5. KAITIAKITANGA AND THE CONSERVATION OF BIOLOGICAL DIVERSITY

5.1 International Perspectives

The crucial importance of indigenous peoples in the conservation of biological diversity is often totally ignored. Much of the literature on international environmental law shows an acute awareness of the diverging interests of developed/underdeveloped ('North'/'South') nation states, but without more than passing references to indigenous peoples.[1] On occasion there is actually an explicit rejection of the option to empower local communities. An example is a prestigious publication which includes contributions from expatriate New Zealanders B Kingsbury and K Piddington. The introduction to this book includes this paragraph co-authored by Kingsbury:

> An alternative radical solution argues not for the creation of a global Leviathan but rather for the decentralisation of power and authority. For its proponents such an approach would weaken the competitive drives of the global economy that intensify the depletion of natural resources and the degradation of the environment and in which environmental 'management' is often no more than the displacement of a problem from one sphere or locality to another. It would empower local communities which have a greater understanding of the specific ecosystems on which their economic livelihood depends. And it would build on the experience of those groups that have historically been able to create small-scale and sustainable forms of economic development. Whilst there are powerful arguments in favour of greater decentralisation and empowerment of local communities, there are also important limitations: that empowerment of local communities and rational ecological management are not always consistent; that it neglects the broader functions of the state system in the many other fields of human activity; that the costs of disrupting the global economic system would be enormous and would also prove a potent source of conflict; and that there would continue to be a need for some degree of global co-ordination either for effective ecological management or out of considerations of social equity, but that such co-ordination would be infinitely more

1. For example, in the University of Auckland's Davis Law Library: W J Snape III (ed), *Biodiversity and the Law,* Washington, 1996; D C Esty, *Greening the GATT,* Washington, 1994; S Lyster, *International Wildlife Law,* Cambridge, 1985; D Reid, *Sustainable Development,* London, 1995; R Bahro, *Avoiding Social And Ecological Disaster,* Bath, 1994

difficult in such a system because of the increased numbers of communities.

It is perfectly possible, indeed likely, that new forms of co-operation will be required, and that some further constraints on state sovereignty will emerge. Nevertheless, environmental issues will still of necessity be managed within the constraints of a political system in which sovereign states play a major part.[2]

An exception amongst international environmental lawyers is Dr K Bosselmann (of Auckland University) who has published a sustained critique of anthropocentric approaches to ecological issues and who acknowledges the importance of indigenous perspectives.[3]

A very important contribution to international perspectives which is focussed on tropical rainforests, but is of very direct importance to the consideration of this claim, is a document produced by the International Work Group for Indigenous Affairs and authored by A Gray.[4] Extracts from his synopsis outline its major points:

Biodiversity is the variety of the world's genes, species and ecosystems. There are well over 30 million different species in existence clustered in particular ecological regions such as coral reefs and rainforests. Through environmental destruction such as deforestation the biodiversity of the world is under threat as never before.

Ecological areas inter-connect with each other which means that the destruction of biodiversity in one area has not only local but global consequences. Furthermore biodiversity encourages alternative varieties of agricultural species and enhances the preservation of ecosystems. Estimates of the destruction of biodiversity are as high as 300,000 times what they would be in a state of unperturbed nature…

However the world biodiversity crisis is matched by a 'world cultural diversity crisis'. Indigenous peoples live predominantly in areas of high biodiversity while at the same time comprise 95 per cent of the cultural diversity in the world. They face threats against their territorial possessions, their cultures and, in some areas, their lives.

Indigenous peoples have demonstrated that they are the best conservers of their environment which they use and manage according to their own cultural premises. In addition indigenous peoples consider themselves as custodians of their territories which have been passed

2. A Hurrell and B Kingsbury (eds), *The International Politics of the Environment*, Oxford, 1992, pp 8–9 The contribution from Piddington quotes a Maori proverb as a section heading but entirely avoids attempting to describe Maori perspectives (p 223).

3. K Bosselmann, *When Two Worlds Collide: Society and Ecology*, Auckland, 1995, pp 129–135

4. A Gray, *Between the Spice of Life and the Melting Pot: Biodiversity Conservation and its Impact on Indigenous Peoples*, International Working Group for Indigenous Affairs, document 70, August 1991

down by their ancestors and have to be conserved for the generations to come.[5]

A particularly difficult issue discussed by Gray, which is of great importance in Aotearoa/New Zealand, concerns the setting aside of 'protection zones' for wilderness preservation and protection of endangered species habitats:

> The usual way of dealing with protection zones is to demarcate them and then try to deal with the indigenous peoples of the area. However this is the inverse of a sound strategy. Unless indigenous territorial rights are recognised as a condition of and in co-ordination with all other conservation strategies, local people risk being expelled from their lands. By recognising indigenous peoples' territories acknowledging the need for land of other forest peoples, it should be possible to combine the social needs of the local population with plans for biodiversity conservation.
>
> Along with protection zones, resource management organisations are seeking ways of harvesting the rainforest for economic profit. This means evaluating its economic potential and extracting its resources. The objective is to make commercial interests prefer sustainable development projects. However this strategy by-passes the needs of indigenous peoples.
>
> Without complete social control over their production and marketing, indigenous peoples cannot enter the market economy on their own terms. Dependency and eventual poverty then face indigenous peoples whereby consumer demand from the North dictates its own production needs onto the South. In addition, encouraging harvesting puts yet more pressure on the environment.[6]

Gray strongly argues that cultural diversity for indigenous peoples is every bit as important as biological diversity is for environmentalists. As a result there is the potential for very real difficulties between conservationists and indigenous peoples:

> Environmentalists have been using protective legislation to set aside areas for conservation for many years. The national park movement started in the United States at Yellowstone in 1872. One hundred years later there were 1200 national parks all over the world.

5. Ibid, pp ii–iii
6. Ibid, p iii

Over the last decade there has been a considerable discussion among environmentalists as to how indigenous peoples and conservation can be brought into line. According to Clad this convergence has become more apparent since the International Union for Conservation of Nature and Natural Resource (IUCN) established a 'Task Force on Traditional Lifestyles'.

However, Dasmann considers that there is a fundamental contradiction between the approaches of 'ecosystem people' (indigenous peoples whose subsistence comes primarily from the ecosystems or systems where they live) and 'biosphere people' who have the whole biosphere at their disposal:

'Local catastrophes that would wipe out people dependent on a single ecosystem may create only minor perturbations among the biosphere people, since they can simply draw more heavily on a different ecosystem ... The impact of biosphere people upon ecosystem people has usually been destructive ... Biosphere people create national parks. Ecosystem people have always lived in the equivalent of national parks'.[7]

It is accepted that the suggestion of a sharp dichotomy between conservationists and indigenous peoples is too crude:

Indeed, the problem presented in this report cannot be simplified as one between 'environmentalists' versus 'indigenous peoples'. The political make-up of these groups is complex and leads to several cross-cutting alliances. At the risk of over-generalisation, environmental groups can be divided into 'green capitalists', 'classical nature conservationists' and 'social ecologists'. Whereas all these groups share the same sense of urgency over the destruction of the environment they emphasise different sets of priorities:

1. The 'green capitalists' are commercial environmentalists who consider that the forest can best be saved by creating profitable markets for forest products to detract companies and colonists from destroying its valuable resources. They work closely with, and in many cases are working for institutions aimed at sustainably managing resources.

2. The classic nature conservationists feel that the best solution to the destruction of the rainforest is to ensure that there are protected areas where no one can enter where endangered species can be guarded from destruction. Some of these people will work with the 'green capi-

7. Ibid, pp 24–25

talists' if they feel they can gain protected areas as a trade off. However, others consider that 'green capitalism' is the greatest threat to environmental protection.

3. The social ecologists see the best stewardship of the rainforests to lie with the forest peoples themselves and have allied themselves in organisation such as the World Rainforest Movement.

On the indigenous side, there are three parallel positions which seek solutions to the problems facing indigenous peoples.

