> <li>• Effects on natural and historic resources</li> </ul>
5.3.8 Lease Area Management	<ul style="list-style-type: none"> <li>• Long-term lease</li> <li>• Forest modification</li> <li>• Pastureland use</li> <li>• Forest corridor</li> <li>• Lack of public areas</li> <li>• Community control</li> <li>• Historic place protection</li> </ul>

METHOD	RESULT SOUGHT	ACTIVITY
<ul style="list-style-type: none"> <li>Pitt Island Reserves Committee</li> <li>Maintain staff presence</li> <li>Whole Pitt community consultation and involvement</li> <li>National media information and interest group involvement</li> </ul>	<ul style="list-style-type: none"> <li>Pitt Island community and Department working well together</li> <li>New Zealand community supportive of Department and Pitt community actions</li> </ul>	<ul style="list-style-type: none"> <li>Community Liaison and Involvement</li> <li>6.2.3 Land Ecosystems</li> <li>6.2.6 Indigenous Species</li> <li>6.2.7 Historic Resources</li> <li>6.2.8 Animal Pests and Wild Animals</li> </ul>
<ul style="list-style-type: none"> <li>Evaluate areas for protection</li> <li>Identify protection options</li> <li>Fencing and animal control</li> <li>Monitoring of animal effects in Waipaua block</li> <li>Habitat restoration</li> <li>Promote Tupurangi wetland protection</li> </ul>	<ul style="list-style-type: none"> <li>Indigenous habitat protected on land managed by the Department</li> <li>Indigenous habitat protection across whole island encouraged</li> </ul>	<ul style="list-style-type: none"> <li>6.2.3 Land Ecosystems</li> <li>6.2.4 Freshwater Ecosystems</li> <li>6.2.8 Animal Pests and Wild Animals</li> </ul>
<ul style="list-style-type: none"> <li>Bird species reintroduction</li> <li>Bird species management</li> <li>Supplement plant populations</li> <li>Undertake fish surveys</li> </ul>	<ul style="list-style-type: none"> <li>Indigenous species survival enhanced</li> </ul>	<ul style="list-style-type: none"> <li>6.2.4 Freshwater Ecosystems</li> <li>6.2.6 Indigenous Species</li> </ul>
<ul style="list-style-type: none"> <li>Maintain inventory</li> <li>Reduce impacts via animal control</li> <li>Undertake appropriate and control inappropriate revegetation</li> <li>Careful facility location</li> <li>Consult iwi re tikanga</li> <li>Glory Cottage conservation plan</li> <li>Community/council care at Flower Pot</li> </ul>	<ul style="list-style-type: none"> <li>Historic places on Department managed land protected</li> <li>Protection of other historic places promoted</li> </ul>	<ul style="list-style-type: none"> <li>6.2.7 Historic Resources</li> </ul>
<ul style="list-style-type: none"> <li>Predator-proof fences</li> <li>Predator species eradication</li> <li>Island involvement</li> <li>Investigate mouse eradication</li> </ul>	<ul style="list-style-type: none"> <li>Suitable areas of predator-free habitat created</li> </ul>	<ul style="list-style-type: none"> <li>6.2.6 Indigenous Species</li> <li>6.2.8 Animal Pests and Wild Animals</li> </ul>
<ul style="list-style-type: none"> <li>Implement rodent contingency plan</li> <li>Work with Pitt community</li> <li>Hold poison and traps at readiness</li> <li>Develop community responses to hold at bay other animal pests</li> </ul>	<ul style="list-style-type: none"> <li>Pitt Island kept free of rodents, possums and other potential pests</li> </ul>	<ul style="list-style-type: none"> <li>6.2.6 Indigenous Species</li> <li>6.2.8 Animal Pests and Wild Animals</li> </ul>
<ul style="list-style-type: none"> <li>Consultation on facilities, interpretation</li> <li>Provide appropriate tracks/routes/signage</li> <li>Visitor information pamphlet</li> <li>Impact monitoring</li> </ul>	<ul style="list-style-type: none"> <li>Provisions for visitors to Department lands developed with the community</li> </ul>	<ul style="list-style-type: none"> <li>6.3 Visitor Services</li> </ul>
<ul style="list-style-type: none"> <li>Lessee liaison</li> <li>Negotiate and resolve public access</li> <li>Identify and implement pasture lease and natural/historic protection options</li> <li>Undertake Waipaua historic place investigation and protection</li> <li>Examine all options</li> </ul>	<ul style="list-style-type: none"> <li>Remaining natural and historic resources protected</li> <li>Public access provided</li> <li>Waipaua values protected</li> <li>Reserves committee manages pastureland use.</li> </ul>	<ul style="list-style-type: none"> <li>6.2.3 Land Ecosystems</li> <li>6.2.7 Historic Resources</li> <li>6.3 Visitor Services</li> <li>6.5.2 Statutory Land Management</li> </ul>

## AREAS MANAGED BY THE DEPARTMENT

The following key areas managed by the Department are described in more detail in Schedule II.

### **Scenic Reserves**

Pitt Island (comprising Rangiauria, Glory, Canister Cove and Waipaua blocks).

### **Conservation Area**

C.J.M. lease area.

## KEY PRIORITIES

### 5.3.1 COMMUNITY LIAISON AND INVOLVEMENT

#### **Issues**

Given Pitt Islanders' strong feelings about their island, it is essential for the Department to maintain close liaison and involve islanders in the Department's management activities. Without such an approach, any Department role on the island is unachievable. At the same time, there is New Zealand-wide interest in Pitt Island's fauna and flora, particularly as Pitt becomes recolonised by threatened species currently on Rangatira and Mangere. There is a need to ensure that this wider community supports and, where possible, becomes involved with the islander and Department negotiated management actions.

#### **Objectives**

- To continue to build a good working relationship with the Pitt Island community.
- To seek New Zealand community support for the Department's and the Pitt community's joint actions.

#### **Implementation**

The Department will:

1. Maintain its involvement with the Pitt Island Reserves Committee.
2. Recommend continued Pitt Islander representation on the Chatham Islands Conservation Board.
3. Maintain a preferably full-time staff presence on the island; their role being community liaison, undertaking monitoring, fence maintenance, predator eradication and other management requirements. This could be a local person with appropriate training.
4. Consult with the whole community on issues affecting the whole island.
5. Encourage community initiative on and involvement with work programmes.

6. Provide research, monitoring and management reports to the community; in particular through the school/public library.
7. Encourage natural and historic resource information exchange from the community to the Department.
8. Encourage involvement in and study of island conservation projects by the Pitt Island schoolchildren, including future options for Internet links with the Department.
9. Ensure all Department staff and contract workers obtain landowner access approvals where required.
10. Disseminate information on the Department's Pitt Island management programmes through national media and to interested groups, and encourage feedback and fieldwork involvement where possible.

### 5.3.2 HABITAT PROTECTION

#### **Issues**

Many of the significant areas are now under some form of legal protection on Pitt but some are not, for example, wetland assemblages at Tupurangi and coastal broadleaved forest with good representation of nikau and ngaio. It is desirable that habitats are protected with consideration to landscape values, so as to minimise land use changes, fencelines etc. that abruptly interrupt the land character.

Serious threats still exist for the areas under protection. Feral stock, wild pigs and intruding domestic stock still exist in the reserves to varying degrees. Fencing to exclude pigs is only realistic in priority areas ringed by expensive predator-proof fences. Most of the forest is on land managed by the Department and the most significant feral stock and pig populations are found in these areas. As these populations are considered important recreational and food resources to Pitt Island residents it is important to consider their availability. On the other hand, by maintaining animal populations, significant conservation values are compromised. Household goats are held on Pitt and, while acceptable in this situation, any establishment of a wild population would be a serious vegetation threat.

#### **Objectives**

- To ensure areas of significant indigenous habitat currently within land managed by the Department (excluding the lease area) are protected.
- To encourage indigenous habitat protection within the current lease area and on land not managed by the Department.

#### **Implementation**

The Department will:

1. Evaluate any area of habitat offered for reserve, covenant or other protection, and implement the land owner's preferred protection options. Land purchase will generally be a last resort.
2. Present to landowners all options for habitat protection (see 6.2.3 Land Ecosystems) and in particular the kawenata and covenant options.

3. Ensure all reserve fences are functional and in good condition to a stock-fence standard.
4. Aim for a zero density of feral stock in the three southern reserve blocks – Glory, Canister Cove and Rangiauria.
5. Work with the community to ensure a pig population in the three southern reserve blocks (Glory, Canister Cover and Rangiauria) that allows native bush and rare plants to flourish. Aim for zero pig density in any predator-proof fenced area.
6. Maintain a stock density of no more than 0.36 per hectare (i.e., 250 total) of the Saxony merino sheep and no cattle in the Waipaua reserve block; maintenance and monitoring of this to be a joint responsibility of the Pitt Island residents, the Pitt Island Reserves Committee and the Department.
7. Closely monitor and control pig numbers in the Waipaua reserve block and ensure their numbers are maintained at a level that is consistent with self-sustaining indigenous habitat. Pig control to be a joint action by the Pitt Island residents, the Pitt Island Reserves Committee and the Department.
8. Maintain animal enclosure plots in the Waipaua block to enable the assessment of future revegetation requirements and the suitability of stock control densities.
9. Advocate that a council regional pest strategy restricts goats to those held for household purposes only.
10. Promote or undertake habitat restoration in the Canister Cove, Glory and Rangiauria reserve blocks.
11. Promote habitat protection for the Tupurangi wetland.  
(see 5.3.8 (Lease Area Management))

### 5.3.3 SPECIES PROTECTION

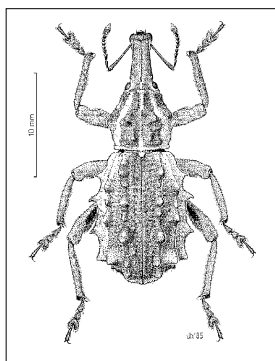
#### Issues

Draft plans for, taiko, black robin, and New Zealand shore plover, as well as the Chatham Islands species strategy and the Chathams part of the former Canterbury Conservancy threatened plant strategy all include Pitt Island in the long-term goal for species recovery. In addition, other endemic species such as the Chatham Island tui, Chatham Island snipe, Chatham Island tomtit, Chatham Island red-crowned parakeet, Forbes parakeet, speargrass weevil and Pitt Island longhorn beetle, as well as numerous other invertebrates, are dependent on Pitt for their long-term survival. Chatham petrel and Chatham Island oystercatcher may also rely on Pitt Island for their recovery.

Little is known of the freshwater fish fauna of Pitt and this subject needs further research.

#### Objective

- To re-establish, enhance and further understand species populations on Pitt Island as part of their management.



Speargrass weevil.  
(D.W. Helmore. Manaaki  
Whenua - Landcare Research.)

## Implementation

The Department will:

1. Reintroduce black robin and Forbes parakeet and possibly parea, taiko and northern royal albatross as necessary and when habitats are suitable.
2. Undertake any management necessary to improve the success of species as they return to Pitt – these may include titi, broad-billed prion, Chatham petrel, New Zealand shore plover, Chatham Island shore plover, Chatham Island oystercatcher, Chatham Island snipe.
3. Consider, with community consultation, the reintroduction of species that have become extinct on the Chathams, such as brown teal and paradise shelduck.
4. Investigate the acceptability and suitability of reintroducing other threatened species originally found there (e.g., Chatham petrel if it fails to self-introduce).
5. Supplement threatened plant populations in reserves and ensure sufficient animal control to guarantee the replacement of threatened plants already present.
6. Undertake or promote surveys of the freshwater fish fauna.

### 5.3.4 HISTORIC

#### Issues

Recorded historic places on Pitt Island are mainly on private land or the council-administered Waihere Bay esplanade reserve. Management primarily lies with the New Zealand Historic Places Trust, landowners and the council. The Department-managed historic places are concentrated in the Waipaua Stream to Canister Cove conservation lease coastal area and at spot localities in the Glory reserve block and the lease area (see 5.3.8 Lease Area Management). Two very important early Moriori sites are at Tupuangi and Waipaua, the latter on lease area.

Historic places require special care to avoid stock damage (e.g., pig rooting or cattle trampling), erosion following vegetation cover removal (mostly by stock root

The historic Flower Pot gaol.



damage following natural or aided vegetation) and visitor impacts (e.g., tracking).

Respect for appropriate tikanga is essential, especially when dealing with exposed burials. Some places (not burials) may be suitable for visitor interpretation.

Two important structures are Glory Cottage, owned by the Department, and the Flower Pot rock gaol on esplanade reserve administered by the council.

## **Objectives**

- To protect historic places on land managed by the Department.
- To promote community, council and New Zealand Historic Places Trust care of historic places not on land managed by the Department.

## **Implementation**

The Department will:

1. Maintain, in conjunction with the Pitt Island community, an inventory of historic places on land managed by the Department, and support a wider inventory for all the island.
2. Maintain animal control (e.g., by fencing and targeted shooting) where feasible at vulnerable historic places on land managed by the Department, and promote/support similar action elsewhere (e.g., as is being carried out by the landowner along the north-east coastline, possibly including the Tupuangi site).
3. Undertake and encourage appropriate revegetation of vulnerable historic places and control natural revegetation where necessary.
4. Avoid inappropriate (e.g., forest) revegetation of vulnerable historic places and control natural revegetation where necessary.
5. Locate tracks, fencelines, other facilities and re-established petrel colonies where they do not disturb historic places.
6. Work with iwi on Pitt Island to ensure appropriate tikanga is observed at all times for iwi historic places, and especially in managing burial sites.
7. Prepare interpretation information for visitors for representative historic places identified in consultation with the community and iwi.
8. Maintain Glory Cottage in accordance with a conservation plan.
9. Support the community and the council in caring for and maintaining the integrity of the Flower Pot gaol.  
(see 5.3.8 Lease Area Management).

### **5.3.5 PREDATOR ERADICATION**

#### **Issues**

A major action in the long-term protection of Chathams species populations is eradicating feral cats and weka from Pitt Island. In achieving this, a significant area of substantially predator-free habitat (pigs will still be present in some areas though eliminated from any predator-proofed areas) will be made available for threatened species. Without this habitat and option for species recovery, the future for many unique species is bleak.

To achieve total eradication, Pitt Island residents must be in full support of the programme.

If it is not possible to eradicate predators from the whole island, the Department will need to make some major reserve areas predator-proof or other areas as negotiated with land owners and maintain a zero density of cats and weka within

these areas. If this option is necessary then it is likely that all feral stock and pigs will also be eliminated from these reserves. Comprehensive monitoring will be an integral part of the programme.

Mice are on the island and their removal would further aid ecosystem recovery. Eradication is technically feasible, though it would entail temporary community disruption. Other methods may develop over time.

### **Objective**

- To create substantial areas of predator-free habitat on Pitt Island, either by eradications from the whole island or from some reserve areas or other areas as negotiated with land owners once the area or areas are suitably fenced.

### **Implementation**

The Department will:

1. Endeavour to install a predator-proof fence at Ellen Elizabeth Preece Covenant (privately owned) or other areas as negotiated with the land owners.
2. Undertake eradication of feral cats and weka from the whole island, if community agreement is obtained, or cats, weka, pigs, wild sheep and feral stock from within the predator-proof fenced areas.
3. Encourage Pitt Island residents to be instrumental in the success of this programme and to assist long-term maintenance of Pitt conservation values.
4. Investigate the feasibility of eradicating mice from the island, and do so if possible, either to avoid any population increase following cat and weka control, or as a means of reducing cat and weka numbers by removing a primary food source.

## **5.3.6 PEST CONTINGENCIES**

### **Issues**

Pitt is unique in being rat and possum free. It is important that this status continues. Of equal importance is to prevent the introduction from mainland New Zealand of other potential pests that may have devastating consequences to natural resources and agriculture.

### **Objective**

- To undertake and promote measures to prevent rats, possums and other pests from establishing on Pitt Island and have contingency measures to provide for the quick elimination of any pest that does reach the Island.

### **Implementation**

The Department will:

1. Implement those parts of the Department's rodent contingency plan (see 6.2.8 Animal Pests and Wild Animals) that relate to Pitt Island, in particular:



- (i) Work closely with the Pitt Island community to put into place quarantine and protective measures to prevent rodents reaching the island through contaminated shipping or air cargo. Bait stations and packaging standards will be maintained at Flower Pot harbour and the various wharves and the airport on Chatham Island.
  - (ii) Hold in a secure facility, on Pitt, quantities of poison bait and traps so that any infestation can be quickly dealt with in accordance with previously prepared guidelines.
2. Develop community awareness and procedures to prevent other pest species reaching Pitt – possums, mustelids, rabbits, wasps and Australian blowfly.

### 5.3.7 VISITOR MANAGEMENT

#### **Issues**

Pitt Island reserves and the conservation area were established with little consideration for visitors. Most access to them is across private land or by sea and no internal reserve tracks or interpretive material exists. (See 5.3.8 Lease Area Management for the special circumstances of the lease area).

There are occasional visitors to Pitt Island and numbers are likely to increase, especially if wildlife viewing opportunities develop as a result of the predator eradication programme, and the re-establishment of species.

Concessions to visitor operators are currently a minor activity but this subject will need to be addressed before demand increases.

As the island community controls the main access routes, including the airstrips, the development of any visitor industry on Pitt Island is largely their prerogative. The community, therefore, will largely determine how this industry is managed and develops, although cruise ship visitors may be able to visit independently where public access does exist. The Department is responsible for fostering recreation, ensuring that visits to the lands it manages do not compromise natural and historic resources, and issuing concessions for commercial visitors.

#### **Objective**

- To develop with the island community, provision for visitors to land managed by the Department on Pitt Island.

#### **Implementation**

The Department will:

1. Support the Pitt Island community in deciding how and to what extent it wishes to provide for and be part of providing services to visitors.
2. Consult with the Pitt Island Reserves Committee and the Chatham Islands Conservation Board on the provision of tracks, facilities and interpretive material.
3. Provide tracks or mark selected routes within the reserves, as appropriate to visitor-use levels.

4. Provide reserve identification at key entrance points, and user-friendly predator proof fence gates where required.
  5. Work with Pitt Island landowners to prepare a visitor information pamphlet identifying public access provisions, private land and landowner contacts, and an access behaviour code.
  6. Support any community proposal for visitor walking route(s) on the island, linking key natural and historic features and accommodation services.
  7. Allow concessions for guided visits within reserves, specifically noting that access may require adjoining landowner/leaseholder approval, and that concession holders need to obtain any such approval.
  8. Monitor reserve visits for natural and historic resource impacts and avoid, remedy or mitigate adverse impacts by facility provision and/or relocation, and education. If necessary, place restrictions on access to sensitive habitat areas by by-law control under section 106 of the Reserves Act 1977.
- (see 5.3.8 Lease Area Management).



Glory Bay with Rangatira in the distance.

### 5.3.8 LEASE AREA MANAGEMENT

#### **Issues**

The lease area of 1283 hectares, comprising a mixture of pastureland and grazed forest, was purchased by the Crown in 1973. With it, the Department inherited a privately negotiated lease between the seller (a fishing company) and the farmer lessee. The grazing lease is due to expire in 2011. The lease does not reflect current Conservation Act lease requirements in respect of term, natural and historic resource protection or public access but can only be reviewed by negotiation with the lessee. The historic resources and the forest remnant are being modified by stock access and browsing, and while the forest has potential as a forest corridor between the Waipaua and Glory/Canister Cove reserve blocks, it will be largely destroyed by the year 2011, when the lease expires, if no conservation action is taken. The

significant Waipaua historic site is also likely to be severely modified. The Pitt Island community would like to see the pasturelands retained for farming and the forest protected. In negotiating on the lease and in seeking to meet both pastureland grazing, and natural and historic resource protection, the Department is constrained by the lease and land disposal requirements of legislation and Government policy.

### **Objectives**

- To seek to protect the remaining indigenous natural resources and historic places prior to lease expiry.
- To seek public land access between the reserve blocks and the Glory Bay legal road, and to and along the coastline.
- To investigate delegation of control and management of the pastoral part of the lease area to the Pitt Island Reserves Committee.

### **Implementation**

The Department will:

1. Negotiate for and resolve the issues of public access between the reserve blocks and the Glory Bay legal road, and to and along the coastline.
2. Seek lessee and iwi approval and undertake investigation and protection, as appropriate, of the Waipaua site and any related historic places.
3. Work with the lessee and the Pitt Island Reserves Committee to identify and seek ways of achieving pastureland availability for farming, forest protection, and other natural and historic resource protection. An option being considered is to exchange a lease over the pastureland south-eastern part of the Canister Cove reserve block (locally called the Waikuri area) for the lease forested area.
4. Seek to change the lease area conservation status to a Local Purpose Reserve under the Reserves Act, with management by the Pitt Island Reserves Committee or a new entity. If vested in the new entity, revenue derived from the lease will be available to that entity to spend on conservation projects on the land under its control or, with the Conservator's delegated authority, on land not under its immediate control. Specific protection of historic places, Glory Cottage, Waipaua Stream habitat, heritage landscape values and coastal strips will also need attention.

## 5.4 Mangere and Rangatira

### INTRODUCTION

Mangere (113 hectares) and Rangatira (or South East, 218 hectares) are the largest of the nine major vegetated islands surrounding Chatham and Pitt islands, and are the only outlying islands in the Chathams group to support forest cover of any significance. Both are nature reserves, in recognition of their outstanding significance for conservation of the plants and animals peculiar to the Chathams. Nature reserve is the most protective reserve classification and imposes specific legislative responsibilities on the Department. These include primary attention to preservation of the natural state and the indigenous flora and fauna, ecological associations and natural environment; the extermination of exotic flora and fauna; the control of persons wishing to enter a reserve (including any boat/mooring rope contact); and the management, where compatible, of other natural and historic values.

In common with the other islands (see 5.5 Other Islands), both Mangere and Rangatira are free of resident-introduced mammalian predators and browsers (though this was not always so). As a consequence, the diversity of native fauna – on Rangatira in particular – is comparable to that of the other major temperate island sanctuaries in New Zealand (Codfish, Kapiti and Little Barrier).

It is the absence of rodents, however, that elevates these two islands to special significance in the New Zealand context. Only a handful of the 700 islands in the New Zealand territory are large and free of rodents and other pests, and few are so critically placed to act as arks for the many threatened species of their regions. Though small relative to similar islands elsewhere, the role and potential of Mangere and Rangatira as sanctuaries ranks them amongst the most important islands in the southern hemisphere.

These islands have not arrived at this state without being damaged by human activity. Typical of islands of their size, both were covered historically in wind-shorn forest and shrublands. In the 120 years over which each island was farmed, these vegetation communities were modified extensively. Burning, and grazing by cattle, pigs, goats, sheep and rabbits, took their toll on forest structures and ecological communities. Today, only the vegetation on Rangatira bears some resemblance to its original character, though the forest remaining is still depleted in both area and diversity.

Mangere's natural communities were so devastated that, apart from a small bush remnant that escaped the fires on the south-eastern cliff ramparts, the island is still covered in exotic grasslands and recovering native herbs and grasses, though with some regenerating shrub on the steepest slopes.

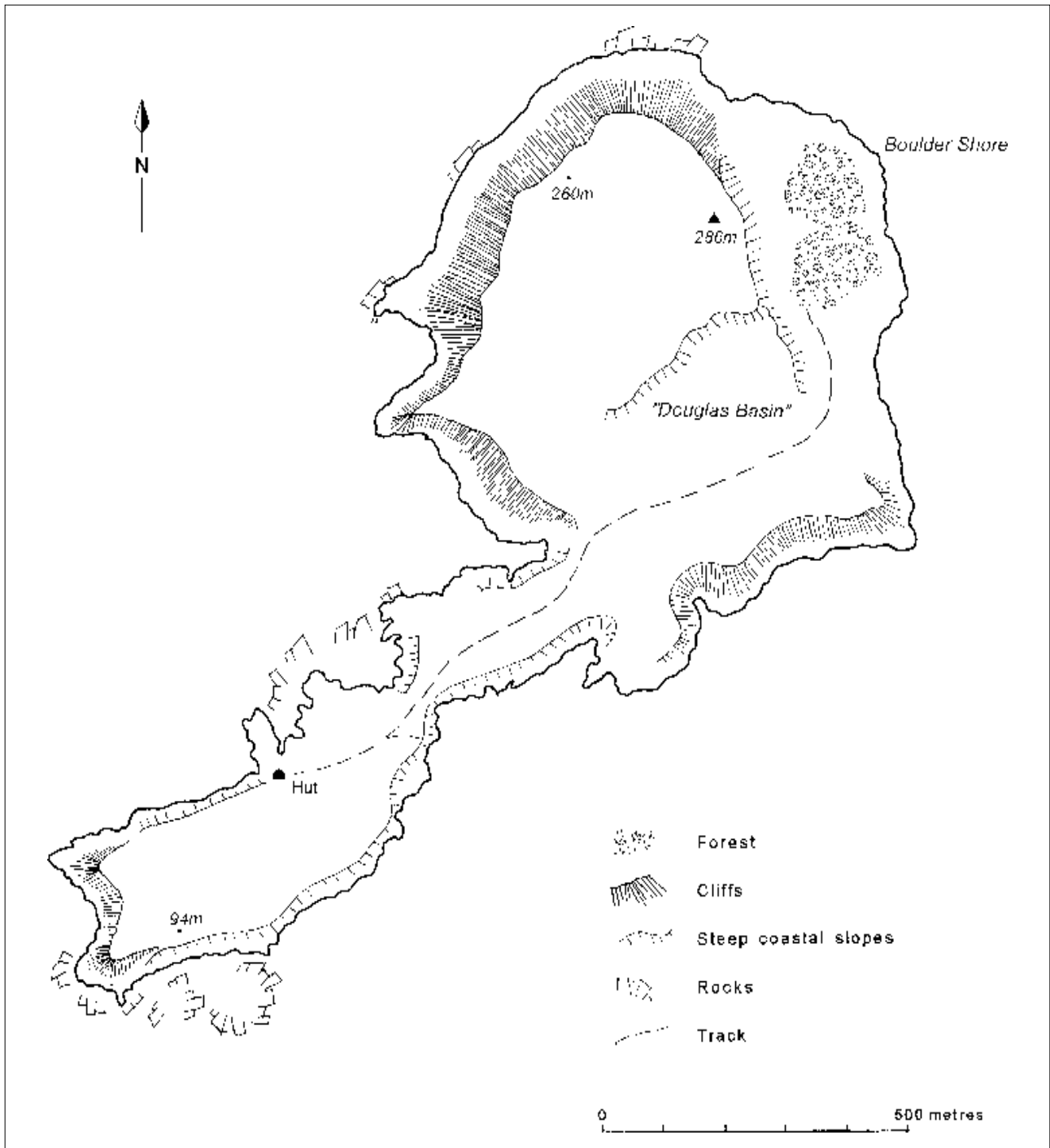
It seems incredible that this history of human contact has not left the islands worse off. Until the 1950s and 1960s when the two islands were purchased by the Crown, the absence of rodents, for example, can only have occurred through good luck and some care by local people. Since then, increasingly stringent rodent and pest quarantine measures have been applied to protect the flourishing bird and insect communities that re-emerged after farming ceased.

Now, teeming with birds, insects and skinks, each island serves as a fragmentary reminder of an ancient Chathams whose original inhabitants were immeasurably

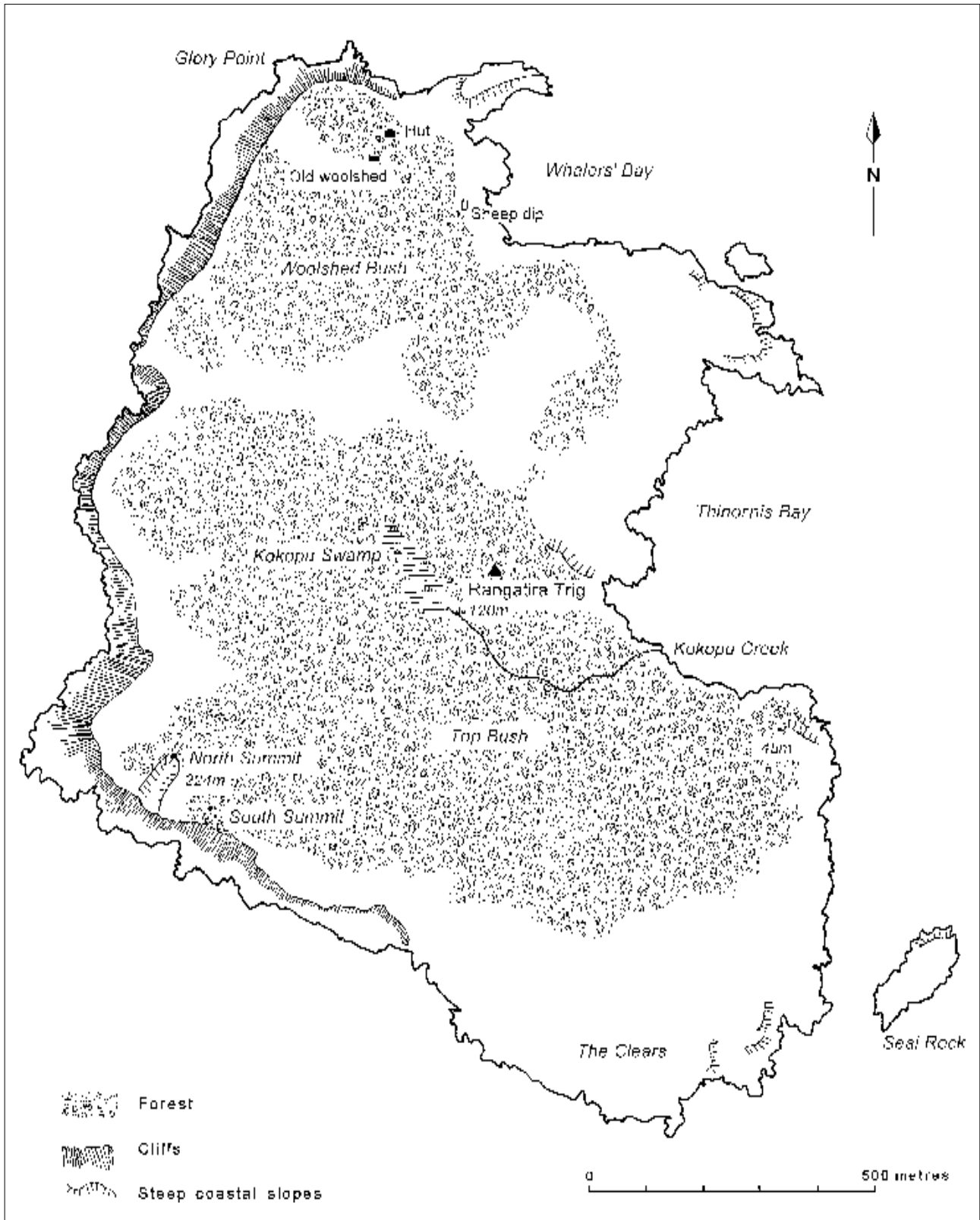
more numerous and varied than they have become in the presence of humans and their accompanying pests and animals.

Mangere and Rangatira are strongholds for threatened herbaceous plants. Mangere has the single largest population of Dieffenbach's speargrass in the Chathams. Forget-me-not is beginning to expand from inaccessible cliff sites on which Chatham linen flax and sow thistle remain in tenuous numbers. Cook's scurvy grass is regularly distributed at the entrances to seabird burrows where it thrives in the nutrient-rich soils. On Rangatira, sow thistle, Dieffenbach's speargrass and forget-me-not have started to disperse from their refuge ledges at the base of the summit cliff. Cook's scurvy grass and linen flax hang on in highly diminished numbers.

MAP 4: MANGERE



MAP 5: RANGATIRA (SOUTH EAST ISLAND)



From a management perspective, it is inappropriate to consider Mangere and Rangatira in isolation from the other land masses of the Chathams or from the influence of the southern Pacific Ocean in which they are found. No such distinctions exist ecologically. For this reason, the management of these island nature reserves needs to complement programmes elsewhere in the Chathams.

## FEATURES AND ISSUES

### **People Partnership**

European naturalists visiting the Chathams and its outliers in the late 1800s made reference to the region's remarkable natural heritage, commenting from either their own observations or those of others. For much of this century, the names of Mangere and Rangatira have been synonymous worldwide with bird research and discovery specifically. But these are relatively recent features of human contact. While Moriori associations with the islands are not well documented, there is traditional and archaeological evidence that occupation and visiting occurred according to their customs.

First European contact occurred when whalers and sealers frequented the region in the 1820s and 1830s. In 1840 sealers took up residence on Rangatira and made their living by selling pigs and potatoes to the crews of passing ships. About the same time a merchant established 50 merino sheep and a shepherd on the island (Richards, 1982) The subsequent history of farming on Rangatira is more clearly documented than it is for Mangere.

In the following 120 years, the islands were leased and stocked variously with cattle, sheep, goats, pigs and rabbits (Mangere). With the assistance of the Royal Forest and Bird Protection Society of New Zealand, the islands were purchased by the Crown from their Maori owners in the late 1950s and early 60s. Each was retired from grazing as soon as possible, the Crown's intention being to develop the islands' outstanding values as sanctuaries for the Chathams' plants and animals.

The Chathams' communities have much to gain from their own care of these habitats. The species and the habitats themselves are characteristic of the face that Chatham Islanders show to the world. They have become increasingly central to the islanders' perceptions of themselves. For these reasons, the Department is anxious to engage the curatorial interest of local people, and to establish a management partnership.

This would necessarily be a partnership of trust – the Chatham Islanders expecting the Department to keep them fully aware of progress with recovery and to involve them in discussing the issues that influence it; and the Department expecting the communities to respect the islands and the need to preserve them from further damage.

As part of this, it is desirable to continue to invite Chatham and Pitt islanders to participate in or visit management programmes on the islands and, where appropriate, initiate their own.

The Department recognises also that a number of non-governmental organisations (NGOs) and individuals in New Zealand have interests in these nature reserves. For some, such as the Royal Forest and Bird Protection Society, the interest stems from direct involvement in the founding of the reserves, or from historical involvement in the work. Consultation with these agencies over management policy, strategic directions and outcomes – as well as techniques and research – assists the Department to design robust programmes that are relevant to the ecological needs of the islands.

## Heritage Conservation

The Department's current work on both Mangere and Rangatira is designed to rehabilitate the islands' ecological communities and by doing so, to remove the species reliant on them from the threat of decline or outright loss. The long-term objective is to leave these communities in self-sustaining states, without the need for support or further intervention. The sanctuaries must function as springboards – in some cases, the only remaining springboards – for restoration of ecological communities elsewhere in the Chathams.

For both islands, the implications of this programme are substantially the same, but their differing vegetation covers influence both the nature of the work undertaken on each and the degree to which each can contribute to the survival of threatened species.

Today, Rangatira's habitat types are numerous and varied. After grazing ceased, regeneration of rough cover and forest species was rapid. Forest is the dominant vegetation type: it covers up to 45 per cent of the island. It differs from the forest of the farming days in having recovered dense understorey structures and closed margins.

Forest recovery is still dynamic and will continue for perhaps a century or more. The dominance of prolifically seeding species such as akeake, ribbonwood and mahoe – species that quickly claimed the lightwells and open spaces in the forest interior after grazing ceased – is being challenged by other slower-growing species, so that forest diversity and recruitment is improving perceptibly. These same early successional species are pushing the margins of the bush remnants out into the extensive areas of pohuehue bracken and exotic grasses.

No habitat enhancement has been planned for Rangatira, in part because regeneration is well underway already, and because habitats elsewhere in the Chathams have more pressing needs.

Mangere's vegetation cover is measurably the poorer of the two islands, though there are signs of accelerating regeneration of ground cover species such as native grasses, *Carex* and *Hebe*. The original forest area was reduced to a threadbare five-hectare remnant under the island's imposing cliffs. Since grazing ceased, the forest has filled out again and its margins have crept outwards into the grasses. Habitat recovery is being actively assisted by the planting of tree species with Nature Heritage Fund support. It is a slow process, however, to replace what was lost in such a brief period of burning and clearance.

Aside from the revegetation programme on Mangere, the intention has been to let the force of plant recovery take its own course on the two islands. Intervention will be minimised to avoid the risks of disease transfer associated with importing plant stock. The welfare of individual threatened species will be monitored. Where there is a need to intervene (for linen flax or sow thistle for instance), seed plots have been and could again be established using local seed sources.

Historically, the biological view of these islands was drawn to their bird faunas. Conceivably, Mangere's would have been comparable in both abundance and diversity with Rangatira's but for the extensive loss of forest cover. The effects of its loss were exacerbated by the depredations of cats, which are thought to have eliminated 12 of the island's native species. Those of Rangatira's species that are represented on Mangere occur in very much reduced numbers. Some are absent altogether: the Chatham petrel no longer breeds there, and shore plover are not able to persist without transit through safe habitats on nearby Pitt Island. Tui are recorded simply as individuals from time to time.





Mangere Bluffs and black robin bush habitat remnants.

Mangere has its own bird speciality, however. It is the only breeding site for the Forbes' parakeet, the most recently recognised new bird species for the Chathams. Fairy prions do not occur on Rangatira but are common in the open grasslands of Mangere. But for the cats, the now-extinct Chathams rail and Chatham Island fernbird might have been found here too.

By comparison, there is barely a square metre of Rangatira that is not used by birds. It supports the largest remnants of the region's traditional bird fauna. In fact, its bird communities are unsurpassed in the Chathams and in most other regions of New Zealand.

Thirty-four species of terrestrial, inshore and oceanic birds breed on the island (Nilsson *et. al.*, 1994). Four of these are threatened Chathams endemics whose only substantial populations are found here: Chatham Island tomtit, snipe, black robin and tui. Two other species, the New Zealand shore plover and the Chatham petrel, are confined to this island alone. Though once distributed further afield (throughout New Zealand in the shore plover's case), these two birds now breed nowhere else.

More than thirty other bird species – terrestrial and marine – are recorded as visitors or vagrants frequenting either the island

or its surrounding waters.

Contrary to popular perceptions, many of them shaped by black robin publicity, it is not the forest birds that are the principal feature of the island's bird fauna, but the oceanic seabirds. Since they return to their burrows at night only, and most species migrate from the region when not breeding, the significance of the seabirds is often overlooked and understated.

It is difficult, however, to overlook the very densely burrowed forest floor. In fact, Rangatira is one of the most densely burrowed of the islands in New Zealand's temperate region. Recent assessments place oceanic petrel numbers on Rangatira in excess of three million birds (West & Nilsson, 1994). This abundance, which is extraordinary today but would have been commonplace in prehuman times, is a clue to the Chathams group's historical significance as a principal centre of oceanic seabird breeding in these latitudes of the southern hemisphere.

Seven species of oceanic seabird reside on Rangatira, and others have been recorded as visitors. Most are circumpolar or transequatorial in their migrations. For the white-faced storm petrel, the island is a key centre for breeding. The broad-billed prion breeds here in large numbers also, but this may be because of drastically reduced breeding opportunities elsewhere in the Chathams.

Even to the unpractised eye, the abundance and diversity of birds on these islands are genuinely startling. It is most visible – especially at night – in the forests where the impacts of habitat loss have been subdued by forty years of recovery.

Amongst the islands' insect fauna are species whose status is critical elsewhere in the region. The speargrass weevil is abundant on Mangere when its *Aciphylla* food source is in flower. On Rangatira, the Pitt Island longhorn beetle still exists, though in such low numbers that it seems always to have been rare. It is much the same for the Chatham Island click beetle.

Black robin monitoring is common to both islands. On Rangatira, the shore plovers are monitored closely and the status of Chatham petrels is being investigated urgently. On Mangere, in-breeding of Forbes' parakeets with red-crowned parakeets,

a consequence of severe habitat degradation, was a problem and continues to be monitored.

Each island is visited with care by research management teams to ensure that rodents and other pests are not introduced. While the Department is tightening up its own procedures, breaches of rodent and other quarantine precautions do still occur, however, such as when birders visit to harvest titi illegally. A pest invasion presents the most serious threat to these island wildernesses.

Table 6 summarises the Department's current activities to improve the quality of these habitats.

TABLE 6: SUMMARY OF CURRENT MANAGEMENT ACTIVITIES IN THE MANGERE AND RANGATIRA NATURE RESERVES

ACTIVITY	RANGATIRA	MANGERE
monitoring/research	Black robin: population status New Zealand shore plover: population status Chatham Island tui: population status, range Black-winged petrel: population status Chatham Island oystercatcher: breeding Southern skua (Auckland University): breeding dynamics Parea (Chatham Island pigeon): breeding Chatham petrel: population status, threats	Black robin: population status Forbes' parakeet: population status Chatham Island oystercatcher: breeding Southern skua (Auckland University): breeding dynamics
Invertebrate research	Pitt Island longhorn beetle: occurrence Speargrass weevil: additional monitoring	Speargrass weevil ecology: relationship to host plant
Rodent quarantine	Strict procedures for transport of gear in sealed packages Careful inspection of incoming equipment Maintenance of bait stations around habitation Rodent contingency plan prepared and implemented	
Forest restoration	Seed collections of akeake, ribbonwood, <i>Coprosma chathamica</i> , matipo, Dieffenbach's hebe, kawakawa	Planting of akeake, ribbonwood, <i>Corokia</i> Careful monitoring of plantings to eliminate ineffective measures
Plant species recovery	Seed plots established for sow thistle, linen flax, Chatham Island forget-me-not, Cook's scurvy grass, Dieffenbach's speargrass, hard fern <i>Polystichum</i> survey required	
Threatened plant monitoring	All of above, and Barker's hebe	Sow thistle, linen flax, forget-me-not. Dieffenbach's speargrass, Cook's scurvy grass. Assess <i>Aciphylla</i> populations.
Minimising human impacts	Authorised access for management purposes only Screening of research proposals to eliminate exploitative or destructive programmes All inorganic rubbish removed from the island, and disposal of organic material by deep burial or at sea Ban on smoking (except in designated sites) and open fires to reduce the fire risk Restricted movements through shore bird breeding sites Petrel boards used on feet to reduce collapsing of burrows Retiring of tracks no longer in use Constraints on number of people ashore or overnighting No planting of exotic species (vegetables, for instance)	
Public awareness; community involvement	Approximate biennial open days to allow Chatham and Pitt islanders to visit Invitations to locals to visit or participate in programmes (revegetation or species management)	

## **Human History**

Other than the signs of present occupation by Department managers, there are few obvious features remaining of the islands' associations with humans. Some Moriori middens and a stone flake site have been recorded at Mangere and Rangatira respectively (Sutton, 1983). No features of the sealing and whaling era have been found, and no aspect of the farming history is being actively maintained.

The old woolshed on Rangatira was partly dismantled prior to the Department's management and is being allowed to decay naturally. Important artefacts such as the timber wall panels, which recorded the visits of shearers, musterers and their vessels, were removed for presentation to the Waitangi museum. The sheep dip carved into the rock on the Whalers' Bay wave platform needs respect but no active preservation.

On Mangere, the most significant historic feature is the cleared forest, and this is definitely not being maintained. Only the piles of the old woolshed remain intact, used in part, as the foundation for a meat safe.

## **Visitor Management**

The two island nature reserves are considered to be ecologically highly valuable as species stock reserves, both to retain threatened species and to allow for species spread to other islands in the Chathams group. While with adequate safeguards there may be a low to moderate risk of pest or predator introduction (both large e.g., rodents and small e.g., seeds and invertebrates) or fire or physical degradation by visitors, the consequences of an adverse event could be as extreme as species extinction. This is a potential reality given the current undeveloped state of impact monitoring techniques, the lack of dispersed island populations to counter disaster risks, the undeveloped state of technology to counter pest species invasions rapidly, and the experience of past island invasion incidents e.g Mangere's cats; big South Cape's ship rats, and the Galapagos fire ants (Atkinson, 1989). Even the impact of management workers – no matter how sensitive they are – is already of concern, prompting the minimising of team sizes and the limiting of research access.

The Department's past stance on visitors to these islands has been clear, though not necessarily well administered. It has been reaffirmed through successive reviews of the islands' tourism potential in particular and has allowed no tourism visits. Occasional media (e.g., nature films) visits have been allowed.

As a community liaison method, to date the Department has also allowed a biennial open day for Chatham Islanders to visit Rangatira nature reserve. Though successful for such liaison there are now concerns about visitor impacts (e.g., fire safety, pest quarantine) and equity issues, i.e., who is entitled to visit; does it extend to any person who happens to be on the Chathams at the time? Though not applied to date, the Reserves Act's requirement for permits and visitor impact mitigation conditions must be enforced if these liaison visits are to continue, in fairness to any other permit-seeking visitors.

As a precautionary measure, for at least the term of this CMS (ten years) all visitor activities and visitor numbers need to be tightly controlled.

The Department has frequently been asked to permit access to these islands for both casual and commercial visitors. Unless there has been a demonstrable benefit for management of the islands themselves, these requests have been declined.

Visitor restrictions are not intended to frustrate opportunities for nature tourism; they simply recognise that within the smaller Chatham islands, the Department has no ecologically suitable islands on which it can encourage the development of these opportunities.

Mindful, however, that nature tourism may bring benefits to local communities and that the Chathams is a very desirable destination for visitors, the Department is anxious to extend the range of threatened species into public or private habitats that can be visited safely. The Pitt Island proposals have this objective at heart (see 5.3 Pitt Island). Mangere and Rangatira are critical to the success of any such initiatives because they are the last major refuges for the species that would draw visitors to the safer habitats on Pitt.

Research proposals need to be assessed for both conservation benefits and the impacts of the research on the islands and their infrastructure.

## AREAS MANAGED BY THE DEPARTMENT

Both Mangere and Rangatira are nature reserves managed by the Department. Both are listed in Schedule II.

## KEY PRIORITIES

### 5.4.1 COMMUNITY LIAISON AND INVOLVEMENT

#### **Issues**

Sustained protection of the Mangere and Rangatira ecosystems (as in all the Chathams) is not possible without the sanction and assistance of the Chathams people. The maintenance and evolution of the community protection ethic is central to this sanction and must be based on full awareness of the management issues.

Given that these two islands are the most significant reserves managed by the Department on the Chathams, the Chatham Island Conservation Board may take particular interest in developing the community protection ethic.

The Department benefits significantly from consultation with national conservation groups and interested individuals (in particular the Royal Forest and Bird Protection Society, which helped purchase the islands as reserves). These people are able to augment the Department's own promotion of island protection in the wider community, and to offer management advice.

#### **Objective**

- To continue to involve the Chathams and the wider national communities in the protection of the natural and historic heritage of Mangere and Rangatira.

#### **Implementation**

The Department will:

1. Invite Chatham Islands residents and other people with relevant skills, interests or associations with the islands to participate in management programmes on the islands (see 5.4.5 Visitor Management).
2. Make provision for Chatham Islands residents to visit Rangatira so they can see and understand the island management being undertaken (see 5.4.5 Visitor Management).

TABLE 7: KEY PRIORITIES FOR MANGERE AND RANGATIRA NATURE RESERVES

NAME	ISSUE
5.4.1 Community Liaison and Involvement	<ul style="list-style-type: none"> <li>• Protection dependent on community support</li> <li>• Wider national community support for Department management</li> </ul>
5.4.2 Ecosystem Protection	<ul style="list-style-type: none"> <li>• Historic impacts</li> <li>• Last outpost for many species</li> <li>• Risk of weed and pest introduction</li> </ul>
5.4.3 Habitat Restoration and Historic Places	<ul style="list-style-type: none"> <li>• Reduced habitat a limiting factor for threatened species</li> <li>• Potential historic place impact</li> </ul>
5.4.4 Indigenous Species Protection and Preservation	<ul style="list-style-type: none"> <li>• Last remaining major populations for many threatened species</li> <li>• Common species protection</li> </ul>
5.4.5 Visitor Management	<ul style="list-style-type: none"> <li>• Vulnerability to visitor and related impacts</li> <li>• Reserves Act permit required</li> </ul>
5.4.6 Illegal Entry and Bird Harvest	<ul style="list-style-type: none"> <li>• Breach of Reserves and Wildlife Acts</li> <li>• Safety of island ecosystems</li> <li>• Facility damage</li> <li>• Island staffing</li> </ul>

3. Use local labour and expertise to assist with plant production and revegetation of Mangere.
4. Keep local people well informed on the islands' protection progress, and involve them in discussion of management issues relevant to the islands.
5. Invite the Chatham Islands Conservation Board, national conservation groups and individuals with relevant skills, interests or associations with the islands to represent the community and ecological views on the Department's recovery groups which plan the management programmes for species on Mangere and Rangatira.
6. Ensure that management documents such as species recovery and contingency plans are distributed for comment and reference amongst the Chathams and national communities of interest.
7. Work with iwi to develop management practices and to ensure that appropriate tikanga is observed at all times for iwi historic places.

METHOD	RESULT SOUGHT	ACTIVITY
<ul style="list-style-type: none"> <li>• Invite participation in islands' management programmes</li> <li>• Rangatira management visits</li> <li>• Information distribution</li> <li>• Include iwi in historic site management</li> </ul>	<ul style="list-style-type: none"> <li>• Continued involvement of Chathams and national communities in islands' management</li> </ul>	<p>6.2.6 Community Liaison and Involvement</p> <p>6.3 Indigenous Species</p> <p>6.3 Visitor Services</p>
<ul style="list-style-type: none"> <li>• Implement rodent contingency plan</li> <li>• Prepare broader pest contingency plan</li> <li>• Access by permit only</li> <li>• Limits and conditions on Department workers</li> <li>• Control indigenous organism transfer between islands</li> </ul>	<ul style="list-style-type: none"> <li>• Islands' natural communities safeguarded</li> </ul>	<p>6.2.6 Indigenous Species</p> <p>6.2.8 Animal Pests and Wild Animals</p> <p>6.2.9 Plant Pests and Exotic Plants</p> <p>6.3 Visitor Services</p>
<ul style="list-style-type: none"> <li>• Continued revegetation</li> <li>• Monitoring revegetation success and threatened plant welfare</li> <li>• Maintain historic place inventory</li> <li>• Manage revegetation on historic places</li> </ul>	<ul style="list-style-type: none"> <li>• Natural processes of habitat recovery assisted</li> <li>• Historic place values protected</li> </ul>	<p>6.2.2 Landscape</p> <p>6.2.3 Land Ecosystems</p> <p>6.2.6 Indigenous Species</p> <p>6.2.7 Historic Resources</p>
<ul style="list-style-type: none"> <li>• Survey and assess species recovery programmes</li> <li>• Community consultation</li> <li>• In situ management</li> <li>• Monitoring and research</li> <li>• Quarantine/screen introductions</li> </ul>	<ul style="list-style-type: none"> <li>• Islands' natural communities and associations preserved</li> </ul>	<p>6.2.6 Indigenous Species</p>
<ul style="list-style-type: none"> <li>• Minimise Department visits</li> <li>• Require permits with tight conditions</li> <li>• Invite management programme participation and Chathams community discussions</li> <li>• Limit activities for which permits may be granted</li> <li>• Monitoring of visitor impacts</li> </ul>	<ul style="list-style-type: none"> <li>• Visitor numbers and impacts minimised</li> <li>• Chathams community involved in and supportive of management</li> </ul>	<p>6.2.6 Indigenous Species</p> <p>6.2.6 Animal Pests and Wild Animals</p> <p>6.3 Visitor Services</p>
<ul style="list-style-type: none"> <li>• Maintain Department presence on islands</li> <li>• Increase community support</li> <li>• Consider prosecution or other alternatives</li> </ul>	<ul style="list-style-type: none"> <li>• Illegal entry, poaching and facility damage eliminated</li> </ul>	<p>6.2.6 Indigenous Species</p> <p>6.2.6 Animal Pests and Wild Animals</p> <p>6.5.3 Compliance and Law Enforcement</p>

## 5.4.2 ECOSYSTEM PROTECTION

### Issues

The vulnerable ecological communities of Mangere and Rangatira have suffered historically from the impacts of farming and other human activities. Nevertheless, as the last outposts for many Chathams species, they remain free of introduced predators and many of the plant pests that frustrate management elsewhere in the Chathams. Continued contact with people dramatically increases the risk of weed and animal pest introductions, with the attendant implications for the welfare of the islands' natural communities (both threatened and common) and for the cost of remedies.

Protection of these habitats proceeds on the assumption that weeds and pests *will* be introduced as a consequence of human contact. While the risk of this happening may not be high, the consequences could be as extreme as species extinction.

## **Objective**

- To safeguard these natural communities as a primary obligation, taking whatever measures are necessary to prevent their deterioration.

## **Implementation**

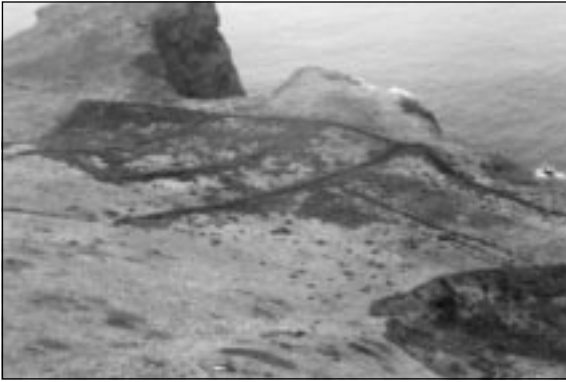
The Department will:

1. Implement those parts of the Department's rodent contingency plan (See 6.2.8 Animal Pests and Wild Animals), that relate to Mangere and Rangatira. In particular the Department will:
  - (i) Ensure that no rodents or other animal pests are introduced to the islands through the Department's own freight or equipment transport practices.
  - (ii) Establish a rodent eradication team in the Chathams to respond immediately to any rodent invasion of either island.
  - (iii) Prohibit boat mooring to the islands.
  - (iv) Treat all boat wrecks as rodent invasion situations.
  - (v) Increase Chathams community's awareness that plant and animal pests jeopardise the welfare of habitats and threatened species on these islands, and that precautions are necessary to reduce or eliminate those risks.
  - (vi) Educate those with the potential to introduce or spread plant and animal pests (whether intentionally or otherwise) about the ecological costs of doing so.
2. Upgrade the rodent contingency plan to a pest contingency plan, to ensure that preparations are made to avoid and, if necessary, cope with the introduction of any animal or plant pest to the islands.
3. Require access to be by permit only, under strict conditions (see 5.4.5 Visitor Management).
4. Limit the number and the activities of the Department's workers on the islands, and minimise their impacts locally. While Department staff do not require a permit, they will be subject to conditions as for permit holders (see 5.4.5 Visitor Management); the same stance will be applied to any volunteers or paid workers involved in Department programmes.
5. Strictly supervise the transfer of indigenous organisms between islands, both to prevent genetic contamination of populations and to avoid the spread of diseases or introduction of plant pests.

### **5.4.3 HABITAT RESTORATION AND HISTORIC PLACES**

#### **Issue**

The reduced habitats of Mangere and Rangatira are major limiting factors for many of the threatened species that are dependent on them. Habitat restoration is required to accelerate the recovery of vegetation on the islands. Such restoration is also likely to provide the most significant impact on the few historic places.



Revegetation planting on Mangere, starting from a grid shelter pattern. (Photo: Andrew Grant.)

## Objectives

- To assist the natural processes of regeneration, if necessary, to improve vegetation recovery, habitat quality, diversity and area for threatened species.
- To protect the remaining historic places.

## Implementation

The Department will:

1. Continue the tree-planting programme on Mangere (see 5.4.5 Visitor Management).
2. Use robust, hardened, clean plant stock of suitable genetic and geographic origin for the Mangere revegetation programme, sourced from Chathams plant nurseries if possible.
3. Monitor the survival of plants and the effectiveness of differing plant treatment regimes to refine restoration techniques as much as possible.
4. Adopt measures such as weed control and seed dispersal to augment the tree planting, and to improve the survival of threatened plant species.
5. Monitor the welfare of threatened plant species to detect emerging threats or declines in status.
6. Maintain an inventory of historic places on the islands, adding to it any historic information gained during island field work.
7. Avoid inappropriate revegetation of known historic places or disturbance by non-historic management activity. Consider site investigations and information retrieval should the places become naturally threatened or to assist in understanding historic activity on the islands.

## 5.4.4 INDIGENOUS SPECIES PROTECTION AND PRESERVATION



Tree weta – one of two prolific weta species on Rangatira.

### Issue

The last remaining major populations for a high percentage of threatened bird species and a scatter of threatened plant species now reside on Mangere and Rangatira. The status of most invertebrate species is unclear but undoubtedly for those threatened

elsewhere, the absence from these islands of rodents and other predators will have improved the likelihood of their survival here.

The protection of these threatened species and the common species is important to the welfare of all the islands' natural communities.

### Objective

- To preserve threatened elements of the islands' natural communities and the associations that support them.



## **Implementation**

The Department will:

1. Identify the species in trouble and prioritise their management according to need, threat and vulnerability.
2. Make objective assessments of conservation status and threats for struggling species, and design programmes for their recovery that do not jeopardise other components of the islands' natural communities.
3. Produce explicit statements of management intent for species or groups of species (see 6.2.6 Indigenous Species).
4. Discuss species management with Chathams communities and interest groups on a regular basis, or as relevant issues arise.
5. Where possible, and where it will not jeopardise their prospects for survival, manage the species *in situ* on Mangere and Rangatira.
6. Preserve species populations as the basis for restoring self-sustaining ecosystems in the Chathams.
7. Monitor species whose populations are not immediately at risk but are confined on the island or elsewhere.
8. Decline to reintroduce captive-bred plant and animal stock to the Mangere and Rangatira populations unless strict quarantine or screening measures have been employed to reduce the risk of disease transfer and genetic contamination.
9. Encourage independent research programmes that have direct application to Mangere and Rangatira species conservation.

### 5.4.5 VISITOR MANAGEMENT

#### **Issue**

The vulnerability of Mangere and Rangatira to ecological change, and potential species extinction through the unwanted introduction of pests or predators, or physical impact such as fires, is a reality at present. A management response is required that seeks tighter visitor activity control than in the past (including Department managers), minimises the number of visits and visitors and retains Chathams community support also. Ongoing monitoring and review of island management elsewhere in New Zealand and overseas may lead to a review of visitor management in the future.

#### **Objectives**

- To minimise the number of visitors to Mangere and Rangatira.
- To minimise the impact of visitors on Mangere and Rangatira.
- To maintain the Chathams community involvement and support for protective management of Mangere and Rangatira.

#### **Implementation**

The Department will:

1. Keep Department management visits to a minimum, although consistent with those needed under 5.4.6 (Illegal Entry and Bird Harvest).

2. Require entry by permit only (for other than Department management) in accordance with sections 20(2)(c) and 57(1) of the Reserves Act 1997. Permits are issued by the Conservator, Wellington Conservancy. See also 5.4.2 (Ecosystem Protection) re Department management entry controls. Permit entry control extends over the foreshore of both islands under section 20(3) of the Reserves Act.
3. Require permits to contain conditions covering:
  - extent of island areas able to be visited
  - protection of fauna, flora and habitat
  - non-introduction of animals and plant material
  - waste disposal or removal
  - firearm control
  - fire prevention and control, including no smoking
  - visit reports and monitoring
  - Crown indemnity
  - Department compliance of permits
4. Require all visitors to the islands to be accompanied by Department staff or be under adequate Department supervision (the latter may apply to some non-Department researchers).
5. Consider permit and concession applications for:
  - independent research programmes that are consistent with 6.2.6 (Indigenous Species) and 6.5.5 (Research)
  - filming and media activity that can only be carried out on the island(s) and that will allow people to appreciate the islands' values through books, radio, film etc.
  - Chatham Island residents (see 7 below)
6. Invite Chatham Islanders and other people with relevant skills, interests or associations with the islands to participate in Department management programmes (see also 5.4.3 Habitat Restoration and Historic Places and 5.4.4 Indigenous Species Protection and Preservation) in accordance with the minimum management practices.
7. The Department will endeavour to hold community days annually and will consult with the Board if there are compelling reasons not to. A number of Chatham residents and their immediate families, based on appropriate staff/visitor ratios, will be invited to visit Mangere or Rangatira to view the island management programmes and informally discuss related management of other Chatham Islands habitats, in accordance with the following criteria and process:
  - Pre-visit registration of interest
  - Visits by permit only (see also 3 above)
  - Priority to those with ancestral, historic, or management programme links (e.g., covenant/kawenata owners, plant nursery operators, supply boat crews) and their immediate family.
  - No overnight stays
8. Consider critically permit and concession applications for visitors other than those covered by 5, 6 and 7 above.

9. Acknowledge that in emergency situations (e.g., fishing boat wreck) access to the islands and use of Department facilities may be necessary. The Department will seek its notification of these cases as a matter of urgency [see 5.4.2 Ecosystem Protection, Implementation 1(iv)]
10. Develop and implement baseline monitoring and island visitor monitoring programmes as national and international techniques become available.
11. Review the islands' visitor management objectives and implementation at next CMS review or before, should monitoring results indicate that a review is necessary.
12. Promote the Pitt Island Scenic Reserve as an alternative future visitor opportunity to view the threatened and other species currently on Mangere and Rangatira.
13. Assess research proposals for conservation benefits and the impacts of the research on the islands and their infrastructure (see pages, 85 and 235).

#### 5.4.6 ILLEGAL ENTRY AND BIRD HARVEST

##### **Issue**

The Department is aware that each year, a few people go ashore on Mangere and Rangatira to take titi. Entry to the reserves for the taking of titi is not authorised and titi on these island reserves are absolutely protected. These activities breach the provisions of the Reserves Act 1977 and the Wildlife Act 1953. More importantly, they jeopardise the safety of the islands' ecosystems. This is a very serious island protection issue.

The Department's huts are left unlocked to provide emergency shelter and radio communications for injured or shipwrecked fishermen and to avoid building damage due to forced entry and consequent bird entrapment. These huts are occasionally entered by birders or other visitors who remove food and equipment and cause delays to management programmes. Department-managed islands of comparable ecological value elsewhere in New Zealand are routinely permanently staffed.

##### **Objective**

- To find solutions that eliminate the incidence of illegal entry, poaching and facility damage on Mangere and Rangatira.

##### **Implementation**

The Department will:

1. Plan its research and management programmes so staff are present on both islands throughout the key birding period, as resources permit this to be done.
2. Design conservation awareness programmes that increase community support for the islands and result in increased ownership of their care (see 5.4.5 Visitor Management).
3. Consider and, if necessary, seek prosecution for any individual found illegally ashore on the islands, or in possession of absolutely protected wildlife from the islands.

## 5.5 Other Islands



### INTRODUCTION

The ocean horizons of Chatham and Pitt islands are interrupted by a series of outer islands, some of them isolated and far removed, others clustered nearby. They range from sizeable scrub-covered stacks (remnants perhaps of ridges now separated from mainlands by the actions of the sea), to towering fortresses created by volcanic activity of long ago. They are imposing lands for their inaccessibility, their geographies and their exposure to the storm forces of the southern Pacific Ocean.

A small number of low-lying islands are also found in Chatham Island's Te Whanga lagoon. Some of these modest islands are ephemeral – submerged or washed over by high water levels. But others are sufficiently stable to support permanent plant communities.

With the exception of Murumuru and Rabbit islands (whose statuses are uncertain) all these islands are in Maori freehold ownership or private ownership.

With a few exceptions, these islands are free of rodents and other pests. This is a rare circumstance for an island group in the New Zealand region, and at variance to the inhabited Chatham islands, which are so severely modified. The absence of introduced animal pests on the marine islands in particular has resulted from very limited human contact, itself the product of the islands' inaccessible and hostile environments.

The principal marine islands are named and well known, though rarely visited. They are Motchuhar/Motuhara (The Forty-Fours: celebrating the latitude on which they occur); Rangitatahi (The Sisters); Motuhope (Star Keys); Tarakoikoia (The Pyramid) and Tapuaenuku (Little Mangere, The Fort). Though not uniformly the largest, these islands are distinct from the others in supporting isolated and distinctive biotic communities including colonies of surface-nesting oceanic seabirds. As Table 8 shows, the principal – and best known – fauna on these islands are the seabirds.

On all islands beyond the natural dispersal ranges of pests in the Chathams, original diversities of plants and animals are probably much as they have been for centuries. Though these may be significantly less complex habitats because of their restricted areas and topographies, they offer glimpses of an older, pre-human Chathams none the less. Their contributions to the welfare of marine food systems and ecological communities are still largely unimpaired.

Other islands from top:

Rangitutahi (The Sisters) (Photo: C. J. R. Robertson);

Motuhara (The Forty Fours);

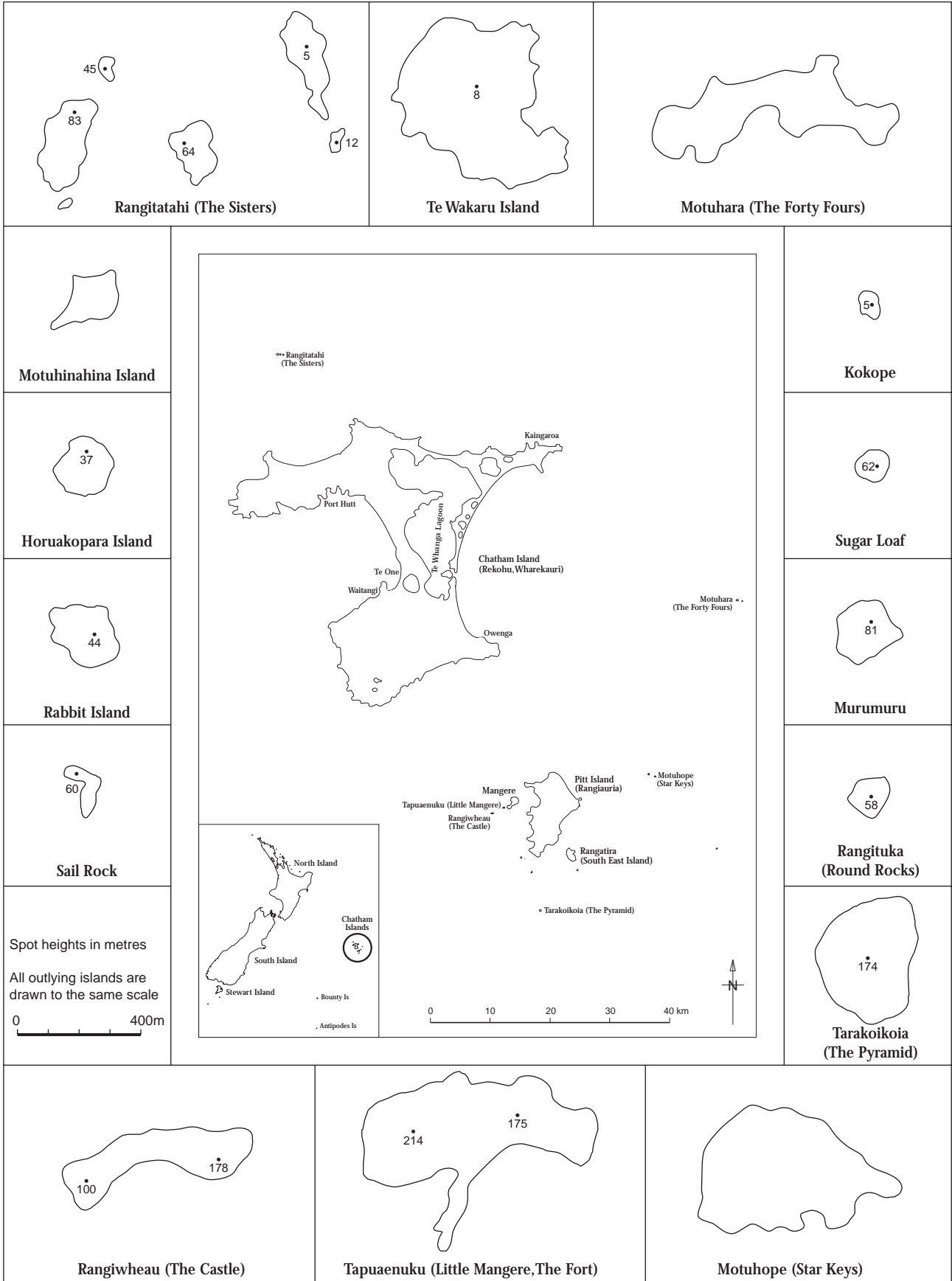
Tapuaenuku (Little Mangere);

Motuhopi (Star Keys);

Murumuru (Photo: Graham Wood);

Tarakoikoia (The Pyramid).

MAP 6: OTHER ISLANDS



## FEATURES AND ISSUES

### People relationships

As most (if not all) of the islands are privately owned, the normal rights of ownership apply (trespass, use, alienation, disposal).

While the indigenous fauna of these islands are subject to Wildlife Act protection and administration by the Department, the safeguarding of this fauna on the islands relies on a co-operative relationship between the owners and the Department.

The Department is anxious to preserve the integrity of these very fragile natural communities. By and large, this is best achieved by leaving them alone if they are in good order. Protection does not imply a need for Crown ownership of the islands, but does rely on the approval of the owners, who may wish to seek Department assistance. To meet its obligations to these wild habitats, the Department needs to assist the owners to be familiar with their islands' ecological importance, the natural processes that sustain them, and influences that threaten them. In turn, the Department must recognise the owners' knowledge of and feelings for their islands. Recent research visits to the outer marine islands have been made in co-operation with the owners. These visits are essential to monitor the status of the oceanic seabirds, a status that has caused some concern. The visits are indicative of a good working relationship of benefit to species and island protection.

In addition to the islands' owners there are wider communities of interest including those who wish to or do harvest seabirds (both titi and toroa) and those who support the protection of the islands' species and ecosystems. Some may seek either to visit, view (e.g., from a boat or aeroplane), or be kept informed (e.g., by media) about such islands. In their own ways all these people value the islands and seek their sustainable management.

### Heritage conservation

Basic surveying and monitoring will satisfy the immediate species management needs on the islands. Other than birds, the plants and animals of the islands, especially of the marine islands, are not well documented. Despite knowledge of seabirds being comparatively further advanced, it still paints an unstable picture.

The greatest shortfalls in knowledge occur with the invertebrates, whose populations on the marine islands are likely to offer the most exciting finds: after

all, these populations have been isolated for very long periods of time. The plant communities are less likely to provide taxonomic surprises because of greater dispersal opportunities. Habitats on the inner islands will have benefited from their closer proximity to more complex communities, but those on the other islands, particularly those that are small or have little or no soil, have low species diversity.

Table 8 summarises the natural values of the ecologically significant islands.

Adult northern royal albatross –  
Motuhara.



TABLE 8: NATURAL VALUES OF SIGNIFICANT OTHER ISLANDS

ISLAND	SIGNIFICANT NATIVE FLORA VALUES	SIGNIFICANT NATIVE FAUNA VALUES
The Forty-Fours/ Motchuhar/ Motuhara	<ul style="list-style-type: none"> <li>• Predominantly coastal herbfield and sparse coastal herb vegetation</li> <li>• Important island refuge for threatened plants: Chatham button daisy a small islands race, distinct from Kaingaroo race; Cook's scurvy grass</li> </ul>	<ul style="list-style-type: none"> <li>• Major breeding site for northern royal albatross</li> <li>• Major breeding site for northern Buller's mollymawk</li> <li>• One of only two breeding sites for Chatham fulmar prion</li> <li>• Newly discovered breeding site for cape pigeon</li> <li>• White-capped mollymawk: one pair breeding 1992</li> <li>• Breeding sites also for: northern giant petrel; subantarctic skua; black-backed gull.</li> <li>• Other faunas not described</li> </ul>
Houruakopara Island (south coast of Chatham)	<ul style="list-style-type: none"> <li>• Not known</li> <li>• Chatham Island kakaha may be present</li> </ul>	<ul style="list-style-type: none"> <li>• Breeding sites for: sooty shearwater, common diving petrel, broad-billed prion, grey-backed storm petrel, little blue penguin, black-backed gull, red-billed gull, white-fronted tern</li> <li>• Other faunas not described</li> </ul>
Murumuru Islands (south end of Pitt)	<ul style="list-style-type: none"> <li>• Inner islands have pristine vegetation richness and diversity. Habitats consist of coastal herbfields, coastal tussock/ice plant, and scrub/flaxlands</li> <li>• The communities were reported in Kelly's 1970s surveys to include populations of threatened plants: Chatham button daisy, distinct from Kaingaroo race; Dieffenbach's speargrass; Chatham Island forget-me-not; Chatham Island aster</li> </ul>	<ul style="list-style-type: none"> <li>• One pair of Australasian gannet bred here in 1980s</li> <li>• Breeding sites for: fairy prion, broad-billed prion, white-faced storm petrel, grey-backed storm petrel, sooty shearwater, Pitt shag, subantarctic skua</li> <li>• Possibility of isolated populations of Aciphylla weevil</li> <li>• Other fauna not known</li> </ul>
The Pyramid/ Tarakoikoia	<ul style="list-style-type: none"> <li>• Sparsely vegetated</li> <li>• Important island refuge for the threatened plants: Chatham button daisy, distinct from Kaingaroo race; Cook's scurvy grass</li> </ul>	<ul style="list-style-type: none"> <li>• Only breeding site for Chatham Island mollymawk</li> <li>• One of only two breeding sites for Chatham fulmar prion</li> <li>• Possible new breeding site for cape pigeon</li> <li>• Breeding site for grey-backed storm petrel, white-fronted tern</li> </ul>
Rabbit Island (north-west corner of Pitt)	<ul style="list-style-type: none"> <li>• Low coastal shrubs and coastal tussock/ice plant communities, considerable area of Chatham Island sowthistle.</li> </ul>	<ul style="list-style-type: none"> <li>• Possible breeding site for Leache's storm petrel</li> <li>• One of only three breeding islands for Chatham shag</li> <li>• Breeding sites also for: fairy prion, broad-billed prion, sooty shearwater, common diving petrel, grey-backed storm petrel, white-faced storm petrel, Pitt shag, subantarctic skua, black-backed gull</li> </ul>
The Sisters/ Rakitchu/ Rangitatahi Big Sister/ Rangitatahi Middle Sister/Te Awanui Little Sister	<ul style="list-style-type: none"> <li>• Vegetation cover varies but is generally sparse and dominated by large coastal herbs including Senecio radiolatus, sedges and ice plant</li> <li>• Big and Middle Sisters are important island refuges for the threatened plants: Chatham button daisy, distinct from Kaingaroo race; Cook's scurvy grass; an unusual form of Hebe chathamica</li> </ul>	<ul style="list-style-type: none"> <li>• Second largest (of only three) breeding site for northern royal albatross</li> <li>• Breeding site of about 2000 pair of northern Buller's mollymawk</li> <li>• Possible new breeding site for cape pigeon.</li> <li>• Breeding sites also for: northern giant petrel, fairy prion, broad-billed prion, sooty shearwater, common diving petrel, grey-backed storm petrel, white-faced storm petrel, Pitt shag, subantarctic skua, red-billed gull, white-fronted tern</li> <li>• Undescribed new species of stag beetle, probably endemic to Sisters</li> <li>• Other fauna not described</li> </ul>

ISLAND	SIGNIFICANT NATIVE FLORA VALUES	SIGNIFICANT NATIVE FAUNA VALUES
The Castle/ Rangiwheau	<ul style="list-style-type: none"> <li>• These islands are predominantly bare rock</li> <li>• Occasional keketerehe and pockets of coastal herbs and grasses</li> </ul>	<ul style="list-style-type: none"> <li>• The Castle is a breeding site for Pitt shag</li> <li>• Other faunas not known but may include some interesting invertebrates.</li> <li>• Skink faunas may be poor in the absence of seabirds</li> </ul>
Star Keys/Motuhope	<ul style="list-style-type: none"> <li>• Coastal herbfield/sedgeland, and mahoe scrub habitats.</li> <li>• Important refuge for Chatham button daisy</li> </ul>	<ul style="list-style-type: none"> <li>• Breeding site for Chatham Island snipe</li> <li>• Breeding site for little shearwater</li> <li>• Possible breeding site for black-winged petrel</li> <li>• Possible site for New Zealand shore plover dispersing from Rangatira</li> <li>• One of only three breeding islands for Chatham Shag</li> <li>• Breeding sites also for: sooty shearwater, common diving petrel, fairy prion, broad-billed prion, grey-backed storm petrel, white-faced storm petrel, little blue penguin, Pitt shag, subantarctic skua, black-backed gull, white-fronted tern, red-billed gull</li> <li>• Other fauna not described</li> </ul>
Little Mangere Island/ Tapuaenuku The Fort	<ul style="list-style-type: none"> <li>• Tall hardwood scrub with pockets of coastal herbs and <i>Senecio radiolatus</i>. Forest cover in collapse. Research needed to determine reasons; possibly exacerbated by explosive response of pohuehue vines</li> <li>• Important refuge of threatened herbs, Chatham Island forget-me-not, Chatham button daisy</li> </ul>	<ul style="list-style-type: none"> <li>• Largest Chathams breeding centre for sooty shearwater</li> <li>• Probable breeding site for little shearwater</li> <li>• Breeding sites also for: fairy prion, broad-billed prion, Pitt shag, subantarctic skua</li> <li>• Other fauna not described</li> </ul>
Kokope (north-east coast of Pitt)	<ul style="list-style-type: none"> <li>• Coastal mahoe-koromiko scrub, herb and grass communities</li> </ul>	<ul style="list-style-type: none"> <li>• Breeding sites for: fairy prion, broad-billed prion, sooty shearwater, white-faced storm petrel, little blue penguin, black-backed gull</li> </ul>
Te Wakaru Island (north-east coast of Chatham)	<ul style="list-style-type: none"> <li>• Supported populations of Chatham Island sow thistle and forget-me-not until the 1980s. Most of the cover is now flax and broadleaved scrub</li> <li>• Good site for restoration of threatened coastal herbs</li> </ul>	<ul style="list-style-type: none"> <li>• Fauna not described</li> </ul>
ISLANDS OF SIGNIFICANCE IN INLAND WATERS		
Motuhinahina Islands (Te Whanga lagoon)	<ul style="list-style-type: none"> <li>• Most of the cover is dense hardwood/kawakawa scrub with ice plant and sedges</li> <li>• One of three known Chatham populations of the rare Maori spurge</li> </ul>	<ul style="list-style-type: none"> <li>• Breeding site for Chatham shag</li> </ul>

*Note: Seabird information provided from Imber, (1994)*



Adult Buller's mollymawk –  
Motuhara.



The importance of the marine islands in the context of southern hemisphere life systems cannot be overstated. The oceanic seabirds illustrate this most visibly. Amongst these tiny specks of land in the vastness of the world's oceans is the *only* breeding site for the Chatham Island mollymawk (Tarakoikoia), the *only* two significant breeding sites for the northern Buller's mollymawk (Motuhara, Rangitatahi), and the two largest breeding sites for northern royal albatross (Motuhara, Rangitatahi).

Discoveries of new taxonomic invertebrate species are inevitable and such discoveries will make these islands even more special.

Protecting these natural communities from damage (in some cases, from further damage) requires recognition of the risks they face.

As tiny, limited populations in singularly exposed localities, the plants and animals are vulnerable to powerful disruptive forces in their own environments. For instance, storms or droughts can have catastrophic impacts on them – impacts that may endure for decades or longer. Managers can do nothing to deflect these natural events but they can anticipate them by ensuring that species' natural abilities to cope and recover are not already compromised.

Fire, introduction of weeds, pests and diseases, depletion of numbers or diversity by harvesting and physical modification of the habitats, and disturbance of breeding are all threats associated with human activity on the islands. These are the most manageable and preventable of threats.

The mitigation of these threats relies wholly on awareness of them and of the precautions necessary to avoid them. Experience elsewhere in the Chathams and New Zealand has demonstrated that it is cheaper, wiser and ultimately less damaging to *reduce the risk of damage* than to await events and react accordingly.

### **Human History**

All the islands frequented by the larger seabird species were visited seasonally by Moriori to gather food. Their journeys in wash-through waka to the outer islands were brave and at times harrowing affairs. Harvesting persisted in progressively altered forms after the arrival of Europeans and Maori but declined with the advent of Wildlife Act protection in 1953.

There are some historic places but few features to mark human visits to these islands, other than the physical impacts that have occurred on some places. Archaeological sites have been recorded (Sutton, 1994 pp. 36–37) at Motuhope and Te Awanui at Rangitatahi. There are many oral and written historic records and established tikanga for some islands.

### **Recreation and Use**

Access and use of the islands is at the discretion of the owners.

The marine islands have potential for visitor use as sites to approach for observations of the seabirds (as occurs at The Snares in the subantarctic). The difficulties of landing or surviving a forced stay on most of the marine islands would test all but the most intrepid of visitors, although there is likely to be increasing interest in land visits.

The lake and lagoon islands, including the ephemeral islands, are visited by Chathams residents to gather black swan eggs in summer.

While illegal, some harvesting of seabirds occurs, at times without island owners' permission and against their wishes. The issue of seabird harvest from these islands is controversial at present, with claims before the Waitangi Tribunal, harvest applications to the Department, and substantial difficulties in administering existing protection laws.

An application for the harvest of toroa for the 1991 Chatham Island Bicentenary celebrations resulted in permission being given for a harvest of Chatham Island beach-cast birds, probably blown off the outer islands and having a nil survival chance.

In response to population concerns, the Department, with island owners' and iwi support, has instigated long-term seabird population studies, involving extensive on-island research and bird-banding.

## **AREAS MANAGED BY THE DEPARTMENT**

No part of any of these islands is managed by the Department.

## **KEY PRIORITIES**

### **5.5.1 ISLAND OWNER AND COMMUNITY LIAISON AND INVOLVEMENT**

#### **Issue**

Continued protection of the islands' ecosystems is not possible without the approval of the islands' owners and the support of the Chathams community. Neither can be expected to approve of the Department's wishes unless they are aware of the issues and are involved in discussing them. Equally, the Department needs to understand the owners' and the community's attitudes to the islands.

TABLE 9: KEY PRIORITIES FOR OTHER ISLANDS

NAME	ISSUE
5.5.1 Island Owner and Community Liaison and Involvement	<ul style="list-style-type: none"> <li>• Total private ownership</li> <li>• Need for Department to work with owners and community</li> <li>• National and international interest in species</li> <li>• Respect for tikanga</li> </ul>
5.5.2 Ecosystem Protection	<ul style="list-style-type: none"> <li>• Vulnerability due to limited area/habitats</li> <li>• Visitor damage risks</li> <li>• Impacts of bird harvesting</li> </ul>
5.5.3 Indigenous Species Management	<ul style="list-style-type: none"> <li>• Islands critically important for oceanic birds</li> <li>• Generally poor knowledge base</li> </ul>
5.5.4 Customary Use	<ul style="list-style-type: none"> <li>• Some customary use continues</li> <li>• Requests to legalise use</li> <li>• Little known of take impacts</li> <li>• Weed and pest introduction threats</li> </ul>
5.5.5 Historic Places	<ul style="list-style-type: none"> <li>• Few recorded historic places</li> <li>• Scarcity value and need for management respect</li> </ul>

The Department is also obliged to consider the wider New Zealand community, which has interests and concerns for the welfare of the plants and animals on these islands. It must also have regard to the views of the international community in respect of the wide-ranging oceanic seabirds.

Iwi visits to some of the islands established certain tikanga that are retained by island owners today.

### Objective

- To maintain ongoing consultation with the islands' owners on all aspects of the islands' management.
- To consult with all relevant community interests on the management of the islands' protected species.

METHOD	RESULT SOUGHT	ACTIVITY
<ul style="list-style-type: none"> <li>Contact island owners</li> <li>Respect tikanga</li> <li>Information/research findings provisions</li> <li>Chatham Island Conservation Board involvement for public commentary</li> </ul>	<ul style="list-style-type: none"> <li>Ongoing consultation with islands' owners maintained</li> <li>Communities interested in the islands' management consulted</li> </ul>	<p>6.1.3 Community Liaison and Involvement</p> <p>6.2.6 Indigenous Species</p>
<ul style="list-style-type: none"> <li>Work with all owners on all management aspects</li> <li>Support additional protection options</li> <li>Seek to implement rodent contingency plan</li> <li>Prepare wider pest contingency plan</li> <li>Encourage visitor checklist system</li> <li>Research, survey and monitoring</li> <li>Appropriate RMA controls</li> <li>Offer fire prevention and control assistance</li> </ul>	<ul style="list-style-type: none"> <li>Natural communities of the islands safeguarded</li> </ul>	<p>6.1.3 Community Liaison and Involvement</p> <p>6.2.6 Indigenous Species</p> <p>6.2.8 Animal Pests and Wild Animals</p> <p>6.2.10 Fire</p> <p>6.3 Visitor Services</p> <p>6.4.2 Military Use</p> <p>6.5.5 Research</p> <p>6.5.6 Survey, Monitoring and Information Management</p>
<ul style="list-style-type: none"> <li>Continue research and review knowledge</li> <li>Prepare and action recovery plans and strategies</li> <li>Preserve key populations for other area restoration</li> <li>Monitor non-threatened species/groups</li> <li>Integrate owners' traditional and Department knowledge</li> <li>Seabird fisheries by-catch action</li> </ul>	<ul style="list-style-type: none"> <li>Knowledge of indigenous species improved</li> <li>Threatened elements of the islands' natural communities/ associations preserved</li> </ul>	<p>6.2.5 Marine ecosystems</p> <p>6.2.6 Indigenous Species</p> <p>6.5.5 Research</p> <p>6.5.6 Survey, Monitoring and Information Management</p>
<ul style="list-style-type: none"> <li>Research and monitoring</li> <li>Island owner and iwi consultation</li> <li>Information provision</li> <li>Institute research, monitoring, threat control and allocation systems should any take be legalised</li> </ul>	<ul style="list-style-type: none"> <li>Seabird, marine mammals and other indigenous species protected, while allowing for any authorised customary use</li> </ul>	<p>6.2.6 Indigenous Species</p> <p>6.2.8 Animal Pests and Wild Animals</p> <p>6.5.6 Survey, Monitoring and Information Management</p> <p>6.4.3 Customary Iwi Use</p>
<ul style="list-style-type: none"> <li>Follow island owners' and NZHPT requests re historic place care and recording</li> <li>Notify island owners and NZHPT of newly found places and known place conditions</li> </ul>	<ul style="list-style-type: none"> <li>Island owner requests and Historic Places Act controls respected</li> </ul>	<p>6.2.7 Historic Resources</p>

## Implementation

The Department will:

1. Maintain personal communication with the islands' owners.
2. Work co-operatively with the islands' owners on the matters set out in 5.5.1 (Island Owner and Community Liaison and Involvement) to 5.5.5 (Historic Places).
3. Respect the tikanga for the islands.
4. Provide publicly accessible species recovery plans and other management and research reports as community information.
5. Encourage management and research distribution via public meetings, media, and direct supply to island owners.

- Involve the Chatham Islands Conservation Board as a conduit for public commentary on policy and management relating to the islands.

## 5.5.2 ECOSYSTEM PROTECTION

### Issue

The limited area and habitats of the islands make them vulnerable to loss or depletion as a result of disturbances.

The risks of burrow damage, and plant and animal pest invasion accompany most visits to seabird islands, even those visits by careful managers. Within the term of this CMS there is potential for effects by a variety of causes.

Human-induced disturbance by harvesting is potentially the more damaging because it is generally non-selective in the mortality it causes and is persistent. Its effects are to destabilise populations, so that species lose their natural resilience, impairing their capacities to cope with natural environmental fluctuations.

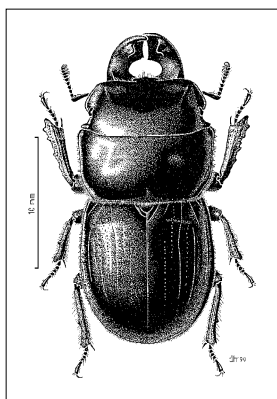
### Objectives

- To safeguard the natural communities of the islands listed in Table 8.

### Implementation

The Department will:

- Work with island owners to share knowledge on activity implications, the need for protection of the islands' natural communities, and protection methods.
- Support proposals that strengthen the protection of natural and historic values on the islands (see protection mechanisms identified in 6.2.3 Land Ecosystems).
- Implement, in conjunction with the island owners, those parts of the Department's rodent contingency plan (see also 6.2.8 Animal Pests and Wild Animals) that relates to these islands, in particular:
  - Ensure that no rodents or other animal pests are introduced to the islands during departmental and island owner visits.
  - Establish a rodent eradication team in the Chathams to respond immediately to any rodent invasion of any island.
  - Seek the prohibition of boat moorings to the marine islands.
  - Treat boat wrecks as rodent invasion situations.
  - Increase the Chathams community's awareness that plant and animal pests jeopardise the welfare of habitats and threatened species on these islands, and that precautions are necessary to reduce or eliminate those risks.
- Upgrade the rodent contingency plan to a pest contingency plan, to ensure that preparations are made to avoid and, if necessary, cope with the introduction of any animal or plant pest to the islands.
- Encourage island owners to implement an island visitor approval system with a checklist akin to 5.4.5 (Visitor Management) Implementation 3(i) to (vii).
- In conjunction with island owners, expand our baseline knowledge of the islands' species and ecosystems and monitor them so that the impacts of any detrimental events can be anticipated and prepared for.



Sisters Island stag beetle – an as yet undescribed species.  
(D.W. Helmore. Manaaki Whenua - Landcare Research.)

7. Work with the island owners and the council to seek appropriate RMA activity controls for the islands (e.g., for buildings, boat moorings, helicopter landings) within the council's resource management document.
8. Offer fire prevention and control expertise to assist the owners of those islands where fire is a threat.
9. Seek clarification of land ownership for Rabbit Island and the Murumurus so contact with the correct island owners can occur.

### 5.5.3 INDIGENOUS SPECIES MANAGEMENT

#### **Issue**

The islands are known to be critically important to oceanic seabirds, especially the larger surface nesters, which currently have no suitable breeding sites elsewhere in the Chathams. Little is known of other flora and fauna values, some of which are expected to be equally significant. The knowledge base for the islands' indigenous species is generally poor.

#### **Objectives**

- To improve the knowledge of indigenous species on the islands, so that existing or emerging problems can be better responded to.
- To preserve threatened elements of the islands' natural communities and the associations that support them.

#### **Implementation**

In co-operation with the islands' owners, the Department will:

1. Continue to review the knowledge of species status and threats on the islands, so that gaps in knowledge are exposed and priorities for investigation are established.
2. Embark on management-directed research programmes to close gaps in knowledge and assist similar proposals from other agencies where appropriate and where Department standards on research approval, rodent and pest precautions, and island owner liaison protocols are met.
3. Produce and action explicit statements of species management needs through recovery plans and strategies (see 6.2.6 Indigenous Species)
4. Preserve key remnant populations on these islands as the basis for programmes to restore their original distributions and densities in the Chathams region.
5. Monitor other species or species groups carefully although they may not be immediately at risk but are confined in their populations on the islands or elsewhere.
6. Seek to integrate the island owners' traditional knowledge with the Department's management and research knowledge so that owners can improve the management of their islands through their own efforts.
7. Continue national and international action to minimise any seabird by-catch by fishing vessels.

## 5.5.4 CUSTOMARY USE

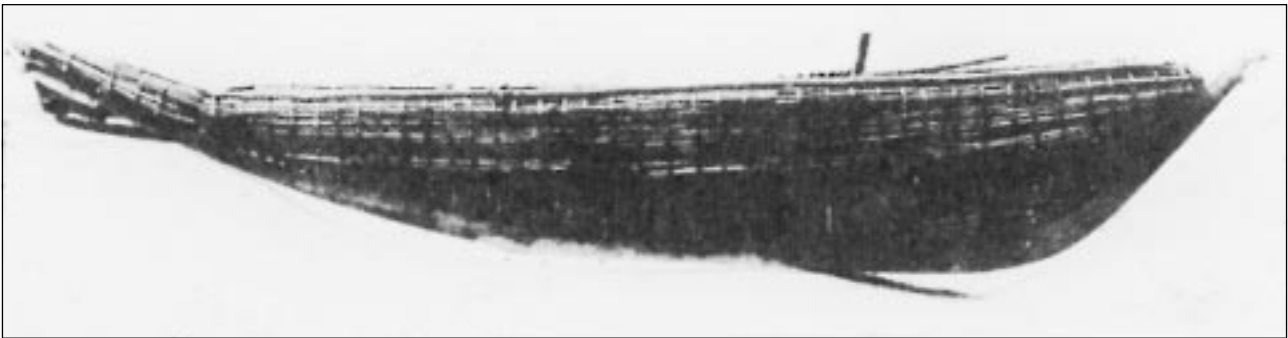
### Issue

The take of protected seabird species occurs occasionally on some islands and more regularly on others. Dramatic reductions in seabird species populations on Chatham and Pitt and the introduction of legislation to protect species have meant these resources are less readily available. There are calls to legalise the take of species such as titi, toroa and also seal, though for toroa there is strong local feeling for its continued protection. Little is known of the vulnerability of most targeted bird species, and virtually nothing is known of the current or potential take impacts. They are expected to be injurious since they affect long-lived, slow-breeding species.

Often the most frequent visitors to islands are birders, especially for the isolated seabird islands. Their precautions against plant and animal pest introductions, fire and other detrimental impacts are unknown, though evidence left behind suggests that they are not sufficiently rigorous to safeguard the habitats or species

Many issues are encompassed within this customary use area, some requiring resolution at a national level, others at community level. There are also international issues given that some species range widely through the southern oceans.

(see 6.4.3 Customary Iwi Use)



Waka-korari: the traditional Moriori watercraft once used for seasonal visits to islands. (H. D. Skinner, 1923.)

### Objective

- To ensure the protection of seabird, marine mammal and other indigenous species while managing any authorised customary use.

### Implementation

The Department will:

1. Promote research to determine the population dynamics of seabird populations.
2. Develop monitoring techniques to gain an understanding of seabird populations that may be subject to an authorised take in the future.
3. Consult with island owners and iwi to share information on customary use take and monitoring techniques.
4. Consult with the island owners and the local community to provide them with all the relevant information they need to make informed decisions on the ecological implications of customary use.
5. Consult with and assist island owners and iwi to set in place a system, as appropriate, to allocate material of cultural importance should the current protective legislation change.

6. Quantify the associated biological and physical (e.g., fire) risks and the monitoring and research requirements, if a customary use take is legalised in the future for the species on these islands, so that any take can be reviewed regularly in the light of all relevant factors..
7. In co-operation with island owners, seek to enforce the species protection legislation (including potential harvest controls), as well as the option of prosecution.

#### 5.5.5 HISTORIC PLACES

##### **Issues**

Although few historic places are recorded for these islands, more may exist either as physical evidence or as other wahi tapu. Their scarcity may give them value and their existence a need for management respect.

##### **Objective**

- To respect island owner requests and Historic Places Act 1993 controls regarding historic places.

##### **Implementation**

The Department will:

1. In planning for and/or undertaking field work on the islands:
  - (i) Determine and implement any requests of island owners or the New Zealand Historic Places Trust regarding activities on or near any identified historic place.
  - (ii) Maintain a lookout for historic places and record any previously un-researched site evidence.
  - (iii) Avoid disturbance of any historic place.
2. Notify the island owners and the New Zealand Historic Places Trust of any newly found historic place evidence and known historic place condition.







# SECTION 6

## Activity Objectives and Implementation



## 6. Activity Objectives and Implementation

Each of the following five sections begins with a general introduction that outlines

- the range and nature of activities included in that section
- the Department's management of these activities

It is important to realise that the sections are inter-related and cannot be taken in isolation. For example, the People Relationship provisions apply across the Heritage Conservation provisions and vice versa.

Within each section, the individual categories contain:

- a brief definition of the activity
- an explanation that illustrates the background, the current situation, the Department's responsibilities and expected future trends.
- an overview of the Department's statutory responsibilities
- a series of objectives, which are statements of intent that focus on what needs to occur in each activity to provide guidance for the Department. They outline the natural, historic and recreation outcomes sought in that activity.
- a series of implementation statements that detail what the Department will do to implement the CMS. To give effect to implementation statements, statutory approvals from the Minister of Conservation or Director-General may be required.
- priorities for the Department which may be classified under primary, secondary or tertiary priorities, or priority actions or sites. By prioritising tasks, it becomes obvious that some activities will not be able to be undertaken or completed. The scope of the tasks facing the Department are of such magnitude that it is unlikely sufficient resources or appropriate technology will be available in the next ten years to undertake or complete many of these tasks. Some of them will be actioned by other agencies and people.
- limitations, which refer to tasks the Department may not be able to undertake or complete. Where possible, specific limitations to or on activities have been identified at the conclusion of the priority section and immediately preceding the key priority table. If no limitations are specified, this does not imply none exist, or will arise.
- a key priority table at the end of each activity section, which outlines the most important priorities for the Department to address over the next ten years. The key priorities appear under Results Sought in the table. Other headings are:
  - Theme – the relevant topic heading
  - Issue – the basis of the problem
  - Method – how the Conservancy will achieve the result sought
  - Place – the CMS places where the activity will occur. In some, the activity may be in several places, in others, in only one. This also provides a cross-referencing to the key priorities within the place sections of the CMS.

## **Monitoring**

The key priority tables flag the major actions required in the activity section. They will be used as indicators in monitoring CMS implementation (see 6.2 CMS Implementation).

# 6.1 People Relationship

## 6.1.1 INTRODUCTION AND OVERVIEW

People relationships encompass all the activities aimed at increasing people's knowledge and understanding of and support for conservation and the Department. Under Section 4 of the Conservation Act 1987 the Department is required to give effect to the principles of the Treaty of Waitangi. Recognition and understanding of iwi resource management concepts are essential.

The overall goals for raising public awareness of conservation are to have:

1. A high proportion of the public enjoying and appreciating the value of all New Zealand's natural and historic resources and understanding the need for their protection.
2. Iwi, community groups, volunteers and other public agencies involved with the Department in achieving conservation initiatives.
3. Individuals, iwi and community groups, associate groups and other agencies taking their own conservation initiatives.
4. Systems and processes in place to ensure that the Department's public awareness efforts are effective.

Some of the major issues are:

- how to develop a bicultural perspective in the Department's work
- ensuring that all Department staff have a good knowledge of natural and historic resource management issues and that they help to pass these on
- the need to share responsibility; increase volunteer opportunities and work more closely with key groups and agencies
- the provision of education resources
- the need to focus on particular ecosystems and issues
- the provision of quality interpretation at key sites

The Department's public awareness and interpretation strategies detail future directions. Over the next ten years the Department will focus on a number of issues. An increased awareness of iwi perspectives will be sought within the Department's work. Further sponsorship opportunities will be identified and developed nationally. Key groups, such as landowners, will be worked with, as will key ecosystems and issues. The Department will work more with educators and interpreters, including concessionaires, to further develop conservation awareness. Key sites will have quality interpretation.

## 6.1.2 TREATY RELATIONSHIPS

Giving effect to the principles of the Treaty of Waitangi

### **Introduction**

The Treaty of Waitangi is the founding document of the relationship between the Crown and iwi. It offers opportunities and contributes to the unique style and context of New Zealand conservation administration. The Treaty provides for Crown

authority (kawanatanga – the right to govern) from which the Department’s authority is derived, and the authority of iwi, which continues to be exercised. This section looks to build on the present relationships the Department has with iwi in a continuing, evolving and constructive manner. It also addresses the need to contribute to the resolution of grievances relating to past acts or omissions of the Crown.

Both Moriori and Maori<sup>1</sup> are Crown Treaty partners exercising customary authority within the Chatham Islands; Moriori as the original inhabitants, and Maori from their 1835 settlement. Currently both iwi are pursuing Waitangi Tribunal claims and for Maori, a Maori Land Court application to determine ownership of Te Whanga lagoon.

## **Current Situation**

In understanding the Treaty principles, the Waitangi Tribunal, the Court of Appeal and the Government have given some direction. This includes:

- recognition that the right of the Crown to make laws was exchanged for the obligation to protect iwi interests;
- that the Crown has an obligation to acknowledge rangatiratanga and customary authority over land and resources owned by iwi;
- that the Treaty implies a relationship akin to a relationship to be exercised with the utmost good faith; and that the duties are not merely passive, but extend to active protection of iwi interests;
- a duty not to create a new Treaty breach;
- a duty not to take any action which prevents redress;
- a duty to make informed decisions.

The Department of Conservation is an agent of the Crown, with limited powers, but consistent jurisdiction. Rendered into its most simple terms, the obligations of the Treaty are about demonstrating a willingness to take an open, generous and flexible approach to the duties. At the Chathams level, this is about forging relationships that work.

## **Working With The Treaty**

The development of a constructive working relationship with iwi is founded on the following three undertakings:

### *To act reasonably and in good faith*

The Department’s duties are based on the principle that the Treaty is an evolving contract and its meaning and direction with respect to individual places or issues is to be worked out in a relationship of trust and action. The paramount undertaking is to act reasonably and in good faith towards one another, each with an interest in the other’s well-being and welfare.

### *To consult with iwi*

The second undertaking is to consult with iwi. Consultation takes place at many levels and in many different ways. To be successful it must be sincere and be carried out with the right people.

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<sup>1</sup> Throughout the CMS, Moriori and Maori are referred to in the chronological order of their settlement of the Chathams. This order in no way should be taken to suggest any predetermined priority between the iwi in respect of the Department’s relationship responsibilities under the Treaty of Waitangi. In all cases the Department will consult with appropriate iwi to the situation.

The Department consults with the public and interested parties generally. At a different level, it is involved in consultation that relates specifically to the appropriate exercise of rangatiratanga or to the protection of mauri or wairua. Such consultation is necessary to achieve a bicultural perspective on conservation issues, and is a central obligation to the Department. With respect to Treaty issues and their resolution, it is the Government's function to deal with iwi on the one hand, and the public on the other.

To be effective, consultation needs to draw on and to respect the decision-making process so that the results can be effectively incorporated. It should provide consensus approaches to authority. It should also be ongoing, and it should seek to empower by way of information access and sharing on both sides.

In order to be effective the Department must act with an awareness of the interests of iwi in particular places or matters. Knowing or understanding these interests is essential. By carrying out effective consultation with iwi, the Department will develop an understanding of the interests and aspirations of iwi in relation to the areas managed by the Department. By developing a knowledge of history or relationships, of interests and tikanga or protocol of the iwi, and meshing this with the conservation imperatives of the Department, relationship initiatives can then evolve constructively, bicultural approaches to conservation can be developed, contributions can be made to the Crown's commitment to the redress of legitimate Treaty grievances and iwi interests can be actively protected as specified in the Treaty.

#### *Active protection*

The courts have indicated that in some circumstances the duty of the Crown is not merely passive but may extend to the active protection of Maori<sup>2</sup> people in the use of their lands and waters to the fullest extent practicable. Such a principle puts the Crown on alert and inevitably leads to consultation.

The principle of active protection of iwi interests is paramount in understanding that 'Maori interests' are not just those of another interest group but that iwi interests, especially as they relate to the management of land, species and resources have a status and prerogative of their own and may need accommodating as pre-conditions to, rather than as qualifiers of, wise resource management decisions.

The principle of active protection of iwi interests has direct relevance to every function of the Department and is referred to throughout the objectives and implementation statements of this strategy.

### **Resolution of Treaty Grievances**

The Treaty of Waitangi Act 1975 has established a process for dealing with Moriori and Maori grievances about breaches of the Treaty by the Crown. In the Chathams all areas and many resources managed by the Department are subject to claims that have been made, and the government is committed to addressing these matters as quickly as possible so that any uncertainties are removed.

The Waitangi Tribunal is the primary forum for grievances to be addressed, with recommendations being made to the Crown. The Department's role is to assist the Crown presenting its case to the Tribunal and to provide advice to the Minister and the Crown on specific Treaty of Waitangi claims. It must also ensure that

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<sup>2</sup> The Waitangi Tribunal (1992) has accepted that Moriori are 'Maori' for the purposes of the Treaty of Waitangi Act 1975.

existing grievances will not be unnecessarily exacerbated, and that administrative actions do not breach the Treaty principles.

There are outstanding tribal grievances for which claims have been lodged with the Tribunal. Most of these grievances relate to claims about historical acts or omissions of the Crown in relation to taonga.

These claims arise from both iwi groups and range across the Chathams.

The continuing existence of a sense of grievance on the part of iwi can inhibit the effective contribution of iwi to a bicultural conservation management regime. The prompt investigation and settling of these matters, though beyond the Department's power, is essential to the improvement of working relationships between the Department and iwi.

### **Statutory Framework**

Section 4 of the Conservation Act requires that the Act 'be interpreted and administered to give effect to the principles of the Treaty of Waitangi'. In practice, this requires changes from the past practices of government. It involves the continuing development of effective working relationships between the Department and iwi.

### **Issues**

The key issue in relation to the Treaty of Waitangi is the development of a constructive working relationship with iwi, focused on conservation achievement and bicultural approaches to conservation. The Department cannot take any action which is contrary to its statutory functions, powers and duties. In particular, it cannot delegate or derogate from its statutory obligations including the making of decisions.

This key issue raises further issues for the Department as it implements its legislation and undertakes the Crown's rights to govern:

- recognising the authority of both iwi
- identifying and managing wahi tapu on land managed by the Department
- working with iwi on indigenous biodiversity management and acknowledging taonga species.
- providing appropriate access to mahinga kai and other resources
- contributing to the process of Waitangi Tribunal claims
- managing lands and resources in accordance with tikanga

The Department has produced a Kaupapa Atawhai Strategy (DOC, 1997) to guide staff in their work on Treaty relationships

### **Objectives**

- To give effect to the principles of the Treaty of Waitangi in exercising Department authority in the management of natural and historic resources by ensuring the interests of iwi are actively protected and provided for.
- To ensure that there is open and effective communication with iwi about natural and historic resource management.
- To strengthen management achievements by drawing on iwi and pakeha cultural traditions in the management of natural and historic resources.



- To contribute constructively to the Crown process of considering claims relevant to the Department's functions.
- To contribute to the implementation of Government decisions on claim settlements affecting natural and historic resources.
- To support iwi in their interpretation to visitors of their traditional relationships and cultural values.

## **Implementation**

### *Treaty Claims*

The Department will:

1. Provide timely and high quality advice to the Minister and the Crown on specific Treaty of Waitangi issues.
2. Respond to Government instructions in regard to the implementation of the findings of the Waitangi Tribunal.

### *Relationship*

3. Work closely with iwi regarding the implementation of this Conservation Management Strategy.
4. Take guidance from the provisions of the Kaupapa Atawhai Strategy, (DOC 1997)
5. Ensure that consultation with iwi on Department management is early, ongoing, informed and effective.
6. Discuss with iwi the means by which customary practices (such as rahui) may be used and supported to protect natural and historic resources.
7. Assist each iwi, to develop their database on cultural values and traditions of relevance to the Department's management responsibilities, and seek to establish a protocol for consultation and use of their database at the discretion of iwi.
8. Support iwi who wish to develop tribal management plans or policy statements and seek guidance from such plans or statements.
9. Incorporate tikanga Moriori and tikanga Maori (as appropriate) into the management of natural and historic resources with the advice and guidance of the iwi concerned.
10. Ensure that each iwi perspective is incorporated in all relevant future interpretative material (e.g., visitor information, signs), having sought the advice and guidance of Iwi.

## **Priorities**

### *Primary*

The implementation of agreements between the Crown and iwi which settle claims will have the highest priority.

### *Secondary*

Joint development of a protocol for the preparation of a database on iwi sites and values on lands managed by the Department will be an important secondary priority. This will allow the Department to incorporate tikanga into its management of natural and historic resources.

## Limitations

Even with such priorities, it is apparent that many projects will still not be undertaken. The scope of these tasks is of such magnitude that it is unlikely that sufficient resources or appropriate technology will be available in the next ten years to begin many of them, e.g., conservancy support for research on values of importance to iwi outside land managed by the Department.

Iwi volunteers and community efforts are encouraged to contribute research and management initiatives in these areas over the terms of this CMS.

TABLE 10: KEY TREATY RELATIONSHIP PRIORITIES

	ISSUES	METHODS	RESULTS SOUGHT	PLACE
Treaty claims	Resolving Treaty grievances	Implement Crown settlements	Crown and iwi relationships occurring free of outstanding Treaty grievances	All places
Relationships	<ul style="list-style-type: none"> <li>• Implementing CMS</li> <li>• Knowledge sharing</li> <li>• Ownership of data</li> <li>• Use of customary management priorities</li> <li>• Respecting tikanga</li> </ul>	<ul style="list-style-type: none"> <li>• Full consultation</li> <li>• Joint development of relevant databases</li> <li>• Support preparation of tribal management plans or policy statements</li> <li>• Iwi input into interpretation material</li> </ul>	<ul style="list-style-type: none"> <li>• Consultation between iwi and Department positive and furthering natural and historic resource management</li> <li>• Sites and values of importance to iwi recorded</li> <li>• Tikanga Mori/ Maori built into Department management and advocacy</li> </ul>	All places

### 6.1.3 COMMUNITY LIAISON AND INVOLVEMENT

#### Introduction

Community liaison and involvement encompasses all the opportunities that exist for people to become involved in hands-on activities: liaison between agencies, groups, individuals and the Department, including media contact; and work undertaken to raise community and Department awareness of natural and historic resource issues and the Department's sole responsibilities.

#### Current Situation

The Department cannot hope to do all the work that needs to be done. It will therefore increasingly involve the community, encouraging and supporting, where appropriate, the initiatives of individuals and groups. Prior to the mid-1980s there was very little community liaison and involvement on the Chathams, but knowledge of and involvement with the Department is now probably far greater on a per capita basis than elsewhere in New Zealand, as seen in the number of covenant-protected areas.

At present the community assists with activities in a number of ways such as the tree plantings on Pitt and Mangere, boat work and trips, involvement in habitat protection, Owenga school pupils assistance with the monitoring of the Chatham Island oystercatcher, and Te One school's involvement in maintaining and enhancing

the School Reserve at Rapanui. Local staff report a noticeable increase in community interest in activities. Advocacy work with schools is important as it tends to draw in the wider community. Islanders have indicated support for establishing volunteer activities for nature programmes for schools, encompassing such things as adopting an area for replanting.

The Department needs to work in close co-operation with key associates including the Conservation Board, iwi, landowners, the Chatham Islands Visitor Promotion Board, university visitors, local schools, the council, the community worker, other government agencies, fishers, visitor services operators and New Zealand-wide interest groups. Landowners are particularly important associates as a high proportion of the Department's work is carried out on private land.

Local media opportunities are provided by the *Chatham Islander* newspaper, Radio Weka and Chathams' TV. At present the Department regularly contributes to the paper and has occasional interviews on the radio. Contact with the national media is also important as there is widespread interest in Chathams issues, particularly anything concerning threatened species. There is the opportunity to pick up topical issues as time permits.

Improved liaison with the community and their increasing involvement in natural and historic resource management over recent years has helped to raise awareness in the community. Field trips with staff have been set up for most of the schools, with correspondence pupils also joining. Accompanying fact and activity sheets produced by local staff are also used. Recently a summer programme set up by the community worker incorporated activities led by Department staff, and outdoor education activities have also been undertaken in co-operation with the local police. Work with the schools has been particularly effective, leading to active involvement with the Department and raising the awareness of parents and the wider community.

Attendances at Department staff talks have been good, showing there is interest in them and there is likely to be benefit from giving more. There is also scope for more community contact with visiting Department staff working on specific projects. Talks to the community on their work would be one way of achieving this.

The Department is not the only holder of natural and historic resource knowledge and will be better able to manage if Department and community knowledge is shared. Processes that encourage this sharing are needed.

Liaison with the community is clearly having positive benefits and the Department is recognising the value of this.

### **Statutory Framework**

Section 6 of the Conservation Act enables the Department to promote the benefits of conservation of New Zealand's natural and historic resources to present and future generations.

Section 6(d) of the Conservation Act enables the Department to provide, disseminate, promote and publicise educational and promotional material relating to conservation.

### **Issues**

In working for conservation on the Chathams, the community liaison and involvement issues for the Department are:

- how to support, develop and encourage community and individual initiatives

- how to increase opportunities for hands-on community involvement
- encouraging community input into Department projects and management
- how best to reach the wide-ranging community groups
- achieving a bicultural perspective in management
- maintaining good working relationships with private landowners
- supporting the schools in their education programmes
- building community liaison into Department projects while being realistic about staff resources

## Objectives

- To build further support for conservation by providing opportunities for the community to take an active part in conservation projects.
- To be open to and supportive of appropriate community conservation initiatives.
- To encourage effective input by the community to conservation issues and the management of lands and natural resources managed by the Department.
- To maintain and develop links with conservation associates.
- To contribute to local and national media to promote specific topics, issues and policy, and to encourage community responses.
- To increase support for conservation and understanding of the Department's work by providing and supporting a range of educational opportunities, activities and information.

## Implementation

The Department will:



Chatham Island Conservation Board members and DOC staff at the first Board meeting, December 1990.

### *Chatham Islands Conservation Board*

1. Keep the Board well informed on all Department activities, responsibilities and concerns and encourage its role as a primary community voice.
2. Support the Board in its actions to make board meetings fully open to the public. The Board has initiated pre-meeting advertising, public speaking time and a post-meeting media report.

### *Landowners*

3. Provide and encourage the exchange of information and experience on legal and physical protection and management.
4. Ensure all Department staff and contract workers seek access approval from landowners, and see that landowners are aware that this is standard departmental procedure.

### *Iwi*

5. See 6.1.2 (Treaty Principles).

### *Chatham Islands Council*

6. Maintain regular contact with the council, especially with respect to RMA matters, fire, pests, weeds and visitor management.
7. Provide natural and historic resource information for council use in preparing its resource management document and in processing RMA consent applications.
8. Exchange advice as requested on RMA matters.
9. Encourage regular information exchanges between the council and the Conservation Board.

### *Schools*

10. Provide copies of relevant Department management, research and field reports to the school libraries (which also function as the local public libraries).
11. Continue to work with schools on active projects and encourage wider community participation in these.
12. Produce local educational material for school and wider use.
13. Provide opportunities for Department staff, including researchers visiting the Chathams, to talk with school groups and, as available in future, interact with schools through e-mail, the Internet and CD ROM material.

### *Wider Community*

14. Provide Department reports and information to public libraries and community groups.
15. Organise or support public or group meetings on topical issues, encouraging both Department and community speakers.
16. Continue to involve people from the Chathams and the wider community in Department projects, and encourage community groups to take initiative in their own appropriate projects. This includes attention to conservation volunteers.
17. Invite Chathams residents to visit and discuss the Mangere or Rangatira island restoration projects (see 5.4.5 Visitor Management) and the Pitt Island Scenic Reserve projects.
18. Invite the Chatham Islands Conservation Board, national conservation groups and appropriate individuals to represent community and ecological views on the Department's recovery groups which plan the management programmes for species.

### *Media*

19. Contribute regularly to the *Chatham Islander*.
20. Supply video and audiotapes, undertake interviews, and make other broadcasts as appropriate and/or as requested by Radio Weka and Chathams TV.
21. Continue contact with national media to promote Chathams natural and historic resource protection.

### **Priorities**

All the above implementations are considered to be achievable and of equal priority within this CMS ten-year timetable.

TABLE 11: KEY COMMUNITY LIAISON AND INVOLVEMENT PRIORITIES

THEME	ISSUES	METHODS	RESULTS SOUGHT	PLACE
Chatham Islands Conservation Board	<ul style="list-style-type: none"> <li>Encouraging board as community voice</li> </ul>	<ul style="list-style-type: none"> <li>Regular information exchange</li> <li>Support board/public contact</li> <li>Invite board to species recovery group meetings</li> </ul>	<ul style="list-style-type: none"> <li>Chatham Islands Conservation Board an influential body in Chathams conservation</li> </ul>	All places
Landowners	<ul style="list-style-type: none"> <li>Supporting landowner concerns for natural and historic resource protection</li> <li>Land access by Department staff</li> </ul>	<ul style="list-style-type: none"> <li>Regular information exchange</li> <li>Seek landowner approvals for access</li> </ul>	<ul style="list-style-type: none"> <li>Landowners responsive to resource protection</li> <li>Natural and historic resource surveys and research able to be carried out on freehold lands</li> </ul>	Chatham Island Pitt Island Other islands
Chatham Islands Council	<ul style="list-style-type: none"> <li>Responsibilities under RMA, Biosecurity Act, fire and visitor management</li> </ul>	<ul style="list-style-type: none"> <li>Regular contact and information provision</li> <li>RMA advice</li> <li>Council and Chatham Islands Conservation Board contact</li> </ul>	<ul style="list-style-type: none"> <li>Resource management document prepared with satisfactory regard to natural and historic values</li> <li>Regional pest strategy prepared</li> <li>Satisfactory co-ordination on fire and visitor control issues</li> </ul>	All places
Schools and wider community	<ul style="list-style-type: none"> <li>Schools and community support for conservation/sustainable management education</li> </ul>	<ul style="list-style-type: none"> <li>Information provision</li> <li>School field projects</li> <li>Department staff access in person and via computer links</li> <li>Involvement in Department projects</li> <li>Mangere/ Rangatira/ Pitt Island project visits</li> <li>Regular information to media</li> <li>Invitations to species recovery group meetings</li> </ul>	<ul style="list-style-type: none"> <li>School pupils with good understanding of conservation issues</li> <li>Community care for Chathams natural/historic values</li> <li>Wider New Zealand community supporting Department and Chathams community natural/historic resource conservation</li> </ul>	All places

# 6.2 Heritage Conservation

## 6.2.1 INTRODUCTION AND OVERVIEW

The natural features of the Chathams are not easily grouped and require division to make management understandable and rational. Heritage conservation concerns the protection of all natural and historic resources in the Chathams and their protection from factors that cause impacts e.g., pests, weeds and fire. We consider that logical grouping is as follows:

- landscape
- land ecosystems
- freshwater ecosystems
- marine ecosystems
- indigenous species
- historic resources
- animal pests and wild animals
- plant pests and exotic plants
- fire

### **Issues**

The factors that link all of these groups together include:

- The need to consider and include continuity between habitats and ecosystems. This may best be accommodated through application of a landscape philosophy.
- The need to identify priorities for protective action for places and species and against threats. A common goal is the need to obtain maximum biodiversity protection.
- A common interest in natural history.

### **Directions**

Priorities between and among these groups are difficult to determine. The Department, in trying to determine priorities between habitat types and places, knows that:

- there are still gaps in the Department's knowledge
- to help fill these gaps some surveys are still required
- as surveys are completed and information gained then priorities must be reconsidered
- more emphasis is needed on habitats that are inadequately protected
- animal and plant pest control need to target viable habitat areas, and those that contribute most to indigenous biodiversity

## 6.2.2 LANDSCAPE

The landscape expresses land–people relationships. It encompasses the natural and physical attributes of the land and sea, how people and communities valued them in the past and how they value them today.

### **Current Situation**

The majority of Chatham Islands landscapes can be considered unique and outstanding. They have many natural, cultural and historical values that exist nowhere else in New Zealand – either individually or in combination. They are shown to advantage in the photography of Robin Morrison in *A Land Apart – The Chatham Islands of New Zealand* (King and Morrison, 1990) in a combination of volcanic cones, coastlines, lakes, vegetation, colours, patterns, settlements and people.

Landscape management is much more than simply safeguarding views or scenes considered important. It encompasses protecting the integrity of the landscape, that is, looking at both the landscape as a whole – the land-use practices operating in that landscape, the dynamic processes and linkages that work within or are part of that landscape, and community values.

As well as managing its land, the Department seeks to encourage the protection of other natural and historic resources through providing advice, and actioning protection methods. It can also aim to support the community in understanding the benefits in safeguarding, maintaining and enhancing heritage values, with a view to greater community support and care for such resources.

Rangatira and Mangere are of special significance to the Department as it is the sole manager of these island nature reserves. By contrast, the outer islands and the landscapes of Chatham and Pitt islands are managed and used by a variety of owners and users.

Major parts of Chatham and Pitt islands and areas of Rangatira and Mangere reflect a history of European-influenced land uses. These were generally for a single purpose (e.g., pastoral farming) with less regard for the complexities and values of the wider, natural systems within which they existed. The resulting landscapes



Mount Chudleigh – a remnant volcanic cone with bush and pasture on flanks.



are typical of an isolated and sparsely settled, imposed pastoral culture. Land clearance has been followed by variable levels of development, resulting in some intensively farmed areas, and other areas of extensive secondary shrubland growth. Elsewhere, remnant forests and wetlands remain.

The Department's early management focus (and that of its predecessors) was relatively single-minded: to save threatened Chatham's bird species from extinction. In addition to species monitoring and enhancement, the Department concentrated on pest control and habitat restoration to facilitate the survival of the threatened species.

To some extent in the past but more so recently, efforts have been put into prioritising and implementing habitat restoration, and retaining significant vegetation associations. This has often built on research by other agency workers, e.g., Kelly (1983).

Early habitat restoration tended not to fully consider or employ ecological and landscape principles. This further detracted from rather than enhancing existing landscapes. A perhaps short-term example of this is the grid pattern of akeake planting on Mangere.

In addition, most protected natural areas in the Chathams were identified for biotic values. New Zealand also has a unique and diverse range of landforms, geological and soil heritage, resulting from a complex geological history and in the Chathams this is particularly so, with 31 identified earth science sites (Kenny and Hayward, 1993). While some sites of significance are present on land managed by the Department, the most important sites in the Chathams have not been protected. The Chatham Islands Council has included objectives and policies in its Resource Management Plan which deal with the protection of outstanding landscapes. It has opted for voluntary protection mechanisms instead of a regulatory regime.

### **Statutory Framework**

Section 6 of the Conservation Act enables the Department to manage the landscape as a natural resource on land it manages. The Department can also promote the benefit of conserving the landscape. The Reserves Act 1977 (Section 3) enables the protection of landscapes. Such landscape may be protected for its natural or cultural values and in some instances both.

Under section 6(b) of the Resource Management Act, the council must recognise and provide for the protection of outstanding landscapes from inappropriate subdivision, use and development.

Specific aspects of the landscape are included in other acts the Department administers such as the Reserves Act. Additionally, the Department supports international organisations e.g., the IUCN World Heritage Committee, and ICOMOS (International Council on Monuments and Sites) whose objectives are to promote and protect landscapes that fulfil specific criteria.

### **Issues**

The following issues need to be addressed in landscape conservation in the Chathams:

- the need to identify, value, seek community support for and manage significant landscapes and landscape values, including geopreservation sites on land managed by the Department
- the processes the Department requires to effectively manage change on land it manages in order to conserve landscape and landscape values

- the use of powers under the Resource Management Act to achieve integrated landscape management
- ensuring the Department's design and development of any facilities on land it manages meet appropriate standards to protect or enhance landscape values

## **Objectives**

- To assist in identifying Chathams landscapes and their values, assess the threat they are under and seek to sustain these landscapes and values in co-operation with other agencies and landowners.
- To encourage the Council to identify, maintain, protect and enhance the character, integrity and heritage values of Chathams landscapes.
- To manage operations on land managed by the Department to conserve landscape integrity and conform to high standards of environmental design.

## **Implementation**

The Department will:

### *Significant Landscapes*

1. Assist in identifying significant landscapes and heritage landscape values in co-operation with the council and the community.

### *Database*

2. Maintain, upgrade and make available a GIS-based landscape database to provide an up-to-date inventory of significant landscape values and attributes, including geopreservation sites prepared by the joint Earth Science Working Group (see Kenny and Hayward, 1993).

### *Landscape Management*

3. Give priority to landscape protection on land the Department manages in those situations where adverse effects are likely to be prevented and where the integration of well-planned development is most critical to maintaining or enhancing existing landscape quality and integrity.
4. Promote a greater understanding of and responsibility for landscape protection and management within the Department through staff training.
5. Recognise the fundamental role of the landscape context and values in the evaluation of land for protection, classification and management.
6. Ensure, as far as possible, that all development, maintenance and restoration of lands managed by the Department conform to high standards of environmental planning and design by:
  - establishing development procedures
  - improved techniques in EIA auditing for landscape

### *Landscape Liaison*

7. Foster a co-operative approach with other organisations and the community in issue resolution, resource information collection and decision-making relating to landscape conservation.

8. Encourage the council to protect heritage values in Chathams landscapes, and seek that natural character is recognised and provided for.
9. Assist in increasing public awareness of and guardianship for landscapes and landscape values through interpretation and advocacy.

### *Geopreservation*

10. Liaise with the joint Earth Science Working Group on geopreservation site recording and management.
11. Develop and implement methods to protect important or vulnerable geological sites and landforms on land managed by the Department.

### **Priorities**

Priorities for the near future are:

1. Integrating landscape protection within management and recovery plans, functional strategies and other priority management.
2. Developing procedures for the management of new works on land managed by the Department.
3. Developing greater landscape understanding amongst the Department's staff.

TABLE 12: KEY LANDSCAPE PRIORITIES

	ISSUES	METHODS	RESULTS SOUGHT	PLACE
Significant landscapes	<ul style="list-style-type: none"> <li>• Many significant landscapes but no inventory</li> <li>• Most landscapes not on Department land</li> <li>• High number of geopreservation sites</li> </ul>	<ul style="list-style-type: none"> <li>• Co-operate with the council and others to identify significant landscapes and values</li> <li>• Maintain, upgrade and make available a landscape database</li> </ul>	<ul style="list-style-type: none"> <li>• Significant landscapes and landscape values identified and sustained</li> </ul>	All places
Landscape integrity	<ul style="list-style-type: none"> <li>• Lack of landscape consideration when seeking other natural and historic resource protection or when undertaking resource management and development</li> </ul>	<ul style="list-style-type: none"> <li>• Staff training</li> <li>• Promote landscape understanding and integration through well-planned developments</li> <li>• Planning and design standards</li> </ul>	<ul style="list-style-type: none"> <li>• Department land management has conserved landscape integrity</li> <li>• Council has greater awareness of landscape management issues</li> <li>• Landscape integrity maintained</li> </ul>	All places

### **Limitations**

Tasks that may not be undertaken or completed include:

- landscape planning for smaller scale developments having lesser impacts
- comprehensive staff training on landscape evaluation
- individual RMA consents screening to assess landscape implications
- local landscape awareness programmes
- regular developer liaison in association with key projects that have wide site or management implications

### 6.2.3 LAND ECOSYSTEMS

#### **Introduction**

The Chatham Islands' distinctive ecosystems have been moulded by several important physical and biological factors. The island group's isolation has meant that even during glacial periods contact with New Zealand was rare. Proximity to the mobile subtropical convergence (where warm northern sea currents meet colder water from the south), however, allowed distant species of New Zealand's far north and south to occasionally be transported by sea to the islands. An unexploited land and fluctuating temperature regime then set the scene for new species to evolve or, in some cases, provided refuge for primitive groups.

The nature of the topography, a gentle relief of low altitude, interrupted occasionally by volcanic cones has also had an important formative influence. The generally flat terrain impeded runoff, fostering the development of extensive areas of blanket peats and associated wetland ecosystems on both Chatham and Pitt islands. A damp, cloudy climate also allowed forest to clothe many surfaces, including entire dune systems. The varied geology, comprising schists overlaid by limestones and mudstones, unconsolidated sands and volcanics, strongly influenced soil development resulting in a range of forest ecosystems. In the absence of dominating New Zealand species such as beeches and podocarps, locally evolved species strongly influenced the resultant landscape, creating unique forest, dune, cliff and wetland associations.

#### **Current Situation**

Before widespread clearance the Chathams vegetation was highly distinctive featuring a mosaic of forest types (about 90 percent cover) with scrub and rush swamps over the balance area. Half of the ecosystems were characterised by endemic plant species like tarahinau and akeake. Most of the remainder was dominated by the New Zealand native bamboo rush and kopi.

As happened worldwide, a dramatic transformation of the Chathams landscape followed the arrival of humans. While natural fire may have been a feature of the pre-human landscape, what changed with the coming of people was the frequency and intensity of fire, probably involving some burning of dry ridge vegetation and swamps. Long-term it was inevitable that Moriori would impact on the vegetation and wildlife (e.g., by the introduction of kiore), though vegetation cover was largely maintained. Following the arrival of Europeans and Maori, however, the vegetation was greatly modified. Expanses of kopi-broadleaved forest were cleared for cultivated plots, while pastoral farming provided further impetus for widespread forest clearance. Feral stock, including pigs, cattle, sheep and horses, were well established by the 1860s and possums were released in 1911 on Chatham Island. Many of the formerly forested lands were reclothed in bracken and umbrella ferns, or pasture. Forest cover is now rare in northern and central Chatham Island and the north of Pitt Island. Combined stock pressure and wind are bringing many small unfenced forest remnants to the point of final collapse. Wetlands are affected by occasional burning and recently there was a period of sphagnum harvesting. Feral stock, pigs and possums continue to be a concern for all forest remnants.

The Department manages 6.8 percent of Chatham, 42 percent (21 percent as reserve) of Pitt and the whole of Rangatira (218 hectares) and Mangere (113 hectares) islands.

Of sixteen largely indigenous vegetation types identified for Chatham Island (see Table 13), most are poorly represented in protected areas by mainland standards (Given and Williams, 1984). Many survive only as depleted remnants, often in a highly fragmented state.

Reserves and covenants protect 22 percent of existing forest on Chatham Island, but 92 percent of this occurs in the Tuku and Thomas Mohi Tuuta (Rangaika) reserves alone. While some of the most extensive and healthy forests occur in these tableland reserves they represent only two of five broad forest types. Significant progress in the protection of forest (akeake, mixed broadleaved and kopi-broadleaved types) should be achieved for Pitt and Chatham when existing Nga Whenua Rahui and Nature Heritage Fund applications are finalised.

Other habitats that are inadequately protected include jointed wire rushland, keketeruhe scrub, akeake-karamu forest, bamboo rush/Chatham Island aster, rush-shrubland and mixed broadleaved forest (southern Chatham and coastal areas on Pitt).

Botanical survey information is generally adequate for natural areas on Chatham and Pitt islands. Native vegetation remnants were identified and prioritised following a comprehensive survey in 1971 by G.C. Kelly (1983). These are presented in map form for easy reference. Work by Departmental and Department of Scientific and Industrial Research/Landcare staff (Walls 1988; Walls and Scheele, 1990 and 1994) has added to this information base. A further Protected Natural Areas-type survey is not seen to be necessary though comprehensive overviews of invertebrate and landscape values remain to be undertaken.

## **Statutory Framework**

Section 6 of the Conservation Act enables the Department to advocate the conservation of natural and historic resources, which includes the identification and protection of areas representing New Zealand's natural diversity.

This advocacy role also enables the Department to promote Part II of the Resource Management Act 1991 and the New Zealand Coastal Policy Statement through the preparation and implementation of the council's resource management document. The responsibility of neighbours for boundary fencing co-operation is provided for under the Fencing Act 1978.

## **Issues**

### *Representativeness of protected natural areas*

Ideally the Department aims to protect a representative cross-section of the island group's natural ecosystems. The degree to which Chatham and Pitt ecosystems have been modified, however, limits the ability to achieve a desirable level of representation; reasons include:

- the small portion remaining of original habitats
- small size of remnants
- dispersed nature of many natural habitats

Lands of near-natural state are concentrated in the south of Chatham Island. These, however, are predominantly of two broad forest types with areas of bamboo rush / Chatham Island aster / swamp heath rush-shrubland. On Pitt Island the representation of northern coastal mixed broadleaf forests and wetlands is poor.

Te Awainanga River and  
rushlands entering Te Whanga.



TABLE 13: MAIN VEGETATION TYPES OF CHATHAM, PITT, RANGATIRA AND MANGERE ISLANDS

(based on Given and Williams (1984), predominantly primary vegetation associations, but some developed or expanded after habitat disturbance)

VEGETATION TYPE	RANGATIRA	MANGERE	PITT ISLAND	
			PROTECTED	NOT PROTECTED
1. Jointed wire rush sedgeland	n/a	n/a	n/a	n/a
2. <i>Myriophyllum</i> – <i>Pratia</i> herbfield	n/a	n/a	n/a	n/a
3. <i>Coprosma propinqua</i> – <i>Carex</i> sedge scrubland	n/a	n/a	none	Tupuangi lagoon and tributaries
4. Coastal herbfields of Chatham Island forget-me-not, Chatham Island sow thistle, Dieffenbach's speargrass	P	P	Pitt Island SR (Glory, Canister and Rangiauria blocks)	Northern Cliffs, Waihere
5. <i>Selliera</i> /sea primrose/ Chatham Island ice plant herbfield	P	P	Pitt Island SR (Glory Canister and Rangiauria blocks)	Western and northern cliffs
6. Chatham Island button daisy/ <i>Carex trifida</i> herbfield	Carex herbfield (No button daisy)	Carex herbfield (No button daisy)	Carex trifida in Pitt Island SR (southern)	n/a
7. Chatham Island koromiko/ <i>Poa chathamica</i> /fescue shrub/grassland	n/a	n/a	n/a	n/a
8. Keketererehe scrub	P	P young	Rangiauria block, Pitt Island SR	South coast between Rangiauria and Glory blocks of Pitt Island SRs, Waihere Head
9. Leucopogon/sand daphne shrub – grassland	n/a	n/a	n/a	n/a
10. Akeake forest	P	P	Woodland in Rangiauria block of Pitt Island SR	North-east coast
11. Kopi/broadleaved forest	n/a	n/a	none	North-east coast (Tupuangi, Kokope, North Head), Lower Waipaua River, proposed Preece C, proposed Lanauze C.
12. Akeake/karamu swamp forest	n/a	n/a	Glory block Pitt Island SR	n/a
13. Mixed broadleaved forest	P	P	Pitt Island SR all blocks	n/a
14. Tarahinau forest	n/a	n/a	Pitt Island SR	Corridor between north and south Pitt Island SR blocks
15. Bamboo rush/ Chatham Island aster rush – shrubland	n/a	n/a	n/a	n/a
16. Potereterere scrub	n/a	n/a	n/a	n/a
17. Other	Swampland	n/a	<i>Baumea</i> /Holygrass wetland and flaxland	Sedge-dominated wet areas

Key:

*C* Covenant                      *MS* Marginal Strip                      *SR* Scenic Reserve  
*CA* Conservation Area                      *NR* Nature Reserve                      *n/a* Not applicable  
*HR* Historic Reserve                      *P* Present

C H A T H A M I S L A N D	
PROTECTED	NOT PROTECTED
Ocean Mail SR (Lake Kaimoumi), Te Whanga Lagoon MS	Eastern and other areas adjoining Te Whanga Lagoon e.g., Taia
Ocean Mail SR (Lake Kaimoumi)	Lake Rotokawa (Wharekauri Station)
Ocean Mail SR	Mangape Creek
Tangepu CA (one species), Henga SR (some species), Rangaika SR, Tuku C, Awatotara C, Ocean Mail SR (one species)	NE dunes (Barkers), West of Kaingaroa Point to western boundary of Ocean Mail SR, Kaingaroa Point, Red Bluff, Point Weeding to Astro Station, parts of south and south-west cliffs. Cliffs north of Awatotara covenant (partly esplanade reserve).
Rangaika SR, Ocean Mail SR	Te Wakaru, south and south-west cliffs, proposed Pt Munning C.
none	Kaingaroa Point (small remnant)
Rangaika SR	Matarakau, Red Bluff, Point Weeding to Astro Station, proposed Pt Munning C.
Rangaika SR	South and south-west cliffs, proposed Pt Munning C.
Hapupu HR, Ocean Mail SR, Tangepu CA, Henga SR	Petre Bay dunes north of Henga SR
Ocean Mail SR, Tangepu CA, Henga SR, Taia Bush HR Cannon-Peirce SR, Te Whanga Lagoon MS.	Remnants along northern coast, Cattle-Waipapa Pts proposed MS, proposed Dix C, proposed Te Matarae Point C, proposed Kaingaroa Stn C.
Hapupu HR, Ocean Mail SR, Tangepu CA, Cannon-Peirce SR, Harold Peirce SR, Henga SR, Chudleigh CA, Tuku NR.	Forest area north of Te One and north of Matakiki (Waitangi West) near Waihi, proposed Big Bush C, proposed Te Roto C, proposed Mairangi C, proposed Preece C, proposed Goomes C, proposed Dix C proposed Kaingaroa Stn C.
Taia Bush HR, Ocean Mail SR, Chudleigh CA, Nikau Bush CA, Tangepu CA, Te Awatea SR. Pt Green Swamp CA (unfenced).	Okahu, near Te Matarae Road (Waitangi), proposed Korako C.
Ocean Mail SR, Rangaika SR.	Whangamarino, opposite Rangihapainga, South of Te Matarae, Cascade, proposed Smith private reserve, proposed Goomes C.
Tuku NR, Rangaika SR.	Forest adjoining Rangaika SR and Tuku NR, proposed Horler C.
Ocean Mail SR, Te Awatea SR (no Olearia), Rangaika SR	Lake Rotokawa, southern tablelands (extensive), Taupeka, Taia, Wharekauri properties (modified)
Tuku C, Awatotara C, Rangaika SR.	Southern tableland, Waimahana Creek, proposed Owenga C.
<i>Sand flats (Henga SR)</i>	Te Whanga 'tidal' flats

Protection ideally should involve:

- (a) The creation of several large protected areas in the south of Chatham Island. This has been initiated with the Tuku Nature Reserve being extended by the Awatotara and Tuku covenants. These large areas are better capable of conserving biodiversity and sustaining cycles of natural disturbance and recovery.
- (b) The protection and restoration of many northern Chatham and coastal Pitt remnants. Though often degraded these remnants represent the last vestiges of what was a vast sequence of distinct forest and rushland habitats.

#### *Rate of deterioration of remnants*

Some haste is required for many areas, such as the unfenced northern Chatham Island and eastern Pitt Island forest remnants, as they appear to be reaching a critical point of collapse.

Once the integrity of forest stands has been compromised, the rates of deterioration are virtually unmatched anywhere in New Zealand. The rate also increases as deterioration proceeds. From a re-measurement of vegetation plots on Pitt Island, Walls and Scheele (1994) found that between 12 and 35 percent of living canopy trees had died in less than eight years. The deterioration can be attributed to the combined pressures of stock, habitat clearance (producing an increase in edge relative to area of the remnant) and a windy climate (with regular severe storms). A wave of forest die-back from edges is a consistent feature of small stands. This often occurs in combination with losses within the stand. Several species appear to be less tolerant of trampling, browsing and opening up of the understorey, which affects the sub-canopy microclimate (reducing humidity and increasing wind speed). Loss of mahoe, hoho and karamu, for instance, precedes the loss of matipo and kopi, thereby decreasing species diversity.

This process can be alleviated by fencing to eliminate stock and allowing a buffer for the re-establishment of a wind-contoured edge. In some cases stands could benefit from replanting of margins and gaps.

#### *Fragmentation of habitats and habitat sequences*

A consequence of land development has been the fragmentation of natural vegetation areas. Other than on Chatham Island tableland sites, expanses of intact habitat or intact sequences/mosaics of intergrading habitats are rare.

The Department examines habitat protection in the context of the need to consolidate small remnants and link distant remnants by corridors, in order to improve their remnant viability. These measures should reduce the remnant's vulnerability to die-back at the edges and loss of species diversity. Establishing links and consolidating remnants may involve the protection of buffer areas to allow active restoration.

An island-wide approach should be taken in regard to linking/protecting natural habitats to encourage ranging by and the expansion of populations of wildlife such as parea. Consolidation of remnants is directly beneficial to wildlife carrying capacity and birds can then foster a dramatic improvement in plant diversity and related invertebrates / reptiles, through the introduction of seed.

In addition to fragmentation of habitats, sequences and mosaics have been disrupted. Several natural land habitat sequences that it would be desirable to develop or protect are:

- i. a. Sandy beach b. dunes c. sandflat d. loamy soils e. wet (freshwater) peats  
f. saline lagoon flats with sedge/rushland or herbfield g. mudflats. There is



an opportunity for this sequence to be restored at Ocean Mail SR.

- ii. As for i. however, e could be replaced by wet (freshwater) mineral soils and f. by limestone bluffs.
- iii. As for i. but insert shallow peats over aeolian sands for e.
- iv. Peat dome and depression systems, freshwater streams/lakes.
- v. a. Basalt bluffs b. fertile coastal terraces/plains c. basaltic knobs d. gently sloped peat beds dissected by small catchments e. flat/rolling deep peats with moderate-poor drainage/lakes/sphagnum areas.

In many cases it will be difficult in the short-term to achieve a full sequence, given the almost complete transformation of the fertile, well-drained coastal habitats. Habitat sequences do not stop at the water's edge but grade into freshwater and marine habitats, requiring across-water-boundary consideration.

### *Land ownership*

Compared to the New Zealand average, little land is managed by the Department on the Chathams, especially on Chatham Island. Most of the Chathams is suitable for farming, which partly explains this difference.

Land use has tended to affect fertile (clay and loam soils), drier areas to the greatest extent, where extensive conversion to exotic pasture species has happened. Farming, in some instances, however, has co-existed with a modified cover of original or secondary native communities. With the increase in farming returns that have arisen recently from the export of livestock it is foreseeable there will be renewed efforts to convert marginal farmland, such as secondary scrub/regenerating forest, and to drain and plough some wetlands.

More than twenty reserves have been gifted or otherwise established and there has been strong local response to covenanting (where owners retain title to the land and can achieve some financial assistance from the Nature Heritage and Nga Whenua Rahui Funds). (See Table 14.)

Land brought under the Reserves or Conservation Acts is given a status that reflects its primary management purpose (e.g., historic, scenic, nature). For a full understanding of the status range, the Acts should be consulted or the options discussed with the Department.

### *Stock/fencing*

The exclusion of domestic stock and pigs from protected areas is often the most important means of natural habitat recovery. Fencing is the first step.

Conventional fences suffer from corrosion, of the staples in particular, and fence heights may be lowered by posts sinking into soft ground or leaning with the wind. A feature of Chathams stock, especially cattle, is their wildness – they are long-ranging and agile. Where stock pressure exists on boundaries, cattle frequently vault fences (including those at full height) or smash through. The frequency with which stock get into protected areas (especially small northern remnants) necessitates a high time commitment to inspection and clearing stock. Cattle can readily destroy regeneration.

Where fence corrosion rates are high, construction methods that extend fence life are needed. Future fencing needs to be examined in the context of likely stock pressure on boundaries, and consideration needs to be given to increasing the height of fences (taller posts and extra wires) and/or providing additional protection such as electric units.

Fencing to exclude pigs is difficult, and regular hunting pressure may be a realistic alternative where particular reserve values do not necessitate a pig-proof fence.

**TABLE 14: MECHANISMS AVAILABLE FOR PROTECTING LAND WITH NATURAL AND HISTORIC VALUES**

MECHANISM	LEGISLATION	COMMENT
Purchase of fee simple title	Reserves Act or Conservation Act	Land becomes owned by the Crown
Gift of fee simple title	Reserves Act or Conservation Act	Land becomes owned by the Crown. Assistance may be available with establishment costs
Conservation covenant (via Department of Conservation or Nature Heritage Fund)	Usually Reserves Act. Can be Conservation Act	Land remains in landowner's title, but subject to a joint landowner/Crown agreement as to how it will best be managed to protect existing values. Kawenata applies to Maori land only
Nga Whenua Rahui kawenata (covenant)	Reserves Act or Conservation Act	
Lease	Reserves Act or Conservation Act	May be obtained by way of purchase, gift or exchange, with a negotiated rent
Exchange of land	Reserves Act or Conservation Act	
Protection of Private Land agreement	Reserves Act	Land is managed in terms of an agreement between the landowner and the Minister of Conservation
Management agreement	Conservation Act	Agreement specifically between the Crown and the current landowner. Not registered against title
Open space covenant or gifted or bequeathed land (non-Department of Conservation options)	Queen Elizabeth II National Trust Act 1979	Land remains in landowner title, or held by the Trust independent of Government
Maori reservation	Te Ture Whenua Maori Land Act 1993	Can arise from any land tenure, the tenure changing to Maori Reservation, with trustees appointed to manage



***Restoration, shelter and firewood***

Restoration is a second phase of habitat protection after legal protection and fencing. Immediate restoration priorities relate to the need to knit fragment habitats (for example, Nikau Bush) and provide buffers against wind. A second phase could involve the re-creation of habitats in highly modified areas to develop sequences and mosaics of different habitats. In areas fenced to exclude grazing animals, rank grass growth can hinder regeneration and may require a more active restoration approach.

The Department principally purchases island-grown native plants for revegetation purposes (limited to Mangere and Pitt material). This currently operates at 8,000 plants per annum but should expand as Chatham Island proposals gain further resourcing and/or community involvement increases.

Plant materials are appropriately provenanced for the various projects. Where the Department clearly holds the best or most appropriate sources of seed for restoration it either supplies seed or authorises growers to collect seed.

The Department is aware that supplies of firewood and plants for shelter are important and believes this is an issue that needs to be addressed by individuals and possibly the council. Several sources of locally grown natives and exotics are available for purchase on Chatham Island. The use of sustainable firewood plantings rather than dwindling native forest remnants is desirable.

## **Objectives**

- To improve the representativeness of protected natural areas.
- To seek protection and appropriate management of areas that will consolidate small natural remnants, provide corridors between significant habitat tracts and that contribute to protection of a contiguous series of habitat types.
- To work with landowners to promote protection and appropriate management of identified significant natural areas across a broad range of important habitat types.
- To foster habitat recovery by appropriate animal control, especially of stock and pigs.
- To control weeds that could dramatically alter the appearance and composition of natural ecosystems.
- To restore species diversity and processes by fencing and excluding browsers to allow regeneration, including the reintroduction of plant species by birds.
- To supplement natural regeneration where this is likely to take decades, using nursery stocks of species originally belonging to the site.

## **Implementation**

The Department will:

### *Landowner Liaison*

1. Provide information to landowners on the various mechanisms and funding sources available for protecting the values of natural areas.
2. Provide biological information and administrative support to landowners making Nature Heritage or Nga Whenua Rahui funding applications.
3. Develop and maintain positive relationships with landholders and encourage exchange of information and discussion of management issues amongst them.
4. Seek landowner permission for access to private land that has not been comprehensively surveyed for a decade or more, and survey areas where permission is obtained.

### *Key Area Protection*

5. Promote the protection of habitat sequences not well represented in existing protected areas (see Issues 3), and the following vegetation type examples. For Chatham Island the protection of:

- coastal herbfields
- karamu/akeake swamp forest
- jointed wire rush sedgeland
- coastal shrublands

and for Pitt Island the protection of:

- cliff communities
- coastal broadleaved/nikau forest
- wetland associations

as identified by comprehensive field surveys (e.g., Kelly, 1983)

6. Seek to establish several large protected areas in the south of Chatham Island by encouraging covenant or other protection of areas adjoining the Tuku and Rangaika reserves.

### *Advocacy*

7. Provide information to the council on areas of significant indigenous vegetation and significant habitats of indigenous fauna for their use in meeting the requirements of the Resource Management Act 1991.
8. Encourage the council to have regard to this CMS in respect to land and species managed by the Department, in preparing and reviewing its resource management document.
9. Seek that important natural areas on private land are protected from the adverse effects of proposed activities where Resource Management Act 1991 consent is required, by making a submission to the council seeking that adverse effects be avoided, remedied or mitigated.

### *Fencing, Stock and Wild Animal Control*

10. Undertake at least annual inspections to ensure that all fences around land managed by the Department are maintained to a specified standard, and construct all new fences to a specified standard.
11. Complete the fencing of present reserves and key conservation areas, especially the Tuku Nature Reserve, Ocean Mail Scenic Reserve and forest areas in Wharekauri (Green Swamp) Conservation Area.
12. Discuss the responsibilities for fence maintenance and stock control with landowners bordering reserves and conservation areas who have covenants on their land.
13. Re-examine fence designs (height, additional electric wires) in the light of stock pressure in the vicinity of protected areas.
14. Monitor the saxony merino sheep and pig effects on vegetation within the Waipaua block of Pitt Island Scenic Reserve. If significant adverse effects are found, reassess the stock densities and/or their location.

### *Habitat Restoration*

15. Initiate a programme of replanting native species in protected areas where habitat integrity is severely disrupted by expanses of stable rank grassland, for example at Henga, Ocean Mail and Nikau Bush scenic reserves.
16. Restore habitat types that have almost disappeared (e.g., forget-me-not herbfields on dunes) and enhance species diversity where this has been



DOC's Motukarara Nursery produces 2000 Chathams plants per annum for revegetation. Local nurseries are increasingly supplying plants.

seriously disrupted and is unlikely to recover without assistance (e.g., hoho/kowhai dominated lagoon margin).

17. Use plants of appropriate genetic origin and ecologically appropriate to the situation where undertaking restoration work.
18. Use natives in preference to exotic species for wildlife recovery programmes and require a high degree of proof that any exotic species used in these programmes do not have weed potential.
19. Continue the revegetation programme on

Mangere until there is a good cover on the Douglas Basin and the western end of the island.

20. Encourage restoration projects by the community on private land and provide opportunities for schools and the public to undertake restoration on land managed by the Department, where this is undertaken with appropriate planning for the ecological requirements of the site.
21. Continue to develop priorities for new restoration initiatives with the focus being to preserve biodiversity (communities and species).

#### *Plant Pest Control*

22. Monitor protected areas where there is a large component of exotic plants to identify potential control needs.
23. Tolerate plant pest species within protected areas only where they form an appropriate nursery cover function and are eventually suppressed before they spread to adjoining areas.
24. Develop and implement a plant pest control plan (see 6.2.9 Plant Pests and Exotic Plants).
25. Work with the council, the Ministry of Agriculture and Forests and the community to prevent any new plant pest species or threat to natural areas entering the Chathams.

#### *Firewood, Shelter and Riparian Protection*

26. Encourage the community, by providing access to native seed sources and advice on species and nursery techniques, to plant fast-growing trees on areas of low conservation value to provide for sustainable firewood gathering as an alternative to use of indigenous wood, to provide shelter and to protect riparian margins.

#### **Priorities**

The Department will consider the following when looking at areas offered for protection when determining priorities for advocating the protection of natural areas:

- the protection of an ecological community type that remains and the level to which this is protected
- the quality (diversity, cover composition) of the remaining portions of the community

TABLE 15: KEY LAND ECOSYSTEMS PRIORITIES

THEME	ISSUES
Representative areas	<ul style="list-style-type: none"> <li>• Relatively little of some habitat types is protected on Chatham or Pitt islands</li> <li>• Some habitat types are severely reduced in extent and may have a depleted composition, including their characteristic species</li> </ul>
Rate of deterioration of remnants	<ul style="list-style-type: none"> <li>• Unfenced small forest remnants are subject to rapid decline through stock presence preventing revegetation.</li> <li>• Accelerated loss of certain species in community through preferential targeting by possum (hoho, hokataka)</li> <li>• Some species are more vulnerable to a change in forest interior microclimate e.g., mahoe</li> </ul>
Fragmentation	<ul style="list-style-type: none"> <li>• Some habitats exist as a series of small dispersed remnants with a large edge-to-area ratio (even within one protected area)</li> <li>• Mosaics of adjacent habitats have often been lost or greatly simplified</li> </ul>
Land ownership	<ul style="list-style-type: none"> <li>• Relative to the New Zealand average, a high proportion of land is privately owned and habitats unprotected.</li> </ul>
Stock/fencing	<ul style="list-style-type: none"> <li>• Stock, especially cattle, frequently gain entry to fenced protected areas (by jumping or smashing)</li> <li>• Cattle can effectively destroy regeneration that is a decade old or more</li> </ul>
Restoration	<ul style="list-style-type: none"> <li>• Some exotic grasslands are very slow/unable to return to native cover in spite of fencing, animal control and improved dispersal of seeds (because of grass competition for seedlings)</li> <li>• Some species have been eliminated from former habitats e.g., nikau from Chudleigh</li> </ul>

METHODS	RESULT SOUGHT	PLACE
<ul style="list-style-type: none"> <li>Encourage landowners to use the various mechanisms and funds to help protect forest remnants</li> <li>Provide assistance for making applications</li> <li>Make use of the Department's Land Acquisition Fund to purchase other valuable remnants as these become available</li> <li>Provide interpretive information on the full range of native habitat types</li> </ul>	<ul style="list-style-type: none"> <li>Improved community understanding of the Department's objectives</li> <li>Improved level and range of habitats protected e.g., karamu-dominated swamp forest, mixed broadleaved forest featuring nikau</li> <li>Some habitats restored to more closely resemble their original condition e.g., Te Whanga forest margin featuring hoho and kowhai</li> </ul>	Chatham Pitt
<ul style="list-style-type: none"> <li>Formal/informal protection of vulnerable forest remnants including effective fencing and removal of stock</li> <li>Possum control</li> </ul>	<ul style="list-style-type: none"> <li>Survival and recovery of remnants</li> <li>Expansion in area of some remnants (to infill grass enclaves)</li> <li>Improved species diversity and structure of remnants</li> <li>Better capability to survive/recover from extreme climatic events</li> </ul>	Chatham Pitt
<ul style="list-style-type: none"> <li>Formal protection of new areas to allow consolidation or linking of existing protected areas</li> <li>Look to protect areas that represent a good range of habitat types e.g., Ocean Mail model</li> </ul>	<ul style="list-style-type: none"> <li>Improved viability of remnants</li> <li>Creation of complex functioning natural systems</li> </ul>	Chatham Pitt
<ul style="list-style-type: none"> <li>Explain to landowners the options in relation to protecting valuable natural areas</li> </ul>	<ul style="list-style-type: none"> <li>Valuable habitats protected through a range of options including covenanting without necessitating Crown ownership</li> </ul>	Chatham Pitt
<ul style="list-style-type: none"> <li>Regularly inspect reserves for stock presence and fence condition</li> <li>Remove all stock from completely fenced areas</li> <li>Control stock numbers where fencing is incomplete e.g., Tuku</li> <li>Reassess and modify fencing prescriptions to reduce the incidence of animals gaining entry (depending on boundary pressure)</li> <li>Inform neighbours of responsibilities for fence maintenance/stock control</li> </ul>	<ul style="list-style-type: none"> <li>Regeneration is effective, i.e., there is replacement of canopy species, and re-establishment of species from the seed bed or recently introduced seeds by birds</li> <li>Good relationships with neighbours</li> </ul>	Chatham Pitt
<ul style="list-style-type: none"> <li>Replant genetically and environmentally suitable stocks of native species to join key habitat fragments, expanses, protect exposed margins and fill detrimental canopy gaps</li> <li>Replant habitat areas where these are critical to threatened species</li> <li>Attempt low key restoration measures to assess their success, e.g., direct sowing of kopi seed</li> <li>Use natives rather than exotics for habitat creation for threatened species</li> <li>Assess success of different restoration approaches</li> </ul>	<ul style="list-style-type: none"> <li>Maintain vulnerable communities in good condition</li> <li>Prevent gorse establishing in Pitt reserves</li> <li>Prevent spread of old man's beard to new sites</li> </ul>	Chatham Pitt Mangere

- whether there are species in the community of special significance (endemism, nationally threatened, distributional significance)
- the perceived threat to the unprotected habitat, or its deterioration rate, and the ability to control or reverse these
- the ability to expand or link other habitat remnants to improve habitat resilience and to foster natural recovery in species diversity and carrying capacity

A specific priority is the continuing need to protect forest habitats by making use of the Nature Heritage Fund and Nga Whenua Rahui in response to the high deterioration rate occurring in forest remnants. Forest remnants appear to be much less resilient than several other under-represented habitat types e.g., rushlands. Another priority is securing effective fencing around all protected areas, including upgrading of existing fences and completing unfinished portions.

### **Limitations**

Tasks that may not be undertaken or completed involve extensive new work or a rise in scale of existing work including:

- ongoing regular repair and maintenance of fences
- protection of a broader range of habitats
- ongoing habitat restoration initiatives

## **6.2.4 FRESHWATER ECOSYSTEMS**

### **Introduction**

In this CMS the boundary used between ‘freshwater’ and ‘marine’ ecosystems is the coastal marine area boundary as defined by the Resource Management Act (though see 6.2.5 Introduction regarding Te Whanga). The Conservation Act definition of ‘freshwater’ does extend the Department’s responsibilities into some estuarine and marine areas. These matters are covered under section 6.2.5 (Marine Ecosystems). A wide range of freshwater ecosystem types is represented on the Chathams. While Chatham Island is relatively well endowed with lakes and streams, the other islands and sea stacks have limited or no freshwaters. Protection and management measures are required to maintain and enhance the fisheries, landscape, wildlife and botanical values associated with the freshwater ecosystems on the Chathams. Increasing the currently limited understanding of the ecology of the freshwater ecosystems is seen as an integral part of improving their protection and management.

### **Current Situation**

Like their counterpart ecosystems elsewhere in New Zealand, the freshwater ecosystems of Chatham Island have been subject to human modification. Extensive areas of the original forest and rush wetlands have been cleared, burnt over, or converted to pasture and bracken fern associations. Northern Chatham Island has been most significantly affected while the extent of modification has been less on the southern tablelands. The grazing of riparian vegetation and access by stock to



waterways continue to degrade the values of freshwater ecosystems. In several streams small dams and culverts have been constructed without provision for the passage of indigenous fish, and road metal quarries straddle or adjoin waterways. Habitat degradation has contributed to the extinction of some bird species associated with freshwater habitats on the Chathams, including brown teal, Chatham Island fernbird, and Chatham Island rail. Gamebirds such as black swan and ducks are present on several water bodies.

While the plant community component of freshwater ecosystems has been degraded, the impacts of other adverse activities such as pollution, channelisation, water abstraction, drainage, damming and invasion by exotic predatory species (e.g., trout) have been less significant. There are no introduced freshwater fish species on the Chathams. This is reflected in the relative abundance of indigenous fish including banded and giant kokopu (a threatened species) which are now greatly reduced in many New Zealand habitats (Rutledge, n.d.). Of the ten known species of indigenous freshwater fish that occur on the Chathams, one recently discovered



Giant kokopu.  
(Photo: Tony Eldon.)

species, *Galaxias rekohua* (Mitchell, 1995), is endemic to Chatham Island. It has been recorded in only one small lake on the Chatham Island southern tablelands. The maintenance of freshwater fisheries values, including the Chathams' unique smelt-based whitebait fishery and the eel fishery, are dependent on the protection and enhancement of habitats and judicious management of potential threats, including over-harvest.

The currently limited understanding of the Chathams freshwater resources and their biological components is reflected in the recent discovery of the new endemic fish species. It is possible that other unknown fish and invertebrate species are present in the Chathams freshwaters.

Freshwater ecosystems are not formally protected anywhere in the Chathams except for a relatively small amount of habitat on land managed by the Department, primarily within the Tuku and Thomas Mohi Tuuta (Rangaika) reserves. Few private covenant areas include freshwater habitat, the exceptions being the Awatotara and Tuku covenants. A few riparian habitats alongside water bodies are protected by marginal strips (e.g., the Taia lakes) or esplanade and other reserves (e.g., Ocean Mail).

### Statutory Framework

Section 6 (ab) of the Conservation Act gives the Department a function to preserve, as far as practicable, all indigenous recreational freshwater fisheries, and to protect freshwater fisheries and freshwater fish habitats.

The taking of whitebait in the Chathams is subject to the Whitebait Fishing Regulations 1994, administered by the Department. The taking of other species of native fish (except eels) is covered by regulations 70 and 71 of the Freshwater Fisheries Regulations 1983 providing the take is for scientific research or human consumption. Section 26ZH of the Conservation Act provides for Maori<sup>3</sup> fishing rights (see 6.4.3 Customary Iwi Use). The taking of eel is administered by the Ministry of Fisheries under the Fisheries (Amateur Fishing) Regulations 1986 for non-commercial take and the Fisheries Act 1996 for commercial take. Commercial eel fishers wishing to take eels from Department-managed areas require

<sup>3</sup> The Waitangi Tribunal (1992) has accepted that Moriori are 'Maori' for the purposes of the Treaty of Waitangi Act 1975.

Conservation or Reserves Act approval depending on the status of the area. Some allow for taking where that was a condition of reserve establishment (section 50(1) of the Reserves Act).

The Department administers legislation relating to fish passage (Part 6 of the Freshwater Fisheries Regulations) and the transfer of live aquatic life (section 26ZM of the Conservation Act) to freshwaters. The prior approval of the Department is required for the design of structures that could interfere with the passage of fish, and the transfer of live aquatic life to freshwaters where it does not already exist requires the Minister's approval.

Under the Resource Management Act the Chatham Islands Council administers the allocation of water, discharges into it and some activities within or affecting waterbodies, and has responsibility for controlling the effects of land use. The council must prepare a resource management document for the Chathams and this must be consistent with the New Zealand Coastal Policy Statement (1994) in relation to the coastal environment and have regard to the provisions within this CMS in relation to land and species managed by the Department.

Unlike most of New Zealand, there is no Fish and Game Council established for the Chatham Islands. Instead, the Department undertakes this work in accordance with the conservation Act and the Chatham Island (Wildlife) Notice 1977, issued pursuant to sections 6 and 44 of the Wildlife Act 1953, which establishes game species and harvest rules.

## **Issues**

For freshwater ecosystems on the Chathams the maintenance or restoration of riparian vegetation is the key issue. Riparian vegetation functions not only to provide habitat for wildlife, fish and insects but is critical in regulating water temperature, run-off and quality (by controlling nutrient and sediment inputs) and bank erosion. Other key issues include:

- maintaining adequate flows to sustain freshwater communities
- providing for the free passage of fish
- maintaining water quality
- providing for the sustainable harvest of freshwater fish other than eels (the harvest of eels being a Ministry of Fisheries concern)
- controlling the introduction of ecologically disruptive animals and plants, e.g., trout, willows
- poor understanding of freshwater resources and ecology
- providing for the management of gamebirds and habitat
- advocating the need for and implementing freshwater ecosystem protection, particularly riparian protection
- identifying critical habitats for protection e.g., fish spawning areas, rare plants
- mitigating adverse environmental impacts associated with major development projects, e.g., hydro schemes, peat-mining, afforestation, sphagnum harvesting

## **Objectives**

- To liaise with the Chatham Islands Council, landowners, community groups and developers using a range of statutory and non-statutory mechanisms to advocate for the protection and enhancement of freshwater ecosystems.

- To consult with iwi and other users to assist in the protection of freshwater fisheries.
- To promote surveys of and research into freshwater ecosystems.
- To provide information on freshwater resources and management/restoration techniques to landowners.
- To use the freshwater statutes to protect fish habitat and the integrity of freshwater communities.
- To ensure appropriate fish passage is provided where structures impede the natural movement of fish in any natural waterway.
- To promote the restoration of key habitats to a condition where species diversity and cover is reinstated and indigenous natural processes have resumed, as free from human and exotic influence as possible.
- To avoid the introduction of undesirable new aquatic species to Chatham freshwaters, thereby conserving endemic biodiversity.
- To liaise with gamebird shooters and iwi in managing gamebird harvest and habitat.

## **Implementation**

The Department will:

### *Freshwater Habitat*

1. Raise public awareness of indigenous freshwater fish and freshwater ecosystem management issues through media and community liaison.
2. Identify significant freshwater habitats for protection/restoration and encourage landowner initiatives for protection using a variety of statutory and non statutory mechanisms (e.g., the Tupurangi wetlands on Pitt Island).
3. Provide information on freshwater ecosystem values and management to the Chatham Islands Council for their use in the preparation and implementation of their resource management document and processing of the consent applications, and in developing contingency plans for pollution incidents where clean-up is desirable.
4. Undertake general surveys of freshwater habitats to improve knowledge of resources, including freshwater invertebrates and plants.

### *Fish Passage*

5. Increase community awareness through information exchange and require compliance with the fish passage provisions of the Freshwater Fisheries Regulations 1983.

### *Transfer/Release of Aquatic Life*

6. Recommend approval by the Minister of transfer and/or release under section 26ZM of the Conservation Act, of fish or other aquatic life into Chatham freshwaters, only when the Department is satisfied that:
  - an EIA/risk assessment of the proposed introduction has been prepared (section 6.5.4 Environmental Protection applies)
  - the public process of section 26ZM (4) of the Conservation Act has been followed

- the negative impacts on indigenous fish and aquatic invertebrates will be minimal
- the aquatic life will not spread into waters of high natural value or where a high indigenous component is present
- the negative impacts on the physical and chemical aquatic environment will be minimal

Approval for the introduction of new fish species is very unlikely because of the threats to indigenous biodiversity and ecological functioning.

### *Freshwater Fish*

7. Increase community awareness of the reasons for the Whitebait Fishing Regulations 1994 and undertake compliance activities if necessary.
8. Respect Maori freshwater fishing rights and discuss with iwi any concerns they may have about conservation of these freshwater fish resources (see 6.4.3 Customary Iwi Use).
9. Where illegal or accidental introductions of new species occur or noxious species are found, the impacts of such species will be assessed and, if necessary, all practical steps will be taken to remove them. The recovery of associated costs and prosecution of any offenders will be considered (see 6.5.4 Environmental Protection).

Tuku a tamatea River



### *Gamebirds*

10. Maintain liaison with the Chatham Island Gun Club and iwi to promote habitat protection and sustainable harvest of gamebird resources.

### *Plans*

11. Where appropriate, prepare operational plans for gamebirds and vulnerable freshwater fish species.

### **Priorities**

- Advocacy for freshwater ecosystems protection through RMA processes.
- Administration of freshwater legislation under which the Department is responsible for conserving and managing freshwater fisheries, gamebirds and habitats, recognising Treaty of Waitangi principles.
- Survey and research to assist in freshwater ecosystem protection.
- Protection of Pitt Island's Tupurangi wetlands.

### **Limitations**

Tasks that may not be undertaken or completed include:

- Thorough surveys of all freshwater habitats

TABLE 16: KEY FRESHWATER ECOSYSTEMS PRIORITIES

THEME	ISSUES	METHODS	RESULTS SOUGHT	PLACE
Fish passage	Maintaining indigenous fish populations	<ul style="list-style-type: none"> <li>Information exchange</li> <li>Ensure compliance with freshwater fisheries regulations</li> </ul>	Provision of adequate passage for all life history stages	Chatham Island Pitt Island
Introduced freshwater species	Impacts on indigenous fish and habitat associations	<ul style="list-style-type: none"> <li>EIA required for applications</li> <li>Ensure compliance with Conservation Act requirements</li> </ul>	Ecologically disruptive species do not become established or special habitats damaged	Chatham Island Pitt Island
Broadening knowledge of freshwater fish, ecosystems and ecology	Maintaining freshwater species and habitats	<ul style="list-style-type: none"> <li>Raising public awareness</li> <li>RMA advocacy</li> <li>Field surveys</li> </ul>	Community and Department have better knowledge to facilitate species and habitat conservation	Chatham Island Pitt Island
Significant habitats	Habitat loss or deterioration	<ul style="list-style-type: none"> <li>Promote stock exclusion, riparian protection, sediment/contaminant inflow control</li> </ul>	Significant habitats protected or sustainably managed	Tupuangi Wetland (Pitt Island) Chatham Island

## 6.2.5 MARINE ECOSYSTEMS

### Introduction

The Department has a range of responsibilities within the marine ecosystem including the protection of marine mammals and seabirds, the protection of any marine reserves and advocating for the conservation of marine fish and oceanic ecosystems generally. The Department also has a role under the Resource Management Act to ensure that resources in the coastal marine area, other than minerals and fisheries, are managed on a sustainable basis. Te Whanga is included within this Marine Ecosystems section as it is predominantly a marine ecosystem, although its status with respect to the Resource Management Act's coastal marine area (see 6.2.4 Freshwater Ecosystems, Introduction) is currently unresolved.

### Current situation

Utilisation of the rich resources of the marine environment has been a feature of the human occupation of the Chatham Islands – ranging from the subsistence level of the early Polynesian settlers to the larger scale sealing and whaling carried out in the 1800s. In more recent times the crayfish boom of the 1960s bore witness to the discovery of new resources and the development of technologies enabling large-scale commercial harvesting and subsequent decline. While present day catches of crayfish have declined, they still combine with paua and species such as blue cod to represent the major income-earner for the local economy. The deep-

water commercial fisheries of the Chathams Rise (principally orange roughy and hoki) are of major economic significance. Aquaculture, although still in its infancy on the Chathams, also has the potential to become a significant income-earner. Its development needs to be carefully planned to secure its viability and minimise adverse environmental effect.

The current challenge and responsibility, principally for the Ministry of Fisheries, is to ensure that Chathams fisheries resources are sustainably managed or conserved. This will not only benefit the commercial and recreational sectors but also marine biota generally, and maintain the associated seabird and marine mammal populations dependent on the integrity of the general ecosystem. It will also aid the conservation of indigenous marine biodiversity.

To the credit of Chatham Islanders, 14 areas which were originally identified as rahui areas were established around the Chatham and Pitt Island coastline and have now been gazetted non-commercial fishing areas by the Ministry of Fisheries. Other options for local involvement in fisheries management include taiapure and mahinga mataitai, which are administered by local committees and the Ministry of Fisheries. These options are designed to recognise areas of traditional importance as mahinga kai. The marine reserve concept is another management tool that islanders may consider to extend protection to some area or areas. All these options and the provisions of the Resource Management Act can work together to ensure sustainable management and protection of the Chathams marine ecosystems.

Marine reserves provide a mechanism to protect a sample of the Chathams unique and nationally significant marine biota and their habitat. Marine reserves protect areas for scientific study of marine life, affording a level of protection equivalent to reserves on land (i.e., no take of marine life is generally permitted). A network of these reserves is being established throughout New Zealand to preserve representative examples of ecosystems that can act as benchmarks for comparisons with other areas. Marine reserves are also important as areas where the public can enjoy observing marine life in its natural state. In terms of the qualifying criteria specified in the Marine Reserves Act, the Chathams marine biota is worthy of protection.

Chatham Island has the highest incidence of cetacean stranding in the world, with mass stranding events of over 200 pilot whales being reported in recent years and the regular stranding of a wide range of other species, including sperm whales, beaked whales and oceanic dolphins. This high rate of strandings is a natural consequence of the islands' location and has likely been a natural feature for aeons. Generally the remoteness and difficulty of access to beaches precludes refloating stranded animals, though locals successfully refloated six bottlenose dolphins in 1994. The Department maintains a database of stranding incidents.

Under the Marine Mammal Protection Act all marine mammals are totally protected and the Department is responsible for the distribution of non-naturally separated marine mammal parts. Currently there is some conflict over the allocation of parts and a system of allocation that recognises iwi, scientific and other demands needs development.

Te Whanga is one of New Zealand's largest shallow water marine lagoons and may be a unique ecosystem (Roberts *et al.*, 1991). Although the marginal vegetation has been modified by grazing it is significantly less modified and the lagoon water is largely unpolluted in comparison with most similar mainland habitats such as Te Waihora (Lake Ellesmere). Te Whanga is a strong feature of the landscape and has important cultural, historic and botanic values associated with it. The lagoon provides a diverse range of habitats for wildlife including waders, waterfowl and

some seabirds; and the lagoon's fish and shellfish fauna consists of a unique mix of truly marine and largely freshwater species. The ecology, nutrient status and functioning of the lagoon are largely unstudied, and how the biota react to environmental change (such as manual opening to the sea) is therefore unknown. There is very wide acceptance on the Chathams that food from the lagoon is 'food for the table' and not for commercial harvest.



Seal Rock and Rangatira coast – large seal colony locality. (Photo: Poma Palmer.)

While coastal water quality, including that in Te Whanga, currently appears to be of a high standard, safeguards are needed to ensure that future discharges and other sources of nutrient inputs are adequately treated and controlled. There is a potential risk of serious pollution from sources such as shipwrecks and oil and diesel spills, all of which are relatively common, though none has yet reached a serious pollution stage. Careful management is needed along with the development of contingency plans to deal with cleaning up spills and affected wildlife. The Ministry of Transport has overall responsibility for marine pollution and has assisted council to develop an

oil spill contingency plan identifying wildlife risk areas and will assist in cleaning up affected wildlife.

Of crucial importance in the Chathams is the role of marine and terrestrial interactions and the flows of nutrients between land and sea (in both directions). There is a lack of precise information both on these flows and on the mitigation of their disruption.

The 360 kilometres of Chathams coastline is diverse and spectacular. It is of considerable historic and cultural significance as the site of numerous shipwrecks, whaling stations and iwi occupation and is internationally significant for the breeding and roosting habitat it provides for a wide range of birds including a number of threatened endemic species. Threatened endemic plants grow in a number of coastal locations and there are many fur and elephant seal haulouts, moulting areas and breeding colonies scattered around the coastline of the islands.

### **Statutory Framework**

Section 6(b) of the Conservation Act enables the Department to advocate for the conservation of natural resources, which include marine habitats for freshwater fish, marine mammals, and shore and seabirds. The opportunity to do so is provided by contributing to fisheries management plans, committees and taskforces established by the Minister of Fisheries and the Department.

Due to the definition of 'freshwater' in the Conservation Act (i.e., a definition that covers the habitat range of 'freshwater fish') the Act's section 6(ab) function regarding freshwater fisheries and habitats extends into the marine areas of coastal lagoons, estuaries, and 500 metres seaward from all river and stream mouths.

The Wildlife Act 1953 confers protected status on most seabirds.

The Marine Mammals Protection Act 1978 requires the Department to protect and manage marine mammals. The Marine Mammals Protection Regulations 1992 regulate human contact and behaviour with marine mammals in order to prevent harmful effects. Commercial marine mammal watching operators (including land-based operations e.g., for seal colonies) are required to obtain a permit under these regulations, in accordance with the concessions provisions under the Conservation Act (see 6.4.4 Concessions General).

The Minister of Conservation recommends to the Governor-General the establishment of marine reserves, with the concurrence of the Ministers of Fisheries and Transport. The Marine Reserves Act 1971 sets out the application process for marine reserves and the Department's responsibilities for the administration and management of marine reserves; the Marine Reserves Regulations 1993 regulate activities that can be undertaken within them.

The Resource Management Act 1991 provides for the Minister for the Environment to make regulations that control discharges from vessels and dumping of waste. The regulations are the mechanism through which the Marine Pollution Convention (MARPOL) and other international conventions dealing with the pollution of the marine environment are implemented. The Department advises the Ministry of Transport Maritime Safety Division and the council on how to plan and prepare for dealing with oiled wildlife.

Separate from the Department's responsibilities, as set out in this CMS, and the Ministry of Fisheries' responsibilities for fisheries, the council must prepare a regional coastal plan, as set out in the Resource Management Act and the New Zealand Coastal Policy Statement (1994). This plan will cover the sustainable management of the coastal marine area and those types of uses as set out in sections 12 and 15 of the RMA (e.g., structures, discharges, occupation). The Minister of Conservation, under his RMA duties, is the consent authority in some cases (e.g., as for the Waitangi port reclamation expansion), and does finally approve the council's regional coastal plan. For the Chathams, the plan will form part of the council's resource management document and the Minister's approval will only relate to the plan part of the document. These functions of the Minister are quite distinct from the Conservation Act functions and are not covered by this CMS. These separate functions also include any actions to determine the status of Te Whanga with respect to the coastal marine area.

## **Issues**

There are many issues associated with marine ecosystems. Those important to the Department are:

- The need to encourage and support the Ministry of Fisheries in its role of conservation and management of fisheries resources for sustainable harvest while maintaining the general health and indigenous biodiversity of the ecosystem. The Department has an interest in fisheries interactions; ensuring marine mammals and seabirds continue to have sufficient food supplies and their populations do not suffer from fisheries by-catch.
- Protection of the landscape, historic, wildlife and botanical values associated with marine ecosystems from inappropriate development and pollution.
- Preservation of representative or distinctive examples of the Chathams assemblage of marine biota for scientific, heritage and biodiversity reasons.
- Protection of marine mammals, co-ordination to rescue stranded marine mammals, and distribution of parts for customary and scientific purposes.
- The lack of information on coastal and marine resources and ecological processes, compared to terrestrial situations.
- Effective avoidance and mitigation of the threat of oil spills to wildlife.



## **Objectives**

- To assist in the identification of marine sites suitable for protection, to support initiatives from outside the Department for marine conservation and to advocate generally for the protection of marine ecosystems and resources.
- To protect marine mammals and stimulate public awareness and involvement in their management.
- To provide for the use of marine mammal parts by iwi and scientific institutions.
- To ensure effective planning and response capability for the protection of marine wildlife from marine pollution.
- To promote surveys and research that contribute to effective management of coastal resources and understanding of key ecological processes.

## **Implementation**

The Department will:

### *Survey and Monitoring*

1. Promote and participate in survey and monitoring of the marine environment, including descriptive surveys of habitats and communities. Criteria for determining survey priorities include:
  - presence of a major potential marine development
  - area of high marine diversity
  - representative areas
  - areas of interest for possible marine reserve status
2. Maintain marine resource information in GIS database form for use by the Department and other interested parties.

### *Advocacy*

3. Provide information on coastal and marine values to the Chatham Islands Council.
4. Advocate the protection of indigenous marine biodiversity, including the protection of marine mammals, freshwater fish, seabirds and their habitats through input to RMA coastal planning processes, the Ministry of Fisheries planning and liaison processes, and public education.
5. Promote the protection of marine areas from fishing practices inappropriate to those areas.
6. Provide procedural advice and resource information to groups or organisations investigating any marine reserve application.
7. Undertake full and early consultation with iwi, the Ministry of Fisheries, community and interest groups over any marine reserve proposal.
8. If a marine reserve is established, to involve the community in its management as honorary rangers or by belonging to a marine reserve advisory committee, which the Department would see as including people from:
  - iwi
  - local recreational and educational interests

- visitor services, fisheries and conservation interests
  - other interested individuals
9. Work with the community, fishing industry, council and Ministry of Fisheries to encourage the appropriate disposal of fish packaging material, nets etc, and the removal of such discarded or storm-wracked material from the coastline.

### *Marine Mammal Management*

10. Advocate protection of marine mammals and marine mammal habitat through input to the council's resource management document and the Ministry of Fisheries assessment working groups.
11. Promote public awareness and involvement in marine mammal protection.
12. Administer marine mammal watching permits as required. Permits will be issued subject to the following criteria:
- the ability to demonstrate that activities will not have adverse effects on marine mammals
  - the ability to demonstrate that the addition of the activity will not lead to cumulative harassment of marine mammals
  - consultation with appropriate iwi prior to application (6.5.4 Environmental Protection applies)
  - impacts on marine mammals are monitored
13. Maintain a local database and contribute to a national database of incidents involving marine mammals.
14. Encourage and co-ordinate community involvement in marine mammal rescue.
15. Support the formation of a joint iwi and Department committee to co-ordinate the distribution of marine mammal material, according to criteria developed by the committee in accordance with relevant legislation.

### *Wildlife Rescue*

16. Maintain liaison with and provide advice to the Chatham Islands Council and Ministry of Transport Maritime Division to aid the development and implementation of effective oil spill contingency planning.
17. Provide staff resources and co-ordinate community assistance to treat oiled wildlife.

## **Priorities**

### *Primary*

Meeting the Department's responsibilities, managing permit requirements for marine mammal watching, managing marine mammal rescue needs, and ensuring oil spill contingency planning is in place and is actioned.

### *Secondary*

Gathering survey data about the marine environment and promoting marine biodiversity conservation and the establishment of protected areas. Other lower level priorities include fisheries and general conservation advocacy.

### *Priority Sites and Actions*

Some of the priority actions are prescribed by legislation and policy, e.g., the Resource Management Act and the New Zealand Coastal Policy Statement. The other



Chatham shag.

priority sites and actions have been decided on the qualitative assessment of their role in marine conservation. Even without formal assessment it is possible to recognise the following areas as desirable for research or survey:

- Te Whanga, especially the lagoon opening issues
- potential aquaculture areas

### Limitations

Tasks that may not be undertaken or completed include:

- progress with coastal survey work
- progress with establishing a marine reserve
- submissions on non-RMA coastal permit applications

TABLE 17: KEY MARINE ECOSYSTEMS PRIORITIES

THEME	ISSUES	METHODS	RESULTS SOUGHT	PLACE
Marine mammal management	<ul style="list-style-type: none"> <li>• Species and habitat protection</li> <li>• Potential marine mammal watching</li> <li>• Marine mammal rescue</li> </ul>	<ul style="list-style-type: none"> <li>• RMA advocacy</li> <li>• Ministry of Fisheries liaison</li> <li>• Permit issue</li> <li>• Rescue co-ordination</li> </ul>	Marine mammals and habitats protected or sustainably managed	All places
Oil spill contingency planning	<ul style="list-style-type: none"> <li>• Survival of wildlife in oil spill situation</li> </ul>	<ul style="list-style-type: none"> <li>• Assist the council and Ministry of Transport in contingency planning</li> <li>• Co-ordinate treatment of oiled wildlife</li> </ul>	Oil spill impact on wildlife minimised	Chatham Island Pitt Island

## 6.2.6 INDIGENOUS SPECIES

### Introduction

The native plants and animals of the Chathams have found themselves in radically altered circumstances since humans arrived in the islands. Management aims to assist threatened plants and animals to reach self-sustaining levels. They will then contribute again to the natural communities that they and the Chatham Islanders depend on and value.

### Current Situation

#### *Island Communities*

Natural communities on islands are more vulnerable to damage and outright loss than are those in continental or mainland contexts.

Through long isolation from neighbouring populations or relative species, plants and animals on islands develop their own characteristics in response to local environmental influences. This process results in species, subspecies or varieties (taxa) whose characteristics are peculiar to an area, such as an island or island group.

These specialised taxa are called endemics. Populations of island endemics are typically small and limited in their ranges. Their populations and habitats are generally not large enough to have allowed for variation. This is more true of animals than it is of plants, which are capable of exploiting the unoccupied niches common in the simpler habitat structures of island communities.

Sudden changes in the environment or the habitat can have profound effects because they are acting on whole populations rather than parts of them. Behavioural responses to change may be common to the whole population, so there may be no unaffected parts of the population to compensate for the losses.

#### *Terrestrial Plants and Animals*

In the New Zealand context, the Chathams group illustrates perfectly the degree to which isolation leads to specialisation in terrestrial plants and animals.

The level of endemism in Chathams' plants (11 percent) exceeds that of any area of comparable size in the New Zealand region. There are thirty-seven endemic vascular plant taxa (species; subspecies and varieties), one of which is critically endangered, seven are endangered, seven are vulnerable and eight are rare (IUCN criteria). Eleven of the endangered and vulnerable taxa are endemics (Cameron *et al.*, 1995). Two plant genera, *Myosotidium* and *Embergeria*, are also endemic.

Isolation has acted on the terrestrial animals just as it has sculptured the plants to local conditions. There are 16 endemic bird forms (4 endemic species and 12 endemic subspecies). Amongst the known invertebrates are at least 50 endemic forms (many others await discovery or description) and there are several endemic snails and one endemic lizard.

The convergence of subtropical and subantarctic ocean currents at the Chathams has created a climate that has made neighbours of plant species that might normally never meet. Nikau palms from the north grow alongside the storm-toughened Chatham Island aster and keketererehe shrubs of the far south.

#### *Seabird Fauna*

The mixing of ocean currents has generated an abundance of food and shaped the character of the Chathams seabird fauna in the same manner. The large albatrosses and mollymawks of the southern oceans share local waters with the small petrels of northern latitudes.

The wealth of the food source at the convergence gave rise to an extraordinary variety of oceanic petrels, estimated to have been at least 21 species at the time of first human settlement. This concentration of species is considered to have been incomparable: no other part of the world supported equivalent concentrations of these birds, a feature of the Chathams that is often overlooked today.

#### *Marine Mammals*

The ocean food source also provided rich ground for seals, dolphins and whales. These marine mammals, though much reduced in numbers, are still evident. A high rate of strandings occurs (see 6.2.5 Marine Ecosystems).

#### *Freshwater Fish*

Indigenous freshwater fish are relatively abundant, in habitats much less adversely affected compared to those in mainland New Zealand. The threatened species giant kokopu, the banded kokopu, and a newly found endemic species are all present (see 6.2.4 Freshwater Ecosystems).

### *Human Impact*

Constrained by the Chathams climate and the small land areas, the natural communities of the islands and their distinctive elements were vulnerable to disturbance. More than any other region in New Zealand, the Chathams illustrates the profound impact of catastrophic events on highly specialised, isolated forms of plant and animal. The arrival of humans, livestock and mammalian predators were such events – probably the most catastrophic in the Chathams' history. Few of the species had evolved the behaviours necessary to cope with sudden habitat changes, human harvest, or the accelerated rates of mortality.

The rate of extinction for fauna species resident in the Chathams is high. Subfossil evidence points to the loss locally of up to seven petrel and eleven other bird taxa before Europeans arrived. For six of these, this meant total extinction (e.g., Chatham Island duck and Chatham Island fish eagle). Since the 1830s (when formal records were first kept), a further eight bird taxa have been lost, four of them Chathams endemics (Butler and Merton, 1992:Table 1).

Losses from individual islands (local extinctions) are considerably more numerous. As a result, some endangered species survive today in single populations (especially the birds – taiko, Chatham petrel, and Forbes parakeet for example.) Others, such as the Chatham Islands oystercatcher, snipe, New Zealand shore plover and tui, persist in naturally very low or dramatically reduced numbers and distributions, some as critically endangered species. The numbers and distributions of many plants have been reduced similarly, even since the beginning of this century.

This is a conservative estimate of extinctions: the record for the region is incomplete because so many past plant and insect species, for example, leave no trace of their existence.

The condition of the islands' bird fauna is indicative of the health of native communities and ecological associations today. Up to 50 percent of the bird species present at the time of first European contact are extinct, endangered or severely reduced in number. The highest comparable figure for mainland New Zealand is precisely half that number. Of the seventeen endemic bird taxa remaining in the Chathams, only six are not considered to be rare, threatened or endangered.

### *Species Management*

The Chathams present the southern hemisphere with some of its most pressing challenges in restoration of natural communities. Already it has given rise to the development of world firsts in management techniques (black robin recovery, for example); but little-understood species such as the taiko and Chatham petrel will depend for their survival on the evolution of new, even more demanding, conservation measures.

Presently, the Department is maintaining a raft of threatened bird species on the two island nature reserves of Mangere and Rangatira. These species – amongst them a selection of New Zealand's most endangered – are awaiting the restoration of larger habitats in the Chathams, habitats from which they have been exiled for more than a century. For most, the immediate hope for survival into the next century rests with Pitt Island.

On Chatham Island, the survival of threatened plants and animals is more problematical because their habitats are severely modified, most are in private ownership, and predators and browsers have almost unrestricted access to them. Here, the Department is engaged in more desperate struggles to preserve such species as taiko, parea and oystercatcher from extinction.



Dieffenbach's speargrass, host to the speargrass weevil, on Mangere.

The future for the Chathams' less visible or less spectacular species, such as the unobtrusive plants and insects, will improve when more is understood of taxonomies, distributions, life cycles and habitat requirements. Efforts to obtain this vital information are often diverted by the more immediate need to rescue populations or the species themselves from predators or browsers. This juggling of resources is a constant feature of conservation research in the Chathams. Where the information is known already (as it is for more of the plants than the animals), management must wait until resources are assembled to cope with the greatest scale of threat.

In managing species and their ecosystems the iwi viewpoint needs to be considered (e.g., the reverence for taonga species) and guidance taken from the Department's Kaupapa Atawhai Strategy (1997)

## **Statutory Framework**

The Department has the responsibility to manage species under the Wildlife Act 1954, the Marine Mammals Protection Act 1978 and the Reserves Act 1977. Section 6 of the Conservation Act also enables species management as a 'natural resource'. While Department management of plant species is restricted to land managed by the Department and other land with landowner agreement, for wildlife species the management role is across all lands.

Specific provision for wildlife planning under section 41(e) of the Wildlife Act 1953 gives the Minister of Conservation the authority to prepare and issue plans and publications for the advancement, conservation and management of wildlife.

## **Issues**

Although restoration of Chathams natural communities has been in progress for decades now, many of the pressures confronting the region's plants and animals have yet to be countered effectively.

Despite the persistence of these pressures, there have been some notable successes, such as the black robin programme and, more recently, the parea and New Zealand shore plover programmes. As community support for conservation has lifted, more initiatives have been generated, especially in habitat protection. The ongoing work of David Crockett and Taiko Expeditions must be acknowledged. Nevertheless, the status of many Chathams species – especially those on Chatham and Pitt islands – has barely improved or is still declining.

The urgent management issues have in common the need to counter more of the processes that have been so detrimental to the Chathams' flora and fauna, so that, at least, species declines can be arrested. Equally, there is a need to improve local awareness of the ways in which these plants and animals contribute to the character of the Chathams, so that the Chathams people have an attractive reason for being involved in their recovery.

Other principal issues include:

- monitoring the health of the flora and fauna, so that new problems are detected immediately and the benefits of management actions can be measured
- protecting the Chathams biota from new ecological pests and their threats
- setting priorities for species management
- managing visitor impacts on species
- retaining intact protected areas with their linked habitats, species sequences and populations
- working with iwi on species management and cultural use of Chathams plants, animals and fish
- improving invertebrate knowledge and protection

## **Objectives**

- To restore species in imminent danger of extinction to population levels at which they can sustain themselves and increase over as much as possible of their traditional distributions.
- To systematically survey species, assess their habitat requirements and threats, and implement management to sustain and enhance their populations.
- To embark on or support habitat recovery programmes for vulnerable habitats on which the native plants and animals of the Chathams depend for their survival.
- To encourage and facilitate iwi and wider community involvement and support in species protection projects.
- To minimise the threats posed by the accidental or deliberate introduction to the Chathams of ecologically damaging organisms, and seek to limit their dispersal if they are already present.

## **Implementation**

The Department will:

### *National Priorities*

1. Select species work programmes as governed by the Department's national priorities process. The process is described in *Setting Priorities for the Conservation of New Zealand's Threatened Plants and Animals* (Molloy, Davis and Tisdall, 1994). The ranking criteria are ecologically weighted, but regard is given to community perceptions of species. The criteria assess five different factors:
  - taxonomic distinctiveness
  - status of the species
  - threats facing the species
  - vulnerability of the species
  - human values
2. For plant priorities also take heed of the *New Zealand Botanical Society Threatened and Local Plant List* (Cameron *et al.*, 1995) which is updated regularly by the New Zealand Botanical Society using IUCN criteria and which feeds into the Department's priority process (1. above).

3. Review the status of species during the term of the CMS, so that as the conditions of some improve or decline, or as knowledge of circumstances in the wild improves, work programmes can be adjusted.
4. Complete the *Chatham Islands Species Conservation Strategy* (In preparation) and the Chathams part of the former *Canterbury Conservancy Threatened Plants Strategy* (in preparation) to outline their objectives for conservation of Chathams plants and animals. These strategies will be reviewed regularly to take account of progress with species recovery programmes, changing perceptions in the Chathams community, and improved knowledge of lesser known fauna (especially invertebrates).

### *Recovery Plans*

5. Initiate threatened species recovery plans based on their threatened category in Molloy, Davis and Tisdall (1994), under the following criteria (listed randomly):
  - Head Office and Conservancy priorities
  - species recovery complexity
  - cost
  - benefits of recovery action for individual species
  - likelihood of extinction
  - taxonomic distinctiveness
  - human values
  - species status
  - threats facing the species
  - vulnerability of the species

Recovery plans will be reviewed regularly. Where significant information comes to hand, they are reviewed at earlier intervals. Where recovery plans have not been prepared for a species or an ecosystem (see Implementation 8), management will still occur in accord with the Implementations above and below.

6. Make recovery plans available for comment to the Chatham Islands Conservation Board and the Chathams community, with completed plans available in Chathams public libraries.
7. Complete and action all the species recovery plans.
8. Move from single species management towards ecosystem-based management as appropriate.

### *Research*

9. Conduct research to evaluate:
  - species status
  - the nature of threats
  - appropriate protective measures
  - efficient monitoring regimes
  - effectiveness of recovery action
10. Continue the research emphasis on invertebrate and plant species for which the status, individual ecology or taxonomies are poorly understood.



### *Survey and Monitoring*

11. Monitor the pelagic seabirds such as northern royal albatross and Chatham Islands mollymawk in part to clarify the trends in their populations, and in part to provide a sound information base on which to make any needed assessments for any proposed customary-use take. Where resources can be spared from work of higher ecological priority, monitor sooty shearwater to clarify the trends in their populations, and to provide a sound information base on which to make any needed assessments for any proposed customary-use take.
12. Continue monitoring for species such as the black robin, parea, Chatham Island speargrass and forget-me-not, and Dieffenbach's speargrass, some of which have reached the limits of recovery in existing habitats, to ensure that they do not slide back towards extinction again. In general, intensive monitoring will cease when there are new populations established in larger Chathams habitats.
13. Survey species populations and their habitats to establish their status. Priorities for these surveys will be based on the following criteria:
  - category A and B species as nationally directed
  - species where basic survey knowledge is needed before any other management actions can be considered

### *Management Techniques*

14. Select management techniques that best use available resources with the objective of creating self-sustaining species populations, including:

#### **Research**

- Apply scientific methods to reveal species habitat and predator issues to resolve species management needs and problems.

#### **Habitat Manipulation**

- Manipulate habitat to provide environmental conditions more favourable for species.

#### **Animal and Weed Control**

- Eradicate, contain or control stock, animal pest, wild animal and plant pest densities until their threats to species are reduced or mitigated.

#### **Captive Management/Nursery**

Manage species in captivity to:

- provide a safe population when the wild population is under threat
- develop techniques for holding and raising species either by using analogue (similar) species or by using the target species themselves
- produce individuals to establish back in the wild

#### **In Situ Management**

- On-site surveying, monitoring, protection and enhancement of species. This may involve manipulation such as cross-fostering.

#### **Interpretation**

- Raise understanding of species issues through education, media and interpretation.

### **Advocacy**

- Maintain contact with landholders, the council and interest groups to encourage the protection of species.

### **Translocation**

- **Move populations** of species to suitable safe habitats. Reintroduce nursery-raised plants to former portions of their geographic range. The Department's translocation guidelines apply.

### **Island Restoration**

- Improve an island habitat quality by removing predators, weeds or other pests, or by translocating populations of species to that island. (This could include a mainland habitat 'island').

When designing the strategy for management, take the following factors into account:

- recovery objectives
- management history
- feasibility of population enhancement
- ability to control weeds and pests
- surrounding land management
- costs and benefits of management options
- land status, threats, management issues and priorities of Schedule II of this CMS.

### *Habitat and Ecosystem Protection*

15. Proceed with the elimination of feral cats and weka from predator-proof fenced areas of Pitt Island (feral pigs will also be controlled), or from all of the island, whichever option is supported by the Pitt Island community. While elimination of all introduced predators and feral browsers from the island is the preferred option, this will not be undertaken without consultation with the Pitt Island community.
16. Investigate the possibility of eradicating mice from Pitt Island. Improvements in eradication methods make this an increasingly viable objective.
17. If funds become available, accelerate revegetation of Mangere in order to expand both forest cover and diversity, and hence support larger populations of threatened species.
18. Avoid the risk of importing weed pests or plant and soil pathogens to the small offshore islands during species revegetation programmes. Priority will be given to seed sowing before relying on imported plants from nurseries.
19. Maintain fences and deal directly with communities and landowners over the entry of domestic and feral stock into protected areas and into ecologically valuable areas that are not yet protected.

### *Species Recovery*

20. Continue to provide specialist input emphasis to management programmes for threatened and endangered species.
21. Develop new measures to avert renewed species losses and declines.

22. Establish new populations of threatened Chathams endemic fauna in the Chathams:
  - as insurance against disasters
  - to restore components of ecosystems and ecological process
  - to provide opportunities for people to observe species in more accessible locations
  - to create ecosystems that favour a variety of species
23. Give preference to managing plant and animal species in their natural habitats.
24. Expand the ranges of species through reintroduction, from either local wild populations, captive-raised stock or, in the case of plants, from seed sowing or propagating nurseries. The development of techniques for direct sowing of seeds is proceeding.

### *Iwi and Community Liaison*

25. Work with iwi on species management (see 6.1.2 Treaty Relationship).
26. Support the Chatham Islands Conservation Board as the principal contact for comment from the Chathams community on the Department's species management policies and work programmes.
27. Ensure that the Chatham Islands Conservation Board has access to commentary from NGOs and the wider New Zealand community by assisting the Board with consultation.
28. Where privately owned lands or habitats may be involved in species recovery programmes, seek to ensure through face-to-face and other contact that landowners and those with interests in the habitats are aware of the conservation issues and implications, and that landowner approvals are obtained.
29. Involve local people as much as possible in species work programmes. Continue to invite islanders to participate in programmes or to visit workplaces.
30. Where possible, welcome and assist community initiatives to protect or improve the habitats of threatened species.

### *Customary Use*

31. Contribute to national policy development on customary use, ensuring that both the species protection and iwi perspectives of the Chathams situation are well understood.

## **Priorities**

The need to avoid further extinctions is the principal driving force of Chathams' indigenous species work.

### *Primary*

Emphasis is given to plant and animal species for which fears of loss or decline are held or which are incapable of surviving without active intervention. Initially, for such species as taiko, Chatham petrel, the Kaingaroa race of Chatham Island button daisy and *Aciphylla* weevil, for example, work consists of identifying status and threats, followed by applying appropriate management techniques.

Management of protected or privately owned habitats where remnant or relatively unmodified natural communities survive is also a primary activity. The outer islands of the Chathams, including Mangere and Rangatira, are good examples of these, but habitats may also occur as 'islands' within the highly modified landscape of Chatham and Pitt.

### *Secondary*

Species that have reached the limits of recovery in existing habitats, or are thought to be declining from an earlier secure status fall into the second category of priority. These species may be monitored intensively to ensure that they do not regress or decline suddenly.

## **Limitations**

### *Resources*

The Department does not have enough resources to deal with all of the native plant and animal issues confronting it in the Chathams. Setting priorities may mean the following tasks are not undertaken or completed:

- extensive reassessment of invertebrate knowledge (including basic survey and distribution)
- paleoecological surveys to define pre-human fauna densities and distribution
- accelerated revegetation of Mangere and other key habitats
- basic ecological research of all threatened plants and animals
- building comprehensive plant and animal inventories

### *Habitats in private ownership*

Only a small proportion of the Chathams land area is managed by the Department or is otherwise free of uses that conflict with species protection needs. Most threatened species work in the Chathams, and throughout New Zealand, is conducted in habitats that occur on land managed by the Department. While there are outstanding examples to the contrary, generally it is more difficult to achieve protection of threatened and endangered species where their habitats are privately owned.

The ability to extend species protection work in privately owned habitats relies on the approval of landowners. Often, their willingness to adjust land use or stock management practices will suffice, or allowing access to the habitats for study may be the solution.

The Chathams community is showing a strong willingness to protect habitats through covenants and other private land options. Although the outlook appears good, time is needed to see how these protection methods compare to Crown ownership and protection.



TABLE 18: KEY INDIGENOUS SPECIES PRIORITIES

THEME/SPECIES (AND RANKING)	ISSUES
BIRDS	
* Taiko Ranked nationally as Category A	<ul style="list-style-type: none"> <li>• Predation by rats, cats, weka, possibly possums, pigs</li> <li>• Massive loss of forested burrowing habitats</li> <li>• Only six breeding burrows known</li> <li>• Total population currently small and little recruitment</li> </ul>
* Chatham Island oystercatcher Ranked nationally as Category A	<ul style="list-style-type: none"> <li>• Predation by cats, weka</li> <li>• Trampling of nests by stock</li> <li>• Altered vegetation on beach fronts</li> </ul>
* Chatham petrel Ranked nationally as Category A	<ul style="list-style-type: none"> <li>• Confinement to single breeding population in what may have been only a peripheral site</li> <li>• Displacement from traditional breeding sites elsewhere in Chathams by massive habitat loss and predation</li> <li>• Competition for breeding burrows with broad-billed prions <i>Pachyptila vittata</i></li> <li>• Vulnerable to incidental illegal harvest and probably taken if encountered</li> </ul>
* Chatham Island pigeon, <i>parea</i> Ranked nationally as Category A	<ul style="list-style-type: none"> <li>• Widespread habitat loss</li> <li>• Degradation of remaining habitats</li> <li>• Possible competition for food with possums</li> <li>• Predation by rats, cats, harriers, possibly weka, possums</li> </ul>
* Black robin Ranked nationally as Category A	<ul style="list-style-type: none"> <li>• Retreat from Chathams-wide distribution through habitat loss and predation</li> <li>• Shortage of alternative predator-free habitats</li> </ul>
* Chatham Island tui Ranked nationally as Category A	<ul style="list-style-type: none"> <li>• Apparent shortage of good food sources: outright loss of habitats and depletion of foods by possums</li> <li>• Confined to one major breeding centre on Rangatira</li> <li>• Predation by cats, weka, possibly possums</li> </ul>
* New Zealand shore plover Ranked nationally as Category B	<ul style="list-style-type: none"> <li>• Retreat from New Zealand-wide distribution; confined now to two populations in the wild</li> </ul>

*Notes:*

1. *National rankings refer to those established by the Molloy, Davis and Tisdall (1994) criteria. No priorities have been set within the rankings.*
2. *An asterisk (\*) preceding a species' name indicates that the species is endemic to the Chathams*
3. *Indigenous, common and scientific names are cross-referenced in Appendix 1.*
4. *Not all tasks outlined in the methods will be undertaken or funded by the Department and could involve a variety of agencies and persons.*

METHODS	RESULTS SOUGHT	PLACE
<ul style="list-style-type: none"> <li>• Predator control around breeding burrows</li> <li>• Discovery of new burrows</li> <li>• Establishment of new predator-free burrowing sites on Chatham, Pitt and outer islands</li> <li>• Investigation of possible population on Antipodes Islands</li> </ul>	<ul style="list-style-type: none"> <li>• Short-term: preserved from extinction</li> <li>• Mid-term: more populations created for safety</li> <li>• Long-term: returned to as much of traditional density and range as possible</li> </ul>	Southern Chatham: Tuku, upper Nairn and Awatotara catchments
<ul style="list-style-type: none"> <li>• Survey to monitor population status and dynamics</li> <li>• Fencing to exclude stock from key beach breeding sites</li> <li>• Experimental modification of beach profiles to improve breeding sites</li> <li>• Artificial incubation of eggs to ensure survival to hatching</li> </ul>	<ul style="list-style-type: none"> <li>• Short-term: preserved from extinction</li> <li>• Mid-term: size, movements and productivity of population defined; improve productivity and survival if necessary</li> <li>• Long-term: returned to as much of original density and range as possible</li> </ul>	Chatham Pitt Rangatira Mangere
<ul style="list-style-type: none"> <li>• Survey to clarify size and status of the Rangatira population: is it stable or declining?</li> <li>• Experimental protection of burrows to reduce interference by prions</li> <li>• Establishment of new populations in safe sites elsewhere in the Chathams</li> </ul>	<ul style="list-style-type: none"> <li>• Short-term: species' status and nature of threats defined</li> <li>• Mid-term: labour-easy means of protecting breeding burrows developed on Rangatira; new population established on Pitt</li> <li>• Long-term: returned to as much of original range and density as possible</li> </ul>	Rangatira
<ul style="list-style-type: none"> <li>• Control of possums in key breeding areas</li> <li>• Protection of habitats from other domestic and feral browsers</li> <li>• Control of predators in key breeding areas</li> </ul>	<ul style="list-style-type: none"> <li>• Short-term: improved breeding productivity</li> <li>• Mid to long-term: species' distribution improved on Chatham and Pitt particularly</li> </ul>	Chatham Pitt
<ul style="list-style-type: none"> <li>• Protection and monitoring of two existing populations</li> <li>• Founding of a third larger population on Pitt Island</li> </ul>	<ul style="list-style-type: none"> <li>• Short-term: two existing populations safeguarded from loss</li> <li>• Mid-term: birds returned to Pitt</li> <li>• Long-term: returned to as much of original range as possible</li> </ul>	Rangatira Mangere
<ul style="list-style-type: none"> <li>• Banding of Rangatira birds to study dispersal patterns in the Chathams</li> <li>• Study of life cycles</li> </ul>	<ul style="list-style-type: none"> <li>• Short-term: conservation status determined</li> <li>• Mid to long-term: habitats improved by removal of browsers and predators where possible</li> </ul>	Rangatira Chatham Pitt
<ul style="list-style-type: none"> <li>• Protection of wild populations against introduction of predators</li> <li>• Establishment of new populations in New Zealand using captive-bred birds as founders</li> <li>• Creation of predator-free habitats in the Chathams for dispersing birds</li> </ul>	<ul style="list-style-type: none"> <li>• Short-term: wild population safeguarded from loss</li> <li>• Mid-term: new populations established in the wild</li> <li>• Long-term: returned to as much of traditional range and abundance as possible</li> </ul>	Rangatira

TABLE 18: KEY INDIGENOUS SPECIES PRIORITIES cont.

THEME/SPECIES (AND RANKING)	ISSUES
<p>* Northern royal albatross Ranked nationally as Category B</p>	<ul style="list-style-type: none"> <li>• Confined to two small populations after retreat from wider distribution in the Chathams</li> <li>• Subjected to take</li> <li>• Severely disrupted breeding patterns</li> <li>• Habitats in very poor shape</li> </ul>
<p>* Chatham Island mollymawk Ranked nationally as Category B</p>	<ul style="list-style-type: none"> <li>• Very rare – confined to its single tiny breeding site on the Pyramid</li> <li>• Subjected to take</li> </ul>
<p>*Forbes’ parakeet Ranked nationally as Category B</p>	<ul style="list-style-type: none"> <li>• Very rare – confined to its single breeding site on Mangere</li> <li>• Loss of forest habitat has caused gender imbalance and hybridisation with Chatham Island red-crowned parakeets <i>C. novaeseelandiae chathamensis</i></li> </ul>
<p>Sooty shearwater Not ranked by Molloy Davis and Tisdall</p>	<ul style="list-style-type: none"> <li>• Retreating rapidly from major parts of its original Chathams distribution; confined now to one major breeding site (Tapuaenuku)</li> <li>• Predation by cats, weka, pigs</li> <li>• Harvested to local extinction in some sites by humans</li> </ul>
<p>* Chatham shag Ranked nationally as Category B</p>	<ul style="list-style-type: none"> <li>• Restricted breeding distribution</li> <li>• Poor knowledge of species</li> </ul>
<p>Northern Buller’s mollymawk Ranked nationally as Category B</p>	<ul style="list-style-type: none"> <li>• Breeding distribution is very restricted</li> <li>• Subject to take</li> </ul>
<p>Eastern buff weka Ranked nationally as Category B</p>	<ul style="list-style-type: none"> <li>• Extinct in its traditional range (South Island east coast) but flourishing in the Chathams where it is an ecological pest</li> <li>• Removal from Pitt will reduce species to a single (harvested and predated) population</li> </ul>
<p>Additional oceanic seabird species which may be the subject to take claims or are taken illegally, as titi are now. These may include the rare Chatham fulmar prion (Ranked Category B) and the little shearwater</p>	



METHODS	RESULTS SOUGHT	PLACE
<ul style="list-style-type: none"> <li>• Study to clarify conservation status and long-term trends in population</li> <li>• Quantify monitoring, research and review requirements should any customary use take be approved</li> <li>• Consult with landowners to identify physical and legal site protection measures</li> </ul>	<ul style="list-style-type: none"> <li>• Short-term: the two Chathams breeding sites safeguarded</li> <li>• Mid-term: improved understanding of biology and population trends</li> <li>• Long-term: traditional habitats elsewhere in the Chathams made suitable for breeding again</li> </ul>	Forty-fours Sisters
<ul style="list-style-type: none"> <li>• Banding study to improve understanding of biology and productivity</li> <li>• Study to determine sustainable rates of take, if this proves to be an acceptable option</li> </ul>	<ul style="list-style-type: none"> <li>• Short to mid-term: improved knowledge of species biology</li> <li>• Long-term: this very rare species safeguarded from loss</li> <li>• Long-term: re-establish on Pitt Island</li> </ul>	Pyramid
<ul style="list-style-type: none"> <li>• Monitoring of population to detect increases in incidence of hybridisation</li> <li>• Reforestation of Mangere to provide species with its preferred habitat</li> </ul>	<ul style="list-style-type: none"> <li>• Short-term: single population protected from outright loss</li> <li>• Mid to long-term: outright loss of genetic integrity avoided</li> </ul>	Mangere
<ul style="list-style-type: none"> <li>• Quantify monitoring, research and review requirements should any customary use harvest be approved</li> <li>• Assessment of conservation gains from harvest trade-off</li> </ul>	<ul style="list-style-type: none"> <li>• Short to mid-term: improved understanding of species' status in the Chathams</li> <li>• Long-term: returned to as much of original range as possible</li> </ul>	Chatham Pitt Rangatira Mangere Tapuaenuku
<ul style="list-style-type: none"> <li>• Regular monitoring of major breeding sites on Chatham</li> </ul>	<ul style="list-style-type: none"> <li>• Short to mid-term: more knowledge of species' status</li> <li>• Long-term: returned to as much of original distribution and abundance as possible</li> </ul>	Chatham Pitt Some outliers
<ul style="list-style-type: none"> <li>• Quantify monitoring, research and review requirements should any customary use take be approved</li> </ul>	<ul style="list-style-type: none"> <li>• Long-term: security of the species in its present distribution; encouragement to resume occupation of traditional breeding sites elsewhere in Chathams (e.g., Pitt)</li> </ul>	Forty-Fours Sisters
<ul style="list-style-type: none"> <li>• Assessment of taxonomic distinctiveness</li> <li>• Assessment of options for return to original distribution</li> <li>• Monitoring of Chatham population to detect sudden decline</li> </ul>	<ul style="list-style-type: none"> <li>• Short to mid-term: subspecies safeguarded from outright loss</li> <li>• Long-term: birds returned to traditional range</li> </ul>	Chatham Pitt
		Chatham Pitt Mangere Rangatira Forty-fours Pyramid Tapuaenuku Star Keys

TABLE 18: KEY INDIGENOUS SPECIES PRIORITIES cont.

THEME/SPECIES (AND RANKING)	ISSUES
<p>Plant conservation status refers to International Union for the Conservation of Nature (IUCN) criteria as used by New Zealand Botanical Society (Cameron et al., 1995)</p>	
<p>Orchid Pterostylis micromega Critically endangered status Ranked nationally as Category A</p>	<p>No information</p>
<p>* Chatham Island toetoe Endangered Ranked nationally as Category A</p>	<ul style="list-style-type: none"> <li>• Very limited distributions on Chatham and Pitt</li> <li>• Small population sizes</li> <li>• Very limited recruitment</li> <li>• Loss of habitats and plants through modification for farming</li> <li>• Most plants occur on private land</li> </ul>
<p>Small succulent herb Crassula hunua Endangered Ranked nationally as Category B</p>	<ul style="list-style-type: none"> <li>• Species yet to be identified in the field</li> <li>• Limited knowledge of preferred habitats</li> </ul>
<p>*Chatham Island kakaha Vulnerable Ranked nationally as Category B</p>	<ul style="list-style-type: none"> <li>• Scattered distribution on Chatham</li> <li>• Very palatable to browsers</li> <li>• Generally small populations</li> <li>• Separate sexes and irregular flowering</li> <li>• Possible browsing of fruit by possums</li> </ul>
<p>* Chatham Island shield fern Endangered Ranked nationally as Category B</p>	<ul style="list-style-type: none"> <li>• Limited knowledge of distribution</li> <li>• Limited knowledge of enhancement techniques</li> </ul>
<p>* Chatham Island speargrass Vulnerable Ranked nationally as Category B</p>	<ul style="list-style-type: none"> <li>• Distribution very fragmented through modification of habitats for farming</li> <li>• Grazed by stock and feral browsers; uprooted by pigs</li> <li>• Regeneration and adult survival compromised by pig rooting</li> </ul>
<p>* Chatham Island sow thistle Vulnerable Ranked nationally as Category B</p>	<ul style="list-style-type: none"> <li>• Distribution fragmented though modification of habitats for farming</li> <li>• Grazed by stock and feral browsers</li> </ul>
<p>* Barker' s koromiko Vulnerable Ranked nationally as Category B</p>	<p>Distribution fragmented and numbers have declined through forest loss and grazing of seedlings by stock and browsers</p> <ul style="list-style-type: none"> <li>• Limited knowledge of distribution</li> </ul>

METHODS	RESULTS SOUGHT	PLACE
<ul style="list-style-type: none"> <li>Assess survival and distribution within Chathams</li> </ul>	<ul style="list-style-type: none"> <li>Survival of Chathams populations if remaining</li> </ul>	Chatham Possibly other islands
<ul style="list-style-type: none"> <li>Maintain provenances from Chatham and Pitt</li> <li>Safeguard populations that are presently unprotected</li> <li>Continue to establish populations in protected natural areas on Chatham and Pitt</li> <li>Consider translocation to Rangatira</li> </ul>	<ul style="list-style-type: none"> <li>Short to mid-term: protection of existing populations</li> <li>Long-term: distribution and abundance of species extended</li> </ul>	Chatham Pitt
<ul style="list-style-type: none"> <li>Collate existing information</li> <li>Search for species in likely habitats</li> </ul>	<ul style="list-style-type: none"> <li>Short to mid-term: improved knowledge of status and management requirements throughout Chathams</li> </ul>	Chatham
<ul style="list-style-type: none"> <li>Maintain and expand provenance collection from a variety of sites on Chatham</li> <li>Safeguard good populations that presently have no protection</li> <li>Enhance populations in protected areas</li> <li>Establish new populations in protected areas</li> </ul>	<ul style="list-style-type: none"> <li>Short to mid-term: protection of existing populations consolidated</li> <li>Long-term: distribution and abundance of species extended</li> </ul>	Chatham Pitt
<ul style="list-style-type: none"> <li>Survey distribution (currently under action)</li> <li>Maintain existing populations in forested woodland portions of protected natural areas</li> <li>Preserve capacity to regenerate by controlling pigs in protected areas</li> </ul>	<ul style="list-style-type: none"> <li>Short to mid-term: protect existing populations</li> <li>Long-term: improve species' conservation status</li> </ul>	Chatham Pitt Rangatira
<ul style="list-style-type: none"> <li>Seek formal protection for airport and southern tableland sites</li> <li>Maintain provenances from as many Chatham sites as possible</li> <li>Control pigs to limit damage to sites</li> <li>Continue monitoring Ocean Mail, airport and Rangaika populations</li> <li>Establish new populations in protected sites – Ocean Mail, Green Swamp</li> </ul>	<ul style="list-style-type: none"> <li>Short to mid-term: protection of existing sites consolidated to prevent further fragmentation</li> <li>Long-term: abundance and distribution extended on Chatham</li> </ul>	Chatham
<ul style="list-style-type: none"> <li>Protect remaining populations on Chatham</li> <li>Maintain existing provenances and obtain more material from Chatham and Pitt</li> <li>Use seed plots to establish new populations on Mangere and Rangatira and replant stocks in Chathams reserves</li> <li>Enhance populations in protected area on Chatham</li> </ul>	<ul style="list-style-type: none"> <li>Short to mid-term: vulnerable populations safeguarded from further decline</li> <li>Long-term: species' range and abundance expanded</li> </ul>	Chatham Pitt Rangatira Mangere
<ul style="list-style-type: none"> <li>Protect existing concentrations</li> <li>Monitor seedling welfare in the Tuku</li> <li>Maintain provenances</li> <li>Establish new populations on Chatham and Pitt</li> <li>Control feral animals where they compromise regeneration</li> </ul>	<ul style="list-style-type: none"> <li>Short to mid-term: existing significant sites protected from further decline</li> <li>Long-term: distribution in the Chathams extended</li> </ul>	Chatham Rangatira Pitt

TABLE 18: KEY INDIGENOUS SPECIES PRIORITIES cont.

THEME/SPECIES (AND RANKING)	ISSUES
<p>Cook's scurvy grass Vulnerable Ranked nationally as Category B</p>	<ul style="list-style-type: none"> <li>• Distribution very fragmented through habitat loss, and grazing by stock, feral browsers and possibly insect pests</li> <li>• Limited knowledge of distribution on Chatham</li> <li>• Appears to be associated with burrowed, nutrient-enriched sites</li> </ul>
<p>* Chatham Island button daisy Vulnerable Ranked nationally as Category B</p>	<ul style="list-style-type: none"> <li>• Distribution very fragmented where grazing by stock and browsers occurs</li> <li>• Different races identified on Chatham and smaller islands</li> <li>• Appears to be associated with burrowed, nutrient-enriched sites</li> </ul>
<p>* Chatham Island nikau Vulnerable Ranked nationally as Category B</p>	<ul style="list-style-type: none"> <li>• Disjunct distribution through loss of forest cover, especially on richer soils that benefit agriculture</li> <li>• Rapidly degenerating adult plants, especially on Pitt</li> <li>• Widespread failure of seedling establishment due to browsing by domestic and feral stock</li> <li>• Limited dispersal due to absence or reduction of traditional dispersers such as parea</li> </ul>
<p>* Dieffenbach's speargrass Vulnerable Ranked nationally as Category C</p>	<ul style="list-style-type: none"> <li>• Fragmented distribution resulting from modification of habitats</li> <li>• Palatable and vulnerable to browsing by stock</li> <li>• Vulnerable should goats establish on Chatham</li> <li>• Prone to sudden catastrophic collapses through unknown causes – perhaps weevils or pathogens?</li> <li>• Few, small populations on northern Chatham</li> </ul>
<p>Coastal succulent <i>Atriplex billardierei</i> Endangered Ranked nationally as Category O</p>	<ul style="list-style-type: none"> <li>• Degradation of coastal habitats – vehicles, horses and people using strand zone of beaches</li> <li>• Fragmented distribution</li> <li>• Natural events such as storms negatively disturb populations but also enable spreading to other beaches.</li> </ul>
<p>*<i>Craspedia</i> 'Chathams' Endangered Ranked nationally as Category I (with taxonomy indeterminate)</p>	<ul style="list-style-type: none"> <li>• Taxonomic status is unclear</li> </ul>
<p>Chatham Island linen flax Endangered Ranked nationally as Category I (with taxonomy indeterminate)</p>	<ul style="list-style-type: none"> <li>• Very small habitat range as a result of die-back</li> <li>• The few plants at some remaining sites are vulnerable to stock</li> <li>• Limited knowledge of range, especially on Pitt</li> <li>• Taxonomic status is unclear</li> </ul>

METHODS	RESULTS SOUGHT	PLACE
<ul style="list-style-type: none"> <li>• Protect vulnerable Chatham sites and improve once protected</li> <li>• Introduce invertebrate and pathogen quarantine on Mangere and Rangatira</li> <li>• Expand provenance collection to include material from Chatham sites</li> <li>• Consider establishment of new populations elsewhere on Chatham</li> <li>• Use seed plots to establish new populations on Rangatira</li> </ul>	<ul style="list-style-type: none"> <li>• Short to mid-term: further losses avoided</li> <li>• Long-term: species returned to as much of original range and abundance as possible</li> </ul>	<p>Chatham Pitt Rangatira Mangere Pyramid Sisters Forty-Fours Possibly other outlying islands</p>
<ul style="list-style-type: none"> <li>• Maintain provenances from Sisters, Forty-Fours and Kaingaroa material</li> <li>• Seek formal protection for Kaingaroa site</li> <li>• Consider translocation from Kaingaroa to Rangatira, and Tapuaenuku to Mangere</li> <li>• Continue with experimental transplants at Chatham sites</li> <li>• Establish new populations in conjunction with new seabird breeding colonies on Pitt and Chatham</li> </ul>	<ul style="list-style-type: none"> <li>• Short to mid-term: transplant technique developed and existing occurrences stabilised</li> <li>• Long-term: distribution extended at sites from which the species has been lost</li> </ul>	<p>Chatham Rangatira Pyramid Forty-fours Sisters Possibly other outlying islands</p>
<ul style="list-style-type: none"> <li>• Consider planting stock in protected areas on Chatham where the species is not represented by good adult populations (e.g., Tuku catchment)</li> <li>• Monitor seedling survival (recruitment to population) on Chatham and Pitt</li> <li>• Control browsers, especially pigs, in protected sites so as to enhance existing populations, especially on Pitt</li> </ul>	<ul style="list-style-type: none"> <li>• Short to mid-term: existing populations stabilised</li> <li>• Long-term: assurance that regeneration of populations is possible; distributions extended</li> </ul>	<p>Chatham Pitt</p>
<ul style="list-style-type: none"> <li>• Protect existing populations on Chatham and Pitt</li> <li>• Establish and maintain provenances from all four island sites</li> <li>• Establish new populations in protected sites on Chatham and Pitt</li> <li>• Monitor Mangere sites</li> <li>• Establish further seed plots on Rangatira</li> <li>• Research relationship with Aciphylla weevil Hadramphus spinipennis</li> </ul>	<ul style="list-style-type: none"> <li>• Short to mid-term: reasons for collapses of populations explained; and existing sites protected from further degradation</li> <li>• Long-term: distribution extended significantly in all traditional sites</li> </ul>	<p>Chatham Pitt Mangere Rangatira</p>
<ul style="list-style-type: none"> <li>• Monitor existing populations</li> <li>• Determine plant's life cycle</li> <li>• Establish plant in a live collection</li> </ul>	<ul style="list-style-type: none"> <li>• Short to mid-term: improved knowledge of species' status and difficulties</li> <li>• Long-term: maintain current distribution</li> </ul>	<p>Chatham</p>
<ul style="list-style-type: none"> <li>• Clarify taxonomy</li> <li>• Further searches for species</li> <li>• Secure provenances</li> <li>• Commence population enhancement as appropriate</li> </ul>	<ul style="list-style-type: none"> <li>• Short to mid-term: improved knowledge of species' status and management requirements in Chathams</li> </ul>	<p>Chatham</p>
<ul style="list-style-type: none"> <li>• Clarify taxonomy</li> <li>• Maintain a provenance collection</li> <li>• Use seed plots to expand populations on Mangere and Rangatira</li> <li>• Seek formal protection of specific sites alongside Te Whanga lagoon</li> <li>• Investigate feasibility of founding new populations around Te Whanga lagoon on Chatham</li> <li>• Fence areas containing wild populations, where appropriate</li> </ul>	<ul style="list-style-type: none"> <li>• Short to mid-term: existing sites protected from further degradation</li> <li>• Long-term: distribution extended and plant densities increased</li> </ul>	<p>Chatham Pitt Rangatira Mangere</p>

TABLE 18: KEY INDIGENOUS SPECIES PRIORITIES cont.

THEME/SPECIES (AND RANKING)	ISSUES
OTHER PLANT PRIORITIES – RARE SPECIES	
Sand tussock Hokotaka *Chatham Island forget-me-not Ranked nationally as Category B *Chatham Island tree daisy keketerehe *Akeake Sand daphne *Chatham Island ribbonwood	<ul style="list-style-type: none"> <li>• Much reduced total numbers</li> <li>• Greatly reduced ranges</li> <li>• Continuing pressure on surviving populations through conversion of land to farming, habitat deterioration, and grazing by stock and browsers</li> <li>• Targeted by possum (e.g., hokataka) causing early demise of plants</li> <li>• Problems with invasion of protected areas by feral and domestic browsers and possums</li> <li>• Weed competition, especially marram grass</li> <li>• Sand tussock: limited knowledge of distribution</li> </ul>
OTHER PLANT PRIORITIES – STATUS INSUFFICIENTLY KNOWN	
*Sedge <i>Carex chathamica</i> *Sedge <i>Carex ventosa</i> Native iris Chatham Island bladderwort	<ul style="list-style-type: none"> <li>• Difficulties with accurate identification</li> <li>• Limited knowledge of associations and distributions</li> <li>• Occur outside protected areas and are accessible to browsers</li> </ul>
OTHER PLANT PRIORITIES – LOCAL DISTRIBUTION	
Bidibidi <i>Acaena pallida</i> * <i>Coprosma propinqua</i> var. <i>martini</i> *Chatham Island geranium Fern <i>Hypolepis amaurorachis</i> <i>Leucopogon parviflorus</i> *Cox' s matipo	<ul style="list-style-type: none"> <li>• Limited knowledge of some species (e.g., bidibidi)</li> <li>• Species occupy sites that may be threatened in the future</li> </ul>
INVERTEBRATES	
*Pitt Island longhorn beetle Ranked nationally as Category A	<ul style="list-style-type: none"> <li>• Considered to be extinct on Pitt but recently confirmed on Rangatira – extremely rare</li> <li>• Predation by weka, mice, pigs on Pitt; disturbance of habitats by pigs; degradation of food sources by possums and loss of forest diversity</li> <li>• Very little known of life cycle and habitat preferences</li> </ul>
* <i>Aciphylla</i> weevil Ranked nationally as Category B	<ul style="list-style-type: none"> <li>• Very little known of life cycle</li> <li>• Missing from Pitt – probably extinct there</li> <li>• Speargrass host plant <i>Aciphylla dieffenbachii</i> now fragmented in distribution; restricted largely to Mangere and Rangatira</li> <li>• Predation where it still coincides with cats, weka, rats, mice</li> </ul>
*Chatham Island click beetle Ranked nationally as Category C	<ul style="list-style-type: none"> <li>• Ominously hard to find on Chatham</li> <li>• Loss of forest and leaf litter habitats</li> <li>• Predation by weka, rats, mice</li> </ul>

METHODS	RESULTS SOUGHT	PLACE
<ul style="list-style-type: none"> <li>• Improve knowledge of sand tussock distribution</li> <li>• Monitor wild populations</li> <li>• Develop or persist with conservation measures such as weeding, fencing of key sites, population enhancement</li> <li>• Maintain provenances where provided</li> <li>• Protect key sites from detrimental impacts – especially from stock and possums – to conserve adults and guarantee regeneration</li> <li>• Assist or establish new populations</li> </ul>	<ul style="list-style-type: none"> <li>• Short to mid-term: vulnerable populations stabilised</li> <li>• Long-term: species restored to original abundance and ranges</li> </ul>	Where appropriate
<ul style="list-style-type: none"> <li>• Improve awareness of conservation status and risks through survey, monitoring and research</li> <li>• Consider need for active management</li> <li>• Consider formal protection of habitat where it is warranted</li> </ul>	<ul style="list-style-type: none"> <li>• Short to mid-term: assurance that the circumstances of the species are not overlooked</li> </ul>	Where appropriate
<ul style="list-style-type: none"> <li>• Collate information on distribution and conduct surveys to fill in the gaps</li> <li>• Monitor wild populations</li> <li>• Continue with habitat protection through fencing and exclusion of animals from newly protected areas (especially those with sand dunes in the north of Chatham)</li> </ul>	<ul style="list-style-type: none"> <li>• Short to long-term: assurance that these species do not become problems</li> </ul>	Where appropriate
<ul style="list-style-type: none"> <li>• Protection of Rangatira from predator introductions</li> <li>• Removal of predators and browsers from Pitt</li> <li>• Vigilance to detect other occurrences of the species in the Chathams</li> </ul>	<ul style="list-style-type: none"> <li>• Short to mid-term: existing population preserved; knowledge of species' life cycle and habitat requirements improved</li> <li>• Long-term: traditional habitats restored and species returned to original distributions</li> </ul>	Pitt Rangatira
<ul style="list-style-type: none"> <li>• Research to clarify life cycle and relationship with host plant</li> <li>• Preservation of the two known populations from predators and browsers</li> <li>• Investigate feasibility of supplementing speargrass populations with reseeding or plant transfer</li> <li>• Check for presence on other predator-free islands</li> </ul>	<ul style="list-style-type: none"> <li>• Short to mid-term: existing population preserved; knowledge of species' life cycle and habitat requirements improved</li> <li>• Long-term: host plant and species restored to as much of original range and abundances as possible</li> </ul>	Pitt Mangere Rangatira Possibly Tapuaenuku Other outlying islands
<ul style="list-style-type: none"> <li>• Further checks for existence on Chatham</li> <li>• Monitor other habitats, especially outlying islands, which may have been affected by drought in recent years</li> <li>• Outer island vegetation affected by severe droughts</li> </ul>	<ul style="list-style-type: none"> <li>• Short to mid-term: conservation status clarified, especially on Chatham</li> <li>• Long-term: habitats restored so that species returns to original abundances and distribution</li> </ul>	Chatham Pitt Mangere Rangatira Sisters Other outlying islands

TABLE 18: KEY INDIGENOUS SPECIES PRIORITIES cont.

THEME/SPECIES (AND RANKING)	ISSUES
All Pitt Island invertebrate fauna	<ul style="list-style-type: none"> <li>Removal or control of predators and browsers on Pitt is expected to bring direct benefit to the island's invertebrate fauna</li> </ul>
OTHER INVERTEBRATE PRIORITIES	
All Chathams invertebrate fauna	<ul style="list-style-type: none"> <li>Very little is known of the Chathams invertebrates or the threats to them</li> <li>Widespread modification of habitats and the prevalence of predators will have had a profound impact on many species</li> <li>The invertebrate contribution to the welfare of plant communities, and to the processes of regeneration is expected to have been severely diminished by habitat changes and predation</li> </ul>
All Pitt Island invertebrate fauna	<ul style="list-style-type: none"> <li>The invertebrate contribution to the welfare of plant communities, and to the process of regeneration is expected to have been severely diminished by habitat changes and predation</li> </ul>

## 6.2.7 HISTORIC RESOURCES

### Introduction

Historic resources can be broadly defined as identifiable evidence of human activity or a sacred place and they include archaeological sites, historic places (which can include land, buildings, structures, and any combination of land, buildings or structures) and wahi tapu and ko-iwi, that form part of the historical and cultural heritage of New Zealand.

Responsibility for their management lies with the Department on its lands only, with the Council on its reserves and with the New Zealand Historic Places Trust and landowners on private lands.

Physical historic resources are not renewable and once damaged or destroyed cannot be replaced. Management needs to address, therefore, the physical protection of these historic resources and, where this is no longer possible, should protect the information by appropriate recording and archiving.

Although historic resources on land managed by the Department are legally protected, they can still be threatened by natural processes, inappropriate public use, lack of resources for management, deferred maintenance and inappropriate management practices. Given the extent of the historic resources, the threats to them and the resource constraints faced by the Department, it is necessary to prioritise management.

Wahi tapu may or may not involve physical place evidence, but along with ko-iwi do require respectful management.



METHODS	RESULTS SOUGHT	PLACE
<ul style="list-style-type: none"> <li>Monitor the invertebrate fauna through regular sampling to detect changes after removal of predators</li> </ul>	<ul style="list-style-type: none"> <li>Short to mid-term: benefits of predator control or removal quantified</li> <li>Long-term: quality of habitats and invertebrate associations improved on Pitt</li> </ul>	Pitt
<ul style="list-style-type: none"> <li>Encourage entomologists to focus on the Chathams</li> <li>Support research and management proposals that have a clear management benefit</li> </ul>	<ul style="list-style-type: none"> <li>Mid to long-term: improve awareness of Chathams invertebrate fauna and ecological problems</li> </ul>	All islands
<ul style="list-style-type: none"> <li>Encourage entomologists and ecologists to assess which measures should be adopted to enhance the invertebrate contribution to replanting programmes</li> </ul>	<ul style="list-style-type: none"> <li>Mid to long-term: integrate programmes to restore invertebrate and plant communities</li> </ul>	Pitt

### Current Situation

Moriori, European and Maori settlement in the Chatham Islands has left a variety of historic resources representing the cultural occupation of the lands by these people. Examples of this occupation are common on land managed by the Department, and include the remaining two major concentrations of Moriori tree carvings in J.M. Barker (Hapupu) and Taia Bush historic reserves, other tree carvings in Henga Scenic Reserve and at Lake Kairae, which is in the process of being protected as historic reserve; occupation sites such as middens, quarries, and burials and other wahi tapu. These are dispersed within coastal reserve and conservation areas of Chatham and Pitt Islands and, to a lesser extent, on other offshore islands. European historic places on land managed by the Department include Glory Cottage on Pitt Island and the old woolshed site and sheep dip site on Rangatira.

There are more than 700 recorded archaeological sites on the Chathams and, along with unrecorded sites, their protection is promoted by the Historic Places Act 1993, regardless of whether they lie within areas managed by the Department. Some of the recorded sites have been difficult to re-locate or are of debatable accuracy. As a Department policy any evidence of human activity older than 30 years on land managed by the Department may be recorded as a historic place if it is determined that the place is of historic significance.

Considerable archaeological field work has been undertaken on the Chathams (see Sutton, 1983 and 1994, McFadgen, 1994 and references therein), some on land now managed by the Department. Sutton (1994) has provided a major overview of the Moriori in the Chatham Islands, which will assist in determining future historic management priorities.

Coastal and sand dunes of the late Holocene period (i.e., last 5,000 years) and their Moriori middens have been the subject of Department research (McFadgen, 1994) to further aid the understanding of the natural and cultural history of the Chathams,



Waipaua Stream – historic values needing management.

example being Waipaua on Pitt Island (see 5.3.8 Lease Area Management)

and in documenting the impacts of humans on the natural environment. Three of the studied dune sites are on land managed by the Department at Maunganui Beach, Warekauri and Taia.

Ongoing site protection and/or research is needed if further information is to be saved or recovered before being lost to archaeological site deterioration, both on and off the Department land. Of particular significance are sites that could contain evidence of early settlement (the archaic East Polynesian – Moriori connection) an

### **New Zealand Historic Places Trust**

The New Zealand Historic Places Trust was established by the Historic Places Act 1993, and its purpose is ‘to promote the identification, protection, preservation, and conservation of the historical and cultural heritage of New Zealand’.

The Trust and the Department are separate agencies but have a close working relationship. The sharing of information and liaison benefit historic conservation and management. The Trust, though, is the statutory agency that (alongside council and land owners) is responsible for the conservation and protection of historic resources on lands in private ownership.

The Trust has its national office in Wellington and a regional officer based in Christchurch. Some Trust activities are carried out by branch committees with the Chatham Islands currently coming under the umbrella of the Canterbury Branch, although most Trust involvement with the Chathams comes from the national office. The Department has a representative on the branch committee.

To promote the protection of historic places the Trust has a range of roles and methods (see Part I of their Act) including, of prime relevance to the Department, the control of disturbance of all archaeological sites and the registration of historic places. Registration serves to notify the owner, the public and the council of the historic values present and in need of protection. In recent years the Trust has registered four Category I and seven Category II historic buildings on the Chathams (see section 22(3)(a) of the Historic Places Act for category descriptions). These buildings are:

#### *Category I*

Solomon House – Manukau; German Mission – Maunganui; Ponga Whare Wharekauri; and Nairn (Holmes) house – Waitangi

#### *Category II*

Hunts Forge building – Pitt Island; Fraser (P. Ingram) Cottage – Waitangi; Zimmerman house – Waitangi West; St Augustine’s Church – Te One; Whangamarino woolshed – Waitangi; Meikle (C. Emeny) house – Te One; and Glory Cottage – Pitt Island

Of all these buildings, only Glory Cottage is a Department building.

There could be occasions where, for convenience, the Department may undertake work for the Trust or vice versa. This work or a joint project may require a contract or formal agreement.

## **Statutory Framework**

The Department has a role under section 6(a) of the Conservation Act 1987 and section 3(a)(v) of the Reserves Act to protect and respect historic resources on land it manages. The Department is also bound by the Historic Places Act 1993, the Antiquities Act 1975 and the ICOMOS New Zealand Charter for the Conservation of Places of Cultural Heritage Value (1993).

The Department can advocate the conservation of historic places generally under section 6(b) of the Conservation Act 1987 and promote the benefits to present and future generations of the conservation of historic resources under section 6(c) of the Conservation Act 1987.

Artefacts and antiquities that may exist in an archaeological site have some protection under the Historic Places Act 1993 and the provisions of the Antiquities Act 1976 also apply. Any artefact found is the property of the Crown, and the Secretary of Internal Affairs or a museum is required to be notified of the finding of an artefact. Provisions of the Antiquities Act 1975 determine where an artefact can be held and the movement of such artefacts. The Maori Land Court can have a role to decide on actual or traditional owners.

Historic places must be managed in accordance with the Department's national Historic Heritage Strategy (1995), and resultant conservation plans (e.g., the proposed Glory Cottage plan) and any operative management plans (e.g., the draft J.M. Barker (Hapupu) National Historic Reserve Conservation Management Plan). Note that Government has initiated a review of historic heritage protection within New Zealand and this may result in changes to the legislation and the roles of the above-mentioned agencies.

A departmental national strategy on management and protection of wahi tapu on land managed by the Department is under preparation.

## **Issues**

The important issues for the Department are:

- The development of a complete and accurate inventory of historic resources on land managed by the Department that allows for easy resource re-location.
- The lack of assessment and monitoring of historic resources on land managed by the Department.
- Unintentional damage (e.g., by fencing) to historic resources on land managed by the Department.
- Deterioration of historic resources resulting from natural processes or stock disturbance.
- Conflict between natural and historic resource management.
- The provision of public information on historic resources.
- How best to manage historic resources with spiritual or traditional significance for iwi; in some cases they may best be left alone.
- The priority for the management of historic resources, including research priorities.
- Appropriate management of isolated historic resources.
- Identifying and respecting tikanga of the historic resources of iwi.
- The Department's role in respect of the protection of historic resources on land that it does not manage.

## **Objectives**

- To systematically identify and locate historic resources and their values and threats on land managed by the Department.
- To prioritise historic management work by actively managing a representative range of Chathams historic places that reflect the varying cultural occupation and/or are of high historic significance..
- To collaborate with and support the New Zealand Historic Places Trust, iwi and other agencies to promote, manage, identify and protect historic resources on and off land managed by the Department.
- To consult with iwi over tikanga and appropriate management of historic resources, including wahi tapu and ko-iwi.

## **Implementation**

The Department will:

### *National Strategy*

1. Implement the Historic Heritage Strategy (1995). The following implementation statements are derived from this strategy.

### *Historic Criteria*

2. Use the following criteria based on section 23 of the Historic Places Act 1993 to determine the significance of a historic resource.
  - the extent to which the resource reflects important or representative aspects of New Zealand (including Chathams) history
  - the association of the resource with events, persons or ideas of importance in New Zealand history
  - the potential of the resource to provide knowledge of New Zealand history
  - the importance of the resource to iwi
  - the community association with or public esteem for the resource
  - the potential of the resource for public education
  - the technical accomplishment, value or design of the resource
  - the symbolic or commemorative value of the resource
  - the importance of identifying historic resources known to date from early periods of New Zealand settlement
  - the importance of identifying rare types of historic resources
  - the extent to which the resource forms part of a wider historical and cultural complex or historical and cultural landscape
  - such additional criteria for registration of wahi tapu, wahi tapu areas, historic places and historic areas of Moriori or Maori interest may be prescribed in regulations made under the Historic Places Act
  - any other relevant historic criteria not inconsistent with the above

### *Survey and Recording*

3. Undertake, where it has not already occurred or where previous records require checking or more accurate site location, a programme of survey and recording of archaeological sites and other historic resources on land managed by the Department, including any historic place over 30 years old.

4. Record historic resources on land managed by the Department through the maintenance and updating of the Department's historic database, with location data on the GIS database.
5. Advise New Zealand Historic Places Trust of any proposal likely to affect any registered historic site, recorded archaeological site, or area likely to contain unrecorded archaeological sites.
6. Record archaeological sites in the New Zealand Archaeological Association Site Recording Scheme, via their Outlying Islands File Keeper.

#### *Historic Assessment*

7. Undertake assessments of historic resources using the criteria in Implementation 2 as a guide.
8. Manage each historic resource primarily on the basis of a historic assessment (such as through New Zealand Historic Places Trust registration) and having regard to any particular protected status (e.g., historic reserve).

#### *Monitoring*

9. Periodically, and in particular prior to any management activity (e.g., fencing, restoration planting) that could disturb any historic resource, inspect and/or re-evaluate any known historic resource.
10. Monitor, to assess any changes in resource condition, a representative range of indicator areas containing historic resources on land managed by the Department, including:
  - kopi and other vegetation regrowth within Moriori tree-carving reserves
  - restoration planting areas
  - burrowing seabird re-establishment areas (should they occur)
  - problem stock control areas
  - coastal erosion areas
  - actively managed sites (see Implementation 14)
  - wahi tapu

#### *Priorities*

11. Prioritise, at times, historic resource management over natural resource or recreational management, depending on the value of the historic resource and the degree of threat impacting on it.
12. Give emphasis for active conservation (i.e., conservation beyond survey, inventory and protection) to historic resources that reflect major themes developed nationally for the historic resources on land managed by the Department.

#### *Registration*

12. Seek registration under Part II of the Historic Places Act of historic places or areas, or wahi tapu or wahi tapu areas, on land managed by the Department in the following circumstances:
  - nationally high historic status
  - as a prerequisite to seeking Department national priority pool funding for protection work
  - as a prerequisite to land acquisition for historic resource protection

### *Wahi Tapu and Ko-iwi*

13. Develop with iwi a protocol for wahi tapu and ko-iwi on land managed by the Department, including:
  - a Department (i.e., public) or iwi (i.e., potentially public, potentially 'silent file') record of wahi tapu and ko-iwi
  - desired on-site management
  - appropriate tikanga
  - visitor activity control

### *Conservation Plans*

14. Prepare conservation plans for historic resources deemed to be actively managed historic places, selected by one or more of the following criteria:
  - high historic significance (see Implementation 2)
  - New Zealand Historic Places Act registered sites (e.g., Glory Cottage)
  - historic reserves (except the J.M. Barker (Hapupu) National Historic Reserve, which will have a reserve management plan)
  - high accessibility and visitor appeal
15. Follow the requirements of the ICOMOS New Zealand Charter (1993) in the preparation and implementation of conservation plans, ensuring:
  - community consultation, continuing throughout a project as appropriate
  - implementation of remedial and long-term maintenance
  - documentation of any research, recording and conservation work, as it proceeds

### *Conservation Processes*

16. Select management approaches that best use available resources and minimise long-term costs in accordance with the Historic Heritage Strategy (1995) and the ICOMOS New Zealand Charter (1993). Conservation may involve, in increasing order of intervention: non-intervention, maintenance, stabilisation, repair, restoration, reconstruction or adaption.

### *Iwi*

17. Consult with iwi when a proposed action by the Department involves places special to them and take their requirements into account.
18. Ensure that any archaeological investigation of Moriori or Maori historic resource sites on land managed by the Department has the approval of the appropriate iwi.
19. Seek iwi involvement in the management of historic resources and, where appropriate, discuss the possibility of vesting control or management in iwi.

### *Liaison*

20. Share skills and experience with the New Zealand Historic Places Trust on historic resource projects where there is a mutual advantage.
21. Collaborate with and support the New Zealand Historic Places Trust to promote, manage, identify, register and protect historic resources generally.
22. Consult with local communities, museums, universities and historical groups over management issues and research material.

### *Advocacy*

23. Promote a Chatham Islands Branch Committee of the New Zealand Historic Places Trust *or* greater Chathams input into the Canterbury Branch Committee *or* greater direct involvement of the New Zealand Historic Places Trust with the Chathams.
24. Work with the New Zealand Historic Places Trust, iwi, landowners, the council and other interested persons to promote the recording, assessment and, where appropriate, the protection of historic resources.

### *Visitor Services*



Glory Cottage.  
(Photo: Andrew Grant.)

25. Provide visitor information, in consultation with iwi and local interest groups, at jointly selected historic resources on land managed by the Department, including: J.M. Barker (Hapupu) National Historic Reserve, Chatham Island; Glory Cottage, Pitt Island

26. Control or discourage visitor use or potential visitor activities at physically unstable historic resources (e.g., eroding archaeological sites) or wahi tapu. This action will be undertaken in consultation with iwi, with control techniques including signage,

diverting visitor facilities and potential legislative control (e.g., by-laws).

### *Approvals*

27. Seek New Zealand Historic Places Trust approval for any work proposed to be undertaken on registered historic places.
28. Seek New Zealand Historic Places Trust authority for any work that will modify an archaeological site in terms of the Historic Places Act 1993.

### *Heritage Review*

29. Implement the outcomes of Government's 1998 historic heritage review and adjust the above Implementations accordingly.

## **Priorities**

### *Primary*

- Survey, recording, assessment and monitoring of significant Moriori historic places and archaeological sites on land managed by the Department.
- Actioning of the wahi tapu protocol with iwi.
- Preparation and implementation of conservation plans for actively managed historic places.
- Monitoring of historic resources as part of wider management project development (e.g., prior to fencing, revegetation).
- Visitor control within vulnerable historic areas and wahi tapu.
- Visitor information at key historic resources.
- Survey, recording, assessment and monitoring of indicator areas (see Implementation 9).

### *Secondary*

- Registration of historic places/areas, wahi tapu.
- Liaison and advocacy with the New Zealand Historic Places Trust and others for historic resources not on land managed by the Department.

TABLE 19: KEY HISTORIC RESOURCES PRIORITIES

T H E M E	I S S U E S	M E T H O D S	R E S U L T S S O U G H T	P L A C E
Mori historic places and archaeological sites	<ul style="list-style-type: none"> <li>• Locations not all known</li> <li>• Recording, assessment and monitoring needed</li> <li>• Physical damage</li> </ul>	<ul style="list-style-type: none"> <li>• Survey, recording, assessment and monitoring</li> <li>• Fencing and/or stock control</li> <li>• Information retrieval via field research</li> </ul>	<ul style="list-style-type: none"> <li>• Complete inventory</li> <li>• Regularly updated</li> <li>• Significant places/sites protected</li> <li>• Research information published</li> </ul>	Department-managed lands in all places, primarily Chatham and Pitt Islands
Wahi tapu, ko-iwi and vulnerable historic areas	<ul style="list-style-type: none"> <li>• Unknown localities</li> <li>• Potentially inappropriate management or visitor activity</li> </ul>	<ul style="list-style-type: none"> <li>• Iwi consultation</li> <li>• Locality and tikanga recording</li> <li>• Visitor control</li> <li>• On-site management</li> </ul>	<ul style="list-style-type: none"> <li>• Management of wahi tapu and ko-iwi respectful and appropriate</li> </ul>	Department-managed lands in all places
Historic building: 1860s cottage associated with whaling, farming and bird recovery	<ul style="list-style-type: none"> <li>• Isolation and deferred maintenance</li> </ul>	<ul style="list-style-type: none"> <li>• Prepare and implement conservation plan</li> </ul>	<ul style="list-style-type: none"> <li>• Building conserved in accordance with the conservation plan and regular maintenance carried out</li> </ul>	Pitt Island: Glory Cottage
Historic resources within other Department project areas	<ul style="list-style-type: none"> <li>• Impacts of revegetation, fencing and seabird burrowing</li> <li>• Greater frequency of visits by non-historic project staff</li> </ul>	<ul style="list-style-type: none"> <li>• Consideration of historic issues in natural values project development</li> <li>• Use of field staff to monitor and record historic sites</li> <li>• Site protection from fencing, revegetation etc.</li> </ul>	<ul style="list-style-type: none"> <li>• Inventory and protection of historic resources improved</li> </ul>	Primarily Pitt Mangere/Rangatira and other islands
Visitor information	<ul style="list-style-type: none"> <li>• Lack of information</li> <li>• Some key visitor destinations</li> </ul>	<ul style="list-style-type: none"> <li>• Identify key sites</li> <li>• Consult with iwi and local interest groups</li> <li>• Provide on-site information</li> </ul>	<ul style="list-style-type: none"> <li>• On-site historic site interpretation provided</li> </ul>	Pitt Island: Glory Cottage Chatham Island: J.M. Barker (Hapupu) National Historic Reserve
Historic area monitoring	<ul style="list-style-type: none"> <li>• Insufficient knowledge of natural and human induced changes to historic area</li> </ul>	<ul style="list-style-type: none"> <li>• Identify indicator areas e.g., kopi tree-carving areas</li> <li>• Establish monitoring programme</li> </ul>	<ul style="list-style-type: none"> <li>• Historic area change better understood</li> <li>• Improved ability to establish protection priorities</li> </ul>	Department managed land in all places



## 6.2.8 ANIMAL PESTS AND WILD ANIMALS

Managing the effects that animal pests have on fulfilling statutory obligations to adjoining landowners and indigenous biodiversity. Controlling and eradicating wild animals where necessary and practicable.

### **Statutory Framework**

#### *General*

The Department considers that an animal pest or wild animal is one that poses an existing or potential threat to indigenous ecosystem processes, habitats or species and that it is an animal requiring management. The work is given legislative effect through the Conservation Act 1987 and the Reserves Act 1977, which seek to protect natural values. These animal pests and wild animals are defined and managed under:

- Wild Animal Control Act 1977 (wild animals on land of all tenure).
- Wildlife under the Wildlife Act 1953 (control of animal pests and control of wildlife causing damage).
- Defined pests under the Biosecurity Act 1993. These may be nationally or regionally defined pests.
- Noxious fish under the Freshwater Fisheries Regulations (1983). (See 6.2.4 Freshwater Ecosystems).

#### *Biosecurity Act*

The Biosecurity Act 1993 is the principal legislation under which the control of all animal pests is undertaken on a national and regional basis. This Act replaces a raft of legislation, including the Agricultural Pests Destruction Act 1967.

The Biosecurity Act enables Government and/or the council to take a range of measures to ensure that pests are adequately controlled through the preparation of national and regional pest management strategies. The Chatham Islands Council is preparing a regional pest management strategy and the Department is involved in that process. The Department, as a Crown agency, is bound by strategies to the extent it formally agrees to be. A strategy specifies the actions that must be taken to achieve control of a pest, the management agency responsible for implementing the strategy, how the strategy will be funded, the extent to which land occupiers are required to be involved and enforcement measures to ensure compliance with these requirements. Provisions of the Agricultural Pests Destruction Act will remain in effect during a transitional period up to 30 June 1998 or before that date for a specified animal pest if a pest strategy has been prepared for that species. (This Act retained a rabbit control provision dating back to the 1880s.

#### *Wild Animal Control Act*

The Wild Animal Control Act 1977 defines wild animals (e.g., deer, possums, wallabies, unconstrained and unidentified goats and wild pigs) and requires the Department to control wild animals generally and to eradicate wild animals where necessary and practical. The focus of the Act is to 'ensure concerted action against the damaging effects of wild animals on vegetation, soils, waters and wildlife.'

#### *Deer Farming*

Deer farming requires Wild Animal Control Act approval. By Deer Farming Notice No. 4 (Gazette 1986 p.3420) under the Act, the Chathams (along with some other

offshore islands and mainland areas) is a prohibited area for deer farming. Changes to this Notice would require an application to the Minister with an EIA, and a public notification and hearing process under section 49 of the Conservation Act.

### *Animal Health*

The Ministry of Agriculture and Forests and the Animal Health Board are responsible for pest control for animal health, e.g., possum and tuberculosis. The Department liaises with the Ministry and the Animal Health Board where control for natural values and animal health overlaps, or otherwise occurs on land managed by the Department.

## **Current Situation**

### *Background*

Both animal pests and wild animals pose threats to natural values in the Chathams. It is important to differentiate between animal pests and wild animals for statutory purposes. Animal pests in this document are defined as any animal that poses an existing or potential threat to indigenous ecosystem processes, habitats or species. Wild animals are defined in the Wild Animal Control Act (see glossary). However, the basic management principles and control techniques are identical for both. These are:

- management is prioritised according to the significance of the actual or potential impacts of the animal pest/wild animal on identified natural and historic values
- control is undertaken on the basis of achievable goals with the present resources and technology
- the level of control applied must be the method that is best able to meet the natural or historic values threatened
- areas for control will be managed as discrete management units
- the Department will control wild animals where recreational hunting is insufficient to maintain natural and historic values

### *Animal Pests*

Various animal pests pose major threats to natural and historic values in the Chathams. Some of the most significant are:

- predation of parea, taiko and Chatham Island oystercatcher by rats, cats, weka and possums
- predation of invertebrates and birdlife by cats, weka and mice on Pitt Island
- impacts of cattle and sheep on forests, especially on Chatham Island's southern tableland, and on historic resources
- potential introduction of rodents and other pests to pest-free islands
- potential introduction of mustelids, wasps (neither of which have yet reached the Chathams), rabbits and other animal pests to the Chathams. Reported rabbit sightings in northern Chatham Island have occurred but their presence has yet to be confirmed.

Current animal pest management in the Chathams is dominated by the need to prevent the spread of animal pests to pest-free islands (e.g., rodents to Mangere and Rangatira), to minimise by fencing the damaging effects of cattle and sheep within protected areas, and reduce by trapping and poisoning the predation of threatened species.

TABLE 20: PRESENT AND POTENTIAL ANIMAL PESTS AND WILD ANIMALS OF RELEVANCE TO THE CHATHAM ISLANDS

	ISLAND DISTRIBUTION	STATUS	CURRENT MANAGEMENT
<b>P E S T S</b>			
Kiore	Limited distribution Chatham Island	Predator of invertebrates, reptiles and smaller birds and their eggs	Spot control as part of threatened species programmes and contingency planning to prevent introduction to other islands
Norway and ship rat	Chatham Island trapping suggests restricted to coastal habitats and human habitation	Severe predator of invertebrates, reptiles and birds	Spot control as part of threatened species programmes and contingency planning to prevent introduction to other islands
Chinchilla	Not present	Herbivore	Prevent introduction
Mice	Widespread Chatham and Pitt	Predator of invertebrates and seeds	Advocate eradication from Pitt
Hedgehogs	Chatham	Predator of invertebrates, ground-nesting birds' eggs	No control. Prevent dispersal to other islands
Rabbit spp.	Unconfirmed, possibly present on Chatham	Herbivore	Prevent introduction and encourage eradication if present
Hares	Not present	Herbivore	Prevent introduction
Mustelids – stoats, ferrets and weasels	Not present	Predator of invertebrates, lizards, birds	Prevent introduction
Cats	Widespread on Chatham and Pitt	Predator of invertebrates, rodents, birds	Spot control on main Chatham and Pitt. Advocate eradication from all of Pitt. Prevent introduction to all other islands
Cattle	Chatham (southern tablelands) and Pitt	Herbivore	Removal or eradication from all reserves, depending on stock ownership
Sheep	Chatham (southern tablelands) and Pitt	Herbivore	Removal, eradication or density control in all reserves, depending on stock ownership
Wasps	Not present	Predator of invertebrates, nestling birds. Competitor: birds	Prevent introduction. Advocate a workable quarantine strategy

TABLE 20 cont.: PRESENT AND POTENTIAL ANIMAL PESTS AND WILD ANIMALS OF RELEVANCE TO THE CHATHAM ISLANDS cont.

	ISLAND DISTRIBUTION	STATUS	CURRENT MANAGEMENT
<b>WILD ANIMALS</b>			
Possum	Widespread Chatham	Herbivore and predator: forest, shrubland, birds	Sustained control at priority sites on Chatham Prevent dispersal to other islands
Wild pigs	Chatham and Pitt	Herbivore and predator	Sustained control using hunters main Chatham Eradication southern reserves, and lower numbers elsewhere on Pitt
Goats	Very few on Chatham and Pitt	Herbivore	Eradication in all reserves
Deer spp.	Not present	Herbivore	Require statutory procedures to be met before any introduction
Wallaby spp.	Not present	Herbivore of forest and grassland	Prevent introduction

The council has some statutory pest control powers.

Mori on the Chathams, Maori in New Zealand and New Zealand settlement researchers have expressed interest in retaining and/or researching kiore populations for cultural and human settlement dispersal reasons. The Chatham Island kiore population has been identified as one unlikely to be significantly affected by predator control and hence be self-maintaining (An Approach to Island Management where Kiore occur, 1995b).

### *Wild Animals*

Currently, three wild animals pose threats to natural and historic values in the Chathams. These threats are:

- Possums on Chatham Island selectively stripping the bark from some important food source trees for parea, killing some trees and reducing habitat quality. Known to be predators of birds and their eggs in mainland New Zealand.
- Predator and herbivore effects of pigs on invertebrates, ground-nesting birds, and vegetation on both Chatham and Pitt islands.
- Pig rooting damage of historic areas.
- Potential goat spread on Chatham and Pitt Islands seriously affecting vegetation. Current management of wild animals in the Chathams is focused on possum control in selected areas, an increasing pig-control programme in the southern Pitt Island Scenic Reserve blocks, and general advocacy to prevent wild animal spread to other islands (e.g., possum to Pitt Island) or developing wild populations (e.g., goat). The Chathams are currently free of deer species (though an introduction to Chatham Island did occur in the past) and interest is being expressed in deer farming.

## **Issues**

To protect natural and historic values the present priorities for animal pest and wild animal control are demanding and difficult to meet. The demands of statutory requirements, public awareness needs and resource management, and with interrelated recreational use opportunities, mean there are several fundamental issues that must be addressed within the CMS. The Department needs to:

- assess the significance of an animal pest/wild animal once it has been identified and located
- prioritise efficient, effective and economic animal pest/wild animal control with limited resources
- identify those ecosystems and species which contribute most to indigenous biodiversity and are under the greatest threat from animal pests/wild animals
- select the most appropriate strategies and control methods for animal pest/wild animal control
- establish monitoring programmes to ensure that animal pest/wild animal control is achieving natural and historic values protection
- ensure that animal pests/wild animals are not introduced or spread either accidentally or on purpose, while not precluding properly authorised liberations that may be beneficial (e.g., gorse mite, Judas animals)
- appropriately monitor potentially severe animal pests/wild animals
- allow for recreational hunters, especially of pig, while minimising pig impact
- ensure pest control operations are completed in a safe and environmentally appropriate manner
- liaise with farmers, the council and hunters to co-ordinate control efforts and raise public awareness of the threats animal pests/wild animals pose to natural and historic values
- clearly advise on the legislative controls in response to any requests for deer farming
- determine the optimum densities of wild animals to achieve the purposes of the Wild Animal Control Act
- acknowledge both iwi and scientific interests in kiore

## **Objectives**

- To fulfil responsibilities for animal pest and wild animal control and maintain good neighbour relationships with all adjoining landholders by fulfilling boundary control responsibilities in a co-operative way.
- To systematically identify significant animal pests/wild animals on land managed by the Department, assess the risks they pose to natural and historic values and implement control where it best contributes to indigenous biodiversity, landscape and historic protection.
- To support appropriate recreational hunting in the Chathams to protect indigenous plants, reduce animal pest/wild animal densities, provide recreational opportunity and reduce management costs.

## **Implementation**

The Department will:

### *Significant Areas*

1. Recognise that all lands managed by the Department in the Chathams are significant areas for animal pest and wild animal control, with the exception of the following:
  - administrative areas (e.g., Chatham Islands Area Office, Te One)
  - lands where effective control is impractical (e.g., most marginal strips)
  - lands with predominant public access or recreation values (e.g., CI 1080 and CI 1051 – see Schedules)
  - lands identified for disposal (see 6.5.2 Statutory Land Management)
2. Identify other significant areas of land not managed by the Department (e.g., covenant areas, Chatham Island oystercatcher beaches, other freehold lands) and in those areas set priorities for animal pest and wild animal management where they are identified as a threat. Priorities are to be set on the basis of:
  - the significance of the natural and historic values identified
  - the types and level of threat to each identified value
  - the value of the management gain from the effort directed at the threat to each identified value

### *Priority Setting*

3. Prioritise animal pest and wild animal control over other indigenous biodiversity and landscape conservation priorities

### *Statutory Criteria*

4. Meet requirements of national or regional pest management strategies prepared in accordance with the Biosecurity Act (e.g., possum) where the Department agrees to be bound by that plan, and Wild Animal Control Act policy and plans.

### *Control Strategies*

5. Choose from the following methods to best use available resources to minimise the long-term management costs.
  - Eradication – single-action controls that will permanently reduce or eliminate an animal pest or wild animal and its impacts. This can be achieved by limiting the introductions of potentially harmful animal pests and wild animals; eradication; habitat manipulation and biological control.
  - Sustained Control – ongoing, regular control that reduces animal numbers and maintains them at a lower pre-determined level which protects the values under threat. This can be undertaken by the Department through sustained control or by sustained harvesting by recreational hunters.
  - Zero Density – total eradication in a particular area and ongoing control of any animals migrating into that area.
  - No solution – no management solutions exist at present for technological or research reasons.
  - Integrated Control – combination of control strategies and techniques.

### *Contingency Plans*

6. Implement the actions set out in the *Rodent Contingency Plan* (in preparation) covering the following matters:
  - acquisition of baseline information on the rodent status and fauna and flora of all islands
  - monitoring of the rodent status of protected and ecologically important islands
  - provision of rodent-proof buildings and containers for servicing island visitors
  - landing procedures for people and equipment
  - rodent bait stations at key departure points for the most vulnerable islands
  - rodent control on boats moored alongside or visiting islands
  - boat wreck contingencies
  - public liaison and involvement
  - Department reaction response to rodent invasions
  - precautionary plans for the rescue of new founder populations
  - island landowner approvals
7. Upgrade the rodent contingency plan (ibid) to an island pest contingency plan so that the Mangere and Rangatira nature reserves in particular are safeguarded from the threat of any pest invasion.

### *Liaison*

8. Liaise with individuals and groups, including adjacent landowners, seeking co-operation and assistance to achieve animal pest and wild animal control objectives and the protection of natural and historic values.
9. Co-ordinate control operations with adjoining land managers or administering authorities wherever possible, e.g., the Ministry of Agriculture and Forests, the Animal Health Board and the council where animal health and natural and historic value controls overlap.

### *Safety*

10. Train staff in the safe handling and use of poisons, traps and other control techniques and comply with all storage and other safety requirements.

### *Quarantine*

11. Develop Department quarantine practices to ensure Department freight and staff transfer from mainland New Zealand do not introduce wasps to the Chathams.

### *Advocacy*

12. Advocate through the council's resource management process to raise awareness of threats posed by animal pests and wild animals to indigenous ecosystems and historic resources, and to seek prohibited entry for additional pest species (e.g., rabbits).

Waitangi wharf – a potential introduction point for pests. Rodent bait stations are maintained here.



13. Advocate for suitable poison application rules in the council's resource management document.
14. Encourage the council to prepare a regional pest strategy under the Biosecurity Act to ensure co-ordinated and effective control of pests in the Chathams.
15. Participate in education programmes to raise awareness of animal pests and wild animal threats. In particular:
  - the deliberate spread of animal pests
  - developing an awareness of the threats posed by animal pests on indigenous biodiversity and historic resources and the need for the control techniques required
16. Advocate to and work with land owners to prevent the establishment of wild goat populations

#### *Research and Monitoring*

17. Support and encourage national research into the following aspects of animal pest and wild animal control:
  - improved biological control for key species including possum, mustelids and wasps
  - improved control techniques for key predators including cat, rat species and wasps
  - the economics of animal pest and wild animal control
18. Undertake operational monitoring of all animal pest/wild animal control operations, including:
  - pre-monitoring of natural condition and animal densities
  - post-operation density performance monitoring to determine project efficiency
  - various post-operation monitoring of natural and historic resources to determine improvements in their quality

#### *Kiore*

19. Maintain records of kiore deaths in predator-control programmes on Chatham Island
20. Work with iwi to collect, if needed, any kiore caught in predator-control programmes, for customary use or research.
21. Aim to prevent kiore (along with the other rat species) from spreading from Chatham Island to other islands of the group.

#### *Recreational Hunting*

22. Control by recreational hunters of animal pests and wild animals such as cattle, pigs and sheep in most areas unless monitoring shows this to be ineffective.
23. Allow for recreational hunting by permit, as required by the legislation, on appropriate land managed by the Department. Access for hunting may be limited in areas at specific times of the year because of threatened species programmes. This limitation on access will particularly apply to pig hunters with dogs in ground-nesting bird areas.



### *Wild Animal Control*

24. Monitor the impacts of wild animals on vegetation, soils, water, wildlife and historic resources in the Chathams.
25. Determine priority areas for wild animal control and relevant wild animal density thresholds based on their impacts on native vegetation and historic resources and the significance to these.
26. Process any application for deer farming in accordance with the provisions of the Wild Animal Control Act.
27. Investigate the feasibility of total eradication of possum from Chatham Island and action if resources and technology permit and community support is obtained.

### *Rabbits*

28. Co-ordinate with the council and landowners to determine any rabbit presence.
29. Strongly advocate to the council and landowners and assist the early and total eradication of any establishing rabbit population, and undertake eradication on land managed by the Department.

## **Priorities**

### *Primary*

Any ongoing statutory control programmes will continue to have the highest priority for control resources – these are the commitments the Department must comply with under the Biosecurity Act, the Wild Animal Control Act and the noxious fish provisions of the Freshwater Fisheries Regulations.

### *Secondary*

The second priority is the protection of natural and historic resources in accordance with the criteria established in Implementations 1 and 2.

### *Priority sites and species*

It is expected that most of the existing programmes will be consistent with the above priorities and will continue to consume a significant portion of available resources, at least for the next few years. Table 21 summarises these priorities, the results sought and the places in which they are to be implemented.

## **Limitations**

Tasks that may not be undertaken or completed include:

- cat or rat control on Chatham Island, except in significant areas
- eradication of mice on Pitt may be feasible but at present is neither approved by the Pitt community nor costed
- eradication of possum on Chatham Island, unless increased resources are available

Nevertheless it is hoped that others will contribute to research and management initiatives in some of these areas over the term of the CMS.

TABLE 21: KEY ANIMAL PESTS AND WILD ANIMALS PRIORITIES

THEME	ISSUES	METHODS	RESULTS SOUGHT	PLACE
Statutory control programmes	<ul style="list-style-type: none"> <li>Legislative requirement on Department</li> </ul>	<ul style="list-style-type: none"> <li>Control or eradicate pests/wild animals</li> </ul>	<ul style="list-style-type: none"> <li>Legislative requirements met</li> </ul>	All places
Contingency plans	<ul style="list-style-type: none"> <li>Preventing spread of rodents and other pests to significant habitat areas</li> </ul>	<ul style="list-style-type: none"> <li>Implement draft rodent contingency plan</li> <li>Upgrade plan to an island pest contingency plan and implement it</li> </ul>	<ul style="list-style-type: none"> <li>Offshore islands free of further animal pest introductions</li> </ul>	Mangere/Rangatira in particular, but also Pitt and other islands
Community liaison and advocacy	<ul style="list-style-type: none"> <li>Build on community concerns to reduce and prevent further Chathams pest problems</li> </ul>	<ul style="list-style-type: none"> <li>Community liaison, education and control operation co-ordination</li> <li>RMA advocacy</li> <li>Encourage a regional pest strategy</li> <li>Determine rabbit presence and seek eradication if found</li> </ul>	<ul style="list-style-type: none"> <li>Existing animal pest and wild animal numbers controlled</li> <li>Systems in place to avoid/prevent new animal pest introductions</li> <li>Common conservation and community concerns realised</li> </ul>	All places

## 6.2.9 PLANT PESTS AND EXOTIC PLANTS

### Introduction

The Department's responsibilities involve managing the effects that plant pests and exotic plants have on adjoining landowners and indigenous biodiversity.

### Current Situation

Many plant pests established on mainland New Zealand that threaten agricultural production and natural values have not yet been introduced to the Chatham Islands e.g., nassella tussock, Spanish heath, spartina and a range of aquatic weeds.

Other common plant pests such as gorse have been slow to establish and spread in the Chathams environment following their introduction. Even so, over the last decade some of these plant pests appear to have increased their ability to set viable seed and are now increasing their distribution more rapidly. The reasons for this increase in seeding viability are unclear but are thought to be linked to an increase in the numbers of pollinating insects such as honey bees during the same period. A number of plant pests that are a serious threat in New Zealand have, as yet, only been recorded at site localities on the Chathams e.g., old man's beard and broom. Other species already pose a serious potential threat on the Chathams but are not present on mainland New Zealand e.g., Chilean guava. The Chathams has a unique opportunity to eradicate these weeds before they build to the unmanageable levels experienced in mainland New Zealand. It is too late to consider eradication once a species has established a wide distribution and an extensive seed bank. Gorse is a good example of a plant pest approaching or already beyond this level.

The potential threat of all the above plant pests to both natural and economic values is extremely large and the resources required to manage this threat are likely to substantially increase if established plant pests spread further or new plant pest species are introduced. Over 200 different introduced plant species have already been recorded in the Chatham Islands. Only by being aware of the potential threat these species pose and acting quickly to eradicate problem species before they become widespread will the overwhelming plant pest problems of mainland New Zealand be avoided.

The Department of Conservation has two types of responsibility for controlling plant pests:

- protecting natural values from threats posed by plant pests; and
- controlling any noxious weeds on lands managed by the Department where they pose a threat to neighbours.

Historically, plant pests on land managed by the Department have been sparsely distributed and targeted for control without the need to establish priorities for action. The aim of these operations has been to prevent establishment of larger infestations and remove seed sources to prevent further spread. In the absence of a co-ordinated control programme across the whole of the Chathams, the number and scale of plant pest infestations will inevitably increase, necessitating a more systematic approach. This will focus control on areas where the natural values under threat are highest. At present, the Department has no large-scale plant pest control operations in place to protect threatened natural values and all sites of recognised plant pests are treated.

Monitoring of the effectiveness and performance of plant pest control operations has historically been poor. As control efforts continue this will need to be improved to evaluate these efforts in two ways. Firstly, operational monitoring assesses the effectiveness of the control method in removing the target plant pest. Secondly, performance monitoring assesses how well the control operation is meeting the long-term objectives for the control sites.

### **Statutory Framework**

The Department considers any plant that poses an existing or potential threat to indigenous ecosystem processes, habitats or species to be a pest requiring management. This work is given legislative effect through the Conservation Act 1987, though more specifically through the Reserves Act 1977 which requires that 'exotic flora and fauna shall, as far as possible, be exterminated' in certain types of reserve. Exotic plants can be acceptable in some cases (e.g., where of historic value) but would still need management if they posed a threat.

The presence of exotic plants is inappropriate in nature reserves, scientific reserves, historic reserves, most scenic reserves and most conservation areas. Section 53(3)(g) of the Conservation Act provides for control of any introduced species causing damage to any indigenous species or habitat.

Under Section 75 of the Reserves Act, however, recreation, local purpose, and unclassified reserves can be afforested with the consent of the Minister, subject to restrictions to protect natural and historic values.

The Biosecurity Act 1993 is the other principal piece of legislation under which the control of all animal and plant pests is undertaken on a national and regional basis. This Act replaces a raft of legislation, including the Noxious Plant Act 1978, which empowered the Ministry of Agriculture and Fisheries and regional authorities to require land occupiers to eliminate or contain plants declared to be noxious weeds.

The Biosecurity Act enables the Government and/or the council to take a range of measures to ensure pests are adequately controlled, through the preparation of national and regional plant pest management strategies. A strategy specifies the actions that must be taken to achieve control of a pest; the management agency responsible for implementing the strategy, how the strategy will be funded, the extent to which land occupiers are required to be involved and specifies enforcement measures to ensure compliance with these requirements. Provisions of the Noxious Plants Act remain in effect during a transitional period.

### **Issues**

There are many fundamental issues that must be addressed for plant pest control in this CMS. Plant pest control should have regard to the relevant legislation, past and future plant pest priorities, and neighbour and public concerns. If the basic issues are not addressed, the objectives and implementation statements to follow will not provide adequate direction in plant pest control effort.

The fundamental issues for the Department are:

- Liaison with the council, adjoining landowners and the community to co-ordinate control efforts and raise public awareness of the threats plant pests pose to natural and economic values.
- Assessing the significance of plant pest threat once the plant pest species has been identified and located.
- Setting priorities for plant pest control to protect indigenous ecosystems and species of greatest conservation value.
- Selecting the most appropriate strategies and control methods for plant pest control.
- Establishing monitoring programmes to ensure that plant pest control is achieving long-term conservation objectives and goals.
- Ensuring plant pest control operations are safe.

### **Objectives**

- To liaise with the Chatham Islands Council and the community to develop an awareness of the threat that plant pests pose to natural and historic values and encourage a unified approach to plant pest control.
- To systematically identify significant plant pests on land managed by the Department, assess the risks they pose to natural and historic values, and implement control where it best contributes to indigenous biodiversity, landscape and historic resource protection.
- To maintain good neighbour relationships with all adjoining landholders by, where possible, undertaking boundary control in a co-operative way.
- To enable the planting of exotic species on land managed by the Department in circumstances where there will be conservation benefits, and such plantings will not adversely affect indigenous natural or historic values.

## **Implementation**

The Department will:

### *Plant Pest Strategy*

1. Statutory obligations
  - i) Discharge any current obligations to control class A, class B target, and class B widespread noxious plants under the Noxious Plants Act 1978.
  - ii) Discharge agreed obligations arising out of National and Regional Pest Management Strategies established under the Biosecurity Act.
2. Prepare a control plan for plant pests threatening conservation values within the Chatham Islands, for actioning by the Department on land that it manages, and for actioning in co-ordination with land owners on private lands.
3. Identify within the control plan the significant areas of land managed by the Department in the Chathams and set priorities for plant pest management in those areas where plant pests are identified as a threat.  
(6.2.8 Animal Pests and Wild Animals, Implementations 1 and 2 provide the basis for assessing significant area priorities.)

### *Control Strategies*

4. Choose control strategies to best use available resources with the view to minimising the long-term management costs.

*Prevention:* preventing a plant pest species establishing in an area

*Eradication:* a reduction in occurrence of a plant pest to a level at which it no longer requires control

*Initial control:* a new control effort that will result in a long-term reduction in plant pest occurrence over a specified time-frame

*Maintenance:* a follow-up control effort to remove regenerating plants, usually after initial control or eradication

*Containment control:* resulting in containment of a plant pest problem, often to achieve statutory or good neighbour requirements

*Ongoing control:* control effort (excluding boundary clearances) that requires ongoing commitment of resources and/or where there is little likelihood of achieving a long-term reduction in occurrence given current technology.

When further assessing the strategy for control the following need to be taken account of:

- feasibility of eradication
- ability to control seed source
- surrounding land management
- history of control
- cost

### *Control method*

5. Assess the appropriateness of control methods for all operations in the following priority order:
  - a) successional displacement
  - b) biological control
  - c) physical control
  - d) chemical control

6. Conform to council regional rules for herbicide application and meet all other statutory requirements, as necessary.
7. Permit exotic plantings on conservation areas and s19(1)(b) scenic, recreation, local purpose and unclassified reserves where the following criteria are met:
  - significant recreational, scientific, landscape or cultural benefits can be achieved
  - no adverse effects on indigenous biodiversity or historic resources will occur
  - indigenous plantings have been considered

#### *Liaison*

8. Manage Department land and encourage other landowners to manage land in such a manner that the risk of introducing or allowing the spread of plant pests is reduced.
9. Consult with adjoining landowners, iwi and interested public where conflicts of interest are likely to arise as a result of plant pest control operations
10. Co-ordinate control operations with adjoining land managers or administering authorities wherever possible.

#### *Safety*

11. Train staff in the safe handling and use of chemical sprays. All chemicals will be required to be applied and stored in accordance with nationally accepted codes of practice and safety standards and any council rules or by-laws.

#### *Advocacy*

12. Advocate through Resource Management Act processes to raise awareness of threats posed by plant pests to indigenous ecosystems and encourage council to specifically include a prohibited plants list.
13. Advocate for suitable herbicide application rules in the resource management document that foster protection of indigenous vegetation.
14. Encourage the council to prepare a regional pest strategy under the Biosecurity Act to ensure co-ordinated and effective control of ecological plant pests on the Chathams.
15. Participate in community educational and plant pest control programmes to raise awareness of plant pest reporting and of plant pest control threats, in particular to:
  - avoid the introduction or spread of environmentally damaging plant pests
  - be aware of the passive movement of plant pests on clothing, cars, boats and stock
  - develop awareness of the threat plant pests pose to indigenous biodiversity, particularly ornamental plants with a high plant pest potential
16. Encourage land owners to undertake plant pest control where significant indigenous ecosystems, habitats, species and historic resources are under greatest threat from plant pests.

#### *Research*

17. Encourage and support research into the following aspects of weed control:

- improved biological or chemical control for species, such as gorse and Chilean guava, that threaten the shrubland and rushland plant communities
- the economics of plant pest control, especially to the whole Chathams community

### *Monitoring*

18. Undertake operational monitoring of all plant pest control options at treatment time.
19. Implement performance monitoring on all plant pest control operations.

## **Priorities**

### *Primary*

Discharge any current obligations to control noxious plants under the Noxious Plants Act, and any obligations in Regional and National Pest Management Strategies (established under the Biosecurity Act) that are agreed to by the Department. Prepare a control plan for plant pests that threaten conservation values.

### *Secondary*

The second priority is the protection of indigenous biodiversity, landscapes and historic resources on land managed by the Department. Criteria for this are set out in Implementation 3.

The Department will also action, or advocate for, plant pest control for the protection of significant natural values on freehold land. Criteria for this are also set out in Implementation 3. This will seek to enhance indigenous biodiversity on the Chathams.

TABLE 22: KEY PLANT PESTS AND EXOTIC PLANTS PRIORITIES

THEME	ISSUES	METHODS	RESULTS SOUGHT	PLACE
Statutory control programmes	<ul style="list-style-type: none"> <li>• Agreed to obligations in pest management strategies (Biosecurity Act)</li> </ul>	<ul style="list-style-type: none"> <li>• Control or eradicate target plant pests</li> </ul>	<ul style="list-style-type: none"> <li>• Legislative requirement met</li> </ul>	Chatham, Pitt
Natural and historic resource protection	<ul style="list-style-type: none"> <li>• Restricting the further spread of existing plant pests</li> <li>• Eradication of all new occurrences of recognised plant pests</li> </ul>	<ul style="list-style-type: none"> <li>• Control or eradicate</li> <li>• Prepare and action a plant pest control plan</li> </ul>	<ul style="list-style-type: none"> <li>• Integrity of indigenous ecosystems, habitats and species from the impacts of introduced plant pests</li> </ul>	Significant Department lands in all places and other lands by agreement
Community liaison and advocacy	<ul style="list-style-type: none"> <li>• Build on community concern to reduce and prevent further Chathams plant pest problems</li> </ul>	<ul style="list-style-type: none"> <li>• Community liaison, education and control operation co-ordination</li> <li>• RMA advocacy</li> <li>• Control plan promotion</li> <li>• Encourage a regional pest strategy for ecological plant pests</li> </ul>	<ul style="list-style-type: none"> <li>• Existing plant pest numbers controlled</li> <li>• Systems in place to avoid/prevent new plant pests</li> <li>• Common conservation and community concerns realised</li> </ul>	All places

## 6.2.10 FIRE

### Introduction

Wildfires have the potential to damage or destroy many features of the Chathams conservation heritage. The Minister of Conservation is the Fire Authority for all state areas. 'State area' is defined by the Forest and Rural Fires Act 1977 and includes all land managed by the Department. For fire control purposes it also includes any land within one kilometre of its boundaries. In these areas the prevention of uncontrolled fires, or minimising their impact if they are already established, is the Department's main concern. This concern extends to the control of camp-fires.

### Current Situation

Many ecosystems and historic places are at risk from fire, particularly those which contain easily combustible fire fuels such as grasslands, wetlands, shrublands, sand dune and forest communities, and buildings. An assessment of the danger of fire to these situations is made regularly using a nationally standardised New Zealand fire danger rating system. This information is used to advise the public of fire danger and, when necessary, regulate the lighting of fires.

Practices currently undertaken by the Department to prevent or control fire include:

- Maintaining liaison with adjoining landowners.
- Operating an *all year* restricted fire season, which requires that any persons within the one-kilometre fire safety margin of a state area who wish to light a fire obtain a fire permit. This requirement prevents the Department's fire-fighters from having to respond to wildfire reports that are, in fact, managed fires.
- When the fire danger reaches 'very high' or 'extreme', a prohibited fire season, which prevents the lighting of *any* fires on state areas or within the one-kilometre fire safety margin, may be declared. This step is often undertaken co-operatively with other fire authorities as a regional fire prohibition.
- Training staff in fire-fighting skills and maintaining fire-fighting equipment on the Chatham Islands.

The Chathams have the particular fire hazard situations of extensive peatlands, limited Department lands with almost all having high ecological values, the isolated Chatham Island southern tableland rush/scrub/forest areas, extensive high ecological value covenant/kawenata areas and offshore islands, and currently no on-island helicopter service for fire-fighting. In extreme situations the Department can call in long-distance helicopter support from New Zealand, but this is expensive, has a minimum eight-hour time delay, and is not always available.

Some Chatham Island landowners maintain firebreaks and this technique could be used more widely. Community concern has been expressed about the possibility of wildfires starting from visitor camp-fires as visitor numbers increase and should camping occur on Department land.

The Department's policy on camp-fires is contained within the *Fire Control Operations Instructions and Guidelines* (1994b). This states that, like all other fires, camp-fires are banned during any prohibited fire season for *all* state areas. During the restricted fire season camp-fires are restricted, discouraged or prohibited, depending on their type (i.e., gas cooker, barbecue or camp-fire) or location (i.e., high conservation value area, other state area, permanent fireplace).



## **Statutory Framework**

The Forest and Rural Fires Act 1977, Rural Fire Management Code of Practice, Fire Service Act 1975 and the Forest and Rural Fires Regulations 1979 specify rural fire-fighting responsibilities and criteria for assigning these to administering organisations. The Minister of Conservation is the Fire Authority for all state areas and is responsible for the safeguarding of life and property by the prevention, detection, control, restriction, suppression and extinction of fires on state areas and within a one-kilometre fire safety margin around each state area. The Chatham Islands Council is the other fire authority operating in the Chathams under the same legislation. This authority is responsible for fire prevention and suppression of fires on land other than state areas and the gazetted Fire Service District at Waitangi.

## **Issues**

The important issues for the Department are:

- maintaining an effective fire prevention and control capability
- acknowledging the widespread occurrence of threatened species and ecosystems outside state areas under the Department's fire control
- remoteness and difficulties of access to fire hazard areas
- limited Chathams-based fire-fighting staff numbers
- dealing with potential camp-fire threats

## **Objectives**

- To prevent or minimise fire damage to all state areas in the Chatham Islands.
- To provide an effective rural fire-fighting force in the Chatham Islands by undertaking its rural fire-control responsibilities in a co-operative way with the Chatham Islands Council and the New Zealand Fire Service.
- To meet all legislative requirements for rural fire suppression.
- To consider the use of fire as a management tool to maintain or enhance a particular natural community.
- To assist in any nationally co-ordinated research programme or projects implemented by the National Rural Fire Authority.
- To offer fire prevention and control support for covenant/kawenata areas and fire hazard islands.

## **Implementation**

The Department will:

1. Give absolute work priority (with the exception of safety to human life) to the control and suppression of wildfires on state areas.
2. Undertake annual training of all staff to National Rural Fire Authority and Department standards in fire equipment use, fire-fighting techniques and fire support operations. Joint training with the council and the New Zealand Fire Service will also be encouraged.
3. Maintain an equipped fire depot at Te One field centre with fire equipment in a state of immediate readiness.
4. Maintain daily Fire Weather Index (FWI) readings. These will show fire danger levels and the fluctuations throughout the fire season.

5. Declare a prohibited fire season or impose appropriate fire control measures when significant fire danger exists. The FWI readings will form the basis of determining the level of control required.
6. Provide appropriate fire danger publicity to the public during the fire season. The Department will work co-operatively with the council and New Zealand Fire Service with publicity.
7. Require fire permits for all fires requested to be lit within the fire safety margin of any state area and also all fires lit on state areas.
8. Provide no fireplaces and prohibit campfires at any time on land managed by the Department and encourage the alternative use by campers or picnickers of gas cookers, or barbecues where appropriate.
9. Discourage the lighting of campfires in non-permanent fireplaces and encourage the use of gas cookers or permanent fireplaces as alternatives within state areas adjoining land managed by the Department, outside of a prohibited fire season.
10. Co-operate with the council and the New Zealand Fire Service to ensure mutual safety measures are in place for the protection of each authority's fire control areas.
11. Maintain a Chathams fire plan that is updated annually.
12. Consider the use of fire as a management tool for land managed by the Department.
13. Take every opportunity to support and become involved in fire research where this will be of benefit to the Department as a fire authority to better perform its responsibilities.
14. Cut and maintain firebreaks or support firebreak use where they would be effective in preventing or reducing fire spread.
15. Offer fire prevention and control expertise to assist the owners of those offshore islands and covenant/kawenata areas where fire is a threat.
16. Bring in additional staff, equipment and helicopter support from New Zealand as required to fight fires.



Landowner firebreak adjoining  
Preece Covenant, Owenga.

## Priorities

### *Primary*

The statutory requirements under the Forest and Rural Fires Act for the suppression of fires on state areas will be the first priority for action.

### *Secondary*

The secondary priorities are:

- camp-fire control and prohibition
- assistance to offshore island and covenant/kawanata owners
- use of fire as a management tool
- fire research

TABLE 23: KEY FIRE PRIORITIES

THEME	ISSUES	METHODS	RESULTS SOUGHT	PLACE
Fire suppression in state areas	<ul style="list-style-type: none"> <li>• Fire response capability</li> </ul>	<ul style="list-style-type: none"> <li>• Staff training</li> <li>• Fire planning</li> <li>• Fire breaks</li> <li>• Fire permit adherence</li> <li>• Camp-fire control and prohibition</li> </ul>	<ul style="list-style-type: none"> <li>• Fires are prevented or controlled by effective and efficient Department response</li> </ul>	All, where applicable
Fire prevention and control on offshore islands and in covenant/kawanata areas	<ul style="list-style-type: none"> <li>• Protection of threatened species on land not managed by the Department</li> </ul>	<ul style="list-style-type: none"> <li>• Assistance to landowners</li> <li>• Agreement with the council</li> <li>• Council fire control</li> </ul>	<ul style="list-style-type: none"> <li>• Fires are prevented or controlled by effective and efficient Department response</li> </ul>	Other islands Pitt Island Chatham Island



## 6.3 Visitor Services

### Introduction

The Department's role includes providing settings and access to outdoor recreation opportunities; facilities for visitor use on land managed by the Department; managing the impacts of visitors on natural and historic resources and the promotion of public safety; providing information and interpretation to the public; managing potential aircraft landing; and regular or one-off concessions on land managed by the Department.

### Current Situation

#### *Chatham Islander Recreation*

For Chatham Islanders, recreation focuses on food-gathering, hunting, short walks, family camping, and community social and sporting events. Locations for these activities are varied, widespread and not usually on lands managed by the Department. The key community and sporting event recreation reserves are managed by the Chatham Islands Council and the Chatham Islands Gun Club. Many private lands are used for recreation or for access to recreation areas (e.g., for diving and hunting), under informal arrangements with the landowners.

#### *Visitors*

Currently, approximately 750 visitors per year come to the Chathams with a small number of these visiting Pitt Island. The number of visitors to the Chathams is increasing, especially as travel costs become more comparable with other destinations. Aside from islanders' family and friends, other visitors are generally with organised commercial nature tour groups, conservation projects or, increasingly, independent travellers. For New Zealanders and overseas visitors interested in natural and human history, the Chathams have a fascination as outlying islands with many endemic and threatened species, distinctive land and seascapes, and an intriguing history of human occupation and settlement. In this respect, the recreation opportunities are nationally significant.

#### *Access*

Physical access to land managed by the Department on the Chathams is variable.

Legal access is always possible, though it may involve difficult terrain, and direct physical access may involve vehicle or foot tracks over private land or along unformed legal roads. The only vehicle transport on the island is provided privately or by rental vehicle or minibus tours. Access to Pitt Island is either by small plane or boat from Chatham. These are not regular services and run subject to demand and the weather. Access to Mangere and Rangatira nature reserve islands, when allowed, and to all other islands, is by fishing boat. Legal public access to and along the coastline, lakes and rivers is considerably less

Coastal basalt columns – a visitor attraction requiring landowner approval for access.



on the Chathams compared with mainland New Zealand. This probably reflects the lack of original Crown purchase of the islands, hence the lack of opportunity to implement Queen's Chain provisions upon Crown survey and land sale. Unless visitors have commercial aims, however (e.g., for inshore fishing), there is general landowner acceptance of visitor access to key natural attractions, providing landowner approvals are sought and subject to the normal rules regarding behaviour, guns, dogs etc. There are areas on lands managed by the Department where public access or activities do need to be controlled. Camping in wahi tapu or ko-iwi areas on coastal marginal strips is the potential activity most in need of control. Another control reason may be to avoid disturbance of threatened species. At present, legal access within all land managed by the Department is unrestricted, except where permits are required for access to nature reserves (Tuku, Mangere, Rangatira). The most direct access to many reserves involves crossing private land for which landowner approval must be sought. While there is legal access to many reserves, this access is not always practical, and landowner approval must still be sought. Permits to visit Tuku have been granted, but they have been declined for Mangere and Rangatira, except visits for management and research purposes. In declining Mangere and Rangatira permits, the Department has recognised the high ecological value of these nature reserves, their function as last refuges for threatened species, the danger of pest or predator introductions or other physical degradation, and the difficulty of monitoring and overcoming any adverse effects. Concurrent to declining Mangere/Rangatira permits, the Department is promoting the development of similar visitor opportunities (e.g., by species re-establishment) on a predator-free Pitt Island, or part thereof.

The Department seeks to provide or enhance public walking access to most lands it manages. Elsewhere, the Department has an advocacy role, particularly to encourage public access to rivers, lakes and the coastline. Public information about access is a necessary and effective management tool. It informs people about where they can or cannot go and advises if any restrictions apply (e.g., permits for nature reserves).

Walkways are a formalised way in which people can gain access across private or other public land for recreation. Survey and gazettal are expensive but essential requirements to register this type of access against a title of land.

#### *Chatham Islands Visitor Promotion Board*

A Chatham Islands Visitor Promotion Board works to actively develop the visitor industry. A report (R. Lewis and Associates Limited, 1994) for the board suggests brochure and public relations development, accommodation, and marketing of adventure activities, some of which involve lands and resources managed by the Department.

The report highlights land-based visitor opportunities along with the scope for Chathams-based tour boat trips. To this must be added the seasonal, variable-sized, New Zealand or overseas-based tour boats and cruise ships.

Many islanders are uneasy about visitors camping at basic facility sites and moving independently around Chatham Island (e.g., trampers/mountain bikers camping on reserves and conservation areas). Unlike mainland New Zealand, this activity is not one that islanders in general are familiar with and there is an anticipation of management problems (e.g., trespass, fire, water pollution, litter, bike impact). Consequently, the Board's report focuses on privately managed walking tracks with overnight homestay or private hut accommodation along an initial northern coastline route and potentially a later southern coastline route. Both these routes would be spectacular and in part would involve reserves managed by the Department.



Roadside entrance and access to Nikau Bush Scenic Reserve.

### *Facilities*

The only visitor facilities on land managed by the Department include tracks to and/or within the J.M. Barker (Hapupu), Nikau Bush, Henga, and Thomas Mohi Tuuta (Rangaika) reserves. Signs are provided to identify most reserves and inform people of any access and restrictions. Overall, the use of conservation lands and resources by islanders and visitors is low.

There is potential for providing basic facility camp-sites (e.g., those with toilets and water supply) within some Department-managed

lands, to cater for the lower budget and/or more independent visitors. Attention to visitor impact codes and reserve and conservation area access and boundaries would be necessary. There is a privately owned backpackers' campground at Owenga, a 'backpackers' hostel, motel and hotel accommodation at Waitangi. The Chatham Lodge is situated beside Henga Scenic Reserve. Homestays are offered elsewhere.

A nationwide system has been developed to standardise the appearance of all the Department's signs. Chatham signs will need to be replaced in accordance with this system.

### *Visitor Information and Interpretation*

There has been very little provision of information for the public on the Chathams to date. Growing numbers of visitors make the provision of information increasingly important. Interpretation aims to stimulate interest, satisfy curiosity and provide insights into the natural and historic heritage that the Department manages. Interpretative techniques include visitor programmes, displays at visitor venues, brochures and outdoor signs. There is a possibility of the Chatham community setting up a visitor centre, as discussed by the Chatham Island Visitor Promotion Board. Consistent with its national programme of only providing visitor/interpretation centres in high visitor-number localities where the Department has extensive land management roles (e.g., national parks), and of encouraging community initiatives for centres, the Department is not intending to provide a visitor/interpretation centre on the Chathams. It could offer support to a community-initiated project. However, more could be done to provide information by using existing outlets. Key areas to target are the airport, the council office, accommodation places, the Area Office reception and tour operators. In conjunction with identifying outlets for information there is a need to provide more material. Alerting visitors to the impacts they may make is important. The publication of *Chatham Islands; Heritage and Conservation* (1996) filled a gap but there is also a need for some basic pamphlets on recreation opportunities, conservation highlights and visitor impacts.

On-site interpretive panels can enhance a visitor's experience by providing stories, facts, anecdotes and explanations about an area's human and natural features.

Major heritage themes identified for the Chathams are:

- the evolution and survival of species in an isolated environment
- settlement history, particularly of Moriori

### *Nature Tourism*

Endangered species, spectacular recovery stories, large rodent-free islands, large seabird breeding colonies and a position on the Antarctic/subantarctic/Chathams cruise-ship route, all combine to make the Chathams a place of significant attraction to the rapidly growing nature tourism industry.

There is a natural tension between allowing visits to land managed by the Department and seeking to protect natural and historic resources.

In particular, decisions on visits to Mangere and Rangatira must be based on their likely or potential environmental effects. Any criteria developed must apply equally to concessionaires, management and non-commercial visits to the islands.

Visitor interest in the Chathams' plants and animals, especially those of the island nature reserves can, in some cases, be catered for or enhanced by creating new populations of species in locations where visitors will not threaten their survival or jeopardise their habitats. Founding new accessible populations also ensures that single remnant populations or last surviving groups of species are spared potential or actual impacts of human contact. It also increases numbers of populations.

### *Commercial Recreation and Concessions*

Nationally, commercial recreation on land managed by the Department includes a broad range of outdoor recreation businesses from relatively passive sightseeing trips to active guided hunting and tramping. The industry is dynamic, making it difficult to predict new proposals arising over the term of this CMS.

Currently in the Chathams there are visitor service operators providing guided tours, natural and historic resource interpretation, and hunting/fishing opportunities. In recent years the Chathams have also been an occasional destination for small cruise ships, in association with subantarctic tours. Some visitor sites used are on land managed by the Department.

Commercial recreation provides opportunities for people to participate in activities they may not normally do themselves (e.g., scenic flights, guided nature tours). While this activity produces substantial personal and commercial benefits, the capacity of the natural resource to cope with increasing visitors will always be a limiting factor. Commercial recreation, like any other form of recreation, has the potential to adversely modify natural resources, and to negatively impact on other visitors' experiences.

Commercial activities on land managed by the Department require concessions. A 1996 amendment to the Conservation Act established a new and thorough process for concession applications, processing and management (see 6.4.4 Concessions General).

### *Visitor Impacts and Safety*

The present amount and types of recreational use appears to be within the capacity of the few facilities provided by the Department. Projected increases in visitors, however, may require future management action.

Most lands managed by the Department are of such a nature (e.g., fenced, well-vegetated) that impacts from off-road vehicles are minimal, although potentially localised impact could occur.

A New Zealand Environmental Care Code (n.d.) and a New Zealand Water Care Code (1995) (see Appendix 3) have been prepared to encourage visitors to behave responsibly in the outdoors. Impacts from visitors can be kept to acceptable levels if the codes are followed.

While the New Zealand police are responsible for land and sea search and rescue,



the Chathams is such that the community (including the Department) would assist should operations involve land managed by the Department.

Horses are used by islanders and visitors in some areas. As well as providing a special recreational experience (apart from stock management), horses can cause impacts, mainly through hooves, weed seeds in dung (especially on areas relatively free of introduced weeds), and disturbance of ground-nesting birds (e.g., the Chatham Island oystercatcher).

### *Dogs*

While the Dog Control Act 1996 provides extensive powers for dog control, the Minister of Conservation may also, under the Conservation Act 1987, declare areas of land managed by the Department to be either a 'controlled dog area' or an 'open dog area'. Permits will be required to take dogs into 'controlled dog areas' but not for 'open dog areas'. Both areas can have varying seasonal controls. Identification of these areas will be determined by the vulnerability of fauna to dogs and potential conflict with other uses. Exceptions will apply where specific management activity requires the use of dogs and is provided for in any management plan. Permits will not be required for seeing-eye dogs, search and rescue dogs, Police and Customs Department dogs, or dogs used by the Department in species management programmes. Certain areas are not able to be declared 'open dog areas'. These include national parks, wilderness areas, ecological areas, scenic or scientific reserves, wildlife refuges, sanctuaries and management reserves.

Areas proposed to become 'open dog areas' or 'controlled dog areas' must be identified within a discussion document that is publicly notified and submissions invited. Following this consultation process and after taking public submissions into account, a number of areas will be submitted for gazetting as 'open dog' or 'controlled dog' areas.

Once the area is gazetted, the Department has powers to seize or destroy any dogs not under proper control within any open or controlled dog area. The provisions of the Dog Control Act still apply outside these areas.

### *Aircraft*

Currently there is no demand, and little practical opportunity, for fixed-wing aircraft to make landings on land managed by the Department. In the past though, helicopters have been present on the Chathams. They are a possibility for the future and approval could be sought for visitor services onto land managed by the Department. This would require concession approval.

Aircraft, by themselves, cause effects on the ground (runways and helipads, and disturbance to wildlife on take-off and landing), and in the air (especially in quiet, natural areas). Allowing aircraft to use land managed by the Department would require recognition that some level of impact occurs to natural values and to the experience of visitors – this may be positive or negative.

A more likely possibility than landing on Department land is landings nearby to ease access, or overflying to gain views of key natural areas.

## **Statutory Framework**

Section 6(e) of the Conservation Act enables the Department to foster compatible recreation including land, water and air-based recreation, where it is consistent with conservation. The Conservation and Reserves Acts provide for recreation on land managed by the Department. The Walkways Act provides walking opportunities over private or leasehold land in accordance with formal agreements between the

Minister and landowners. On land managed by the Department, the Department has a direct management role and off this land, an advocacy role.

The Reserves and Conservation Acts allow the Department to provide structures (buildings, signs, bridges and tracks) for visitors.

The Resource Management Act 1991, Building Act 1991, Occupiers Liability Act 1962 and Occupational Safety and Health Act 1992 provide the framework for the council and the Department to set environmental, building, safety and health standards for these facilities.

The Conservation Act 1987, since its 1996 amendment, provides for tighter controls on dogs and increased responsibility on owners. The Conservation and Reserves Acts empower the Department to take necessary measures to provide for public safety.

The Department is required to provide adequate facilities for rubbish removal under the provisions of the Litter Act.

Section 6(d) of the Conservation Act enables the Department to prepare, provide, disseminate, promote and publicise educational and promotional material relating to conservation.

The Department can manage only some of the impacts that result from aircraft activities where they occur on land it manages.

Aircraft overflying is managed by the Civil Aviation Authority, and it is this aspect of aircraft use that can result in adverse impacts, especially over seabird colonies. The council can control aspects of aircraft use by permitting air and heliports in land use rules, and by controlling the effect of noise from air and heliports under the Resource Management Act.

All commercial aircraft operators on land managed by the Department require a concession. The term 'landing' is defined in section 17ZF of the Conservation Act to include 'the hovering of aircraft and the setting down or taking on of goods or persons from the aircraft.'

Concessions for all commercial operations are granted by way of permits or licences issued under the Conservation Act (for conservation areas and the Reserves Act (for reserves). The Department can authorise concessions on lands that it manages under both of these primary Acts.

## **Issues**

The important issues for the Department are:

- liaison with the Chatham Islands Visitor Promotion Board, the council, landowners and iwi to co-ordinate visitor facilities and management.
- the provision of better legal and practical public access to, between and within land managed by the Department
- the enhancement of appropriate public access to and along priority areas of the coastline, lakes and rivers
- the lack of recreation facilities on land managed by the Department, and priority-setting to improve facilities
- provision of adequate sign and on-site interpretation systems
- management of the use of areas where natural and historic values are particularly vulnerable (e.g., wahi tapu) and controlling off-road vehicles
- dealing with projected increases in visitor numbers
- monitoring of impacts arising from visitor use

- management of rubbish, wastes, fire and public safety
- the use of dogs and horses on land managed by the Department
- identification of the Department's position on a visitor centre and other interpretation/information venues
- consideration of aircraft activity and facility proposals for lands managed by the Department
- impacts of concession activity on natural and historic resources and other visitors
- permit-issuing criteria for access to the Tuku, Mangere and Rangatira nature reserves
- the future of the open days to Rangatira

## **Objectives**

- To encourage co-ordination between the Department, the Chatham Island Visitor Promotion Board, the council and landowners to maintain and enhance the diversity of Chatham's recreational opportunities.
- To encourage the council and landowners to facilitate appropriate public access to land managed by the Department, and to and along rivers, lakes and the coast.
- To systematically identify public access to land managed by the Department, provide this information to the public, and enhance public walking access.
- To provide facilities appropriate to levels of use, recreational or historic importance, environmental compatibility and costs, and to provide a range of quality visitor experiences.
- To have a sign system consistent with national criteria providing messages that are easy to read and understand, and identifying the areas, facilities and services managed by the Department.
- To raise visitors' awareness of their impacts and encourage them to minimise adverse effects.
- To manage significant visitor impacts on natural and historic resources by applying effective long-term methods and approaches to avoid, remedy or mitigate adverse impacts
- To provide safety information for visitors, recognising they will be primarily responsible for their own safety.
- To protect ground-nesting birds from the adverse effect of dogs.
- To provide support to a range of appropriate events for visitors that increase public understanding of our natural, cultural and historic heritage, and the Department's roles and responsibilities.
- To provide a series of high-quality interpretive facilities that will satisfy visitor expectations, increase their understanding of natural and historic resources, encourage responsible behaviour and promote visitor safety.
- To liaise with the Civil Aviation Authority aircraft operators, the New Zealand Defence Force and the council to advocate for safe and quiet services to areas managed by the Department, and to avoid disturbance of vulnerable seabird colonies.

- To consider applications for commercial activities (including aircraft) and to grant and manage concessions where the adverse effects of the activity can be avoided, remedied or mitigated, and the activity is compatible with the purpose for which the land is held..

## **Implementation**

The Department will:

### *Recreation opportunities*

1. Co-ordinate with the Chatham Islands Visitor Promotion Board, the council, the Pitt Island Reserves Committee and landowners on the provision of outdoor recreational opportunities; the Department's prime focus being for land that it manages.

### *Access*

2. Negotiate with landowners to provide appropriate public foot access to land managed by the Department.
3. Advocate through Resource Management Act processes for appropriate public foot access to and along priority areas of rivers, lakes and the coast, as identified jointly with landowners, the Chatham Islands Visitor Promotion Board and the Pitt Island Reserves Committee.
4. Discourage off-road vehicle use (including mountain bikes) on land managed by the Department, except as required for management purposes, and in passing between beaches and inland areas, or across defined parts of marginal strips.
5. Encourage the use of walkways under the Walkways Act as one method to formalise and control agreed public access across private land.
6. Co-ordinate with the Chatham Islands Visitor Promotion Board, the council and landowners to develop visitor access and an access code of behaviour, and to make this information available to visitors, and intending visitors on mainland New Zealand.
7. Provide for controlled public access to Tuku Nature Reserve by strict control of permit entry, as set out in Section 5.2.9 (Visitor Management).

### *Facilities*

9. Improve the extent of recreation facilities on priority areas of land managed by the Department and maintain them to acceptable health, building and safety standards. Priority considerations will include existing and predicted public use, ease of access, vulnerability to user impact, representation of ecosystem types and available funding.
10. Progressively replace and install appropriate signs at priority reserves and conservation areas in accordance with the Department's national sign system.

### *Visitor Monitoring*

11. Periodically monitor, in liaison with the Chatham Islands Visitor Promotion Board, levels of visitor use, visitor characteristics and expectations and satisfaction with the provision and adequacy of visitor opportunities and facilities on land managed by the Department. Additional facilities may be needed to avoid adverse environmental effects or to foster recreation.

### *Visitor Impact and Safety*

12. Utilise the Department's manual *Management Techniques to Reduce Visitor Impacts* (DOC, 1994) as a basic reference in managing the effects of visitor impacts. The aim of management will be to avoid, remedy or mitigate the adverse effects of visitors.
13. Manage visitor impacts in accordance with the following criteria:
  - land status
  - natural, historic and recreational values affected
  - facility or opportunity priority
  - extent, history and significance of impacts
  - minimising costs to other visitors
  - minimising costs of management
  - ensuring the concessionaires bear the costs of adverse effects arising from their impacts
14. Use the following methods to manage the adverse effects of visitor impacts in the following priority order:
  - i) provision
  - ii) persuasion
  - iii) site manipulation
  - iv) regulation/status change

Because the essence of recreation involves freedom of choice, it is important to use methods that minimise visitor costs and maximise freedom of choice where possible. Management is needed in instances where natural, cultural or historic resources are being adversely impacted. The use of regulations is a last resort technique, to be used in exceptional situations where impacts are high, irreversible, or where the values have high significance or low resistance to impact(s).
15. Seek, as visitor impact demands, regulations and/or by-laws under:
  - section 123 of the Reserves Act
  - section 48 of the Conservation Act

to manage the activities and impacts of visitors where it is the most appropriate and efficient method, having regard to 13 and 14 above.
16. Distribute the New Zealand Environmental Care Code and the New Zealand Water Care Code (1994) to inform visitors of their responsibilities to mitigate the adverse effects of their impacts.
17. Assist, in association with the New Zealand police and volunteers, with search and rescue operations on land managed by the Department.
18. Provide appropriate warning information to visitors when hazards pose a threat to public safety.
19. Permit dogs in nature reserves or any other areas only at a time or in a manner that would not pose a threat to wildlife or disrupt management programmes.
20. Permit horses (other than where covered by existing legal prohibitions such as some classes of reserve) where the impacts (physical, introduced plant pests, ground-nesting bird disturbance etc.) will have minimal effect.

### *Visitor Information and Interpretation*

21. Foster natural and historic interpretation and recreation opportunities on lands managed by the Department through any Chatham visitor centre and other visitor venues.
22. Work with the Chatham Islands Visitor Promotion Board on Department input into any visitor centre development but *not* provide a Department visitor centre.
23. Identify the best outlets for extending the provision of conservation information by contact with tour operators, the Chatham Islands Visitor Promotion Board, the Chatham Islands Enterprise Trust and the council.
24. Provide material to any visitor information centres established in the Chathams to enable them to answer queries relating to land managed by the Department, Department activities, natural and historic values, and recreational use.
25. Continue with interpretation programmes that involve the Chathams community in understanding, exchanging knowledge on, and being involved in managing natural and historic resources both on and off lands managed by the Department.
26. Liaise on interpretation programmes with visiting work parties (e.g., conservation volunteers, research groups).
27. Encourage the community and concessionaires to provide and support visitor programme events.
28. Consult iwi over interpretative signs, publications and events.

### *Dogs*

28. Identify and gazette areas of land managed by the Department which are to be open to dogs and those areas where dog access will be controlled:
  - prepare a discussion document identifying areas proposed to become 'open dog areas' or 'controlled dog areas'
  - undertake public consultation on the areas
  - gazette 'open dog areas' and 'controlled dog areas'
  - identify special conditions applying to 'open dog' areas and 'controlled dog areas'
  - ensure information on 'open dog' and 'controlled dog' areas is well publicised in pamphlets, signs, maps and other visitor information material prepared by the Department.

### *Aircraft*

30. Manage aircraft access to land managed by the Department having regard to (but not limited by):
  - relevant Acts, policies, strategies and plans
  - the values of the area, the reasons the land is managed and natural quiet
  - the adverse effects of aircraft on these values and measures to avoid, remedy or mitigate any effects
  - implementation criteria in 6.4.4 (Concession General)
  - aircraft that have lower noise levels and a lower requirement for support infrastructure
  - the location of landing sites and facilities off land managed by the Department

31. Liaise with the Civil Aviation Authority, aircraft operators, the council, and the New Zealand Defence Force on landings, airspace activities and the issue of concessions.

### *Concessions*

32. Consider concession applications and grant concessions in accordance with the processes set out in 6.4.4 Concessions General.

## **Priorities**

### *Primary*

The primary priorities for the Department are:

- providing access to lands managed by the Department
- liaison on visitor access information
- controlling access to the three nature reserves
- distributing care codes to visitors
- improving recreation facilities, including directional and interpretive signs
- assisting with search and rescue operations
- caring for public safety
- controlling dogs where appropriate
- involving the Chathams community in interpretation programmes
- consulting iwi on interpretation
- managing significant visitor impact areas

### *Secondary*

Secondary priorities for the Department are:

- advocating for access to rivers, lakes and the coast
- discouraging inappropriate off-road vehicle use
- monitoring visitor use and facility responses
- managing visitor impacts over all land managed by the Department
- liaison on and provision of information for a visitor centre
- managing concession activity

### *Tertiary*

- promoting walkways as an access method
- supporting visitor programmes
- managing aircraft use (could rise in priority should a helicopter service be re-established)

## **Limitations**

Tasks that may not be undertaken or completed include:

- providing easy public access to all areas managed by the Department
- providing facilities and interpretation for all but priority reserves and conservation areas
- visitor programmes for visitors coming to the Chathams

TABLE 24: KEY VISITOR SERVICES PRIORITIES

THEME	ISSUES	METHODS	RESULTS SOUGHT	PLACE
Access to Department lands	<ul style="list-style-type: none"> <li>Variable access quality</li> <li>Lack of practical legal access</li> <li>Lack of access information</li> </ul>	<ul style="list-style-type: none"> <li>Negotiate and mark public access provisions to priority areas</li> <li>Co-ordinate the provision of access information</li> </ul>	<ul style="list-style-type: none"> <li>Practical public access to priority areas well identified</li> <li>Information available on access status for all Department-managed lands</li> </ul>	Chatham Island Pitt Island
Nature reserve access	<ul style="list-style-type: none"> <li>Vulnerability of ecological values of reserves</li> <li>Reserves Act permit requirements</li> </ul>	<ul style="list-style-type: none"> <li>Enforce permit-only entry</li> <li>Provide for controlled entry to Tuku Nature Reserve</li> <li>Minimise access to Mangere/Rangatira by strict control of permit entry</li> </ul>	<ul style="list-style-type: none"> <li>Ecological values of reserves protected</li> <li>Access to Tuku Nature Reserve well identified and controlled</li> </ul>	Chatham Island Tuku Nature Reserve Mangere/Rangatira
Visitor impacts and care of environment	<ul style="list-style-type: none"> <li>Islands residents' concerns for environmental effects of visitors</li> <li>Potential visitor impacts on natural and historic resources</li> </ul>	<ul style="list-style-type: none"> <li>Distribute New Zealand Environmental Care and Water Care Codes</li> <li>Manage visitor activities and impacts</li> </ul>	<ul style="list-style-type: none"> <li>Positive visitor experiences with minimal impact and Chathams community approval</li> </ul>	Chatham Island Pitt Island
Visitor facilities	<ul style="list-style-type: none"> <li>Minimal existing facilities</li> <li>Lack of signage for Department managed lands</li> </ul>	<ul style="list-style-type: none"> <li>Improve facilities at priority areas</li> <li>Upgrade signage at priority areas</li> </ul>	<ul style="list-style-type: none"> <li>Visitor experiences are positive through improved information on Department-managed lands</li> </ul>	Chatham Island Pitt Island
Public safety	<ul style="list-style-type: none"> <li>Search and rescue</li> <li>Safe facilities</li> <li>Access/egress/location information</li> </ul>	<ul style="list-style-type: none"> <li>Assist New Zealand police in search and rescue</li> <li>Provide facilities to acceptable standards</li> <li>Provide hazard warning</li> <li>Provide access information</li> </ul>	<ul style="list-style-type: none"> <li>Safe visitor experiences of Department-managed lands</li> </ul>	Chatham Island Pitt Island
Chathams community involvement	<ul style="list-style-type: none"> <li>Build on community support for natural and historic resource protection</li> <li>Utilising community knowledge</li> <li>Ensuring interpretation acceptable to iwi</li> </ul>	<ul style="list-style-type: none"> <li>Involve community in interpretation programmes</li> <li>Consult iwi on interpretation signs, publications etc.</li> <li>Assist with information provision to any visitor centre</li> </ul>	<ul style="list-style-type: none"> <li>Increased community responsibility to protect natural and historic values</li> <li>Improved communication between Department and community and support of Department activity</li> </ul>	All places



## 6.4 Other Use

### 6.4.1 OTHER COMMERCIAL AND COMMUNITY USE

#### **Introduction**

Nationally the commercial use of the Department's lands for activities other than recreation is generally limited to grazing, mining, public works, site occupation for accommodation and telecommunication facilities, apiary licensing, sphagnum moss collecting and the granting of easements. Concessions are needed for most of these activities.

#### **Current situation**

There are presently no mining activities on land managed by the Department on the Chathams although an old road-metal quarry beside the Te Awainanga River Bridge and a local shingle and beach sand/shell extraction site near Owenga are both on Department-managed marginal strips. Road metal and limestone quarrying, and beach sand/shingle extraction are ongoing Chathams activities. Peat-mining on main Chatham Island and phosphate nodule mining within Te Whanga and at sea have been proposed. These would be extensive activities with potentially high environmental impact and effects on land managed by the Department.

The Department administers only one grazing licence in the Chathams, on Pitt Island, and the only significant amount of farmland that the Department manages on the islands. The area grazed is 1282 hectares of Pitt Island and the lease is current until March 2011. Grazing needs careful consideration as it can introduce and spread plant pests, and alter regeneration dynamics. Sphagnum moss harvesting on land not managed by the Department was a 'boom and bust' activity in 1993, without the required Resource Management Act approvals or any sustainable yield controls. Some lands managed by the Department contain sphagnum but the Department's *Guidelines for Sphagnum Moss Harvesting* (DOC, 1991) and the status of the lands restrict the possibility of harvesting approvals.

There are presently no private buildings on Chathams land managed by the Department. Some community and sports facilities are on recreation reserves (e.g., Norman Kirk Memorial Reserve).

Telecommunication installations on land managed by the Department are limited to a site on Tikitiki Hill licensed to the Chatham Islands TV and Radio Society Inc. No apiary licences have been issued for the Chathams, and in the past apiary development has been a prime factor in the germination and spread of gorse.

The Department has an ongoing role in consenting to (for reserves under council control) or granting (for its managed lands) easements for access, drainage, sewerage, water and electrical supply.

Recently there has been increased national interest in bio-prospecting, that is, the activity of removing samples of native flora and fauna to assay for biologically active compounds which then could be developed for medical cures, crop improvements and such like. Although most collecting leads to research only, some of the more promising samples can lead to commercially viable products. A permit is required to collect samples. A concession that allows commercial activity (in this case, research with commercial intentions) may also be needed. Government policy on

access to indigenous genetic resources is still being developed in view of both intellectual property rights and Treaty responsibility issues.

Public works such as power and water utilities, roads and bridges, while not extensive on the Chathams, are actual or potential activities for which consent may be sought to locate on land managed by the Department. The purposes for which lands held by the Department are to be managed are generally not consistent with accommodating such public works. Where it is impractical to locate a work elsewhere then proposals can be considered under section 6.4.4 (Concessions General)

For all activities the Department is primarily concerned with protecting natural and historic resources and the granting of any concession, whether a lease, licence or permit is dependent on the effect the proposed use will have on these resources. An aspect of the Chathams different from mainland New Zealand is that the land managed by the Department is a small percentage of the total land area and nearly all Department land has high natural and/or historic value or is essential administration land. There is, therefore, very little opportunity to consider commercial use of these lands.

### **Statutory Framework**

The Department's control over mining on land managed by the Department is through the negotiation and issue of Access Agreements pursuant to section 61 of the Crown Minerals Act 1991. No areas managed by the Department are closed to mining except where approved by Order in Council on joint recommendation of the Ministers of Conservation and Energy, or special legislation. However, when considering an application for an access arrangement under the Crown Minerals Act, the Minister of Conservation must have regard to the purposes for which the land is managed. To prospect, explore or carry out mining on land managed by the Department, an applicant must obtain a minerals permit from the Minister of Energy as well as an access agreement from the Minister of Conservation. A resource consent or RMA plan approval from the council may also be required under the Resource Management Act 1991.

Grazing concessions are generally issued under either section 74 of the Reserves Act 1977 or section 17Q14 of the Conservation Act 1987, depending on the land's status. The conditions for both types of licence are based on national guidelines prepared in 1991, and in general only allow the grazing of sheep. Public access through licence areas is generally protected, as are existing recreational rights. Both Acts have a maximum term of five years for new licences or leases, and require public advertising, although for Conservation Act licences or leases a maximum 60-year term is applicable where there is a CMS or CMP.

Concessions for telecommunication sites are issued pursuant to section 17Q of the Conservation Act 1987 or section 59A of the Reserves Act 1977. Building sites and apiary concessions are issued under section 17Q of the Conservation Act or relevant sections of the Reserves Act.

Community and sports facilities on reserves are approved under section 54 of the Reserves Act.

Easements may be granted under section 59A of the Reserves Act 1977 and section 17Q of the Conservation Act 1987. Public advertising is required except for some Reserves Act easements where their impact is insignificant, or for Conservation Act easements if provision is made in a CMS or CMP.

The taking of plants and other natural materials can be authorised under the Reserves and Conservation Acts. Department authorisations will be guided by Government policy currently under preparation.

Part II of the Public Works Act 1981 allows areas of reserve or conservation areas to be taken for public works. Compensation is payable under Part V of the Act.

### **Issues**

The key mining issue is to avoid, remedy or mitigate any adverse effects of mining activities on natural, historic and recreational features.

Grazing is sometimes seen as conflicting with the Department's functions to protect indigenous ecosystems, but in some circumstances grazing can provide a useful management tool. The Department needs to:

- allow for grazing opportunities where these will be compatible with maintaining or enhancing natural features, or where there are no conservation values
- monitor the impacts of grazing on indigenous ecosystems and species
- ensure that a current market price is paid for grazing licences

### **Objectives**

- To ensure that any prospecting, exploration or mining activity on land managed by the Department avoids, remedies or mitigates any adverse effect on natural, historic and recreational resources.
- To ensure that any proposed mining activity is properly assessed to enable any potential adverse effects to be avoided, remedied or mitigated, and to ensure adequate compensation.
- To consider grazing or sphagnum harvest applications and grant or re-issue and manage concessions only where grazing will have a positive or neutral effect on natural, historic and recreational values; and when all conditions have been fulfilled in the case of renewals.
- To protect natural and historic values from inappropriate site occupation and developments by avoiding the use of Department-managed areas where possible, and allowing installations where the effects on the site and surroundings can be remedied or mitigated.
- To permit the erection of buildings associated with sport or community activities on reserves where this is consistent with the purpose of the reserve and adverse effects can be avoided, remedied, or mitigated.
- To allow easements where they do not significantly impact on the purposes for which the land is held and where no suitable alternative exists on land not managed by the Department.
- To ensure that the taking of plants, animals and other natural materials for appropriate purposes (bio-prospecting) is in accord with the general aim of protecting those resources and Government policy.

## **Implementation**

The Department will:

### *Mining*

1. Require all applications for mining access agreements to be accompanied by an environmental impact assessment (see 6.5.4 Environmental Protection).
2. Assess prospecting and exploration proposals on their merits. New roads or tracks, and vehicle access off existing tracks will generally not be permitted.
3. Have regard to the following matters on any application:
  - whether the effects of the activity can be avoided, remedied or mitigated
  - whether the restoration proposed is adequate and can be achieved
  - whether there is adequate financial protection by way of insurance or bond to ensure compliance with conditions and remedial action
  - the adequacy of compensation offered for access to the land for prospecting, exploration or mining
  - appropriate conditions will be sought to avoid, remedy and mitigate adverse effects
4. Recover all costs incurred by the Department in processing and monitoring applications.
5. Seek necessary conditions for resource consents to make sure any operations will avoid, remedy or mitigate adverse effects on the natural and historic values of the site or sites involved.
6. Require monitoring at the applicant's expense of mining activities that are likely to impact on natural or historic resources.
7. Require work programmes detailing areas to be worked, methods of working, water supply and disposal, soil disposal areas, waste disposal and supporting facilities.
8. Include conditions in any access arrangement that the Department may make submissions on any associated Resource Management Act applications, and may modify the access arrangements as a result of Resource Management Act consents granted.
9. Promote performance standards for mining and quarrying in policies and plans developed by the council.
10. Monitor resource consent applications with significant effects on natural, historic or recreational values, caused by mining and quarrying.

### *Grazing/Sphagnum Concessions*

11. Issue concessions only where the proposed activity will have no significant adverse effect on the natural, historic or recreational values of the land. (section 6.4.4 Concession General applies.)
12. Allow sphagnum harvesting only in areas not having a specially protected status (e.g., reserve), nor rare or representative values, nor significant ecological value, nor containing slow-growing sphagnum. Refer to the 'Guidelines for sphagnum moss harvesting' (1991, DOC, Wellington)
13. Use grazing as a possible method for short-term control of plant pests or for reducing the risk of fire. Public access will be maintained as far as possible.

14. Monitor grazing concessions issued on land identified by the Department as having significant natural features, under the following arrangements:
  - the monitoring programme will be designed to meet Department requirements for understanding trends in vegetation condition
  - monitoring will normally be undertaken at the concessionaire's expense
  - concession areas will be inspected for compliance with conditions of the licence and the effect of grazing on natural and historic values
15. Include concession conditions to maintain and enhance natural, historic and recreational values. Conditions will consider, amongst other things:
  - stock type
  - stocking rates
  - timing
  - monitoring
  - ensuring public access is maintained
  - plant and animal pest control
  - fencing
16. Impose standard conditions on all concessions to protect the land, including a prohibition on:
  - spraying, burning, cutting or crushing native vegetation
  - damage to natural, scenic, historic, archaeological, biological, geological or scientific features of the land
  - erection of buildings
  - exclusive possession or exclusive rights to or over the land
17. Base rentals for concessions on current market rentals. Where conditions or limitations are placed on stocking or farming management for conservation reasons a reduction may be considered.
18. Review rentals three-yearly.
19. Discount rentals from a market rate where a concessionaire is prepared to undertake work of benefit to the Department, such as fencing.
20. Discuss concession proposals with iwi and the Conservation Board, where appropriate, as well as advertising publicly.
21. Grant grazing and sphagnum harvesting concessions only (new grazing leases will not be issued) and, under normal circumstances, for a maximum term of five years.
22. Exchange land suitable for grazing for other land of higher conservation value or dispose of it where this is appropriate.

### *Site Occupation*

23. Permit telecommunications, subject to conditions, having regard to:
  - the effects on natural and historic values and public use.
  - the effects on the values of the appropriate iwi
  - minimising the visual impacts of the site
  - the opportunities to locate on land of other tenure

- the reasons why any existing sites on land managed by the Department cannot be utilised
- the potential for plant and animal pest introduction

(6.4.4 Concessions General applies)

24. Require co-siting of telecommunication sites, where technically possible.
25. Charge market rentals that reflect the commercial worth of each site.
26. Renegotiate in full any concession where an existing tenant desires to vary the terms or conditions of a concession (e.g., to change the permitted use from 'transmission of TV signals' to 'telecommunications').
27. Issue no apiary concessions for land having high ecological values that could be adversely affected by increased bee numbers, or near recreational facilities or other areas used by the public.
28. Revoke apiary concessions where evidence shows that the presence of bees is having a significant impact on native plants or animals and require that the beehives be removed.
29. Require all apiarists applying for a concession to be registered with the Ministry of Agriculture and Forests.
30. Consider private accommodation buildings an inappropriate use of land managed by the Department.
31. Grant concessions for new buildings and structures associated with public outdoor recreation or community facilities on reserves where they are consistent with the purpose of the reserve and this CMS.
32. Identify and pursue the removal of any unauthorised structures from lands managed by the Department.

#### *Easements*

33. Permit easement applications where impacts on natural and historic values and public use can be avoided, remedied or mitigated and no practicable alternative exists on private land (6.4.4 Concessions General applies)
34. Safeguard natural and historic values and public use of the area by seeking appropriate conditions.
35. Subject any construction work on land managed by the Department, as a result of an approved easement, to performance conditions and the deposit of a performance bond to guarantee compliance with conditions.
36. Consider granting easements for finite terms and subject to the payment of a market rental or royalty.
37. Require the applicant to bear all costs associated with the processing of an easement.

#### *Taking of Plants etc.*

38. Generally the taking of plants or other natural materials for other than authentic non-bio-prospecting research or education purposes will not be permitted until such time as Government policy on bio-prospecting is developed. Any taking will be limited to species that are in abundance, and only minimal quantities will be approved (6.4.4 Concessions General applies)
39. Consider inappropriate the taking of plants and other natural materials that are threatened or locally uncommon or the taking from nature reserves.

### *Public Works*

40. Consider granting concessions, subject to conditions, for public works and associated structures where alternative sites are unavailable and the environmental effects can be avoided, remedied or mitigated.
41. Require all approved works to adhere to strict construction guidelines aimed at minimising any environmental impacts. Site restoration will generally be a condition of any concession given.
42. Require performance bonds to ensure that construction is carried out to required standards and conditions.
43. Maintain close liaison with roading authorities over routine road maintenance adjacent to streams, rivers and areas managed by the Department to avoid, remedy or mitigate any adverse effects on natural, historic and recreational values.

### **Priorities**

#### *Primary*

The Department will give priority to efficient processing of all applications and ensure adequate conditions are imposed to remedy or mitigate adverse effects on natural, historic and recreational values, where the proposed activity cannot be located on land not managed by the Department.

#### *Secondary*

Determining all existing situations where easements should be obtained but have not been applied for is a secondary priority.

### **Limitations**

There are no limitations, given the low level of current and likely activity affecting land managed by the Department.

TABLE 25: KEY OTHER COMMERCIAL AND COMMUNITY USE PRIORITIES

THEME	ISSUES	METHODS	RESULTS SOUGHT	PLACE
Protection of natural, historic and recreational values	<ul style="list-style-type: none"><li>• Mining impacting on land or species managed by the Department</li><li>• Grazing and sphagnum harvest impacts</li><li>• Site occupation effects</li><li>• Controlling activities for which easements are required</li><li>• Impacts of taking plants and natural materials</li></ul>	<ul style="list-style-type: none"><li>• Concession application process</li><li>• Require EIA</li><li>• Performance conditions</li><li>• User-pay monitoring</li><li>• Bonds</li><li>• Fencing</li><li>• Stock control</li><li>• Co-siting</li><li>• Controls on taking</li></ul>	<ul style="list-style-type: none"><li>• Any adverse effects of uses avoided, remedied or mitigated</li></ul>	Chatham Island Pitt Island

## 6.4.2 MILITARY USE

### **Background**

The size and remoteness of some New Zealand lands managed by the Department makes them attractive for defence training, though no such training has yet occurred on the Chathams.

Under the Military Manoeuvres Act 1915 the Governor-General may proclaim lands (including lands managed by the Department) to be available for military manoeuvres. Any other intended defence activity, however, requires the approval of the Department.

The Department and the New Zealand Defence Force are parties to a Defence Training Agreement (1990) that provides for military training to be carried out on state areas as defined in the Forest and Rural Fires Act 1977, provided certain conditions are met. Department approval to carry out military exercises is issued subject to conditions to protect natural and historic resources, and visitors.

In return, the New Zealand Defence Force may make available fire-fighting assistance to the Department. Further assistance for various projects, including track construction and maintenance, and transportation of departmental personnel to remote conservation areas by road, air and sea, is also often provided.

Military training within the Chathams could involve Royal New Zealand Airforce aircraft participating in low-level flying. Low-level flying is undertaken in accordance with the Civil Aviation New Zealand Aeronautical Publications, which recognise notified wildlife sanctuaries and nature reserves, though not comparable areas on private land (e.g., some Chathams offshore islands – see 5.5 Other Islands). Prior consent must be obtained from the controlling authority if flying is proposed within restricted airspace.

### **Management Issues**

Military exercises can occur on lands managed by the Department and must be carefully managed.

### **Objective**

- To allow for military use of lands managed by the Department in accordance with the Defence Training Agreement (1990).

### **Implementation**

The Department will:

1. Work co-operatively with the New Zealand Defence Force to manage the effects, if any, of military exercises.
2. Consider requests for military use of areas managed by the Department, on their merits in accordance with the criteria in the Defence Training Agreement (1990).
3. Apply conditions to reduce impacts on natural and historic resources and on visitors.
4. Liaise with the New Zealand Defence Force headquarters to seek protection of natural and historic resources where areas managed by the Department are subject to a proclamation under the Military Manoeuvres Act 1915.



## Priorities

Working with the New Zealand Defence Force in allowing for military exercises.

TABLE 26: KEY MILITARY USE PRIORITIES

THEME	ISSUES	METHODS	RESULTS SOUGHT	PLACE
Protection of natural and historic resources, and public use	<ul style="list-style-type: none"> <li>Effects of military exercises</li> </ul>	<ul style="list-style-type: none"> <li>Liaison with New Zealand Defence Force</li> <li>Activity conditions</li> </ul>	<ul style="list-style-type: none"> <li>Compatible exercises with any adverse effects avoided, remedied or mitigated</li> </ul>	Chatham Island Pitt Island

### 6.4.3 CUSTOMARY IWI USE

This section covers the exercising of freshwater fishing rights and the taking of protected animals and plants by iwi.

#### Background

The natural resources of New Zealand, particularly the native plants and animals, have traditionally formed an important cultural and spiritual part of the Maori way of life. This is no less so for Moriori than Maori on the Chathams. The Department must respect the ongoing customary rights to freshwater fisheries and consider all requests for the customary taking or use of protected animals and plants by iwi.

Since the arrival of humans, many natural resources have been depleted or become extinct. In some cases, to halt this decline in native species, various pieces of legislation were established to help protect them.

Legislation providing for the protection of species and the day-to-day management of these species reflects the desire to ensure New Zealand's natural resources are maintained for the benefit of all New Zealanders. This legislation in part recognises the significant spiritual and cultural role native plants and animals have in the Moriori and Maori way of life and the importance of maintaining traditional values. Many of the traditional ways are unable to be pursued in today's environment, especially where it might involve the use of threatened species. The use has to be balanced against the vulnerability of the species.

The taking of abundant species for customary use is allowable where it will not threaten the species and is within the constraints of the law. As a matter of priority, it will be important for the Department to initiate research into acceptable levels of use of native species consistent with national policy and legislation.

#### *Freshwater Fisheries*

The taking of freshwater fish (e.g., eel and whitebait) is a customary practice of iwi.

The legal exercise of their customary fishing rights has been clarified through decisions under the Fisheries Act 1996. These decisions are also relevant to iwi non-commercial freshwater fishing rights under the Conservation Act.

The Department's role in administering legislation such as the Whitebait Fishing Regulations 1994 must be respected and restrictions complied with on the taking of fauna from reserves. Otherwise, the exercising of a clearly definable customary freshwater fishing right is specifically provided for within the Conservation Act.

### *Birds and Mammals*

The Department receives applications for the customary use of feathers of dead native birds and any whalebone and teeth held by the Department. The Department and the Conservation Board are working with iwi to set in place a system to allocate such material in accordance with Department policy to dispose of suitable carving bone to the hapu of the stranding site as well as providing for rare specimens and scientific sample collection. The Department has produced an instruction booklet on correct dissection techniques to maximise bone recovery and minimise the very real health risks from handling whale carcasses. Mainland New Zealand iwi requests are also received for feathers of the introduced weka. These are processed by the Department.



Due to scarcity of many native bird species today, the taking of threatened birds may compromise the long-term viability of these species. For the 1991 Chatham Island Bicentenary celebrations a limited take of beach-cast albatross was authorised under the Wildlife Act though no birds were subsequently found. The take was requested by iwi to honour the visiting Governor-General.

Where dead birds become available through Department staff 'finds' or authorised management culling, the birds can be made available to iwi through existing legislative procedures.

### *Plants*

There is a national resurgence of interest in the use of native plants for both cultural purposes and traditional medicines. The important plant for customary use is harakeke. Some species are utilised for medicines.

A set of procedures on sustainable customary use of native plants is being developed nationally to guide the taking of native plants on land managed by the Department.

Wherever possible, the Department will assist iwi with the planting of culturally significant plants on private land to reduce the need for plants to be gathered from land managed by the Department. The Department can assist iwi to propagate and cultivate plants.

### **Statutory Framework**

Under the Reserves, Conservation and Wildlife Acts, species and natural resources are generally protected. However, specific provision exists to allow the non-commercial exercise of freshwater fishing and the taking of material for cultural use by Maori people under these Acts (the Waitangi Tribunal 1992 has ruled that 'Maori' includes Moriori). The taking of material can be authorised, or in the case of fish requires no authorisation (except in reserves), under the following legislation:

- Freshwater Fish (non-commercial) – section 26ZH of the Conservation Act 1987
- Plants – section 30(2) of the Conservation Act 1987
- Animals – section 38 of the Conservation Act 1987
- Flora and Fauna – section 50 of the Reserves Act 1977
- Birds – section 53(1) of the Wildlife Act 1953
- Marine Mammal Parts – section 4(1) of the Marine Mammal Protection Act 1978

## **Issue**

The issue associated with customary use of species is how to provide for the expectations of iwi, while protecting species populations so that populations are sustained within the framework of the relevant legislation. Customary use of other than freshwater fish is currently being debated in New Zealand following the release of a discussion paper by the New Zealand Conservation Authority (Maori Customary Use, 1997). Resolution of the issue will see national policy developed and implementation of this CMS must be in accord with that policy. The indigenous flora and fauna claim which has been lodged with the Waitangi Tribunal (Wai 262) (1996), also covers Maori interests in indigenous flora and fauna.

## **Objective**

- To respect the exercising of freshwater fishing rights and, subject to the relevant legislation, to allow the taking of materials for customary use by iwi where species populations and habitats are not adversely affected.

## **Implementation**

The Department will:

1. Contribute to national policy development on customary use, ensuring that the species protection, iwi perspectives and the perspective of the Chathams situation are well represented, and implement any resultant national policy.
2. Consult with iwi over the exercising of customary freshwater fishing rights, to clarify iwi and Department roles and promote sustainable fishery management.
3. Consider, subject to conditions, the customary use of plants, animals (other than freshwater fish) and minerals managed by the Department, where:
  - the application is from Chatham Island iwi
  - the use will have minimal impacts on indigenous ecosystems and species populations
  - the purpose is customary use
  - the species population is not threatened
  - the use is permitted by statute and national policy (6.5.4 Environmental Protection applies)
4. Provide feathers or other dead native bird material received by the Department to iwi for customary use in accordance with statute and national policy.
5. Consult with iwi, the Conservation Board and other groups where significant conflict arises between customary use and natural values.
6. Encourage and provide advice to iwi in the establishment of nurseries to provide plants for customary purposes.
7. Promote research into levels of use of native plants and animals consistent with national policy and legislation (see 6/5/5 Research).
8. Develop, in consultation with iwi, protocols for the gathering and distribution of plant and animal material (excluding freshwater fish, but including whalebone and minerals for customary use).
9. Provide information on effective and safe dissection of stranded whales for bone recovery.

## Priorities

### *Primary*

The development of a good working relationship with iwi on the whole issue of customary use is a high priority for the Department nationally.

### *Secondary*

Provision of advice on necessary establishment and promotion of research, while part of the whole customary use issue, has lesser priority than the above.

## Limitations

The importance of this issue will mean that limitations are likely to be minimal over the CMS ten-year period.

TABLE 27: KEY CUSTOMARY IWI USE PRIORITIES

THEME	ISSUES	METHODS	RESULTS SOUGHT	PLACE
Customary use of plants, animals and minerals	<ul style="list-style-type: none"> <li>Determining species sustainability</li> <li>Identifying correct iwi protocol</li> <li>Application of legislation</li> </ul>	<ul style="list-style-type: none"> <li>National policy development</li> <li>Freshwater fish consultation</li> <li>Customary use allocation</li> <li>EIA</li> <li>Iwi consultation</li> <li>Develop gathering and distribution protocols</li> <li>Promote research</li> <li>Encourage nursery sources</li> </ul>	<ul style="list-style-type: none"> <li>A good working relationship with iwi established</li> <li>Plant and animal material use in accordance with legislation, policy and protocol</li> </ul>	Chatham Island Pitt Island Other Islands

### 6.4.4 CONCESSIONS GENERAL

This section covers the conservation of applications and the management of concessions for commercial use of land managed by the Department.

#### **Current Situation**

##### *Background*

A concession means a lease, licence, permit or easement, as well as meaning the activity itself as authorised by a concession document.

The Conservation Amendment Act No. 2 came into force on 1 July 1996, creating provisions that apply to concessions under the Conservation, National Parks, Reserves and Wildlife Acts.

These provisions affect all concessions on lands managed by the Department, including recreation and tourism concessions, aircraft landings, commercial filming and resource use concessions such as grazing, telecommunications and harvesting, e.g., sphagnum moss. It is important that the Department is able to consider all applications on their merits based on their adverse effects, the relevant statutory framework and within the scope of this CMS.

Individuals or organised groups taking part in a recreation activity, whether for the benefit of individuals or collectively, do not require a concession if they do not receive any specific gain or reward for that activity, whether monetary or otherwise. A group of this kind may charge its members a reasonable cost to recover expenses for organising the activity.

### *Concession applications*

There are a number of issues relating to concession applications. The first is ensuring the decision-makers receive adequate information to be able to consider applications. The next step is to consider applications with regard to relevant legislation.

### *Information*

Applicants must identify and provide information about the possible effects of their proposed activities, through an appropriately detailed environmental impact assessment (EIA). For major proposals an environmental impact report may be required (see 6.5.4 Environmental Protection).

The focus of the legislation is to require the identification of ways in which the adverse effects of activities can reasonably and practicably be avoided, remedied or mitigated. 'Effect' has the same meaning as in the Resource Management Act 1991.

The intention to grant a lease or licence must be publicly notified but there is discretion for notifying permits or easements.

### *Considerations*

A number of matters must be considered (in accordance with section 17(U) of the Conservation Act) when deciding whether or not to approve an application.

The main considerations are related to the provisions of the Act or purposes for which the land is held and the effects or methods proposed to avoid, remedy or mitigate adverse effects.

Applicants seeking any concession granting an interest in land or an easement must provide additional information as there are a number of conditions to satisfy before such concessions will be granted. These relate to the reasons for and appropriateness of the application. For example, an application to build a structure will not be granted if building it in another place would have fewer adverse effects. The Department consults with iwi on all concessions where that is appropriate as part of its obligations arising from section 4 of the Conservation Act.

### *Conditions*

Conditions, rents and bonds can be included in concession documents.

If concession applications are successful there are a variety of conditions that can be imposed, including adequate monitoring and charging appropriate rentals.

There are also a number of situations in which rent, compensation or bonds can be reduced or waived. Concessionaires can be asked to provide copies of accounts so that rents, fees or royalties can be verified.

Grazing concessions generally have a maximum term of five years, and usually do not have to be publicly advertised. Concessions may be issued for up to 30 years, or up to 60 years in special circumstances.

## **Statutory Framework**

In 1996, Parliament passed the Conservation Amendment Act, which changed the way the Department manages concessions. The Act amended three existing Acts affecting concessions on the Chathams:

- Conservation Act 1987
- Reserves Act 1977
- Wildlife Act 1953

A single set of provisions now applies to concessions. These provisions appear only in the Conservation Act with cross-referencing to other Acts. The new provisions came into effect on 1 July 1996.

Under section 17S(3) of the Conservation Act, the Department, acting under delegated authority from the Minister, may require concession applicants to prepare an environmental impact assessment (EIA) in the form set out in the Fourth Schedule of the Resource Management Act, or such other format as required.

Section 17S(1) of the Conservation Act places the onus on a concession applicant to provide adequate information on the effects of their proposed activity. The Department is responsible for assessing whether the applicant has met these requirements, that the applicant's predictions of effects are accurate, and that the applicant's proposed means of avoiding, remedying or mitigating adverse effects are appropriate.

## **Objectives**

- To consider applications for concession proposals and to grant them where reasonable and practicable measures can be taken to avoid, remedy or mitigate any adverse effects.
- To require information from applicants and others to enable the Department to adequately assess the effects of concession proposals.

## **Implementation**

The Conservancy will:

1. Require every application for a concession to include (but not be limited to):
  - a description of the proposed activity
  - a description identifying the places where the proposed activity will be carried out and indicating the status of such places (including reasons why the activity or structure cannot be placed off land managed by the Department)
  - a description of the potential effects of the proposed activity, and any actions that the applicant proposes to take to avoid, remedy or mitigate any adverse effects
  - details of the proposed type of concession for which the applicant is applying
  - a statement of the proposed duration of the concession and the reasons for the proposed duration
  - relevant information relating to the applicant, including any information relevant to the applicant's ability to carry out the proposed activity

2. Require applicants to supply further information as necessary to make an informed decision. This will include an environment impact assessment (EIA). The Department may (at the expense of the applicant) commission a report or review, seek advice from other persons or obtain relevant information from any source, on matters relating to the application.
3. Consider applications, having regard (but not being limited) to:
  - the purposes for which the land is held
  - the availability of alternative locations for the proposed structure or activity
  - measures to avoid, remedy or mitigate adverse effects on natural values including (but not limited to):
    - indigenous vegetation
    - ecological associations
    - indigenous wildlife
    - indigenous invertebrates
    - indigenous fish
    - landscape
    - landforms
    - geological features
    - soil sequences
    - natural quiet and natural dark
  - measures to avoid, remedy or mitigate adverse effects on historic values including (but not limited to):
    - Maori and Moriori historical sites and appropriate tikanga (custom)
    - European historical sites
  - measures to avoid, remedy, or mitigate adverse effects on recreational values including (but not limited to):
    - hut use and capacity
    - track systems, both on and adjacent to affected track systems
    - public access
    - recreational opportunity settings, including noise levels and natural darkness and light
    - social settings of recreational use, including party size and interaction
    - existing users
    - public use and enjoyment of the area concerned
    - public safety
4. In accordance with section 17(U) of the Conservation Act have regard, but not be limited, to the following in considering any application for a concession:
  - the nature of the activity and the type of structure or facility (if any) proposed
  - the effects of the activity, structure or facility
  - measures that can reasonably and practicably be undertaken to avoid, remedy or mitigate any adverse effects of the activity

- information received by the Minister under section 17(S) of the Conservation Act
- relevant environmental impact assessments, including any audit or review
- relevant oral or written submissions received as a result of any relevant public notice issued under Section 49 of the Conservation Act
- any relevant information that may be withheld from any person in accordance with the Official Information Act 1982 or the Privacy Act 1993.

Reasons for declining applications may include (but are not limited to):

- the activity is contrary to the provisions of the Act governing the land or the purposes for which the land is held
  - there is insufficient or inadequate information to assess the effects of the intended activity, including any effects of the proposed methods to avoid, remedy or mitigate adverse effects
  - there are no adequate methods for remedying, avoiding or mitigating the adverse effects of the activity
  - the applicant cannot demonstrate the necessity for exclusive possession to protect public safety; to provide security for the activity site, structure or facility; or for the competent operation of the activity
  - the activity is inconsistent with this approved Conservation Management Strategy (CMS) or any relevant Conservation Management Plan (CMP). (Concessionaires must comply with the CMS or CMP even if the concession document allows, or appears to allow the concessionaire to do otherwise.)
5. Impose and enforce (where required) appropriate conditions in accordance with the Conservation Act. These may include (but are not limited to):
- the activity and where it can be carried out
  - the names and addresses of those who may carry out the activity
  - the payment of rent, fees and royalties
  - the payment of compensation for any adverse effects of the activity (unless included in the rent)
  - the provision of bonds to cover costs of work required by the concession document but that the concessionaire failed to carry out; or to mitigate any adverse effects not authorised or not reasonably foreseen
  - the terms of waiving or reducing rent, compensation or bonds
  - the restoration of the site and removal of structures or facilities at the expense of the concessionaire, or the vesting of such facilities in the Crown, at the end of the concession term
  - periodic reviews of the terms and conditions (including rents) of the concessions
  - a covenant on any transfer, sublease, sublicence or assignment of a concession
  - the payment of fees (including legal fees) related to preparing the concession document and its registration
  - the production and implementation of safety plans for each concession (where deemed appropriate these may be independently audited)



- reporting all incidents or accidents to the Department of Conservation and the Occupational Safety and Health division of the Department of Labour.
6. Monitor concessions to ensure that concessionaires comply with requirements to remedy and mitigate adverse effects on natural and historic resources and recreation opportunities.
  7. Fix concession rents, fees or royalties at the appropriate value, having regard to:
    - any circumstances relating to the nature of the activity
    - the effects of the activity on the purposes of the area concerned
    - any contractual conditions, covenants or other encumbrances placed upon intrinsic, natural or historic resources by the concession
  8. Review rent, fees and royalties for each concession at least every three years.
  9. Seek cost-recovery for the processing of concessions, in accordance with sections 60A and 60B of the Conservation Act.
  10. Publicly offer concession opportunities, in accordance with the Conservation Act, by:
    - tendering the right to make an application
    - inviting applications; or
    - carrying out other actions that may encourage specific applications
  11. Include concession provisions for the concessionaire to carry out activities relating to the management of any conservation area on behalf of the Minister (if required).

### **Priorities**

- Adopt an effects-based management regime of concessions.
- Enhance visitor experiences by providing opportunities for people to experience and enjoy protected natural areas in a controlled and safe manner.
- Implement full cost-recovery.
- Charge appropriate rentals for the privilege of using land managed by the Conservancy.
- Monitoring of concessions.

### **Limitations**

Given the expected low level of concession activity within the Chathams, few limitations are expected.



# 6.5 Departmental Management

## 6.5.1 INTRODUCTION AND OVERVIEW

In Wellington Conservancy (which includes both Wellington and the Chatham Islands), the Department has the responsibility of managing over 370 individual administrative units (some 191,000 hectares in total), including one marine reserve. Annual business plans are prepared to detail the proposed conservation programme for each year. A six-year business planning process is also undertaken to provide indicative directions for future management.

Issues associated with the Department's Chatham Islands management include:

- ensuring that all additions to lands managed by the Department seek to maximise the Chatham Islands indigenous biodiversity
- ensuring that reserves are appropriately classified
- disposing of land of low natural and historic resource value
- ensuring that an adequate law enforcement system is in place
- maintaining adequate strategic management planning coverage with a high degree of public support
- ensuring that efficient financial, training, EEO and kaupapa atawhai systems are maintained
- management of the environmental impacts of statutory consents

The Department will increase focus on the future by:

- using conservation criteria to assess acquisition priorities
- ensuring that business planning processes are efficient and effective
- ensuring that applications for using land managed by the Department have adequately considered the environmental impacts of proposals so that impacts can be avoided, mitigated, remedied or relocated.

## 6.5.2 STATUTORY LAND MANAGEMENT

Statutory protection, exchange or disposal, closing and classification or status change of land.

### **Current Situation**

#### *Background*

The Department maintains a land register of each unit of land it manages. Basic information, such as the name and location of the area, its classification, area and legal description are recorded. A Geographic Information System (GIS) is used to store all data and to prepare maps of areas managed by the Department and of natural and historic resources. This is supplemented by schedules that record briefly the natural and historic resources present, recreational facilities, uses and management priorities for the areas.

Land managed by the Department in the Chathams includes areas allocated to the Department in 1987. Of these, seven are under one hectare and nine are between

one hectare and five hectares. The largest areas are the Tuku Nature Reserve (1238 hectares) and the leased Pitt Island Conservation Area (1282 hectares).

The Department has an overseer role under the Reserves Act for seventeen reserves managed by the Chatham Islands Council and the Chathams Gun Club. The majority of these are recreation and esplanade reserves.

### *Classifications*

A range of land classifications exists, to provide direction and restrictions on the activities that can take place on land managed by the Department. Changes and review of the status of areas can be a lengthy and complex process. The Department undertakes reclassification exercises only where this is necessary for appropriate management, protection, public use and/or is requested by local authorities.

### *Disposal*

The Department pursues the sale or transfer of surplus land where there is a gain to natural or historic resource protection (e.g., by an exchange of land) or to reduce administration of land of minimal natural or historic value. Proceeds from land disposals are used on a national basis for the acquisition, management or protection of land managed by the Department.

### *Reserves*

The majority of reserves administered by the council under the Reserves Act 1977 are esplanade and recreation reserves. The Department is required to process various types of consent required under the Reserves Act, such as leases to sports clubs and easements. The Department nationally encourages local authorities to prepare management plans for their reserves. This increases local control of the reserve, and reduces administration workloads for both organisations.

Where reserves have significant natural and historic resources, (e.g., burials in esplanade reserves) the Department will work with the council and iwi to establish appropriate management direction.

### *Covenants/Kawenata*



Akeake regeneration within the fenced Point Munning covenant.

The Chatham Islands land owners have been enthusiastic in using the Nature Heritage and Nga Whenua Rahui funds to protect areas under conservation covenants or kawenata. Processing these applications has been a priority statutory land management task and continuing applications are expected and encouraged.

### *Pitt Island lease area and reserve*

The Department has 'inherited' a complex situation of a conservation area with a renewable lease expiring in 2011, adjoined by Pitt Island Scenic Reserve blocks with difficult legal access, a mix of pastureland and natural and historic values on both tenures, and a community desire for continued pastureland use under greater community control, and remnant forest protection (see 5.3.8 Lease Area Management).

## **Statutory Framework**

The Conservation Act 1987, Wildlife Act 1953 and Reserves Act 1977 provide the Department with the ability to acquire, exchange and dispose of land and to classify areas it manages in accordance with the classes of protected land established in the Acts. Under the Reserves Act, the Department has an approval role for management plans and activities on reserves for which a management plan does not exist, and oversees the management of reserves administered by and vested in the Chatham Islands Council and the Chathams Gun Club.

## **Issues**

The fundamental issues to be addressed for statutory land management are:

1. Actioning land protection via covenants/kawenata or land acquisition.
2. Determining circumstances for the disposal and closing of conservation areas and reserves.
3. Prioritising and reducing the administrative workload under the Reserves and Conservation Acts.
4. Monitoring and enforcing compliance with the Reserves and Conservation Acts.

## **Objectives**

- To systematically describe and upgrade the natural, historic, recreational, administrative details, and management issues and threats to all land managed by the Department (as partially completed in the Schedules).
- To prioritise statutory management work to maximise gains in the protection of a broad range of Chathams indigenous biodiversity.
- To achieve a net gain to conservation when selling or exchanging land.
- To implement status/classification changes that are appropriate for the natural, historic and recreational values of land managed by the Department, where resources permit.
- To increase the effectiveness of reserve management by encouraging the preparation of management plans where required and delegating the appropriate management of reserves.
- To monitor and effectively service Reserves Act management undertaken by the council and other administering bodies.
- To close land managed by the Department for the protection of natural and historic resources, or where access would compromise safety.
- To resolve statutory land management issues associated with the Pitt Island conservation area lease and adjoining scenic reserve.

## **Implementation**

The Department will:

### *Land Inventory*

1. Maintain a computer register containing the following on all lands managed by the Department:
  - administrative details
  - ecosystem/special

- historic/cultural
  - recreational facilities
  - management threats, issues and priorities
2. Seek to update the land inventory at five-year intervals.

### *Disposal*

3. Take into account, as appropriate, the following when assessing whether reserve or conservation areas managed by the Department should be disposed of, or when the council requests disposal or a change of administration of any reserve:
- the natural and historic resources and recreational opportunities of the area: scientific, cultural, historic features, landscape or recreational opportunities that should be protected (see 6.2.3 Land Ecosystems, Implementations 5 and 6).
  - the view of the council
  - the views of iwi
  - whether the area enhances the natural or recreational values of any adjacent protected area or adjacent water body and public access to it
  - whether the area could be exchanged for an area with significant natural and historic resources or high recreational value
  - public submissions received on the public notification to dispose of the land
  - the views of the New Zealand Historic Places Trust when any known archaeological site or historic place is being considered for sale
  - arranging the disposal of surplus areas in accordance with current legislation and relevant government instructions relating to disposal of surplus lands of the Crown, including consultation with iwi
4. Action the disposal of conservation land unit 1052 (see Schedules) to the council and the Port Company.

### *Land Protection*

5. Use the criteria set out in 6.2.3 Land Ecosystems, Implementations 5 and 6, to assess indigenous biodiversity priorities.
6. Utilise the wide range of funding sources to protect land including:
- Nature Heritage Funds for covenants
  - Nga Whenua Rahui for kawenata
  - the Department's land acquisition fund
  - non-government grants
  - private donations and bequests through the mechanisms set out in 6.2.3 Land Ecosystems, Table 14.

### *Chatham Islands Council and other controlling activities*

7. Liaise with the council to outline their obligations and responsibilities under the Reserves Act 1977, and in particular:
- assist with policy and management advice where reserves have significant natural and historic resources (e.g., Flower Pot gaol, esplanade reserves)

- advise on their obligations to prepare management plans
  - encourage the preparation of a Chathams-wide reserves register by sharing Department and council information
  - encourage recognition of the natural and historic resources
  - provide management advice/consents under the Reserves Act generally
  - implement cost recovery for all Reserves Act approvals
8. Use the following criteria to assess natural and historic values when processing consents under the Reserves Act:
- Implementations 5 and 6 under 6.2.3 Land Ecosystems, for indigenous biodiversity
  - Implementation 2 under 6.2.7 Historic Resources, for historic values.
9. Use the following guidance to delegate reserve management:
- a) For vestings:
- To the council, or any trustees as set out in section 26 of the Reserves Act
- b) For control and management:
- the council wishes not to accept vesting of the area; or
  - the organisation can demonstrate an ongoing commitment to the reserve; and
  - the activities of the organisation on that reserve are consistent with the principles of the Reserves Act, and the relevant reserve classification

#### *Classification/Status Review*

10. Review classifications/land status of land managed by the Department when:
- increased knowledge of the land demonstrates that a change of protected status would be of conservation benefit
  - the land has lost the values for which it was originally held, and that restoration or enhancement is not practicable
  - access or activities need to be restricted to protect natural and historic resources
  - the views of affected parties, the Conservation Board, and the public have been considered

#### *Closing of Areas*

11. Allow for the closing of areas, in whole or part, under section 13 of the Conservation Act 1987, in the following circumstances:
- in case of public safety
  - in case of emergency
  - for defence exercises
  - in exceptional circumstances for approved scientific research

#### *Pitt Island lease area and scenic reserve*

12. Work with the lessee and the Pitt Island Reserves Committee to:
- negotiate for and resolve the issue of public access to the reserve blocks and coastline

- consider lease exchanges between the existing lease and reserve areas to achieve pastureland availability and natural and historic resource protection
- seek means of passing greater control and management responsibility to the community for areas identified for pastureland grazing

## Priorities

### Primary

The primary CMS priorities for statutory land management will be threefold:

- to increase the protection of indigenous ecosystems and species not well represented in the Chathams protected area network
- to maintain and upgrade information on the values and threats to land managed by the Department
- to resolve management and protection issues for the Pitt Island lease and scenic reserve areas

### Secondary

The secondary CMS priority is to meet statutory requirements to service the council and give consents under the Reserves and Conservation Acts.

### Tertiary

The tertiary priorities for statutory land management are twofold.

- to change the status or classification of land managed by the Department as necessary

TABLE 28: KEY STATUTORY LAND MANAGEMENT PRIORITIES

THEME	ISSUES	METHODS	RESULTS SOUGHT	PLACE
Protection of range of indigenous biodiversity	<ul style="list-style-type: none"> <li>• Many ecosystem types not adequately protected</li> <li>• Limited scope of land acquisition</li> </ul>	<ul style="list-style-type: none"> <li>• Promote range of funding sources, e.g., for covenant/kawanata</li> <li>• Encourage council protection action on their reserves</li> </ul>	<ul style="list-style-type: none"> <li>• Create range and extent of indigenous biodiversity protected</li> </ul>	Chatham Island Pitt Island Other Islands
Department land inventory	<ul style="list-style-type: none"> <li>• Incomplete data on all lands managed by the Department</li> <li>• Land values and threats not always well known</li> </ul>	<ul style="list-style-type: none"> <li>• Maintain computer database</li> <li>• Gather and update field data</li> <li>• Determine land boundaries</li> </ul>	<ul style="list-style-type: none"> <li>• Accurate land inventory held by Department</li> </ul>	Chatham Island Pitt Island Mangere/Rangatira
Resolution of Pitt Island lease and reserve management	<ul style="list-style-type: none"> <li>• Long-term lease</li> <li>• Lack of public access</li> <li>• Natural and historic value decline</li> <li>• Pastureland availability</li> </ul>	<ul style="list-style-type: none"> <li>• Work with lessee and reserves committee</li> <li>• Negotiate and resolve access</li> <li>• Lease exchanges</li> <li>• Greater community management</li> </ul>	<ul style="list-style-type: none"> <li>• Remnant forest and other natural and historic values protected, and assured pastureland grazing</li> </ul>	Pitt Island



- ii) to liaise with the council over Reserves Act management generally

### **Limitations**

There are some statutory actions begun by the Department's predecessors yet to be finalised. These will not always have priority over more recent actions (such as covenant protection), however it is anticipated that within the CMS ten-year time-frame all statutory action will be up-to-date.

## **6.5.3 COMPLIANCE AND LAW ENFORCEMENT**

Compliance with statutes administered by the Department.

### *Current Situation*

The first principle of compliance and law enforcement (CLE) is to ensure that the public are aware of all the relevant laws relating to the Department's management and that the laws are voluntarily complied with.

Where members of the public commit offences, the Department's job is firstly to maintain an intelligence network to locate suspects, evaluate the situation and consider if prosecutions should be sought.

### *Past Activity*

Past activities have related to compliance with permit-only entry to the Rangatira, Mangere and Tuku nature reserves, the taking of currently protected species, such as toroa and titi, and the removal of parts from stranded marine mammals.

Other CLE activities relate to the various reserve and conservation areas. The remoteness and difficult access to the lands managed by the Department and generally within and around the Chatham Islands make effective observation difficult. The protection of natural and historic resources is jeopardised by this. CLE is co-ordinated by a CLE co-ordinator based in the Department's Wellington office, who disseminates policy from the national co-ordinator and ensures relevant staff receive training. The Chathams Area Office has an Area CLE Co-ordinator. The Department may appoint honorary rangers to assist in CLE duties, especially where it is desirable to increase compliance levels.

### **Statutory Framework**

The Department has a duty to inform the public of all relevant statutes administered by the Department and to enforce them when necessary. This includes the following Acts:

- Conservation Act 1987
- Native Plants Protection Act 1934
- New Zealand Walkways Act 1990
- Reserves Act 1977
- Trade in Endangered Species Act 1989
- Wild Animal Control Act 1977
- Wildlife Act 1953
- Marine Mammal Protection Act 1971
- Forest and Rural Fires Act 1977

## **Issues**

The fundamental issues to be faced in this CMS for compliance and law enforcement are:

- increasing public awareness of their responsibilities to comply under statutes administered by the Department
- providing adequate training to individual officers to effectively implement Compliance and Law Enforcement work
- development of an effective information system

## **Objectives**

- To encourage voluntary public compliance with statutes administered by the Department.
- To systematically gather information, detect offences and initiate prosecution of offences under legislation administered by the Department, in a professional and efficient manner.

## **Implementation**

The Department will:

### *Compliance*

1. Develop compliance programmes to reduce offences and increase public awareness of the responsibility for compliance with legislation administered by the Department.
2. Appoint honorary rangers to assist, especially with voluntary compliance work.

### *Law Enforcement*

3. Prioritise law enforcement operations to ensure effective results.
4. Provide adequate training to staff and honorary rangers to ensure effective administration and to maximise operational capability.
5. Seek prosecution of offences based on offence repetition, offence severity and the effects on natural, historic and recreational values, and public complaints.

### *Information/Liaison*

6. Develop an information system that provides the Department and other law enforcement agencies with knowledge of suspected illegal activities.
7. Liaise with other agencies (i.e., police, customs, the Ministry of Agriculture and Forests) responsible for law enforcement and regulatory procedures.

## **Priorities**

### *Primary*

The primary priority is to seek the voluntary compliance of the public with the statutes the Department administers. This includes the maintenance of a system that provides knowledge of suspected illegal behaviour.

### *Secondary*

The secondary priority is to detect and undertake prosecutions of offences to legislation the Department administers.

TABLE 29: KEY COMPLIANCE AND LAW ENFORCEMENT PRIORITIES

THEME	ISSUES	METHODS	RESULTS SOUGHT	PLACE
Nature reserve permit compliance	<ul style="list-style-type: none"> <li>Protected species and ecosystems at risk through inappropriate visitor activity</li> </ul>	<ul style="list-style-type: none"> <li>Observation</li> <li>Public awareness and public information</li> <li>Criteria for permit issues</li> </ul>	<ul style="list-style-type: none"> <li>Voluntary compliance or prosecution if necessary</li> </ul>	Mangere/Rangatira Chatham Island: Tuku Nature Reserve
Protected species protection	<ul style="list-style-type: none"> <li>Illegal taking affecting habitats and threatening species survival</li> </ul>	<ul style="list-style-type: none"> <li>Observation</li> <li>Public awareness and information</li> </ul>	<ul style="list-style-type: none"> <li>Voluntary compliance or prosecution if necessary</li> </ul>	Predominantly other islands and Rangatira
Marine mammal parts	<ul style="list-style-type: none"> <li>Illegal collection of parts preventing controlled distribution</li> </ul>	<ul style="list-style-type: none"> <li>Observation</li> <li>Public awareness and information</li> <li>Iwi consultation on parts distribution</li> </ul>	<ul style="list-style-type: none"> <li>Voluntary compliance or prosecution if necessary</li> </ul>	Chatham Island Pitt Island

#### 6.5.4 ENVIRONMENTAL PROTECTION

Avoiding, remedying and mitigating the adverse environmental effects of activities approved by the Department.

##### **Current Situation**

The guidelines set out in *Environmental Protection and Enhancement Procedures* (1987) were first introduced in the 1970s to provide for environmental impact assessments (EIA) of proposals on natural physical and human resources, where government approval, funding or resources were involved. The concept is now applied in many statutory situations.

For concessions under the Conservation Act, the EIA process is now a standard part of concession applications and is covered under 6.4.4 (Concessions General). A concession for a very large proposal may, however, trigger the need for its environmental impact report (EIR) to be considered by the Parliamentary Commissioner for the Environment.

Other non-concession approvals by the Department such as under the Wild Animal Control Act (see 6.2.8 Animal Pests and Wild Animals) or under the Freshwater Fisheries Regulations (see 6.2.4 Freshwater Ecosystems) do require EIAs.

The Department itself is also required to assess the environmental consequences of its actions, such as for new facilities and tracks.

Monitoring of the effectiveness and performance of Environmental Impact Assessment (EIA) processes has historically been poor. This needs to be improved to evaluate consent management in two ways: firstly, approval assessment and monitoring to understand the environmental impacts of individual activities; secondly, policy monitoring to assess how well the Department is managing environmental effects across a range of consent types, such as visitor concessions (see 6.5.6 Survey, Monitoring and Information Management).

## **Statutory Framework**

The publication *Environmental Protection and Enhancement Procedures* (1987) outlines a set of administrative procedures set down by Government under a Cabinet directive. They determine whether an Environmental Impact Assessment or Report is necessary, and establish the process to be followed in producing and auditing any such assessment or report. The procedures apply to all proposals or actions on land managed by the Department, whether initiated by a government department or a private organisation or individual, to all approvals by the Department, and to all activities of the Department.

Sections 17S(1) and (3) of the Conservation Act set out the concession application requirements for providing adequate information and EIA (see 6.4.4 Concessions General). This specified process is an appropriate one to follow for non-concession approvals to meet the above EP and EP requirements.

Section 4 of the Resource Management Act provides an exemption for the Crown for land use consents on land managed by the Department where the proposed land use is provided for within this CMS or a relevant CMP. Consents for other Resource Management activities (e.g., subdivision, water discharge) will be required if applicable. Non-Crown applicants for activities on land managed by the Department must comply with the consent requirements of the Resource Management Act and the Council's Resource management document (when approved). The Resource Management Act's Fourth Schedule requirements for an assessment of effects on the environment may also apply in these cases.

## **Objective**

- To require the preparation of an appropriate EIAs, supporting applications to identify, avoid, remedy and mitigate, adverse effects.

## **Implementation**

The Department will:

### *EIA Preparation*

1. Require applicants seeking statutory approvals in regard to land or natural and historic resources managed by the Department to provide an environmental impact assessment that adequately assesses adverse effects where the effects of the proposal are potentially significant or where a lack of knowledge exists. This includes the Department's own consent applications for Department management programmes (under legislation and policy administered by the Department), or for other statutory approvals, such as under the Resource Management Act. Assessments of effects on the environment (AEE) prepared under the Fourth Schedule of the Resource Management Act will generally be regarded as fulfilling the Department's EIA requirement, particularly where there has been consultation with the Department and its concerns have been addressed.
2. Require EIAs to be prepared for proposals initiated by itself or other persons where statutory approvals are not required but significant adverse effects on natural or historic resources are anticipated.
3. Advise proponents seeking statutory approvals to consult appropriate Department staff to outline key issues that the EIA needs to address before the application is submitted to the Department.

4. Require each EIA prepared by applicants for the Department's assessment to be of appropriate detail, corresponding to the size, scale, impact and environmental effects of the proposal, before the application is accepted by the Department. Substantial compliance with this implementation statement is a necessary prerequisite to the lodging of a proper application. Failure to provide adequate information will be grounds for refusal to consider an approval. The Department will make available any information it has of relevance to the application. The EIA should:
  - clearly describe the activity, its location (including its relationship to land title boundaries), and the relevant land status involved
  - identify those persons interested in or affected by the proposal, the consultation undertaken, and any response to the views of those consulted
  - describe alternative sites or methods for the proposal, including those sites outside of lands managed by the Department
  - identify natural ecosystems and processes, historic values, cultural values and recreational values affected by the application
  - identify any beneficial and adverse effects of the proposal, direct and indirect, as well as their short-term, long-term, and cumulative effects, using sound scientific methods and data where possible
  - identify the probability of effects, along with their likely severity and magnitude
  - suggest measures including safeguards and contingency plans, where relevant, for mitigating predicted adverse effects and the environmental consequences of implementing the mitigating measures

#### *EIA Process*

5. Release EIAs prepared by applicants for public comment concurrent with or before the release of the application for public submissions where required under statute.
6. Review EIAs prepared for Department proposals by a person(s) independent of the project proponents.

#### *EIA Monitoring*

7. Require monitoring of the adverse effects of any approved activities where the effects on the environment are more than minor. The costs of such monitoring shall be borne by the approval holder, who shall outline in the application, a proposed monitoring programme, identifying:
  - selected key environmental indicators that the applicant will monitor to adequately assess the short- and long-term effects of their activities
  - appropriate consent review periods for reviewing consent conditions

#### *RMA Consents*

8. Require all applicants for Department approval to identify other statutory approvals needed and to co-ordinate the necessary EIAs and AEEs.
9. Generally consider Department approvals either prior to or jointly with other statutory approvals.
10. Liaise with and advise the council over the section 4 Resource Management Act land use exemption provided by this CMS and any relevant CMP.

11. Apply for Resource Management Act land-use consents where Department management will cause significant adverse effects beyond the land managed by the Department.

## **Priorities**

### *Primary*

Ongoing statutory approvals will have highest priority for EIA work. This is a commitment the Department must meet under Cabinet directive.

### *Limitations*

Tasks that may not be undertaken or completed include:

- policy level EIA assessment
- studies to determine critical thresholds for natural, historic and recreational management

## 6.5.5 RESEARCH



Banding black robin chicks,  
Rangatira.  
(Photo: Andrew Grant.)

Undertaking, supporting or allowing research that has benefits for or that does not significantly affect natural, historic or recreational values.

### **Current Situation**

The Chathams are a major centre of research activity for the Department. Much of this research is funded directly, or indirectly via contracts, by the Department, and is carried out by Department staff. Major projects funded and carried out largely by the Department include:

- taiko status and productivity
  - Chatham Island tui status
  - parea ecology
  - toroa/albatross ecology and population status
  - predator bait trials
  - Pitt Island habitat assessment
  - late-Holocene sand dune stratigraphy and human settlement chronology
  - DNA analysis of taiko
  - long-term population studies of southern royal albatross, Chatham Island mollymawk and Bullers mollymawk
  - ecology of the Chatham Island tui
- Major projects being undertaken via DOC contract and private research include:
- Chatham Island oystercatcher habitat use
  - skua ecology
  - speargrass weevil ecology

- toetoe survey
- burrow competition between broad-billed prions and chatham petrels, and techniques to manage competition
- habitat requirements of Chatham Island oystercatcher
- Coxella weevil and interactions with its host plant *Aciphylla dieffenbachii*
- threatened invertebrates of the Chatham Islands
- threats to indicator species on the Chatham Islands
- dendroglyphs on the Chatham Islands
- DNA analysis if NZ shore plover

Important areas in which there is currently little research or further research is needed, and where such work could be valuable to conservation include:

- the individual ecology of several endemic threatened plants
- identification and distribution of various toetoe on the Chathams
- predator bait station development
- predator-proof fence design
- taiko ecology
- Chatham Island oystercatcher ecology
- attraction of seabirds to artificial colonies
- sooty shearwater status and population dynamics, including potential customary-use effects
- Other potential customary-use effects
- assessment of visitor impacts on natural and historic values
- status and management of invertebrates
- development of effective predator poisons
- impacts of intensive management on endangered species

### **Statutory Framework**

The Conservation, Reserves, National Parks, Wildlife, Marine Reserves and Marine Mammals Acts variously enable the taking, removal, killing or damaging of plants, animals and other natural resources. Any research that requires any of these actions must be authorised under the appropriate act.

Any sampling or collecting as part of a trade, business or occupation requires a concession under Part IIIB of the Conservation Act, or an authorisation under the appropriate legislation, depending on the status of the land.

Bioprospecting (assaying for biologically active compounds) has implications for Government policy on access to indigenous genetic resources. *The indigenous fauna and flora claim to the Waitangi Tribunal (Wai 262)* (1996) has been lodged over this matter. This involves issues associated with Maori and Moriori interests and intellectual property rights. Until Government policy is clarified, the Department will generally not allow bioprospecting, commercial use, registration of intellectual property rights or transfer of material to third parties.

## **Issues**

Research priorities for the Department are set nationally. Nevertheless, there has been difficulty in defining priorities between various areas of conservation activity. Issues for the Department are:

- setting priorities among a range of research activities
- allowing for research activities that, while not having a direct benefit to conservation, do not have significant adverse effects on natural and historic values
- providing for a variety of research activities without incurring significant extra costs for the Department
- sharing financial benefits from research that has a commercial purpose undertaken on lands or species managed by the Department
- differentiating between research of scientific value, for collecting, and for economic gain
- integrating research into management programmes

## **Objectives**

- To identify areas in need of investigation and to provide a list of research priorities to the Department's Science and Research Unit, universities and other institutions.
- To undertake research and to consider applications for research on land or species managed by the Department where adverse effects can be avoided, remedied or mitigated.
- To provide support to researchers when the research is of benefit to major management and advocacy priorities.
- To develop contractual arrangements with researchers where the research is commercially oriented, either in whole or in part.
- To implement research findings that benefit management.

## **Implementation**

The Department will:

### *Research Priorities*

1. Set research priorities on the basis of the following criteria:
  - Highest priority is research required to identify and/or address information gaps that need to be investigated for effective management, followed by:
  - Research of scientific interest, but not necessarily required for management decisions. This will be permitted or encouraged as long as no natural or historic values are compromised or diminished.
  - In sensitive areas such as nature reserves, the research should be essential to the management of the ecosystem or components within it.
2. Provide annually a list of priority research topics to universities and other research providers throughout New Zealand.



### *Research Support*

3. Consider financial, logistical and other support where research meets national research agenda priorities and is a management priority for the Department.
4. Provide access where possible to huts, tracks and other logistical support where the research is of benefit to the Department.

### *Permit Requirements*

6. Provide researchers with appropriate permits where these are statutory requirements. Permits will be issued, subject to conditions on the following matters:
  - an assessment being made of effects on other species, ecosystems or other relevant matters (6.5.4 Environmental Protection applies)
  - methods to protect the species or ecosystems being studied
  - methods of animal or plant handling or removal
  - a management-related report to be provided to the Department at the end of the research
7. Consider the following in deciding whether to grant approval for specimen collection:
  - the necessity for collection
  - the credentials of the application
  - the nature of the project
  - the specimens and numbers required
  - the techniques being used for collecting specimens
  - the benefits of the research programme as a whole
  - the threats to indigenous species and their habitats
  - the views of iwi

Research that could have significant environmental effects will be closely examined, and sound reasons will be needed for approval to be given.

Approval for specimen collection may be granted where the specimen is not available elsewhere, where specialised laboratory study/identification is required, and where collection would not adversely affect the survival chances of threatened indigenous species or their habitats. Collection will be permitted:

- for recognised public collections (herbariums, museums, etc.)
- for approved propagation or research purposes
- to assist an approved Department research programme
- for education purposes (to be granted to a supervisor rather than to students) only in exceptional circumstances

Special conditions or restrictions as to time, place and method of collection may apply. Permits will not be issued where the collecting of indigenous plant and animal life is for exchange purposes. In sensitive areas specimen collecting will be permitted only in exceptional circumstances. Any permit to collect specimens will specify that all specimens collected be deposited in a recognised public collection and labelled as voucher specimens for the approved study or project.

8. Require that, except under exceptional circumstances, intending research proposals be submitted to the Department at least one month before the intended start date. This will allow proposals to be checked before they commence to ensure that they can safely be undertaken, that they will not be detrimental, that they will not interfere with existing programmes or public enjoyment, and that they are scientifically sound.

Researchers have similar rights of free entry and access to land managed by the Department, as does the public generally.

9. Require any questionnaires or surveys of the public by the Department to have obtained the written approval of the Minister of Statistics before they commence (section 6 of the Statistics Act 1975).

#### *Iwi involvement*

10. To consult with or involve iwi in relevant research.

### **Priorities**

#### *Primary*

It is important to direct research to those areas we know least about or which face threats to their viability. The Department has limited resources and will therefore provide most support for research that addresses current concerns. For the foreseeable future, the main focus of Department research will be on threatened species management and ecological processes relating to threatened ecosystems and their restoration.

#### *Secondary*

The Department will support, where possible, applications for financial support that best meet the priorities for management of the Department.

## 6.5.6 SURVEY, MONITORING AND INFORMATION MANAGEMENT

Survey and monitoring must be an integrated part of all management programmes. Information from survey and monitoring allows reasoned decisions to be made on management requirements, and provides a means to assess the effectiveness of programmes being carried out. Without good information it is difficult to be a good manager of the complex issues and areas managed by the Department.

Because resources for conservation are limited it is essential to have good information bases to allow the Department to prioritise management in a responsible and effective manner.

### **Current Situation**

#### *Background*

Limited information is available on Chatham Island ecosystems and some species groups, and on historic and cultural resources. There are large gaps in information that need urgent attention through survey and monitoring.

The Department must be proactive and establish good baseline information to mitigate any problems from activities that show signs of creating important issues



Survey recording of Chatham  
Island toetoe.  
(Photo: Andrew Grant.)

in the future. Some of these include: visitors to reserves and offshore island nature reserves; natural resource development and exploitation; energy developments; marine farming; customary use of natural resources.

### *Survey*

Surveys have been undertaken by the Department and other agencies to address specific needs such as freshwater fish, Chatham birds, Te Whanga lagoon birds, threatened plants, a number of invertebrate groups (e.g., moths), archaeological, geological, marine fish, soil and various botanical matters.

### *Monitoring*

Monitoring programmes have revolved around specific species' management programmes and in some cases have been undertaken for many years. Some habitat monitoring has taken place for a number of years in selected areas. A number of new

programmes have recently been initiated to measure what is happening to significant habitats and to assess current possum control and animal exclusion programmes.

Monitoring for the threatened bird management programmes has been good but in other areas it has been virtually non-existent. Monitoring is required to:

- understand the dynamics of a natural system, habitat, ecosystem or species population
- assess the changing conditions of historic resources
- assess the effectiveness of management actions (operational monitoring)
- assess how well management is meeting conservation objectives, whether they are specific (from a recovery plan) or holistic (part of long-term objectives across the whole Conservancy), by performance monitoring

### *Information Management*

A number of national databases exist but are not readily accessible or usable by the Area Office. To effectively use and develop national information systems, planning must be focused on area offices.

## **Statutory Framework**

The Department's mandate for undertaking survey and monitoring programmes comes from its functions under section 6 of the Conservation Act and from management requirements under the Reserves, Wild Animal Control, Marine Mammals Protection and Marine Reserves Acts.

## **Issues**

The issues to be addressed by the Department are:

- how to prioritise survey and monitoring to best effect
- how to assess threat significance with ongoing monitoring
- identifying and addressing methodological deficiencies for survey and monitoring, e.g., no robust methodology is available to assess visitor impacts

- identifying issues that may arise in the future so that information needed to address these can be identified, and, if necessary, commence survey and monitoring programmes to accumulate data to assess future visitor impacts
- establishing monitoring and survey programmes to meet long-term objectives and goals
- how to best co-ordinate with other agencies to minimise duplication and provide relevant management information
- how to efficiently collect, store, and use information in a GIS database

Important areas in which there is currently little survey/monitoring but where survey/monitoring problems exist include:

- comprehensive animal pest and wild animal distribution and impact information
- comprehensive historic resource survey
- comprehensive recreational, motivational, satisfaction and impact information
- comprehensive information on habitats and ecosystems

### **Objectives**

- To seek a complete, comprehensive ecological and historic survey for all of Chatham Islands.
- To systematically identify values, threats and potential management actions on all land managed by the Department.
- To ensure that natural, historic and recreational information is stored and accessible in ways that best enable the prioritisation of management decisions.

### **Implementation**

The Department will:

#### *Survey Priorities*

1. Set priorities for surveys using criteria that reflect conservation management needs e.g.
  - degree of threat
  - the need to increase our knowledge in areas in which the Department anticipates that issues will emerge
  - importance of area/community (relates to former distribution, rarity etc.)

#### *Monitoring*

2. Set priorities for long and short terms, and for performance and operational monitoring which satisfy the following criteria:
  - to provide information on how effectively management programmes are meeting management objectives
  - developing priorities for monitoring ecosystems and species where there are interest and potential management implications over the long-term
  - the monitoring outcomes can be applied to similar situations, places and threats

### *Information Management*

3. Maintain all survey and monitoring databases with GIS capability
4. Develop arrangements with other agencies for the sharing, storage and use of survey and monitoring information.
5. Make available information to local government and other organisations involved in the management of those resources in a readily understandable form.
6. Ensure database systems are developed to meet the needs of the Area Office field centre in the first instance.

### *Iwi involvement*

10. To consult with or involve iwi in relevant monitoring.

### **Priorities**

There are numerous pressures on the Chathams for survey and monitoring, however, due to resource constraints, only a limited amount can be undertaken within the ten-year period of this CMS. The rapidly changing situation on the Chathams means other requirements may develop and will require urgent attention.

The most pressing needs are:

#### *Primary*

##### Surveys

- invertebrate: to understand which species exist on the island group and their management needs
- ecological: to identify habitat types, their status and management needs
- species: those species identified in Molloy, Davis and Tisdall (1994) as priority A or B, where their status is due to a lack of information
- species populations that may be subject to customary use applications
- historic resource indicator areas to assess changes in resource conditions
- visitor-use areas, initially by gathering base-line data for potential visitor targetted areas.

#### *Secondary*

Integration of the Department's natural, historic and recreation information into a GIS system throughout the Conservancy.

**TABLE 30: KEY SURVEY, MONITORING AND INFORMATION MANAGEMENT PRIORITIES**

<b>T H E M E</b>	<b>I S S U E S</b>	<b>M E T H O D S</b>	<b>R E S U L T S S O U G H T</b>	<b>P L A C E</b>
Survey programmes	<ul style="list-style-type: none"> <li>Limited scope of past surveys</li> <li>No ongoing programmes</li> </ul>	<ul style="list-style-type: none"> <li>Survey priority species, and all invertebrate populations</li> <li>Undertake broad ecological surveys</li> <li>Undertake extensive historic surveys to gain full Department land coverage</li> </ul>	<ul style="list-style-type: none"> <li>Knowledge of all species, habitats and historic resources more evenly recorded</li> </ul>	All places
Monitoring programmes	<ul style="list-style-type: none"> <li>Limited focus of past monitoring</li> <li>Understanding dynamics of natural systems</li> <li>Understanding changing conditions of historic resources</li> <li>Effectiveness and outcomes of management</li> </ul>	<ul style="list-style-type: none"> <li>Monitoring as part of all Department projects</li> <li>Priority species and historic area monitoring</li> <li>Gather baseline data for potential visitor use areas</li> </ul>	<ul style="list-style-type: none"> <li>Management, natural process, and visitor effects able to be quantified</li> </ul>	All places



# SECTION 7

## CMS Administration



# 7. CMS Administration

## 7.1 MANAGEMENT PLANS AND FUNCTIONAL PLANNING

### **Background**

Prior to 1990, individual management plans were required for all reserves in the Chathams, however no reserves have management plans approved.

The Conservation Law Reform Act 1990 changed the requirements for management plans and established conservation management strategies to serve as the primary planning documents for all land managed by the Department and all of its functions.

### **Conservation Management Plans**

This section only applies to conservation management plans (CMPs) for land managed by the Department. For other areas see 6.5.2 (Statutory Land Management).

The purpose of CMPs is to implement this CMS and establish detailed objectives for the integrated management of natural and historic resources within an area, and for recreation, tourism and other purposes (see section 17I of the Conservation Act 1987).

### **Functional Strategies**

Beside conservation management strategies and conservation management plans there are other types of non-statutory documents such as functional strategies or operational plans that may be prepared by the Department. These plans provide a greater level of detail than this conservation management strategy.

The functional strategies, such as recreation and public awareness strategies, define how those specific issues are to be dealt with, usually throughout the Department's Canterbury Conservancy. Draft functional strategies already prepared have contributed to this CMS and will be revised according to CMS outcomes.

### **Current Situation**

The current management/functional planning situation in the Chathams is:

- A CMP is under preparation for the J.M. Barker (Hapupu) National Historic Reserve.
- Functional strategies include (note some of these were prepared while the Chathams were part of Canterbury Conservancy, and are still relevant strategies):
  - Draft interpretation strategy: Canterbury Conservancy 1991–2001 (1991)
  - Conservation connections: Canterbury Conservancy public awareness strategy (1995)
  - Chatham Islands Species Conservation Strategy (in preparation)



## **Statutory Framework**

A conservation management plan may relate to any land managed by the Department under the:

- Wildlife Act 1953
- Marine Reserves Act 1971
- Marine Mammals Protection Act 1978
- Conservation Act 1987
- Reserves Act 1977

Under section 17E(2) of the Conservation Act 1987, conservation management plans shall be prepared as required by a CMS.

## **Issues**

The issues associated with management planning are:

- What management plans should be prepared?
- What functional plans should be prepared and how can associates be involved in their preparation?

## **Objectives**

- To maintain, review and amend a CMP for J.M. Barker (Hapupu) National Historic Reserve.
- To prepare, review and amend other CMPs where significant or irreversible impacts on natural, historic and recreational values require a CMP to be prepared.
- To prepare, maintain and review functional strategies to provide strategic direction in functional areas and to focus management and advocacy.

## **Implementation**

The Department will:

### *CMPs*

1. Maintain, amend and review a CMP under section 17E, G and I of the Conservation Act 1987 for J.M. Barker (Hapupu) National Historic Reserve.

### *Future CMPs*

2. Produce CMPs where:
  - the rate and scale of changes to the use and management of natural and historic resources is significant on a national scale
  - a management plan is required to address the changes identified
  - a management plan would be the most effective and efficient management technique to manage the changes identified above

### *Functional Strategies*

3. Prepare, complete or maintain functional strategies for whole Conservancy or Chathams coverage to provide strategic direction (not inconsistent with this CMS or any CMP) in the following areas:

- ecosystems
  - public awareness
  - interpretation
  - plant pests
4. Prepare all functional strategies in draft form and invite comments from relevant associate and interest groups.
  5. Consult the Chatham Islands Conservation board in the preparation of all strategies. They will provide relevant advice to the Department once associate group input has been received and summarised.
  6. Regularly review functional strategies to maintain their consistency with the CMS and in response to changed conservation priorities.

### **Priorities**

Priorities for the Department are:

- approval of the J.M. Barker (Hapupu) National Historic Reserve Management Plan
- maintaining and reviewing functional strategies to give direction to the CMPs and the CMS

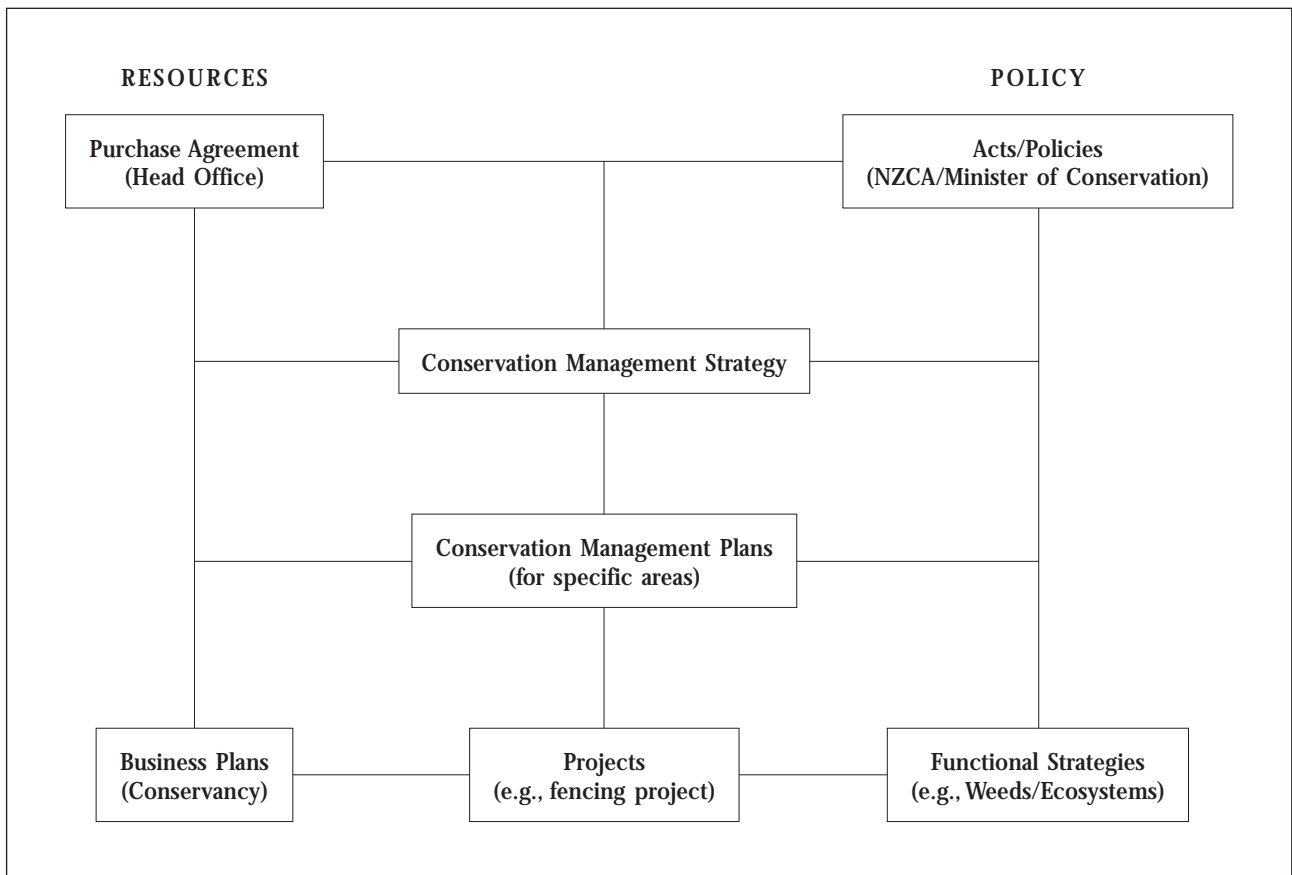
## **7.2 CMS IMPLEMENTATION**

### **Background**

The purpose of a CMS is to integrate the management of land and species managed by the Department. This section sets out:

- how the Department's Conservancy Business Planning will implement the CMS
- how the Department will monitor the achievement of CMS key priorities and objectives
- how the Chatham Islands Conservation Board will advise the Department and the New Zealand Conservation Authority on the implementation of the CMS
- when and how reviews or amendments will be considered
- how areas of land will be managed in accordance with the CMS and operation of CMPs (see 6.5.2 Statutory Land Management)

The following diagram illustrates the links between conservation management strategies and plans, business planning, and functional planning.



### **Business Planning**

The strategy will be implemented through CMPs, functional strategies and the Conservancy Business Plan prepared under section 41(2) of the Public Finance Act 1989. The plan covers a twelve-month period from July to June and serves as a contract between the Regional Conservator and the Director-General. This Conservancy Business Plan is part of a broader contract between the Director-General and the Minister.

Business plans determine priority conservation management and advocacy work and allocate staff time and money for that year. Business plans will accord with the direction of the government and national priorities and be consistent with the CMS and CMPs.

### **Monitoring**

Monitoring is required to ensure that the CMS is being effectively administered, and that the provisions of the strategy are still current and best serving the Department's needs.

Monitoring of business plans is provided through quarterly and yearly monitoring reports prepared by the Department. These quarterly and yearly reports will form the accountability mechanism to report on CMS implementation.

One of the functions of the Chatham Islands Conservation Board is to advise on the implementation of the CMS. The Department will establish a process that allows them to comment and advise on CMS implementation in conjunction with their consultation during business plan preparation.

## **Reviews and Amendments**

Processes for review and amendment of the strategy are provided for in sections 17H and 17I of the Conservation Act. The procedures for review and amendment are the same as those for preparation and approval of the strategy as set out in section 17E.

- A review of the strategy as a whole or in part may be initiated any time by the Director-General after consultation with the Chatham Islands Conservation Board. The strategy as a whole must be reviewed not later than ten years after its approval, although the Minister may extend this period.
- Amendment to the strategy may be initiated at any time by the Director-General after consultation with the Conservation Board. Every amendment must be carried out in accordance with section 17F of the Conservation Act.
- Where the proposed amendment is of such a nature that the Director-General considers that it will not materially affect strategy objectives or policies, a more simple process may be used. In this case paragraphs (k) and (p) of section 17F will apply and no formal public consultation will be required.

## **By-laws and Regulations**

The CMS cannot affect the legal rights or powers of any person other than the Minister, Director-General or any Fish and Game Council. To enable specific controls to implement and enforce the use by other people of land or resources managed by the Department, by-laws or regulations are required in addition to statutory powers. These are provided for under the following Acts:

- regulations under section 123 of the Reserves Act 1977
- regulations under section 48 of the Conservation Act 1987
- regulations under section 20 of the Walkways Act.

## **Objectives**

- To implement and monitor the Chatham Islands CMS through business plans to co-ordinate and prioritise the direction of Department management and advocacy.
- To monitor the Chatham Islands CMS and amend or review the document to ensure it is current and effective.
- To prepare appropriate CMPs, by-laws and regulations to implement this CMS.

## **Implementation**

The Department will:

### *CMS Implementation*

1. Collect, review and update resource information relevant to the management of natural, historic and recreational resources in the Chathams relevant to CMS and management planning.
2. Prepare the Department's annual business plans with regard to the provisions of the CMS.

### *CMS Monitoring*

3. Provide copies of the quarterly and yearly reports to the Chatham Islands Conservation Board for them to advise on CMS implementation.
4. Meet with the Chatham Islands Conservation Board annually to advise on:
  - current performance
  - recommended priorities for the following year's business plan
  - long-term progress in implementing the Chatham Islands CMS

### *Amendment and Review*

5. Prepare, maintain, amend and review the Chatham Islands CMS under sections 17D, 17E, 17H and 17I of the Conservation Act 1987. The strategy will be amended or reviewed when:
  - required by the Director-General of Conservation as advised by the Chatham Islands Conservation Board
  - general policy or government directions represent a significant departure from the provisions of the CMS
  - monitoring indicates that the provisions in the strategy are impractical or have been superseded by new information
  - a CMS amendment or review is required to address the new information, and a CMS amendment or review would be most effective and efficient technique.
6. Review this CMS not later than ten years after its approval by the New Zealand Conservation Authority.

### *CMS Coverage*

7. Manage any areas added to land managed by the Department, subsequent to the approval of the CMS, in accordance with the relevant objectives and implementation statements, until such time as the CMS is amended or reviewed to specifically include such areas.

### *By-laws and Regulations*

8. Seek by-laws and regulations as required to protect the Chathams natural, historic and recreational resources from adverse effects. The following Acts are relevant:
  - section 123 of the Reserves Act 1977
  - section 48 of the Conservation Act 1987section 72 of the Wildlife Act 1953



# Glossary, Abbreviations, Bibliography, Appendices, Index



# Glossary

## A

**access** (public) on foot only unless otherwise qualified.

**advocacy** the collective term for work done to promote conservation to the public and outside agencies by the Conservation Department, Conservation Boards and the New Zealand Conservation Authority. Advocacy includes taking part in resource management planning processes and using a range of methods to inform and educate the public and visitors on conservation issues.

**aircraft** has the same meaning as in the Civil Aviation Act 1964.

**aircraft landing** includes the hovering of any aircraft and the setting down or taking on of goods or persons from an aircraft (section 17ZF of the Conservation Act 1987)

**amend** in relation to conservation management strategies and conservation management plans means any change that does not affect the objectives of the strategy or plan. Such a change may not require a full public process (Conservation Act 1987).

**amenity values** those natural or physical qualities and characteristics of an area that contribute to people's appreciation of its pleasantness, aesthetic coherence and cultural and recreational values (Resource Management Act 1991).

**animal** any member of the animal kingdom other than a human being (Conservation Act 1987).

**archaeological site** any place in New Zealand that

(a) either

- i) was associated with human activity that occurred before 1900; or
- ii) is the site of the wreck of any vessel where that wreck occurred before 1900; and

(b) is or may be able through investigation by archaeological methods to provide evidence relating to the history of New Zealand (Historic Places Act 1993).

**area office** a public office of the Department, at Te One.

**Associates** collective term for the groups listed in Table 2 with whom the Department relates to achieve conservation gains.

## B

**biodiversity/biological diversity** the variability among living organisms from all sources including terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part. This includes diversity within species, between species and of ecosystems (United Nations Convention on Biological Diversity 1992).

**biological community** a group of plants or animals of distinctive character related to a particular set of environmental requirements. The term is used in a general, collective sense.

**biomass** weight of living material.

**biota** plants and animals.

**boat** any vessel used in navigation, however propelled (Reserves Act 1977).

## C

**coastal environment** an environment in which the coast usually is a significant part or element. The extent of the coastal environment will vary from place to place depending how much it affects or is (directly) affected by coastal processes and the management issues concerned. It includes at least three distinct but interrelated parts: the coastal marine area, the active coastal zone, and the land backdrop.

**coastal marine area** the foreshore, seabed and coastal water, and the air space above the water, between the outer limit of the territorial sea and mean high water springs. At river mouths the landward boundary is upstream five times the width of the river mouth (Resource Management Act 1991).

**community (biotic)** a recognisable group of plants and animals living together in one place.

**concession or concession document** a lease, easement, licence or permit granted under Part IIIB of the Conservation Act 1987 and includes any activity authorised by the concession document. (Section 2 Conservation Act 1987)

**concessionaire** as defined by section 2 of the Conservation Act 1987

**conservation (in respect of conservation areas)** the preservation and protection of natural and historic resources for the purpose of maintaining their intrinsic values, providing for their appreciation and recreational enjoyment by the public and safeguarding the options for future generations (Conservation Act 1987).

**conservation (in relation to historic places and areas)** the process of preserving, maintaining and restoring historic places and historic areas so as to safeguard their historical and cultural values (Historic Places Act 1993).

**conservation area** all land, foreshore and interest in land held under the Conservation Act 1987 (Conservation Act 1987).

**conservation boards** there are 15 regional conservation boards, each comprising up to 12 appointed members. Their functions include overseeing the preparation of the conservation management strategies and national park management plans for their area, approval of conservation management plans (e.g. for key reserves), advising the New Zealand Conservation Authority or the Director-General of the Department of Conservation on regional conservation matters and advising on new walkways in the region (Conservation Act 1987).

**conservation management plan (CMP)** a plan for the management of natural and historic resources, and for recreation, tourism and other conservation



purposes that implements the conservation management strategy and establishes detailed objectives for integrated management within any area or areas specified in a conservation management strategy (section 17D of the Conservation Act 1987).

**conservation plan** a document that outlines the cultural significance of a historic place and specifies the nature of the physical works to be undertaken in order to conserve it.

**consultation** a genuine invitation to give advice and genuine consideration of the advice. To achieve consultation, sufficient information must be supplied and sufficient time allowed by the consulting party to the consulted to enable it to tender helpful advice. It involves an ongoing dialogue (adapted from McGechan decision in *Air New Zealand v. Wellington International Airport* [1992] CP403/91).

**council** the locally elected Chatham Islands Council with primary responsibility for management of land development, water, soil conservation, pollution control, hazard mitigation and hazardous substances, as well as management of plant and animal pest controls.

**covenants** covenants under the Reserves Act 1977, Conservation Act 1987, or QEII National Trust Act 1977.

## D

**Department** the Department of Conservation.

**Director-General** the Director-General of Conservation.

**district plan** prepared and changed by the territorial authority according to the requirements of the Resource Management Act 1987 for the purpose of sustainable management of natural and physical resources. District plans indicate what uses are permitted for land within the district (see Resource Management Document) (Resource Management Act 1991).

## E

**ecological region** a single, very distinctive ecological district or, more commonly, a group of adjacent ecological districts that have diverse but closely related ecological components and relationships. The Chathams comprise a single ecological region/district (Kelly and Park, 1986).

**ecology** the study of organisms in relation to one another and to their surroundings.

**ecosystem** a biological system comprising a community of living organisms and their environment involved together in a process of living. There is a continuous flow of energy and matter through the system. The concept implies process and interaction. They range in size from small freshwater ponds to Earth itself.

**effect** as defined in section 3 of the Resource Management Act 1991.

**endangered** a plant or animal in danger of extinction whose survival is unlikely if the causal factors continue (Williams and Given, 1981).

**endemic** species of plants and animals that are unique to an area or animals which may migrate but breed only in the area (Williams and Given, 1981).

**environment** includes:

- a) ecosystems and their constituent parts, including people and communities, and
- b) all natural and physical resources, and
- c) amenity values, and
- d) the social, economic, aesthetic and cultural conditions which affect the matters stated in paragraphs (a) to (c) of this definition or which are affected by those matters (Resource Management Act 1991).

**esplanade reserve** a local purpose reserve usually 20 metres wide, vested in the territorial authority or in the Crown with the purpose of protecting conservation values, enabling public access to or along the sea, a river or lake and recreational use where this is compatible with conservation values. Usually created as a result of subdivision of private land. Refer marginal strips (Resource Management Act 1991, Reserves Act 1977).

**estuary** a broad tidal area associated with a river where there is a mixing of saline and freshwater.

**exploration** (in relation to mining) as defined in section 2(1) Crown Minerals Act 1991

## F

**fauna** animal life of a place or time.

**Fish and Game Council** statutory body responsible for the management of sports fish and game, and their habitats (Conservation Act 1987).

**fishery** one or more stocks of species of freshwater fish or aquatic life that can be treated as a unit for the purpose of conservation or management (Conservation Act 1987).

**flora** plant life of a given place or time.

**foreshore** shore between high and low water marks at mean spring tides (Conservation Act 1987).

**freshwater** as defined in the Conservation Act 1987.

**freshwater fish** includes all species of fin fish of the classes Agnatha and Osteichthyes, and all shellfish of the classes Mollusca and Crustacea, that must, at any time in the life history of the species, inhabit freshwater and includes any part thereof and such fin fish and shellfish that seasonally migrate into or out of freshwater (Conservation Act 1987).

**functional strategy** strategic assessment for a single function of the Department over a wide geographic area. For example, wild animal control plans for a conservancy, or conservancy recreation strategies (Management Planning Guidelines, Department of Conservation, 1991).

## G

**game animal** any game bird e.g. duck, geese (as in the first schedule of the Wildlife Act 1953), wild animal (as used in the Wild Animal Control Act 1977), rabbit or hare.

**general policy** a guide for decisions based on general approaches. General policy is used to mean a statement, directive or guide adopted by the Minister of Conservation, or the New Zealand Conservation Authority following a statutory process under the Conservation Act, National Parks Act, Reserves Act, Wildlife Act, Marine Reserve Act, Wild Animal Control Act, Marine Mammals Protection Act or the New Zealand Walkways Act. Conservation management strategies are required to implement statements of general policy (Management Planning Guidelines, Department of Conservation. 1991).

**geographic information system (GIS)** a computerised system for the input, manipulation and output of a wide variety of geographical data.

## H

**habitat** the environment in which a particular species or group of species lives. It includes the physical and biotic characteristics that are relevant to the species concerned. For example, the habitat of the black robin consists of Chatham Islands forest.

**heritage** inherited circumstances or benefit.

**historic area** an area of land that

- a) contains an interrelated group of historic places, and
- b) forms part of the historic and cultural heritage of New Zealand, and
- c) lies within the territorial limits of New Zealand

(Historic Places Act 1993)

**historic place** any land, building or structure that forms part of the historical and cultural heritage of New Zealand and is within the territorial limits of New Zealand. Includes anything fixed to this land (Historic Places Act 1993).

## I

**International Council on Monuments and Sites (ICOMOS)** Established by UNESCO to set world standards for cultural heritage preservation.

**International Union for the Conservation of Nature and Natural Resources (IUCN)** the World Conservation Union, based in Geneva. Comprises governmental and non-governmental organisations.

**implementation provisions** specific statements on how objectives are to be achieved, which may include criteria for assessment.

**indeterminate** (species) a plant or animal known to be extinct, endangered, vulnerable or rare, but where there is not enough known to say which of the four categories is appropriate Williams and Given, 1981).

**indigenous** as defined in the National Parks Act 1980.

**indigenous biodiversity** diversity within indigenous species, between indigenous species and diversity of the indigenous component of ecosystems.

**integrate** bring together.

**integrated management** the management of activities, existing or potential, in a manner which ensures that each is in harmony with the other and that priorities are clear.

**interpretation** conveying information about the origin, meaning or values of national or cultural heritage via live interaction or static media. It occurs in the vicinity of the subject and is designed to stimulate visitor interest, increase understanding and promote support for conservation.

**intrinsic value** this is a concept that regards the subject under consideration as having value in its own right, independent of any value placed on it by humans. Elements of intrinsic value with respect to ecosystems can include their integrity, form, uniqueness, functioning interrelationships and resilience (refer biodiversity).

**invertebrates** animals without backbones – including snails, insects, worms etc.

**iwi** tribe, people (Waitangi Tribunal 1991).

## K

**kaitiakitanga** the exercise of guardianship. In relation to a resource this includes the ethic of stewardship based on the nature of the resource itself (Resource Management Act 1991).

**kaupapa** an abstract word with many meanings. Within the Department it is generally used in the sense of vision, philosophy, cause, idea or theme.

**kawanatanga** European government powers and systems.

**ko-iwi** human bones or remains

## L

**land acquisition fund** a departmental fund used to meet costs associated with the establishment of statutory protection over areas of private and Maori land.

**land managed by the Department** all land held, managed or administered under the Conservation Act and other Acts administered by the Conservation Department (refer to the First Schedule of the Conservation Act 1987).

**land status** legal name given to land by the Act under which it is administered.

**land** includes foreshore and land covered by water and the air space above land.

**lease** an agreement that gives the lessee the right to exclusive possession of the land with the intention of conferring an interest in land as opposed to giving a personal privilege (Conservation Act 1987)

**licence** grant of a non-exclusive interest in land or a grant of permission to undertake an activity that does not require an interest in land (Conservation Act 1987).

**local authority** any regional or district council or unitary authority. In the Chathams, the Chatham Islands Council is the local authority.

## M

**mahinga kai** places where food is procured or produced (Waitangi Tribunal 1991).

**mahinga mataitai** area set aside for customary food-gathering by Maori under the Fisheries Act 1993.

**mana** authority, control, influence, prestige, power (Waitangi Tribunal 1991).

**mana whenua** customary authority exercised by an iwi or hapu in an identified area (Resource Management Act 1991)

**management planning** the process of setting and confirming objectives for the management of natural and historic resources, and recreation, tourism and other conservation purposes; and specifying the actions and resources necessary to achieve those objectives (Management Planning Guidelines, Department of Conservation, 1991)

**marginal strip** land reserved from disposition by the Crown under the Land Act 1948 and the Conservation Act 1987 along the foreshore, waterways greater than 3 metres wide and lakes. This term also refers to land acquired in exchange for marginal strips. Marginal strips are 20 metres wide, unless a reduction of width has been approved by the Minister. For more information refer to the Act (Conservation Act 1987).

**mineral** as defined in section 2(1) of the Crown Minerals Act 1991.

**mining** as defined in section 2(1) of the Crown Minerals Act 1991.

## N

**natural character** the qualities of an area that, taken together, give it a particular, recognisable character. These qualities may be ecological, physical, spiritual or aesthetic in nature.

**native** as defined in the National Parks Act 1980.

**natural** see natural resources.

**natural resources** include plants and animals and their habitats, landscape and landforms, geological features, and systems of interacting living organisms and their environment (Conservation Act 1987).

**natural value** having importance for the presence of indigenous species or ecosystems, or unmodified landform (see naturalness).

**naturalness** the degree to which a place is characterised by indigenous species (see natural value). A high degree of naturalness occurs when there are few or no impacts from exotic species, including human impacts.

**nature conservation** the preservation and protection of the natural resources of New Zealand, having regard to their intrinsic values and having special regard to indigenous flora and fauna, natural ecosystems and landscape (Conservation Act 1987).

**Nature Heritage Fund** a nationally contestable fund established by Government in 1990 to help fund the voluntary and permanent protection of indigenous forest and associated vegetation on private land.

**network utility** means the same as section 166 of the Resource Management Act.

**New Zealand coastal policy statement** as defined in section 57 of the Resource Management Act (gazetted 5 May 1994).

**New Zealand Conservation Authority (NZCA)** a national body of 12 appointed members established under section 6A of the Conservation Act 1987. Amongst other functions it has the statutory responsibility for approving generally policy, conservation management strategies, plans and national park management plans (Conservation Act 1987).

**New Zealand Fish and Game Council** a statutory body appointed by fish and game councils to co-ordinate the management, enhancement and maintenance of sports fish and game (Conservation Act 1987).

**Nga Whenua Rahui** a fund established to facilitate the voluntary protection of indigenous forest on Maori-owned land.

**Nga Whenua Rahui Kawenata** an agreement entered into under section 27A of the Conservation Act 1987.

**niche** (ecological) particular combination of site conditions where a species is found.

## O

**objectives** statements of intended results. These can be broad or narrow in scope and should be accompanied by implementation provisions (Management Planning Guidelines, Department of Conservation, 1991)

## P

**permit** a grant of rights to undertake an activity that does not require an interest in land. (Conservation Act 1987)

**plant** any member of the plant kingdom and includes any alga, bacterium or fungus, and any part of or seed or spore from any plant (Conservation Act 1987).

**protected natural areas (PNA) programme** a programme that aims to establish a network of reserves and other protected natural areas which is representative of the full range of New Zealand's natural diversity. Ecological districts are surveyed and areas identified that best represent the diversity of their natural features. These are termed recommended areas for protection, or RAPs.

**preservation** in relation to resources under the Conservation Act 1987, means the maintenance, so far as is practicable, of their intrinsic value (Conservation Act 1987).

**prospecting** as defined in section 2(1) Crown Minerals Act, 1991.

**protection** in relation to a resource, means its maintenance, so far as is practicable, in its current state, but includes:

- a) its restoration to some former state of mind
- b) its augmentation, enhancement, or expansion (Conservation Act 1987).

**public notice/notification** as required under the Conservation Act and other acts in the 1st Schedule.

## R

**rahui** a restriction on access, prohibition (Waitangi Tribunal 1991).

**rare** species with small work populations that are not at present endangered or vulnerable but are at risk (Williams and Given, 1981).

**recreation facilities** includes tracks, walks, picnic areas, camping grounds, shelters, huts, bivouacs, toilets.

**regional plans** the purpose of these is to assist regional councils and unitary authorities to carry out their functions. They are designed to address specific resource management issues for which regional councils and unitary authorities are responsible. Other than a mandatory regional coastal plan, councils must decide what regional plans they will prepare. Plans may cover matters such as water management, soil conservation, natural hazard mitigation and air pollution (refer Regional Policy Statement and Resource Management Document) (Resource Management Act 1991).

**regional policy statements** these set out the objectives for managing resources and are prepared by regional councils and unitary authorities in accordance with the Resource Management Act 1987. They provide the overall framework for achieving sustainable management in the region and are binding on regional and district plans (refer Resource Management Document) (Resource Management Act 1991, Regional Policy Statement and Plans, Ministry for the Environment).

**rehabilitation** to return a degraded ecosystem or population to an undegraded condition, which may be different from its original condition.

**relict** (populations) that which is left after all others have gone.

**resource consent** as defined in section 87 of the Resource Management Act 1991.

**resource management document** document required by the Chatham Islands Council Act 1995 to incorporate for the Chatham Islands only, the provisions of a district plan, regional plans and regional policy statement.

**restoration** returning a place as nearly as possible to a known earlier state by reassembly, reinstatement and/or the removal of extraneous additions (ICOMOS New Zealand Charter, 1993).

**restricted coastal activity** as defined in the Resource Management Act 1991.

**review** in relation to conservation management strategies and management plans, means to reconsider objectives and policies and, following a process of public comment, to approve a new strategy or plan, having regard to increased knowledge or changed circumstances.

**RM Act** Resource Management Act.

**road** access way designed primarily for motorised vehicles, including public roads and off-road vehicle tracks, but excluding paths designed for wheelchairs.

## S

**significance assessment** an assessment of the values of a historic place based on the criteria set out in section 23 of the Historic Places Act 1993.

**species recovery plan** a plan of action intended to halt the decline of a threatened species and increase its population.

**sports fish** introduced fish sought by freshwater anglers, mostly trout or salmon (First Schedule, Freshwater Fisheries Regulations 1983).

**stewardship area** a conservation area that is not a marginal strip, watercourse, conservation park, ecological area, sanctuary area or wilderness area, or land in which an interest is held under the Conservation Act 1987 for one or more of these purposes (Conservation Act 1987).

**strategic planning** an approach that analyses issues and develops policy or a course of action based on this analysis.

**strategic** planned approach to a problem or issue.

**sustainability** (ecological) the use of the components of an ecosystem in ways that allow for the perpetuation of the character and natural processes of that ecosystem.

**sustainable management** managing the use, development and protection of natural and physical resources in a way or at a rate that enables people and communities to provide for their social, economic and cultural well-being and for their health and safety while (a) sustaining the potential of natural and physical resources (excluding materials) to meet the reasonable foreseeable needs of future generations, (b) safeguarding the life-supporting capacity of air, water, soil and ecosystems, and (c) avoiding, remedying, or initiating any adverse effects of activities on the environment. This definition is specific to section 5(2) of the Resource Management Act 1991.

## T

**taiapure** local fishery of special significance to iwi or hapu, set aside under the Fisheries Act 1986.

**taking** in relation to plants this includes breaking, cutting, destroying, digging up, gathering, plucking, pulling up and removing of the plant. In relation to fish it means fishing (Conservation Act 1987).

**taonga** valued resources, treasures.

**taxa** species, subspecies or variety.

**territorial limit** limit of New Zealand's legal jurisdiction, 12 nautical miles from the coast.



**threatened** (species) a generic term used to describe all 'threatened' status – rare, vulnerable, endangered (Molloy, Davis and Tisdall, 1994).

**territorial** relating to land.

**tikanga** Maori customary values and practices (Resource Management Act 1991).

**traditional site** a place or site that is important by reason of its historical significance or spiritual or emotional association with Maori (Historic Places Act 1993).

**treaty** the Treaty of Waitangi.

## V

**vector** carrier of disease or infection.

**vehicle** as in the Transport Act means (in paraphrase) anything with wheels or runners that moves or is moved.

**visitors** people who visit lands managed by the Department for recreation, participating in activities for personal satisfaction, interest or enjoyment. Visitors include adults and children from both New Zealand and overseas. They may either arrange their own visit or use the services of a concessionaire.

**vulnerable** a plant or animal believed likely to move into the endangered category in the near future if the causal factors continue (Williams and Given, 1981).

## W

**wahi tapu** place sacred to Maori in the traditional, spiritual, religious, spiritual or mythological sense (Historic Places Act 1993).

**walkway** an area of land that has been declared a walkway or an area of land over which a walkway has been established under the New Zealand Walkways Act 1990.

**water** in all its physical forms and includes freshwater, coastal water and geothermal water.

**wetland** permanent or intermittently wet area, shallow water and land-water margins. Wetlands may be fresh, brackish or saline, and are characterised in their natural state by plants or animals that are adapted to living in wet conditions (New Zealand Wetlands Management Policy, 1986)

**wild animal** deer, chamois, thar, wallaby and possum, goats and pigs that are living in a wild state. Except for deer kept in captivity for farming, it does not include animals kept in captivity or rats, mice, rabbits, stoats, ferrets or weasels. Refer to the Act for the legal definition (Wild Animal Control Act 1977).

**wildlife** all animals that are living in a wild state, but does not include any animals of any species for the time being specified in the sixth Schedule to the Wildlife Act 1953 ('wild animals') (Conservation Act 1987).

## ABBREVIATIONS

AHB	Animal Health Board
CIVPB	Chatham Islands Visitor Promotion Board
CLE	Compliance and Law Enforcement
CMA	Coastal Marine Area
CMP	Conservation Management Plan
CMS	Conservation Management Strategy
CU	Conservation Unit
EEO	Equal Employment Opportunities
EIA	Environmental Impact Assessment
EP & EP	Environmental Protection and Enhancement Procedures
FORST	Foundation for Research and Science and Technology
FWI	Fire Weather Index
GIS	Geographical Information System
ICOMOS	International Convention on Monuments and Sites
IUCN	International Union for the Conservation of Nature and Natural Resources
MAF	Ministry of Agriculture and Forestry
MHWM	Mean High Water Mark
NZCA	New Zealand Conservation Authority
NZCPS	New Zealand Coastal Policy Statement
NZDF	New Zealand Defence Force
NZHPT	New Zealand Historic Places Trust
RMA	Resource Management Act
SAR	Search and Rescue
TB	Bovine Tuberculosis

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# Appendix 1

List of indigenous, common and scientific names for plants and animals referred to in the text.

INDIGENOUS OR COMMON NAME	SCIENTIFIC NAME
<b>PLANTS</b>	
Akeake/Chatham Island akeake	<i>Olearia traversii</i>
Ake-rautini	<i>Dodonaea viscosa</i>
Arrow grass	<i>Triglochin striatum</i>
Aruhe/bracken fern/rarahu/rauruhe	<i>Pteridium esculentum</i>
Autetaranga/sand daphne	<i>Pimelia arenaria</i>
Bamboo rush	<i>Sporodanthus traversii</i>
Barker's hebe/Barker's koromiko/koromiko	<i>Hebe barkeri</i>
Barker's koromiko/Barker's hebe/koromiko	<i>Hebe barkeri</i>
Bidibidi	<i>Acaena pallida</i>
Bidibidi/piripiri	<i>Acaena</i> spp.
Blackberry	<i>Rubus fruticosus</i>
Bracken fern/aruhe/rarahu/rauruhe	<i>Pteridium esculentum</i>
Bush flax/Chatham Island kakaha/kakaha	<i>Astelia chathamica</i>
Cabbage tree/tii	<i>Cordyline australis</i>
Chatham Island akeake/akeake	<i>Olearia traversii</i>
Chatham Island akeake/Chatham Island tree daisy/ keketerehe	<i>Olearia chathamica</i>
Chatham Island aster/makora	<i>Olearia semidentata</i>
Chatham Island bladderwort	<i>Utricularia</i> 'chathams'
Chatham Island button daisy	<i>Leptinella featherstonii</i>
Chatham Island corokia/hokataka	<i>Corokia macrocarpa</i>
Chatham island forget-me-not/Chatham Island lily/ kopakopa/kopukapuka	<i>Myosotidium hortensia</i>
Chatham Island geranium	<i>Geranium traversii</i>
Chatham Island groundsel	<i>Senecio radiolatus</i>
Chatham Island ice plant	<i>Disphyma papillatum</i>
Chatham Island kakaha/bush flax/kakaha	<i>Astelia chathamica</i>
Chatham Island karamu/karamu	<i>Coprosma chathamica</i>
Chatham Island koromiko/koromiko	<i>Hebe chathamica</i>
Chatham Island lily/Chatham Island forget-me-not/ kopakopa/kopukapuka	<i>Myosotidium hortensia</i>
Chatham Island linen flax	<i>Linum monogynum</i> var. <i>chathamica</i>
Chatham Island mingimingi/poteretere/rutitira	<i>Cyathodes robusta</i>
Chatham Island nikau palm/nikau	<i>Rhapalostylis</i> 'chathams'
Chatham Island poa	<i>Poa chathamica</i>
Chatham Island ribbonwood/manatu	<i>Plagianthus regius</i> var. <i>chathamica</i>
Chatham Island shield fern	<i>Polystichum</i> 'chathams'
Chatham Island sow thistle/puha	<i>Embergeria grandifolia</i>
Chatham Island spaniard/karamea/taramea/ Chatham Island speargrass	<i>Aciphylla traversii</i>
Chatham Island speargrass/Chatham Island spaniard/ karamea/taramea	<i>Aciphylla traversii</i>
Chatham Island toetoe/toetoe rakau	<i>Cortaderia turbaria</i>
Chatham Island tree daisy/Chatham Island akeake/ keketerehe	<i>Olearia chathamica</i>
Chatham Island woollyhead	<i>Craspedia</i> 'chathams'
Clubrush	<i>Isolepis</i> spp.
Coastal succulent	<i>Atriplex billardierei</i>
Cocksfoot	<i>Dactylis glomerata</i>
Cook's scurvy grass/nau	<i>Lepidium oleraceum</i>
Cox's matipo	<i>Myrsine coxii</i>

Coxella/karamea/taramea/Dieffenbach's speargrass/karamea/taramea	<i>Aciphylla dieffenbachii</i>
Dieffenbach's speargrass/Dieffenbach's spaniard/karamea/ taramea	<i>Aciphylla dieffenbachii</i>
Dieffenbach's speargrass/Dieffenbach's spaniard/karamea/ taramea	<i>Aciphylla dieffenbachii</i>
Fern	<i>Hypolepis amaurorachis</i>
Fescue	<i>Festuca coxii</i>
Flax/harakeke	<i>Phormium tenax</i>
Glasswort	<i>Sarcocornia quinqueflora</i>
Gully treefern/puunui	<i>Cyathea cunninghamii</i>
Harakeke/flax	<i>Phormium tenax</i>
Hard treefern/wheki	<i>Dicksonia squarrosa</i>
Hares tail	<i>Lagurus ovatus</i>
Hoho	<i>Pseudopanax chathamicus</i>
Hokataka/Chatham Island corokia	<i>Corokia macrocarpa</i>
Holygrass/karetu	<i>Hierochloa fusca</i>
Horokaka/New Zealand ice plant	<i>Disphyma australe</i> ssp. <i>australe</i>
Jointed wire rush/oioi	<i>Leptocarpus similis</i>
Kakaha/bush flax/Chatham Island kakaha	<i>Astelia chathamica</i>
Karaka/kopi	<i>Corynocarpus laevigatus</i>
Karamea/Chatham Island spaniard/taramea/Chatham Island speargrass	<i>Aciphylla traversii</i>
Karamea/Dieffenbach's speargrass/Dieffenbach's spaniard/ taramea	<i>Aciphylla dieffenbachii</i>
Karamu/Chatham Island karamu	<i>Coprosma chathamica</i>
Kareao/pirita/supplejack	<i>Rhipogonum scandens</i>
Karetu/holygrass	<i>Hierochloa fusca</i>
Kawakawa	<i>Macropiper excelsum</i>
Keketerehe/Chatham island akeake/Chatham	<i>Olearia chathamica</i>
	Island tree daisy
Kokihi/New Zealand spinach	<i>Tetragonia trigyna</i>
Kopakopa/Chatham island forget-me-not/Chatham Island lily/kopakopa	<i>Myosotidium hortensia</i>
Koromiko/Barker's hebe/Barker's koromiko	<i>Hebe barkeri</i>
Koromiko/Chatham Island koromiko	<i>Hebe chathamica</i>
Kowhai	<i>Sophora microphylla</i>
Maakoako/sea primrose	<i>Samolus repens</i>
Mahoe	<i>Melicytus chathamica</i>
Makora/Chatham Island aster	<i>Olearia semidentata</i>
Manatu/Chatham Island ribbonwood	<i>Plagianthus regius</i> var. <i>chathamica</i>
Maori spurge/New Zealand shore spurge/sand milkweed/ wai-okahukurai/waiu-atua	<i>Euphorbia glauca</i>
Marram grass	<i>Ammophila arenaria</i>
Mataira/matipo	<i>Myrsine chathamica</i>
Matipo/mataira	<i>Myrsine chathamica</i>
Matua-rarauhe/swamp umbrella fern	<i>Gleichenia dicarpa</i>
Native iris	<i>Libertia peregrinans</i>
Nau/Cook's scurvy grass	<i>Lepidulum olearaceum</i>
Nettle/ongaonga	<i>Urtica australis</i>
New Zealand ice plant/horokaka	<i>Disphyma australe</i> ssp. <i>australe</i>
New Zealand spinach/kokihi	<i>Tetragonia trigyna</i>
Ngaio	<i>Myoproum laetum</i>
Nikau/Chatham Island nikau palm	<i>Rhapalostylis</i> 'chathams'
Oioi/jointed wire rush	<i>Leptocarpus similis</i>
Ongaonga/nettle	<i>Urtica australis</i>
Orchid	<i>Pterostylis micromega</i>
Pa-naki-naki	<i>Pratia arenaria</i>
Pingao	<i>Desmoschoenus spiralis</i>
Piripiri/bidibidi	<i>Acaena</i> spp.
Pirita/supplejack/kareao	<i>Rhipogonum scandens</i>
Pohuehue	<i>Muehlenbeckia australis</i>
Poroporo	<i>Solanum aviculare</i> var. <i>aviculare</i>
Poteretere/Chatham Island mingimingi/rutitira	<i>Cyathodes robusta</i>



Puha/Chatham Island sow thistle	<i>Embergeria grandiflora</i>
Pukio/sedge	<i>Carex chathamica</i>
Pukio/sedge	<i>Carex trifida</i>
Pukio/sedge	<i>Carex ventosa</i>
Puunui/Gully treefern	<i>Cyathea cunninghamii</i>
Rarahu/aruhe/bracken fern/raruruhe	<i>Pteridium esculentum</i>
Raruruhe/Aruhe/bracken fern/rarahu	<i>Pteridium esculentum</i>
Rautini	<i>Brachyglottis huntii</i>
Remuremu	<i>Selliera radicans</i>
Rimurimu	<i>Sphagnum</i> spp.
Rutitira/poteretere/Chatham Island mingimingi	<i>Cyathodes robustus</i>
Sand daphne/autetaranga	<i>Pimelia arenaria</i>
Sand milkweed/Maori spurge/New Zealand shore spurge/wai-o-kahukurai/waiu-atua	<i>Euphorbia glauca</i>
Sand tussock	<i>Austrofestuca littoralis</i>
Sea primrose/maakoako	<i>Samolus repens</i>
Sea rush	<i>Juncus maritimus</i> var. <i>australiensis</i>
Sedge	<i>Baumea rubiginosa</i>
Sedge/pukio	<i>Carex chathamica</i>
Sedge/pukio	<i>Carex trifida</i>
Sedge/pukio	<i>Carex ventosa</i>
Sphagnum moss	<i>Sphagnum</i> spp.
Spike rush	<i>Crassula hunua</i>
Supplejack/pirita/kareao	<i>Rhipogonum scandens</i>
Swamp karamu	<i>Coprosma propinqua</i> var. <i>martini</i>
Swamp umbrella fern/matua-raruruhe	<i>Gleichenia dicarpa</i>
Tarahinau	<i>Dracophyllum arboreum</i>
Taramea/Chatham Island spaniard/karamea/ Chatham Island speargrass	<i>Aciphylla traversii</i>
Taramea/Dieffenbach's speargrass/Dieffenbach's spaniard/karamea	<i>Aciphylla dieffenbachii</i>
Ti/cabbage tree	<i>Cordyline australis</i>
Toetoe rakau/Chatham Island toetoe	<i>Cortaderia turbaria</i>
Tutsan	<i>Hypericum androsaemum</i>
Tutu	<i>Coriaria arborea</i>
Wai-o-kahukurai/Maori spurge/New Zealand shore spurge/sand milkweed/waiu-atua	<i>Euphorbia glauca</i>
Waiu-atua/Maori spurge/New Zealand shore spurge/sand milkweed/wai-o-kahukurai	<i>Euphorbia glauca</i>
Water milfoil	<i>Myriophyllum</i> spp.
Wheki/hard tree fern	<i>Dicksonia squarrosa</i>
Whekiponga	<i>Dicksonia fibrosa</i>
Yorkshire fog	<i>Holcus lanatus</i>

## BIRDS

Akoko/sooty shearwater/muttonbird/titi	<i>Puffinus griseus</i>
Australasian gannet	<i>Morus serrator</i>
Banded dotterel	<i>Charadrius bicinctus</i>
Black robin/kakaruai	<i>Petroica traversii</i>
Black swan	<i>Cygnus ultratus</i>
Black-backed gull	<i>Larus dominicanus</i>
Black-winged petrel	<i>Pterodroma nigripennis</i>
Broad-billed prion	<i>Pachyptila vittata</i>
Brown skua	<i>Stercorarius skua</i> <i>lonnbergi</i>
Cape pigeon	<i>Daption capense</i>
Cattle egret	<i>Bubulcus ibis coromandus</i>
Chatham fulmar prion	<i>Pachyptila crassirostris pyramidalis</i>
Chatham Island blue penguin	<i>Eudyptula minor chathamensis</i>
Chatham Island mollymawk/hopo/toroa	<i>Diomedea cauta eremita</i>
Chatham Island oystercatcher	<i>Haematopus chatamensis</i>
Chatham Island pigeon/parea	<i>Hemiphaga novaeseelandiae</i> <i>chathamensis</i>

Chatham Island snipe	<i>Coenocorpha pusilla</i>
Chatham Island tomtit/miromiro	<i>Petroica macrocephala</i>
Chatham Island tui/parson bird/koko	<i>Prosthemna novaeseelandiae</i>
Chatham Island warbler	<i>Gerygone albofrontata</i>
Chatham Island yellow-crowned parakeet/Forbes parakeet	<i>Cyanoramphus auriceps forbesi</i>
Chatham petrel/ranguru	<i>Pterodroma axillaris</i>
Chatham shag	<i>Leucarbo onslowi</i>
Common diving petrel	<i>Pelecanoides urinatrix urinatrix</i>
Dunnock	<i>Prunella modularis</i>
Eastern buff weka/weka/woodhen	<i>Gillirallus australis hectori</i>
Fairy prion	<i>Pachyptila turtar</i>
Forbes parakeet/Chatham Island yellow-crowned parakeet	<i>Cyanoramphus auriceps forbesi</i>
Grey duck	<i>Anas superciliosa</i>
Grey-backed storm petrel	<i>Oceanites nereis</i>
Hedge sparrow	<i>Prunella modularis</i>
Hopo	<i>Diomedea bulleri platei</i>
Hopo/Chatham Island mollymawk/tora	<i>Diomedea cauta eremita</i>
Hopo/Northern royal albatross/toroa ingoingo	<i>Diomedea epomorpha sanfordi</i>
Hopo/wandering albatross/toroa	<i>Diomedea exulans</i>
Kakaruai/black robin	<i>Petroica traversii</i>
Koko Chatham Island tui/parson bird	<i>Prosthemna novaeseelandiae</i>
Leach's storm petrel	<i>Oceandroma leucorhoa</i>
Little blue penguin	<i>Eudyptala minor</i>
Little shearwater	<i>Puffinus assimilis elegans</i>
Magenta petrel/taiko	<i>Pterodroma magentae</i>
Mallard duck	<i>Anas platyrhynchos</i>
Miromiro/Chatham Island tomtit	<i>Petroica macrocephala</i>
Mutton bird/sooty shearwater/akoko/titi	<i>Puffinus griseus</i>
New Zealand shore plover/tuturuatu	<i>Thinornis novaeseelandiae</i>
Northern Buller's mollymawk	<i>Diomedea bulleri platei</i>
Northern giant petrel	<i>Macronectes halli</i>
Northern royal albatross/hopo/toroa ingoingo	<i>Diomedea epomorpha sanfordi</i>
Parea/Chatham Island pigeon	<i>Hemiphaga novaeseelandiae chathamensis</i>
Parson bird/Chatham Island tui/koko	<i>Prosthemna novaeseelandiae</i>
Pied stilt	<i>Himantopus himantopus leucocephalus</i>
Pitt shag	<i>Stictocarbo featherstoni</i>
Ranguru/Chatham petrel	<i>Pterodroma axillaris</i>
Red-billed gull	<i>Larus novaehollandiae</i>
Silvereye	<i>Zosterops lateralis lateralis</i>
Sooty shearwater/mutton bird/akoko/titi	<i>Puffinus griseus</i>
Subantarctic skua	<i>Catharacta sku lonnbergi</i>
Taiko/magenta petrel	<i>Pterodroma magentae</i>
Titi/sooty shearwater/mutton bird/akoko	<i>Puffinus griseus</i>
Torea	<i>Haematopus chatamensis</i>
Toroa	<i>Diomedea bulleri platei</i>
Toroa/Chatham Island mollymawk/hopo	<i>Diomedea cauta eremita</i>
Toroa/wandering albatross/hopo	<i>Diomedea exulans</i>
Toroa ingoingo/Northern royal albatross/hopo	<i>Diomedea epomorpha sanfordi</i>
Tuturuatu/New Zealand shore plover	<i>Thinornis novaeseelandiae</i>
Wandering albatross/hopo/toroa	<i>Diomedea exulans</i>
Waxeye	<i>Zosterops lateralis lateralis</i>
Weka/Eastern buff weka/woodhen	<i>Gillirallus australis hectori</i>
White capped mollymawk	<i>Diomedea cauta steadi</i>
White-breasted shearwater	Undescribed species
White-faced heron	<i>Ardea novaehollandiae</i>
White-faced storm petrel	<i>Pelagodroma marina maoriana</i>
White-fronted tern	<i>Sterna striata</i>
Woodhen/Eastern buff weka/weka	<i>Gillirallus australis hectori</i>

## INVERTEBRATES

Aciphylla weevil/coxella weevil/speargrass weevil  
Chatham Island click beetle  
Coxella weevil/aciphylla weevil/speargrass weevil  
Pitt Island longhorn beetle  
Speargrass weevil/coxella weevil/aciphylla weevil  
Tree weta  
Weevil

*Hadramphus spinipennis*  
*Amychus candezi*  
*Hadramphus spinipennis*  
*Dorcus* spp. (undescribed)  
*Hadramphus spinipennis*  
*Talitropsis crassicuris*  
*Thotmus hallii*

## REPTILES

Chatham island skink/mokomoko  
Mokomoko/Chatham Island skink

*Leiolopisma nigriplantare*  
*Leiolopisma nigriplantare*

## MARINE ANIMALS

Blue cod/rawaru  
Crayfish/koura/rock lobster  
Cuvier's beaked whale/rongomoana  
Elephant seal  
Hakura/scamperdown whale/iheihe  
Iheihe/scamperdown whale/hakura  
Kewa/tohora/southern right whale  
Koura/crayfish/rock lobster  
Leopard seal/waka hao  
Long-finned pilot whale/tukuperu/upokohu  
Minke whale/pakaka  
New Zealand fur seal  
New Zealand fur seal  
Pakaka/minke whale  
Paraoa/sperm whale  
Paua  
Rawaru/blue cod  
Rock lobster/koura/crayfish  
Rongomoana/Cuvier's beaked whale  
Scamperdown whale/hakura/iheihe  
Southern right whale/kewa/tohora  
Sperm whale/paraoa  
Tohora/kewa/southern right whale  
Tukuperu/upokohue/long-finned pilot whale  
Upokohue/tukuperu/long-finned pilot whale  
Waka hao/leopard seal

*Parapercis colias*  
*Jasus edwardsii*  
*Ziphius cavirostris*  
*Mirounga leonina*  
*Mesoplodon grayi*  
*Mesoplodon grayi*  
*Balaeno gracialis*  
*Jasus edwardsii*  
*Hydrurga leptonyx*  
*Globicephala mealaena*  
*Balaenoptera acutorostrata*  
*Arctocephalus forsteri*  
*Arctocephalus forsteri*  
*Balaenoptera acutorostrata*  
*Physeter macrocephalus*  
*Haliotis australis*  
*Parapercis colias*  
*Jasus edwardsii*  
*Ziphius cavirostris*  
*Mesoplodon grayi*  
*Balaeno gracialis*  
*Physeter macrocephalus*  
*Balaeno gracialis*  
*Globicephala melaena*  
*Globicephala melaena*  
*Hydrurga leptonyx*

## FRESHWATER FISH

Banded kokopu/kokopu  
Giant kokopu/kokopu  
Kokopu/banded kokopu  
Kokopu/giant kokopu  
Kokopu/new kokopu species  
Long-finned eel/tuna\*  
Mata/whitebait  
New kokopu species  
Piraki/smelt  
Red-finned bully/toittoi  
Short-finned eel/tuna\*  
Smelt/piraki  
Toittoi/red-finned bully  
Whitebait/mata

*Galaxias fasciatus*  
*Galaxias argenteus*  
*Galaxias fasciatus*  
*Galaxias argenteus*  
*Galaxias rekohua*  
*Anguilla dieffenbachii*  
*Galaxias* spp.  
*Galaxias rekohua*  
*Retropinna retropinna*  
*Goiomorphus huttoni*  
*Anguilla australis*  
*Retropinna retropinna*  
*Gobiomorphus huttoni*  
*Galaxias* spp.



# Appendix II: Part II, Resource Management Act 1991

(see 1.4 Relationship between Resource Management Act and Conservation Act)

## PURPOSE AND PRINCIPLES

### **5. Purpose**

- i) The purpose of this Act is to promote the sustainable management of natural and physical resources.
- ii) In this Act, 'sustainable management' means managing the use, development, and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic and cultural well-being and for their health and safety while –
  - a) Sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonable foreseeable needs of future generations; and
  - b) Safeguarding the life-supporting capacity of air, water, soil and ecosystems and
  - c) Avoiding, remedying, or mitigating any adverse effects of activities on the environment.

### **6. Matters of national importance**

In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development and protection of natural and physical resources, shall recognise and provide for the following matters of national importance:

- a) The preservation of the natural character of the coastal environment (including the coastal marine area), wetlands and lakes and rivers and their margins, and the protection of them from inappropriate subdivision, use and development;
- b) The protection of outstanding natural features and landscapes from inappropriate subdivision, use and development;
- c) The protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna;
- d) The maintenance and enhancement of public access to and along the coastal marine areas, lakes and rivers;
- e) The relationship of Maori and their culture and traditions with their ancestral lands, water, sites, wahi tapu, and other taonga.

## **7. Other matters**

In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development and protection of natural and physical resources, shall have particular regard to –

- a) Kaitiakitanga
- b) The efficient use and development of natural and physical resources
- c) The maintenance and enhancement of amenity values
- d) Intrinsic values of ecosystems
- e) Recognition and protection of the heritage values of sites, buildings, places or areas
- f) Maintenance and enhancement of the quality of the environment
- g) Any finite characteristics of natural and physical resources
- h) The protection of the habitat of trout and salmon

## **8. Treaty of Waitangi**

In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall take into account the principles of the Treaty of Waitangi (Te Tiriti o Waitangi).

**Appendix III:  
New Zealand Environmental  
Care Code and  
New Zealand Water Care Code**















# Schedules



# Schedules

## 1 INTRODUCTION

Schedules I and II identify and describe (in general terms) all areas managed by the Department within the Chatham Islands as at December 1998, and meet the requirements of section 17D(7) of the Conservation Act 1987. They also identify areas for which action is underway to bring them under Department of Conservation management, or are reserve managed by other agencies. The Schedules are part of the Chatham Islands Conservation Management Strategy and are to be read in conjunction with the CMS text, which presents the context, goals, objectives, implementation statements and priorities for all areas and natural and historic resources managed by the Department in the Chathams.

Table 31 summarises the 49 areas managed by the Department (6,836 hectares).

Table 32 summarises 18 units of private land protected by conservation covenants/kawenata (approximately 1077 hectares) or for which action is underway to bring them under a form of protection.

Table 33 summarises 17 reserves (91.8968 hectares) that are managed by other agencies in the Chathams.

Table 34 summarises general information about areas managed by the Department that have no significant values for conservation.

The Schedules comprise two sets of information. Schedule I comprises numerical lists of conservation units to assist with the location of areas within Schedule II, and a list of lands managed for conservation purposes by landowners and agencies other than the Department. Schedule II is a text description of 42 areas (managed by the Department) that are known to contain significant indigenous flora, fauna, geological or historic features. This schedule only surveys the features of note. Many of the more widely dispersed fauna are not recorded.

All areas listed in Schedules I and II that have Conservation Unit numbers are identified on the maps.

More specific information about each area can be obtained from the Conservancy Office where extensive records are held. We welcome queries and additional information on areas that have been included in the schedules. As additional information becomes available, the Department will continue to update the schedules.

## 2 HOW TO USE THE SCHEDULES

A If you know the name of an area managed by the Department:

- i) Refer to Schedule I (Tables 31, 32A, 32B, 32C) where you will find, in numerical order, the conservation unit number.
- ii) The conservation unit number comprises an initial number (1 or 2) which is the NZMS 260 map sheet number, and a three figure number (e.g., 001) which is the conservation unit identifier number used by the Department.
- iii) Look at the text description of the area by looking up the conservation unit number in Schedule II or, for some areas Schedule I, Table 34; then

- iv) Locate the conservation unit identifier number on the appropriate map sheet.
- B** If you do not know the name of an area managed by the Department:
  - i) Locate the area on the map sheet and note its land unit number;
  - ii) Refer to Schedule II to find out if it has a full description.
  - iii) Refer to Schedule I to find out its name, area, legal description and status.
- C** If you wish to find a conservation unit on the NZMS 260 topographic map, the grid reference is to be found within the conservation unit description in Schedule II.

## SCHEDULE 1: AREAS MANAGED FOR CONSERVATION PURPOSES

### Key

CA Conservation Area	NHR National Historic Reserve
CU Conservation Unit	PR Proposed Reserve
ER Esplanade Reserve	RR Recreation Reserve
HR Historic Reserve	SR Scenic Reserve
MS Marginal Strip	* Refer to Table 34
NR Nature Reserve	

TABLE 31: AREAS MANAGED BY THE DEPARTMENT

CU	LEGAL DESCRIPTION	AREA (ha)	NAME
1001	Sec 1 & 2 SO34601 and Sec 1 SO36529	191.885	Tangepu CA plus Add'n
1002	Sec 1 SO36531 and Pt 1F Wharekauri	72.6467	Chudleigh CA
1009	Sec 9 SO34574 and Sec 1 SO36530	32.816	Nikau Bush CA
1012	Lots 1 & 2 DP 53087	28.793	Pt Hapupu NHR
1013	Sec 1 SO34497	1.3125	Pt Hapupu NHR
1016	Lot 1 DP 55240	170.4	Henga SR
1017	Sec 33 SO31980	34.03	Taia Bush HR
1018*	Sec 6 SO35045	2.8075	CA
1021*	Lot 1 DP 55026	0.7596	DOC Base CA
1022*	Part 1J SO35045	3.2375	Pt Tikitiki Hill
1023*	Sec 4 SO35045	0.059	CA
1025*	Closed Road	0.0405	CA
1026	Sec 7 SO34132, Pt Sec 1 SO35496	50.4966	Te Awatea SR
1029	Sec 1 SO36532	419	Wharekauri (Green Swamp) CA
1032*	Part 1W SO35045	0.8094	Pt Tikitiki Hill CA
1033*	Lot 2 DP60775	1.9874	CA
1034		831.1509	Ocean Mail SR
1036		4.4	Lake Kaingarahū MS
1037		6	Lake Makuku MS
1038		10	Lake Kairae MS
1039		30	Te Whanga Lagoon MS
1040		5	Lake Taia MS



TABLE 31: AREAS MANAGED BY THE DEPARTMENT cont.

CU	LEGAL DESCRIPTION	AREA (ha)	NAME
1041		14	Hanson Bay MS
1042		4	Te Whanga Lagoon MS
1043		12	Waikawa Island MS
1044		4	Te Whanga Lagoon MS
1045		24	Te Awainanga River MS
1046		15	Hanson Bay MS
1047		9	Hanson Bay MS
1048		0.2	Hawaiki Stream MS
1049		4	Hanson Bay MS
1050		0.5	Petre Bay MS
1051		3	Petre Bay MS
1052*		0.2	Waitangi Bay MS
1053		12	Pacific Ocean MS
1056	Secs 1 SO36538, 2 SO36539, 3 SO36540	37.9	Wharekauri CA
1058	Pt Lots 1, 2, 3 DP24095	60.2	Cannon-Peirce SR
1059	Pt Lot 1 DP24095	29	Harold Peirce SR
1067	Lot 1 Pt Sec 13 Owenga Settlement	10.15	Kairae HR (proposed)
1070	Sec 1 SO36528	60.84	Lake Rotokawau CA
2001	Sec 34 SO3341	406.79	Thomas Mohi Tuuta (Rangaika) SR
2007	ML5270 (Mangere)	112.9073	Mangere Island NR
2008	Sec 1 SO32598	41	Rangiauria, Pitt Is SR
2009	Secs 2 & 3 SO 33431	615	Glory & Canister Cove; Pitt Is SR
2010	ML5270 (Rangatira)	218.5303	Rangatira (South East Island) NR
2011	Lot 1 DP60624	1238.5	Tuku NR
2012	Pt Sec 1, 2, 3, SO 32597	1282.659	Waipaua CA
2013	Sec 1 SO32597	692	Waipaua; Pitt Is SR
2015		20	Pitt Straight MS
	<b>Total Area</b>	<b>6,835.3322</b>	

TABLE 32: PRIVATE LANDS PROTECTED BY CONSERVATION COVENANTS/KAWENATA

A: ACTIONED THROUGH NATURE HERITAGE FUND

CU NO. WHERE ON MAP	DESCRIPTION	AREA (ha)	NAME	STATUS
1060	Pt 1G Kekerione	4.45	Te One School Covenant	Proposed
1061	Pt 1 B19 Wharekauri	247.0520	Barkers Kaingaroa Station Covenant	Finalised
1062	Pt 1E & 3 Wharekauri	23.25	J Muirson Point Munning Covenant Extension	Being actioned
1063	Pt 1D Otonga	70.1	G & R Horler Franks Bush Covenant	Being actioned
1064	Pt IMI Kekerione	6.12	Te Roto Covenant	Proposed
1065	Pt 37 ABC2 Kekerione	6.4	R. Tuuta Big Bush Covenant	Being actioned
1066	Pt 1 L2 Wharekauri	12.6	Mairangi Covenant	Proposed
1068	Pt 12, 1 Owenga Settlement	70.1	A & R Preece (Gillespie Ck) Covenant	Finalised
2017	Pt 1E 8, Otonga	122.6	B & E Tuanui, Tuku/ Awatotara Covenants	Finalised
	Pt Matarae 4 Subdivision 8	16	P Smith (Te Matarae) Covenant	Being actioned
	Pt 1E4A1 Otonga	40	D Prendeville & D Whittaker (Matakatau Creek) Covenant	Being actioned
	Pt 1E 9, 10, 11, 12 Otonga	1300	Holmes, Seymour & Day: South Chathams Covenant	Proposed
	Pt 1E 8 Otonga	14	B & E Tuanui Kiringe/ Waterfall Creek Covenant	Proposed
1031	Pt 1E Wharekauri	28	J Muirson Point Munning Covenant	Being actioned

TABLE 32: PRIVATE LANDS PROTECTED BY CONSERVATION COVENANTS/KAWENATA  
cont.

**B: ACTIONED THROUGH NGA WHENUA RAHUI**

NO. <sup>1</sup>	AREA (ha)	NAME	STATUS
1	16.8	The Maori Trustee (Tennants Lake) Kawenata; Lessee Eric Dix	Proposed
2	28	A & R Preece (Te Awaapatiki and Wairua Bush) Kawenata	Being actioned
3	60	H Daymond (Otonga) Kawenata	Being actioned
4	70	Goomes (Rapanui, including Plum Tree, Pear Tree, and The Falling) Kawenata	Being actioned
5	10	T Lanauze (Nuhaka) Kawenata	Being actioned

*1. Conservation Unit numbers not yet given.*

**C: OTHERS (CONSERVATION COVENANTS)**

CU NO. WHERE ON MAP	AREA (ha)	NAME	ORIGIN	STATUS
1054	53.88	Wharekauri Covenant	SOE Land allocation	Finalised
	24.0	P Smith (Lake Huro) Conservation Covenants	Private Land	Being actioned
	53.13	Ellen Elizabeth Preece (Pitt Island) Conservation Covenants	Private Land	Being actioned
	5.8	E. R. Seymour (Otaawe Point) Covenant	Private Land	Being actioned
	135.0	Frederick & Mary Hunt, Memorial Conservation Covenant	Private Land	Being actioned

TABLE 33: RESERVES MANAGED BY OTHER AGENCIES<sup>1</sup>

CU	LEGAL DESCRIPTION	AREA (ha)	NAME
1003	Lot 11 DP35291	0.5943	Kaingaroa ER
1004	Lot 10 DP35291/Lot 1 DP55692/Lot 6 DP49302	0.4965	Kaingaroa RR
1006	Lot 10 DP35291, Lot 6 DP49302	0.2346	Kaingaroa ER
1010	Lot 5 DP57368	1.7	Lk Rotoeka ER
1011	Lot 1 DP27648	37.4688	Chudleigh RR
1014	Lot 4 DP57368	1.39	ER (Petre Bay)
1015	Lot 2 DP45644	0.992	ER (Te Whanga)
1019	Lot 10 DP35274	0.1012	Te One RR
1020	Lot 1 DP44584	2.5939	Chatham Island Gun Club RR
1024	Secs 4 & 5 SO31076	22.197	Norman Kirk Memorial RR
1027	Lot 2 DP50245	4.88	RR, (south west coast)
1028	Lot 5 DP60525	0.375	Owenga ER
1035	Block 2A 2E3, Te Awapatiki	0.04	Te Awapatiki ER, Owenga
2002	Lots 4 & 5 DP54703	1.41	Flower Pot ER
2003	Lot 2 DP34321	0.3035	Flower Pot ER
2005	Lots 13 DP54703, 16 DP54704	7.62	Waihere Bay ER
2014	Lot 1 DP 61677	9.5	Otonga ER
	<b>Total Area</b>	<b>91.8968</b>	

<sup>1</sup> All of these reserves are managed by the Chatham Islands Council, except CU1020 which is managed by the Chatham Island Gun Club.

TABLE 34: LAND UNITS FOR WHICH NO SCHEDULE II RECORD SHEET PREPARED

CU	AREA (ha)	LOCALITY AND CURRENT USE
1018	2.8075	Te One: 20m wide by 1350m long strip (closed road?), in pasture
1021	0.7596	Te One: DOC Field Centre office, workshop and house
1022, 1032	4.0469	Tikitiki Hill, Waitangi: Pasture, DOC house, two other government house sites and Chatham Islands TV and Radio Society station site
1023	0.059	Waitangi: Part true right bank of Nairn River at mouth
1025	0.405	Waitangi: closed road being part of bed of Mangape Stream between Maipito Road bridge and Nairn (Waitangi) River
1033	1.9874	Te One: DOC house and paddock
1052	0.2	Waitangi: former seabed, now seaward edge of formed road to wharf and part of harbour reclamation. Road identified in 6.5.2 for disposal to Council, reclamation in process of disposal to Port Company
2020	1.68	Tuku: DOC house

<sup>1</sup> *Some still under final covenanting action. Several others still being discussed.*

## SCHEDULE II: AREAS MANAGED BY THE DEPARTMENT

**Conservation Unit:** Conservancy conservation unit number (e.g., 1001 prefixed by NZMS 260 Chatham Islands map sheet no (e.g., 1) then the DOC conservation unit number (e.g., 001). The numbers are not in complete sequence as some numbers have been used for protected land not managed by DOC.

**Name:** Gazetted or common name

**Legal Status:** Statutory category under relevant legislation

**Reserve classified:** If it is a reserve under the Reserve Act 1977, whether it has been classified or not. The classification is in the legal status.

**NZMS 260 Grid Reference:** East/north as on topographic maps

**Legal description:** Legal description of the conservation unit as held by Land Information New Zealand

**Survey block and district:** Block and district in which the conservation unit is situated.

**NZMS 260 and CMS Map #:** Sheet 1 or 2 as appropriate

**Area:** Area of conservation unit in hectares

**Ecological district:** Always Chathams

**Area Office:** Always Chatham Islands

**Local Authority:** Always Chatham Islands Council

<b>CONSERVATION UNIT: CI 1029</b>		<b>NAME: Wharekauri (Green Swamp) Conservation Area</b>	
<b>ADMINISTRATION</b>			
<b>Legal Status:</b> Conservation Act, Section 62		<b>NZMS 260 and CMS Map#:</b> 1	
<b>Reserve Classified?</b> N/A		<b>Area:</b> 422 9560 ha	
<b>NZMS Map Reference:</b> 410 780		<b>Ecological District:</b> Chathams	
<b>Legal Description:</b> Sec 1 SO 36532, Sec 2 SO 36532		<b>Area Office:</b> Chatham Islands	
<b>Survey Blk &amp; District:</b> II, II Rangitihi		<b>Local Authority:</b> Chatham Islands Council	
<b>DESCRIPTION</b>			
<p><b>General:</b> Very large low-lying peat system and smaller areas of lower slopes on the south-facing flanks of the peak Motuariki. Some streamside plants, and steep banks to the west. The majority of the cover is of wetland shrubs and restiads, lesser amounts of pouteretere fernland and stands of karamu/akeake swamp forest.</p> <p><b>Location:</b> Adjoins Wharekauri Station on its southern boundary, northern headwaters of Tutuiri Creek catchment, Chatham Islands.</p> <p><b>Main Ecosystems:</b> <i>Dracophyllum paludosum</i> shrubland, <i>Dracophyllum</i>/bamboo rushland, square rush/umbrella fern /bracken/pouteretere fern/shrubland, bracken fern, karamu, swamp forest.</p> <p><b>Main Plant Species:</b> <i>D. paludosum</i>, bamboo rush, bracken fern, umbrella fern, pouteretere, karamu, hoho, kopi, matipo, <i>Libertia peregrinans</i>.</p> <p><b>Notable Fauna:</b> Not known.</p> <p><b>Threatened Species:</b> Reintroduced plants of Chatham Islands speargrass in fern/shrubland.</p> <p><b>Landscape:</b> Integral to the existing character of this fairly large visible corner of the Island, a broad expanse of tawny colour set against surrounding volcanic peaks and adjoining gully slopes of fern and pasture.</p> <p><b>Historic/Cultural:</b> Not known.</p> <p><b>Visitor Use:</b> Possibly occasional use for hunting.</p> <p><b>Facilities:</b> None. Access by unformed legal road through farmland.</p> <p><b>Other Features:</b> Forms part of the extensive peat swamp system of northern Chatham Islands – one of New Zealand's best examples with scientific, scenic and educational values.</p>			
<b>THREATS</b>			
<p><b>Animal Threats:</b> Feral cattle.</p> <p><b>Plant Threats:</b> Chilean guava and gorse.</p> <p><b>Other:</b> Fire.</p>			
<b>MANAGEMENT</b>			
<p><b>Issues:</b> Survival of forest remnant, no effective fencing for much of the boundary – i.e., unhindered access for neighbouring sheep and cattle. Potential impact of Chilean guava requires evaluation.</p> <p><b>Priorities:</b> Fencing of valuable karamu swamp forest remnants, examining cattle effect and exploring control options. Removal of any Chilean guava establishing within the reserve.</p>			

CONSERVATION UNIT: CI 1026		NAME: Te Awatea Scenic Reserve
<b>ADMINISTRATION</b> <b>Legal Status:</b> Scenic Reserve <b>Reserve Classified?</b> Yes <b>NZMS Map Reference:</b> 499 548 <b>Legal Description:</b> Sec 7 SO 34132, a & B SO 37973 <b>Survey Blk &amp; District:</b> III Orupuke		<b>NZMS 260 and CMS Map#: 1</b> <b>Area:</b> 50.4965 ha <b>Ecological District:</b> Chathams <b>Area Office:</b> Chatham Islands <b>Local Authority:</b> Chatham Islands Council
<b>DESCRIPTION</b> <p><b>General:</b> Lake shore, gentle slopes and flats adjoining the southern end of Lake Huro, principally supporting a forest cover but also some residual swamp. Portions are periodically flooded or retain surface water.</p> <p><b>Location:</b> South eastern corner of Lake Huro, east of Waitangi, Chatham Islands.</p> <p><b>Main Ecosystems:</b> Diverse broadleaf forests of kakeke/karamu/matipo on wetter portions and kopi on drier sites. Second-growth kakeke and <i>Coprosma propinqua</i> scrub and bamboo rush.</p> <p><b>Main Plant Species:</b> Kopi, karamu, matipo, fuchsia, kakeke, supplejack.</p> <p><b>Notable Fauna:</b> Chatham Island fantail, Chatham Island warbler, dunnoek, waxeye parea (E) occasionally feeding on kowhai.</p> <p><b>Threatened Species:</b> Nikau, occasional ribbonwood adults and regeneration, parea (E). Notable species: Fuchsia (thought to be introduced), presence of tutu and <i>Myrsine coxii</i>.</p> <p><b>Landscape:</b> Distant view from roads for most people. Attractive swathe of forest against the lake setting when viewed from adjoining uphill farmland.</p> <p><b>Historic/Cultural:</b> Not known.</p> <p><b>Visitor Use:</b> Probably very low, possibly some hunting activity.</p> <p><b>Facilities:</b> None.</p> <p><b>Other Features:</b> None known.</p>		
<b>THREATS</b> <p><b>Animal Threats:</b> Cattle, possum, weka, feral cats?</p> <p><b>Plant Threats:</b> None, potentially gorse.</p> <p><b>Other:</b> Fire.</p>		
<b>MANAGEMENT</b> <p><b>Issues:</b> Enhanced regeneration of forest areas, especially drier portions with kopi and nikau. Predator control.</p> <p><b>Priorities:</b> Maintain fences and control occasional cattle (that jump/break in).</p>		



<b>CONSERVATION UNIT: CI 1017</b>		<b>NAME: Taia Bush Historic Reserve</b>
<b>ADMINISTRATION</b> <b>Legal Status:</b> Historic Reserve <b>Reserve Classified?</b> Yes <b>NZMS Map Reference:</b> 575 638 <b>Legal Description:</b> Sec 33 50 31980 <b>Survey Blk &amp; District:</b> IX Rekohu		<b>NZMS 260 and CMS Map#:</b> 1 <b>Area:</b> 34.03 ha <b>Ecological District:</b> Chathams <b>Field Centre:</b> Chatham Islands <b>Local Authority:</b> Chatham Islands Council
<b>DESCRIPTION</b> <p><b>General:</b> Eastern dune system and flats including swamp.</p> <p><b>Location:</b> A portion of the eastern dunes along Hanson Bay south of Lake Taia.</p> <p><b>Main Ecosystems:</b> Remnant akeake dune forest, kopi mixed broadleaved forest, recovering karamu swamp forest, marram on dunes, tree regeneration, native shrubland/sedge on dunes.</p> <p><b>Main Plant Species:</b> Kopi, matipo, marram, hokataka, karamu.</p> <p><b>Notable Fauna:</b> Chatham Island fantail, Chatham Island warbler, dunnock, waxeye</p> <p><b>Threatened Species:</b> None known.</p> <p><b>Landscape:</b> Attractive but remote pocket of forest on dunes, not readily or frequently seen except from the air (Pitt flights).</p> <p><b>Historic/Cultural:</b> Moriori tree carvings and associated archaeological sites - middens.</p> <p><b>Visitor Use:</b> Low.</p> <p><b>Facilities:</b> Sign.</p> <p><b>Other Features:</b> Geopreservation site as best remaining soil-forest sequence on Chatham Islands.</p>		
<b>THREATS</b> <p><b>Animal Threats:</b> Sheep gaining access periodically, weka, feral cat and possum predation of birdlife.</p> <p><b>Plant Threats:</b> None.</p> <p><b>Other:</b> Fire.</p>		
<b>MANAGEMENT</b> <p><b>Issues:</b> Ensure/enhance regeneration of all forest types introduction of Chatham Islands toetoe, stock control. Predator control. Eventual removal of pines.</p> <p><b>Priorities:</b> Ensure freedom from stock and good fence condition.</p>		

CONSERVATION UNIT: CI 1016		NAME: Henga Scenic Reserve
<b>ADMINISTRATION</b> <b>Legal Status:</b> Scenic Reserve <b>Reserve Classified?</b> Yes <b>NZMS Map Reference:</b> 455 663 <b>Legal Description:</b> Lot 1 DP 55240 <b>Survey Blk &amp; District:</b> X, XI Te Whaanga		<b>NZMS 260 and CMS Map#: 1</b> <b>Area:</b> 170.4 ha <b>Ecological District:</b> Chathams <b>Area Office:</b> Chatham Islands <b>Local Authority:</b> Chatham Islands Council
<b>DESCRIPTION</b> <p><b>General:</b> Gifted by John and Denise Sutherland. Comprises low foredune, high re-ardune and flats supporting several forest communities and a range of shrublands. A limestone outcrop supports threatened endemic herbs at the southern end of the reserve.</p> <p><b>Location:</b> On dunes at mid Petre Bay – western coast of Chatham Islands.</p> <p><b>Main Ecosystems:</b> Sparsely vegetated sandflat/knolls supporting small/prostrate shrubs, herbs, densely vegetated dunes with marram/clubrush/<i>Pimelia/Coprosma/Leucopogon</i> and tree regeneration, kopi/matipo/karamu forest, matipo scrub and remnant keake forest.</p> <p><b>Main Plant Species:</b> Kopi, keake, matipo, karamu, kawakawa, nettle, marram, <i>Coprosma acerosa</i>, <i>Leucopogon parviflorus</i>, dubrush, Chatham Island granium.</p> <p><b>Notable Fauna:</b> Chatham Island fantail, Chatham Island warbler, dunnoek, waxeye, Chatham Island pipit.</p> <p><b>Threatened Species:</b> Chatham Island forget-me-not, sowthistle (wild and introduced plants), introduced <i>Euphorbia glauca</i>.            Notable: Cabbage tree regeneration. Occasional pare (E), occasional Chatham Island red-crowned parakeet</p> <p><b>Landscape:</b> Impressively broad, tall dune complex, eroded sand pavements add interest from the seashore. Very attractive swathe of dense forest flowing over dune faces (as viewed from North Road) located in a pastoral setting.</p> <p><b>Historic/Cultural:</b> Moriori tree carvings and associated middens and kowiri.</p> <p><b>Visitor Use:</b> High relative to other Chatham protected areas, used by visitors staying at the adjoining Chatham Lodge.</p> <p><b>Facilities:</b> Sign at North Road, marked foot route across paddocks to reserve, circuit track from Chatham Lodge but not linked to road access route.</p> <p><b>Other Features:</b> None known.</p>		
<b>THREATS</b> <p><b>Animal Threats:</b> Stock gaining access periodically, resident possum population, weka, feral cats.</p> <p><b>Plant Threats:</b> Marram threatens remnant wild forget-me-not.</p> <p><b>Other:</b> Fire, dune erosion following vegetation removal, visitor disturbance of historic places.</p>		
<b>MANAGEMENT</b> <p><b>Issues:</b> To enhance regeneration of dune vegetation. Predator control. Protection of historic places. Observance of tikanga at burial sites and other wahi tapu.</p> <p><b>Priorities:</b> Predator control. Fence maintenance. Iwi liaison. Maintain access.</p>		

CONSERVATION UNIT: CI 1009		NAME: Nikau Bush Conservation Area
<b>ADMINISTRATION</b> <b>Legal Status:</b> Conservation Act, Section 62 <b>Reserve Classified?</b> N/A <b>NZMS Map Reference:</b> 43 754 <b>Legal Description:</b> Sec 9 SO3457 4 and Sec 1 SO 36530 <b>Survey Blk &amp; District:</b> II Te Whanga		<b>NZMS 260 and CMS Map#: 1</b> <b>Area:</b> 3.816 ha <b>Ecological District:</b> Chathams <b>Field Centre:</b> Chatham Islands Local Authority: Chatham Islands Council
<b>DESCRIPTION</b> <p><b>General:</b> Forest strip running from the eastern flanks of the volcanic cone Korako downslope to within several hundred metres of Te Whanga lagoon's west shore.</p> <p><b>Location:</b> Western slopes adjoining the north-west lobe of Te Whanga lagoon.</p> <p><b>Main Ecosystems:</b> Kopi forest, akeake/karamu swamp forest, mixed kopi broadleaved forest, pasture, nikau over blackberry/grassland and sedges on peaty soil.</p> <p><b>Main Plant Species:</b> Kopi, hoho, mātipō, karamu, nikau, akeake, <i>Muehlenbeckia</i>, supplejack.</p> <p><b>Notable Fauna:</b> Chatham Island fantail, waxeye, dunnoek, Chatham Island warbler.</p> <p><b>Threatened Species:</b> Nikau, one <i>Hebe barkeri</i> (seen in 1982, not re-confirmed).</p> <p><b>Landscape:</b> Attractive long bush remnant in pasture landscape running from the flanks of Korako toward the lagoon.</p> <p><b>Historic/Cultural:</b> None known.</p> <p><b>Visitor Use:</b> Some.</p> <p><b>Facilities:</b> Sign at road, marked foot access from road, small stretch of walking track.</p> <p><b>Other Features:</b> None known.</p>		
<b>THREATS</b> <p><b>Animal Threats:</b> Stock, (cattle, sheep and, in the past, goats), possum (strip bark from seedling mahoe causing death); weka, feral cat predation of birdlife.</p> <p><b>Plant Threats:</b> Blackberry.</p> <p><b>Other:</b> Fire.</p>		
<b>MANAGEMENT</b> <p><b>Issues:</b> Possum, stock and predator control.</p> <p><b>Priorities:</b> Stock control, maintain foot access from road.</p>		

<b>CONSERVATION UNIT: CI 1012, 1013</b>		<b>NAME: J.M. Barker (Hapupu) National Historic Reserve</b>	
<b>ADMINISTRATION</b> <b>Legal Status:</b> Historic Reserve <b>Reserve Classified?</b> Yes <b>NZMS Map Reference:</b> 617 720 <b>Legal Description:</b> Lots 1 & 2 DP 5308 7, Section 1 SO 34497 <b>Survey Blk &amp; District:</b> VIII Rekohu		<b>NZMS 260 and CMS Map#: 1</b> <b>Area:</b> 29.3918 ha <b>Ecological District:</b> Chathams <b>Area Office:</b> Chatham Islands <b>Local Authority:</b> Chatham Islands Council	
<b>DESCRIPTION</b> <p><b>General:</b> Gifted by Barker Bros. Ltd. Comprises dune, near dune and sand flat communities.</p> <p><b>Location:</b> On Hanson Bay dune system to north-east of Te Whanga lagoon.</p> <p><b>Main Ecosystems:</b> Kōpi forest, degenerated kōpi dominated by matipo or mixed hardwood regeneration, marram grass and ākeake/<i>Corokia</i> regeneration.</p> <p><b>Main Plant Species:</b> Kōpi, matipo, ākeake (occasional adults), hokataka, mahoe and karamu (principally as regeneration), nettle, pohuehue, New Zealand spinach.</p> <p><b>Notable Fauna:</b> Chatham Island fantail, Chatham Island warbler, dunnoek, waxeye</p> <p><b>Threatened Species:</b> None known.</p> <p><b>Landscape:</b> An important though small portion of the long eastern coastal dune system, unusual now for the health and extent of the remaining forest.</p> <p><b>Historic/Cultural:</b> Mōriori tree carvings and associated archaeological sites – middens.</p> <p><b>Visitor Use:</b> High in relation to other Chatham reserves, a focus for visitors to view the tree carvings.</p> <p><b>Facilities:</b> Sign, small loop track</p> <p><b>Other Features:</b> None known.</p>			
<b>THREATS</b> <p><b>Animal Threats:</b> Stock, weka and feral cats.</p> <p><b>Plant Threats:</b> None known.</p> <p><b>Other:</b> Fire, regeneration and mosses or lichens covering tree carvings.</p>			
<b>MANAGEMENT</b> <p><b>Issues:</b> Ensure regeneration is not hindered by stock presence. Management of tree carvings</p> <p><b>Priorities:</b> Maintenance of fences. Preparation of reserve management plan.</p>			

CONSERVATION UNIT: CI 1001		NAME: Tangepu Conservation Area
<b>ADMINISTRATION</b> <b>Legal Status:</b> Conservation Act, Section 62 <b>Reserve Classified?</b> N/A <b>NZMS Map Reference:</b> 393 802 <b>Legal Description:</b> Sec 1 & 2 SO34601 and Sec 1 SO36529 <b>Survey Blk &amp; District:</b> II Rangititihi		<b>NZMS 260 and CMS Map#: 1</b> <b>Area:</b> 191 885 <b>Ecological District:</b> Chathams <b>Field Centre:</b> Chatham Islands <b>Local Authority:</b> Chatham Islands Council
<b>DESCRIPTION</b> <p><b>General:</b> Long expanse of modified dunes with brackish lagoon to north (Lake Waikauia), remnant forest communities and sedge swamp. Notable remnants of tarahinau forest.</p> <p><b>Location:</b> West-facing beach at the north-west of Chatham Islands. Extends inland alongside Punakokowai Creek to Wharekauri Road.</p> <p><b>Main Ecosystems:</b> Kopi mixed broadleaved forest, scattered akeake forest remnants on dunes, <i>Leucopogon parviflora</i>/sand daphne-dominated dune community, jointed rush swamp on lake edge and akeake/karamu swamp forest.</p> <p><b>Main Plant Species:</b> Kopi, akeake, karamu, matipo, dubrush, <i>Pimelia arenaria</i>, <i>Leucopogon parviflora</i>, <i>Libertia (iris)</i>, <i>Geranium traversii</i>, <i>Leptocarpus similis</i>.</p> <p><b>Notable Fauna:</b> Chatham Island oystercatcher, Chatham Island fantail, Chatham Island pipit, Chatham Island warbler, dunnock.</p> <p><b>Threatened Species:</b> Chatham Island sownthistle, introduced populations of Maori spurge and pingao and Chatham Island large tme-not. Notable: remnants of tarahinau forest. Chatham Island Oystercatcher (E).</p> <p><b>Landscape:</b> Attractive steep ocean beach and dunes, rocky promontory to south bounded by cliffs to the north.</p> <p><b>Historic/Cultural:</b> Archaeological middens.</p> <p><b>Visitor Use:</b> Irregular, mostly adjoining landowners gaining beach/sea access for kaimoana.</p> <p><b>Facilities:</b> No sign or tracks - gate and small access track at south end.</p> <p><b>Other Features:</b> Relatively remote access. Inland boundary fenced. Some stock get through at southwest end. Dunes form part of the excellent dune chronosequence of Chatham Islands. Many remnant sub-fossil bones. Geopreservation site for early Eocene molluscan fauna.</p>		
<b>THREATS</b> <p><b>Animal Threats:</b> Stock, especially sheep, possibly cattle if grazing is increased on neighbouring farmland. Weka and cat predation.</p> <p><b>Plant Threats:</b> Marram is a plant competitor in dune communities. Gorse could be a long-term problem.</p> <p><b>Other:</b> Fire, low probability.</p>		
<b>MANAGEMENT</b> <p><b>Issues:</b> Grazing is slowing regeneration of akeake dune forest and mixed kopi. Loss of adult trees is occurring faster than replacement by regeneration. Public access routes are poorly identified.</p> <p><b>Priorities:</b> Upgrade and repair fencing to keep stock out. Develop a public access route from Wharekauri Road.</p>		

<b>CONSERVATION UNIT: CI 1002</b>		<b>NAME: Chudleigh Conservation Area</b>
<b>ADMINISTRATION</b> <b>Legal Status:</b> Conservation Act, Section 62 <b>Reserve Classified?</b> N/A <b>NZMS Map Reference:</b> 443 803 <b>Legal Description:</b> Sec 1 SO3653 1 Pt 1F Wharekauri <b>Survey Blk &amp; District:</b> III Rangitahi		<b>NZMS 260 and CMS Map#: 1</b> <b>Area:</b> 72.6467 <b>Ecological District:</b> Chathams <b>Area Office:</b> Chatham Islands <b>Local Authority:</b> Chatham Islands Council
<b>DESCRIPTION</b> <p><b>General:</b> Important northern forest remnant of high plant diversity retaining remnant associations that are now rare. Dry and damp mineral soil types (brown granular loam). The northern half of the reserve was fenced long ago and has good regeneration, the canopy of the southern half is more open. The two portions were severed by bulldozing of the fence line.</p> <p><b>Location:</b> On southern hill slope of Mount Chudleigh, centre/ north Chatham Islands.</p> <p><b>Main Ecosystems:</b> Karumu and ōkeake in damper areas, a small remnant of mature ribbonwood trees, <i>Carex</i> sedge land and broad zones of pasture grasses on the margins.</p> <p><b>Main Plant Species:</b> Kopi, matipo, karumu, ribbonwood, supplejack, kawa kawa, mahoe (regeneration), nettle, <i>Carex virgata</i>, cocksfoot and Yorkshire fog, cabbage trees, hoho.</p> <p><b>Notable Fauna:</b> Chatham Island pipit, Chatham Island warbler, dunnoek, waxeye, Chatham Island fantail.</p> <p><b>Threatened Species:</b> None known.</p> <p><b>Landscape:</b> Attractive remnant on the slopes of Mount Chudleigh, the highest peak in the general vicinity.</p> <p><b>Historic/Cultural:</b> Nothing recorded.</p> <p><b>Visitor Use:</b> Low.</p> <p><b>Facilities:</b> Sign on road and access route along unformed legal road through farmland. No tracks.</p> <p><b>Other Features:</b> None known.</p>		
<b>THREATS</b> <p><b>Animal Threats:</b> Stock gaining access, especially cattle. Weka numbers very high, feral cats.</p> <p><b>Plant Threats:</b> Nothing significant.</p> <p><b>Other:</b> Fire.</p>		
<b>MANAGEMENT</b> <p><b>Issues:</b> Fence height has been insufficient to exclude stock when grazing pressure is high. Predator control.</p> <p><b>Priorities:</b> Fencing, forest regeneration in grass expanse to help long-term viability of the remnant, increasing ribbonwood distribution, maintaining access route.</p>		

<b>CONSERVATION UNIT: CI 2013</b>		<b>NAME: Pitt Island Scenic Reserve - Waipaua block</b>	
<b>ADMINISTRATION</b>			
<b>Legal Status:</b> Scenic Reserve	<b>NZMS 260 and CMS Map#:</b> 2		
<b>Reserve Classified?</b> Y	<b>Area:</b> 692 ha		
<b>NZMS Map Reference:</b> 715 173	<b>Ecological District:</b> Chathams		
<b>Legal Description:</b> Sec 1 SO 3259 7	<b>Field Centre:</b> Chatham Islands		
<b>Survey Blk &amp; District:</b> III V VI Rangiauria	<b>Local Authority:</b> Chatham Islands Council		
<b>DESCRIPTION</b>			
<p><b>General:</b> The majority of the large central block of Pitt Island Scenic Reserve, which is based on two long catchments draining eastwards, Second Water Creek in the north and Waipaua Stream in the south. There is a large variety of forest and woodland types with other significant areas of rank grassland, bracken fern and reefernland and a freshwater wetland in the east. This is a key reserve for Chatham Island nikau.</p>			
<p><b>Location:</b> The central portion of Pitt Island, encompassing most of the length of the Second Water Creek and Waipaua Stream north branch catchments.</p>			
<p><b>Main Ecosystems:</b> Open-canopied broadleaved forest with dense tree fern below, karamu-dominated swamp forest, mixed tarahinau broadleaved forest with emergent nikau, tarahinau forest, reefernland, woodland variations of forest types, bracken fernland, rank grassland without native herbs or sedges.</p>			
<p><b>Main Plant Species:</b> Tarahinau, hoho, ake ake, karamu, matipo, nikau, some ngaio, ribbonwood, supplejack, tree ferns (especially wheki), bracken, blackberry/<i>Blechnum procerum</i>, <i>Carex</i> spp., <i>Baumea</i> spp.</p>			
<p><b>Notable Fauna:</b> Chatham Island tomtit, Chatham Island tui, Chatham Island fantail and Chatham Island warbler, dunnoek, waxeye, parea, Chatham Island long horn beetle.</p>			
<p><b>Threatened Species:</b> <i>Hebe barkeri</i>, rautini, Chatham Island shield fern, nikau (stronghold), Chatham Island tui (E), parea (E).</p>			
<p><b>Landscape:</b> Attractive rolling landscape spanning two broad valley systems. Of note are the peak 'cabbage tree' on the ridge separating the two catchments and the distinctive nature of the forest cover with its large numbers of emergent nikau.</p>			
<p><b>Historic/Cultural:</b> Not known.</p>			
<p><b>Visitor Use:</b> Used for hunting and some walking. Occasional visitor groups.</p>			
<p><b>Facilities:</b> Reserve sign on eastern boundary.</p>			
<p><b>Other Features:</b> Was farmed prior to reservation.</p>			
<b>THREATS</b>			
<p><b>Animal Threats:</b> Pigs, feral sheep, cattle, saxon merino sheep, cats, weka.</p>			
<p><b>Plant Threats:</b> Tutsan, blackberry (nuisance/detracts aesthetically), potential gorse.</p>			
<p><b>Other:</b> Fire.</p>			
<b>MANAGEMENT</b>			
<p><b>Issues:</b> Consultation with Pitt Island reserves committee in respect to management. Management of all browsers to ensure regeneration of forest and the maintenance/improvement of species diversity. Ensure survival of nikau as a prominent feature of the reserve. In future possible predator-free status/reintroduction of threatened wildlife. Possibly a marked walking route. Predator control.</p>			
<p><b>Priorities:</b> Ensure animals are sufficiently controlled for long-term maintenance of forest diversity and cover to allow forest to re-establish in fernland etc. Consult with Pitt Island reserves committee over future management of reserve.</p>			

CONSERVATION UNIT: CI 1039, 1042, 1044		NAME: Te Whanga Lagoon Marginal Strips
<p><b>ADMINISTRATION</b>  <b>Legal Status:</b> Marginal strip, Conservation Act 1987  <b>Reserve Classified?</b> N/A  <b>NZMS Map Reference:</b> S77 696 to 551 541  <b>Legal Description:</b> Adj. Pt. Sec 4 5, 21, 23, 25, 26  <b>Survey Blk &amp; District:</b> VII, IX, X Rekohu, XII, XVI Te Whanga, IV Oropuke</p>	<p><b>NZMS 260 and CMS Map#: 1</b>  <b>Area:</b> 38 ha  <b>Ecological District:</b> Chathams  <b>Field Centre:</b> Chatham Islands  <b>Local Authority:</b> Chatham Islands Council</p>	
<p><b>DESCRIPTION</b></p> <p><b>General:</b> 20-metre wide lagoon margin comprising salt marsh vegetation occupying gentle sloping mud substrates with a fluctuating water level; marram grass on sandier substrates near the lagoon mouth, a small steep bank along the Te Awapatiki point just south of the lagoon mouth.</p> <p><b>Location:</b> Eastern shore of Te Whanga lagoon from adjacent to Lake Kaingarahua in the north to Te Awainanga River in the south.</p> <p><b>Main Ecosystems:</b> Sea rush and oioi swards, salt meadow vegetation, mud with occasional dumps of vegetation, coastal bank in early stages of forest recovery with a shrub/fern/flax cover.</p> <p><b>Main Plant Species:</b> Sea rush, oioi, <i>Plantago coronopus</i>, <i>Triglochin striatum</i>, Arrow grass, <i>Selliera radicans</i>, <i>Samolus repens</i>, <i>Leptinella dioica</i>. Bracken, dubrush, flax, paiteretere, sand daphne, karamu, <i>Coprosma propinqua</i>, young kahinau and hoho.</p> <p><b>Notable Fauna:</b> Chatham Island pipit, Chatham Island warbler, grey duck, pied stilt, black shag, white-faced heron, white-fronted tern, red billed gull, banded dotterel, stint, eastern bar-tailed godwit.</p> <p><b>Threatened Species:</b> Pitt Island shag turnstones, Chatham shag.</p> <p><b>Landscape:</b> Long margin of low relief with interest created by taller rush and sedge vegetation.</p> <p><b>Historic/Cultural:</b> Te Awapatiki area very important for Moriori.</p> <p><b>Visitor Use:</b> Some shooting and swan egg collecting.</p> <p><b>Facilities:</b> None.</p> <p><b>Other Features:</b> None known.</p>		
<p><b>THREATS</b></p> <p><b>Animal Threats:</b> Potentially cattle in large numbers. Weka and feral cats.</p> <p><b>Plant Threats:</b> None.</p> <p><b>Other:</b> Fire.</p>		
<p><b>MANAGEMENT</b></p> <p><b>Issues:</b> Retention of rush and sedge cover, fencing not feasible.</p> <p><b>Priorities:</b> Control of grazing to appropriate levels through adjoining landowner liaison.</p>		



<b>CONSERVATION UNIT: CI 1043</b>		<b>NAME: Waikawa Island Marginal Strip</b>
<b>ADMINISTRATION</b> <b>Legal Status:</b> Marginal Strip, Conservation Act 1987 <b>Reserve Classified?</b> N/A <b>NZMS Map Reference:</b> 545 580 <b>Legal Description:</b> Adj. Pt. Sec 24 <b>Survey Blk &amp; District:</b> IV Oropuke		<b>NZMS 260 and CMS Map#: 1</b> <b>Area:</b> 12 ha <b>Ecological District:</b> Chathams <b>Area Office:</b> Chatham Islands <b>Local Authority :</b> Chatham Islands Council
<b>DESCRIPTION</b> <p><b>General:</b> 20-metre wide strip around low flat islands influenced by the fluctuating water level of the lagoon.</p> <p><b>Location:</b> South-eastern margin of Te Whanga adjacent to the lagoon mouth.</p> <p><b>Main Ecosystems:</b> Tall sward of oioi and intervening salt meadow vegetation.</p> <p><b>Main Plant Species:</b> Oioi, <i>Selliera radicans</i>, <i>Samolus repens</i>.</p> <p><b>Notable Fauna:</b> Black swan, grey duck, white-faced heron, white-fronted tern, banded dotterel, red-billed gull, black shag, turnstone.</p> <p><b>Threatened Species:</b> None known.</p> <p><b>Landscape:</b> Strip is a small part of the dramatic Te Whanga landscape.</p> <p><b>Historic/Cultural:</b> Archaeological sites?</p> <p><b>Visitor Use:</b> Low.</p> <p><b>Facilities:</b> None.</p> <p><b>Other Features:</b> None known.</p>		
<b>THREATS</b> <p><b>Animal Threats:</b> Island grazing by stock may affect marginal strip vegetation. Weka and feral cats.</p> <p><b>Plant Threats:</b> None.</p> <p><b>Other:</b> Fire.</p>		
<b>MANAGEMENT</b> <p><b>Issues:</b> Depletion of vegetation by grazing.</p> <p><b>Priorities:</b> Maintain vegetative cover in good condition through liaison with island owner.</p>		

CONSERVATION UNIT: CI 2012		NAME: Waipaua Conservation Area
<b>ADMINISTRATION</b> <b>Legal Status:</b> Conservation Act, Section 62 <b>Reserve Classified?</b> N/A <b>NZMS Map Reference:</b> 715 150 <b>Legal Description:</b> Pt Sec. 1, 2, 3 SO32597 <b>Survey Blk &amp; District:</b> III, V, VI, IX Rangiauria		<b>NZMS 260 and CMS Map#: 2</b> <b>Area:</b> 128 2659ha <b>Ecological District:</b> Chathams <b>Field Centre:</b> Chatham Islands <b>Local Authority:</b> Chatham Islands Council
<b>DESCRIPTION</b> <p><b>General:</b> A largely pasture-covered landscape linking surrounding protected areas in the middle and south of Pitt Island. Significant remnant forest/woodlands or treefern land occupy the Waipaua Stream south branch, draining to the east side of the island. Also gullies west of Glory Cottage and a valley in the north-west. Remnant woody scrub vegetation and salt meadow occur in places on the bluffs. Large peat domes are covered in bracken. Pockets of akeake survive in the east in proximity to small coastal banks and gentler beaches.</p> <p><b>Location:</b> Much of the southern half of Pitt Island encompassing land between west and east coasts and adjoining the portions of Pitt Island Scenic Reserve.</p> <p><b>Main Ecosystems:</b> Predominantly exotic pasture, mixed broadleaved woodland and remnant forest (with kopi and ribbonwood), karamu/akeake swamp forest along river, tarahinau-dominated woodland and forest, wet pasture with spike rush and bidibidi, treefern fernland, deteriorated keketerere coastal scrub, bracken fern.</p> <p><b>Main Plant Species:</b> Introduced grasses, bracken, tarahinau, akeake, matipo, karamu, tree ferns (wheki, gully fern, wheki ponga), ribbonwood, hoho, kopi, keketerere, spike rush, <i>Carex</i> species.</p> <p><b>Notable Fauna:</b> White-fronted tern, white-faced heron, red-billed gull, black shag, turnstone, occasional New Zealand shore plover, Chatham Island tomtit, Chatham Island fantail, Chatham Island warbler, Chatham Island oystercatcher, parea, Chatham Island pipit, Chatham Island tui, Chatham shag, Chatham Island red-crowned parakeet, Pitt Island shag dunnoek, waxeye.</p> <p><b>Threatened Species:</b> Rautini (possibility for <i>Polytichum 'chatham'</i>, <i>Hebe barkeri</i>) Notable: tutu (not common on the Chathams), Chatham Islands oystercatcher (E), Chatham shag (E), Chatham Island tui (E).</p> <p><b>Landscape:</b> A pastoral landscape of gently rolling to dramatic form; the latter particularly in the west with its tall, eroding, colourful cliffs. The land ribbons and expansive woodland/forest centred on the southern branch of Waipaua Stream form an important visual and biological link between northern and southern portions of Pitt Island Scenic Reserve. Attractive views occur within the block and outwards to smaller islands, Mangere and Rangatira (South East).</p> <p><b>Historic/Cultural:</b> Wahi tapu, archaeological sites, Glory Cottage, built ca. 1860, 'Glory' Anchor.</p> <p><b>Visitor Use:</b> Extensively for farming purposes, occasional hunting and access to reserve blocks in the south.</p> <p><b>Facilities:</b> None, no fencing in relation to valuable native vegetation, Glory and Yellow cottages (leased).</p> <p><b>Other Features:</b> Currently farmed, some burning in recent past.</p>		
<b>THREATS</b> <p><b>Animal Threats:</b> Cats, weka, stock grazing of native remnants, (potentially rats).</p> <p><b>Plant Threats:</b> Potentially gorse, blackberry.</p> <p><b>Other:</b> Fire.</p>		
<b>MANAGEMENT</b> <p><b>Issues:</b> Maintain freedom from rats. To protect valuable areas of native vegetation with a view to linking northern and southern blocks of Pitt Island Scenic Reserve. Lease management. Land exchange possibility between reserve and unreserved areas. Possibly revegetation by planting nursery stock. Predator control.</p> <p><b>Priorities:</b> Protect/enhance valuable remnants on the lease. Consult with Pitt Island reserves committee regarding future management of the reserve and lease area.</p>		

CONSERVATION UNIT: CI 1070		NAME: Lake Rotokawau Conservation Area
<b>ADMINISTRATION</b> <b>Legal Status:</b> Conservation Act, Section 62 <b>Reserve Classified?</b> N/A <b>NZMS Map Reference:</b> 430 776 <b>Legal Description:</b> Sec 1 SO 36528 <b>Survey Blk &amp; District:</b> II Te Whanga		<b>NZMS 260 and CMS Map#:</b> 1 <b>Area:</b> 60.84 ha <b>Ecological District:</b> Chathams <b>Area Office:</b> Chatham Islands <b>Local Authority:</b> Chatham Islands Council
<b>DESCRIPTION</b> <p><b>General:</b> Low-lying peat country surrounding a small lake. The area principally supports a cover of modified bamboo rush, parts of which have been burnt a number of times. One of the very rare lowland bamboo rush bogs still in good condition.</p> <p><b>Location:</b> North centre of Chatham Islands, north-west of Te Whanga lagoon.</p> <p><b>Main Ecosystems:</b> Bamboo rush rushland with endemic shrubs Chatham Island aster and <i>Dracophyllum paludosum</i>. <i>D. paludosum</i> and umbrella fern shrub/fernland. Also more disturbed examples of these types. Peat lake with remnant fringing flax.</p> <p><b>Main Plant Species:</b> Bamboo rush, <i>Olearia semidentata</i>, <i>Dracophyllum paludosum</i>, umbrella fern flax.</p> <p><b>Notable Fauna:</b> None known.</p> <p><b>Threatened Species:</b> <i>Carex chathamica</i>.</p> <p><b>Landscape:</b> An integral part of the wide low-lying wetland basin that occupies a significant portion of this corner of the wetland.</p> <p><b>Historic/Cultural:</b> Nothing recorded.</p> <p><b>Visitor Use:</b> None.</p> <p><b>Facilities:</b> None. Probably no fencing exists. Access strip to formed road.</p> <p><b>Other Features:</b> None known.</p>		
<b>THREATS</b> <p><b>Animal Threats:</b> Wild cattle, weka and feral cat predation of avifauna.</p> <p><b>Plant Threats:</b> Potential for Chilean guava invasion.</p> <p><b>Other:</b> Fire, drainage, topdressing.</p>		
<b>MANAGEMENT</b> <p><b>Issues:</b> Inaccessibility. Difficulty controlling use of the area by cattle. Recovery following fire damage. Potential impact of Chilean guava if it becomes established.</p> <p><b>Priorities:</b> Control numbers of cattle affecting the area. Maintain free of Chilean guava.</p>		

<b>CONSERVATION UNIT: CI 1067</b>		<b>NAME: Kairae Historic Reserve</b>
<b>ADMINISTRATION</b> <b>Legal Status:</b> Acquisition in progress <b>Reserve Classified?</b> N/A <b>NZMS Map Reference:</b> 585 665 <b>Legal Description:</b> Lot 1 Pt Sec 13 Owenga Settlement <b>Survey Blk &amp; District:</b> IX Rekohu		<b>NZMS 260 and CMS Map#:</b> 1 <b>Area:</b> 10.15 ha <b>Ecological District:</b> Chathams <b>Field Centre:</b> Chatham Islands <b>Local Authority:</b> Chatham Islands Council
<b>DESCRIPTION</b> <p><b>General:</b> Small forest pocket at the north-east corner of Lake Kairae with deteriorated forest remnant, which is regenerating as a result of fencing.</p> <p><b>Location:</b> On the north-east corner of Lake Kairae on the eastern shore of Chatham Island (Hanson Bay).</p> <p><b>Main Ecosystems:</b> Kopi mixed broadleaved forest. Kopi dominates the canopy on the seaward side and matipo and occasional akeake in the west.</p> <p><b>Main Plant Species:</b> Kopi, matipo, akeake, poroporo, <i>Australina pusilla</i>, karamu (seedlings), hoho (seedlings).</p> <p><b>Notable Fauna:</b> Chatham Island fantail, Chatham Island warbler, dunnoek, waxeye</p> <p><b>Threatened Species:</b> None known.</p> <p><b>Landscape:</b> Attractive northern forested boundary features kopi coppice reaching 6 metres.</p> <p><b>Historic/Cultural:</b> Moriori tree carvings and associated archaeological sites.</p> <p><b>Visitor Use:</b> Rare.</p> <p><b>Facilities:</b> None.</p> <p><b>Other Features:</b> None known.</p>		
<b>THREATS</b> <p><b>Animal Threats:</b> possum, cattle, sheep, weka and feral cats.</p> <p><b>Plant Threats:</b> None.</p> <p><b>Other:</b> Fire.</p>		
<b>MANAGEMENT</b> <p><b>Issues:</b> Maintain freedom from stock. Control possums to ensure regeneration of all species. Legal acquisition process not yet completed.</p> <p><b>Priorities:</b> Ensure fencing is maintained/effective. Control possums as required. Complete legal transactions required to finalise acquisition.</p>		

CONSERVATION UNIT: CI 1059		NAME: Harold Peirce Scenic Reserve	
<b>ADMINISTRATION</b>			
<b>Legal Status:</b> Scenic Reserve		<b>NZMS 260 and CMS Map#:</b> 1	
<b>Reserve Classified?</b> N/A		<b>Area:</b> 29 ha	
<b>NZMS Map Reference:</b> 256 765		<b>Ecological District:</b> Chathams	
<b>Legal Description:</b> Pt Lot 1 DP 20495		<b>Area Office:</b> Chatham Islands	
<b>Survey Blk &amp; District:</b> I Tawirikoko		<b>Local Authority:</b> Chatham Islands Council	
<b>DESCRIPTION</b>			
<b>General:</b> Gifted by Harold and Madeline Peirce. Comprises predominantly swampy ground north of an old dune that parallels the course of Waihi Creek. The reserve features forest and some open pasture pockets.			
<b>Location:</b> South of Cape Patisson on the north-west coast of Chatham Island.			
<b>Main Ecosystems:</b> Kara mu-dominated swamp forest, mixed broadleaved forest featuring kopi, swampy pasture, sedge/shrubland.			
<b>Main Plant Species:</b> Matipo, kopi, akeake, <i>Coprosma propinqua</i> , var. <i>martinii</i> , <i>Carex virgata</i> , dubrush, bracken.			
<b>Notable Fauna:</b> Chatham Island pipit, Chatham Island fantail, Chatham Island warbler, white-faced heron, dunnoek, welcome swallow, pukeko, grey duck, dunnoek, waxeye,			
<b>Threatened Species:</b> Toetoe.			
<b>Landscape:</b> Attractive view from across Waihi creek onto old dunes and forest remnant.			
<b>Historic/Cultural:</b> Archaeological sites.			
<b>Visitor Use:</b> Low.			
<b>Facilities:</b> Signpost, marked access to boundary.			
<b>Other Features:</b> None known.			
<b>THREATS</b>			
<b>Animal Threats:</b> Possibly stock, feral cats and weka.			
<b>Plant Threats:</b>			
<b>Other:</b> Fire.			
<b>MANAGEMENT</b>			
<b>Issues:</b> Ensure regeneration proceeds without setbacks. Public access.			
<b>Priorities:</b> Ensure survival of the remnant. Negotiate improved public access with adjoining landowner.			

<b>CONSERVATION UNIT: CI 1058</b>		<b>NAME: Cannon Peirce Scenic Reserve</b>
<b>ADMINISTRATION</b> <b>Legal Status:</b> Acquisition in Progress <b>Reserve Classified?</b> N/A <b>NZMS Map Reference:</b> 263 767 <b>Legal Description:</b> Pt 1 Lots 1, 2, 3 DP 2409 5 <b>Survey Blk &amp; District:</b> I, II Tawurikoko		<b>NZMS 260 and CMS Map#:</b> 1 <b>Area:</b> 60.2 ha <b>Ecological District:</b> Chathams <b>Field Centre:</b> Chatham Islands <b>Local Authority:</b> Chatham Islands Council
<b>DESCRIPTION</b> <p><b>General:</b> Gifted by Harold and Madeline Peirce. Comprises attractive area of large stabilised dunes, including their back slopes adjoining a region of damp peat. Their cover is variable and includes a significant remnant of native forest.</p> <p><b>Location:</b> North-west coast of Chatham Island, east of Cape Pattison.</p> <p><b>Main Ecosystems:</b> Coastal herbfield (mat), sedge land, regenerating akeake forest, mixed-broadleaved forest featuring ngaio, bracken fernland, introduced pasture grassland.</p> <p><b>Main Plant Species:</b> Akeake, ngaio, matipo, kopi, karamu, clubrush, Yorkshire fog, <i>Pratia arenaria</i>, bracken.</p> <p><b>Notable Fauna:</b> Chatham shag, Chatham Island pipit, Chatham Island fantail, Chatham Island warbler, red-billed gull, white-faced heron, welcome swallow, dunnock, waxeye, pukeko, grey duck.</p> <p><b>Threatened Species:</b> Chatham Island forget-me-not (planted), Chatham Island oystercatcher (E),</p> <p><b>Landscape:</b> Very attractive internal views, fairly difficult to view from inland. Dramatic views across to Manganui in the east.</p> <p><b>Historic/Cultural:</b> Archaeological sites.</p> <p><b>Visitor Use:</b> Low.</p> <p><b>Facilities:</b> None.</p> <p><b>Other Features:</b> None known.</p>		
<b>THREATS</b> <p><b>Animal Threats:</b> Occasional stock, feral cats and weka.</p> <p><b>Plant Threats:</b> None.</p> <p><b>Other:</b> Fire.</p>		
<b>MANAGEMENT</b> <p><b>Issues:</b> Improved representation of threatened herbs. Maintain fencing/improve height or deterrent qualities. Encourage continued good levels of regeneration. Public access. Legal acquisition process not yet completed.</p> <p><b>Priorities:</b> Fence maintenance and ensuring freedom from stock. Negotiate improved public access with adjoining landowner.</p>		

CONSERVATION UNIT: CI 1056		NAME: Wharekauri Conservation Area
<b>ADMINISTRATION</b> <b>Legal Status:</b> Conservation Area, Conservation Act 1987 <b>Reserve Classified?</b> N/A <b>NZMS Map Reference:</b> 408 830 to 460 816 <b>Legal Description:</b> Sec 3 SO3654 Q Sec 2 SO36539 , Sec 1 DP36538 <b>Survey Blk &amp; District:</b> I, II, III, IV Rangitahi		<b>NZMS 260 and CMS Map#:</b> 1 <b>Area:</b> 37.9 ha <b>Ecological District:</b> Chathams <b>Area Office:</b> Chatham Islands <b>Local Authority:</b> Chatham Islands Council
<b>DESCRIPTION</b> <p><b>General:</b> Strip of upper beach, sand dunes and some flats behind the dunes on the north coast. The dunes are small by Chatham standards and chiefly support a thick marram grass cover. Important beaches for Chatham Island oystercatcher breeding and <i>Artiplex billardieri</i>.</p> <p><b>Location:</b> North coast of Chatham Island, east of Cape Young to Okahu Point</p> <p><b>Main Ecosystems:</b> Coastal dunes supporting remnants of kaeake from the former dune forest, now dominated by introduced marram grass. Strand-zone debris and <i>Atriplex billardieri</i>.</p> <p><b>Main Plant Species:</b> Marram grass, sand daphne, dubrush, kaeake.</p> <p><b>Notable Fauna:</b> Chatham Island oystercatcher, white-fronted tern, Pitt Island shag red-billed gull, turnstone, banded dotterel, white faced heron, Chatham Island pipit.</p> <p><b>Threatened Species:</b> <i>Artiplex billardieri</i>, sowthistle (planted), Maori spurge (planted). Chatham Island oystercatcher (E).</p> <p><b>Landscape:</b> Part of the Wharekauri seascape and landscape.</p> <p><b>Historic/Cultural:</b> Archaeological sites, wahi tapu</p> <p><b>Visitor Use:</b> Low. Some use by fishers, adjoins in part the Wharekauri non-commercial fishing area.</p> <p><b>Facilities:</b> None.</p> <p><b>Other Features:</b> Attractive rocky promontory and island adjoin the marginal strip.</p>		
<b>THREATS</b> <p><b>Animal Threats:</b> Stock, grazing, weka, feral cats.</p> <p><b>Plant Threats:</b> Marram</p> <p><b>Other:</b> Fire, physical impacts of visitors on wahi tapu.</p>		
<b>MANAGEMENT</b> <p><b>Issues:</b> Wahi tapu site protection. Deteriorating last remnant trees of the former kaeake forest. Oversteepening of the beach top due to marram accumulating sand. Predation of Chatham Island oystercatcher. Burying of fences due to mobile sand. High fence deterioration due to salt. Cattle jumping fences. Liaise with iwi regarding future management of the area. Ensure correct tikanga on wahi tapu sites.</p> <p><b>Priorities:</b> Improve fence effectiveness (height) and durability (sheltering flora). Re-establish kaeake forest through planting. Replace marram in areas with pingao to improve suitability for oystercatchers.</p>		

CONSERVATION UNIT: CI 1034		NAME: Ocean Mail Scenic Reserve	
<b>ADMINISTRATION</b>			
<b>Legal Status:</b> Scenic Reserve		<b>NZMS 260 and CMS Map#:</b> 1	
<b>Reserve Classified?</b> Yes		<b>Area:</b> 831 1509ha	
<b>NZMS Map Reference:</b> 590 775		<b>Ecological District:</b> Chathams	
<b>Legal Description:</b> Block IG10B2 Wharekauri		<b>Field Centre:</b> Chatham Islands	
<b>Survey Blk &amp; District:</b> IV, V Rekohu		<b>Local Authority:</b> Chatham Islands Council	
<b>DESCRIPTION</b>			
<p><b>General:</b> This reserve occupies a peat dome and depression between sand dunes and includes small knobs and ridges of stabilised sands. It also encompasses part of Lake Wharemanu and all of Lake Kaimoumi. Before a fire in November 1994, the reserve had a central core of undisturbed bamboo rush and Chatham Island aster. Now all but a small area of young swamp forest and the dune portion of the reserve have been affected by fire. Te Whanga shoreline has notable wader habitat.</p>			
<p><b>Location:</b> Adjoining the north-east corner of Te Whanga, extending to the north coast.</p>			
<p><b>Main Ecosystems:</b> Formerly: regenerating fern/shrublands, bracken fern, lake margin in <i>Coprosma propinqua</i>, fax and sedge/dand, an extensive bamboo rush and Chatham Island aster community (it is unknown whether these will recover). Remaining: bracken fern, remnant akeake and kopi forest types. Extensive shrubland on the dunes dominated by <i>Leucopogon parviflora</i>/clubbrush, pingao (small area), open sand with scattered herbs/sedges/marram. Notable as contains one of several tiny pingao remnants.</p>			
<p><b>Main Plant Species:</b> Pre fire: bamboo rush, Chatham Island aster, <i>Dracophyllum paludosum</i>, umbrella fern, dubrush, bracken fern, paiteretere, akeake, kopi, hokataka, marram, <i>Leucopogon parviflora</i>. Post-fire: bracken fern, kopi, <i>Leucopogon parviflora</i>, dubrush.</p>			
<p><b>Notable Fauna:</b> Chatham Island fantail, Chatham Island warbler, Chatham Island pipit, dunnoek, waxeye, grey duck, black swan, black shag, pukeko, eastern bar-tailed godwit, banded dotterel.</p>			
<p><b>Threatened Species:</b> Chatham Island speargrass, toetoe (planted), forget-me-not (planted), <i>Atriplex billardieri</i>, sowthistle, Maori spurge (planted), Chatham Island oystercatcher (E) on coast occasionally.</p>			
<p><b>Landscape:</b> Expansive vista of swampy flats extending from margin of Te Whanga to extensive dunes of the northern coastline.</p>			
<p><b>Historic/Cultural:</b> Archaeological sites (middens) in dunes.</p>			
<p><b>Visitor Use:</b> Lake used for duck shooting, reserve highly visible as North Road traverses higher ground of the reserve.</p>			
<p><b>Facilities:</b> None.</p>			
<p><b>Other Features:</b> None known.</p>			
<b>THREATS</b>			
<p><b>Animal Threats:</b> Stock, weka and feral cats.</p>			
<p><b>Plant Threats:</b> Blackberry/bracken.</p>			
<p><b>Other:</b> Fire.</p>			
<b>MANAGEMENT</b>			
<p><b>Issues:</b> Fencing/cattle stop to keep out stock. Habitat and species recovery following fire of November 1994. Firewood gathering.</p>			
<p><b>Priorities:</b> New fencing. Erect signs denoting the reserve. Undertake habitat restoration of the dune/behind dune system.</p>			



<b>CONSERVATION UNIT: CI 2001</b>		<b>NAME: Thomas Mohi Tuuta (Rangaika) Scenic Reserve</b>	
<b>ADMINISTRATION</b>			
<b>Legal Status:</b> Scenic Reserve	<b>NZMS 260 and CMS Map#:</b> 2		
<b>Reserve Classified?</b> Yes	<b>Area:</b> 406.79		
<b>NZMS Map Reference:</b> 547.440	<b>Ecological District:</b> Chatham Islands		
<b>Legal Description:</b> Sec 34 SO333.41	<b>Area Office:</b> Chatham Islands		
<b>Survey Blk &amp; District:</b> III Rangimene	<b>Local Authority:</b> Chatham Islands Council		
<b>DESCRIPTION</b>			
<p><b>General:</b> Gifted by Thomas Mohi Tuuta. This is an outstanding reserve featuring coastal cliffs/ledges and an extensive rolling to flat tableland, traversed by Gillespie Creek. The cover is principally of regenerating fern/shrubland, regenerating forest and tarahinau forest.</p>			
<p><b>Location:</b> On the south coast of Chatham Island 8 kilometres south-west of Owenga.</p>			
<p><b>Main Ecosystems:</b> Mixed broadleaved forests on steep coastal faces with keake/karamu/matipo and some kopi, tarahinau/hoho/matipo forest, keketerere scrub on coastal crests, coastal flax, sedge, herb and salt turf communities, <i>Dracophyllum paludosum</i>/umbrella fern shrub/fernland, Chatham Island aster/bamboo rush rushland, bracken fernland, pasture.</p>			
<p><b>Main Plant Species:</b> Tarahinau, matipo, tree ferns, hoho, pouteretere, bracken, umbrella fern, Chatham Island aster, hokataka.</p>			
<p><b>Notable Fauna:</b> Chatham Island tui, Chatham Island warbler, Chatham Island fantail, Chatham Island red-crowned parakeet, dunnoek, parea.</p>			
<p><b>Threatened Species:</b> Rautini, Chatham Island speargrass, <i>Astelia chathamica</i>, nikau (Given and Williams, 1984), <i>Hebe barkeri</i>, parea (E).</p>			
<p><b>Landscape:</b> Dramatic coastal cliff scenery and an attractive expanse of rolling tableland forest.</p>			
<p><b>Historic/Cultural:</b> Nothing recorded.</p>			
<p><b>Visitor Use:</b> Occasional use.</p>			
<p><b>Facilities:</b> Marked track through forest, overgrown through scrub portion.</p>			
<p><b>Other Features:</b> Adjoins CU 106.8 Preece (Gillespie Ck) covenant. Past burning of scrub/rush zones, margins were farmed. Geopreservation site of significance for remnants of formerly more widespread soil-vegetation sequences.</p>			
<b>THREATS</b>			
<p><b>Animal Threats:</b> Pigs, possum, weka and feral cats.</p>			
<p><b>Plant Threats:</b> Gorse, potentially Chilean guava.</p>			
<p><b>Other:</b> Fire.</p>			
<b>MANAGEMENT</b>			
<p><b>Issues:</b> Gorse has been introduced during fencing. Regeneration limited by irregular bouts of pig rooting. Possum damage in coastal portions. Management of threatened plant species. Prevent establishment of Chilean guava.</p>			
<p><b>Priorities:</b> Regular surveillance and control of gorse. Pig control to ensure maintenance of forest/threatened plant regeneration. Enhancement of threatened plant populations. Monitor for presence of Chilean guava and remove.</p>			

<b>CONSERVATION UNIT: CI 2009</b>		<b>NAME: Pitt Island Scenic Reserve - Glory and Canister Cove block</b>	
<b>ADMINISTRATION</b> <b>Legal Status:</b> Scenic Reserve <b>Reserve Classified?</b> Y <b>NZMS Map Reference:</b> 710 128 <b>Legal Description:</b> Sec 2 3 SO 33431 <b>Survey Blk &amp; District:</b> IX Rangiauria		<b>NZMS 260 and CMS Map#: 2</b> <b>Area:</b> 615 ha <b>Ecological District:</b> Chathams <b>Field Centre:</b> Chatham Islands <b>Local Authority:</b> Chatham Islands Council	
<b>DESCRIPTION</b> <b>General:</b> This portion of Pitt Island Scenic Reserve features tracts of tarahinau-dominated forest, expanses of rank pasture (some grazed until recently) and bracken occupying the plateau. A range of coastal scrub, flax and herbfield communities occupy coastal slopes, diffs and promontories. More diverse hardwood forest occurs in gullies and on the coast. <b>Location:</b> On the south-west promontory of Pitt. <b>Main Ecosystems:</b> Rank grassland with native herbs, seedlings, ferns and scattered or dumped trees (akeake, matipo, tarahinau, wheki), grazed pasture with fewer native species, bracken fernland with/without tree regeneration, treefern fernland, woodland and open-canopied forest of broadleaved forest species, tarahinau and treeferns. Tarahinau-dominated forest, mixed forest of broad valleys and gullies, coastal forest featuring mahoe and ngaio, keketererehe-dominated scrub on bony spurs, coastal flaxland, iceplant. <b>Main Plant Species:</b> Tarahinau, matipo, akeake, hoho, karamu, ribbonwood, keketererehe, mahoe, ngaio, pasture grasses, bracken, bidibidi, flax <i>Carex trifida</i> , iceplant, <i>Pratia arenaria</i> . <b>Notable Fauna:</b> Red-billed gull, white-fronted tern, white-faced heron, pukeko, grey duck, New Zealand shore plover, turnstone, dunnoek, Chatham Island oystercatcher, Chatham Island snipe, Chatham Island tomtit, (occasional) Chatham Island tui, Chatham Island fantail, Chatham Island warbler, Chatham Island waxeye, Pitt Island shag, Chatham Island red-crowned parakeet, possibly Pitt Island longhorn beetle, parea (occasional). <b>Threatened Species:</b> <i>Hebe barkeri</i> , rautini, forget-me-not and Dieffenbach's speargrass, possibly other species such as <i>Linum</i> and Cook's scurvy grass. Chatham Island tui (E), Chatham Island oystercatcher (E), parea (E), Pitt Island longhorn beetle (E). <b>Landscape:</b> A large expanse of largely rolling land featuring several incised valleys and dramatic headlands, coastal diffs, bony coastal ridges and picturesque bays. <b>Historic/Cultural:</b> Archaeological sites. <b>Visitor Use:</b> Hunting of pigs has been popular, some use of Canister Cove by boats for shelter. <b>Facilities:</b> Signs, tracks for predator trapping purposes. <b>Other Features:</b> Was farmed and cleared of significant areas of forest and scrub. Until recently the Canister Cove portion was home to saxony merino sheep. These have been removed.			
<b>THREATS</b> <b>Animal Threats:</b> Predators, cats and weka. Feral/domestic sheep, cattle, pigs. Feral saxony merino (until recently). <b>Plant Threats:</b> Potentially gorse, blackberry. <b>Other:</b> Fire, rodents (if established on Pitt generally).			
<b>MANAGEMENT</b> <b>Issues:</b> Maintain animal numbers, especially pigs and feral stock to a level where regeneration of natives will occur. Retain all of the Canister Cove block as reserve or for exchange to obtain a net conservation gain. Development of an area free of introduced weka/mammalian predators. Speed regeneration in exotic-dominated grasslands. Lack of formal Department and public access by land. Upgrading fencing. Control of access of stock/pig control. Revegetation programme. <b>Priorities:</b> Consult with Pitt Island reserves committee regarding future management of the reserve. Control numbers of pigs and feral stock to low level. Negotiate access agreements.			

<b>CONSERVATION UNIT: CI 2008</b>		<b>NAME: Pitt Island Scenic Reserve - Rangiauria block</b>	
<b>ADMINISTRATION</b>			
<b>Legal Status:</b> Scenic Reserve		<b>NZMS 260 and CMS Map#:</b> 2	
<b>Reserve Classified?</b> Y		<b>Area:</b> 41ha	
<b>NZMS Map Reference:</b> 001 138		<b>Ecological District:</b> Chathams	
<b>Legal Description:</b> Sec 1 SO 32598,		<b>Area Office:</b> Chatham Islands	
<b>Survey Blk &amp; District:</b> VIII Rangiauria		<b>Local Authority:</b> Chatham Islands Council	
<b>DESCRIPTION</b>			
<b>General:</b> The reserve features a dramatic rock promontory of dark basalt, a narrow eroded neck and adjoining coastal slopes and flats above the immediate coastal influence; the original keake broadleaved forest and scrub has largely been replaced by reverting rank grassland.			
<b>Location:</b> A south-west promontory of Pitt.			
<b>Main Ecosystems:</b> Reverting exotic pasture land, <i>Poa chathamica</i> , open herbfield of <i>Festuca coxii</i> and Chatham Island geranium, herbfields of iceplant and gasswort.			
<b>Main Plant Species:</b> Iceplant, gasswort, exotic grasses, <i>Hebe chathamica</i> , <i>H. dieffenbachii</i> , keketera he, akeake, <i>Carex trifida</i> , <i>Samolus repens</i> .			
<b>Notable Fauna:</b> Chatham Island tomtit, Chatham Island oystercatcher, Chatham Island fantail, Chatham Island warbler, Chatham Island pipit, dunnock, white-fronted tern, sooty shearwater, broad-billed prion (avifauna not fully investigated as yet).			
<b>Threatened Species:</b> Chatham Island forget-me-not, Chatham Island speargrass, Chatham Island oystercatcher (E)			
<b>Landscape:</b> Dramatic basalt promontory with tall bluffs that is highly visible from sea and many parts of Pitt Island, attractive coastal slopes which are brilliant with iceplant flower in summer. Once farmed and scrub/forest cleared or deteriorated with the lack of regeneration.			
<b>Historic/Cultural:</b> Archaeological sites.			
<b>Visitor Use:</b> Rarely.			
<b>Facilities:</b> None.			
<b>Other Features:</b> Rangiauria Point a geopreservation site of significance for exposed pipes of volcanic breccia.			
<b>THREATS</b>			
<b>Animal Threats:</b> Predators of sea birds – cats, weka. Periodically stock gain entry.			
<b>Plant Threats:</b> Guard against gorse possibly entering on stock.			
<b>Other:</b> Fire.			
<b>MANAGEMENT</b>			
<b>Issues:</b> Fences suffer from wind buffeting and can lean. Fences are exposed to significant salt spray. Occasional stock gaining entry. Populations of threatened plant species are very small. Lack of formal Department and public access by land.			
<b>Priorities:</b> Maintain fences. Improve size of threatened plant populations by propagation and replanting. Negotiate access agreements.			

CONSERVATION UNIT: CI 2007		NAME: Mangere Island - Nature Reserve
<b>ADMINISTRATION</b> <b>Legal Status:</b> Nature Reserve <b>Reserve Classified?</b> Y <b>NZMS Map Reference:</b> 664 202 <b>Legal Description:</b> Mangere Island <b>Survey Blk &amp; District:</b> II Rangiauria		<b>NZMS 260 and CMS Map#:</b> 2 <b>Area:</b> 112 9073 ha <b>Ecological District:</b> Chathams <b>Field Centre:</b> Chatham Islands <b>Local Authority:</b> Chatham Islands Council
<b>DESCRIPTION</b> <p><b>General:</b> A small volcanic island with remnant forest in the east and rapidly regenerating coastal shrublands on bluffs. An extensive area of introduced grassland is being invaded by many native grasses and other herbaceous species. Ecologically this island is extremely important, being one of only two that are free of mammalian predators and herbivores. It supports important populations of threatened endemic wildlife and plants. The Department has engaged in an active revegetation programme to enhance the forest habitat.</p> <p><b>Location:</b> In Pitt Strait just to the west of central Pitt Island.</p> <p><b>Main Ecosystems:</b> Akeake/ribbonwood forest, <i>Olearia chathamica</i> scrub, coastal duff/bank herb/grass/shrublands, <i>Pratia</i>/flax and planted trees.</p> <p><b>Main Plant Species:</b> Akeake, ribbonwood, mahoe (seedling), matipo (seedling), pasture grasses, <i>Carex trifida</i>, bidibidi, <i>Pratia</i>, <i>Poa chathamica</i>, <i>Olearia chathamica</i>, Dieffenbach's speargrass, keplart, New Zealand spinach, <i>Hebe chathamica</i>.</p> <p><b>Notable Fauna:</b> Black robin, Chatham shag, Pitt Island shag Forbes parakeet, Chatham Island fantail, Chatham Island tit, Chatham Island snipe, shining cuckoo, Chatham Island warbler, broad-billed and fairy prion, grey-backed, white-faced and southern diving petrel, <i>Coxella</i> weevil and other invertebrates and skinks.</p> <p><b>Threatened Species:</b> Dieffenbach's speargrass, Chatham Island forget-me-not, linen flax, Cook's curly grass, sowthistle, Forbes parakeet (E), black robin (E), <i>Coxella</i> weevil, Chatham shag (E).</p> <p><b>Landscape:</b> A dramatic volcanic island, featuring a high plateau bounded by sheer cliffs and ramparts with a lower-cliffed eastern portion topped by colourful daisy soils.</p> <p><b>Historic/Cultural:</b> Archaeological sites.</p> <p><b>Visitor Use:</b> Limited to management and research to date (and some illegal bird harvest).</p> <p><b>Facilities:</b> Eight-bunk hut, track to the bush edge, sign above north landing.</p> <p><b>Other Features:</b> Shoreline geopreservation site for breccia containing mantle and crystal xenoliths. Xenoliths are of importance in relating the magmatic history of rocks and earth's crust beneath the Chathams. Principal habitat for black robin, Forbes parakeet, Chatham Island snipe and Chatham Island tomtit. The original forest area was removed for farming which ceased in the 1960s when stock was removed and rabbits were controlled. The Wildlife Service undertook the first restoration efforts in the middle to late 1970s. Restoration efforts resumed in the 1990s. Large part of the black robin restoration programme.</p>		
<b>THREATS</b> <p><b>Animal Threats:</b> Some introduced pests (grey cabbage aphid, white butterfly), potential threat from rodents.</p> <p><b>Plant Threats:</b> Thistles (for burrowed earth areas), potential introduction of gorse if not careful with nursery stock potting mixes</p> <p><b>Other:</b> Fire, visitors.</p>		
<b>MANAGEMENT (see also 5.4 Mangere and Rangitira)</b> <p><b>Issues:</b> Illegal bird harvest. Management of threatened bird populations/threatened plant populations. Maintenance of rodent-freedom. Visitor regime. Revegetation/species diversity enhancement. Disease/pest control.</p> <p><b>Priorities:</b> Strict quarantine to prevent colonisation by pests/rodents. Attaining self-perpetuating populations of key threatened species. Establishing forest cover to about 35-40% of the island.</p>		

<b>CONSERVATION UNIT: CI 2010</b>		<b>NAME: Rangatira (South East Island) Nature Reserve</b>	
<b>ADMINISTRATION</b>		<b>NZMS 260 and CMS Map#: 2</b>	
<b>Legal Status:</b> Nature Reserve		<b>Area:</b> 218 5303	
<b>Reserve Classified?</b> Yes		<b>Ecological District:</b> Chathams	
<b>NZMS Map Reference:</b> 759 114		<b>Area Office:</b> Chatham Islands	
<b>Legal Description:</b> South East Island (Rangatira)		<b>Local Authority:</b> Chatham Islands Council	
<b>Survey Blk &amp; District:</b> X Rangiauria			
<b>DESCRIPTION</b>			
<p><b>General:</b> With Mangere, Rangatira is one of two vitally important reserves because of its freedom from weka and mammalian predators and herbivores. It is home to several species of threatened birds and outstanding populations of seabirds. Threatened plants also feature, though population levels are still building slowly from low levels. The island has regenerated a large area of akeake/ribbonwood forest and other areas are dominated by native plants.</p>			
<p><b>Location:</b> Located to the south-east of Pitt Island opposite Glory Bay.</p>			
<p><b>Main Ecosystems:</b> Regenerating akeake/ribbonwood mixed broadleaved forest, regenerating karamu mixed broadleaved forest, keke terehe/<i>Hebe chathamica</i>, scrub and grasses, <i>Carex trifida</i> sedgeland, flax/akeake/<i>H. dieffenbachii</i> scrubland. Extensive coastal turf communities with some rare endemics. Pohuehue with occasional regenerating trees.</p>			
<p><b>Main Plant Species:</b> Akeake, ribbonwood, kawakawa, mahoe, karamu, matipo, <i>Carex trifida</i>, <i>Hebe chathamica</i>, <i>H. dieffenbachii</i>, flax, glasswort, <i>Pratia arenaria</i>, <i>Samolus repens</i>, pohuehue.</p>			
<p><b>Notable Fauna:</b> Numerous invertebrate species, many threatened skink, black robin, Chatham Island blue penguin, black-winged petrel, Chatham petrel, broad-billed prion, fairy prion, sooty shearwater, grey-backed storm petrel, white-faced storm petrel, southern diving petrel, black shag, Chatham shag, Pitt Island shag, white-faced heron, Chatham Island oystercatcher, New Zealand shore plover, Chatham Island snipe, brown skua, southern black-backed gull, red-billed gull, white-fronted tern, parea, Chatham Island warbler, Chatham Island fantail, Chatham Island tomtit, black robin, Chatham Island tui.</p>			
<p><b>Threatened Species:</b> <i>Polystichum</i> 'chatham', sowthistle, Cook's curly grass, <i>Linum monogynum</i> var. <i>chathamicum</i>, Dieffenbach's speargrass, Chatham Island forget-me-not. Principal habitat for Chatham Island snipe, Chatham Island tomtit, Chatham Island tui. Only habitat for Chatham Island petrel and New Zealand shore plover.</p>			
<p><b>Landscape:</b> Attractive wedge-shaped island rising from north to south and ending in abrupt bluffs with a lobe of flatter land adjoining to the east. Much of the island has an attractive forest cover. Bays, rock landings and islets add variety to the coastal margin.</p>			
<p><b>Historic/Cultural:</b> Last vestiges of woolshed present until early 1990s, sheep dip site, archaeological site.</p>			
<p><b>Visitor Use:</b> Use by DOC and research related people. Illegal harvesting occurs. Approximately biennial Chatham Islanders invited visits.</p>			
<p><b>Facilities:</b> Eight-bunk hut and a series of tracks to serve species-management purposes.</p>			
<p><b>Other Features:</b> Farmed into the 1960s when the forest and scrub cover was largely removed. Well-defined series of marine terraces on west coast of island classified as a geopreservation site.</p>			
<b>THREATS</b>			
<p><b>Animal Threats:</b> Potential for rodent introduction.</p>			
<p><b>Plant Threats:</b> None of immediate concern other than possibly the native pohuehue (the subject of debate).</p>			
<p><b>Other:</b> Fire, pests and visitor impact.</p>			
<b>MANAGEMENT (see also 5.4 Mangere and Rangatira)</b>			
<p><b>Issues:</b> Continue to encourage regeneration and expansion of the forest margin. Illegal birding. Maintenance of rodent-free status. Improved carrying capacity/populations of threatened plants/animals. Risk of visitors introducing pests and diseases.</p>			
<p><b>Priorities:</b> Careful quarantine procedures. Control risk posed by illegal bird harvest.</p>			

CONSERVATION UNIT: CI 2011		NAME: Tuku Nature Reserve
<b>ADMINISTRATION</b> <b>Legal Status:</b> Nature Reserve <b>Reserve Classified? Y</b> <b>NZMS Map Reference:</b> 410 426 <b>Legal Description:</b> Lot 1 DP 60624 <b>Survey Blk &amp; District:</b> IX, X, XIII, XIV Oropuke		<b>NZMS 260 and CMS Map#: 2</b> <b>Area:</b> 123 85 ha <b>Ecological District:</b> Chathams <b>Field Centre:</b> Chatham Islands <b>Local Authorities:</b> Chatham Islands Council
<b>DESCRIPTION</b> <p><b>General:</b> Gifted by Ma me l and Evelyn Tuanui. Comprises a large expanse of ta bleland dominated by tarahinau forest and more diverse broadleaved forest where the many branches of the Tuku a tamatea River and smaller creek dissect the surface. To the east forest gives way to bamboo rush/shrubland. The area is a key site for conservation of parea and taiko, several threatened plants and an extensive forest tract. The area was formerly farmed (leading to deterioration in forest diversity/ structure rather than complete clearance).</p> <p><b>Location:</b> In the south-west sector of Chatham Island, primarily the Tuku a tamatea mid-catchment.</p> <p><b>Main Ecosystems:</b> Tarahinau forest, bamboo rush/ Chatham Island aster/ <i>Dracophyllum paludosum</i> shrub/rushland, sphagnum moss field, kopi mixed broadleaved forest and gullies with tree fern. <i>D. paludosum</i>/umbrella fern, shrub/fernland, bracken.</p> <p><b>Main Plant Species:</b> Tarahinau, matipo, hoho, hokataka, tree ferns, kopi.</p> <p><b>Notable Fauna:</b> Taiko, parea, Chatham Island tui, Chatham Island red-crowned parakeet, Chatham Island fantail, Chatham Island warbler; dunnoek, waxeye.</p> <p><b>Threatened Species:</b> Rautini, <i>Hebe barkeri</i>, <i>Astelia chathamica</i>, taiko (E), parea (E), Chatham Island fantail.</p> <p><b>Landscape:</b> Part of the largest expanse of continuous forest on Chatham Islands occurring on the gently rising southern tableland. The size of the reserve is best appreciated from the rim of the Tuku River catchment.</p> <p><b>Historic/Cultural:</b> None known.</p> <p><b>Visitor Use:</b> DOC and associated personnel some hunting, some visitors with/without permits.</p> <p><b>Facilities:</b> Signposts, tracks for species/habitat management purposes. Limited access except across private land.</p> <p><b>Other Features:</b> Only taiko breeding habitat; principal Chatham Islands habitat for parea, Chatham Island fantail and Chatham Island red-crowned parakeet. Geopreservation site of significance for wide range of relatively undisturbed soil-vegetation associations.</p>		
<b>THREATS</b> <p><b>Animal Threats:</b> Feral cattle, pigs, rats, cats, possum and weka.</p> <p><b>Plant Threats:</b> Potentially gorse.</p> <p><b>Other:</b> Fire.</p>		
<b>MANAGEMENT (see also 5.2 Chatham Island)</b> <p><b>Issues:</b> Enhancing habitat diversity; (survival of preferred species (e.g., hokataka and regeneration) by control of feral stock, pigs and possum. Control of predators, especially of parea and taiko. The need to ring fence or limit stock gaining access from unfenced areas. Control of visitor impact, research and management teams.</p> <p><b>Priorities:</b> Boundaries. Continued enhancement of threatened plant populations. Browser and predator control. Permit entry control for visitors. Visitor facilities. Fire prevention and control.</p>		

<b>CONSERVATION UNIT: CI 2015</b>		<b>NAME: Pitt Strait Marginal Strip</b>
<b>ADMINISTRATION</b> <b>Legal Status:</b> Marginal Strip, Conservation Act 1987 <b>Reserve Classified?</b> N/A <b>NZMS Map Reference:</b> 509 406 to 597 434 <b>Legal Description:</b> Adj Pt Sec 1, 19, 34 <b>Survey Blk &amp; District:</b> XII, XVI Oropuke, II Rangimene		<b>NZMS 260 and CMS Map#:</b> 2 <b>Area:</b> 20 ha <b>Ecological District:</b> Chathams <b>Area Office:</b> Chatham Islands <b>Local Authority:</b> Chatham Islands Council
<b>DESCRIPTION</b> <p><b>General:</b> 20-metre-wide strip at foot of steep coastal cliffs.</p> <p><b>Location:</b> South-eastern cliffs – main Chatham.</p> <p><b>Main Ecosystems:</b> Keketererehe scrub, coastal fax, sedge, herb and salt turf communities.</p> <p><b>Main Plant Species:</b> Hax, keketererehe.</p> <p><b>Notable Fauna:</b> Possible Chatham shag nesting area.</p> <p><b>Threatened Species:</b> likely to be Chatham Island aster, Dieffenbach's sedgegrass.</p> <p><b>Landscape:</b> Dramatic coastal cliffs.</p> <p><b>Historic/Cultural:</b> Archaeological sites?</p> <p><b>Visitor Use:</b> Minimal.</p> <p><b>Facilities:</b> None.</p> <p><b>Other Features:</b> Part of a continuous line of cliffs classified as a geopreservation site as an extremely well-defined landform of scientific/educational and scenic value.</p>		
<b>THREATS</b> <p><b>Animal Threats:</b> Pigs, cats, possum.</p> <p><b>Plant Threats:</b> Gorse, maple.</p> <p><b>Other:</b></p>		
<b>MANAGEMENT</b> <p><b>Issues:</b> An area difficult of access and impractical to manage separate from the adjoining land. Protection of adjacent Rangika Reserve will partly help protect this coastal community.</p> <p><b>Priorities:</b> Minimal management.</p>		

<b>CONSERVATION UNIT: CI 1045</b>		<b>NAME: Te Awainanga River Marginal Strip</b>
<b>ADMINISTRATION</b> <b>Legal Status:</b> Marginal Strip, Conservation Act 1987 <b>Reserve Classified?</b> N/A <b>NZMS Map Reference:</b> 551 540 to 534 513 <b>Legal Description:</b> Adj Pt Sec 8 10, 20 Owenga Sett <b>Survey Blk &amp; District:</b> IV, VII Oropuke		<b>NZMS 260 and CMS Map#: 1</b> <b>Area:</b> 24 ha <b>Ecological District:</b> Chathams <b>Field Centre:</b> Chatham Islands <b>Local Authority:</b> Chatham Islands Council
<b>DESCRIPTION</b> <p><b>General:</b> 20-metre-wide strip along the bank of the Te Awainanga River.</p> <p><b>Location:</b> True right bank of Te Awainanga River, from Te Whanga to the Makora River junction.</p> <p><b>Main Ecosystems:</b> Oioi grading upstream through flax to forest alongside the freshwater section of the river.</p> <p><b>Main Plant Species:</b> Oioi, flax, bracken, pouteretare, dubrush.</p> <p><b>Notable Fauna:</b> Black swan, grey duck, white-faced heron, white-fronted tern, banded dotterel, red-billed gull, black shag, Pitt Island shag pukeko, welcome swallow, Chatham Islands fantail, Chatham Islands warbler, Chatham shag, turnstone.</p> <p><b>Threatened Species:</b> Chatham shag (E).</p> <p><b>Landscape:</b> Attractive margin of lower reaches of major Chatham Island catchment.</p> <p><b>Historic/Cultural:</b> Not known.</p> <p><b>Visitor Use:</b> Low, some hunting.</p> <p><b>Facilities:</b> None.</p> <p><b>Other Features:</b> Has important role for riparian protection of river. Chatham Island County Council road metal quarry on marginal strip upstream of Te Awainanga River Bridge.</p>		
<b>THREATS</b> <p><b>Animal Threats:</b> Weka, feral cats and stock grazing.</p> <p><b>Plant Threats:</b> Himalayan honeysuckle, gorse.</p> <p><b>Other:</b> Fire.</p>		
<b>MANAGEMENT</b> <p><b>Issues:</b> Fencing not feasible. Location of quarry operations on marginal strip.</p> <p><b>Priorities:</b> Maintain vegetation cover through liaison with adjoining landowners. Ensure future quarry operations do not affect marginal strip.</p>		



CONSERVATION UNIT: CI 1041, 1046, 1047		NAME: Hanson Bay Marginal Strips
<p><b>ADMINISTRATION</b>  <b>Legal Status:</b> Marginal Strip, Conservation Act 1987  <b>Reserve Classified?</b> N/A  <b>NZMS Map Reference:</b> 598 688 to 602 473  <b>Legal Description:</b> Adj Pt Sec 13, 15, 17, 30, 31 Adj Sec 2 Adj Lot 1, 2 DP 4600 Q Adj Lot 2, 3 DP 60880  <b>Survey Blk &amp; District:</b> I, II, III Rangimene, K, X Rekohu</p>	<p><b>NZMS 260 and CMS Map#:</b> 1  <b>Area:</b> 38 ha  <b>Ecological District:</b> Chathams  <b>Area Office:</b> Chatham Islands  <b>Local Authority:</b> Chatham Islands Council</p>	
<p><b>DESCRIPTION</b></p> <p><b>General:</b> 20-metre-wide upper beach strip above mean high water mark. In the storm wash zone of a dynamic coast where a peat plateau contacts the sandy beach forming a low bank that is eroded into pedestals. No dunes have formed and the tide washes regularly to the base of the peat. Areas of shell have accumulated in the south.</p> <p><b>Location:</b> Coastal margin from Owenga north to adjoining Lake Kāingara.</p> <p><b>Main Ecosystems:</b> Marram grass with associated native herbs and shrubs, eroded peat pedestals with occasional salt-tolerant herbs, salt meadow and pasture, bracken fern.</p> <p><b>Main Plant Species:</b> Marram grass, dubrush, sand daphne, Chatham Island geranium, <i>Leucopogon parviflora</i>; <i>Lagurus ovatus</i>, hare's tail, <i>Selliera radicans</i>, <i>Solepis</i> spp., <i>Crassula moschata</i>.</p> <p><b>Notable Fauna:</b> Red-billed gull, white-fronted tern, banded dotterel, Chatham Island oystercatcher (occasional), Pitt Island shag.</p> <p><b>Threatened Species:</b> <i>Pimelia arenaria</i> (threatened in New Zealand not Chathams). Occasional Chatham Island oystercatcher (E).</p> <p><b>Landscape:</b> Part of a remote beach and dune system. An unusual combination of peat and sand provides interest when viewed from the beach at low tide.</p> <p><b>Historic/Cultural:</b> Archaeological sites?</p> <p><b>Visitor Use:</b> Low, some use as access to Te Awapatiki.</p> <p><b>Facilities:</b> None possible.</p> <p><b>Other Features:</b> No significant change in mean high water mark, though more wash erosion of adjoining dunes. Some shell/gravel extraction near Owenga may be on the marginal strip. Geopreservation site (Te Awapatiki) of significance for excellent example of well-exposed pillow lava.</p>		
<p><b>THREATS</b></p> <p><b>Animal Threats:</b> Occasional stock, weka, cats.</p> <p><b>Plant Threats:</b> Nil.</p> <p><b>Other:</b> Not known.</p>		
<p><b>MANAGEMENT</b></p> <p><b>Issues:</b> Chatham Island oystercatcher threatened by predation.</p> <p><b>Priorities:</b> Protection of Chatham Island oystercatcher nesting sites where feasible.</p>		

<b>CONSERVATION UNIT: CI 1049</b>		<b>NAME: Hanson Bay Marginal Strip</b>
<b>ADMINISTRATION</b>		
<b>Legal Status:</b> Marginal strip, Conservation Act 1987 <b>Reserve Classified?</b> N/A <b>NZMS Map Reference:</b> 05 474 <b>Legal Description:</b> Adj Lots 1, 2, 3, 4, 5, 6, 8, 9, 11, 12, 13 DP9548. Adj Pt Sec 28 <b>Survey Blk &amp; District:</b> IV Rangimene	<b>NZMS 260 and CMS Map#:</b> 1 <b>Area:</b> 4 ha <b>Ecological District:</b> Chathams <b>Field Centre:</b> Chatham Islands <b>Local Authority:</b> Chatham Islands Council	
<b>DESCRIPTION</b>		
<b>General:</b> 20-metre-wide strip along approximately 200 metres of rocky shoreline. <b>Location:</b> Adjacent to Owenga in Hanson Bay, Chatham Islands. <b>Main Ecosystems:</b> Unknown. <b>Main Plant Species:</b> Unknown. <b>Notable Fauna:</b> Chatham Island oystercatcher, red-billed gull, white-fronted tern, Pitt Island shag <b>Threatened Species:</b> Chatham Island oystercatcher occasionally (E). <b>Landscape:</b> Small part of Owenga coastal farmland landscape. <b>Historic/Cultural:</b> Archaeological sites. <b>Visitor Use:</b> Probable for recreational fishing/paua collection. <b>Facilities:</b> Nil. <b>Other Features:</b> None known.		
<b>THREATS</b>		
<b>Animal Threats:</b> Cats, weka. <b>Plant Threats:</b> Unknown. <b>Other:</b> Unknown.		
<b>MANAGEMENT</b>		
<b>Issues:</b> Requires assessment of ecological features <b>Priorities:</b> Public access recognised. Assess ecological values.		

<b>CONSERVATION UNIT: CI 1048</b>		<b>NAME: Hawaiki Stream Marginal Strip</b>
<b>ADMINISTRATION</b> <b>Legal Status:</b> Marginal Strip, Conservation Act 1987 <b>Reserve Classified?</b> N/A <b>NZMS Map Reference:</b> 609 472 <b>Legal Description:</b> Adj Lot 1 DP 9456 <b>Survey Blk &amp; District:</b> III Rangimene		<b>NZMS 260 and CMS Map#:</b> 1 <b>Area:</b> 02 ha <b>Ecological District:</b> Chathams <b>Area Office:</b> Chatham Islands <b>Local Authority:</b> Chatham Islands Council
<b>DESCRIPTION</b> <b>General:</b> 20-metre-wide strip. <b>Location:</b> Situated along shoreline west of Hawaiki Stream. <b>Main Ecosystems:</b> Pasture. <b>Main Plant Species:</b> N/A <b>Notable Fauna:</b> Nil. <b>Threatened Species:</b> Nil. <b>Landscape:</b> Small part of Owenga settlement/farmland landscape. <b>Historic/Cultural:</b> No known historic values. <b>Visitor Use:</b> Minimal. <b>Facilities:</b> None. <b>Other Features:</b> None known.		
<b>THREATS</b> <b>Animal Threats:</b> Nil. <b>Plant Threats:</b> Nil. <b>Other:</b> Nil.		
<b>MANAGEMENT</b> <b>Issues:</b> Clarify extent of any adjoining activity use of strips. Maintain public access alongside stream, and protection of stream margin. <b>Priorities:</b> Liaison with adjoining landowner. Formalise easements over marginal strip if necessary.		

<b>CONSERVATION UNIT: CI 1036, 1037, 1038, 1040</b>		<b>NAME: Lakes Kaingarahu, Makuku, Kairae, and Taia marginal strips.</b>	
<b>ADMINISTRATION</b>		<b>NZMS 260 and CMS Map#: 1</b>	
<b>Legal Status:</b> Marginal Strip, Conservation Act 1987		<b>Area:</b> 44 ha	
<b>Reserve Classified?</b> N/A		<b>Ecological District:</b> Chathams	
<b>NZMS Map Reference:</b> 600 700 to 575 645		<b>Field Centre:</b> Chatham Islands	
<b>Legal Description:</b> Adj Pt Sec 13, 14, 22		<b>Local Authority:</b> Chatham Islands Council	
<b>Survey Blk &amp; District:</b> VII, IX Rekohu			
<b>DESCRIPTION</b>			
<b>General:</b> 20-metre-wide margins of small lakes behind the coastal dunes of Hanson Bay and Te Whanga Lagoon. Cover includes forest, bracken and pasture. Forest is best developed in the north and east.			
<b>Location:</b> A group of small lakes behind the dunes of Hanson Bay, north-east Chatham Island.			
<b>Main Ecosystems:</b> Bracken fern, pasture, mixed hardwood kopi forest, marram, sedge margin.			
<b>Main Plant Species:</b> Kopi, matipo, ake-rautini ( <i>Dodonaea viscosa</i> ), karamu, <i>Australina pusilla</i> , hokataka, mahoe, poroporo, introduced grasses, bracken, <i>Carex virgata</i> , dubrush, <i>Juncus</i> spp.			
<b>Notable Fauna:</b> Chatham Island pipit, black swan, grey duck, pied stilt, black shag, Chatham Island warbler, white-faced heron, white-fronted tern, red-billed gull, banded dotterel.			
<b>Threatened Species:</b> None known.			
<b>Landscape:</b> A small part of a wider landscape of lakes, farmland, sea coast, lagoon and wetlands. Forest remnants provide variety to the landscape surrounding the lakes.			
<b>Historic/Cultural:</b> Archaeological sites (middens).			
<b>Visitor Use:</b> Hunting, swan egg gathering. No visitor-access over private land without owner permission.			
<b>Facilities:</b> None.			
<b>Other Features:</b> None known.			
<b>THREATS</b>			
<b>Animal Threats:</b> Stock grazing of marginal forest, weka, feral cats.			
<b>Plant Threats:</b> None.			
<b>Other:</b> Fire.			
<b>MANAGEMENT</b>			
<b>Issues:</b> Damage to forest by stock. Protection of margin from excessive grazing to preserve integrity of lake ecosystem.			
<b>Priorities:</b> Fencing unfeasible but management of stock access to lake edge and forest is a priority.			

CONSERVATION UNIT: CI 1050 and 1051		NAME: Petre Bay Marginal Strips
<b>ADMINISTRATION</b>		
<p><b>Legal Status:</b> Marginal Strip, Conservation Act 1987</p> <p><b>Reserve Classified?</b> N/A</p> <p><b>NZMS Map Reference:</b> 473 583</p> <p><b>Legal Description:</b> Adj Lot 1 DP 40800, Adj Pt Lot 1 DP 4061 0 Adj Pt Lot 1, 2 DP 511 17, Adj Pt Sec 3</p> <p><b>Survey Blk &amp; District:</b> XV Te Wha nga</p>	<p><b>NZMS 260 and CMS Map#:</b> 1</p> <p><b>Area:</b> 35 ha</p> <p><b>Ecological District:</b> Chathams</p> <p><b>Area Office:</b> Chatham Islands</p> <p><b>Local Authority:</b> Chatham Islands Council</p>	
<b>DESCRIPTION</b>		
<p><b>General:</b> 20-metre-wide strip of the upper beach and lower foredune/sandy 'plateau' at the foot of the large western dune system. CU1050 includes a small promontory. Principally clothed in marram grass, clubrush, native shrubs and occasional native herbs.</p> <p><b>Location:</b> Petre Bay beach south of Red Bluff, in the vicinity of Te One, Chatham Island.</p> <p><b>Main Ecosystems:</b> Marram grass and assorted shrubs and herbs.</p> <p><b>Main Plant Species:</b> Marram grass, clubrush, <i>Coprosma acerosa</i>, <i>Leucopogon parviflora</i>, Chatham Island geranium, sand daphne.</p> <p><b>Notable Fauna:</b> None known.</p> <p><b>Threatened Species:</b> <i>Artiplex billardieri</i> (strand zone of beach).</p> <p><b>Landscape:</b> Part of the dramatic coastal seascape and landscape as viewed from Waitangi and from the beach.</p> <p><b>Historic/Cultural:</b> Unknown. likely to be some historic places, including wahi tapu.</p> <p><b>Visitor Use:</b> Low as part of general beach. CU 1050 has unformed legal road access inland to North Road.</p> <p><b>Facilities:</b> None.</p> <p><b>Other Features:</b> None known.</p>		
<b>THREATS</b>		
<p><b>Animal Threats:</b> Potentially from heavy stock grazing.</p> <p><b>Plant Threats:</b> Marram grass.</p> <p><b>Other:</b> Fire.</p>		
<b>MANAGEMENT</b>		
<p><b>Issues:</b> Stock damaging vegetation cover. Marram grass displacing indigenous dune communities.</p> <p><b>Priorities:</b> Fencing unfeasible. Liaise with adjoining landowner to minimise impacts to vegetation.</p>		

<b>CONSERVATION UNIT: CI 1053</b>		<b>NAME: Pacific Ocean Marginal Strip</b>
<b>ADMINISTRATION</b>		
<b>Legal Status:</b> Marginal Strip, Conservation Act 1987	<b>Reserve Classified?</b> N/A	<b>NZMS 260 and CMS Map#:</b> 1
<b>NZMS Map Reference:</b> 355 492	<b>Legal Description:</b> Adj. Pt. Sec 1, 4, 6	<b>Area:</b> 12 ha
<b>Survey Blk &amp; District:</b> V Oropuke		<b>Ecological District:</b> Chathams
		<b>Field Centre:</b> Chatham Islands
		<b>Local Authority:</b> Chatham Islands Council
<b>DESCRIPTION</b>		
<b>General:</b> 20 metre wide strip above mean high water mark. Combination of rocky shoreline and basaltic rock promontories and wave platforms.		
<b>Location:</b> Point Durham, south-west Chatham Island.		
<b>Main Ecosystems:</b> Rocky coastline, salt meadow, pasture.		
<b>Main Plant Species:</b> Ice plant, sea primrose, <i>Selliera radicans</i> .		
<b>Notable Fauna:</b> White-fronted tern, Pitt Island shag red-billed gull, Chatham Island oystercatcher, banded dotterel, white-faced heron.		
<b>Threatened Species:</b> Chatham Island oystercatcher (E) occasionally.		
<b>Landscape:</b> Part of the dramatic south coast seascape and landscape.		
<b>Historic/Cultural:</b> Possible archaeological sites.		
<b>Visitor Use:</b> Minimal.		
<b>Facilities:</b> None.		
<b>Other Features:</b>		
<b>THREATS</b>		
<b>Animal Threats:</b> Weka, cats, stock grazing, rats.		
<b>Plant Threats:</b> Thistles.		
<b>Other:</b>		
<b>MANAGEMENT</b>		
<b>Issues:</b> Disturbance and predation of Chatham Island oystercatcher nests.		
<b>Priorities:</b> Negotiate for public walking access from Wātangi-Tuku Road to marginal strip.		

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