
Tongariro National Park - A Gift to the People of New Zealand

Te Papa Rehia Whakahirahira
o Tongariro
He Koha Ki Nga Tangata o Aotearoa

2.1 Introduction - Whakatuwheratanga

Tongariro and Ruapehu are mountains sacred to the Maori who have lived at their feet for many hundreds of years. In 1887 Te Heuheu Tukino IV (Horonuku), the paramount chief of the Tuwharetoa, gifted on behalf of his tribe the summits of Tongariro, Ngauruhoe and part of Ruapehu to the people of New Zealand, so that their tapu might be protected for all time.

This gift was made towards the end of a century which had witnessed massive destruction of natural landscapes and indigenous cultures in many parts of the world. Yet in that time of expanding frontiers and rampant industrialism other social ideas were beginning to gain acceptance. A combination of democracy and Romantic culture gave the vision and means to preserve large areas of wilderness as the common heritage of all. The idea of a park belonging to the whole nation became a reality in 1872 at Yellowstone in the United States. Canada and Australia soon followed with parks of their own, and the basis for the world's fourth national park was laid by Te Heuheu Tukino's gift in 1887. It was no accident that this innovation happened first in the New World nations, which lacked cultural edifices to enshrine as national monuments but still had extensive tracts of unspoiled wilds.

For the mountains to remain sacred our generation must honour the intention behind the original Maori gift. Equally, we must heed the European philosophers, poets and conservationists who created and nourished the ideal of national parks.

"Beneath the speaking mountains our two cultures have come together and must continue to meet in a strong and creative relationship. Our task is to continue to cement the ancient bonds, and to guarantee future protection of the land, so that it may continue to speak of forces beyond us."

Bruce Jefferies, Chief Ranger, Tongariro National Park, 1986

2.2 The Gift - Te Koha

"They shall be a sacred place of the Crown, a gift forever from me and my people."

Te Heuheu Tukino IV (Horonuku), paramount chief Ngāti Tuwharetoa, 1881

Kua tangohia mai tēnei korero i te pukapuka a John Grace, a, Tuwharetoa. He korero nā Te Heuheu Tukino tuawha (Horonuku) i te tau 1881 i ngā hui whakawā mo Rangipo-Murimotu.

I te ra 23 o Hepetema 1887 i hangaia he whakaaetanga ā pukapuka e te kooti i Taupo, he tuku i nga traumata o Tongariro, Ngaruahoe me Ruapehu e Te Heuheu, te rangatira o Ngāti Tuwharetoa. Ko tēnei te mahi tuatahi i timataria te hanganga i te papa rēhia whakahirahira tuatahi o tēnei motu. E hāngai ana te hanganga o tēnei

papa rēhia ki tērā o Amerika. I 1872 i whakatūria te papa rēhia whakahirahira ā motu tuatahi i Yellowstone, Wyoming i Amerika. I whai mai a Ahitereiria me Kānata, arā ko Aotearoa te motu tuawhā i whakatūria i ēnei momo papa rēhia.

He maha nga take i tipu mai tēnei whakaaro mai i ngā whakaaro kāwanatanga a iwi, tae noa ki te ngaronga o nga momo kōraha. Na ētahi tangata ka taea e tēnei whakaaro te whakawhiti, pēnei i a William Fox.

Ko te mea rerekē o te Papa Rēhia o Tongariro, ko te mea i tukuna te iho o te papa rēhia e ngā tangata whenua. Na tēbnei koha i whakatūria he here mai ngā Maori ki ngā Pākehā hurinoa ki te whenua.

On 23 September 1887, a deed was drawn up in the court at Taupo in which, on behalf of his tribe, Te Heuheu Tukino IV (Horonuku) gifted the summits of Tongariro, Ngauruhoe and Ruapehu to the Crown, thus initiating a process which led to the creation of New Zealand's first national park. Although Tongariro National Park was modelled on a concept imported from the United States of America, where the world's first national park had been created at Yellowstone, Wyoming, in 1872, it was unique in that its nucleus was the gift of an indigenous people. Thus a major new dimension was added to the national park ideal with the gift of the sacred volcanic summits creating a three-way bond between land, Maori and Pakeha.

2.3 The Gift through Time – Te Koha Mo Ake Tonu Atu

I tohua te whakaaetanga ā pukapuka, i tuhia i te kooti i Taupo, kia whakamahia te whenua hei papa rēhia ā motu. Na te iti noa iho o nga whenua i tērā wā (2640 heketea) kua kitea he iti rawa mo te papa rēhia. I tūmata te Karauna ki te hokohoko whenua, ā, i te wā i whakatū te ture mo Te Papa Rēhia o Tongariro i Oketopa, 1894, tata ki te 25000 heketea te wāhi, kāti rā kāore anō kia oti te hook whenua tae noa atu ki 1907. I tērā tau anō na Dr Leonard Cockayne rāua ko E. Philips Turner tētahi ripoata i kī ai kia tōpū rawa te wāhi anō. I ēnei rā he nui rawa te papa rēhia i ērā wā.

Ahakoia tōna rahi, kāore anō te rohenga whenua kia tae ki te rohenga arotau e pā ana ki ngā take koiōra, tikanga-ā-iwi rānei. Tērā pea, i ngā tau kie te heke mai ka taea te hokohoko whenua i nga tapa o te papa rēhia kia āwhina i ngā pūtake whakaaro o te kaupapa nei. Heoi anō, ka taea te whakahoa i ngā tangata whai whenua kia tiaki i ngā whenua e pātata ana ki te papa rēhia pēnei i te papa rēhia anō hoki.

Mai rā anō he maha ngā tuma kua tutakinga e tēnei koha. I ngā take koiōra ko ngā tarukino me ngā orotā; i nga take ahurea ko ngā taumahatanga o te whakamahi; Koinei ngā hāngai o te Papa Atawhai tae noa ki tēnei tirohanga tuawhā i te kaupapa tūturu.

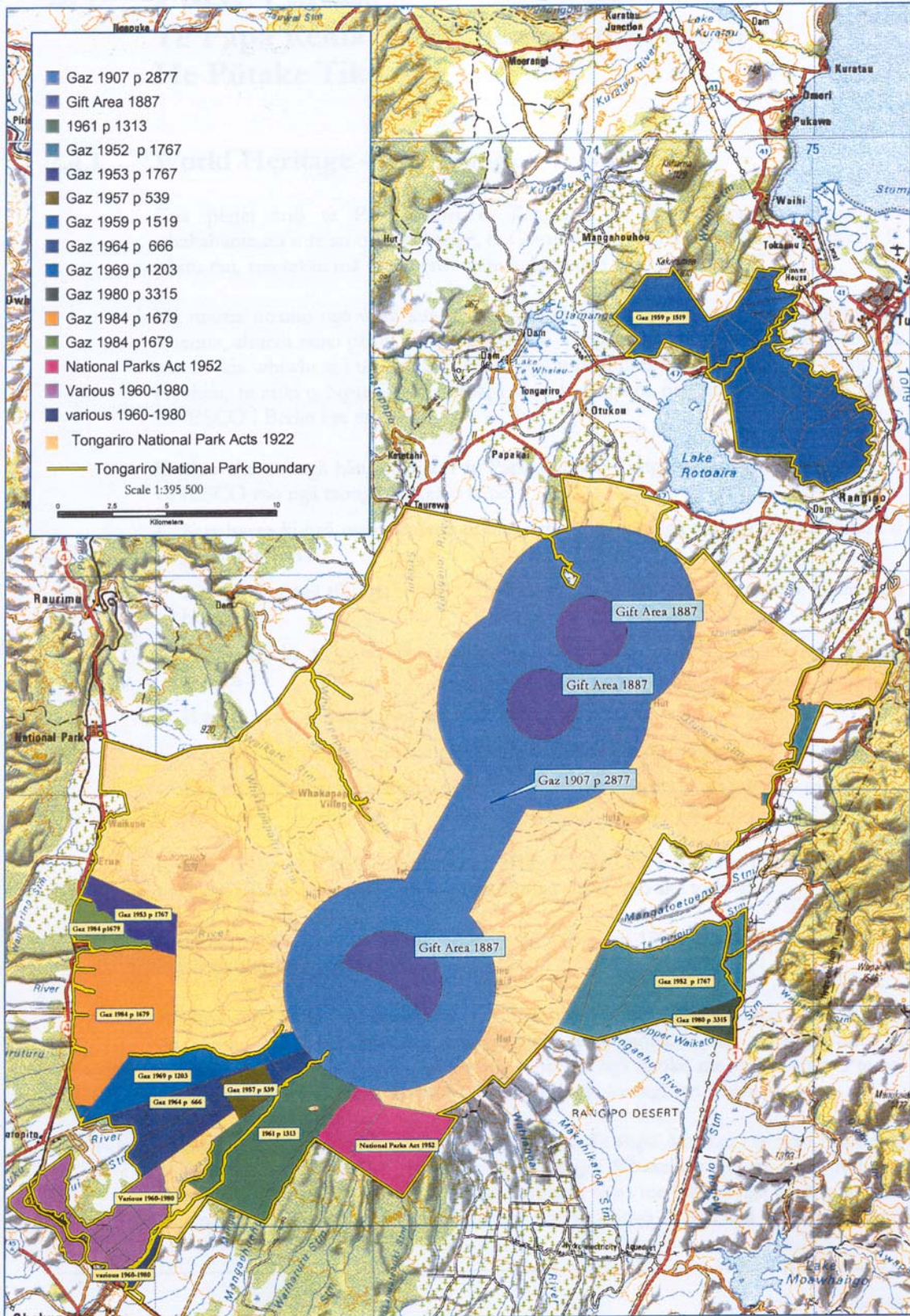
Ehara te oritenga o ngā rapunga whakaaro o te ture mo Ngā Papa Rēhia ā Motu me te tumanako o te koha he ōruatanga. Mā tētahi e awahi i tētahi atu.

Under the deed of gift drawn up in the courthouse at Taupo, the summits of Tongariro, Ngauruhoe and part of Ruapehu were gifted to the Crown for the purposes of being made into a national park. From the day of the deed it was recognised that the size of the gift (2640 hectares) was too small for such a park. Large-scale purchases of land were made by the Crown in the early 1890s and by the time the Tongariro National Park Act was passed in October 1894, the park area had grown to some 25,000 hectares. Final conclusion of all land acquisition within the legislated boundaries was not completed until 1907. That same year, a report by Dr Leonard Cockayne and E Phillips Turner urged more than doubling the size of the park.

Today, Tongariro National Park is many times its original size. But it has not reached a logical boundary defined by biotic or cultural determinants. There may be opportunities in the future to purchase land which contributes to existing park values, and to add conservation land on the margins of the park. It is also possible that a number of partnerships may emerge with private landowners, where values inherent in privately-owned and controlled sites may be protected in line with adjacent national park values.

With time, the Gift and the lands attached to that Gift, which form Tongariro National Park, have been subject to many challenges, particularly from weed and animal pests and heavy demand for use. The sacred nature of Te Heuheu Tukino IV's gift is reflected in the philosophy contained in the National Parks Act 1980. His vision, and this philosophy, will continue to drive management decisions for the park.

Map 2 – The Gift and Subsequent Boundary Additions



2.4 Park Values - Te Papa Rēhia Whakahirahira o Tongariro He Pūtake Tikanga

2.4.1 World Heritage - Ngā Taonga o Te Ao

Kua pēnei anō te Papa Rēhia o Tongariro ki ngā whakamaharatanga nui whakaharahara o te ao o Stonehenge, te Great Wall o China me te Grand Canyon. E whitu rau, rua tekau mā tahi o ēnei wāhi kahurangi i te ao katoa.

He ruarua noaiho ngā wāhi kua whiwhia te komaka paparua nei mo ngā āhuatanga whenua, ahurea rānei pēnei i te Papa Rēhia o Tongariro. Ko tēnei papa rēhia te mea tuatahi kia whiwhi ai i tēnei tohu i raro i ngā ture ahurea kua tāorotia. Nā Tumu Te Heuheu, te ariki o Ngāti Tuwharetoa, i aki i te kaupapa nei mo Aotearoa i te hui a UNESCO i Berlin i te tau 1993.

E whai ake nei ngā hāngaitanga o te Papa Rēhia o Tongariro ki ngā whakaritenga a UNESCO mo ngā taonga ahurea o te ao.

- Kua herea ki ngā mahi, korero tīpuna, whakaaro me ngā tikanga whakahirahira o te ao hurihuri
- E tohu ana ngā tikanga o Ngāti Tuwharetoa, ā ka taea te whakarerekē tāperepere hoki
- Mā te wā ka tohu he whakawhitinga i ngā wārio o te tangata me ngā tikanga ahurea
- E tohu ana ngā nekehanga o te wao o Ruauumoko
- Kei roto ngā taonga ahurei, ngā taonga ataahua hoki o te taiao
- Kei roto ētahi pūtake tikanga mo te ao katoa e pā ana ki te pūtaiao me te papa atawhai

Ko tētahi mea hira ko te tirohanga a UNESCO ki te Papa Rēhia o Tongariro, arā, he mea kua tiakina-a-ture kia pupuri i ngā taonga ahurei mo ake tonu atu.

I tohua te wāhi nei he “World Heritage Site” i te tau 1990, ā, i tāpirihia te tohu mo ngā mea ahurea i te tau 1993.

Ahakoā ēnei tohu, he rite tonu te tūnga o tēnei papa rēhia i raro i ngā ture o Aotearoa, arā, korekau he whakaritenga-ā-ture mōna. Ko te mea nui, ka whakahaeretia te papa rēhia i raro i ngā tono me ngā ūpoko mo ngā taonga o te ao. Heoi anō, ka tū ngā tangata o Aotearoa hei kaitiaki mo ngā iwi whānui o te ao.

Kua whakamahia ēnei ture, ūpoko, tono rānei e Te Papa Atawhai i te wā i pāhūhū ai a Ruapehu i 1995-1996. E ai ki Te Kaupapa Whakahaere o te Papa Rēhia o Tongariro 1990 me ngā korero mo ngā taonga o te ao me tukuna ngā mahi o te taiao kia mahi. I tautoko e te Kāwanatanga me te Minita o te Papa Atawhai i tēnei

whakaaro. He maha ngā tāngata e tautoko ana i ngā whakaaro mo ngā taonga o te ao.

I ēnei rā, te rautau tuatoru o te whakahaere i tēnei papa rēhia, kua whakawhānui te whakahaere, mai i te tirohanga ā-rohe, ā-motu rahei ki te ao whānui. Nā te narengari i te āro i ngā wāhi ahurei, kua whakakoi te mōhiotanga o te hunga ki ngā take whakahirahira e pā ana ki ngā taonga o te ao. He mea pai tēnei hei awahina i ngā tangata o Aotearoa ki te tiaki i te Papa Rēhia o Tongariro mo te ao katoa.

Tongariro National Park is on a pedestal with other great monuments around the world. Stonehenge, the Great Wall of China and the Grand Canyon share similar attributes to Tongariro National Park in the international context. In June 2002 there were 721 of these precious sites, internationally recognised as having met global benchmarks for their cultural or natural properties.

Tongariro National Park is amongst the few sites which have World Heritage status for both their natural and cultural values. The natural landscape was acknowledged as a World Heritage Site in 1990 and its cultural values were recognised in 1993.

Tongariro National Park was the first in the world to receive recognition under the revised cultural criteria describing cultural landscapes. This was advocated on behalf of all New Zealanders by Tumu Te Heuheu, now paramount chief of Ngati Tuwharetoa, at the UNESCO Conference in Berlin in 1993. In the global context, Tongariro National Park has the following attributes which are consistent with the UNESCO criteria for cultural heritage:

- It is directly and tangibly associated with events, living traditions, ideas and beliefs of universal significance.
- It is representative of the culture of Ngati Tuwharetoa and is vulnerable to impacts and irreversible change.
- It represents an interchange of human values and cultural ideas over time.
- It represents significant ongoing geological processes and geomorphic features.
- It contains superlative natural phenomena and exceptional natural beauty.
- It contains values of outstanding universal value from the point of view of science and conservation.

Importantly, UNESCO views Tongariro National Park as a stable site in a protective legislative framework capable of having its key attributes maintained in a pristine state in perpetuity.

World Heritage listing does not undermine or detract from the existing legislative regime. Although it does not impose additional legal requirements, it requires that the park be managed consistent with the articles against which the applications were approved. World Heritage status could be argued to impose the highest privilege on New Zealanders as kaitiaki to manage this unique site for all of humanity.

In a practical sense, this was tested as the department assessed and resolved issues which arose from the volcanic eruption cycles of 1995 and 1996, which created a

number of hazards to the Volcanic Plateau community. Both the 1990 Tongariro National Park Management Plan and World Heritage articles strongly imply that natural processes should be able to run their course. Following extensive community debate at all levels and a thoroughly researched assessment of park management processes which was independently peer reviewed, the Minister of Conservation and the New Zealand Government endorsed that position through imposing a hazard management regime not requiring intervention in the Mount Ruapehu massif. Community agencies, developers, regulatory authorities, conservation organisations and the Crown have acknowledged and accepted the need to support the core principles of World Heritage.

As the country heads into the third millennium there is no question that the department is now managing Tongariro National Park in a global context. Decision making in that context is evolving as the understanding and appreciation of such special sites increases. As pressure grows on protected sites internationally, so must the focus of the thinking be sharpened to cope with that pressure, so that Tongariro National Park can be preserved in perpetuity for New Zealand and the international community.

2.4.2 History - Te Tāhuhu korero o te Papa Rēhia

The history of management within park boundaries began with the same kind of general inactivity which followed the creation of Yellowstone and other nineteenth century national parks. A few basic huts were built where the tourist demand seemed greatest (Waihohonu 1903, Ketetahi 1903, Mangatepopo 1918). But apart from this little else was done before the advent of rail (1910) and reasonable roads (1930s) brought visitors to the park in greater numbers.

The most unfortunate legacy of this early period is the healthy abundance of introduced heather which in later summer gives a mauve tint to the vegetation north and west of Ruapehu. An early honorary ranger, John Cullen, co-ordinated the establishment of this heath vegetation by introducing several species from Europe during World War I. His intention was to then introduce grouse to complete the dream of recreational gamebird hunting in the park. The grouse were never introduced but the heather is now very well established.

It was not until 1922 that a board replaced the previous laissez-faire management regimes, and not until 1931 that the first resident ranger took up his duties.

In the 1920s the road gradually advanced up the Whakapapa Valley where, in 1929, the collection of tourist huts was joined by the Chateau Tongariro. This was built on a grand scale to usher in an era of elegant tourism but the Depression and subsequent world war thwarted these early entrepreneurial dreams. Still higher up the mountain the Ruapehu Ski Club (formed in 1913) had opened a hut at 1770 metres in 1923 and 15 years later the first rope-tow came into operation, a modest forerunner to the present plethora of lifts. The construction of the Bruce Road in the 1930s, giving improved access to the new ski area, was made possible by the interest and financial support of the Bruce Trust.

Propelled by post-world-war prosperity, lifts, ski huts and other structures mushroomed across the mountain in the 1950s and 1960s. The construction of huts was encouraged by the then park board to assist development and interest in the ski area and to promote recreational use of the park.

Management approaches need to change and, as development increases pressure on the natural environment, restrictions must be placed on some aspects of use and development. The commercial skiing industry on Ruapehu today poses some of the park's greatest management dilemmas. It frequently highlights fundamental disagreements about the role of national parks and challenges park managers to formulate a clear and coherent philosophy about the use of protected wild places.

Tramping is the other dominant form of recreation. Although this would seem to be the kind of activity which ought to be encouraged almost without limit in national parks, tramping does bring management problems in a place like Tongariro. The indications are that these problems are likely to become even more acute. The system of huts and tracks developed during the post-war upsurge in tramping is regularly overloaded at certain times of the year. Difficult questions of both a practical and philosophical nature must be faced.

2.4.3 Cultural Values - Ngā Tikanga-ā-Iwi

The park plays an important cultural role both in the traditions of the Maori people, and, more recently, to Europeans. It is of outstanding cultural importance as a spiritual home to the Maori people and the gifting of this sacred land, providing the initial focus for the creation of the New Zealand national parks system, is of great significance to the country as a whole.

Tongariro, Ngauruhoe and Ruapehu are mountains sacred to the Maori, especially the Tuwharetoa and Ngati Rangī peoples who have lived beneath them for many years. The mountains are recalled in ancient tribal stories as great forces in a universe where everything is alive. They are seen as atua, as places of spiritual forces which command and give life to the natural world, and whose wild and capricious actions can create and destroy on a huge scale. Accordingly, they are regarded with respect and humility as well as with awe.

"We look upon them with deep respect and reverence and a tinge of many other complimentary emotions, pride certainly being one of them. Proud that they are ours (Te ha o taku maunga ko taku manawa - The breath of my mountain is my heart), and proud that they are bequeathed to the nation who as nature lovers accord them their deep respect. Our reverence for the mountains goes deeper in that in time, with the essence of our genealogies, all life forms originated from the same parents, Papa-Tū-A-Nuku, the Earth Mother and Rangī, the Sky Father, so that man and all other life forms are in harmony with one another in the bonds of kinship.

Conditioned then with these affinital ties we look upon these mountains as ancestors and this relationship evokes memories of our human ancestors who once roamed and settled within their shadows centuries ago, so that by these memories the past and the present mingle ensuring their continuity. We sing or chant today ancestral compositions paying them homage.

The death of a high chief is likened to the tip of a mountain having broken off. The stern anchor of the Arava canoe, Te Rangī Haruru or Toka Turoa is firmly fixed on Tongariro, with the prow anchor Toka Parore firmly fixed at Maketau, giving rise to the saying 'Mai maketau ki Tongariro' inferring thereby its unshakeable stability. All these are paid tributes to the mountains.

To us the mountains are symbols of the implacable authority of nature. As our ancestors saw them centuries ago, so do they now stand ageless, towering above all with sublime supremacy, immovable, immutable, and impervious to the memorable march of time. Puny man in the face of such overwhelming evidence of the inevitable, suddenly feels small and insignificant, and so the reverence for those mountains goes further deep."

Sir Hepi te Heuheu, paramount chief of Ngāti Tuwharetoa

It came as a severe shock to the Tuwharetoa that the Pakeha colonists apparently did not perceive the mountains as sacred. For thirty years after John Bidwill's ascent of Ngauruhoe in 1839 the Tuwharetoa successfully prevented almost all attempts on the volcanic summits. Bidwill's ascent (the first European ascent) was considered to be insensitive at the time as the mountain was regarded as tapu and his climb was made contrary to the known view of the Tuwharetoa. But by the 1880s it had become evident that before much longer the land would pass from traditional tribal tenure and be owned and managed under the European system of laws. Now the only way to protect the mountain tapu was by way of a public reserve - in the event, a national park.

Management decisions concerning Tongariro National Park need to take cognisance of the fact that the sentiments, purpose and importance of the original gift remain just as valid today as they did in 1887. Sir Hepi Te Heuheu wrote the following words as the preface for 'Tongariro - A Sacred Gift', written to celebrate the park's centennial:

"One hundred years ago my great-grandfather Horonuku Te Heuheu Tukino IV gave the sacred summits of Tongariro to the Government to protect their tapu. In so doing he established a three-way bond between land, Maori and Pakeha. His gift says these sacred mountains are to be owned by no one and yet are for everyone. My Tuwharetoa people wish this gift to be remembered for all time. The mountains of the south wind have spoken to us for centuries. Now we wish them to speak to all who come in peace and in respect of their tapu. This land of Tongariro National Park is our mutual heritage. It is a gift given many times over. As each of us receives it, we could in spirit join Ngatoroirangi of the Arawa canoe, Ariki ancestor of Tuwharetoa, in his invocation when he first landed in this country.

*Ka u ki matanuku,
Ka u ki Matarangi;
Ka u ki tenei whenua,
Hei whenua,
Mau e kai te manawa o tauhono.*

*I arrive where unknown earth is under my feet,
I arrive where a new sky is above me;*

*I arrive at this land, a resting place for me;
O Spirit of the Earth. The stranger
humbly offers his heart as food for you."*

2.4.4 Geoconservation - Te Tiaki i te Wao o Rūaumoko

The region is dominated by some of the world's most active and violent volcanism. A line of volcanoes caused by the collision of the Indo-Australian and Pacific plates runs from Tonga and the Kermadec Islands southwards to White Island, Taupo and Tongariro and westward to Taranaki. The centre of the volcanic activity is in the Taupo Volcanic Zone. It is part of the greater expression of volcanic and seismological activity known as the Pacific Ring of Fire.

Many different expressions of volcanism are found in the Taupo Volcanic Zone. At the quiet extreme of the volcanic spectrum are the frequent and relatively contained ash showers of Ngauruhoe, and Tongariro's hot springs and fumaroles at Ketetahi, Te Maari and Red craters. At the other extreme are the infrequent yet apocalyptic Taupo eruptions. These rhyolitic explosions have been among the largest explosive events known to have occurred on the planet over the last two million years and have had a massive impact on the landscape and biota of Tongariro National Park. However, most of the volcanic activity which has occurred in the park has been of the middle order of eruptive violence from the large multi-coned andesitic strato-volcanoes of Tongariro, Ruapehu and Kakaramea. The eruptive sequences of these volcanoes have produced large fields of alternating ash and lava flows, and are associated with turbulent wet debris flows known as lahars. Today lahar ring plains are a major landscape feature surrounding these active volcanoes.

The major volcanoes of the park are very much alive, with the result that the park contains some of the most dynamic natural landscape in New Zealand.

Ruapehu is the most active, erupting on average every 1-3 years, producing hazardous eruptions every 7-10 years and major eruptions every 20-50 years. The most recent major eruptions in 1995-96 caused significant changes in the crater area and Whangaehu Valley. Ngauruhoe last erupted in 1975; major eruptions in 1949 and 1956 changed the summit area and northwestern flank. Tongariro last erupted in 1896.

Topography is typical of volcanic regions. Most of the park comprises mountain slopes which radiate from one of the three main mountains. The smaller mountains, Pihanga, Kakaramea and Hauhungatahi, contribute approximately ten percent of the park area. The mountain slopes are typically gentle near the park boundary but become progressively steeper toward the summits. Mount Ruapehu dominates the park: its slopes cover more than two-thirds of the park area.

Ngauruhoe, the youngest of the park's volcanoes, shows the most regular form and the steepest slopes. Ruapehu and Tongariro are much older and more eroded and irregular, revealing their structure of layers of ash, lava and debris. There is a sharp contrast throughout the park between soft fine material and hard abrupt often vertical surfaces caused by alternating bands of volcanic rock and ash. The streams and rivers radiating from the mountains cut deep tortuous gorges through this

surface. These gorges continue well beyond the park in some places. One of the most dramatic is that of the Makatote River where it is crossed by State Highway 4 in the west.

Several lakes have formed within the craters. They occur in a line from the summit of Ruapehu through Ngauruhoe, Tongariro and beyond to Lake Rotopounamu, indicating the line of volcanic disturbance.

Situated on an inland plateau, the park and its environs experience a cold climate with considerable local variation. Altitude ranges from 600 to 2797 metres and there is a sharp difference between the conditions, for example, at Ohakune and at the summit of Ruapehu. After the shelter of the forest, a much harsher environment is reached at about 1200 metres. In summer the slopes above 1800 metres can be extremely harsh, with only sparse visible signs of life. In winter, this is a place of deep snow, high winds and freezing temperatures. A mantle of permanent snow and ice covers the top of Ruapehu and extends in glacier tongues down the main valleys to 2000–2250 metres.

Precipitation within the park varies from about 1250 millimetres per year in the south and east to about 5000 millimetres on the summit slopes of Mount Ruapehu. Heavy rain can be experienced at any time of the year and there is no significant difference between summer and winter precipitation levels. Rangipo Desert in the south-east is an area of sparse vegetation and barren soils caused by a combination of soil and climatic factors. The prevailing westerly wind pattern and mountain topography produce a small rain shadow and reduce cloudiness in their lee. Most rain soaks into the highly porous ash soils which are also subject to enhanced and frequent free-thaw cycles and wind erosion. In contrast, the better soils and milder climate of the lower western slopes support a rich dense podocarp forest.

Humans have brought changes to the park. Overuse in some parts has caused erosion along popular walking routes. The development of roads, buildings and other facilities has modified the park environment. Interference in the park ecology by the introduction of certain weeds is a lasting and difficult problem. The area is still recovering from years of accidental and deliberate human-lit fires.

Tongariro National Park is contained wholly within the Tongariro Ecological Region and demonstrates the dramatic contrast of forest, tussock grassland and gravelfields, and volcanic and glacial environments. A major feature of the vegetation is its diversity, due to the wide altitudinal range and landform diversity and the interaction of climatic and volcanic elements.

The volcanoes stand apart as the most spectacular and diverse volcanic complex in the south-west Pacific. The Crater Lake on Mount Ruapehu is one of the very few hot lakes in the world to be surrounded by permanent glaciers and snowfields. It has international scientific importance as do the Whangaehu Valley lava flow sequence and lahar outwash fan and numerous other features that are of national importance.

The park's outstanding natural features represent significant ongoing geological processes and biological evolution.

2.4.5 Flora and Fauna – Ngā Rākau, Ngā Otaota Me Ngā Aitanga Kararehe

Although the volcanic forms of the park are similar to other volcanic regions of the world, the flora and fauna of Tongariro are unique to New Zealand. The great botanist, Leonard Cockayne, recognised this fact in 1907, when he prepared a definitive report with E Phillips Turner on the park and argued strenuously for extensive additions. Cockayne wrote that the existing boundaries were ‘inadequate and inconvenient’ and that the park as a whole presented:

“...the curious anomaly of being practically without a tree... It must not be forgotten that mountain, river, lake, glacier, and even hot spring are much the same the world over and that the special features of any landscape depend upon combinations of plants which form its garment.”

Cockayne’s report urged the further addition of 31,000 hectares including forest, scrub, wetland, grassland and desert, and every major addition since that time has been made on ecological grounds to include more of the distinctive ecosystems of the lower altitude regions. Over 550 species of native plants



(excluding mosses, liverworts, lichens and fungi) are found in the park and at least 80% of these are endemic to New Zealand. Although no single species is restricted to the park alone, the ecological importance of retaining the natural integrity of such a large area of active volcanic landscape is immense.

The diversity of natural vegetation in the park largely reflects the wide range of climatic influences and the history of volcanism. Volcanism has periodically caused the obliteration or burning of large tracts of vegetation. Much of the central region of the park is low vegetation comprising tussock or woody shrubs and flax and is undergoing regeneration after disturbance. The Taupo pumice eruption of about AD 130 is known to have destroyed all forest in the northern and eastern sectors of the park. In more recent times human inhabitants have also started fires. Other non-forested parts of the park, including the upper slopes of all the volcanoes and the eastern lower slopes of Ruapehu (Rangipo Desert), are areas where the climate is too harsh and the soil is inadequate to support the growth of forest. These areas, though sparsely vegetated, contain some of the most interesting plants and plant communities.

Much of the park is clothed in tall beech forest or podocarp forest (at lower altitudes). The largest areas of forest are on the western side of Ruapehu, the

northern and eastern slopes of Tongariro, surrounding Hauhungatahi and throughout Pihanga-Kakaramea.

Human influence through the liberation of weeds is a major problem. In the central regions an infestation of exotic heather (*Calluna vulgaris*) is now a major component of much of the vegetation. Perhaps a greater problem, however, is the continuing growth of wilding lodgepole pines (*Pinus contorta*) which could potentially form forest over much of the unforested part of the park.

Also of concern is the effect of animal pests, particularly deer and possums, on the park's vegetation. Bird-life has suffered as a result of these animals' presence. Other introduced mammals, particularly cats, rats and stoats, continue to predate directly on birds and other natural fauna. Mountain environments tend to be sparsely populated by nature but the effect of animal pests has been to completely eliminate certain species of bird and lower the number of other species. This contributes to the impression many visitors have that the natural animal life of the forest is impoverished.

2.4.6 Recreation Use - Te Whakamahi Tākaro Pūangi

Tongariro National Park is a nationally significant area for outdoor recreation and has sites which have high international use, such as the Tongariro Crossing. The park is a major tourist attraction. It is nationally important for skiing with three ski areas, two of them of international standard. Skiers account for over half of all visitors to the park. Other recreation opportunities include ski mountaineering, tramping, climbing, nature study, photography and hunting.

Except for the top of Mount Taranaki, Mount Ruapehu is the only true alpine environment in the North Island. Climbing at all levels of skill occurs on the mountain: it is acknowledged as an important training ground for North Island climbers preparing for bigger climbs elsewhere.

The park offers a surprising variety of tramping opportunities including desert, bush, mountain and valley walks.



The objective of management is to provide for a variety of low-impact recreational activities consistent with the primary objective of protecting the natural character of the park. Large areas of adjacent public and private lands have considerable recreational potential and could accommodate a greater range of recreational experiences which rely more on developed facilities and services. The original

objectives of protecting the unique mountain environment must remain paramount if the park's value for recreation and tourism is to be retained.

2.4.7 Economic Significance - Te Tikanga Ake o te Ohanga

Tongariro National Park's regional economic significance is substantial. Hundreds of thousands of visitors come to the park each year, adding value to the economy and highlighting the Volcanic Plateau in the global tourism market. The continued drive to maximise economic benefits is not always compatible with the primary protection focus required in legislation.

The park provides significant employment opportunities, both directly and through associated park-dependant industries. The ski industry is particularly vital to the economies of several local townships. Ohakune is a ski town in every sense and has grown in tandem with the development of Turoa Ski Area. Whakapapa Ski Area is, to a greater extent, self-servicing, with numerous buildings providing on-site accommodation. Other services are provided at nearby Whakapapa village and in National Park township and Turangi.

Indirect economic benefits are seen in the park's function as a soil and water conservation area. The headwaters of both the Waikato and Whanganui rivers rise in the park's mountains. Both of these river systems have major economic importance. Their waters provide for hydroelectric power systems, town water supplies, recreational fishing and a large number of other recreational pursuits.