1. 'Pro-Indigenous capitalism' is the approach which argues that indigenous people need money to survive and struggle for their lives and lands. The only way to obtain this money is to draw them closer into international markets and attract new rainforest products attractive to consumers in the north.

2. Isolationists argue that indigenous peoples need a large land base on which they can be protected from the outside world.

3. Proponents of self-determination, who say that indigenous peoples' voices are paramount and that it is through their political empowerment combined with land rights and their control of the markets which will ensure their future.

In the last two years an interesting shift has taken place in the political alignments of these three position in both environmental and indigenous affairs. The 'green/indigenous capitalism' approach has taken off. International environmental organisations such as the World Resources Institute, World Wide Fund for Nature US and the IUCN have promoted these ideas. In addition, indigenous advocacy organisation such as Cultural Survival have been working closely with small 'environmentally friendly' companies and large concerns such as the Body Shop to market rainforest product. ...

For indigenous peoples and social ecologists, the environment and human beings are part of the same world. Indigenous peoples have lived in a dynamic harmony as a part of the ecosystem for centuries, and indeed the destruction of the rainforest really only began with the encroachment of industrial society onto their lands.

Environmentalists, who are more protectionist and commercially oriented on the other hand, clearly distinguish between human beings and nature. For them, Nature is something which contains the means for producing a living, while at the same time it is the environment un-

touched by human disturbance. Human beings operate on nature. If nature is in trouble then the instinctive approach of environmentalists is to keep human beings at bay.[8]

5.2 The Local Context

There can be no doubt that the Wai 262 claimants are an example of the third of the indigenous peoples' positions mentioned by Gray. They are proponents of self-determination and the claim to political empowerment is firmly based on the tino rangatiratanga guarantee of the Treaty of Waitangi. The isolationist large reserves option is hardly available in Aotearoa. There are advocates of 'pro-indigenous capitalism', within the leadership especially of some iwi, and those adopting that position may well be willing to work towards co-management regimes with respect to traditional resource rights. The kaupapa of this claim, however, is clearly based on self-determination principles.

Within 'environmentalist' circles there are of course a wide range of opinions too. Nevertheless the Crown, a number of quango's such as the New Zealand Conservation Authority and Fish and Game Councils (established upon the enactment of the Conservation Law Reform Act 1990), and lobby groups such as the Royal Forest and Bird Protection Society and the Federated Mountain Clubs of New Zealand (both of whom have a right to recommend an appointee to the Conservation Authority) will all have a significant interest in the progress of this claim. It may be said that the enactment of the Conservation Act 1987, The Environment Act 1986 and the Resource Management Act 1991 along with other environmentalist policies of successive national and local governments in recent years has established the 'greening' of capitalism as the mainstream position in New Zealand. Most of the conservation lobby groups however adopt the 'classic nature conservationists' position. There are a few 'social ecologists' including G Park – the author of a brilliant study of ecology and history in a number of New Zealand landscapes.[9]

8. Ibid, pp 56–57
9. G Park, *Nga Uruora: The Groves of Life*, Wellington, 1995. See also T Flannery, *The Future Eaters*, Melbourne, 1995; D Maybury-Lewis, *Milennium: Tribal Wisdom and the Modern World*, New York, 1992; E Kemf, *Indigenous Peoples and Protected Areas: The Law of Mother Earth*, London, 1993 (with foreword by Sir Edmund Hillary) for a large number of examples of indigenous peoples living within 'protected areas' in various part of the world.

5.3 'Biosphere People'

The general thrust of Crown policy in promoting immigration and settlement by Pakeha populations from the outset of colonial rule to the present day has been entirely consistent with the 'biosphere people' label mentioned above. The promotion of rapid orderly immigration from Britain and Australia to New Zealand was at the forefront of Crown policy from 1839 onwards. The Crown insisted that this immigration into and settlement of the country was to be firmly controlled by the Crown rather than by entrepreneurs such as the New Zealand Company. The 1839 Instructions by Lord Normanby to Lieutenant Governor Hobson strongly insisted upon the Crown monopoly over settlement and indicated that there could be no doubt 'an extensive settlement of British subjects will be established in New Zealand.'[10] The Treaty of Waitangi itself in its preamble refers to emigration to Aotearoa:

> Na te mea hoki he tokomaha ke nga tangata o tona iwi kua noho ki tenei wenua, a e haere mai nei.

The English text reads:

> In consequence of the great number of Her Majesty's Subjects who have already settled in New Zealand, and the rapid extension of Emigration both from Europe and Australia which is still in progress,

Later the 1846 Instructions to Governor Grey contained extensive material on the settlement of 'waste lands'. The imperial and colonial governments continued to foster rapid settlement. With the advent of responsible government by settler politicians the pace of immigration increased and the impact on the tangata whenua became dramatically evident in the war period from 1860 to 1872. The New Zealand Loan Act 1863, a companion measure to the raupatu legislation in the New Zealand Settlement Act 1863, authorised the raising of a substantial loan for purposes including:

> For the introduction into the Northern Island of settlers from Australia, Great Britain and elsewhere
>
> For the cost of Surveys and other expenses incident to the location of settlers

10. Normanby to Hobson, 14 August 1839 [1840], *British Parliamentary Papers* (IUP ed), vol 3, pp 85–90

A number of Naval and Military Settlers Acts from 1860 provided for free grants of land in return for military service, usually by establishing settlements on confiscated land.

The pace of Crown-promoted settlement increased ever more dramatically with the enactment of the Immigration and Public Works Act 1870 in line with the policies of J Vogel. An even more determined settlement push came with the policies of the Liberal Party governments from the 1890s as exemplified in Acts such as the Lands Improvement and Native Lands Acquisition Act 1894 – which remained in the statute book until 1980 – and the Aid to Public Works and Land Settlement Act 1896. And so it went on (with particularly significant opening up of new settlement lands in the 'rehabilitation' farms for servicemen returning from the World Wars) under the Discharged Soldiers Settlement Act 1915 and the Servicemen's Settlement and Land Sales Act 1943. The Lands for Settlement Act 1925 and Land Act 1948 established Land Settlement Boards and Land Settlement Committees under provisions finally repealed by the State-Owned Enterprises Act 1986. Those who won ballots for settlement on farms were required to remove all forest cover from their blocks in a very short period of time, with penalties imposed on those who were tardy in clear-felling or, as was often the case, simply burning off all forested land. As late as 1963 to 1982 the Land Amendment Act 1963 established a Marginal Lands Board which brought in yet more land for onward disposal to holders of 'uneconomic areas of farm land'. Right to the end of the term of the Muldoon-led administration in 1984 uneconomic uses of farming land were being sustained by mechanisms such as 'supplementary minimum payments' to farmers.

The evidence of the utterly devastating impact of a century and a half of settlement policies upon the indigenous flora, fauna and ecosystems is available for all to see as town, cities and farm lands now cover the entire territory of this country apart from fragments of indigenous ecosystems which are now almost exclusively to be found in the Crown's conservation estate in high country and on outlying islands. G. Park's accounts in *Nga Uruora* graphically describe the pitiful lack of indigenous forest or swamp lowlands remaining after the ruthless implementation of settlement policies.

Of course it was not just human beings who came to settle in New Zealand. Robertson and Calhoun state that 'over 90% of New Zealand's agriculturally important plants are introduced species'.[11] For many years

11. J Robertson and D Calhoun, *Ownership Issues and Access to Genetic Materials*, 1994, p 6 (paper submitted for publication in the *European Intellectual Property Reports*)

the Department of Scientific and Industrial Research and the successor Crown Research Institutes have been predominantly concerned with non-indigenous species. The pilot study in 1986–88 by the Botany Division of the DSIR on traditional uses of plants in New Zealand and the Pacific,[12] that Division's role in the 1988 international workshop on ethnobotany[13] and a recent project by Manaaki Whenua–Landcare Research on Maori and native birds[14] are a few of the rare exceptions which prove the general rule.

In addition to the Pakeha settlers and to the exotic grasses, trees, hedges, crops and other plants, Crown policy also strongly encouraged the introduction of foreign animals, birds and fish for commercial production, for game hunting and for other recreational purposes. There was a great deal of legislation passed on such matters from 1861 onwards. The basic thrust of Crown policy was set out in the Protection of Certain Animals Acts 1861 and 1865:

> Whereas it is expedient to provide for the protection of certain Animals and Birds within New Zealand and the increase arising therefrom and to encourage the importation into the Colony of certain Animals and Birds.

From the Protection of Animals Act 1867 onwards, and up until 1990, there is an additional element in government policy of promoting and encouraging the efforts of Acclimatisation Societies in New Zealand. The Acclimatisation Societies for many years played a significant role in massive and regularly repeated introductions into New Zealand habitats of non-indigenous fish, birds and animals desired for sport and recreation. A particularly significant feature of the Protection of Animals Act 1867 (and in succeeding consolidations of that Act in 1873, 1880, 1907, etc) is the provision that any non-indigenous birds and animals turned at large and their offspring may be deemed by gazette notice from the Governor to be vested in the Acclimatisation Society absolutely or for any stated period (eg s.6 of 1867 Act; s.57 of 1907 Act). This may be compared with the fact that at no point in the history of New Zealand law from 1840 to the present day have the tangata whenua been recognised as having ownership or property rights in indigenous species regardless of whether or not the principles of their kaitiakitanga and the use of rahui may have been just as significant as the work of Acclimatisation Societies. On the contrary, contemporaneously with the wholesale importation of exotic

12. G Walls, *Traditional Uses of Plants in New Zealand and the Pacific*, Havelock North, 1988

13. W Harris and K Kapoor, *Nga Mahi Maori o te Wao Nui a Tane*, Christchurch, 1990

14. N Burley, 'Maori and native birds', draft paper, Manaaki Whenua – Landcare Research, 1996

species of animals and birds and with the nationwide devastation of indigenous swamps and forests in favour of agricultural developments, the list grew of native birds which had once been so abundant (and had been the staple diet of many iwi and hapu) but which now faced extinction or near extinction as a direct consequence of those policies and practices.

At the same time the legislature began to impose more and more restrictions upon Maori exercising customary harvesting rights. This began in the Wild Birds Protection Act 1864 with a prohibition on hunting indigenous wild duck, paradise duck or pigeon except during April to July.

As the years went by the number of protected species began to grow. It must be remembered that when the legislature spoke of 'protection', iwi and hapu were suffering the unilateral suppression of their traditional rights and responsibilities of kaitiakitanga. The Fifth Schedule to the Animals Protection Act 1907 was as follows:

Birds, Animals, and Reptiles to be Protected

Birds

Bell-bird, or mocker (makomako), *(Anthornis melanura)*
Bittern *(Botaurus poeciloptilus)*
Blue heron *(Demiegretta sacra)*
Blue or mountain duck (whio), *(Hymenoloemus malacorhynchus)*
Crested grebe *(Podiceps cristatus)*
Crow (kokako), *(Glaucopis)*
Cuckoo (Family *Cuculidoe)*
Fantail *(Rhipidura flabellifera)*
Fernbird *(Sphenoeacus punctatus)*
Ground parrot (kakapo), *(Stringops habroptilus)*
Huia *(Heteralocha acutirostris)*
Kaka *(Nestor meridionatis)*
Kingfisher *(Halcyon vagans)*
Kiwi *(Apteryx)*
Landrail *(Hypotoenidia philippensis)*
Morepork (ruru), *(Ninox novoe-zealandiae)*
Native thrush *(Turnagra tanagra and Turnagra crassirostis)*
Oyster-catcher *(Haematopus longirostris)*
Paradise duck *(Casarca variegata)*
Parson-bird (tui), *(Prosthemadera novae-zealandiae)*

Redbill *(Haematopus unicolor)*
Robin (Genus *Miro*)
Saddleback (tieke), *(Creadion carunculatus)*
Stitchbird (ihi), *(Pogonornis cincta)*
Swamprail *(Porzana tabuensis)*
Tomtit (Genus *Petraeca)*
White heron (kotuku), *(Herodias timoriensis)*
Wren *(Xenicus longipes)*

Animals and Reptiles

Tuatara lizard
Opossum *(Phalangista)*

From a 1997 perspective it seems utterly bizarre that the Opossum was in the same protected category as tuatara, huia (probably already extinct), tui, kaka, kiwi, etc!! Hardly more credible from a modern perspective is section 51 in the same Act permitting the Governor, on the petition of any local authority or acclimatisation society, to declare districts within which weasels, stoats and other natural enemies of the rabbit may be killed despite the prohibition on such killings in the Rabbit Nuisance Act 1882. Yet that was indeed the law and the policy of the Crown as at 1907. Native birds mentioned in the Second Schedule – including kereru/kukupa(pigeon) and whio(duck) – could still be lawfully hunted but only during a May to July season. There was a special season of February to April for kuaka (godwit) specified in section 27 and a special exemption from closed seasons for native game in 'the Urewera country and other Native districts' (s26).

The law is very different now. Under the rules and regulations governed by the Wildlife Act 1953 all native bird species now have an absolute protection all the year around, with the solitary exception of the karoro (common black-backed gull. Only the Director-General of Conservation under section 53 of the 1953 Act (as amended) has the legal authority to permit catching or killing of absolutely protected or partially protected wildlife.

The legislative record with respect to indigenous species of birds and animals is indeed consistent with the profile of 'biosphere people'. A similar pattern may be observed in laws and policies relating to forests. The New Zealand Forests Act 1874 recognised the importance of timber resources for New Zealand's economy (railways, housing) and for natural

conservation reasons. It sought to preserve certain existing native forests, to promote the planting of new forests and to establish a system of forest management and control. The New Zealand State Forests Act 1885 commences with an important preamble:

> Whereas it is expedient to make provision for setting apart areas of forest land in New Zealand as State forests, and to subject the same to skilled management and proper control, in order thereby to prevent undue waste of timber, and to provide timber for future industrial purposes, and to provide for the proper conservation of climatic conditions by the preservation of forest growth in elevated situations.

I would wish to draw attention to the fact that preservation of forest growth is considered important only in elevated situations. The converse of that policy is that lowland areas should be entirely deforested and it is precisely that policy which was articulated by a Royal Commission in 1913. This Commission laid down 'a general principle that no forest land which is suitable for farm lands, except it is required for a scenic or climatic reserve, should be permitted to remain under forest if it can be occupied and resided upon...'[15] As Park notes the government quickly adopted the idea, particularly in its enthusiasm to eliminate kahikatea growing in lowland swampy ecosystems which were viewed as prime country for close settlement.[16]

The Government was also very keen to acquire a large proportion of Maori land under forest which was seen to be unproductive land. The Forests Act 1921–22 following a further report in 1920[17] legislated in section 59 for Maori forests to be transferred to the Commissioner of State Forests. During debates on this statute, Apirana Ngata commented that if Maori were prosecuted for trespassing or hunting in their forests then they would be unwilling to transfer further forest land.[18] Thus the incompatibility of Maori customary usages in forests and Crown policies on forestry management have long been a matter of open dispute. It should be noted that it was not until 1948 that an amendment to the Forests Act first made provision for sanctuaries to be set aside within state forests for the preservation of indigenous flora and fauna.

It was mentioned above that the 1913 Royal Commission on Forestry did recognise scenic reserves as exceptions to the general policy of clear-felling all lowland native forests. The scenic reserves policy which began to be implemented in the first decade of this century, the national parks

15. 'Report of Royal Commission on Forestry', AJHR, 1913, C-12, p xxiv
16. G Park, *Nga Uruora: The Groves of Life*, Wellington 1995, p 69
17. 'Report of Forest Conditions', AJHR, 1920, C-3a
18. Ngata, NZPD, 1921–22, vol 193, p 563

policy and the wildlife sanctuaries permitted under the Animals Protection Acts are all examples of policies entirely consistent with the preservationist approach to protected zones. Whilst continuing with rapacious development (whether sustainable or not) throughout almost the entire country except for 'elevated situations', Crown policy slowly began to recognise merits of absolutely protected remnant areas for the survival of some of the indigenous flora and fauna but at the expense of the rangatiratanga of iwi and hapu who were entirely excluded from continuing with their kaitiakitanga responsibilities. This approach has sometimes been described as the 'Yellowstone model' – named after the first national park of that name created in the United States of America about 1872. A comment on the drastic consequences of the 'Yellowstone model' for indigenous peoples along with modern revisionist thinking on national parks, which is extremely relevant to this Waitangi Tribunal hearing, is to be found in a World Wide Fund for Nature and Sierra Club publication:

> Writing in 1966, and reflecting the thinking of park managers at the time, Scharff says of Grand Teton National Park, created in 1929 and enlarged in 1950 by the addition of a 13,468-hectare area of Jackson Hole National Monument: 'Until shortly after 1800, Jackson Hole truly belonged to the Indians. Nothing was particularly outstanding about their history...'
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> In conformity with the 'Yellowstone model,' many national parks around the globe were developed as wilderness preserves for public recreation, without permanent human habitation or extractive use. Yellowstone's outstanding beauty and natural features – the largest mountain lake in North America, its geysers, breathtaking waterfalls, snow-covered peaks, and an abundance of wildlife – spawned the birth of thousands of parks around the world. For years, park managers strove to create parks based on the Yellowstone model and moved people, sometimes forcibly, from the land where they had lived for centuries. According to Harmon, 'The consequences [of adopting this model] can be terrible.' Recognising the limitations of a global application of the Yellowstone model, which at the time was adopted in good faith and with the best intentions, park managers today are developing new approaches, methods, and guidelines for establishing protected areas, with the assistance of IUCN's Commission on National Parks and Pro-

tected Areas (CNPPA). These guidelines, which have been under serious review by the CNPPA since 1984, were the subject of an intensive workshop at the 1992 Parks Congress in Caracas, and by the time of publication of this book a new set of guidelines should be published. These guidelines will reflect the need for more flexible interpretations to meet the varying conditions around the world.

Meanwhile, the rights and demands of indigenous and local peoples to continue living in parks and reserves and to use them on a sustainable basis is gaining acceptance. Commenting on the evolution of Australia's national park system, David Foster of the Phillip Institute of Technology, who is also an IUCN consultant, says: 'Park managers have had to come to terms with a whole new set of issues, concepts and ideas as well as to learn to communicate with a group of people with a different language, culture and world view. Of particular concern to many has been the challenge to their fundamental beliefs about the very nature of national parks themselves.' It was evident during the WWF-chaired Workshop on People and Protected Areas at the Caracas Congress that conservationists are divided into several schools of thought: those who think resident people should be able to fish, hunt, and forage in national parks; those who do not; and those who think there should be a compromise between the camps. But it was also apparent that the human factor in creating and managing national parks and protected areas had long been overlooked and misunderstood.

Many of the participants were amazed to find that 86 percent of the protected areas in Latin America were inhabited, either permanently or temporarily.[19]

5.4 Islands, Scenic Reserves, and National Parks

Some of the most totalitarian examples of the creation of what are now recognised to be places of very special conservation importance are highlighted in the Wai 262 claim with respect to Takapourewa (Stephens Island) and Hauturu (Little Barrier Island). The whanau of the late John Hippolyte of Ngati Koata and the claimant Witi McMath of Ngati Wai will be able to provide detailed evidence on the tangata whenua perspectives concerning the history of those islands to the Tribunal. Both islands

19. E Kemf, 'In Search of a Home: People Living in or near Protected Areas' in E Kemf (ed), *Indigenous Peoples and Protected Areas: The Law of Mother Earth*, London, 1993, pp 6–7; see also M D Spence, 'First Wilderness: Native Use of the Yellowstone Basin and Indian Removal from Yellowstone National Park', Department of History, UCLA, undated

were compulsorily acquired in the 1890s, although Takapourewa was not originally set aside as a protected area. On the contrary, the island was compulsorily acquired in 1891 under the Public Works Act 1882 for lighthouse purposes. The island is best known today as one of the few remaining sites for a significant population of tuatara living in a natural environment and it has been something of a test case in the Crown's attempts to accommodate settlement of Maori grievances with public ownership of protected zones. It is also the site of one of the best documented (and poignant) stories of a species extinction. T Flannery tells the story in these few words:

> The most inherently interesting of all New Zealand birds were, to me, a family of tiny, entirely flightless, wren-like birds. They appear to have been the ecological equivalents of mice. As with so many of New Zealand's birds, they rapidly became extinct following human disruption of their habitat. In this case a few hundred individuals of a single species survived on a tiny, remote and unpopulated island until 1894. Known as the Steven's (sic) Island flightless wren *(Xenicus lyalli)*, it was to create a scientific sensation when the last population was discovered – and made extinct – all in the same year.
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> The story began when the New Zealand government decided to build a lighthouse on lonely Steven's Island. The lighthouse keeper, lonely himself, decided to keep a cat. Each day, the cat would bring a few tiny brown birds home. The lighthouse keeper had seen them at dusk, running nimbly like mice through the undergrowth near his lighthouse. He never saw them fly. Puzzled by their unusual appearance and behaviour, the lighthouse keeper sent a few bodies to a museum. But by the time a scientist realised that these tiny birds were the only surviving flightless perching birds (the largest bird group of them all) ever discovered, the lone cat of Steven's Island had exterminated the entire species.[20]

The forcible removal of Ngati Wai from Hauturu is a topic which definitely requires detailed research and writing up, as it highlights the failure of Crown policy to respect tino rangatiratanga because of a fixed determination to totally exclude the tangata whenua from their ancestral lands in the interest of the preservation of indigenous flora and fauna. Even the recitals and sections of the Little Barrier Island Purchase Act 1894 on their face disclose a grave injustice against non-selling members of the hapu concerned and indicate a serious doubt as to the entire 'purchase'

20. T Flannery, *The Future Eaters*, Melbourne, pp 61–62

transaction. It appears that the conditions laid down by those who agreed to a sale transaction were not met, so they refused to accept payment and sought to avoid completion of the sale. Section 2 of the Act orders that their unclaimed money should be paid to the Public Trust Office and the Public Trustee's receipt was deemed a full discharge of the owners interests in the island. As for those who resolutely refused to sell at all, the preamble audaciously declared that 'according to Native custom and usages they are bound by the terms of the document' whilst section 3 vested their interests in the Public Trustee who then was to execute a conveyance of their interests to the Crown. It is suggested that the Crown will have grave difficulty in justifying its continuing right and title to this extremely important island when the details of the 1894 Act and associated transactions are measured against the requirements of Treaty jurisprudence.

R Holdaway has recently written some comments on three islands which 'like biological life-rafts' are the last refuses for many animals and plants. He mentions remote Resolution Island, the first to be gazetted as a reserve about 1891. He then comments on Hauturu:

> Acquiring Little Barrier proved a more difficult proposition. Although Henry Wright had visited the island and made a strong report in its favour as a reserve (it was the last home of the stitchbird, which until a few years earlier had been common in North Island forests), Little Barrier had resident Maori owners. While negotiations dragged on, kauri logging on the island continued, and there were rumours of commercial collecting of stitchbirds. The impasse was cleared in the traditional way, by a compulsory purchase, and Little Barrier became a reserve, too.

He then gives some information on the forest clear-felling of most of Stephens Island by the Marine Department when it established the lighthouse and he mentions the head keeper, David Lyall, whose name is immortalised in the botanical name of the extinct wren. He offers the thought however that Crown policies were more to blame than Lyall's cat:

> There had to be a scapegoat, or rather a 'scapecat', for, ever since, the lighthouse keeper's cat has been blamed for exterminating the Stephens Island wren. Conveniently overlooked is the forest clearance that removed most of the habitat for not only the wren but also the kokako,

> saddleback and piopio. Yes, the cats killed many birds on Stephens Island – perhaps as many as were taken by the collectors who, roused by the stories of abundance of birds rare unto death elsewhere, rushed to the island. But many birds simply died of starvation and exposure as their forest shrank.
>
> Within a year of the lighthouse being erected, professional science found out what was happening on the island. A meeting of the Australasian Association in 1895 was told of the damage done by cats and collectors, and, horrified, passed a motion urging the New Zealand government to set Stephens Island aside as a refuge for the tuatara and other wildlife. James Hector, director of the Colonial Museum and the senior government scientist in New Zealand, took up their case, gazetting the tuatara under the Animals Protection Act.[21]

This provides the background for the panic reaction which saw tuatara included in the Animal Protection Act in 1895 but of course if does not explain the complete absence of concern for the rangatiratanga rights of iwi and hapu who had had a very special relationship with the tuatara for many centuries. Although the tuatara became legally protected it was not until 1966 that Stephens Island itself became a designated wildlife sanctuary.

I turn now from the focus of offshore islands in the 1890s to the beginnings of protected zones on the main islands. The origins of Crown policy on protected zones, in formal legislation passed for that purpose, lies in a desire to protect 'scenery'. The idea of scenery preservation finally became government policy in the first decade of this century and the late in life work of Percy Smith was a belated effort to save a few scraps of scenery from the ongoing 'progress' of settler development. Unfortunately a large proportion of these picturesque remnants of indigenous flora were Maori-owned and Maori were called on yet again to sacrifice their own interests to the national good. Smith put much energy into strengthening the powers of the Scenery Preservation Acts so that Maori land could be compulsorily acquired under the Public Works Acts for scenery purposes. G Park describes Smith's endeavours in relation to Maori wahi tapu land beside the Mokau river. I extract the general thrust of Crown policy from what Park has written on that sorry saga:

> On 4 October 1769, as the *Endeavour* approached New Zealand from Tahiti, the poet Thomas Gray was high above the Vale of Derwentwater

21. R Holdaway, 'Stephens Island: A Chance Lost' *N Z Geographic*, no 32, Oct–Dec 1996, pp 62–84

in England's Lake District. Angling his Claude glass to ensphere the view across meadows and wooded slopes to the water, he told Thomas Wharton it was 'the sweetest scene I can yet discover in point of pastoral beauty'. Soon after, not far away at the Milnthorpe ironworks, he was marvelling at 'the demons at work by the light of their own fires' and 'the thumping of huge hammers'.

'Picturesque' beauty and heavy industry were born together, as the 'natural' became hemmed in by the 'artificial' – nature's variety, intricacy and irregularity framed by rural enclosure and urban sprawl, and threatened by human activity. Gray's response to landscape over two centuries ago is strikingly similar to our own. In this brief period of the mid 18th century, our culture's way of looking at the non-human world turned a corner. Painters like Claude Lorraine and Salvator Rosa created a style that rapidly found its way, in England especially, into the design of parks and gardens, and into the very definition of beauty itself. By the mid 19th century, 'the Picturesque' had spread beyond England to the newly possessed edges of its empire, to become a term on nearly every traveller's lips for describing strange beauty.

No small part of the English legacy in Africa, says the Kenyan historian Ali Mazrui, was in the notions of scenery and beauty that the colonisers brought with them as they fled, like refugees, the industrial ugliness of their homeland. When New Zealand's colonising century ended, scenery was more than something in which exhausted settlers took a break from bush-burning and jaded townsfolk picnicked. There was money to earn from the tourists who were crossing the world for the picturesque sights of other lands – but it needed wild waterfalls, gorges and cool, wooded riverbanks.

The government handed the task of acquiring them to a Scenery Preservation Commission it established for the purpose in 1903. To lead it, they called out of retirement a Surveyor-General, Percy Smith, whose obituarists 20 years later highlighted his 'eye for the picturesque', and who by the time Tauwhare was gazetted Native Reserve in 1897, had become renowned for his efforts to keep the country's scenic corners at least secure from the ravages of land clearance. Smith was uncommonly conversant with Maori language and custom and complemented his surveying profession with a private passion for Polynesian ethnology, particularly of Maori origins and canoe traditions. His *History and Traditions of the Maori of the West Coast of the North Island* and *Lore of the*

Whare Wananga are still widely consulted by Maori and Pakeha alike. But the 'scenic reserve' he created was not interested in the Maori spiritual landscape; it was a late-colonial afterthought from men on whose survey maps country like Mokau was labelled: *Land in the Hands of the Natives over which the Native Title has not been Extinguished.* A pleasure of imperialism, set aside 'only when … the needs of settlement… have been amply met and provided for'.

Percy Smith believed preserving scenery was a Crown responsibility and advocated it years before legislation made it possible. 'In future,' said his memoranda, 'attention must be given in dealing with Crown lands to the reservation of all places of natural beauty of whatsoever nature, which are likely to become resorts for the people of the country hereafter.' He had a special concern for riverbanks, particularly 'along the larger rivers, more especially those which are navigable, not alone in the interests of the conservation of their banks, but in the interests of tourists and other travellers'.

Smith's Scenery Preservation Commission was created at a crucial time. Without its efforts, hundreds of places that are now protected would have been cleared for farms along with everything else. Each one, the Commission decided at its first meeting, was to have a clearing for bush picnics…

Wherever Percy Smith and his commission looked, what had escaped 60 years of settlers' fires and was still wild and beautiful tended to be Maori land. Pressing for changes to what seemed a ridiculous situation, he asked the Prime Minister, Sir Joseph Ward, for amendments to make the Act 'more satisfactory'. 'There are,' he explained, 'in the hands of the Natives at the present time, many forest clad ranges etc., which have been from time immemorial preserved by them for the purpose of snaring birds, such lands being called Pua-tahere; … just such places as the Commission would wish to see reserved in order to preserve the forests and the scenic features of the country.' Were honorary Maori rangers appointed and a season prescribed for bird-snaring, he intimated, 'the Maoris will hand over some of their Pua-tahere without cost'.[22]

The legislation Park refers to was the Scenery Preservation Act 1903 which provided for the appointment of a Commission to inquire into lands possessing scenic or historic interest or on which there are thermal

22. G Park, *Nga Uruora: The Groves of Life*, Wellington, 1995, pp 142–146

springs – a list which indicates that Park is correct in identifying tourism potential as a driving force – and to recommend whether these lands should be permanently reserved. The MP for Northern Maori, Heke, argued for the protection of kauri forests in Northland but objected to the compulsory acquisition of Maori land under the Public Works Act.[23] An amendment Act in 1906 did clarify that Maori land could not be compulsorily taken but this was reversed in the Scenery Preservation Amendment Act 1910. No doubt as a 'sweetener' to console Maori in accordance with Percy Smith's suggestion, the 1910 Act included a section granting certain rights to Maori. Note, however, the unilateral right of the Crown to withdraw or vary the rights granted:

> 7(1) The Governor may from time to time, by notice in the *Gazette*, grant to Natives the right to take or kill birds, not for the time being specially protected, within any reserve which before the reservation or taking thereof was Native land, or, where any such reserve includes any ancestral burial-grounds of Natives, the right to bury deceased Natives therein.
>
> (2) All rights so granted may at any time thereafter be withdrawn or varied by the Governor by notice in the *Gazette.*

This legislation has been continued through the Reserves and Domains Act 1953 consolidation to the Reserves Act 1977, section 46:

> 46. **Grant of rights to Maoris**—(1) The Minister may from time to time, by notice in the *Gazette*, grant to Maoris the right to take or kill birds within any scenic reserve which immediately before the reservation or taking thereof was Maori land, provided the taking and killing of the birds would not be in contravention of the Wildlife Act 1953 or any regulations or Proclamation or notification under that Act.
>
> (2) Where any scenic or historic reserve includes any ancestral burial grounds of Maoris, the Minister may, by notice in the *Gazette*, grant the right to bury or inter the remains of deceased Maoris in a place to be specified therein.
>
> (3) Any rights so granted may at any time in like manner be withdrawn or varied by the Minister.

Although this law remains in force, in relation to hunting rights it would seem to be quite meaningless in actual fact because, as noted above, there are no native birds (except the common gull) the taking of

23. Heke, NZPD, 1903, vol 126, pp 710–711

which would not be in contravention of the Wildlife Act 1953. This follows a familiar example of assurances being given to Maori to enable policies to be implemented and then, when the policy is firmly in place, the promises to Maori are later withdrawn without any consideration of the Treaty of Waitangi rights that were being trampled upon in the process. The land involved however remains in Crown ownership and under Crown control despite the withdrawal of rights that were originally a quid pro quo for Maori acquiescing in the compulsory acquisition of ancestral land, or even freely gifting it.

A free gift by Maori plays an important part in the history of national parks as well. The gift to the nation in 1887 by the ariki Te Heu Heu, of Ngati Tuwharetoa, of Tongariro lands provided the basis for the creation of the national park established by the Tongariro National Park Act 1894. It is my understanding that this gift was in no sense an abdication of kaitiakitanga responsibilities by Ngati Tuwharetoa but rather an attempt to maintain the integrity of the sacred mountain areas which might otherwise have been swept away in a piecemeal way by the ever-pressuring activities of land purchase officers seeking to extinguish Maori title to land.

Lands added to the gift by the government were in some cases compulsorily acquired from Maori because they were said to be 'of no benefit' to the owners. Heke in Parliament objected to those compulsory acquisitions as a breach of the Treaty of Waitangi.[24] The next national park to be established occurred without any reference whatsoever to its Taranaki iwi kaitiaki because it was raupatu land confiscated under the New Zealand Settlements Act 1863. The Egmont National Park Act 1900, as with the Tongariro park, provided for a board which was to act in a manner similar to public domain boards. The 'Yellowstone model' of national park became more firmly established in the 1920s when the Tongariro National Park Act 1922, the Egmont National Park Act 1924, the Peel Forest Act 1926 and then Part III of the Public Reserves, Domains and National Parks Act 1928 all bestowed the ordinary powers of domain boards on park boards. Section 80 of the 1928 Act read:

> (a) Excluding the public from any specified part or parts of the park;
>
> (b) Prescribing the conditions on which any persons shall have access to or be excluded from the park or any part thereof,....

24. Heke, NZPD, 1894, vol 86, pp 678–680

With consolidations in the National Parks Act 1952 and the National Parks Act 1980 the 'Yellowstone model' continues to the present day. The tino rangatiratanga rights of iwi and hapu entirely fail to be met by minority representation on conservation boards or authorities. Something approaching partnership – but with Maori as the subordinate partner – is to be found in amendments such as the Conservation Law Reform Act 1990, section 113:

> (2) The Board having jurisdiction in respect of the Whanganui National Park shall, in carrying out its functions,—
>
> (a) Have regard to the spiritual, historical, and cultural significance of the Wanganui River to the Whanganui iwi; and
>
> (b) Seek and have regard to the advice of the Whanganui River Maori Trust Board on any matter that involves the spiritual, historical, and cultural significance of the park to the Whanganui iwi.

It hardly needs to be added that, once the procedures of 'having regard to' iwi concerns have been gone through, the board may arrive at whatever decision seems appropriate to the majority of its members.

The Conservation Act 1987 as amended (particularly by the Conservation Law Reform Act 1990) now brings together on the statute book a wide range of legislation on the various types of protected zones currently in place. It is true that provisions such as section 27A on Nga Whenua Rahui kawenata now provide a legal regime for managing land for conservation purposes whilst protecting spiritual and cultural values which Maori associate with the land and without resort being necessary to the 'traditional way', as Holdaway put it, of compulsory acquisition by the Crown. However, despite the formal obeisance to the Treaty of Waitangi in section 4 requiring the Act to be interpreted and administered so as to give effect to the principles of the Treaty, the conservation statutes and Crown policy on the conservation estate retain firm control by the Crown over virtually all conservation lands. There are differences in the administration of conservation areas (including national parks), specially protected areas such as conservation parks, wilderness areas, ecological areas, sanctuary areas, watercourse areas and stewardship areas yet throughout the conservation estate the Crown retains the entire right to control and manage all areas, consulting various parties as it sees fit and excluding Maori along with all members of the public as and when it sees fit. I would assume that a consideration of the impact of Treaty

jurisprudence on the conservation laws, policies and practices would be a major feature in the hearing of this claim.

5.5 Maori Customary Use of Native Birds, Plants, and Other Traditional Materials

In May 1994 the New Zealand Conservation Authority / te Whakahaere Matua Atawhai o Aotearoa issued a discussion paper on Maori customary use of native birds, plants and other traditional materials following a request by the Minister of Conservation in 1993 that the Authority should lead and focus public debate on the customary use by Maori of various native species of both flora and fauna. The publication of the discussion paper[25] may be said, in the words of a Pakeha proverb, to have set the cat among the pigeons! Indeed the cat (in the form of Maori being permitted to re-exercise customary rights to a 'cultural harvest') seems to be viewed by some conservationist lobby groups as an activity similar to lighthouse keeper Lyall's cat which will drive certain species to extinction – in particular the kereru/native pigeon. The Authority has summarised the debate thus far during 1994 and 1995 in these paragraphs:

> The majority of Pakeha and NGO respondents were opposed to extending Maori customary use to protected species. Many took the NZCA's Paper to be a full-scale policy, rather than just a starting point for looking into the issue. They feared that the NZCA was proposing total Maori control of all wildlife management, with no constraints or safeguards and no opportunities for non-Maori to participate. They focussed on a few 'icon species' such as kereu/pigeon and toroa/albatross. They believed that Maori harvesting would lead to disaster because Maori had hunted the moa to extinction. They believed only Western science and modern ecological management could give security for species at risk. They insisted on strict legislation, strong government control and absolute protection for all native species. They upheld the recreational and symbolic importance of wildlife and unspoiled wild places for New Zealand as a nation.
>
> The majority of Maori respondents supported traditional customary use of native plants, animals and materials such as bone and feathers. They insisted that the Treaty of Waitangi guaranteed rights and access

25. New Zealand Conservation Authority, *Maori Customary Use of Native Birds, Plants and Other Traditional Materials: Discussion Paper*, Wellington, New Zealand Conservation Authority, 1994

> to these taonga/valued resources. They questioned the authority and the results of Pakeha management of natural resources. They upheld tikanga/custom and matauranga Maori/the environmental knowledge and management practices which have been handed down through the generations. They discussed sustainability and protection of species and resources using traditional methods such as rahui/prohibition, and the potential for decisions to be made at local community levels. They explained the importance of taonga species and materials in keeping Maori culture and identity alive and vibrant in modern times, and emphasised the spiritual dimensions of traditional relationships with the natural world.
>
> There is also a lot of common ground. Both Maori and Pakeha respondents are strongly committed to the conservation of New Zealand's natural wild creatures, plants, forests and habitats, and want future generations to be able still to enjoy this heritage. Both Maori and Pakeha are strongly determined to take an active part in conservation, to have their say, and to have their views and priorities taken into account.[26]

It is apparent that this issue has attracted a great deal of attention and it is a clear example of the tension identified by Gray between 'classic nature conservationists' and 'indigenous peoples self-determination'. In terms of the categories he mentioned (which were quoted at the beginning of this chapter) Maori iwi and hapu today are not fully within the definition of 'ecosystem people' as 'indigenous peoples whose subsistence comes primarily from the ecosystems where they live'. As the evidence summarised in the next chapter will show, Maori certainly were an ecosystem people prior to the impact of colonisation. They have been dispossessed of the direct subsistence on the land, forests and fisheries which the Treaty of Waitangi was supposed to have guaranteed but they have not lost the commitment to sustaining their kaitiakitanga and their rangatiratanga.

The assertions of the Wai 262 claim find many echoes in the notes taken by Conservation Authority members and staff at hui held to discuss the 1994 paper. I quote from some of the statements made at these hui. I quote at some length from these submissions in order to provide evidence of widespread support within iwi and hapu for the general kaupapa of Wai 262:

26. Ibid, p 12

The Maori perspective of conservation being for use was explained. The need for any harvest of plants or animals to be sustainable was agreed. We may not be able to have a harvest now but could actively propagate the species.

Concern was expressed about the recent gifts of tuataras overseas. There had not been appropriate consultation with tribal elders. These tuatara were the heritage of the people and should not be given away.

The holistic Maori view of the environment and the links with the past to Rangi and Papa were explained. The whole package must be sustainable and common sense would help provide an answer. Thus birds are not just food but a part of the whole forest ecosystem.

One person discussed taking kereru as a boy. His great grandfather decided when and where they were taken. It was very important that taonga such as kereru were preserved. The spiritual side of kereru harvest was also recognised. …

There was a recognition of different tikanga in different areas. For example toroa are taken on the Chathams but this is not acceptable here. While all albatross caught accidentally by fisherman should be given to iwi, others should not be killed and taken. …

There was opposition to poaching. (Takapuwahia marae, Porirua)

The old way of making things happen, was to relate to Papatuanuku, to Tane Mahuta and Tangaroa.

In the old days our old people had all the right karakia to make sure the birds stayed in the area. There is a spiritual side to it, the mauri. I don't know how many iwi still do that today, but we still remember these important things. It comes down to the relationship between you and the atua; you have to do things right or otherwise things will go wrong. …

If birds die the tangata whenua should have the right to the feathers; the Discussion paper says the feathers belong to the government, but not to the people. The Crown has a cheek to say these things belong to it. We're here as kaitiaki; the Crown doesn't say it's looking after things, it says it owns them; Nature belongs to itself, not to the Crown. …

These taonga belong to the tangata whenua. If there's a fallen totara there has to be a way of getting it for the people. But even some of our own people have lost the understanding. We need to look to our own people, explain to them and show them things such as how to look after a young totara. (Tahuna marae, Waiuku)

Wai 262 was mentioned as an important Treaty claim relating to traditional materials and intellectual property rights.

There was discussion about kiekie and the traditional way of taking. Kiekie was respected as one of the children of Tane, and harvest was always done with care. Deep concern was expressed about the sale of koromiko overseas. …

The tension mentioned in this section is a preservationist view. There is no tension from Maori. It was acknowledged that there are individual Maori who abuse the system. All iwi should not be 'tarred with the same brush' as these individuals.

The loss of kereru as a result of habitat destruction was noted. There was support for revegetation to restore kereru habitat. …

The group considered that it would be difficult to get a national kaupapa because of different kawa and uses. There was support for rahui as a protection mechanism. A national kaupapa would be acceptable for guiding principles such as sustainability. While principles would be identified nationally, they would be implemented locally. (Omaka marae, Blenheim)

All the bush, all the forests are tapu to Maori people, but the protocols are different from hapu to hapu. These issues need to wait until there's a resolution of our claim. But meantime all the things Maori people hold dear, our rongoa in the forests, it's your job to look after them and kill all the possums.

In Tuhoe here in the past every time we had a government minister here we'd send our young people out with guns to get pigeons. We always had ways of conserving the birds. All the resources would be used, like the feathers for weaving. Here in Tuhoe we are one of the best conservationists in the world; we've been doing it for hundreds of years.

We're very concerned now about our forests, our birds and our eels. With the forestry all the places where pigeons live are being cut down; the birds come back to where pine trees are planted and they die. The birds have no food trees any more. It's the same with plants. …

The greatest killers of our birds today are not people shooting them, it's the forestry and the possums. The forestry all goes off to Japan. The eels suffer also, when dams are built in the rivers stopping the eels going up. Where is it going to end? …

The problem is when one partner starts making money and the other doesn't. The taonga becomes a commodity. But we're only using it for

our own customary use, not for commercial use as an asset or commodity. (Ngahina marae, Ruatoki)

The taonga for her area was whale bone and her people were upset that they cannot control resources in their own rohe. That they must go through this committee for bone. She quoted an instance where totara was given to the iwi by Ngati Hine and that they cannot give bone back as a gift. She requested access to taonga for gifting. She also noted that the committees priorities did not mention Mana whenua. (Te Awhina marae)

Toroa (northern royal albatross) nest on these islands and chicks have been taken by Maori and Moriori for food. Chicks on the sea which would otherwise die are also taken. There was a desire to legalise what has been going on for many years. The tikanga for the harvest had been passed on to these owners by older members of their families. The toroa are a taonga and precious food; the oil was used for treating the flu and for polishing wood, feathers were used for pillows and mattresses, the wing bones made flutes and the meat was eaten. Nothing was wasted. About 400 toroa chicks used to be taken from the islands periodically and distributed to all the Maori on the Chathams.

The trustees wished to be able to manage the toroa themselves. They acknowledged the need to receive help and advice to do this, but their mana rested on their management of the toroa. Taking toroa was currently illegal under the Wildlife Act and the owners wanted the right to manage and take their taonga. They wanted the support of Department of Conservation to enable this. There had been close links between Chatham Island Maori and Te Whiti O Rongomai in Taranaki. The three white feathers worn by Te Whiti and his followers were those of the toroa, their kaitiaki, and taonga. …
… the weka is considered a pest on the Chathams and is hunted and eaten widely. It is protected in New Zealand. A national policy could not be too detailed because of regional differences in perspective. (Chatham Islands)

Te Aupouri request that they be allowed to take and eat the kuaka. Te Aupouri would only take the birds at the right times and seasons, going back to the system that their old people used. They understand how to capture the birds for food, without any guns. Permission to take the birds would only be granted by the kaumatuas of the area. …

Here not to ask that our mana be given back, but to exercise our mana. We stand by the Treaty today – all our taonga were given to us in the Treaty. The one we're pursuing today is the kukupa, and our right to take the bird if we so desire. When Pakeha laws are put in place our people won't recognise them. The birds, and waiora from the springs, are taken for pregnant women and for old people who are sick. We are only attempting to take back our rights.

Te Rarawa has identified people around the forest to be custodians of that piece of forest. DOC and the government haven't got the resources to look after the forests adequately, so each marae has nominated people with integrity to look after the bush, to keep track of all the strangers that come around, and keep an eye on things. …

All these taonga belong to iwi Maori and always have done – the birds, the fish and the other foods. When it's in the paper that someone's selling birds in the pubs the whole of Maoridom gets the blame. These foods are seasonal, and Maori never take them out of season, but in the shops in town the seasonal fish are there year in and year out.

Tell the Minister to return the mana of these taonga to the people. All of these things should be controlled by the people they rightfully belong to. They were taken away from us unlawfully. All these years we've had to fight for what is rightfully ours, when it should be the other way round – they should be coming to us and asking to negotiate with us. …

The ancestors have passed down the treasures to us; we now have the responsibility to nurture the things that are precious to hand on to our children. Only the practices that are sustainable will survive; cultural practices that are not sustainable will not last. Nothing stands still, and cultures need to evolve. …

Years ago our tupuna would have a rahui at Motatau; if anybody dared go in there and broke that rahui the result would be your neck. Traditional punishments. Now Pakeha sell all the fish, and then we're restricted what we can fish.

To me, our taonga, our rongoa is ours; but people request large quantities of rongoa materials for selling commercially. Maori people from Auckland came up here to pick pingao for their meeting house; DOC had given them instructions about how much to take, but she told DOC those taonga are our taonga.

Maori have always been conservationists, protecting even insects if there aren't enough of them. You don't hunt when the birds are laying.

All the forests used to be full of birds until the Pakehas came and burned all the forests and cut the trees down saying farming is better. Now the Pakehas come around and say conservation is better. …

As a weaver of kakahu she has had kiwi and kukupa feathers from Te Aniwa Hona at DOC. Where she lives there are kukupa in the trees still flying around. But the feathers from DOC come in pelts. For months after getting them she can't bear to work with them; she strokes them and blesses them before she can begin working with them. Some people bring her feathers just stuffed into plastic bags; this is horrifying. She karakias the feathers, and shows people what she's doing so that they'll understand.

The spiritual side to conservation is very important; she teaches the younger women learning weaving from her about the spiritual dimensions of the feathers and the work. We must go back to the marae to the kuia and kaumatua, to the old people who have the responsibility to teach these things. All the people who work with kakahu, kete and tukutuku must hui with our whanau to learn these important things. (Motatau marae, Motatau)

We believe that the exercise of kaitiakitaka is a duty or responsibility that we as mana whenua see as being derived from the Treaty of Waitangi. We have not in the last 5 or 6 generations been given recognition by the Crown, of that role. The Resource Management Act is the first significant piece of legislation to acknowledge kaitiakitaka.

It is also the responsibility of the Crown, we feel, to pursue a policy of active protection of nga taoka tuku iho. This we consider to be a Treaty principle and duty of the Crown, to implement in the policies and strategies of it's departments who are given the statutory management of nga taoka under the various Acts.

On reading the Authority paper, it would seem that some mechanisms do exist to legally effect the use of natural resources by us. However, while we acknowledge the statutory role played by government and other organisations in the management of nga taoka, we are the traditional kaitiaki and this should be given statutory recognition as well.

It is recognised that sustainability of resources is the measure by which any customary harvest could occur. We welcome the use of appropriate scientific methodology in determining how to approach some of the issues that would lead to a customary harvest. …

Some people who call themselves conservationists, we believe carry other kaupapa as part of their cultural baggage. Animal rights advocacy often surfaces under the guise of conservation. This must be separated as an issue from the need to protect species because of immediate extinction dangers. The aims of such interest groups such as animal rights lobbyists, is to totally protect everything from human interaction by ensuring wildlife is enclosed in a glass case of legislative protection.

Iwi believe that we are part of the environment and have always interacted within it. We are part of the 'biodiversity' that people are talking about now. It is a cultural position arising from Article 2 of the Treaty of Waitangi. (Otakou marae, Portobello)[27]

It is evident that the Conservation Authority is well aware of strongly held contesting viewpoints on the question of customary harvesting. The Waitangi Tribunal will also be well advised to take note of the passionate responses of many Pakeha groups and individuals to the issues. R Cooper, adviser to the Authority, has identified a range of key issues in a report to the Australasian Wildlife Management Society in 1995:

5. **A Scale of Values:**
There is a clear scale of values – of intensity of feeling and concern – across the range of different species and traditional resources. At one end of the spectrum are native birds, especially those species which are threatened either nationally or at regional or local levels. Many people were adamant that total protection is the only acceptable regime for all native birds. Hunting and eating native birds is violently offensive to these respondents.

Somewhere through the middle zones of the spectrum are feathers used in weaving for korowai/cloaks and other taonga/precious artefacts. DOC currently makes feathers available to approved Maori weavers from accidentally killed birds, usually roadkills. Also in this middle category of value is the use of whalebone from stranded whales for carving.

At the other end of the scale of values are plant materials. There was a significant level of concern about totara, kauri and other larger timber species sought for carving work, and the diminishing resources of suitably sized timber. However many other plant species sought for traditional and cultural uses are relatively common and are easily cultivated to provide the necessary stocks. There was general acceptance from

27. New Zealand Conservation Authority, 'Maori Customary Use of Native Birds, Plants, and other Traditional Material', consultation hui minutes, Wellington, 1996

both Pakeha and Maori respondents that plants such as pingao, kiekie and harakeke should be made available for weaving and tukutuku/panelling work, and that special stocks should be grown for Maori use.

6. **Rongoa/Medicinal Plants**

The use of medicinal plants for rongoa/natural medicines was a major concern for Maori at all the hui and meetings up and down the country, but it was virtually ignored by non-Maori respondents. Possibly the Pakeha public are not aware of these kinds of uses for native plant species. However in Maori communities natural health and medicinal traditions are increasingly widely supported. Access to adequate supplies of rongoa materials, and protection of these resources on the conservation estate or other public lands are major priorities. Many Maori gave painful testimony of heedless destruction or damage to such plant resources by councils or forestry developments.

7. **Icon Species**

Another interesting pattern to emerge from the responses was the intense focus on icon species. This was especially noticeable with the submissions from NGOs and the form letters. A few lucky species have the power to focus public attention and concern. Internationally the big icons are physically big species – elephants, whales, pandas, gorillas, rhinos, tigers, the familiar 'charismatic megafauna' of TV documentaries and media campaigns. In New Zealand the predominant icon species has become the kereru/kukupa/pigeon. The majority of non-Maori respondents focused on this bird, its decline and the imperative for protection. Other major icon species mentioned most regularly by these respondents include toroa/albatross, kuaka/godwit, titi/muttonbirds and totara. Interestingly many species important for traditional uses – such as seals in the South, whales for meat in some coastal areas, and rongoa materials – provoked no attention from these respondents.

8. **Worst-case Scenarios**

Perhaps because of the fairly narrow focus on icon species with strong emotional appeal, many submissions opposed to customary use focused firmly on the worst-case scenario. The common assumption was that any harvesting at all would inevitably mean disaster, devastation and rapid extinctions. Many non-Maori responses operated on this all-or-nothing basis. These submissions characteristically used strongly emotive vocabulary, especially the word 'slaughter'. There were many

statements that if Maori are given access to wild species – especially to birds – there would be no controls, no limits, no constraints, no stopping until everything was gone. These submissions invariably referred to the extinction of the moa and other bird species before the arrival of Europeans – in support of their assertions that Maori customary use would not and could never be sustainable.[28]

5.6 Moa, Maori, and Pakeha Myths

Some stories are important to people because an understanding of the past contained in the stories may serve to validate current perceptions with unambiguous certainty. The notion that there were original inhabitants of this country unrelated to Maori is one such story. Elsdon Best called them 'Mouriuri'.[29] In popular versions of the story this people was exterminated by war-like Maori. Often there is an association with the Moriori of Rekohu/Chathams who did indeed suffer at the hands of Maori around 1835. The popularity of the story seems to stem from the fact that it is therefore possible for Pakeha to say that Maori are **not** the original tangata whenua, and that if British settlers did commit some atrocities against Maori last century it was no more than Maori had done to the original people a few centuries before that. The conclusion validated by the story is that we should all forget about the past and focus on being a harmonious one people of New Zealand in the future, with decisions being made by a government democratically elected by the majority of citizens.

In the conservation of species and ecosystems there is another story which as noted above, surfaced with great regularity in Pakaha submissions to the Conservation Authority. The story is that Maori tribes colonised New Zealand (and especially the South Island) with such careless disregard for the limitlessness of resources that they destroyed countless species – in particular the magnificent moa whose reconstructed presence features in many of our museums. The story skips lightly over the vast number of species rendered extinct by the impact of Pakeha settlers during the last 200 years and then dwells upon the plight of the beautiful wood pigeon who so often finishes up being raffled in a pub by Maori using rifles to poach them in such great numbers that they are in danger of extinction 'just like the moa'. The conclusion validated by the story is

28. Ronda Cooper, 'Maori Customary Use of Native Birds, Plants and Other Traditional Materials' a report presented at the Annual Conference of the Australasian Wildlife Management Society, 4–7 December 1995, