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# KAWEKA FOREST PARK

## CONSERVATION MANAGEMENT PLAN

Prepared and Published by the  
Department of Conservation,  
P O Box 644, NAPIER  
August 1991

ISSN 1170-2966 Hawkes Bay Conservancy Series Number 2  
ISBN 0-478-01282-9

**Cover Photo**

**Scout and Guide Group on track to Te Puia Lodge. (Brian Turner).**

*".... And the solitude - which is only broken by the rush of the dark water and the shrill beating of the fitful mountain blasts against the grey cliffs and (during the day) by the occasional horrid scream of a rapidly passing parrot, or, at night, by the additional hooting of a lonely owl,; the plaintive cry of the weka calling to its mate, the mournful wail of the wio, all lonesome birds - is intense and almost unbearable".*

From William Colenso's Journal 16 October 1851. (An account of the Kuripapango - Taruarau Journey; written at a campsite near Kuripapango, on the banks of the Ngaruroro River).



## FOREWORD

This conservation management plan sets out the objectives and policies for management of Kaweka Forest Park. It has been prepared by the Department in consultation and with the approval of the Rangitikei/Hawke's Bay Conservation Board.

This plan has been formulated after considerable public consultation. A draft plan was released in December 1990 and an invitation extended to all persons or organisations interested in the management of the Park to submit their comments by 18 February 1991. Prior to and following release of this document meetings and discussions took place between a number of individuals, user groups and the Iwi.

A total of 44 submissions were received on the draft plan, and 9 people who had asked to be heard in support of their submission were met by the Board and the Department at a meeting in Napier on 5 April 1991.

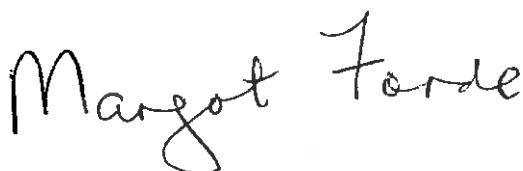
After giving due consideration to all submissions the Board requested the Department to make appropriate amendments to the draft plan. The amended plan was subsequently presented to the Board for approval at its meeting on 14 June 1991.

The objectives and policies in this plan represent the Board's aspirations for the Park. They reflect the commitment to protection and enhancement of the significant natural values of the area for their intrinsic values and for the benefit of future generations, and to facilitate appropriate recreational use and enjoyment of the Park.

The plan will be the basic day-to-day working document for Park Managers and will also provide a statement of intent for the long-term direction in which management of the Park will proceed.

Therefore pursuant to Section 17 of the Conservation Act 1987 the Rangitikei/Hawke's Bay Conservation Board approves this plan.

Dated this fourteenth day of June 1991.



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Dr Margot Forde  
Board Chair  
Rangitikei/Hawke's Bay Conservation Board



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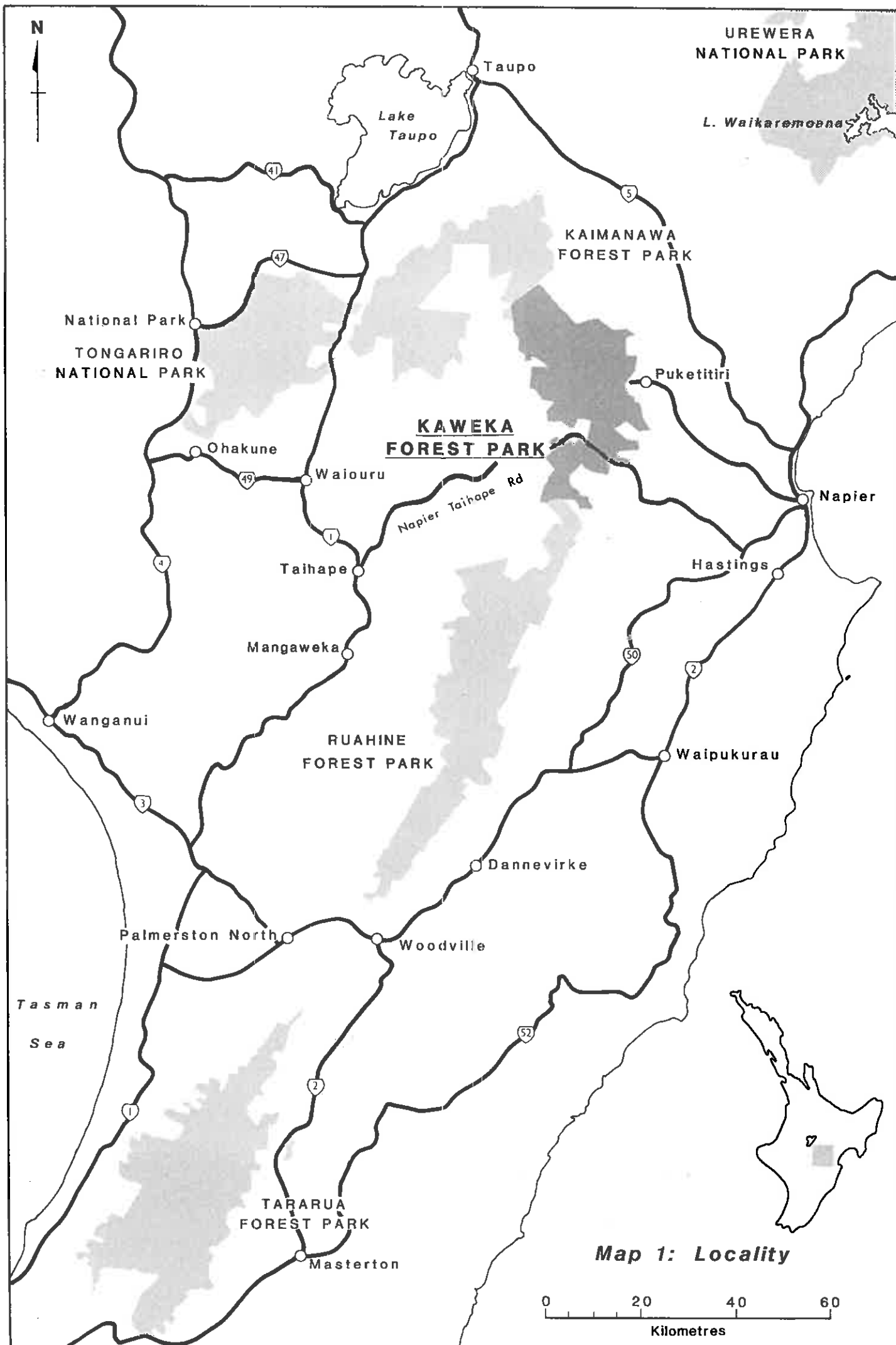
## **MAPS**

1. Locality
2. Administrative Boundaries
3. Local Government Boundaries
4. Proposed Park Classification
5. Recreation

## NOTE (1)

Several words have been used extensively in this management plan. To avoid unnecessary duplication the following words have been abbreviated where possible:

- i) Department means Department of Conservation
- ii) The Act means the Conservation Act 1987
- iii) The Park means Kaweka Forest Park
- iv) The Minister means Minister of Conservation
- v) The Board means the Rangitikei-Hawke's Bay Conservation Board



Map 1: Locality

0 20 40 60  
Kilometres



**Part I**  
**THE PARK**



## PART I

# KAWEKA FOREST PARK CONSERVATION MANAGEMENT PLAN

## 1. Introduction

### 1.1 Management Planning - The Basis for Management

Kaweka Forest Park (referred to as the Park from now on in this management plan) had an operative management plan (1976-1986) that was prepared in accordance with the Forests Act 1949. Since April 1987, the Park has been administered by the Department of Conservation as a "Conservation Park" under Section 61 of the Act. The Park will continue to be managed as a Conservation Park according to the provisions of the Act, but for reasons of familiarity the term "Forest Park" will remain:

Section 19 of the Act stipulates how Conservation Parks will be managed:

*"Every Conservation Park shall be so managed that its natural and historic resources are protected, and subject to this, to facilitate public recreation and enjoyment."*

This plan has been prepared by the Department of Conservation - Hawke's Bay Conservancy and approved by the Rangitikei/Hawke's Bay Conservation Board after taking into account public submissions on a discussion paper released in 1988 and the draft conservation management plan released in 1990.

This plan will last for a period of 10 years, but is able to be reviewed at any time if this is necessary, due to changing circumstances.

The policies and objectives of this plan have been formulated taking into account the policies and objectives for management of adjoining natural areas administered by the Department, in particular the Ruahine and Kaimanawa Forest Parks.

With the passing of the Conservation Law Reform Act 1990 significant changes were made to procedures for management planning. In essence the Department is now required to prepared Conservation Management Strategies (CMS's) for all protected areas managed by it, by April 1995, and may prepare statements of General Policy and Conservation Management Plans (CMP's).

CMS's implement statements of General Policy and establish objectives for integrated management of resources. CMP's (such as this plan) establish more detailed objectives for management of particular areas, and are required to be consistent with CMS's. As a CMS has not been prepared for Hawke's Bay Conservancy this plan could conceivably require amendment to achieve this consistency.

The preparation of both CMS's and CMP's must be carried out by the Department in consultation with conservation quangos (the NZ Conservation Authority (NZCA) and Conservation Boards). Final approval of CMS's rests with the NZCA, while CMP's are usually approved by the appropriate Conservation Board.

(For further details on statutory requirements for management planning refer to Appendix 15).

This conservation management plan is in effect a "contract" negotiated with the public, setting out how the Park is to be managed. It is a "working" document with a number of functions:

- It establishes long-term objectives for management of the Park during the term of the plan.
- It guides day-to-day management decisions.
- It provides appropriate policy support for the controls on use of the Park outlined in the plan.

While this plan is prepared under the Conservation Act, park management is frequently affected by other legislation. These include the Civil Aviation Act 1990, (and Regulations 1953), the Wild Animal Control Act 1977, the Noxious Plants Act 1978, Water and Soil Conservation Act 1967, Town and Country Planning Act 1977, Forest and Rural Fires Act 1977, Historic Places Act 1980, Wildlife Act 1953 and the Mining Act 1971 (and amendments). Many of these Acts have now been incorporated in the Resource Management Act, which will come into effect in October 1991.

The Rangitikei/Hawke's Bay Conservation Board which has approved this plan, was appointed by the Minister of Conservation in October 1990 and it has a policy formulation role on the conservation estate as well as an advocacy role off the conservation estate. The Board consists of twelve members representing a wide and diverse range of interests. The Board's role does not cease now that this plan is approved. It will be involved in any review or amendment of the plan and will have a continuing role in supervising policy implementation.

## 1.2 Tangata Whenua Involvement:

Section 4 of the Conservation Act states "the Act shall be interpreted and administered as to give effect to the principles of the Treaty of Waitangi". This provision places tangata whenua in a special position as Treaty partners and places special obligations on the Department and the Board.

In recognition of this, the views of the tangata whenua prior to and during preparation of the draft Kaweka Forest Park Conservation Management Plan were specifically sought in consultation with the Maori representatives on the Board. In management of the Park there will be ongoing consultation with the appropriate tangata whenua.



## 2. THE PARK

The following sections give a brief summary of the physical resources of the Park that are pertinent to its management. They are not intended to be a complete guide to the resources. For more detail refer to references cited in the Bibliography.

### 2.1 Introduction

The Kaweka Forest Park which covers most of the Kaweka Range was gazetted in 1974. It covers an area of 68,500 hectares, of which 59,000 hectares is administered by the Department. The remaining areas, largely in exotic forest, are managed by private forestry interests but the land remains in public ownership<sup>1</sup>. (See map 2)

### 2.2 Topography and Drainage

The dominant feature of the Park is the Kaweka Range, a steeply rising ridge running approximately north and south. North-west of the main range is the lower rolling country of an old, dissected peneplain, which feeds the Mohaka and Ngaruroro Rivers.

To the east and south the main range is flanked by the down-faulted and tilted blocks of the Kohurau Depression and by escarpments and rounded hills along the south-east boundary.

To the east are the outliers of Black Birch Range and Don Juan, rising to 1000 m and 900 m respectively. Westward from these hills lie the tilted plateaus of the Mackintosh and Blowhard blocks, and the Taramea Flats. South of the Napier-Taihape Road are the parallel fault blocks of the Glenross, Burns and Kaikomata (Comet) Ranges.

The altitude of the plateau country is between 600 and 900 m, while rolling country to the north west is between 600 and 1400 m. The central range lies above 1000 m, rising to 1724 m at Trig J Kaweka. The lowest altitude is 213 m, where the Tutaekuri and Ngaruroro Rivers leave the Park.

Rivers within the Park are deeply incised, except to the North-west. The Ngarururo, Taruarau, Tutaekuri, Mohaka and Donald Rivers and Gorge Stream, all run in gorges for some distance. As discussed in section 5.1.4 the protection of the soil and water values of the Tutaekuri and Ngarururo Rivers is of importance to the intensively farmed areas of the Heretaunga Plains.

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<sup>1</sup> The areas administered by private forestry interests do not come under the Conservation Act.

### 2.3 Geology and Soils

The geology of the area is mapped and described in Geological Survey Map 1:250,000. Sheet 8 (Taupo).

It is predominantly shattered Jurassic greywacke with young, extensively faulted and dipping Tertiary sedimentary rock overlying areas to the south-east.

The soils of the area are largely derived from volcanic ash and particularly from the Taupo ash shower of circa 120 AD. They are broadly classified as yellow brown pumice soils.

Eyles, G O 1969, describes the soils of the Ngaruroro saying "...All soils formed on ash have a poor structure, are light and have a high water holding capacity all of which result in a very high erosion potential. These soils also have a low natural fertility due to composition and lack of weathering of the Taupo ashes and the cold climate".

Cunningham A, 1974, describes the shallow mountain and skeletal soils of the Tutaekuri as being particularly susceptible to the action of wind and frost where the vegetation is sparse. He further states that once a bare surface is initiated on the erosion-sensitive pumice of the Kaweka Range, rapid enlargement of the bare area can follow.

The geological instability, thin, light soils and steep topography, combined with a denuded vegetation cover in parts of the Park all contribute to a high natural and induced rate of erosion for which the area is renowned. The high rates of erosion have impacts not only on park management but on management of downstream areas, and policies in this plan will reflect this.

### 2.4 Climate

Although the range is dry by New Zealand mountain land standards it receives torrential rainstorms, gale force winds and heavy snowfalls during the winter. Like other mountain areas the climate is characterised by sudden temperature changes, a high variability in the distribution of rainfall and a wide range in monthly and daily temperature extremes.

Rain bearing winds are generally from the south, south-east, and north-west, but topography exerts considerable influence on local rain patterns, with annual rainfalls ranging from 1340 millimetres at Waiwhare to about 3800 millimetres at Trig J, Kaweka.

Snow may occur at any time of the year and generally lies above the bushline from June to October. Hail may occur at any time, but fog frequency is low by mountain standards.

The prevailing and strongest winds are from the north-west, but south-east and south-west winds are also common and can be associated with sub-zero temperatures above 1000 m.

## **2.5 History**

### **2.5.1 Maori History**

It appears that the Kaweka Range was not permanently occupied by Maori, but was used as a hunting ground for kiore and native birds.

Routes from Hawke's Bay, through the Kaweka Ranges and into the Inland Patea<sup>2</sup> and Central Plateau areas lay up the Mohaka and Oamaru Valleys in the north, and through the Kuripapango gap in the south.

Obsidian has been found in the Black Birch Range and in the Oamaru Valley (Elder 1959) and there are reports of artifacts found on a property at Whittle Road and Puketitiri, indicating a Maori presence in these areas.

It also appears that the area of bush in some areas was reduced during the pre-European period, as a result of both natural and human induced fires. There is evidence of fires in the Puketitiri area, in the Mohaka and Ngaruroro Valleys, and particularly in the south east of the main range.

### **2.5.2 European History**

The first recorded European presence in the Kaweka Ranges was that of the Reverend William Colenso, when he crossed from Hawke's Bay into Inland Patea via the Ngaruroro - Kuripapango route in 1851. Colenso made many exploratory trips through the Northern Ruahine and Kaweka Ranges and because he wrote detailed accounts of his journeys, has contributed significantly to our knowledge of the history of these areas and particularly to botanical history. He was an avid botanist and discovered and named many species, which still bear his name.

Another person who has contributed significantly to our present day knowledge of the Kaweka Ranges is Norman Elder. His involvement spanned a period from 1924 to about 1960, and while concentrating on botanical matters, covered a range of disciplines. His observations and writings on vegetation patterns and changes in the Kaweka Ranges provide a valuable record for Park managers today.

Farming began in the Kaweka region around the 1860's, after the Government, in 1850, purchased about 20,000 hectares of the central and southern part of the range. Most of this land was leased to two large sheep stations, Hawkeston and Mangawhare, which ran high numbers of merino sheep over the southern part of the range.

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<sup>2</sup> The area between the Rangitikei and Moawhango Rivers, east of Taihape, became known as Patea towards the end of the fifteenth century, after a man called Patea settled briefly in the area. Centuries later, with the arrival of Europeans, it became known as Inland Patea to avoid confusion with Patea on the Taranaki coast.

During the 1860's and 1870's more land became stocked with sheep and up until the turn of the century large fires swept the southern half of the range. Some fires may have been accidental, but most were lit to burn off the unpalatable native grasses and to clear native forest and scrub to induce fresh grass.

The successful establishment of sheep farming in the southern Kaweka and Inland Patea areas was due in part to the establishment of a road link to the Central North Island via Kuripapango. The road was little more than a packhorse trail during the 1860's and 1870's, but active construction of a road for horsedrawn coaches alongside the packhorse track began in the 1880's. In January 1881 it reached Kuripapango from the east. In 1903, the east-west link between Hawkes Bay and Taihape was completed with the bridging of the Rangitikei River. Kuripapango became a major stopping point on this route and was also used as a summer retreat and spa by wealthy run-holders, and people from coastal areas in Hawkes Bay. In 1882 two hotels were built at Kuripapango, one on the western side of the Ngaruroro river, and one on the eastern side of the river, and in the 1890's Kuripapango was a lively community. This changed in the early 1900's. In 1901 the remaining hotel on the western side of the river burnt down and was not replaced, and in 1908 the main trunkline through the centre of the Island was completed, meaning that the Inland Patea farmers no longer needed to use the road through to Napier to send their produce to markets. Both these events ensured that Kuripapango never returned to its lively state again.

The early part of the 20th century also saw a distinct change in the Kaweka region in general. The spread of rabbits, increased erosion and the difficult climate led to the abandonment of grazing on the main range. The retirement of land from grazing meant that the once devastating fires that were lit to clear forest for pasture were stopped on the main range and greatly curtailed on the Black Birch Range. The last major burn in the Ranges took place in 1918 when an area south of Makino Hut, down to Middle Hill was burned.

However the introduction of wild animals such as deer, pigs, goats, and possums resulted in yet another threat to the vegetation and stability of the ranges, a problem which continues to this day. Red deer first appeared in the south-east in 1901, and in the following three decades the population increased steadily. Sika deer were liberated in 1905, near the northern end of the range, and by 1960 had spread throughout, favouring the eastern side of the range.

It is clear that vegetation clearances and animal introductions have greatly changed the character of the ranges, which are themselves inherently unstable and prone to erosion. As accelerated erosion in the three main river catchments (Tutaekuri, Ngaruroro and Mohaka) became apparent, soil and water conservation became recognised as an important issue. Ground animal control operations began in 1938, and in the late 1950's revegetation work on eroded areas in the Tutaekuri and Ngaruroro catchments began.

In the late 1950's the NZ Forest Service established a Forest and Range Experimental Station (F & RES) at Makahu Saddle. The station developed revegetation techniques for North Island high country and conducted extensive trials on stabilising erosion prone and eroding country. The F & RES was closed down in the early 1970's, but the results of plantings are still very much in evidence today. One species in particular, Pinus contorta, has spread rapidly and unfortunately has suppressed native species (particularly above the bushline). Control of this species whilst protecting soil and water conservation values is a major management issue today.

The (then) Water and Soil Division of the NZ Ministry of Works established the Ngahere "Representative Basin" in the Kaweka Ranges from 1968 through the early 1970's. The purpose of this area was to provide bench-mark hydrological data on both precipitation and stream flow. Considerable data was collected, but with the demise of the Water and Soil Division little has been published. However the site remains as one of the network of recording sites throughout the country providing valuable ongoing hydrological and climatic information.

The reservation of parts of the Kaweka Range began in 1859 when some 20,000 ha was bought by the Crown, a further 7000 ha in the Mangatainoka area being added in 1875.

Further areas of the Ranges were gazetted State Forest in 1900 and again in the 1940's and 1950's. In 1974 68,500 ha of the Ranges were gazetted as State Forest Park.

### 2.5.3 Historic Places of the Park (see Appendix 14)

#### (a) Archaeological Sites

To date three archaeological sites have been recorded in the Park. (Furey 1985)

#### (i) Kuripapango Hotel Site

Grid reference: NZMS 260 U20 967955

The hotel, on the eastern side of the Ngaruroro River at Kuripapango, was built about 1882 and destroyed by fire in 1901. The remains of the hotel include two large brick chimney bases, one of which is reputed to be part of the kitchen area. The land around the site is currently under a grazing lease.

#### (ii) Old Kuripapango Hotel Site

Grid reference: NZMS 260 U20 966959

Site of hotel on western side of Ngaruroro River. Built in 1882 also, and shifted across the river beside the other hotel. The site was completely destroyed and is now part of a picnic area on the banks of the Ngaruroro River.

(iii) Iron Whare

Grid reference: NZMS 260 U20 060108

This totara slab hut dates from the period when the Kaweka Range was grazed by sheep. It is reputed to have been built to house rabbiters and hunters in the 1860's although it was also used by shepherds when driving stock through the area. The hut is situated in beech forest near Kaweka Flats.

(b) Traditional Sites

To date no traditional sites have been recorded in the Park.

(c) Historic Buildings

To date no buildings have been classified in the Park.

(d) Historic Areas

To date no historic areas have been declared in the Park.

Other historic places may be present in the Park, and further surveys are required to determine this.

2.6 Vegetation

As discussed in section 2.5 many areas of the Park have been affected by burning, grazing and wild animals, in particular the south eastern fringes. However the Park contains a wide range of ecosystems, some of which are ecologically significant. (These are outlined in section 2.10.1).

The ranges are the driest section of the North Island mountain axis and plant compositions reflect this. Vegetation ranges from indigenous forest to alpine grasslands and scrublands. In the southern and eastern Kawekas, which were the areas most affected by fires and grazing, low forests and scrublands of manuka/kanuka associations dominate, with occasional pockets of broadleaved shrubs and red or mountain beech. This area also contains extensive areas of bare eroding surface. On the slopes of the main range, red beech, and at higher altitudes mountain beech, dominates. Modified and true alpine grasslands occur above the beech bushline with an indistinct subalpine scrub zone.

Towards the north the forests are dominated by red and mountain beech, with little subalpine scrub or alpine grasslands. Red tussock (Chinochloa rubra) grasslands occur in the river valleys in the north western section of the Park such as the Upper Ngaruroro, but in some areas are gradually being replaced by Dracophyllum and manuka (probably a "normal" succession from a fire induced grassland). At the extreme north of the range silver beech replaces mountain beech, forming the southern limit of common silver beech in the Central North Island.

Although the predominant forest type is beech there are areas of podocarp forest (rimu, miro, matai and kahikatea) and mixed broadleaved species (lacebark, fivefinger, kohuhu, kowhai etc) especially in the Makino and Mangatainoka valleys. There are also small remnant areas of podocarp forest in the more modified areas in the south and east.

As indicated in section 2.5, in an effort to control erosion, extensive revegetation programmes have been carried out, focussing on exotic species. The lodgepole pine (Pinus contorta) in particular has become invasive in many areas and is a major problem above the bushline, where it is displacing indigenous plant communities. It forms a major foreign vegetation pattern in the Park and as discussed its control is a special issue for management. Other introduced plants, such as Hieracium pilosella (hawkweed), yellow lupin and buddleia also pose a threat to natural values.

## 2.7 Fauna

Although parts of the Park have been greatly modified by past events and the continuing presence of grazing and browsing animals, it provides an important habitat for a variety of indigenous animals.

Several rare, endangered or threatened species <sup>3</sup> have been recorded in the Park including long tailed bat, North Island brown kiwi, blue duck, NZ falcon, North Island kaka, long-tailed cuckoo, North Island fernbird and North Island robin (see appendix 4). Uncommon species occurring in the Park include whiteheads, yellow-crowned parakeet and dwarf kokopu. An Australasian bittern has been recorded just adjacent to the Park (off Lawrence Road).

The Kaimanawa Ecological District, in which the Park, and the majority of the adjacent Kaimanawa Forest Park are included, represents the southernmost continuous distribution of North Island robin in central and eastern North Island and the southern limit of the long-tailed cuckoo north of the Tararuas (NZ Biological Resources Centre 1987).

The Wellington green gecko (Naultinus elegans punctatus) has been recorded in the Kaweka Ranges and is close to its western limit in the Park.

Wainuia snails have been recorded recently in the Ngaruroro and Tutaekuri catchments and Powelliphanta snails have been recorded in the Ngaruroro catchment.

Other invertebrate species of regional importance (such as Peripatus spp) are also known to occur.

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<sup>3</sup> As referred to in "The Conservation Status of NZ Wildlife" (BD Bell 1986).

Native fish species occurring in the Park's rivers include short finned and long finned eels, several species of galaxiid, koura (freshwater crayfish), torrentfish, smelt and bullies. The dwarf galaxias (Galaxias divergens) has been recorded in the Ngaruroro River. This species was once widespread but is now regarded as being sufficiently in decline to demand attention (Tierney et al 1982). Further research is required to determine the presence of the banded kokopu (G fasciatus) and shortjawed kokopu (G postvectis) in park waters. Like the dwarf kokopu, the banded kokopu is now much less abundant than it formerly was. The shortjawed kokopu is listed as a species of "indeterminate status" in the Red Data Book of Fishes, published by the International Union for the Conservation of Nature (McDowall 1990).

As indicated in section 2.5 introduced animals have been an integral part of the Park environment for many years. Red and sika deer are favoured recreational hunting species. Other introduced animals include possums, hares, rabbits, mustelids cats, rats and locally, pigs and goats. Sheep and to a lesser extent feral cattle have had a significant impact on the park in the past, but are now rare or absent. Wild dogs were also present in the past (Elder, 1959) and were reported as late as 1961. They may have had a significant impact on kiwi and blue duck. Trophy sized brown and rainbow trout are present in the Ngaruroro and Mohaka Rivers.

There is a continuing need for further research into the fauna of the Park, and the effects of introduced animals, and recreational use on indigenous species. This is especially important for species such as kiwis and blue duck which are particularly vulnerable to predation.

## 2.8 Recreation

The Kaweka Ranges form a prominent backdrop to Hawke's Bay and have much to offer those interested in active outdoor pursuits and also more passive uses. Hunting, tramping and angling are popular activities in the interior of the Park, while picnicking, camping, swimming, short walks and sightseeing by car predominate in outer areas especially around Kuripapango, at Makahu, and at Mangatutu. Rafting and canoeing, particularly on the Ngaruroro and Mohaka Rivers, have become popular activities in recent years and are often carried out in association with hunting, fishing and camping.

Hunters comprise the largest single user group. The Park, along with the neighbouring Kaimanawa Forest Park, has the only populations of sika deer in the southern hemisphere and attract hunters from a wide area, particularly during the roar. A



Recreational Hunting Area was gazetted in the eastern sector of the Park in 1986, largely in recognition of the recreational value attached to these animals.

Tramping is also a popular and traditional activity in the Park. The Kaweka Ranges offer a range of tramping/walking experiences from short walks adjacent to roadends, to long tramps through a range of landscapes - beech forests, mountain tops, open tussock lands, and through regenerating manuka/kanuka forests. The area is served by an extensive hut and track network developed initially for wild animal control purposes, (see appendix 5 for list of huts).

The Ngaruroro and Mohaka rivers are renowned trout rivers with high wild and scenic qualities. They attract anglers from throughout New Zealand, and increasingly, from overseas.

## **2.9 Regional and District Planning**

As shown in map 3 the Park falls within the Hawke's Bay Regional Council boundaries, the majority being in the Hastings District. Small areas to the west and south are in the Rangitikei District.

A Regional Scheme and policy statements have yet to be prepared for the new Council (above). The former Taupo County District Scheme referred to the Park in the context of protection of natural values and for the high, wild and scenic values of the Mohaka River and its tributaries within the Park. In the former Hawke's Bay Council District Planning Scheme (Review No. 2) the park is classified as "Conservation Area I". The objective for this area is to ".... protect the soil and water values of upper catchments and watershed areas in the interests of water yield, prevention of flooding and of the sedimentation of farmland, and to protect water quality".

## **2.10 National and Regional Significance of the Park**

The Park is of significance to the North Island, and in particular the Hawke's Bay and Central North Island areas as an ecological, recreational and soil and water conservation resource.

The Park forms part of a network of protected areas in the Central North Island. It is contiguous with the Ruahine and Kaimanawa Forest Parks, the latter being contiguous with Tongariro National Park (the link only being broken by SH1).

### 2.10.1 Ecological Importance

As part of a network of protected areas (above) the Park provides an important habitat for a variety of wildlife. Several species of rare and threatened birds, and one species of native bat have been recorded in the Park (see appendix 4).

The Park has several significant ecological features which sets it apart from the adjoining Ruahine and Kaimanawa Ranges.

The southern boundary of common silver beech in the North Island occurs in the Park. It abuts on the silver beech forest of the northern Kaimanawa Range and contains part of the ecotone between pure silver beech and pure mountain beech forest. In addition while there is a general relationship with the Ruahine vegetation, several species are absent, notably Libocedrus bidwillii (Pahautea), Olearia colensoi (leatherwood), Chionochloa conspicua (Hunangamoho), and Dacrydium biforme (pink pine) (Elder 1959).

There is also a distinct floristic boundary separating the Kaweka and Ahimanawa Ranges from ranges to the north, with northern species such as Dracophyllum latifolium (tawherowhero), and Quintinia serrata not extending into the Park.

A number of ecological areas have been proposed for the Park in recent years, and are discussed later in this plan. The Lakes area has significant botanical values which are recognised by its inclusion in group 2 of "A list of Rivers and Lakes Deserving Inclusion in a schedule of Protected Waters". (NWASCA 1986). The Department is to recommend that this area be gazetted as an ecological area (see policy 5.1.1 Park Classification).

### 2.10.2 Recreational Importance

The Kaweka Ranges are an important recreational resource for Hawke's Bay and Central North Island people with a long history of use for hunting and tramping in particular.

The varied landscapes of the Park attract trampers from throughout the North Island, while the presence of sika deer is of national significance for recreational hunters.

Three major rivers run through the Park - the Ngaruroro, Mohaka and Tutaekuri. The Ngaruroro and Mohaka provide angling, rafting and canoeing opportunities of national significance. These values are well documented in a number of publications (refer to Bibliography).

In recent years outdoor recreation pressure on natural areas has been steadily increasing. As pressure on well known tourist areas such as Tongariro National Park grows, areas like the Kaweka Ranges will likely be seen as an attractive alternative for those seeking quieter or more remote recreation experiences. Increased recreational use will place greater demands on the natural resources and facilities in the Park. Policies in this plan have been formulated taking into account these factors.

### 2.10.3 Soil and Water Conservation

The three major Hawkes Bay rivers which rise in the Kaweka Ranges have very important soil and water conservation values. The Tutaekuri and Ngaruroro rivers are of major significance for the intensively farmed and horticulturally developed areas around Napier and Hastings for both flood control reasons and for artesian water supplies. The Ngaruroro River is of particular importance in that it provides most of the Heretaunga Plains underground water supply from a recharge area near Fernhill. It is also a source of irrigation water on the Ngatarawa flats east of Maraekakaho. The Tutaekuri River is considered to have high potential for providing future water supplies. (Hawke's Bay Catchment Board 1975). Protection of their catchments is therefore of great importance.



**Part II**  
**MANAGEMENT PLANNING**



## PART II

### 3. MANAGEMENT OBJECTIVES

The management objectives for the Park are derived from S19(1) (a) and (b) of the Act and reflect the requirement to firstly protect the natural values of the area, and secondly to facilitate appropriate recreational use and enjoyment.

The objectives fall into three categories.

(i) Protection

- to protect the natural and historic resources of Kaweka Forest Park.
- to ensure that the natural character and landscape of the Park is retained and where appropriate restored and/or enhanced.
- to manage the Park in a manner consistent with the needs of soil and water conservation.

(ii) Recreation

- to provide for a range of recreational opportunities that are compatible with the primary objective, ie protection of natural and historic features.
- to provide recreational opportunities which complement or enhance the opportunities available elsewhere in the Hawke's Bay Region, and in adjoining natural areas, as far as they are consistent with protection objectives for Kaweka Forest Park.

(iii) Management

- to achieve protection of the natural and historic resources of the Park in the most cost efficient and environmentally sensitive manner.
- to liaise and co-operate with the appropriate Iwi authorities, local bodies and interest groups on park management issues where appropriate.
- to ensure that management is compatible with that of the adjoining Ruahine and Kaimanawa Forest Parks and other adjacent natural areas.

## 4. MAJOR PARK MANAGEMENT ISSUES

This discussion of major issues does not endeavour to cover all aspects of concern to park management. It aims to present the Department's stance on issues which impact on many other areas of management, may require substantial resources, or may be complex and/or contentious.

### 4.1 Control of *Pinus contorta*

*Pinus contorta* poses a significant threat to the natural values of the Park and because of its potential to spread is a major concern. As indicated in the resource section, large areas of the southern and eastern Kaweka Ranges are heavily eroded, the result of the inherent instability of the area, and the impact of fires and grazing animals. In an attempt to control this erosion, for protection of downstream soil and water conservation values, extensive planting and aerial sowing of exotic species, principally *Pinus contorta* took place from the mid 1960's to mid 1970's. Approximately 3000 hectares of this species and to a lesser extent *P radiata* were direct seeded during this time. *P contorta* established itself readily in the Kaweka's to the extent that it has become invasive in many areas, particularly above the bushline where it is displacing native species.

Since the 1980's labour-intensive ground control work has been carried out to counter the spread of *P contorta*. Control continues to concentrate on clearance of ridgelines associated with alpine grasslands and herbfields, and also in the western fringes of the Park (in particular the Studholme area) to prevent spread of seeds with the prevailing wind. Specific areas have also been targeted below the bushline, or in areas where access is readily available for volunteer groups (eg, the Comet area adjacent to the Napier-Taihape road).

The Department in its management of the Park must assess the benefits that *Pinus contorta* may provide for soil and water conservation, against the undesirable effects of these exotic plants on the Park's natural ecosystems, and also its potential to spread. This will be done in co-operation with the Hawke's Bay Regional Council which has the responsibility for soil conservation and flood control within and outside the Park. When assessing the value of retaining *Pinus contorta* for erosion control it must also be recognised that although erosion has been accelerated by human activities and grazing animals, natural erosion is an inherent feature of the Kaweka Ranges. (see sections 2.3 and 2.5).



The Department has a clear mandate to manage the Park to protect its natural and historic resources (section 19(a) of the Act), and its aim in the long-term is the eradication of adventive pines which are threatening natural Park values. Therefore the retention of P contorta for soil and water conservation purposes is only seen as a temporary measure. However, this is not achievable in the foreseeable future. Further research is needed into the most effective means of controlling this plant without compromising soil and water conservation. This research and monitoring will continue, as resources allow, alongside ongoing control work in key areas.

Other adventive pines and introduced plants in general, are also issues of concern. The degree to which resources should be utilised for control should reflect the seriousness of infestation and the impacts on native species.

Consideration must also be given to the potential for some introduced plants not currently in the Park, to spread into it. Of particular concern is heather, which is spreading eastward from Tongariro National Park, and is now in western areas of Kaimanawa Forest Park, and Hieracium pilosella (hawkweed).

#### 4.2 Wild Animal<sup>4</sup> Control

As indicated in the resource section introduced animals have been an integral part of the Park for many years and have had a significant detrimental impact on the vegetation and on soil and water conservation values.

Policy 5.1.10 fully discusses the strategy to be adopted by the Department for introduced animal control in the Park.

In terms of protection of natural values, eradication of deer, possums, goats, pigs and hares is highly desirable. However this is not feasible (except for goats which only occur in small localised areas of the Park) given current resources, technology and priorities.

A complicating factor, in the case of deer in particular, is that eradication is not considered desirable by some people. The Department's stance on this is quite clear however. While it has a mandate to provide for recreation this is subject to the overriding objective for management of the Park, which is protection of natural and historic resources. Therefore while recreational hunting is a useful method of animal control, if deer numbers increase to a level that is undesirable in terms of the ability of the native vegetation to regenerate and retain its diversity, further controls will be implemented to supplement this basic control. There are indications in some areas of the Park that animal numbers are such that plant diversity and the ability of palatable species to regenerate are being threatened.

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<sup>4</sup> "Wild Animal" - as defined in section 2 of the Wild Animal Control Act 1977 (see Appendix 13b).

In present circumstances recreational hunting will continue to be used as the first means of control of animals, but commercial and Departmental operations will supplement this where/if recreational hunting is not achieving the necessary control. For unfavoured recreational species (ie. goats and possums) it is likely that commercial or Departmental operations will continue to be the main control methods.

In a Recreational Hunting Area (RHA) the desired level of control is achieved by recreational hunters, although not exclusively. The Department will continue to support recreational hunting as the means of animal control in this area as long as sufficient control is being achieved. If this is not occurring recreational hunting will need to be supplemented by other methods (commercial and Departmental control) as in all other areas of the Park.

Long-term monitoring of plant communities, animal densities and the relationship between them, is essential in order to determine the intensity of control needed. The Department is currently investigating estate monitoring techniques which will be both effective and feasible given available resources. Previous techniques of animal/vegetation monitoring, while providing a valuable database against which current vegetation conditions can be assessed were often time consuming and expensive when applied to the Park as a whole. The Department must consider the options of new techniques and/or selectively applying traditional techniques.

Until effective nationwide techniques are established defining a "desired level of control" (as outlined in policies 5.1.10 and 5.2.6) of wild animals is difficult. In general terms this refers to what animal numbers an area can support and still satisfy the major management objectives of the area (protection of natural values). There are no firm quantitative methods available for determining these carrying capacities. It requires ongoing monitoring and comparisons between areas with and without browsing animals to see what could theoretically be achieved with no browsing. The few enclosure plots in the Park can act as baselines by indicating the species that recover in the absence of browsing animals.

At present monitoring is being carried out in the Park using a combination of traditional techniques (exclosure plots, permanent quadrat plots, and monitoring of selected indicator plants) and also utilising information provided by hunters. This co-operation with recreational hunters is essential. Kill returns, and returns of deer jaws and rumen samples greatly assist in establishing a database which can be used to identify relationships between animal populations and the condition of vegetation in the Park.

#### **4.3 Recreational Use**

Recreational use of the Park is likely to increase both in terms of numbers and in the range of activities which people wish to pursue. Management must ensure that while catering for and encouraging appropriate recreational use, natural and historic Park resources are protected.

Park management therefore seeks to balance the protection of the natural and historic resources with the demands and aspirations of the users, with protection remaining the primary consideration. This has particular relevance for such things as the retention of the RHA in the Park and for activities such as trail bike and mountain bike riding, horse use and 4 wheel drive access. These issues are addressed in section 5 of this plan.

It is inevitable that there are many differing expectations as to what activities are appropriate in the Park, or what facilities should be provided, and as demands for use of parks grows, conflicts and dissatisfactions may occur. However at all times the Department is bound by the provisions of the Conservation Act, and in this instance to section 19, which stipulates that protection is the primary objective for management.

As far as possible a range and variety of recreational opportunities, which are compatible with protection of the resource, will be provided for in the Park. However in some instances where activities are compatible with Park values and it is envisaged they be catered for in the Park, such usage throughout the Park may be undesirable. For example in the remote experience area new huts, tracks and signs will not be developed unless they are required for management purposes. While this may limit to some extent the use of this area to experienced outdoor recreationists, in other areas of the Park provisions will be made for those who require or prefer well developed huts, tracks and sign systems.

When assessing the appropriateness of activities or developments within the Park it is also necessary to consider opportunities available elsewhere in the region. It is not the intention of management to make provision for the full spectrum of recreational activities within the Park, especially where some activities would be more appropriately accommodated in other areas. Such activities as trail bike riding and 4 wheel drive access would fit into this category. In general, however, activities which are compatible with protection of the Park's natural and historic values will be catered for.

While the approach to public use outlined above provides a specific management direction it is not possible to formulate a simple definitive statement setting out where the balance between protection and use lies. Each case will be considered on its individual merits.



## **5. MANAGEMENT POLICIES**

### **5.1 RESOURCE PROTECTION**

- 5.1.1 Park Classification**
- 5.1.2 Boundaries/Additions**
- 5.1.3 Advocacy**
- 5.1.4 Soil and Water Conservation**
- 5.1.5 Indigenous Plants**
- 5.1.6 Introduced Plants**
- 5.1.7 Pinus Contorta and Other Adventive Pines**
- 5.1.8 Revegetation**
- 5.1.9 Indigenous Animals**
- 5.1.10 Introduced Animals**
- 5.1.11 Archaeological, Historic & Cultural Sites**
- 5.1.12 Landscape Management**
- 5.1.13 Fire Control**
- 5.1.14 Research and Information**
- 5.1.15 Grazing Leases and Licences**
- 5.1.16 Prospecting and Mining**
- 5.1.17 Hydro Electric Power Generation**
- 5.1.18 Telecommunication Systems and Public Utilities**
- 5.1.19 Roding and Vehicle Access**
- 5.1.20 Chainsaws**



## 5.1 RESOURCE PROTECTION

### 5.1.1 Park Classification (see map 4)

- (i) A four category land classification system is proposed for Kaweka Forest Park.
  - (a) Ecological Area
  - (b) Remote Experience Area
  - (c) Natural Environment Area
  - (d) Recreation Facility Sites
- (ii) The Department will recommend to the Minister the gazettal of the Lakes Ecological Area, and will investigate further the appropriateness of an Ecological Area in the NE of the Park (Mangatainoka area), and in a representative area of manuka/kanuka forest (see also policy 5.1.5).
- (iii) A 9000 hectare area in the Makino Catchment will be managed as a remote experience area.
- (iv) The majority of the Park will be managed as a natural environment area.
- (v) Recreational facilities sites will be provided for where appropriate.

#### Explanation

The zoning and classification system set out in the former management plan and prepared under the Forests Act 1949, no longer applies. With the administration of the Park now subject to the Conservation Act, the overriding philosophy is protection of the Park's natural and historic resources, as opposed to a multiple-use philosophy which characterised the former plan.

#### 5.1.1.1 Ecological Areas

Section 18 of the Act allows for areas with special scientific values to be set aside as ecological areas. This is a high level of protection designed to ensure the preservation of important ecosystems for their intrinsic and scientific values. Three ecological area proposals are discussed below.

##### (i) Forests of manuka/kanuka

Forests of manuka and kanuka are important components in the east and south-west of the Park. In the past these forests were extensive, but with development of production forest and farmland clearances adjacent to the Park they have become reduced to isolated areas.

These forest types generally resulted from fires and represent a seral stage in forest development. On some sites mountain or red beech forests are likely to replace the manuka/kanuka, while in other areas broadleaved species such as mahoe and broadleaf will become dominant.

Possible areas for selection as manuka-kanuka ecological areas include:

- i) Kaikomata Range
- ii) Junction of Taruarau and Ngaruroro Rivers/Longfellow Range
- iii) Kiwi Mouth/Cameron Area
- iv) Lawrence Hut Area

To date studies indicate a preference for the lower Ngaruroro proposal, or alternatively the Taruarau/Ngaruroro/Longfellow proposal (Jenkins 1981). Further studies are required to determine the most appropriate area(s) for protection.

(ii) Mangatainoka

The existing plan, prepared under the Forests Act 1949, identifies a 3800 hectare ecological area in the Mangatainoka catchment. The area was designated as such to protect a representative portion of the forest type pattern of the Upper Mohaka catchment, and also to cover the southern limit of common silver beech in the North Island.

More recent scientific evidence suggests that the present ecological area cannot be regarded as being representative of the above forest type pattern, and that the boundaries may need to be altered, or an alternative area investigated to protect this forest type (Shaw 1989). Therefore this plan does not identify an ecological area in the Mangatainoka Catchment but research will be carried out to determine where/if such an ecological area would be appropriate in this catchment (see policy 5.1.14 Research).

(iii) Kaweka Lakes (see map 4 and appendix 3)

The Kaweka Lakes were formed as a result of a landslide, which blocked two streams, more than 2000 years ago. The western lake has a fluctuating water level, while the eastern lake, which has no outlet, has a constant water level, and can overflow into the western lake. The presence of these two types of lakes in such close proximity is significant, and the area is listed in group 2 of "A list of Rivers and Lakes Deserving Inclusion in a Schedule of Protected Waters" (Nwasca 1986). They are identified in this publication as an "..... extraordinary pair of lakes botanically", with ".... very rich flora", and as one of four North Island sites for the sedge Carex cirrhosa. Two species of indigenous fish; smelt (Retropinna retropinna), and kaoro (Galaxias brevipinnis) are also present. The western lake also



contains a population of brown trout thought to be of the Loch Leven strain, and introduced to the lake by the landowners in the late 1800's and early 1900's. While these trout are valued by anglers, if research shows that they are having a detrimental impact on indigenous species consideration will be given to removal of the trout. This would be done in consultation with the local Fish and Game Council.

In light of the significance of these lakes, and the natural areas surrounding them, the Department proposes to recommend to the Minister (under section 18 of the Act) that the area be declared an ecological area. As such, the area will be managed to preserve its significant natural values. Control of introduced plants and animals that are threatening natural values will therefore be a management priority.

At present a walking track and also a wider track sometimes used by trail bikes and 4 wheel drive vehicles lead down to the western lake. It is proposed to maintain and where necessary enhance the walking access, but to stop access by vehicles, to protect the area's natural values (see also policy 5.2.12 Vehicles). Interpretation of the area's ecological values and information on its management will also be provided.

(Further details on the areas ecological significance are included as appendix 3).

#### 5.1.1.2 Remote Experience Area (see map 4)

The former plan (prepared by the NZ Forest Service) identified a wilderness area in the Makino Catchment (approximately 9000 ha).

A specific wilderness classification is not proposed in this plan. A remote experience classification is considered more appropriate for the former wilderness zone, which has several huts located in or adjacent to it (see maps 4 and 5). These huts and the helicopter landing sites associated with some of them, are important for wild animal control and will be retained as long as they are required for this purpose. The area still retains its remote and undeveloped character however and its retention in this state would be compatible with the proposed remote experience zone in the adjoining Kaimanawa Forest Park.

In order to protect the quiet and remote values of this area, whilst providing for helicopter access for wild animal control, the Department will encourage helicopter operators to consider the needs of other recreational users when flying through it, (ie. by avoiding crossing it wherever possible).

#### 5.1.1.3 Natural Environment Area (see map 4)

The majority of the Park will be managed as a Natural Environment Area. It comprises areas which will be maintained in their natural state, but huts, tracks, bridges, designated landing sites for helicopters, and other facilities may be provided to allow safe use and enjoyment of the Park. These areas may also be enhanced by appropriate revegetation or other management programmes.

The majority of the Recreational Hunting Area is included within this classification.

#### 5.1.1.4 Recreational Facility Sites (see map 4)

These are areas and sites to be maintained as at present, or developed further to facilitate recreational use and enjoyment of the Park.

Areas included in this classification are situated at roadends and receive high use by campers, day trippers and those leaving for longer trips into the interior of the Park. In such areas picnic tables, toilet facilities, fire places, water supply, and interpretation facilities may be provided to protect park values and facilitate public use and enjoyment.

Areas proposed as recreational facility sites are:

- Kuripapango picnic areas
- Lawrence roadend and picnic sites
- Makahu Saddle
- Mangatutu Hot Springs

Further areas of the Park may be identified as recreational facility sites, subject to the Conservancy Recreation Strategy, prepared as part of the Conservancy Conservation Management Strategy exercise (see section 1.1).

### 5.1.2 Boundaries/Additions

- (i) The Department will identify areas adjacent to the Park, which because of their natural values, recreation values, and/or landscape/ecological unity with the Park, may warrant inclusion in the Park.
- (ii) The Department will seek the acquisition or protection, through appropriate mechanisms, of areas identified above.
- (iii) Every effort will be made to consolidate boundaries for reasons of improved management of the Park, such as fire prevention.
- (iv) Boundary adjustments will take into account the need for continuing and improved access (see also 5.1.3 (ii)).

#### Explanation

The Kaweka Forest Park adjoins land in both public and private ownership.

There are several areas of Department of Conservation stewardship land adjoining the Park which the Department considers would be better managed as part of the Park (see appendix 11). The Department will proceed with the requirements to achieve this.

There may also be opportunities for additions of other areas into the Park. These would be the subject of negotiation and agreement between all parties concerned, and would only be pursued if this was the owner(s) wish.

While the Department may seek to protect the natural values of adjacent lands by acquiring them for inclusion in the Park, or by lease or covenant, it's main objective is to achieve, wherever possible, compatible land management to protect the natural values of the Park and its surrounds. (See policy 5.1.3 Advocacy).

### 5.1.3 Advocacy

- (i) The Department will liaise with and seek the co-operation of landowners, local authorities, state owned enterprises and government agencies to encourage land uses adjacent to the Park that are compatible with conservation of the area's natural values, and to minimise the impact of activities that may be detrimental to, or detract from park values.
- (ii) The Department will liaise with adjoining landowners to maintain, and where necessary to improve access to the Park for recreational users.

#### Explanation

Some land use practices adjacent to the Park may detract from park values, or hinder access for park users. The Department will, through liaison with landowners and local authorities, and through statutory processes, continue to advocate management practices on adjacent lands that are as far as possible compatible with park management.

Particular areas of concern include clearing of indigenous forest and modification of rivers adjoining the Park, soil and water conservation, fire prevention, management and use of adjacent exotic forests, and releases of introduced animals such as goats from surrounding farmland. Liaison with regional councils and landowners is essential in this respect. Town and Country Planning procedures and the Water and Soil Conservation Act (or succeeding legislation) will be used extensively to help achieve this policy.

As indicated in the resource section the Mohaka, Ngaruroro and Tutaekuri Rivers which flow through the Park have significant wild and scenic, natural and recreational values. The Department will continue to advocate their protection through statutory processes, and in liaison with conservation and recreation groups. (see policy 5.1.4 Soil and Water Conservation)

Adequate road and foot access to the Park is important to facilitate public use and enjoyment of the area. The Department will continue to liaise with adjoining landowners to provide security of access, and improved access to some areas.

Access to the Park through private exotic forests in the southeast has been negotiated giving the public free right of foot access for recreational purposes. Vehicle access through the forests is available through the following roads over which public access easements have been registered. (See map 5).

- i) Lawrence Road
- ii) Kuripapango Road - leading to Lakes Road and MacIntosh carparks
- iii) Charlie Brown Road (leading to Burns Road)

Both foot and road access through the above three roads can only be restricted for reasons relating to the safety of the public or those working in the forests, or for protection of the forest resource (eg. in times of high fire risk).

Opportunities for further access through these forests may be investigated in liaison with the owner(s).

#### 5.1.4 Soil and Water Conservation

This policy section should be read in conjunction with section 4 (Major Park Management Issues) and policies 5.1.5 Indigenous Plants, 5.1.7 Pinus contorta and Adventive Pines, and 5.1.14 Research and Information.

- (i) The Park will be managed so that as far as possible the quality and quantity of waters are maintained in a natural state or enhanced.
- (ii) Any proposals to dam rivers or abstract waters in or adjoining the Park that would interfere with the natural quantities and qualities of park waters, park land, or recreational use of these areas will be opposed.
- (iii) The Department will continue to liaise and co-operate with local authorities, government departments and landowners in matters of catchment protection, to ensure as far as possible that soil and water values are protected in and adjoining the Park.
- (iv) The Department will support the completion of a National Water Conservation Order for the Mohaka River. It will investigate, and if appropriate, seek a water conservation order for the Ngaruroro River in co-operation with the Tongariro-Taupo Conservancy of the Department of Conservation. (see policy 5.1.17 Hydro Electric Power Generation).
- (v) Any revegetation for protection of soil and water conservation values will as far as possible be with indigenous plants. If exotic species have to be used for protection of soil and water values they will be of species which will allow subsequent invasion by indigenous species, and will not themselves be invasive. They would only be used after careful research. (see policies 5.1.5 Indigenous Plants, 5.1.7 Pinus contorta and other Adventive Pines, 5.1.8 Revegetation and 5.1.14 Research and Information).
- (vi) Control of introduced animals in critical catchments will be given high priority.

#### Explanation

The catchments of the Park have very high regional and national significance for their intrinsic, scenic and ecological values. The Department will oppose any proposals to disrupt the natural flows of the rivers in the Park for hydro electric or water supply developments. It regards the protection of waterways in

their natural state within the Park to be of fundamental importance. (see policy 5.1.17 Hydro Electric Power Generation). In addition these rivers have important soil and water conservation values. The Tutaekuri and Ngaruroro Rivers are of major significance for the intensively farmed areas around Napier and Hastings, and protection of their catchments is important.

As indicated in section 2.3 natural erosion rates are high in parts of the Park, and since removal of vegetation by fires and grazing animals, erosion has become more pronounced, especially in southern and eastern areas. Much effort has gone into controlling erosion by reinstating a (mainly exotic) vegetation cover. This has had varying success, and has in some instances created additional problems (notably the spread of Pinus contorta).

The Department in its management of the Park must assess the benefits of an exotic vegetation cover (ie, Pinus contorta) for soil and water conservation, against the undesirable effects of these exotic plants on the Park's natural ecosystems. This will be done in co-operation with the Hawke's Bay Regional Council which has the responsibility for soil conservation and flood control within and outside the Park. As indicated in policy 5.1.7 the Department's aim in the long-term is the eradication of adventive pines which are impacting on park values. Therefore the retention of Pinus contorta for soil and water conservation purposes is only seen as a temporary measure. Research into all aspects of Pinus contorta control, (including it's effectiveness in erosion control and revegetation by indigenous species) will be carried out as resources permit. (See policies 5.1.7 Pinus contorta and Other Adventive Pines and 5.1.14 Research and Information).

Control of wild animal is another important aspect of soil and water conservation. The wild animal control policies in this plan were formulated taking into account the importance of maintaining, or enhancing, the vegetation cover in the Park for soil and water conservation purposes. (See policies 5.1.10 Introduced Animals and 5.2.6 Recreational Hunting).

With the assistance of the Regional Council the Department will also undertake an assessment of catchment condition in the Park, to identify critical areas needing particular catchment protection. Critical catchment control areas are generally sensitive headwater areas above about 900 metres above sea level, where vegetation is more susceptible to damage and where recovery from damage is slow.

The maintenance of water quality and quantity in Park rivers is also of great importance downstream. The Ngaruroro River is a major supplier of high quality artesian water to the Hawke's Bay urban areas. The Tutaekuri is regarded by the Hawke's Bay

Regional Council as having high potential for providing future water supply needs. Therefore the protection of these rivers and the enhancement of their catchments is in the interests of the Hawke's Bay community.

The Department will work closely with the Regional Council, other local authorities and government departments, and landowners to promote all the objectives of this policy section.



### 5.1.5 Indigenous Plants

- (i) The Park will be managed to ensure the protection of indigenous vegetation as far as possible in its natural state.
- (ii) Any threatened or significant plants found in the Park will be protected, by special measures if required. (see policy 5.1.1.1).
- (iii) The Department will continue to monitor indigenous plant communities in order to determine how best to protect the ecological values of the Park.
- (iv) As far as possible introduced plant species that are threatening indigenous plant communities (in particular Pinus contorta) will be controlled or eradicated (for more detail see policy 5.1.7 Pinus contorta).
- (v) As far as possible any plantings for revegetation/landscaping/erosion control will be with appropriate indigenous species (see policies 5.1.4 Soil and Water Conservation, 5.1.8 Revegetation and 5.1.12 Landscape Management).
- (vi) The removal of indigenous plants from the Park is prohibited except where specifically authorised for traditional Maori or scientific purposes only.

Applications for removal of plant materials for scientific purposes will be assessed against the following criteria:

1. the taking of such plant material shall not have a detrimental impact on plant or other species classed as rare, endangered or locally uncommon.
2. plant species may not be taken from ecological areas.
3. there are no alternative sources outside the Park.
4. removal of plant species must be supervised by Departmental staff.
5. there is no purpose or intention of deriving gain or reward from the plants

The removal of plant material from the Park for traditional Maori purposes will be authorised according to the policy outlined in Section 5.2.15.

(see policy 5.2.15 Traditional Maori Uses of Park Resources).

**(vii) The development of tracks, huts and other public facilities will be carried out in such a way as to minimise damage to ecological values of the Park.**

Explanation

Protection of indigenous vegetation in the Park is required by Section 19 of the Act.

Water and soil conservation is of particular importance in the Kaweka Ranges and protection of vegetation in general will also be consistent with provisions of the Water and Soil Conservation Act 1967 and the Soil Conservation and Rivers Control Act 1941 (soon to be covered by the Resource Management Act).

Grazing and browsing animals continue to have a significant effect on ecological values of the Park. In order to make wise use of resources and direct introduced animal and plant control measures effectively, monitoring of plant communities, animal numbers and population dynamics is essential. Extensive animal and plant surveys have been carried out in the ranges in the past, and a number of enclosure plots and photo points continue to be maintained. These past surveys provide a valuable database. Present resources will limit large scale vegetation surveys in the foreseeable future and monitoring will likely concentrate on such methods as enclosure plots, photo points, hunter diaries, rumen sampling and jawbone sampling (the latter three to gain information on hunting kills, on deer populations and their vegetation preferences). The Department is investigating other methods of estate monitoring that are effective and realistic given the available resources. (see policy 5.1.10 Introduced Animals, for more detail).

In order to protect indigenous vegetation park users will be actively encouraged to carry portable stoves for cooking purposes (see policy 5.1.13), and chainsaws are not permitted in the Park (see policy 5.1.20).

#### 5.1.6 Introduced Plants

(see also policies 5.1.7 Pinus contorta and other Adventive Pines, and 5.1.4 Soil and Water Conservation)

- (i) The Department will continue to monitor and control, as far as possible, introduced plant species that may pose a threat to indigenous plant communities in the Park.
- (ii) There will be continued liaison with the Hawkes's Bay Regional Council, other relevant local authorities and government departments, and adjoining landowners on control of noxious plants both inside and outside the Park which pose a threat to indigenous plant communities in the Park.
- (iii) The Department's aim in the long-term is eradication of Pinus contorta and other adventive pines which are impacting on natural park values. (see policy 5.1.7)

#### Explanation

The spread of introduced plants into and throughout the Park and their control is an ongoing management issue. Introduced plants are a problem because they threaten the natural values (vegetation and wildlife habitats, and landscapes) of the Park. This issue has particular relevance in the Kaweka Ranges because of the deliberate introduction in the past of some species which were designed to control erosion, but have since become a threat to the natural ecosystems of the Park.

The introduced plant causing the greatest concern, Pinus contorta is discussed in a separate section of this plan (5.1.7) but other species require ongoing control programmes to prevent their spread onto and throughout the Park. These include broom, gorse, blackberry, lupin and buddleia.

While the long-term aim for management of some noxious plants is their eradication, given the available resources a more realistic objective is their control, or prevention of their spread into areas currently free of particular species.

Also, as discussed in policy 5.1.5 it may be necessary in some instances to maintain an introduced vegetation cover temporarily until a viable means of control/eradication is available which does not compromise other park values. This is especially relevant in the case of Pinus contorta, because of its soil and water conservation role in some areas.

While there may be a statutory requirement to control noxious plants on Departmental land, the priority for their control needs to be according to a number of criteria, including:

- (i) Size of threat,
- (ii) Imminence of threat,
- (iii) Their actual and potential spread to other areas,
- (iv) Whether the presence of particular noxious plants will aid in the regeneration of indigenous plants communities, and
- (v) Whether the cover of noxious plants poses a fire hazard.

Criteria (iv) and (v) often apply in the case of gorse.

The Department may, for management reasons wish to control some species which are not registered as noxious plants, but which can cause particular management problems. This includes lupin, which can be a problem in some river flat areas, and is sometimes so dense as to impede access for park users.

Hieracium pilosella (hawkweed) is now present in the Park and poses a threat to tussock grassland communities, especially in areas modified by burning and/or grazing. While there are no feasible techniques available at present to control or eradicate this plant, control of browsing animals to prevent degradation of tussock grasslands may be important.

An introduced species which is not a problem in the Park at present but which has the potential to have a significant impact on the natural environment is heather (Calluna vulgaris). This plant has become established in Tongariro National Park and is spreading into the western areas of Kaimanawa Forest Park. Hawke's Bay Conservancy staff will liaise closely with staff in the Tongariro/Taupo Conservancy to monitor the spread of heather and to assess its threat to Kaweka Forest Park. At present there are no suitable methods available to control heather, although some research has been done on possible biological control. Biological control of heather would be considered by the Department, should a safe and suitable method become available.

### 5.1.7 Pinus contorta<sup>5</sup> and Other Adventive Pines

(This section should be read in conjunction with section 4 (Major Park Management Issues) and policies 5.1.4 Soil and Water Conservation, 5.1.5 Indigenous Plants and 5.1.14 Research and Information).

- (i) The Department's aim in the long-term is eradication of lodgepole pine (Pinus contorta) and other adventive pines which are impacting on natural park values.
- (ii) Eradication in the short-term, is not feasible. Priority will be given to identification of critical areas, and control of adventive pines in these areas, as resources permit.
- (iii) The Department will advocate and carry out research into the most effective means of adventive pine control/eradication, and into monitoring of the effect of these plants on natural ecosystems. (see policy 5.1.14 Research and Information).
- (iv) There will be continued co-operation with local bodies, government departments, conservation and recreation groups and adjoining landowners on all aspects of adventive pine control.
- (v) As part of an overall Conservation Management Strategy for the Hawke's Bay Conservancy an Adventive Pine Control Strategy will be prepared and implemented for the Hawke's Bay Conservancy. (see Section 1.1).
- (vi) The Department will continue to encourage and co-ordinate public involvement in adventive pine control operations.

#### Explanation

The Department has a clear aim of eradicating Pinus contorta in the long-term. However, this is not achievable in the foreseeable future. Further research is needed into the most effective means of controlling this plant without compromising soil and water conservation values. This research and monitoring will continue alongside control work in key areas.

Further research and information is required in the following areas before a long-term eradication policy is implemented:

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<sup>5</sup> The only area of the Park where Pinus contorta has been declared a "Class B Target Plant" (January 1991) is in the Erewhon Riding of the Former Rangitikei County Council (now in the Hawke's Bay Regional Council Area).



- (i) Identification, assessment and mapping of critical catchments.
- (ii) Rate of spread of Pinus contorta.
- (iii) The most cost effective means of controlling/eradicating this species.
- (iv) Revegetation using indigenous species.
- (v) Rate and success of colonisation of indigenous species under Pinus contorta.
- (vi) The effectiveness of Pinus contorta in erosion control.

In the short-term the Department will continue to control Pinus contorta as resources allow. It will concentrate on preventing spread into areas currently free of Pinus contorta, on preventing spread into alpine grasslands and herbfields, and on controlling it in specific areas identified as having particular natural values.

As part of an overall Conservation Management Strategy for the Hawke's Bay Conservancy an Adventive Pine Control Strategy will be prepared. This will detail how the Department is to proceed towards its aim of eradication of adventive pines based on research (above).

Recreation and conservation groups and private volunteers have made an important contribution to Pinus contorta control in the Park, and in other areas. The Department will continue to encourage their involvement, especially in defined areas with readily available access.

### 5.1.8 Revegetation and Landscape Planting

(see also policy 5.1.7 Pinus contorta and Other Adventive Pines)

- (i) Where resources allow, following fires, major slips, or removal of noxious plants, or for specific management purposes, revegetation of areas may be undertaken in order to assist the recovery of native vegetation.
- (ii) Revegetation will be with indigenous plant species wherever possible. If exotic species have to be used for a specific purpose (eg, soil and water conservation purposes) they will be of species which will allow subsequent invasion by indigenous species, and will not themselves be invasive.
- (iii) Amenity plantings with indigenous species may be carried out at roadend sites, picnic areas or camping areas to provide privacy and shelter, or after development of new facilities.
- (iv) Indigenous plants used for amenity plantings will be collected as close to the planting area as possible.

#### Explanation

In the past revegetation has concentrated on introduced species such as Pinus contorta, Pinus mugo, lupin and Lotus pedunculatus. In accordance with the Conservation Act the emphasis will now be on the use of indigenous species wherever possible.

There are instances related to soil and water conservation where the eradication of exotic plants, preceding restoration of an indigenous plant cover in particular areas, is neither practicable nor desirable. This may occur in areas in the south and east of the Park. These areas are, in many cases, largely made up of an exotic plant cover so that removal of exotic plants could expose soils to serious erosion.

Any use of exotic species within the Park needs to be according to the following conditions:

- (i) that they are the only practical means of fulfilling, in the short to medium term, urgent water catchment and indigenous flora and fauna habitat rehabilitation;
- (ii) that the species selected are known not to put indigenous values at risk and that they will decline over time;
- (iii) that no extraordinary control measures are needed for the exotic species once established (as in the case of Pinus contorta).



5.1.9 Indigenous Animals <sup>6</sup>

- (i) Indigenous animals within the Park will be protected by all appropriate means including where necessary active management.
- (ii) Priority for conservation management will be given to any endangered, threatened or rare species <sup>7</sup> found in the Park.
- (iii) The disturbance, removal, taking or killing of indigenous animals (excluding fish) <sup>6</sup> will not be allowed except for authorised scientific and management purposes under strict guidelines.
- (iv) The disturbance, removal, taking or killing of indigenous fish will not be allowed except for authorised scientific and management purposes, or for authorised traditional Maori uses under strict guidelines, including principles of kaitiakitanga. There will be no disturbance, removal, taking or killing of indigenous fish in ecological areas or other specially protected areas, (see policies 5.1.1 and 5.2.15)
- (v) Control of introduced animals will be carried out in such a way that does not conflict with the protection of indigenous animals (see policies 5.1.1 and 5.2.13).
- (vi) Ongoing studies on indigenous animals, their habitats, and the effects of introduced plant and animal species on these habitats, will be carried out, and a record system maintained.
- (vii) The re-introduction of indigenous animals that were once present in the Park will be allowed should the option arise.

Explanation

Section 2.7 and appendix 4 give a description of indigenous animals in the Park.

The disturbance, removal, taking or killing of indigenous animals (excluding fish) will not be permitted except for authorised scientific or management purposes.

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<sup>6</sup> "Animal" means any member of the animal kingdom other than a human being. (Conservation Act 1987). However in various legislation fish are treated differently to land animals. Note therefore the differences in policies (iii) and (iv) above.

<sup>7</sup> As referred to in "The Conservation Status of NZ Wildlife" (B D Bell 1986) see appendix 4.

Permission may be granted to take indigenous fish for traditional Maori purposes, as long as the species is not threatened and/or the demands are not excessive. The taking of indigenous fish will not be permitted from ecological areas or other specifically protected areas, or for the purposes of commercial gain. The appropriate Iwi Authority and/or the tangata whenua will be involved in any applications to remove indigenous fish from the Park. (See policy 5.2.15 Traditional Maori Uses of Park Resources).

Protection, maintenance and where necessary enhancement of existing natural habitats of indigenous animals is a high priority for park management. The greatest priority will be given to any endangered, threatened or rare species found in the Park. Methods of enhancing the natural habitats include fire prevention and control, introduced plant and wild animal control, and fencing of Park boundaries. These issues are considered later in the plan.

A number of species known to have been widespread in the Park now only occur in restricted numbers, or in certain catchments. These include blue duck, North Island brown kiwi, kaka and dwarf galaxias.

Protection of known kiwi populations and habitats is of particular importance in the Park. A NZFS kiwi survey of the Eastern Kaweka Range in 1984 indicated the presence of kiwi throughout this area, particularly in the Middle Hill area (C Speedy 1985). Further surveys of kiwi throughout the Park will be carried out as a matter of priority and appropriate measures will be taken to protect kiwi populations and/or kiwi habitat if necessary (see policy 5.2.13 Dogs).

Further studies are required to determine where/if other endangered species exist in the Park, and also if they require special management consideration.

Records will be kept of any rare or endangered species and the location of populations of such species, so that these areas are avoided in the provision of public facilities and services. Field staff routinely keep records of wildlife sightings and the Department will encourage park users to report sightings of significant wildlife.

Regulations will be formulated to enforce policy (iv) above. (See also policy 5.3.3 Park Regulations).

5.1.10 Introduced Animals

- (i) Protection of the Park's indigenous plants and animals and catchment protection will continue to be the priority for management, and wild animal control will reflect this emphasis.
- (ii) The eradication of goats in the Park is feasible and will be pursued. Immediate goat control efforts will concentrate on preventing spread into areas currently free of them and on liaising with adjoining landowners to ensure that boundaries are fenced where necessary to prevent re-introduction of goats into the Park.
- (iii) Commercial possum control will be encouraged in the Park.
- (iv) The Department will continue research on wild animal demographics and the effects of introduced animals on the indigenous flora and fauna, and soil and water values of the Park, so that existing control efforts can be assessed and changes made if required.
- (v) Recreational hunting will remain the prime means of animal control, for favoured recreational hunting species<sup>8</sup>. However, recreational hunting may be supplemented by other control methods if it is not achieving a level of control necessary to protect park values.
- (vi) The Department will encourage recreational hunting in the Park by providing adequate access, up to date information and adequate camping or hut facilities where necessary.
- (vii) The Department will liaise with recreational hunting organisations in order to improve results achieved by recreational hunters where required. Recreational hunters will be encouraged to provide information on their hunting success (ie. deer jaws and kill returns) so that adequate data is available to assess the effectiveness of recreational hunting. (see appendix 10).
- (viii) The Recreational Hunting Area in the Park will be retained. However other methods of control may need to supplement recreational hunting in this area, if it is not maintaining a desired level of control.
- (ix) Aerial access for recreational users will not be permitted in the Recreational Hunting Area unless authorised by the Department. If recreational hunting does not maintain a desired level of control the Department may allow aerial access to facilitate animal control.

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<sup>8</sup> Primarily red and sika deer and pigs within the Park.

- (x) The Department will liaise, on an ongoing basis, with local and regional authorities, other government departments, conservation organisations, recreational hunting groups, commercial operators, and occupiers of adjoining land on all aspects of wild animal control.

### Explanation

As indicated in section 2.7 a range of introduced animals are found in the Park, and all are impacting on the natural values of the Park to a greater or lesser extent.

The Department will adopt a three thrust strategy for control of wild animals:

- (i) Recreational hunting
- (ii) Commercial operations
- (iii) Departmental operations

Recreational hunting will continue to be used as the first means of control, but commercial, and Departmental operations will supplement this if/where recreational control is not meeting management requirements. At all times the main objective for park management (ie protection of natural and historic resources) will determine which form(s) of animal control is required.

The method and intensity of control required will clearly differ according to the management objectives for a particular area of the Park and to the animal in question. For example, some animals such as sika deer are a favoured recreational hunting species and therefore sufficient control may feasibly be carried out entirely by recreational hunters in some parts of the Park. By contrast goats are generally not sought after by recreational hunters and therefore the Department will need to take prime responsibility for their control.

Eradication of possums and deer in the Park is not feasible given current technology and resources and in the case of deer eradication is not always seen as desirable by some people. However eradication of goats in the Park is feasible, and will be pursued by the Department. Pigs and hares could feasibly be eradicated in the Park, but goat eradication and possum and deer control, are higher priorities.

The Park attracts many recreational hunters, largely because of the presence of sika deer. In recognition of this the RHA was gazetted in the eastern area of Park in 1986. Since 1986 there has been a policy of not allowing aerial access into the RHA, unless authorised by the Department. However this policy can be altered in the future if aerial access is considered necessary to facilitate animal control. Similarly recreational hunting can be supplemented by other means of control in the RHA if required.

If recreational hunting is to remain the major control method for deer the Department requires the co-operation of hunters. It needs to know that recreational hunting is succeeding and that animal numbers are not building up generally in the Park, or in specific areas. To achieve this hunters will be encouraged to supply the Department with information from their diaries, and to return animal jaws and rumen samples for analysis of population demographics and diet preferences (see appendix 10). As indicated in section 4.2 the poor state of the vegetation in parts of the Park (such as the Te Pukeohikarua area) (Jenkins 1982) suggests that deer populations are above the level required to protect the natural values of the Park.

Pigs only occur in low numbers in localised areas of the Park. They are also a favoured recreational hunting species, and the Department will continue to rely on control by recreational hunters as long as their efforts maintain conservation values. The presence of high numbers of pigs in areas of prime kiwi or native snail habitat is undesirable and should this occur every effort will be made to control the pigs.

Goats are present in low numbers in specific areas of the Park and as they have the potential to pose a serious threat to park values the Department will pursue a policy of eradication. This will require the co-operation of adjoining landowners to stop the re-introduction and spread of goats from areas outside the Park. (see policies 5.1.3 Advocacy and 5.1.15 Grazing Leases and Licences).

Possums have had a significant impact on vegetation in the Park and are a major concern. Their control has traditionally been carried out by commercial operators, the effectiveness of which fluctuates according to the price of possum skins. At present, due to low prices, there are few possum trappers working in the Park. The Department will actively encourage commercial trapping and poisoning in the park. It may consider assisting with aerial transport in combination with other operations, allowing aerial access into the RHA if this is necessary, and will provide ongoing information to possum hunters. It is recognised however that in many cases this form of control may be ineffective in significantly reducing animal numbers in the long-term. If commercial operations are not achieving sufficient control in areas with high conservation values (eg, ecological areas, or important wildlife habitats) the Department will need to carry out control of possums. This will be dependent on adequate financial resources. The Department will closely monitor commercial operations to ensure that conditions of permits are met. This is essential to protect park users and indigenous animals. Ground animals, in particular kiwis, are very vulnerable to incorrectly sited traps.

Hares are present throughout the Park and can have a detrimental impact on tussock grassland areas in particular. At present their actual impact is uncertain but they have been implicated in the spread of weeds such as hieracium. The Department will monitor their impact on the vegetation by developing and maintaining exclosure plots which exclude hares.

Continued research and monitoring of animal populations and the effect of animals on indigenous vegetation is essential. In the past extensive animal/vegetation surveys were carried out in association with use of photo points and exclosure points. The Department will continue to monitor animal numbers and the condition of vegetation in the most cost effective way, as resources allow. In the near future this will rely heavily on the use of photo points, quadrat plots, exclosure plots and returns from recreational hunters. If/when more resources, or new techniques become available this policy will be re-evaluated and the best method of monitoring adopted. (see section 4.2 and policies 5.1.14 Research and Information and 5.1.5 Indigenous Plants).

### 5.1.11 Archaeological, Historic and Cultural Sites

(See appendix 14)

- (i) All sites of archaeological, historic and cultural interest in the Park will be protected, and enhanced where necessary/appropriate.
- (ii) The Department will co-ordinate and co-operate in further investigation, protection and interpretation of historic sites in liaison with the appropriate Iwi authorities, and the NZ Historic Places Trust.
- (iii) An inventory/assessment of archaeological and historic resources in the Park will be completed as part of a Conservancy wide exercise.
- (iv) Sites of significance to Maori people will not be identified, publicised or interpreted without the consent of the appropriate Iwi authorities.
- (v) Archaeological, historic and cultural sites will be avoided when developing new facilities for park users.

#### Explanation

All historic, archaeological and cultural sites are protected under both the Historic Places Act 1980 and the Conservation Act.

Section 2.5 of this plan gives a brief outline of the history of the Park, and identifies sites of historic interest.

There is a need to complete an updated inventory/assessment of historic resources in the Park as an important guide to management, and to ensure no historic sites are compromised during development. This includes an assessment of the need or appropriateness of formally identifying, publicising or interpreting sites. The Historic Places Trust and appropriate Iwi authorities will be consulted before any archaeological sites are considered for management. (See policy 5.3.2 Iwi Liaison).

#### 5.1.12 Landscape Management

- (i) The natural landscape and character of the Park will be retained as far as possible, and if necessary/practicable restored.
- (ii) Any developments in the Park will be designed and sited to ensure the greatest possible integration with the Park landscape, and the least disturbance to the natural environment.
- (iii) The aim of control and eventual eradication of Pinus contorta and other adventive pines in the Park will be pursued, as far as resources allow, in order to retain and where appropriate restore the natural landscape values of the Park.

#### Explanation

The Kaweka Ranges form a distinctive landscape feature in Hawke's Bay. Park users can experience a variety of landscapes ranging from tussock grasslands, beech forests, open tops and modified scrublands.

Protection, and where necessary and practicable enhancement, of the intrinsic values and landscape character of the Park will remain a key management objective.

The retention of the natural landscape character of the Park will be a factor influencing the design and siting of any new facilities in the Park.



### 5.1.13 Fire Control

- (i) The Department will respond to and extinguish all uncontrolled fires within and/or threatening the Park.
- (ii) The Department will maintain and update as necessary the Hawke's Bay Conservancy Fire Plan that includes the Park.
- (iii) The Department will ensure that staff are trained in fire control procedures, including monitoring of fire risk, and that fire fighting equipment is available at locations in and adjacent to the Park.
- (iv) The Department will promote public awareness of fire prevention, and liaise and co-operate with other fire control agencies in prevention and control of fires.
- (v) The Department will promote the use of portable stoves throughout the Park, as an alternative to open fires, for both fire control and wood conservation reasons.

#### Explanation

Protection of the Park's natural and historic resources is the priority for park management. Control of fires is of paramount importance in this respect and is especially relevant in Hawke's Bay, which is a rainshadow area renowned for its high fire risk. In the past fire has had a significant effect on the conservation values of the area.

The Department is responsible for fire control in the Park, and within one kilometre of its boundaries in accordance with the Forest and Rural Fires Act 1977. The Department produces fire plans, which are revised annually and detail the fire fighting equipment available and procedures to be followed in the event of a fire in or adjoining the Park.

The Department has an important advocacy role for fire safety amongst park users and adjoining landowners. In the past fires on adjoining land have threatened park land and every endeavour will be made to liaise and co-operate with landowners to minimise this risk.

The Department will continue to promote the use of portable stoves in the Park, as they assist in fire prevention and help conserve indigenous vegetation.

The Hawke's Bay Conservancy Fire Plan details actions to be taken in the event of a fire. It will be maintained and updated annually.

#### 5.1.14 Research and Information

Research and information gathering will be pursued in the following areas where resources permit.

(i) Vegetation

- survey and documentation of vegetation patterns and processes of the Park.
- compilation of information on rare and threatened plants (distributions, status and threats).
- monitoring of the seven existing exclosure plots.
- monitoring of condition in the main vegetation types and at vulnerable sites.
- further investigation of the appropriateness of an ecological area in the Mangatainoka Catchment and an ecological area representing manuka/kanuka associations in the Park. (See policy 5.1.1).

(ii) Wildlife

- Kiwi surveys to determine distribution and abundance.
- Blue duck surveys of the Ngaruroro and Mohaka Rivers and tributaries
- the distribution and abundance of nationally rare, endangered or threatened species recorded in the Park, ie blue duck, kiwi, kaka, bats, falcon, whitehead, fernbird, robin, native snails, native fish.

(iii) User Groups - changes, trends and demands.

(iv) Introduced weeds - in particular the most efficient means of controlling and eradicating Pinus contorta in the Park.

(v) Revegetation - the use of indigenous species for water and soil conservation in cases where introduced vegetation has traditionally been used for this purpose.

(vi) Introduced Animals - continued monitoring and information gathering on population, demography and ecological impact of goats, possums and deer.  
- monitoring of wasp spread and densities in and adjacent to the Park.

(vii) Advocacy - research on natural and recreation values of the major rivers in the Park.

- research into identification and protection options for unprotected riparian areas adjacent to the above rivers.

(viii) Archaeological/historical/Cultural site identification, assessment and management.

(ix) Other projects which may be defined from time to time.

Explanation

A valuable database already exists in such areas as vegetation changes, revegetation and hydrology, but ongoing research and studies are essential for effective management of the Park.

Further surveys are needed to determine where/if rare, endangered or threatened wildlife exist in the Park, so that specific measures can be taken if needed, to safeguard their habitats.

Pinus contorta is a particular problem in the Park (see policy 5.1.7). Studies are needed into the rate and success of colonisation of indigenous species under Pinus contorta, the most cost efficient means of controlling/eradicating this species and revegetation using indigenous species.

Information is needed in a variety of other areas including that on users of park resources, their needs and aspirations, changing patterns of use and their impact on park facilities and conservation values.

It is recognised that implementation of these projects will be largely dependent on available resources. While all are important, groupings from the most important and urgent to the least urgent have been identified (below), with priority for resources going to those identified as most urgent.

NB: The list is not definitive and should only be used as an indication of where priorities lie with present knowledge.

Priority Research Order:

1. Pivotal (Most important and most urgent)
  - Vegetation
  - Introduced Animals
  - Introduced Plants
  - Wildlife
2. Less Urgent, but still Important
  - Advocacy
  - User Groups
  - Archaeological/Historical/Cultural
3. Less Urgent
  - Revegetation
  - Others

#### 5.1.15 Grazing Leases and Licences

- (i) Grazing is generally incompatible with protection of park values and will only be permitted if it is performing a conservation objective.
- (ii) The current grazing lease will be periodically reviewed, and will be discontinued if there is a conflict with natural and/or historic park values.
- (iii) The Department will liaise and co-operate with adjoining landowners to ensure that boundaries are fenced, where necessary, to prevent stock entering the Park.

#### Explanation

There is only a small area of leased land used for grazing in the Park, at Kuripapango (see appendix 9).

The continuation of this lease and approval of any new leases or licences will be subject to their compatibility with protection of natural and historic resources, and recreational use.

Grazing is not usually in keeping with protection of park values. However in specific areas grazing may be acceptable for specific management purposes, such as maintenance of open space for camping or picnic areas, control of undesirable plants, or reduction of fire hazards which could result from rank, dry grass. Such areas would be small and generally on the periphery of the Park.

The Department does not foresee the granting of any further grazing leases or licences in the Park in the near future.

The straying of domestic stock into the Park has been a problem in some areas. The Department will continue to liaise with adjoining landowners to prevent this as far as possible. The priority for fencing will be areas identified as most vulnerable to stock trespass in terms of ecological, water and soil and recreation values.

5.1.16 Prospecting and Mining<sup>9</sup>

- (i) Each application for a mining privilege will be assessed on its merits.
- (ii) Any application for a mining privilege in or adjoining the Park which may have a detrimental effect on park values or public use will be opposed.
- (iii) Applications will be required to provide detailed environmental impact information to enable the Department to determine the possible impacts of their proposed prospecting or mining activity.
- (iv) Where a mining, prospecting or exploration privilege is granted in the Park, strict controls to protect the natural environment and public use of the Park will be sought.

Explanation

Mining is generally incompatible with park values, and applications which may threaten natural or historic resources, or restrict public use will be opposed.

However in terms of the Mining Act 1971<sup>9</sup> mining may occur on Conservation land. This means that applications for mining privileges must be considered by the Department.

Mining privileges within the Park are granted by the Minister of Energy, with the consent of the Minister of Conservation (section 26 Mining Act 1971). The Minister of Conservation may decline, consent or grant it subject to conditions.

An exploration licence does not require ministerial consent which means that the Department has limited powers to attach conditions for such a licence. However exploration privileges usually involve only hand methods, which do not have a significant impact on park values. In recent years there have been exploration licences granted over much of the Kaweka Ranges, but no applications to mine have resulted.

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<sup>9</sup> The Mining Act will soon be replaced by the Crown Minerals Act, 1991. As this new Act will strengthen the powers of the Minister of Conservation to stop access to the Park by miners, this policy section will need to be altered to reflect this once the new Act comes into effect.

**5.1.17 Hydroelectric Power Generation**

**Any proposals for hydro-electric development within or adjoining the Park which could compromise park values will be opposed.**

**Explanation**

Hydro developments are generally inconsistent with protection of park values and the Department will oppose any proposal that impacts on the Park.

Two significant wild and scenic rivers, the Mohaka and Ngaruroro flow through the Park. These rivers have been investigated for their hydro development potential. Several potential sites have been identified but the most likely sites are outside park boundaries. There has been one serious proposal in the past for a development site within the Park, near the junction of the Ngaruroro and Taruarau Rivers.

The wild, scenic and recreational values of the Mohaka River have been recognised in a recent draft National Water Conservation Order (NWCO) on the river (see appendix 1). The Department also plans to investigate the appropriateness of a NWCO for the Ngaruroro River. In light of the outstanding natural values of these rivers, any proposal to develop their hydro potential would be closely scrutinised by the Department and opposed if these values would be downgraded.

**5.1.18 Telecommunication Systems and Public Utilities**

- (i) The siting and routing of telecommunication systems, transmission lines or public utilities in the Park which could compromise Park values will be opposed.**
- (ii) The presentation of an environmental impact report, and proof that no suitable alternative sites for utilities exist outside the Park, are required before proposals for any utilities within the Park are considered.**
- (iii) The siting of any facilities within the Park would be subject to sections 14, 15 and 17 of the Act.**
- (iv) Any approved facility within the Park will be subject to a resource rental set by the Department.**
- (v) Proposals to site utilities adjacent to the Park will be investigated, and if adverse effects on the Park are likely, the utilities will be opposed through statutory planning processes.**

**Explanation**

The siting and routing of telecommunication systems, transmission lines, and public utilities in the Park is generally incompatible with management objectives for the Park. The construction of roads is often associated with these developments, and as indicated in policy 5.1.19 would be opposed by the Department unless considered necessary for park management purposes.

All applications for utilities will be subject to Environmental Protection and Enhancement Procedures and only approved if no suitable alternative sites exist outside the Park.

Many survey installations and telecommunication systems are now privately owned, and in some areas of the country the Department is receiving numerous applications for such installations on a particular site. The Department will make every effort to ensure that such facilities are shared wherever possible. It will not approve multiple facilities on a particular site unless there are compelling reasons to do so.

**5.1.19 Roading and Vehicle Access**

- (i) No additional roads will be constructed in the Park, unless they are necessary for park management purposes.**
- (ii) The Department will liaise and co-operate with adjoining landowners and local authorities, in an endeavour to maintain and enhance vehicular access to and around Park boundaries (see policy 5.1.3).**
- (iii) The use of vehicles in the Park is not permitted, except on formed roads, or for specific management purposes (see policy 5.2.12 Vehicles).**

**Explanation**

Adequate road access to the Park is important to facilitate public use and enjoyment of the area.

Access is generally adequate. The Department will liaise and co-operate with adjoining landowners and local authorities to maintain good access to the Park and where appropriate/necessary enhance public access. In some cases access is by informal agreement. Where this is the case, the Department will liaise with landowners to endeavour to gain formal access agreements.

As indicated in section 5.1.3 access agreements through private exotic forests in the southeastern area of the Park have been negotiated, giving public access to the Park except in times of high fire risk or logging operations. The designated vehicle access roads are marked on map 5 of this plan.

Additional roading within the Park is not considered necessary or desirable in terms of providing for public use and enjoyment and protecting Park values.



5.1 20 Chainsaws

**Chainsaws are not allowed in the Park, except for management purposes.**

Explanation

Cutting of live vegetation by Park users is a problem in some areas. These activities are associated with firewood collection and campsite clearance, with some users flying chainsaws into landing sites as part of their equipment.

The Department requires the support of commercial aerial operators to ensure this policy is enforced. This policy of not allowing chainsaws in the Park is included as a condition of licences issued to aerial operators, and will be strictly enforced.



## **5.2 PUBLIC USE**

- 5.2.1 Public Use and Facility Development (Introduction)**
- 5.2.2 Huts**
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### 5.2.1 Public Use and Facility Development (Introduction)

- (i) To allow free and unrestricted access to, and use of the Park consistent with the protection of natural resources.
- (ii) A range of appropriate recreational opportunities that are complementary to those supplied elsewhere in the Conservancy, and in adjacent areas will be provided for in the Park.
- (iii) Charges and fees may be made for use of park services and facilities.
- (iv) Facilities and services which are provided will be designed and sited to:
  - (a) encourage the safe use and enjoyment of the Park by visitors.
  - (b) minimise the impact on the environment and natural character of the Park.
  - (c) complement existing activities as provided for in the management plan, and enhance visitor enjoyment of the Park.
- (v) The findings and recommendations of the Conservancy Recreational Strategy (which will be prepared as part of the overall Hawke's Bay Conservancy Conservation Management Strategy) will be adopted, and if necessary this plan reviewed accordingly. (See section 1.1).

#### Explanation

The primary aim of forest parks is the protection of natural and historic resources, and to facilitate public recreation and enjoyment. (Section 19 of the Act). Public use, however is subject to protection of the natural environment, and so there are provisions to impose conditions or restrictions on public use to protect natural values if necessary.

In general the level of public use in the Park is not causing concern at present. However visitor pressure can occur in some huts during peak use periods, eg during "the roar".

Use of the Park, and changes to the physical environment will be monitored, so that any degradation of the resource or quality of the visitor experience below acceptable levels can be identified, and allowing action to be taken to prevent damage before it occurs.

Kaweka Forest Park has a distinctive character, the result of its history, its rugged terrain and the traditional users of the area. In the past the ranges were the domain of hunters and to a lesser extent trampers. However in recent years, although these groups still constitute the bulk of users, there is increasing use by a wide range of recreationists: day trippers, picnickers, anglers, canoeists, rafters, and by education groups. The policies in this plan reflect these trends in Park usage.

5.2.2 Huts

- (i) The hut system in the Park will be maintained and upgraded as appropriate, if supported by public use.
- (ii) Removal or relocation of huts will be considered where their level of use is insufficient to justify their continual existence.
- (iii) A charge will be made for overnight use of park huts consistent with the national hut charging policy <sup>10</sup>.
- (iv) No new facilities will be developed in the proposed remote experience area, unless required for park management purposes. (See policy 5.1.1).
- (v) Investigations will be continued into the use of alternative fuels for heating of and cooking in park huts, and encouragement given to park users to carry portable stoves, in order to conserve firewood.
- (vi) Rubbish holes at huts will be filled in and rubbish bins removed in line with the "pack it in and pack it out" rubbish policy in the Park (see policy 5.2.4).
- (vii) Park huts and bunks are available to all users on a "first-come, first served" basis, unless otherwise determined by the Department. (See also policy 5.2.16).
- (viii) The Department may place restrictions on the maximum number of consecutive nights that a park hut is used without permission from the Regional Conservator.

Explanation

The Department is ultimately responsible for all huts and bivouacs in the Park, including those erected by private groups. There are 22 huts and 6 bivouacs in the Park at present, the oldest (Kaweka hut) built in 1936 by the Heretaunga Tramping Club.

The majority of huts were built for animal control purposes and are of the basic 4 or 6 bunk/open fire design. In high use areas some basic huts have been upgraded or replaced with larger huts, eg, Tira Lodge and Te Puia Lodge (A list of huts and bivouacs is included as appendix 5).

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<sup>10</sup> Park huts (not shelters or bivouacs) are included in Category 3 of the national system, ie they are basic huts, with bunks or sleeping platforms, with toilets and water supply. They may include cooking and/or heating systems.

In line with Departmental policy a charge is made for an overnight stay at park huts. The revenue gained from hut fees is used to maintain huts, shelters and bivouacs throughout the Park. If the level of use of a particular hut is insufficient to justify its continued existence relocation or removal of it may be considered. However huts will not be removed solely on grounds that insufficient revenue is being collected from hut fees to maintain them. Interested parties, and the public in general would be consulted before any decision was made on removal of a hut, and any decision would reflect not only the level of use of the hut, but also its values for such things as public safety, animal control, or other management purposes.

Park huts are available for all users. Conflicts can occur if groups of individuals use huts for long periods of time, thereby restricting the use of the hut for other people. In order to prevent this situation occurring the Department may place restrictions of the maximum number of consecutive nights that a hut may be used without permission from the Regional Conservator.

The track and hut system in the Park is well developed, a legacy of the deer culling days and it is not proposed to erect any new huts in the Park. The Makino catchment by contrast remains substantially undeveloped and will be retained as such unless facilities are required for management purposes (see policy 5.1.1 Park Classification).

Problems exist with rubbish around huts. The "pack it in, pack it out" rubbish policy will place the responsibility for rubbish removal on park users. The Department will actively promote this policy and information will be supplied in huts, at roadends, on hunting permits etc.

At present all huts have open fires or wood burning stoves. The supply of fuel for hut heating and cooking is causing concern because of the expense of supplying fuel (coal to Te Puia and wood to some roadend huts) and because of the continued removal of live vegetation around some huts. There is a need to establish alternative means of cooking in and heating of huts. These include:

- i) Replacement of open fires with efficient wood burning stoves. Hut users carry own fuel and cookers for cooking purposes.
- ii) Supply of gas to huts for cooking only. Existing efficient wood burning stoves retained for heating only.

Recently, efficient wood/coal burning stoves were installed in 6 park huts. It is proposed to investigate the use of gas cookers at Te Puia Hut (the most heavily used hut in the Park).



The Department will also promote the use of portable stoves for park users in order to limit the amount of wood and/or coal used by park users.

The Heretaunga Tramping Club owns and maintains 2 huts in the Park (Kaweka and Kiwi Saddle). These huts, although not part of the hut fees system will remain freely available for the use of all park users.

### 5.2.3 Camping

- (i) Informal camping is permitted in the Park, except where specifically prohibited to prevent disturbance or degradation of natural or historic resources.
- (ii) Formal campsites, with simple facilities will be provided at designated roadend sites. (See policy 5.2.4).
- (iii) Rubbish bins will not be provided at camping sites.
- (iv) Use of portable stoves will be encouraged as an alternative to open fires (see policies 5.1.13 Fire Control and 5.2.2 Huts).
- (v) The "Environmental Care Code <sup>11</sup>" applies to all users. As a condition of licences, concessionaires and their clients must follow this code when camping in the Park, and remove all rubbish.

#### Explanation

While informal camping is permissible throughout the Park there may be occasions when, to protect significant natural or historic features, an area is closed to camping. (For example an area where revegetation trials/plantings are being established, a habitat of a rare or endangered wildlife species, or a popular area where overcrowding and damage is occurring).

In the past there have been problems associated with a proliferation of unsightly campsites and with accumulations of rubbish in the interior of the Park. This problem is often associated with aerial access. As a condition of their concession aerial operators must carry out rubbish and ensure their clients clean up campsites (see policies 5.2.16 Recreational Concessions, and 5.2.4 Rubbish).

Designated roadend campsites exist at Kuripapango, Lawrence roadend and Mangatutu. These sites have minimum facilities (picnic tables, fireplaces, and toilets) which will continue to be maintained. New facilities/new camping areas may be established in appropriate areas if there is a demand for them, as identified in the proposed Conservancy Recreation Strategy.

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<sup>11</sup> See appendix 12.

5.2.4 Rubbish

- (i) A "pack it in and pack it out" rubbish policy throughout the Park, will be implemented.
- (ii) All existing rubbish holes and rubbish bins will be removed both within the Park and at roadend campsites and picnic areas.
- (iii) The Department will actively promote the "pack it in and pack it out" policy and the reasons and advantages for such a policy.
- (iv) As a condition of licences all concessionaires operating within the Park will be required to issue their clients with rubbish bags, and ensure all rubbish is removed from the Park. (see policy 5.2.16).

Explanation

It is now a widely accepted practice in natural areas for recreational users to carry out their own rubbish. This is necessary to ensure the problem of rubbish disposal is kept to a manageable level and to maintain the environment as far as possible in its natural state.

The Department will actively promote this policy, with the co-operation of aerial operators, other concessionaires, and all park users.

### 5.2.5 Tramping/Tracks

- (i) The Department will facilitate tramping and walking within the Park by providing a range of opportunities from short walks near roadends to long tramps in the interior of the Park.
- (ii) All tracks will be classified into track classifications of "walk", "track" and "route", and maintained to these standards. (See appendix 6).
- (iii) No new tracks will be developed in the Remote Experience Zone, unless improved access is required for wild animal control or other management purposes. (See policy 5.1.1).
- (iv) The development of foot access tracks to route standard may need to be investigated to facilitate recreational hunting in areas of high deer concentrations, where access is at present difficult.
- (v) The Department will investigate further opportunities for short walks in areas of high public use near roadends.
- (vi) Liaison with adjoining landowners will continue, in order to facilitate legal public access to the Park over private land.
- (vii) Signs and markers will be provided along "walks" and "tracks" but only at key junction points along routes (see policy 5.2.19 Signs).
- (viii) Track use will be monitored by use of track counters and hut log book information.

#### Explanation

Tramping and walking are popular uses of the Park.

The current track network was largely established for animal control purposes, and has been developed since then to cater for other uses. Tracks and routes cover most areas of the Park, with the exception of part of the Makino Catchment which has remained largely undeveloped. It is proposed to retain this area in its present state, without tracks, unless basic facilities are required for management purposes, in particular wild animal control. (See policy 5.1.1).

Similarly, it is not proposed to increase the track network in other interior areas of the Park, unless this is required for wild animal control or other management purposes. The existing track system gives good access to most areas of the Park, without compromising the natural, remote experience values of the area.

As outlined in section 5.2.1 the Park now attracts a range of recreational uses and in order to cater for this it is proposed to investigate further opportunities for short walks for less experienced outdoor recreationists in areas of high public use on the fringes of the Park. These would be located in areas such as Kuripapango, Lawrence roadend, Makahu Saddle or Mangatutu, which are popular with day visitors. Tracks in such areas would be suitable for families and people with light footwear and where practicable for disabled persons. They would ideally be of a loop nature, lead to points of interest and may include interpretative information. The public will be consulted on tracking in the Park during preparation of the Conservancy Recreational Strategy. This strategy will consider the recreational demands and opportunities in the Park, and throughout the Hawke's Bay Conservancy.

Access to the Park in several areas is through private land. Continuing liaison and co-operation between the Department and adjoining landowners is essential to maintain and/or enhance public access. In any areas where access is by informal agreement, a formal agreement will be pursued through negotiation with owners to protect continued public access. Access across private land will be clearly marked on future maps and publications produced by the Department to avoid any potential misunderstanding with landowners or park users.

### 5.2.6 Recreational Hunting <sup>12</sup>

(see also section 4.2 and policy 5.1.10 Introduced Animals)

- (i) Recreational hunting will be provided for and encouraged in the Park, as the major means of animal control, as long as it is achieving a level of control necessary to protect park values.
- (ii) Recreational hunting pressure and success will be monitored to determine its effectiveness as a means of wild animal control.
- (iii) Recreational hunters will be encouraged to provide the Department with information (ie deer jaws and kill returns) on their hunting success so that adequate data is available to assess the effectiveness of recreational hunting (see appendix 10).
- (iv) The Recreational Hunting Area will be retained in the Park as long as recreational hunting maintains a desired level of control.
- (v) Adequate access and facilities for recreational hunters will be maintained and where necessary and practicable enhanced, to achieve effective control of introduced animals.
- (vi) Recreational gamebird hunting (of both indigenous and introduced species) will not be permitted in the Park.

#### Explanation

Recreational hunting is a major recreational use of the Park, and is also an important means of controlling deer, and to a lesser extent pig numbers. Recreational hunting will therefore be facilitated and encouraged as long as it is compatible with protection of the Park's natural resources and does not endanger other park users.

The presence of sika deer in the Park is a great attraction for recreational hunters. The Recreational Hunting Area (RHA) will be retained in the Park, as long as recreational hunting maintains a desired level of control. The Wild Animal Control Act 1977 allows for the Director-General to vary or revoke the

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<sup>12</sup> This policy refers mainly to deer and pigs which are favoured recreational hunting species. For policies on goats, possums and hares refer to Sections 4.2 and 5.1.10 of this plan.

conditions for use of such areas, to allow for official or commercial wild animal control should research show that recreational hunting pressure is not achieving sufficient control to protect natural values. (Section 27(3)(a)(b)(c) and 4a).

As discussed in policy 5.1.10 the Department requires ongoing information from recreational hunters in order to assess the effectiveness of this method of animal control.

Co-operation between the Department and hunters is therefore of great importance if recreational hunting is to continue to be the prime means of animal control for deer and pigs in the Park.

Recreational gamebird hunting will not be permitted in the Park. Populations of both indigenous and introduced gamebirds are sparse and localised, and the risks to native animals from gamebird shooting are high. The Lakes area does provide a suitable habitat for some gamebird species, but because this area has such significant ecological values recreational gamebird hunting is undesirable.

### 5.2.7 Recreational Fishing

- (i) The Department will continue to advocate, through statutory processes and by liaison with other groups and local authorities, the protection of the Mohaka and Ngaruroro <sup>13</sup> rivers because of their outstanding angling values, where consistent with the needs of indigenous plants and animals.
- (ii) The catchments of the Park will be maintained to protect their fisheries values, where consistent with the needs of indigenous plants and animals.
- (iii) The taking of indigenous fish for traditional Maori purposes only, will be permitted as long as this species is not threatened and/or demands are not excessive. Indigenous fish may not be taken from ecological areas or other specially protected areas. (see also policies 5.1.9 and 5.2.15).

#### Explanation

Both brown and rainbow trout are present in the Ngaruroro and Mohaka rivers. The Ngaruroro river in particular is renowned as a trophy fishery, and both rivers have outstanding wilderness values.

The management of the recreational fisheries contained within the Park are the responsibility of the Regional Fish and Game Councils. The Department will advocate the protection of the resource for its wilderness fisheries qualities, where consistent with the needs of indigenous plants and animals. If studies indicate that trout are having a detrimental impact on indigenous fish or blue ducks, priority for protection will always be given to the indigenous species.

The Department will carry out research on the impact of brown trout in the Western Kaweka Lake on native fish. Protection of native plants and animals will take precedence over protection of an introduced trout species if a conflict is identified (see policy 5.1.1).

Many anglers gain access to the Park's rivers by helicopter (or fixed wing aircraft to Boyd's airstrip in Kaimanawa Forest Park). Their activities are therefore regulated by the conditions of Concession licences (see policies 5.2.16 Recreational Concessions and 5.1.4 Soil and Water Conservation).

Regulations will be formulated to enforce policy iii (above). (See also policy 5.3.3 Park Regulations).

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<sup>13</sup> These rivers have been identified as nationally important for their recreational, scenic, and/or wilderness fisheries values (Teirney et al, 1982).



#### 5.2.8 Rafting and Canoeing

- (i) The catchments of the Ngaruroro and Mohaka Rivers will be managed to protect their rafting and canoeing values for both park and downstream users, consistent with protection of natural park values.
- (ii) Recreational concessions will be managed for the benefit of the public, and to ensure protection of natural park values (see policy 5.2.16).

#### Explanation

One of the strong growth areas in New Zealand recreation is water based activities, and the increasing use of the Mohaka and Ngaruroro Rivers for rafting and canoeing reflects this trend.

Both rivers provide a scenic/wilderness recreational experience and are attracting both private and commercial use.

Use of the Ngaruroro River, within the Park, is mainly by private recreationists, with rafting an activity associated with other pursuits such as angling and hunting. The Mohaka River receives more commercial rafting use, and private canoeing is popular because of the range of opportunities on the river.

Access to the Ngaruroro River is usually by aircraft, while both air and road access is used to gain entry to the Mohaka River.

Rafting and canoeing provide an opportunity for quiet enjoyment of the natural environment and a means of access into and through the Park. The Department will continue to facilitate rafting and canoeing use which is consistent with protection of park values, and will manage concessions so that these values are not compromised. This involves ensuring that as far as possible the quality and quantity of waters are maintained in a natural state or enhanced (see policies 5.1.4 Soil and Water Conservation and 5.1.17 Hydro-Electric Power Generation). It also requires that the Department closely monitors commercial and private rafting and canoeing use of Park rivers to ensure that rubbish is carried out, live wood is not cut, and that in general users follow the principles of the "Environment Care Code".

### 5.2.9 Jetboating

The Department will oppose the uplifting/amendment of sections 7 and 8 of the Water Recreation Regulations 1979 (that effectively prevent jetboat use in park waters), unless it can be clearly demonstrated that park values will not be compromised by jetboat use in the area.

#### Explanation

The Water Recreation Regulations 1979, effectively prevent jetboating use on waters within the Park.

Under these regulations jetboats may not travel beyond the Taruarau Confluence, on the Ngaruroro River, and the Willowflat Bridge, on the Mohaka River, at speeds greater than 5 knots.

The Department favours the upholding of these regulations to protect natural park values and the quiet enjoyment of the Park for other users, and will advocate this stance at any hearings or discussions on this matter. It will liaise with other interested groups such as the Fish and Game Council, and other recreation and conservation groups on this matter also.

**5.2.10 Picnicking/Day Use**

**(See also policies 5.2.3 and 5.2.4)**

- (i) Facilities and access for picnickers and day users of the Park in general will be provided at appropriate locations, and existing facilities upgraded as appropriate.**
- (ii) Facilities at roadend sites will as far as is practicable be suitable for use by disabled persons (see policy 5.2.21).**

**Explanation**

In the past facilities have tended to be designed to meet the needs of the main user groups, (trampers and hunters). As indicated in section 5.2.1, recreational uses of the Park are changing and a greater range of activities now occurs in the Park. Day walks, camping and picnicking at roadends, where there is good road access and appropriate facilities, are popular uses of the Park.

Four roadends areas in the Park (Kuripapango picnic areas, Lawrence roadend, Makahu saddle and Mangatutu) are proposed as Recreation Facility Areas (see policy 5.1.1) where appropriate facilities will be maintained and developed to cater for day users. (For example, provision of picnic tables, toilets, tap water where necessary, interpretation facilities and short walks to points of interest). Other areas may be suitable for such developments, particularly areas which are used as starting points for trips into the interior of the Park.

Wherever practicable facilities at roadend sites will be suitable for use by disabled persons.

**5.2.11 Aircraft**

- (i) No provision will be made for fixed wing aircraft to land in the Park.**
- (ii) Helicopters may operate in the Park for the purposes of transporting passengers to designated locations (see appendix 7) for recreational activities such as hunting, fishing, tramping, rafting, and for management and emergency purposes.**
- (iii) All helicopters landing within the Park will require permission to land from the Department.**
- (iv) All commercial helicopter operators must be authorised concessionaires and will be required to comply with all provisions of their concession to protect park values and park users (see policy 5.2.16).**
- (v) Aerial access for recreational users is not permitted in the Recreational Hunting Area, unless otherwise determined by the Department (see policy 5.1.10).**

**Explanation**

The term "aircraft" in this policy section refers to fixed wing planes, helicopters, microlights and balloons, but excludes non-motorised hang gliders and parapentes. However, as indicated (in policy i, above) no provision will be made for fixed wing aircraft to land in the Park. Therefore this policy section refers primarily to access for helicopters which are used extensively to gain access to the more remote areas by recreational users, mainly hunters.

The control of aircraft over the Park is the responsibility of the Civil Aviation Division, Ministry of Transport by virtue of the Civil Aviation Act 1990. In general terms the regulations state that aircraft shall not operate at less than 500 feet (152 metres) above any ground within a radius of 2000 feet (610 metres) around the aircraft unless they are landing, taking off forced lower due to stress of weather, or in an emergency.

Helicopters provide a means of access for management and recreational purposes, with minimum physical impact compared to roading and some other means of access. They can play an important role in animal control in that hunters can access areas which would otherwise be virtually inaccessible.

However they may conflict with other park users seeking quiet enjoyment of the Park. Therefore any policy dealing with helicopter access must seek to balance the needs and aspirations of a variety of park users, and reflect the management priorities

of the area. As indicated in policy 5.1.1.2 helicopter operators are encouraged to consider the needs of other users when flying in and around the Remote Experience Area.

Helicopters may only land at designated landing sites. There are currently 14 designated landing sites in the Park (see appendix 7). The number of sites needed for effective control of wild animals, and to facilitate public access may vary from time to time. Therefore some designated sites may be closed/relocated, or alternatively extra sites may be designated as circumstances change in the future.

Aerial access to the Recreational Hunting Area (RHA) by recreational users is not permitted unless otherwise determined by the Department. (See policy 5.1.1 Introduced Animals). As indicated on map 5 a number of landing sites are situated on the boundary of the RHA and hunters and other Park users can gain access from these points.

Commercial helicopter operators must be authorised and comply with all provisions of their licence, including removal of rubbish. In the past there have been problems with rubbish in remote areas of the Park associated with helicopter access and this will be closely monitored in the future. The number of concessionaires may also need to be limited if this is necessary to maintain park values and provide a quality experience for park users (see policy 5.2.16 Recreational Concessions).

There are no official fixed wing airstrips in the Park and the Department does not consider there is a need to develop such facilities. There is fixed wing access through Boyd's airstrip (in Kaimanawa Forest Park) which can provide easy access to the remote areas of the Park, there is adequate access for helicopters, and in many areas of the Park the terrain is unsuitable for development of safe airstrips.

### 5.2.12 Vehicles

(Includes cars, trucks, four wheel drive vehicles, motorcycles and bicycles)

- (i) Vehicles will only be allowed on formed roads in the park. The formed roads are Makahu, Kaweka, Lotkow and Comet Roads (see Maps 2, 3, 4 and 5).

#### Explanation

Motorised vehicles will only be allowed on formed roads in the park, because of the damage they can cause to tracks and to vegetation and soils, as well as disturbing other park users. This policy is especially relevant in Kaweka Forest Park because of the erodible nature of much of the area.

Mountain bikes are a relatively new style of bicycle capable of traversing quite rough terrain. While there is little use in the area at present park management must consider the growth potential of this sport and the impacts that increased usage could bring. In general bicycles have less impact on natural values than motorised vehicles. However experience in other areas has shown that bicycles can also cause considerable damage to tracks designed for walkers, and can conflict with other users. Because of the inherent instability of much of the Kaweka Range and the importance of maintaining an intact vegetation cover, careful evaluation would be required before this policy was relaxed to allow bicycles off the four listed formed roads in the Park.

Opportunities for motor vehicle and mountain bike use exist in other areas adjoining the Park, including private exotic forests where permission may be granted for such activities.

Regulations will be formulated to enforce this policy (see policy 5.3.3 Park Regulations).

5.2.13 Dogs

- (i) Dogs will be excluded from any areas of the park where their presence may endanger native wildlife, in particular kiwi or blue duck.
- (ii) Dogs may be excluded from other areas of the Park where their presence is incompatible with other users; for example, high use areas.
- (iii) The Department will give priority to surveys of abundance and distribution of kiwis and blue duck in the Park, so that measures can be taken to implement dog-free areas if necessary. (see i above).
- (iv) A limit of one dog per park visitor is permitted, unless specific permission is granted for such activities as pighunting.
- (v) There is no restriction on the entry of seeing-eye dogs, or specially trained dogs for search and rescue purposes.
- (vi) A permit is required for the entry of hunting dogs into the Park.
- (vii) Dogs will not be permitted inside or under huts, except for seeing-eye dogs.

Explanation

Forest Parks have traditionally been among the few places where dogs can be freely taken, and are often used for hunting. However dogs can conflict with other users and may endanger native wildlife. In the Park there is concern at the impact dogs may have on blue duck and kiwis.

Further blue duck and kiwi surveys will be carried out in the Park as a matter of priority. Where populations of these birds are located, consideration will be given to the need to exclude dogs from these areas.

Dogs may also be excluded, or required to be kept on a leash, in high use areas such as roadend picnic areas.

There is no restriction on the entry of seeing-eye dogs, or specially trained dogs for research and search and rescue purposes.

Unless specifically excluded for the above reasons, visitors can bring one dog with them into the Park. Specific permission may be granted for more than one dog for activities such as pig hunting. The law requires that a permit is necessary for the entry of hunting dogs into the Park (section 38(4)(e) of the Act) but is not required for other dogs.

Regulations will be formulated to enforce this policy. (See policy 5.3.3 Park Regulations).



5.2.14 Horses

Horses and other pack animals, will only be allowed on formed roads in the Park. The formed roads are Makahu, Kaweka, Lotkow and Comet Roads (see maps 2, 3, 4 and 5).

Explanation

There is little or no horse use in the Park at present. Although pack routes were established in some areas when farming was carried out in the Ranges, most of these are either outside Park boundaries or no longer exist.

The use of horses off formed roads poses a threat to the natural values of the Park, due to the potential for spread of noxious plants and other introduced species, their eating and trampling of native vegetation and the damage they can do to foot tracks. The high natural and induced rates of erosion in the Kaweka Ranges increases these threats.

Regulations will be formulated to enforce this policy. (See policy 5.3.3 Park Regulations).

### 5.2.15 Traditional Maori Uses of Park Resources

(See also policies 5.1.5 Indigenous Plants and 5.1.9 Indigenous Animals)

- (i) The removal of indigenous plants may be permitted for traditional Maori uses, provided:
  - (a) The taking of such plant material shall not have a detrimental impact on plant or other species classed as rare, endangered or locally uncommon.
  - (b) Plant species may not be taken from ecological areas, or any other specially protected areas.
  - (c) There are no alternative sources outside the Park, particularly in modified areas.
  - (d) There is no purpose or intention of deriving gain or reward from the plants.
  - (e) Demands are not considered excessive.
  - (f) Removal of plant species must be supervised by Departmental staff.
- (ii) The disturbance, removal, or taking of indigenous animals (excluding fish) <sup>14</sup> from the Park is not permitted except for authorised scientific or management purposes.
- (iii) The taking of indigenous fish may be permitted for traditional Maori purposes only, as long as the species is not threatened and/or the demands are not excessive. The taking of indigenous fish will not be permitted from ecological areas or any other specially protected areas. (see also policies 5.1.9 and 5.2.7).
- (iv) The Department will involve the appropriate Iwi Authority and/or the tangata whenua in any applications to remove plants or indigenous fish from the Park.

#### Explanation

The removal of indigenous plants from the Park or the disturbance, killing or removal of indigenous animals (except for freshwater fish) is an offence under sections 38 and 39 of the Act.

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<sup>14</sup> "Animal" means any member of the animal kingdom other than a human being. (Conservation Act 1987). However in various legislation fish are treated differently to land animals. Note therefore the differences in policies (ii) and (iii) above.

Permission will not be given to hunt or remove indigenous animals from the Park for traditional Maori purposes, except for freshwater fish, which may be taken (under strict guidelines) for recreational and cultural purposes only, as long as the species is not threatened and/or the demands are not excessive. The taking of indigenous fish will not be permitted from ecological areas or other specially protected areas, or for the purposes of commercial gain.

The removal of indigenous plants may be permitted, under strict guidelines, for traditional Maori uses. (The guidelines are outlined above). Before any approval is given for removal of plants the Department must be assured that the taking of such material will not have a detrimental impact on any rare, endangered, or locally uncommon species.

The appropriate Iwi Authority will be involved in all stages of an application to remove plants or freshwater fish from the Park.

Regulations will be formulated to enforce policy (iii) above. (See also policy 5.3.3 Park Regulations).

5.2.16 Recreational Concessions <sup>15</sup>

- (i) Applications for concessions within the Park will be considered on the following basis:
- that there is a proven need for such a service
  - that the service is compatible with conservation values and management objectives
  - that the service provides for safe use and enjoyment of the Park
  - That the concession does not adversely affect other recreational users
  - that the applicant has the means and expertise to carry out the service to be offered according to the conditions of the licence.
- (ii) The Department will limit the number of concessions granted in the Park to protect park values or the quality and/or safety of the visitor experience.
- (iii) If a limit is placed on the number of concessions (see above) the Department will choose the concessionaire whom it considers will give the best service to the public at the most reasonable rates, with an operation that is consistent with protection of conservation values.
- (iv) All concessionaires require a licence, lease, or permit which details conditions of use and sets appropriate fees for use of the Park's resources (see policy 5.3.6 Cost Recovery).
- (v) Concessions will be cancelled if the terms and conditions are not followed.
- (vi) Concession trials may be permitted, under strict conditions, in order to assess the acceptability of activities which may not be provided for in this management plan, but for which the Department requires more information to assess its acceptability or viability before final commitment to it.
- (vii) Concessionaires must take primary responsibility for the safety of their clients. (See policy 5.2.20 Visitor Safety).

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<sup>15</sup> The Department has recently produced (December 1990) a revised draft policy on "Concessions for Recreation/Tourism Business Operations in Protected Areas". The policies in this plan are consistent with this. A final departmental policy taking into account public submissions will be released, and will form the basis for concession management on Conservation land. This policy will define the roles of Conservation Boards and the Department in relation to the granting of concessions.

(viii) Concessionaires and their clients may use park huts and bunks on a "first-come, first-served basis" with other park users, (unless otherwise determined by the Department), but will not be given exclusive use of any park hut.

Explanation

A concession is a lease, easement, licence or a permit granted to enable the carrying on of a trade or business on lands managed by the Department.

Concessionaires can extend the range of activities and services available to the public and facilitate greater use and enjoyment of the natural environment. In general the Department will provide for activities that allow visitors to recreate independently, and concession activities will be complementary to these.

The Department will consider all applications for concessions in the Park in light of the conditions outlined in policy (i) (above). The concession must be compatible with protection of park values, and provide for safe and enjoyable use of the Park.

Currently, there are 8 recreational concessions in the Park, 4 of which are providing aerial access for park users; in particular for hunters. (see appendix 8). In general the Department will allow free competition to regulate the number of concessions in an area. However the Department will limit the number of concessions in the Park, or in a particular area of the Park if it is in the public interest to do so. (For example, if increased competition might lower standards of service below an acceptable level, risk public safety, or if more concessions would put too much ecological or social strain on an area).

As a condition of a licence aerial operators must ensure rubbish generated by their clients is flown out, that clients have hut tickets, that campsites and huts are left in a tidy state and that chainsaws are not carried into the Park. Concessions will be cancelled if the terms and conditions of a licence are not followed.

Trials of proposed concessions may be permitted so that the Department can fully assess the acceptability or viability of an operation, where it does not have sufficient information at the time to make this judgement. A trial will test the acceptability of a service (using public comment or opinion surveys, for instance) in terms of its impact on conservation values and public use and enjoyment of the Park. A permit is required for a trial and permanent structures may not be erected.

Concessionaires and their clients may use park huts and other facilities fairly with the general public on a "first-come, first-served basis." They will not be given preferential or exclusive use of any park huts or facilities. (see policy 5.2.2 Huts). For this reason concessionaires are required to provide their own shelter (ie, tents) for their clients as they cannot rely on use of huts.

There may need to be some restriction on use of facilities by concessionaires and their clients in popular locations during peak periods although this situation has not been reached as yet in the Park. The Department retains the right to direct concessionaires away from using Park facilities if/where there is a particular problem or conflict with other users.

Concessionaires must take primary responsibility for the safety of their clients. The Department will assess concessionaires expertise in this respect, and the provisions he/she has made for public safety, when assessing applications for concessions.

### 5.2.17 Organised Club or Public Events

**Organised club or public events may be restricted where they may be detrimental to park values or the enjoyment of other park users.**

#### Explanation

This policy is intended to cover organised events which are not licensed commercial activities, but are advertised as being open to the general public. It could also include club events.

Public events could include triathalons, cross country runs, competitive sport, summer programmes or similar events (The "Kaweka Challenge", which was held in the Park in February 1990 is an example of such an event). These events can have valuable education benefits provided the leaders/organisers have adequate knowledge, and the ability to organise and control the event to protect the safety of participants, and other park users. They will be permitted at the discretion of the Regional Conservator, and only if park values are not threatened.

When such events occur the Department will ensure that any costs associated with it are recovered. In the case of approved commercial ventures a resource rental will be charged as with all concessions (see policy 5.2.16 Recreational concessions).

Large scale commercially sponsored competitive events may be permitted to take place in the Park, but only where they can be shown to be consistent with the protection of natural values and will not be detrimental to the enjoyment of other park users.

5.2.18 Interpretation and Education

- (i) The Department will endeavour to foster public understanding and appreciation of the Park and the environment in general, through the provision of interpretive programmes, and interpretive displays in and adjacent to the Park.
- (ii) A sign system will be developed in the Park which provides for safe and enjoyable use of the Park and its facilities (see policy 5.2.19 Signs).
- (iii) Handbooks, pamphlets and other written material will be provided to enhance the visitor's enjoyment of the Park, and promote a greater appreciation and understanding of the natural processes in the Park.
- (iv) The Department will encourage use of the Park for educational purposes that are compatible with park values.

Explanation

An adequate sign system is a basic necessity in the Park to provide for public enjoyment and safety. In addition appropriate interpretive and educational material can greatly enhance the visitors appreciation and enjoyment of the Park.

The Department is currently updating pamphlets on the Park's facilities and resources, and will be publishing more information as resources permit.

Displays/information boards will also be developed at strategic points in and adjacent to the Park.

Visitor nature programmes are also an important means of interpreting the natural features of the Park, and imparting conservation values in general.

Any interpretation of Maori cultural aspects of the Park will only be done in consultation with, and with the approval of the appropriate Iwi authorities.

The Park is an ideal environment in which to study physical processes and natural ecosystems. School and community groups utilise the area regularly, many staying at Robson Lodge at Kuripapango. The Department supports this use of the Park, and will work in conjunction with educational authorities to ensure that use is compatible with protection of park values. (see also policy 5.2.19 Signs).



5.2.19 Signs

- (i) A sign system will be developed in the Park which provides for safe and enjoyable use of the Park and it's facilities (see policy 5.2.20 Visitor Safety).
- (ii) Information signs will be erected at all park access points to assist park users.
- (iii) The Department will liaise with the Automobile Association and advocate that it erects directional signs on all access roads to the Park.

Explanation

Signs play a key role in visitor guidance and orientation and are important for appreciation of the Park experience.

With the development of a Conservancy Recreation Strategy, and also Sign Manual Standards, an appropriate system for the entire park will be established. All existing signs will gradually be replaced by signs which are standard throughout the Park.

The guiding principle of the Parks sign system will be minimal use of signs for the maximum effect and function.

**5.2.20 Visitor Safety**

- (i) All reasonable precautions will be taken for the safety of park users, but each person is ultimately responsible for his/her own safety.**
- (ii) Safe and responsible attitudes to use of the Park will be promoted through education and interpretive means.**
- (iii) The Department will assist and co-operate with search and rescue authorities and other authorities having responsibilities for public safety and health.**
- (iv) Concessionaires will have responsibility for public safety in respect of their operations.**
- (v) Well sited toilet facilities and water supplies will be provided at all huts, in recreation facility sites, and at other appropriate sites as necessary.**

**Explanation**

There is an element of risk in all outdoor recreational activities and it would be inappropriate and impractical to remove that risk entirely. Each person must be responsible for his or her own safety but park management can contribute to safety through information and education programmes, by provision of well maintained and well sited facilities (tracks, bridges etc) and by ensuring staff are trained in first aid and relevant outdoor skills.

Giardia, is now present in water supplies throughout New Zealand and may be in the Park. The Department will provide information to the public on how to prevent giardia and how to stop it's spread and will site and design toilet facilities to protect waterways. (See also appendix 12).

**5.2.21 Facilities for the Disabled**

- (i) Access and facilities for disabled persons will be provided, where required and practicable when developing new facilities.**
- (ii) Suitable tracks may be provided or adapted for disabled persons in areas where the terrain permits.**

**Explanation**

Under section 25 of the Disabled Persons Community Welfare Act 1975, the Department is required to make provision for access for disabled persons in any new building to which the public have access unless exemptions are obtained. In some instances this may be impracticable, (eg new huts in the interior of the park) but in general the Department will endeavour to provide facilities which are accessible to disabled persons at roadends sites.

At present most roadend facilities in the Park are not designed to enable access for the disabled. This in part reflects the rugged nature of the terrain and the traditional uses of the Park. However, with the evolving nature of recreation it is appropriate that when developing new facilities at roadends provision is made for their use by disabled persons, wherever possible. This would apply in Recreation Facility Areas such as Kuripapango picnic areas, Makahu Saddle, Lawrence roadend and Mangatutu roadend, and to other areas as is practicable.

Provision of such facilities will be considered as part of the Conservancy Recreation Strategy. This strategy will identify where/if facilities for disabled persons would be most appropriate, according to demand and the nature of the terrain.



## **5.3 MANAGEMENT**

- 5.3.1 Management Planning**
- 5.3.2 Iwi Liaison**
- 5.3.3 Park Regulations**
- 5.3.4 Honorary Rangers**
- 5.3.5 Defence and Police Training**
- 5.3.6 Cost Recovery**



### 5.3.1 Management Planning

- (i) The Department will continue to collect resource information and other planning data relevant to management of the Park, (see policy 5.1.14 Research).
- (ii) The Department will consider management policies in terms of new information on a continuous basis, and amend the plan as necessary.
- (iii) This plan will be kept under continuous review during its operative period, (ten years) and may be altered should circumstances require it (in accordance with Sections 17H and I of the Act).
- (iv) This conservation management plan will be altered if necessary, to achieve consistency with the Hawke's Bay Conservation Management Strategy once prepared.

#### Explanation

In terms of the Act management plans must be reviewed no later than ten years from their date of approval. Plans can also be amended, as necessary, in the light of increased knowledge or changed circumstances.

The Department will, through its research and ongoing estate monitoring, continue to obtain information on all aspects of the Park (natural systems and public use). In light of this information it may be desirable/necessary to amend some policies in this plan before the statutory ten year period.

The public are encouraged to submit comments or suggestions which may assist or improve park management at any time.

### 5.3.2 Iwi Liaison

The Department will co-operate and consult with the appropriate Iwi authorities on all issues of park management of concern to the tangata whenua.

#### Explanation

Throughout the management planning process, and on an ongoing basis the Department will liaise with the appropriate Iwi authority(s) and informally with the tangata whenua on all aspects of park management of concern to the Maori people. Special areas of concern may include historic site protection and interpretation, traditional Maori use of Park resources, and access through and compatible management of lands adjacent to the Park.

(See also policies 5.2.15 Traditional Maori Uses of Park Resources, 5.1.11 Archaeological, Historical and Cultural Sites, 5.1.5 Indigenous Plants and 5.1.3 Advocacy).



### 5.3.3 Park Regulations

Regulations will be formulated under the Conservation Act (Section 48(1)) to enforce certain policies in this management plan, as required.

#### Explanation

Regulations, or by-laws cover such aspects as fire control, rubbish disposal, taking of indigenous fish, and horse, dog and vehicle use in the Park.

General park by-laws will be displayed at prominent locations in the Park such as roadends or picnic areas.

Regulations will be reviewed as required to take into account changing circumstances.

5.3.4 Honorary Rangers

- (i) The honorary ranger system will be continued and encouraged.
- (ii) Training and information will be provided to honorary rangers as resources allow.

Explanation

Under the Act (Section 59(2)) honorary rangers may be appointed for the Park.

Honorary rangers assume the same responsibilities and have the same powers as warranted officers, employed by the Department. (The powers of warranted officers are listed in section 40 of the Act).

### 5.3.5 Defence and Police Training

- (i) Use of the Park for SAR training, as authorised by the Police, will be permitted consistent with protection of park values.
- (ii) Use of the Park for defence and rescue training will be regulated by issue of permits, with strict conditions to ensure protection of park values.

#### Explanation

Defence activities have occurred in the Park and also in the adjoining Kaimanawa Forest Park.

Sectors of Kaweka Forest Park may be available for defence training and SAR exercises providing the activities do not detract from recreational use and compromise park values.

Such exercises will not be permitted in any sensitive areas of the Park (eg ecological areas) or any other areas identified as having particular conservation values which may be affected by such exercises.

### 5.3.6 Cost Recovery

- (i) The cost recovery policies of the Department will be applied for use of park services and facilities, for concession management, and sale of publications where this is appropriate and applicable.
- (ii) The principle of freedom of entry and access to the Park will be maintained.

#### Explanation

Cost recovery is required by Government policy and will be applied to all commercial activities in the Park, and may be applied to facilities provided in the Park.

Charges will be reviewed and amended periodically to ensure they are equitable and realistic in light of changing conditions and in line with Government policy. In most cases charges will be made for the recovery of costs for providing the facility or service. However in the case of commercial operators there will be a rent/concession fee added to this basic charge.

(See also policies 5.2.2 Huts & 5.2.16 Recreational Concessions).

### ACKNOWLEDGEMENTS

Many people have contributed to this conservation management plan.

Special thanks to:

Staff of the Hawke's Bay, Wanganui and Tongariro/Taupo Conservancies of the Department of Conservation, and in particular Gavin Rodley (Board Secretary), Bill Fleury, Phil Mohi and other Kaweka Forest Park Staff.

Jeanette Fifield for typing this document.

The Draughting section of the Department of Conservation, Wanganui Conservancy.

Forest Research Institute, Rotorua.

Department of Survey and Land Information, Map Licence 1990/45 : Crown Copyright Reserved.

The local Maori Community.

The many individuals and organisations who provided written and oral submissions prior to this plan being formulated.

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**Part III**  
**APPENDICES**



THE DRAFT NATIONAL WATER CONSERVATION  
(MOHAKA RIVER) ORDER 1990

1. Title and commencement -

- (1) This order may be cited as the Draft National Water Conservation (Mohaka River) Order 1989.
- (2) This order shall come into force on the 28th day after the date of its notification in the Gazette.

2. Interpretation -

In this order "Act" means the Water & Soil Conservation Act 1967.

3. Outstanding Characteristics and Features -

It is hereby declared that the Mohaka River and its tributaries contain and provide the following characteristics and features:-

- (a) Outstanding wild and scenic characteristics on the Mohaka River mainstem from The Organs to Willow Flat and in the Te Hoe River Gorge:
- (b) Outstanding trout fishery above the confluence of the Te Hoe River and the Mohaka River:
- (c) Outstanding amenity for water sports on the Mohaka River mainstem from Pungahuru to Willow Flat:
- (d) Outstanding spiritual and cultural values to the tangata whenua over the whole river system.

4. Waters to be protected -

Because of the outstanding characteristics and features specified in Clause 3 of this order, all waters of the Mohaka River system are to be protected as follows:-

- (a) Except for dams on small tributaries supplying power to remote farms or dwellings, no water rights shall be granted under section 21 of the Act to dam the Mohaka River or its tributaries:
- (b) Water rights may be granted and general authorisations made for other water uses provided that the granting of such rights will not detract from the outstanding features and characteristics specified in Clause 3 of this order.

5. Scope:

- (a) Nothing in this order shall be construed as limiting the effect of the second proviso to Section 21 (1) of the Act relating to the use of water for domestic needs, for the needs of animals, and for or in connection with fire-fighting purposes.
- (b) Water rights may be granted and general authorisations made for the purposes of the construction, maintenance or protection of roads, bridges, pylons and other necessary public utilities, or for soil conservation, river protection or other activities undertaken pursuant to the Soil Conservation and Rivers Control Act 1941.

## KAIMANAWA ECOLOGICAL DISTRICT

Criteria: topography, vegetation, climate.

**TOPOGRAPHY:** a series of high ridges - Pohukura between Hautapu and Waipunga Rivers, Ahimanawa between Waipunga and Mohaka, Kaweka between Kohaka and Ngaruroro, Island (Makorako, 1726m) between Ngaruroro and Rangitikei, and Kaimanawa (1708m) between Rangitikei and Tangariro Rivers - part of North Island mountain axis with strong N-S alignment of main ridges; includes headwaters of several major rivers - Mohaka and Ngaruroro Rivers flowing to Hawkes Bay, Rangitikei R. to Manawatu coast.

**GEOLOGY:** includes Permian, Triassic and Jurassic sandstones, indurated on the W.

**CLIMATE:** driest sector of mountain axis although rainfall over mountains generally exceeds 3000mm p.a. (1600-4000mm).

**SOILS:** strongly leached volcanic ash soils on easier slopes from young rhyolitic ashes (Taupo, Waimahia) over older brown silty andesitic ashes (Tongariro); coarse textured pumice soils from reworked ash in valleys.

**VEGETATION/FLORA:** large tract of indigenous forest not greatly reduced since European settlement in region, minor areas above tree line: predominantly beech forest - red and mountain on range flanks, extensive pure mountain beech at higher altitudes; belt of silver and red beech in N and local silver beech at tree line, otherwise silver beech rare and localised. Belts of podocarp dominated forest in E (Waipunga valley and near Te Haroto) and NW (Tongariro valley). Anomalous areas of montane podocarp-hardwood forest above altitudinal limit of red beech on Ahimanawa Range on E; no kaikawaka or silver pine (compare TONGARIRO and UREWERA Regions); mountain beech forests distinctive for common occurrence of mountain toatoa throughout. Mountain toatoa dominated montane scrub rare on open tops, vegetation (frequently burnt in past) is mainly low Celmisia, Dracophyllum, Gaultheria etc.

**MAMMALS:** the vulnerable lesser short-tailed bat has been found in dense podocarp forest in the Waimarino R. valley near the border with Taupo E.D., and E of the Desert Rd. where the Waipakihi R. flows into the Tongariro R.

**BIRDS:** KAIMANAWA and Maungaharuru represent the present day southern limits of N.I. Brown Kiwi in central and eastern parts of the North Island. District also represents southernmost continuous distribution of robin in central and eastern North Island and southern limit of Long-tailed Cuckoo N of the Tararuas, despite presence of Whitehead in RUAHINE. Other birds include N.Z. Falcon; Blue Duck; Fernbird probably widespread; Yellow-crowned Parakeet present; also kaka.

**REPTILES:** green geckos in the Kaweka Range are close to the western limit for Naultinus elegans punctatus.

**MODIFICATIONS:** eastern forest area most heavily logged, part cleared for farming; western area mainly unlogged. Extensive sheep grazing earlier on tussocklands in lower Mohaka, head of Ripia, and Ngaruroro catchment, now largely abandoned; exotic forests in lower Waipunga and Ripia valleys - mainly on reverted grazing land (i.e. former tussockland gone to manuka etc.).

FLORA AND VEGETATION OF KAWEKA LAKES  
KAWEKA STATE FOREST PARK

B.R. Clarkson and A.P. Druce  
May 1984

SUMMARY

Ten vegetation types are mapped and described:

1. Aquatic plants
2. Shoreline gravelfield and sandfield
3. Shoreline herbfield
4. Alluvial fan herbfield
5. Baumea sedgeland
6. Manuka/Baumea-Carex shrub sedgeland
7. Kanuka/manuka scrub
8. Monoao-manuka shrubland
9. Beech forest
10. Grassland

The high botanical significance of the area is discussed and dedication as an 'Ecological Area' recommended. A species list compiled by A.P. Druce is appended.



FLORA AND VEGETATION OF KAWEKA LAKES  
KAWEKA STATE FOREST PARK

B.R. Clarkson and A.P. Druce,  
Botany Division, DSIR

Following a request by Conservator of Forests, Palmerston North, seeking advice on zoning the Kaweka Lakes as an Ecological Area, a party of three (Mr A.P. Druce, retired, ex Botany Division, DSIR, Taita; Mrs B.R. Clarkson, Botany Division, DSIR, Rotorua; Ms C.E. Regnier, SES, Department of Lands and Survey, based in Rotorua) carried out a botanical survey of the area from 9-11 April 1984. The survey was concentrated on the lakes and surrounding vegetation, a total area of about 60 ha (Fig. 1).

INTRODUCTION

Kaweka Lakes are two small lakes (areas about 5 ha and 8 ha) at 650 m a.s.l., 5 km north-east of Kuripapango (Napier-Taihape Road) in the southern half of Kaweka State Forest Park. Tertiary sandstones and mudstones have weathered to form flat to rolling topography around the lakes, whereas westwards the terrain rises steeply to a rugged greywacke ridge, the highest peak being Kuripapango at 1250 m a.s.l. Alluvial fans of recent origin have formed where streams drain into the lakes, mainly from the north.

Past fires have reduced much of the vegetation in the survey area to seral manuka shrubland and scrub. The vegetation immediately adjoining the eastern and southern boundaries had been reburnt, to facilitate the establishment of exotic forest, only weeks before the survey was carried out. East of this recent burn, and also extending partway north of the survey area, large tracts of former shrubland and scrub have been cleared and planted in pines.

The twin lakes were formed as a result of the damming of two stream valleys by debris from a massive slip of the greywacke ridge many thousands of years ago (pre Taupo eruption). The northern extent of the debris flow, as evidenced by the limit of the shattered greywacke on 'West Lake' foreshore, is depicted in Fig. 1. In the area of greatest deposition a hummock-and-hollow land surface was formed. Andesitic ash, which had already deeply mantled the whole area, continued to fall and covers the greywacke debris. After the Taupo eruption the hollows received an infilling of pumice. From 'West Lake' an underground stream emerges in a gully on the southern boundary of the debris flow, some 500 m from the outlet. No similar outflow was discovered for 'East Lake'. However, a seepage along the western part of the waist of land between the two lakes suggests that East Lake may periodically overflow into the slightly lower 'West Lake'.

'West Lake' has a fluctuating water level, whereas 'East Lake' is relatively stable, resulting in markedly different shoreline habitats. When the water level is low (as it was at the time of our visit) 'West Lake' has a gravelly and sandy shoreline, sparsely covered with various herbs, grasses, sedges and rushes, or else herbfield mats. In contrast, 'East Lake' is surrounded for the most part by Baumea rubiginosa sedgeland.

Although small, the survey area, with its lakes, seral shrubland and scrub, forest remnants, and pumice-infilled hollows, has a high diversity of vegetation types and a large number of plant species (288 indigenous and 59 adventives recorded; Appendix 1).

## VEGETATION TYPES (Fig. 1)

### A. 'West Lake'

#### 1. Aquatic plants

Aquatic plants are few and mainly concentrated in the shallow water at the north-eastern end of the lake. The more common species are Myriophyllum propinquum, Potamogeton cheesemani and the adventives Potamogeton crispus and Ottelia ovalifolia.

#### 2. Shoreline gravelfield and sandfield

The lake shoreline in the southern sector comprises a shattered greywacke gravelfield which changes to a sandfield north of the limit of the greywacke slip debris. The shoreline is sparsely vegetated overall and characterised by scattered individuals of Graphalium involucreatum, G. limosum, Wahlenbergia colensoi, Lechnagrostis filiformis, Rorippa palustris, seedlings of manuka (Leptospermum scoparium), Centipeda sp., Deschampsia caespitosa, Lepidosperma australe and the adventives Cirsium vulgare and Linum catharticum. Turfy patches of Galium sp. (unnamed, aff. G. perpusillum), Lilaeopsis sp. (cf. L. novae-zelandiae), Centella uniflora and Dichondra sp. (cf. D. brevifolia) are present on the lower shore.

#### 3. Shoreline herbfield

Herbaceous species dominate shoreline seepages and poorly-drained alluvial fans, forming up to 100% cover at the northern end of the lake. In the north-west bay vegetation zonation is particularly well developed. Here, submerged lax mats of Myriophyllum propinquum and Potamogeton cheesemani give way at the water's edge to dense turfs of Myriophyllum propinquum, Hydrocotyle hydrophila, Hypselo rivalis and Lilaeopsis sp. (cf. L. novae-zelandiae). Higher up the shore is a zone of grasses, namely Lechnagrostis striata and L. filiformis, which merges into a band of sedges, e.g. Eleocharis acuta and Carex dipsacea, and ultimately grades into manuka scrub of Type 7.

In the north-east sector where the stream drains into the lake the dominant species are Eleocharis acuta, Gnaphalium spp. and the adventive grass, browntop (Agrostis tenuis). Some patches of raupo (Typha orientalis) also occur here.

#### 4. Alluvial fan herbfield

The alluvial fan associated with the main drainage stream and bounded to the south by vegetation of Type 3, has a thick cover of abundant Juncus gregiflorus, Yorkshire fog (Holcus lanatus) and creeping buttercup (Ranunculus repens), and occasional Carex geminata, C. sinclairii and Potentilla anserinoides. A few scattered manuka shrubs are also present.

B. 'East Lake'5. Baumea sedgeland

Around the fringes of the lake is a Baumea rubiginosa zone, which varies from about 1 m wide along parts of the southern shore to more than 20 m wide at the northern end, and covers large areas of low-lying ground to the east. In places, scattered manuka up to 1 m high, overtops the B. rubiginosa. On the lake side of the zone, in deeper water, a belt of Eleocharis sphacelata is usually present.

6. Manuka/Baumea-Carex shrub sedgeland

An area of impeded drainage on the alluvial fan at the north end of the lake is dominated by individuals or clumps of manuka scattered over a lower canopy of Baumea rubiginosa, B. tenax and Carex echinata. Patches of flax (Phormium tenax) also occur here. Other common species are four-square sedge (Lepidosperma australe), Schoenus pauciflorus, umbrella fern (Gleichenia dicarpa) and Scirpus fluitans.

C. Other Areas7. Kanuka/manuka scrub

Second-growth scrub dominated by manuka (Leptospermum scoparium) up to 5 m tall covers most of the land surrounding the lakes. Kanuka (Kunzea ericoides) overtops the manuka in many places, becoming more frequent westwards and finally forming a closed-canopy kanuka forest up to 12 m tall. Seedlings and saplings of Carpodetus serratus and a few of red beech (Nothofagus fusca) were noted in this short forest.

The understory is relatively sparse with a low (usually less than 1 m) shrub layer of Gaultheria antipoda, prickly mingimingi (Cyathodes juniperina), Olearia furfuracea, bracken (Pteridium esculentum) and Coprosma rhamnoides. Ground cover species include Uncinia uncinata, Blechnum sp. (Lomaria latifolia), Lycopodium volubile and Poa anceps var. anceps, with Clematis forsteri sprawling over both the ground and shrub layers.

The margins of some hollows within this scrub contains stands of monoao (Dracophyllum subulatum) which grade into grassland of Type 10.

8. Monoao-manuka shrubland

North-east of 'East lake' is an extensive area of monoao-manuka shrubland interspersed with large, sparsely vegetated erosion patches where the commoner species are bracken, woolly moss (Racomitrium lanuginosum) and Cassinia vauvilliersii. The presence of numerous dead manuka and occasional kanuka stems, together with the above-mentioned early successional species, indicate a more recent burn than in vegetation of Type 7.

9. Beech forest

Beech forest stands, comprising Nothofagus solandri and N. fusca, are best developed in sheltered valleys running down from Kuripapango Peak; they were not investigated.

## 10. Grassland

Hollows in the hummock-and-hollow land surface are dominated by adventive grasses such as Chewings fescue (Festuca rubra), browntop (Agrostis tenuis) and swards of the herb Hieracium pilosella. Monoao shrubs are scattered on the fringes of this type and a few mature cabbage trees grow only in a large hollow south of 'West Lake'.

BOTANICAL SIGNIFICANCE

Kaweka Lakes are of considerable botanical significance for the following reasons:

1. For such a small area there are large numbers of species and vegetation types present.
2. Four species of national significance, due to their very local distribution in New Zealand, grow in the survey area:
  - (a) Amphibromus fluitans - a very rare grass recorded in only a few North Island localities, e.g. L. Wairarapa.
  - (b) Galium sp. (unnamed; aff. G. perpusillum) - a taxonomically undescribed herb. NW Ruahine Ra. is the only other NI locality known. Also found in SI locally.
  - (c) Rorippa palustris - a herb which grows on a few lake shores in NZ.
  - (d) Deschampsia caespitosa var. macrantha - a grass found in a few wet places in NZ.
3. Eight species uncommon in New Zealand grow in the survey area:
  - (a) Carex cirrhosa - sedge
  - (b) Gastrodia minor - orchid
  - (c) Pterostylis foliata - orchid
  - (d) P. micromega - orchid
  - (e) Lachnagrostis striata - grass
  - (f) Senecio sp. (unnamed; aff. S. glaucophyllus) - herb
  - (g) Hypsela rivalis - herb
  - (h) Ranunculus limosella - herb
4. It would be a useful place to study vegetation succession as the succession pathway is evident, i.e. all seral vegetation (particularly Types 7 & 8) should eventually revert to beech forest.

5. The two different lakes, less than 100 m apart, constitute a very special ecological situation. Contrasting faunal populations probably also occur. Here, again, the area should prove ideal for detailed study.

#### CONCLUSIONS AND RECOMMENDATIONS

1. The results of this survey show that, by evaluation on botanical grounds alone, the Kaweka Lakes area warrants protection by dedication as an Ecological Area.
2. The boundaries of the proposed Ecological Area should, as far as is still feasible, follow catchment boundaries.

Suggested boundaries are:

north-east to the pine forest margin, east to the margin of the very recently burnt land, south to the 'West Lake' outlet stream, and west and north-west to the crest of the graywacke range encompassing catchments of streams draining into the lakes (Fig. 2). This incorporates an area of about 250 ha which is considered to include the minimum mature vegetation required to provide a seed source enabling vegetation successions to proceed as naturally as possible.

3. The vehicle access road should be closed at points x and y (see Fig. 1), and only a walking track maintained from there on. This will minimise pressure on the surrounding vegetation and prevent boating in the lakes, which leads to the introduction of noxious aquatic weeds.
4. Management to foster the envisaged natural succession from shrubland to forest will require eradication of self-sown pines when they appear.
5. The vegetation condition should be regularly monitored, and introduced animals controlled when necessary, to ensure that the botanical values of the Kaweka Lakes are not compromised.

#### ACKNOWLEDGEMENTS

Mr J.L. Nicholls and Dr B.O. Clarkson provided useful comments on the manuscript.



HIGHER PLANTS (LYCOPODS, FERNS, GYMNOSPERMS, FLOWERING PLANTS) IN VICINITY OF KAWEKA LAKES†, EASTERN FOOT OF KURIPAPANGO HILL, KAWEKA RANGE, 600-750 M.

†Grid ref. N123 81-55-.

A.P. Druce, Botany Division, D.S.I.R., 1972  
(Revised: Apr. 1974, Dec. 1974, July 1975,  
June 1976, May 1977, Oct. 1977, June 1980,  
Oct. 1981, Oct. 1982, May 1984)

(Based on visits 1957, 1960, 1964, 1974, 1984)  
(unc - uncommon)

X: National importance

O: Uncommon in NZ

INDIGENOUS SPECIES

GYMNOSPERM TREES AND SHRUBS

Phyllocladus aspleniifolius var.  
alpinus (unc)  
Podocarpus hallii X P. nivalis (unc)

Pseudopanax arboreus var.  
arboreus (unc)  
P. colensoi s.s. (unc)

MONOCOT TREES

Cordyline australis

DICOT TREES

Carpodetus serratus  
Grisebinia littoralis (unc)  
Nothofagus fusca (unc)  
N. solandri (unc)  
N. fusca X N. solandri (unc)  
Pittosporum ralphii  
P. tenuifolium X P. ralphii (unc)

DICOT SHRUBS

Brachyglottis repanda s.s. (unc)  
Carmichaelia arborea var. (C.  
flagelliformis) (incl. C. hookeri  
(unc)  
Cassinia vauvilliersii (incl. C. ful-  
vida var. montana)  
Coprosma acerosa (incl. C.  
brunnea) (unc)  
C. cheesemani s.s. (unc)  
C. propinqua ssp. propinqua  
(incl. C. latusecula)

- C. thamnoides* ssp. *thamnoides* *Hebe stricta* var. *stricta*  
 (incl. *C. polymorpha*) *Helichrysum aggregatum* var.  
*C. robusta* (unc) *aggregatum* (unc)  
*C. rugosa* ssp. *rugosa* *Kunzea ericoides* var.  
*C. sp. a)* (unnamed; aff. *C. cheesemani*) (lvs broader than in *C.*  
*cheesemani*) (unc) *Leptospermum scoparium* va  
*Leucopogon fasciculatus*  
*L. fraseri* s.s.  
*C. sp. b)* (unnamed; included in  
*C. parviflora* by Oliver, 1935,  
 and others) (If undersurface  
 not minutely hairy as is usual  
 in *C. parviflora*; drupes vs. un-  
 pigmented, occ. purplish red) *Olearia arborescens* (unc)  
*O. furfuracea* s.s. (incl. *O. f.* var.  
*angustata*)  
*O. nummularifolia* var. *nummul*  
*arifolia*  
*C. propinqua* X *C. robusta* *Pernettya macrostigma*  
*Coriaria arborea* var. *arborea* *Pimelea longifolia* var. *longi*  
*folia* (unc)  
*C. kingiana* *P. prostrata* s.s.  
*C. arborea* X *C. kingiana* (unc)  
*C. a.* X *C. pteridoides* (unc)  
*Corokia cotoneaster* var.  
*cotoneaster* (unc) **DICOT LIANES AND RELATED PLAN**  
*Cyathodes empetifolia* *Clematis forsteri* (incl. *C. austri*  
*Hookeriana*, and *C. petriei*)  
*C. juniperina* var. (lvs vs. < 1 cm.  
 X < 1 mm) *Muehlenbeckia australis*  
*M. axillaris*  
*M. australis* X *M. axillaris* (unc)  
*Dracophyllum subulatum* *Rubus cissoides* var. (leaflet  
 narrower than in var.  
*Epactis alpina* *cissoides*) (unc)  
*Gaultheria antipoda*  
*G. sp.* (unnamed; included in *G.*  
*depressa*, as var. *novae-zeland-*  
*iae*, by Franklin 1962) **LYCOPODS**  
*G. antipoda* X *G. sp.* (unnamed) *Lycopodium australianum* (vi  
*G. a.* X *Pernettya macrostigma* *L. fastigiatum*



*L. scariosum*  
*L. volubile*

### FERNS

*Adiantum cunninghamii* (unc)  
*Asplenium flabellifolium* (unc)  
*A. flaccidum* ssp. *flaccidum* (unc)  
*A. hookerianum*  
*A. terrestre* ssp. *terrestre*  
*A. flaccidum* X *A. hookerianum*  
(unc)  
*Blechnum chambersii*  
*B. colensoi* (unc)  
*B. fluviatile*  
*B. penna-marina*  
*B. minus*  
*B. vulcanicum*  
*B. sp. (a)* (*B. capense* agg.) (common  
sp.; lower pinnae reduced in  
length)  
*B. sp. (b)* (*Lomaria latifolia*)  
*Botrychium australe* (unc)  
*Ctenopteris heterophylla* (unc)  
*Dicksonia fibrosa* (unc)  
*Gleichenia dicarpa*  
*Histiopteris incisa*  
*Hymenophyllum cypressiforme*  
(unc)  
*H. multifidum*  
*Hypolepis* sp. (*H. tenuifolia* auct.  
N.Z., non *H. tenuifolia* s.s.)

*Leptopteris hymenophylloides*  
(unc)

*Ophioglossum coriaceum*  
*Paesia scaberula*  
*Pellaea rotundifolia* (unc)  
*Phymatosorus diversifolius* (unc)  
*Polystichum richardii*  
*P. vestitum* (unc)  
*Pteridium esculentum*  
*Pyttosia serpens* (unc)

### ORCHIDS

*Aporostylis bifolia* (unc)  
*Caladenia catenata*  
*Chiloglottis cornuta*  
*Corybas macranthus*  
*C. oblongus* (unc)  
*C. rivularis* (syn. *C. orbicularis*)  
(unc)  
*C. trilobus*  
*Gastrodia cunninghamii*  
*G. minor* (unc) 0  
*Microtis unifolia*  
*Orthoceras strictum*  
*Prasophyllum colensoi*  
*P. nudum* (unc)  
*Pterostylis banksii* var. *patens*  
*P. foliata* (unc) 0  
*P. micromega* (unc) 0 (NB Page X)  
*P. sp.* (unnamed; aff. *P. graminea*  
and *P. montana*) (unc)  
*Spiranthes siemensis* ssp.  
*australis* (unc)

*Thelymitra decora*  
*T. hatchii* (unc)  
*T. longifolia*  
*T. pauciflora*  
*T. venosa*

### GRASSES

*Amphibromus fluitans* (unc) X  
*Chionochloa rubra*  
*Cortaderia fulvida*  
*Deschampsia caespitosa* var.  
*macrantha* X  
*Deyeuxia avenoides* (incl. *D. a.*  
 var. *brachyantha*)  
*D. sp.* (*D. quadrisetia* agg.)  
*Dichelachne chinata*  
*Echinopogon ovatus*  
*Ehrharta stipoides*  
*Elymus sp.* (*E. rectisetus* agg.)

*Hierochloa redolens*  
*Lachnagrostis filiformis* s.s.  
*L. striata* 0  
*L. sp.* (unnamed; included in *L.*  
*filiformis*, as var. *semi-glabra*,  
 by Zotov (1965))  
*L. filiformis* X *L. striata*  
*Poa anceps* var. *anceps*  
*P. colensoi* (incl. *P. c.* var. *brevilig-*  
*ulata*)

*Pimbecilla* s.s.  
*P. sp.* (*P. laevis* auct.)  
*Rytidosperma clavatum*  
*R. gracile*  
*R. setifolium*  
*R. viride*

*Trisetum sp. (a)* (unnamed; aff.  
*T. antarcticum*) (lf sheath  
 distinctly hairy)  
*T. sp. (b)* (unnamed; aff. *T. ant-*  
*arcticum*) (lf sheath glabrous  
 tubular but soon splitting)  
*T. sp. (c)* (unnamed; plant slender  
 lf sheath glabrous or nearly s.

### SEDGES

*Baumea rubiginosa*  
*B. tenax* (unc)  
*Carex breviculmis*  
*C. cithrosa* (unc) 0  
*C. dipsacea* var. (*C. tahcata*)  
*C. dissita*  
*C. echinata* var. (*C. stellulata*  
 var. *australis*)  
*C. flagellifera*  
*C. gaudichaudiana*  
*C. inversa*  
*C. maorica*  
*C. secta* s.s.  
*C. sinclairii*

*C. solandri*  
*C. testacea* s.s. (unc)  
*C. virgata*  
*C. sp.* (cf. *C. coriacea* and *C. geminata*)  
*Carpha alpina*  
*Eleocharis acuta*  
*E. gracilis*  
*E. sphacelata*  
*Isolepis fluitans*  
*I. poltsii*  
*I. reticulata*  
*I. subtilissima*  
*I. sp.* (*Scirpus sulcatus* var. *distigmatus*)  
*Uncinia rubra*  
*U. rupestris*  
*U. scabra*  
*U. uncinata*

### RUSHES

*Juncus gragiflorus*  
*J. planifolius*  
*J. novae-zelandiae*  
*Luzula decipiens* (unc)  
*L. migrata*  
*L. picta* s.s.  
*L. subclavata* (unc)

### MONOCOT HERBS OTHER THAN ORCHIDS, GRASSES, SEDGES, RUSHES

*Arthropodium candidum* (unc)  
*Astelia fragrans* (unc)  
*Lemna minor*  
*Phormium cookianum*  
*P. tenax*  
*Potamogeton cheesemanii*  
*P. suboblongus*  
*Triglochin striatum*  
*Typha orientalis*

### COMPOSITE HERBS

*Brachyglottis lagopus* (unc)  
*Celmisia glandulosa* var. *glandulosa* (unc)  
*C. gracilentata* var.  
*C. spectabilis* var. *spectabilis*  
*C. setacea*  
*Centipeda* sp.  
*Craspedia minor* var. *minor* (incl. *C. major*)  
*C. viscosa*  
*C. sp.* (unnamed) (summer-green bog plant; capitula 1.0-1.5 cm diam.)  
*Guaphalium audax* s.s.  
*G. delicatum*  
*G. gymnocephalum*  
*G. involucratum*

*Thelymitra decora*  
*T. hatchii* (unc)  
*T. longifolia*  
*T. pauciflora*  
*T. venosa*

*P. imbecilla* s.s.  
*P. sp.* (*P. laevis* auct.)  
*Rytidosperma clavatum*  
*R. gracile*  
*R. setifolium*  
*R. viride*

### GRASSES

*Amphibromus fluitans* (unc) X  
*Chionochloa rubra*  
*Cortaderia fulvida*  
*Deschampsia caespitosa* var.  
*macrantha* X  
*Deyeuxia avenoides* (incl. *D. a.*  
*var. brachyantha*)  
*D. sp.* (*D. quadrisetia* agg.)  
*Dichelachne chinata*  
*Echinopogon ovatus*  
*Ehrharta stipoides*  
*Elymus sp.* (*E. rectisetus* agg.)

*Trisetum sp. (a)* (unnamed; aff.  
*T. antarcticum*) (lf sheath  
 distinctly hairy)  
*T. sp. (b)* (unnamed; aff. *T. ant-*  
*arcticum*) (lf sheath glabrous  
 tubular but soon splitting)  
*T. sp. (c)* (unnamed; plant slender  
 lf sheath glabrous or nearly s.

*Heterochloa redolens*  
*Lachnagrostis filiformis* s.s.  
*L. striata* 0  
*L. sp.* (unnamed; included in *L.*  
*filiformis*, as var. *semi-glabra*,  
 by Zotov 1965)  
*L. filiformis* X *L. striata*  
*Poa anceps* var. *anceps*  
*P. colensoi* (incl. *P. c.* var. *brevilig-*  
*ulata*)

### SEDGES

*Baumea rubiginosa*  
*B. tenax* (unc)  
*Carex breviculmis*  
*C. cithrosa* (unc) 0  
*C. dipsacea* var. (*C. talhata*)  
*C. dissita*  
*C. echinata* var. (*C. stellata*  
*var. australis*)  
*C. flagellifera*  
*C. gaudichaudiana*  
*C. inversa*  
*C. maorica*  
*C. secta* s.s.  
*C. sinclairii*

*C. solandri*  
*C. testacea* s.s. (unc)  
*C. virgata*  
*C. sp.* (cf. *C. coriacea* and *C. geminata*)  
*Carpha alpina*  
*Eleocharis acuta*  
*E. gracilis*  
*E. sphacelata*  
*Isolapis fluitans*  
*I. poltsii*  
*I. reticulatis*  
*I. subtilissima*  
*I. sp.* (*Scirpus sulcatus* var. *distigmatus*)  
*Uncinia rubra*  
*U. rupestris*  
*U. scabra*  
*U. uncinata*

### RUSHES

*Juncus gragiflorus*  
*J. planifolius*  
*J. novae-zelandiae*  
*Luzula decipiens* (unc)  
*L. migrata*  
*L. picta* s.s.  
*L. subclavata* (unc)

### MONOCOT HERBS OTHER THAN ORCHIDS, GRASSES, SEDGES, RUSHES

*Arthropodium candidum* (unc)  
*Astelia fragrans* (unc)  
*Lemna minor*  
*Phormium cookianum*  
*P. tenax*  
*Potamogeton cheesemanni*  
*P. suboblongus*  
*Triglochin striatum*  
*Typha orientalis*

### COMPOSITE HERBS

*Brachyglottis lagopus* (unc)  
*Celmisia glandulosa* var. *glandulosa* (unc)  
*C. gracilentata* var.  
*C. spectabilis* var. *spectabilis*  
*C. setacea*  
*Centipeda* sp.  
*Craspedia minor* var. *minor* (incl. *C. major*)  
*C. viscosa*  
*C. sp.* (unnamed) (summer-green bog plant; capitula 1.0-1.5 cm diam.)  
*Gnaphalium audax* s.s.  
*G. delicatum*  
*G. gymnocephalum*  
*G. involucratum*

- G. limosum*  
*G. sphaericum*  
*G. sp.* (unnamed; aff. *G. kerriense*)  
 (lvs shorter, and capitula smaller,  
 than in *G. kerriense*)  
*Helichrysum bellidioides* s.s.  
*H. filicaule* ..  
*H. sp.* (unnamed; aff. *H. bellidioides*)  
 ("H. alpinum" of Cockayne 1928)  
 (lvs and capitula larger than in  
*H. bellidioides*)  
*Lagenifera pumila*  
*Microseris scapigera*  
*Pseudognaphalium sp.* (*P. luteo-*  
*album* agg.) (lvs mostly linear-  
 spatulate to linear, acute)  
*Raoulia albo-sericea* (unc)  
*R. tenuicaulis* (incl. *R. t.* var. *dimorpha*  
 and *R. t.* var. *pusilla*)  
*Senecio glaucophyllus* ssp. *raoulii*  
 (unc)  
*S. minimus*  
*S. quadridentatus*  
*S. sp.* (unnamed; aff. *S. glaucophyllus*)  
 (capitula discoid) 0  
*Vittadinia australis* s.s.
- A. sp.* (unnamed; aff. *A. anserini-*  
*folia*)  
*Aciphylla sp.* (unnamed; aff. *A.*  
*squarrosa*) (unc)  
*Anisotome aromatica* (unc)  
*Cardamine sp. (a)* (*C. debilis* agg.)  
 ("Long Style" of Pritchard 1957)  
*C. sp. (b)* (*C. debilis* agg.) ("Narrow  
 Petal" of Pritchard 1957)  
*C. sp. (c)* (*C. debilis* agg.) ("Glossy  
 Leaf" of Pritchard 1957)  
*Centella uniflora*  
*Dichondra repens* var.  
*D. sp.* (cf. *D. brevifolia*)  
*Drosera binata*  
*D. peltata* ssp. *auriculata*  
*Epilobium alsinoides* s.s.  
*E. atriplicifolium* s.s.  
*E. brunnescens* s.s.  
*E. billardierianum* s.s. (unc)  
*E. chionanthum*  
*E. cinereum*  
*E. insulare*  
*E. komarovianum*  
*E. glabellum* s.s. (unc)  
*E. melanocaulon* (unc)  
*E. microphyllum* (unc)  
*E. nettetoides*

#### DICOT HERBS OTHER THAN COMPOSITES

- Acaena anserinifolia*  
*A. novae-zelandiae*

- E. microphyllum* (unc)  
*E. nettetoides*

- E. nummularifolium*  
*E. pedunculare* (unc)  
*E. pubens*  
*E. rotundifolium*  
*E. tenuipes*  
*E. sp.* (unnamed; included in *E. brunni-Mentha cunninghamii* *escens*, as *ssp. minutiflorum*, by Raven and Englehorn, 1971)  
*Euphrasia cuneata*  
*Galium perpusillum* s.s.  
*G. propinquum*  
*G. trilobum* (unc)  
*G. sp.* (unnamed; aff. *G. perpusillum*) (lvs. wider than stipules, elliptic-lanceolate; apex rounded to subacute) X  
*Gentiana grisebachii* (unc)  
*Geranium microphyllum*  
*G. potentilloides* var. *potentilloides*  
*G. sessiliflorum* var. *novae-zelandiae*  
*Glossostigma elatinioides*  
*Gonocarpus aggregatus*  
*G. micranthus* ssp. *micranthus*  
*Gratiola sexdentata*  
*Gunnera protepens* (incl. *G. flavida*) (unc)  
*Hydrocotyle elongata*  
*H. hydrophila*  
*H. microphylla*  
*H. moschata*  
*H. novae-zelandiae* s.s.  
*Hypericum japonicum*  
*Hypsela rivalis* O  
*Lilaeopsis sp.* (cf. *L. novae-zelandiae*)  
*Linum monogynum*  
*Montia fontana* s.s.  
*Myriophyllum pedunculatum* s.  
*novae-zelandiae*  
*M. propinquum*  
*M. triphyllum*  
*Nertera ciliata*  
*N. depressa* (incl. *N. cunninghamii*)  
*N. setulosa*  
*Oreomyrrhis ramosa* (unc)  
*O. sp.* (unnamed; included in *O. colensoi*, as var. *denticatula*, by Allan 1961) (unc)  
*Durisia macrophylla* var. *robusta* (unc)  
*Oxalis exilis*  
*Pelargonium inodorum* (unc)  
*Plantago raoulii* var. (lvs. narrowly elliptic)  
*Potentilla anserinoides*  
*Pratia angulata*  
*P. perpusilla*  
*Ranunculus glabrifolius*  
*R. hirtos* s.s.  
*R. limosella* (unc) O  
*R. macropus* (unc)  
*R. rivularis*

*Rorippa palustris* 0  
*Rumex flexuosus* (unc)  
*Scleranthus uniflorus* (unc)  
*Stackhousia minima*  
*Urtica incisa*  
*Viola cunninghamii*  
*V. lyallii*  
*Nahlenbergia albomarginata*  
 var. *pygmaea*  
*W. colensoi*  
*W. sp.* (cf. *W. gracilis*)

No. of indigenous species: 288.

ADVENTIVE SPECIES

GRASSES

*Agrostis tenuis*  
*Aira caryophylla*  
*Anthoxanthum odoratum*  
*Bromus mollis*  
*Dactylis glomerata*  
*Festuca arundinacea* sl. (unc)  
*F. rubra* ssp. *commutata*  
*Holcus lanatus*  
*Poa pratensis*  
*Rytidosperma racemosum*  
*Vulpia bromoides*

RUSHES

*Juncus articulatus*  
*J. bufonius*  
*J. effusus*  
*J. tenuis*

MONOCOT HERBS OTHER THAN

GRASSES, SEDGES, RUSHES

*Ottelia ovalifolia*  
*Potamogeton crispus*

COMPOSITE HERBS

*Cirsium arvense*  
*C. vulgare*  
*Conyza floribunda*  
*Crepis capillaris*  
*Gnaphalium spicatum*

SEDGES

*Carex ovalis*



*Hieracium pilosella*  
*Hypochoeris radicata*  
*Leontodon taraxacoides*  
*Mycelis muralis*  
*Senecio jacobaea*  
*S. sylvatica*  
*Sonchus asper*  
*Taraxacum officinale* s.l.

*Lotus pedunculatus*  
*Myosotis laxa* ssp. *caespitosa*  
*Plantago major*  
*Polygonum hydropiper*  
*P. prostratum*  
*Prunella vulgaris*  
*Ranunculus repens*  
*R. sp.* (*R. fluitans* auct. N.Z.)  
*Rumex acetosella*  
*R. crispus*  
*R. obtusifolius*  
*Sagina procumbens*  
*Solanum nodiflorum*  
*Trifolium dubium*  
*T. repens*  
*Verbascum creticum*  
*V. thapsis*  
*Veronica sp.*  
*Wahlenbergia marginata*

### DICOT HERBS OTHER THAN

#### COMPOSITES

*Acaena agnipila*  
*Anagallis arvensis*  
*Actium sp.* (unc)  
*Arenaria serpyllifolia*  
*Centaurium erythraea*  
*Cerastium fontanum* ssp. *triviale*  
*Epilobium ciliatum*  
*Hypericum humifusum*  
*Linum catharticum*

No. of adventive species: 59

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NB

Pterostylus micromega is now considered to be of greater importance than when this report was written. It will be listed as vulnerable in the updated threatened plant checklist. (B Clarkson pers comm 1990).

ANIMAL SPECIES RECORDED IN KAWEKA FOREST PARK <sup>1</sup>

COMMON NAME	SCIENTIFIC NAME	DISTRIBUTION CLASS *
Bat (long-tailed)	<i>Chalinolobus tuberculatus</i>	E
Bellbird	<i>Anthornis melanura</i>	E
Blackbird	<i>Turdus merula</i>	I
Brown Quail	<i>Synoicus ypsilophorus</i>	I
Chaffinch	<i>Fringilla coelebs gengteri</i>	I
Cuckoo (long-tailed)	<i>Eudynamys taitensis</i>	E
Cuckoo (shinning)	<i>Chrysococcyx lucidus lucidus</i>	Es
Duck (Blue)	<i>Hymenolaimus malacorhynchos</i>	E
Duck (Grey)	<i>Anas superciliosa</i>	N
Duck (Mallard)	<i>Anas platyrhynchos</i>	I
Duck (Paradise Shelduck)	<i>Tadorna variegata</i>	E
Falcon (New Zealand)	<i>Falco novaeseelandiae</i>	E
Fantail (North Island)	<i>Rhipidura fuliginosa placabilis</i>	E
Fernbird (North Island)	<i>Bowdleria punctata vealeae</i>	E
Gecko	<i>Naultinus spp</i>	E
Goldfinch	<i>Carduelis carduelis</i>	I
Greenfinch	<i>Carduelis chloris</i>	I
Grey warbler	<i>Gerygone igata</i>	E
Gull (Black-backed)	<i>Larus dominicanus</i>	N
Harrierhawk (Australasian)	<i>Circus approximans gouldi</i>	N
Hedgesparrow	<i>Prunella modularis</i>	I
Heron (White-faced)	<i>Ardea novaehollandiae</i>	N
Kaka (North Island)	<i>Nestor meridionalis septentrionalis</i>	E
Kingfisher (New Zealand)	<i>Haicyon sancta</i>	E
Kiwi (North Island Brown)	<i>Apteryx australis mantelli</i>	E
Magpie (White-backed)	<i>Gymnorhina tibicen hypoleuca</i>	I
Magpie (Black-backed)	<i>Gymnorhina tibicen tibicen</i>	I
Morepork	<i>Ninox novaeseelandiae</i>	E
Parakeet (yellow-crowned)	<i>Cyanoramphus auriceps auriceps</i>	E
Pheasant	<i>Phasianus colchicus</i>	I
Pied Stilt	<i>Himantopus himantopus leucocephalus</i>	N
Pied tit	<i>Petroica macrocephala toitoi</i>	E
Pigeon (New Zealand)	<i>Hemiphaga novaeseelandiae novaeseelandiae</i>	E
Pipit (New Zealand)	<i>Anthus novaeseelandiae</i>	E
Pukeko	<i>Porphyrio porphyrio</i>	N
Quail (Californian)	<i>Lophortyx californica</i>	I
Red pool	<i>Carduelis flammea</i>	I
Rifleman (North Island)	<i>Acanthisitta chlorisgranti</i>	E
Robin (North Island)	<i>Petroica australis longpipes</i>	E
Rook	<i>Corvus frugilegus frugilegus</i>	I
Shag (Black)	<i>Phalacrocorax carbo novaehollandiae</i>	N
Shag (Little)	<i>Phalacrocorax melanoleucos brevirostris</i>	N
Silvereye	<i>Zosterops lateralis</i>	N
Skink	<i>Leiopisma spp</i>	E
Skylark	<i>Alauda arvensis</i>	I
Snail	<i>Powelliphanta spp,</i> <i>Wainuia spp</i>	E
Sparrow (House)	<i>Passer domesticus</i>	I
Spurwinged plover	<i>Vanellus miles novaehollandiae</i>	N
Starling	<i>Sturnus vulgaris</i>	I
Swallow (welcome)	<i>Hirundo tahitica</i>	N
Thrush (song)	<i>Turdus philomelos</i>	I
Tui	<i>Prothemadera novaeseelandiae</i>	E
Whitehead	<i>Mohoua albicilla</i>	E
Yellowhammer	<i>Emberiza citrinella</i>	I

Reference is the OSNZ - "The Atlas of Bird Distribution in New Zealand" in the case of birds.

ANIMAL SPECIES RECORDED IN KAWEKA FOREST PARK <sup>1</sup>

COMMON NAME	SCIENTIFIC NAME	DISTRIBUTION CLASS *
Deer (Red)	<i>Cervus elaphus scoticus</i>	I
Deer (Sika)	<i>Cervus nippon</i>	I
Ferret	<i>Mustela putorius</i>	I
Goat	<i>Capra hircus</i>	I
Hedgehog	<i>Erinaceus europaeus</i>	I
Hare	<i>Lepus europaeus occidentalis</i>	I
Mouse	<i>Mus musculus</i>	I
Pig	<i>Sus scrofa</i>	I
Possum	<i>Trichosurus vulpecula</i>	I
Rabbit	<i>Oryctolagus cuniculus cuniculus</i>	I
Rat (ship)	<i>Rattus rattus</i>	I
Rat (brown)	<i>Rattus norvegicus</i>	I
Stoat	<i>Mustela erminea</i>	I
Weasel	<i>Mustela nivalis</i>	I
Eel (longfinned)	<i>Anguilla dieffenbachii</i>	N
Eel (shortfinned)	<i>Anguilla australis</i>	N
Common Smelt	<i>Retropinna retropinna</i>	N
Koaro	<i>Galaxias brevipinnis</i>	N
Inanga	<i>Galaxias maculatus</i>	N
Common bully	<i>Gobiomorphus cotidianus</i>	N
Torrent fish	<i>Chermarrichthys fosteri</i>	N
Black flounder	<i>Rhombosolea retiaria</i>	N
Brown trout	<i>Salmo trutta</i>	I
Rainbow trout	<i>Salmo gairdnerii</i>	I
Dwarf galaxias	<i>Galaxias divergens</i>	N
Cran's bully	<i>Gobiomorphus basalis</i>	N
Upland bully	<i>Gobiomorphus breviceps</i>	N
Goldfish	<i>Carassius auratus</i>	I
Koura (freshwater crayfish)	<i>Paranephrops planifrons</i>	E

\* Distribution Classification (Bell, Brian, D)

E = Endemic Species (A species which is confined to New Zealand and is not found elsewhere. It includes species which breed only in New Zealand but disperse or migrate to other countries in the non breeding season or as sub adults).

Es = Endemic Species (A subspecies or geographical race which is confined to New Zealand. other subspecies of the species occur in other parts of the World).

N = Indigenous Species (A species which occurs naturally in other countries as well as New Zealand).

I = Introduced Species (A species which has been transported to New Zealand and helped establish, by man).

**ENDANGERED, THREATENED <sup>1</sup> AND RARE WILDLIFE SPECIES RECORDED IN THE PARK <sup>2</sup>**  
(Bell, B D 1986)

SPECIES	CONSERVATION STATUS	DISTRIBUTION CLASS	COMMENT
1. Long-tailed Bat ( <u>Chalinolobus tuberculatus</u> )	Threatened	Endemic	Under threat by habitat loss and predation.
2. North Island Brown Kiwi ( <u>Apteryx australis mantelli</u> )	Threatened	Endemic	Threatened by land clearance. Also vulnerable to accidental kills by pig hunting and possum trapping.
3. Blue Duck ( <u>Hymenolaimus malacorhynchus</u> )	Threatened	Endemic	Declining population being affected by river manipulation particularly for hydro development.
4. New Zealand Falcon ( <u>Falco novaeseelandiae</u> )	Threatened	Endemic	Population still being eroded by illegal shooting.
5. North Island Kaka ( <u>Nestor meridionalis septentrionalis</u> )	Threatened	Endemic	Limited distribution. Threatened locally by loss of habitat (felling of indigenous forest).
6. Long-tailed Cuckoo ( <u>Eudynamys taitensis</u> )	Rare	Endemic	
7. North Island fernbird ( <u>Bowdleria punctata vealeae</u> )	Threatened (regionally)	Endemic	Threatened locally with habitat destruction.
8. North Island Robin ( <u>Petroica australis longipes</u> )	Threatened (regionally)	Endemic	Limited distribution. Threatened locally by timber milling etc.
9. <u>Powelliphanta marchanti</u>	Rare	Endemic	

**1** "Threatened" equates with the term "vulnerable" in the IUCN Classification (definitions PTO).

**2** Freshwater fish are not included.

## RED DATA BOOK CATEGORIES

The following definitions are taken from King (1981) and are based on the categories designated by the Survival Service Commission of IUCN.

### 1. Endangered

Taxa in danger of extinction and whose survival is unlikely if the casual factors continue operating.

Included are taxa whose numbers have been reduced to a critical level or whose habitat has been so drastically diminished and/or degraded that they are deemed to be in immediate danger of extinction. Also included are a few taxa that may already be extinct.

### 2. Vulnerable (Threatened)

Taxa believed likely to move into the endangered category in the near future if the casual factors continue operating.

Included are taxa of which most or all the populations are decreasing because of over exploitation, extensive destruction of habitat or other environmental disturbance; taxa with populations that have been seriously depleted and whose ultimate security is not yet assured; and taxa with populations that are still sizeable but are under threat from serious adverse factors throughout their range.

### 3. Rare

Taxa with small world populations that are not at present endangered or vulnerable, but are at risk.

These taxa are usually localised within restricted geographical areas or habitats or are thinly scattered over a more extensive range.

**HUTS AND BIVOUACS - KAWEKA FOREST PARK <sup>1</sup>**

Comet  
Mackintosh  
Lotkow  
Black Birch Bivouac  
Makahu Saddle  
Dominie Bivouac  
Kaweka Flats Bivouac  
Middle Hill  
Makino  
Te Puia  
Ballard  
Mangaturutu  
Tira Lodge (Venison Tops)  
Rocks Ahead  
Back Ridge  
Back Ridge Bivouac  
Kiwi Mouth  
Kiwi Saddle <sup>2</sup>  
Kaweka <sup>2</sup>  
Cameron  
Omarukokere Bivouac  
Hanson Bivouac  
Otutu  
Ngaawapurua  
Harkness  
Te Pukeohikarua  
Tussock  
Mangatainoka

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<sup>1</sup> A full list of huts and hut charges is available from the Hawkes Bay Conservancy office, the Old Courthouse, 805 Marine Parade, Napier (ph [06] 8350415).

<sup>2</sup> Heretaunga Tramping Club (available for use by all Park visitors).

## **TRACK CLASSIFICATION**

Track Classifications are:

### **Walks (Class I)**

Walks will provide access to areas of historical, ecological, geological or scenic interest and may have relevant interpretative information provided. They will generally be located in areas of high public use. They will be constructed to a high standard and be well signposted so that they are suitable for families, tourists, people with light footwear and, where possible, the disabled. Walks will generally be of a short duration and preferably of a loop nature.

### **Tracks (Class II)**

Tracks will be the principal facility for trampers of average fitness. They will be well defined but constructed and maintained to a lesser standard than walks. They will be generally be located to enable a varied cross section of the Park features to be seen and to provide a variety of trip lengths, eg one to five days.

### **Routes (Class III)**

Routes will be lightly marked and signposted for use by only well-equipped and experienced trampers only.

Class I and II tracks will be situated so as to enhance visitor experiences and interpretation. They will be clearly signposted and where appropriate vantage or lookout points may be provided. Grades and formation will be consistent with the need to provide safe access with minimum maintenance and minimum impact or disturbance to Park resources and values.



**DESIGNATED HELICOPTER LANDING SITES - KAWEKA FOREST PARK**

**Designated landing sites for helicopter companies transporting recreational hunters is as follows: (see also map 5)**

- i) Tussock Hut**
- ii) Harkness Hut**
- iii) Mangatainoka Hut**
- iv) Mangaturutu**
- v) Tira Lodge (Venison Tops)**
- vi) Te Pukeohikarua Hut**
- vii) Ngaawapurua Hut**
- viii) Otutu Hut**
- ix) Manson Hut**
- x) Omarukokere Biv**
- xi) Kiwi Mouth Hut**
- xii) Manson Biv**
- xiii) Back Ridge Hut**
- xiv) Back Ridge Biv**

**Before any flight is undertaken to one of the above landing sites, the permit holder shall contact the Conservation Officer, Kaweka Forest Park (Puketitiri), phone (06) 8398814. (An answer phone is installed in this office to enable messages to be left in the absence of the Conservation Officers)**

- i) Date and time flight to take place**
- ii) Landing site to be visited**
- iii) Number of persons to be flown in**
- iv) Date and approximate time party to be flown in**

## CONCESSIONS OPERATING IN KAWEKA FOREST PARK

INDIVIDUAL/COMPANY/ PARTNERSHIP	ACTIVITY	AREA	FILE	EXPIRY DATE
1. J MacKenzie	Guided Fishing and Rafting Trips	Kaweka Forest Park	CON005	30/9/91
2. Wilderness Waters (J Lowry)	Guided Hunting and Tramping Trips	Kaweka Forest Park	CON009	30/11/91
3. W J Roydhouse (Kaweka Safaris)	Guided Hunting Trips	West Kaweka Forest Park	CON008	30/11/91
4. Helisika	Aerial Transportation	Kaweka Forest Park	CON109	30/6/92
5. Wanganui Aero Work Ltd (Taihapa Unit)	Aerial Transportation	Kaweka Forest Park	CON103	30/6/92
6. Te Onepu Helicopters Ltd	Aerial Transportation	Kaweka Forest Park	CON102	30/6/92
7. Leighton & Graham	Aerial Transportation	Kaweka Forest Park	CON101	30/6/92
8. Rapid Sensations (M Birch)	Commercial Rafting	Kaweka Forest Park (Mohaka River)	CON105	30/6/92
9. Lakeland Helicopters Ltd	Aerial Transportation	Kaweka Forest Park	CON105	30/6/92

Updated 26.7.91

**GRAZING LEASES AND PERMITS IN KAWEKA STATE FOREST  
(AS OF 15.5.90)**

<b>DESCRIPTION</b>	<b>AREA</b>	<b>LESSEE</b>	<b>TERM</b>	<b>EXPIRY</b>
1. Lease No 342. Near Kuripapango Base. Part 2A, Block IX. Kuripapango SD	15 ha	J S McRae Otamauri R D 9 Hastings	10 years	1992
2. Permit No 131. Location as above.	23.2 ha	As above	On a year to year basis	25 February of each year



**HUNTER DIARIES  
HELP US TO HELP YOU**

It is desirable that a major control of wild animals in the Kaweka and Ruahine Ranges is by recreational hunting. As necessary we will reinforce recreational hunting with aerial or departmental ground operations.

If we allow recreational hunting to be a major control then we need to know that it is succeeding and that animal numbers do not build up either generally through the forests or in specific areas within them.

We intend to monitor animal populations and forest condition by surveys including:

- periodic animal and vegetation surveys
- hunter diary returns
- animal jaw and rumen sampling
- permit statistics
- commercial user statistics

A major part of the survey will be the information you can return to us through the hunters diaries. For these to be of value they must be returned to us and they must be completed fully and accurately.

It is essential that we know where you have seen and hopefully shot your animals, not so that your favourite hunting spot is exposed to others, but so that we can gain a fuller picture of what areas are being hunted, where the animals are, how the populations are changing from time to time, how they relate to various vegetation types and altitudes and how the animal numbers and species vary from one part of the forest to another.

We would like to see recreational hunting as an effective and major method of animal control in Hawke's Bay and we believe that you would like this also. We cannot do so without your help.

**Help us to help you - Good Hunting!**

# PLEASE DON'T RUBBISH YOUR PARK

CONSERVATION  
TE PAPA ATAWHAI

HAWKE'S BAY CONSERVANCY

KAWEKA FOREST PARK

RUAHINE FOREST PARK

& STONY CREEK FORESTS

# PACK IT IN PACK IT OUT

"HUNTER DIARY PRIZE DRAW"

WIN A 3-DAY TRIP FOR 2 INTO ANY KAIMANAWA OR WESTERN KAWEKA

DEPARTMENT OF CONSERVATION HELIPAD WITH:

**Heli-Sika**

AND

*Lakeland*  
HELICOPTERS

Phone: Taupo (074) 84532

**FLY IN HUNTING TRIPS**

- Kaimanawas
- Kawekas
- Ureweras
- Exclusive private land

**FLY IN COMFORT** - Jetranger III

**HUNT** - Sika, Rusa, Red, Fallow, Wild Pigs

**FISH** - Rainbow & Brown Trout

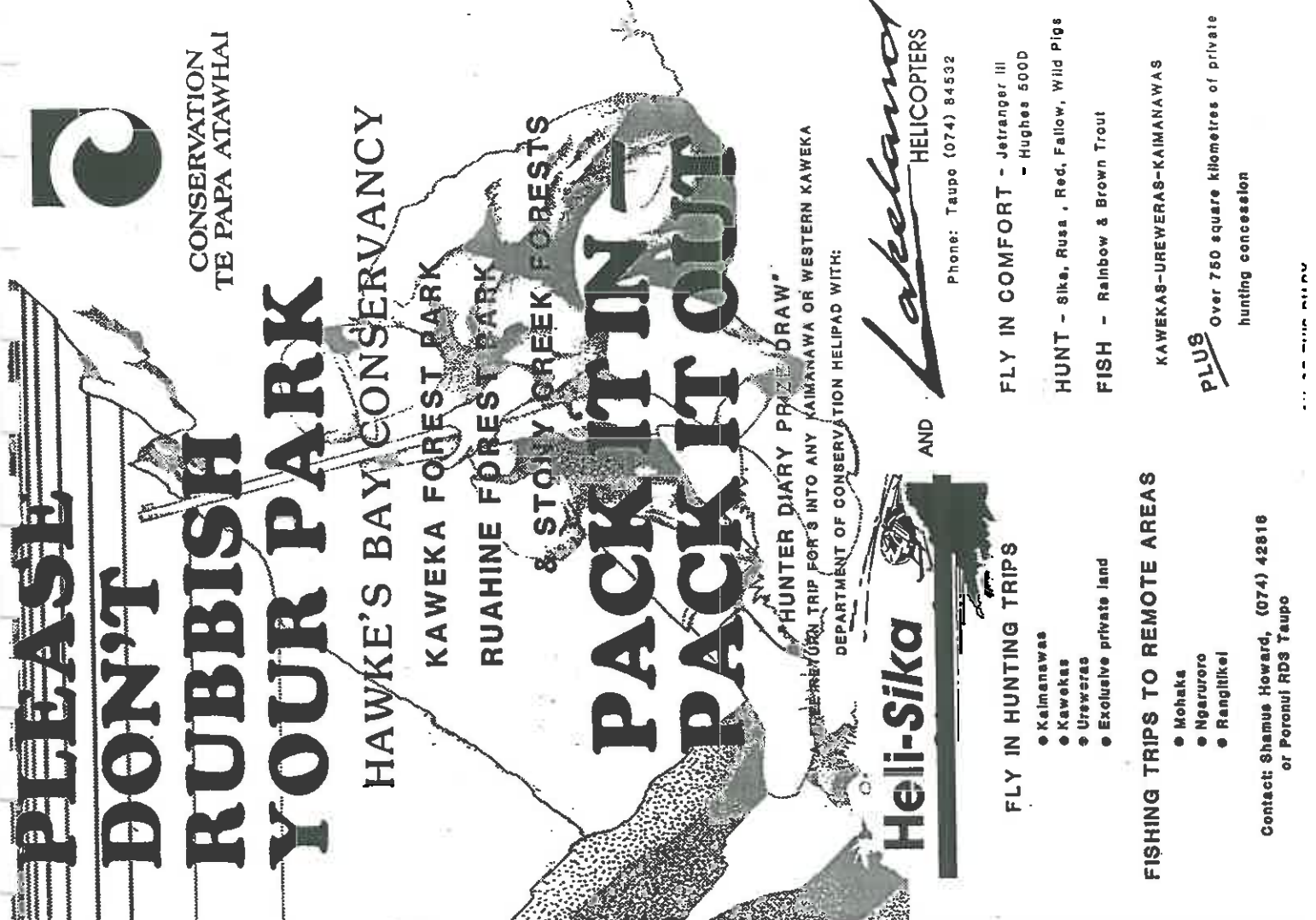
**FISHING TRIPS TO REMOTE AREAS**

- Mohaka
- Ngaruroro
- Rangitikei

KAWEKAS-UREWERAS-KAIMANAWAS

**PLUS** Over 750 square kilometres of private hunting concession

Contact: Shamus Howard, (074) 42816  
or Poronui RDS Taupo



## AREAS TO BE CONSIDERED FOR INCLUSION IN THE PARK

Specific areas where the Department wishes to proceed with protection by covenant, acquisition, lease or addition into the Park include:

i) Fernbird Bush Scenic Reserve (see Map 2)

It is considered that this reserve would be better managed as part of the Park. This will require its revocation as a reserve and its formal addition to the Park.

ii) Stewardship Land at Pakaututu (see Map 2)

The Department will investigate the option of managing this area, which adjoins the NE Section of the Park, as part of the Park.

iii) Taramoa Station (see Map 2)

The boundary exchange with Taramoa Station has now been completed (24/5/90), in liaison with the landowners. The necessary steps will now be taken to formally add it to the Park. This will require a further gazette notice, as required by section 18 of the Act.

iv) Climatic Reserve (see Map 2)

This reserve adjoins the SE section of the Park and largely consists of the steep faces of the Tutaekuri River. There would be no problems including it in the Park in terms of management and ecological unity.

v) Whakatu Afforestation Lease

This area is partly in exotic pine plantations and partly in regenerating manuka scrub. During the land allocation process the area of pines was allocated to the Forestry Corporation (Timberlands) and the remainder to the Department of Conservation.

The Department will continue to liaise with all interested parties to protect access from Seaview Road to the Park, and to ensure protection of the natural values of the stewardship area.

## ENVIRONMENTAL CARE CODE

### \* PROTECT PLANTS AND ANIMALS

Treat New Zealand's forests and birds with care and respect. They are unique and often rare.

### \* REMOVE RUBBISH

Litter is unattractive, harmful to wildlife and can increase vermin and disease. Plan your visits to reduce rubbish, and carry out what you carry in.

### \* BURY TOILET WASTE

In areas without toilet facilities, bury your toilet waste in a shallow hole well away from waterways, tracks, campsites, and huts.

### \* KEEP STREAMS AND LAKES CLEAN

When cleaning and washing, take the water and wash well away from the water source. Because soaps and detergents are harmful to water-life, drain used water into the soil to allow it to be filtered. If you suspect the water may be contaminated, either boil it for at least 3 minutes, or filter it, or chemically treat it.

### \* TAKE CARE WITH FIRES

Portable fuel stoves are less harmful to the environment and are more efficient than fires. If you do use a fire, keep it small, use only dead wood and make sure it is out by dousing it with water and checking the ashes before leaving.

### \* CAMP CAREFULLY

When camping, leave no trace of your visit.

### \* KEEP TO THE TRACK

By keeping to the track, where one exists, you lessen the chance of damaging fragile plants.

### \* CONSIDER OTHERS

People visit the back country and rural areas for many reasons. Be considerate of other visitors who also have a right to enjoy the natural environment.

### \* RESPECT OUR CULTURAL HERITAGE

Many places in New Zealand have a spiritual and historic significance. Treat these places with consideration and respect.

### \* ENJOY YOUR VISIT

Enjoy your outdoor experience. Take a last look before leaving an area; will the next visitor know that you have been there?

Protect the environment for your own sake, for the sake of those who come after you, and for the environment itself.

*Toitu te whenua  
(Leave the land undisturbed)*

(The NZ Environmental Care Code was developed by a number of organisations, including FMC, ECO, NZ Mountain Safety Council, NZ Institute of Park and Recreation, Administration, Royal Forest & Bird Protection Society of NZ, and coordinated by the Department of Conservation 1991).

**WILD ANIMAL CONTROL ACT 1977**

**RECREATIONAL HUNTING**

**27. Declaration of recreational hunting areas - (1)** The Director-General may from time to time, by notice in the Gazette, subject to such conditions as he may indicate, publicly notify that any area of Crown-owned land (other than National Park land or Maritime Park land), and any other land included with the agreement of the owner or occupier or land controlling authority, being land on which wild animals are present, shall form or be part of a recreational hunting area where hunting as a means of recreation is to be used to control (though not exclusively) the numbers of wild animals.

(2) The Director-General may at any time vary or revoke any such notice, or the conditions under which any recreational hunting area may be used; and, where studies and investigations have shown that the presence of wild animals is detrimental to the maintenance of the land and vegetation or the natural waters flowing through the land in a satisfactory state, he may:

- (a) Permit for a specified period the hunting of all or any part of the area by wild animal recovery hunters under Forest Service supervision; or
- (b) Introduce control measures carried out by Forest Service <sup>1</sup> officers and employees; or
- (c) Agree to allow for a specified period a trail of intensive recreational hunting.

(3) The Director-General may at any time carry out control operations against any species of wild animals not sought after by recreational hunters in a recreational hunting area, or such species of wild animals as are not listed in a wild animal control plan for an area as animals to be controlled by recreational hunting.

**28. Management of recreational hunting areas - (1)** Each recreational hunting area shall be managed under a wild animal control plan issued by the Director-General and revised from time to time at intervals no greater than 5 years.

(2) No less than one month before any such plan is prepared or revised the Director-General shall advertise, on 2 occasions in at least one local newspaper and on 2 occasions in one major newspaper circulating in the district wherein the area lies, his intention to revise, or to prepare, a wild animal control plan for the management of the recreational hunting area, and inviting submissions or proposals for the hunting of the area.

**29. National Recreational Hunting Advisory Committee -**

The Minister may set up a National Recreational Hunting Advisory Committee composed of such persons as the Minister thinks fit, or of representatives of organisations whose object is to foster hunting or shooting in recreational hunting areas, and any Advisory Committee so established shall hold office during the pleasure of the Minister, and shall have such functions and powers as the Minister may decide.

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<sup>1</sup> Now, Department of Conservation



**DEFINITION OF "WILD ANIMAL" IN WILD ANIMAL CONTROL ACT 1977**

**"Wild animal" -**

**(a) Means -**

- (i) Any deer of the family Cervidae:**
- (ii) Any chamois, thar, wallaby, or possum:**
- (iii) Any goat that is deemed under section 20 of this Act to be a wild animal:**
- (iv) Any pig that is living in a wild state and is not being herded or handled as a domestic animal or kept within an effective fence or enclosure for farming purposes:**
- (v) Any member of any species or class of land mammals that the Governor-General may from time to time, by Order in Council, declare to be wild animals for the purposes of this Act; and**

**(b) Includes the whole or any part of the carcass of any such animal.**

**(c) Does not include any animal kept in captivity pursuant to a permit or licence that is effective for the purposes of section 12 of this Act during the currency of the permit or licence and the observance of all conditions under which the permit or licence has been issued.**

## HISTORIC PLACES ACT 1980

An Act to preserve the historic heritage of New Zealand, to continue the New Zealand Historic Places Trust and to establish the New Zealand Historic Places Board of Trustees with the necessary powers and functions for the full and proper attainment of the objectives of this Act, and to amend and consolidate the Historic Places Act 1954 (18 September 1980)

BE IT ENACTED by the General Assembly of New Zealand in Parliament assembled, and by the authority of the same, as follows:

1. **Short Title and commencement** - (1) This Act may be cited as the Historic Places Act 1980.  
(2) This Act shall come into force on the 1st day of February 1981.

Cf. 1954, No.14, s.1

2. **Interpretation** - Unless the context otherwise requires; -  
**"Archaeological site"** means any place in New Zealand -
  - (a) Which at any material time was associated with human activity which occurred more than 100 years before that time; or
  - (b) Which is the site of the wreck of any vessel where at any material time that wreck occurred more than 100 years before that time, -  
and which is or may be able through investigation by archaeological techniques to provide scientific, cultural, or historic evidence as to the exploration, occupation, settlement, or development of New Zealand:

**"Historic Area"** means an area which contains an inter-related group of pre-historic or historic features which have historical value as a group even though some or all of the features may have little historical value individually.

**"Historic Place"** means a place (including a site, building, or natural object) which is historic by reason of an association with the past and which demonstrates or provides evidence of any cultural, traditional, aesthetic, or other value of the past; and includes -

- a) archaeological sites
- b) traditional sites

**"Traditional Site"** means a place or site that is important by reason of its historical significance or spiritual or emotional association with the Maori people or to any group or section thereof.

## STATUTORY REQUIREMENTS FOR MANAGEMENT PLANNING

With the passing of the Conservation Law Reform Act 1990, significant changes were made to procedures for management planning for protected areas managed by the Department of Conservation.

### The Conservation Act 1987

The Conservation Law Reform Act amended the Conservation Act 1987 to require the preparation of Conservation Management Strategies and to provide for preparation of statements of General Policy and Conservation Management Plans. The department must manage all conservation areas and natural and historic resources in accordance with these documents.

The relevant provisions of the amended Conservation Act are outlined below.

(a) General Policy (section 17B)

The purpose of General Policy is to facilitate the implementation of the Conservation Act. General Policy can be prepared for conservation areas of any class or description. Statements of General Policy must not derogate from any provision in the Conservation Act or any other Act.

Draft statements of General Policy are prepared in consultation with the NZCA. The Minister of Conservation approves statements of General Policy after such statements have been considered by the Authority.

(b) Conservation Management Strategies (section 17D)

Conservation Management Strategies will implement general policies and establish objectives for the integrated management of natural and historic resources (including any species) managed by the department under the:

Wildlife Act 1953  
 Marine Reserves Act 1971  
 Wild Animal Control Act 1977  
 Marine Mammals Protection Act 1978  
 National Parks Act 1980  
 Conservation Act 1987  
 New Zealand Walkways Act 1990  
 Reserves Act 1977

or any of them, and provide for recreation, tourism and other conservation purposes.

The Act requires coverage of the entire conservation estate by CMS's within 5 years of the passage of the Conservation Law Reform Act (ie by April 1995).

A CMS cannot derogate from any provision of the Conservation Act or any other Act, nor can it derogate from any statement of General Policy or affect any agreement or arrangement between the Minister or the Director General and any landowner (other than the Crown) under the Conservation Act or any other act (S.17D(3) Conservation Act 1987).

Conservation Management Strategies will be prepared by the Department of Conservation in consultation with conservation boards. They will be approved by the New Zealand Conservation Authority.

(c) Conservation Management Plans (section 17E)

Previously there was a requirement to prepare management plans for each protected area administered by the Department. A large number of plans were prepared but a significant number of protected areas were not covered by management plans. With changed legislation a CMS will now cover the entire estate, and CMP's need only be prepared for specific areas, which will be identified in the CMS. In the Hawkes Bay Conservancy CMP's are being prepared for the two Forest Parks (Ruahine and Kaweka), and it is envisaged they will also be necessary for Cape Kidnappers Nature Reserve and Heipipi and Otatara Historic Reserves.

A CMP shall establish detailed objectives for the integrated management of natural and historic resources (including species) within any area or areas under the:

Wildlife Act 1953  
Marine Reserves Act 1971  
Marine Mammals Protection Act 1978  
Reserves Act 1977  
Conservation Act 1987

The Conservation Law Reform Act amended each of these Acts to provide for any plans prepared under these to be approved as Conservation Management Plans under the Conservation Act.

The preparation of CMPs is not mandatory and they will not be prepared for each protected area managed by the Department. A CMP must not derogate from the Conservation Act and any other Act, or any statement of General Policy, nor from any provision of a CMS.

In most cases conservation boards will approve CMPs. However, the Act contains provisions for the call up of plans for approval by the NZCA and referral of plans to the NZCA by conservation boards for approval. The Minister, the NZCA, or the Conservation Board itself can request that the plans be referred to the NZCA for approval.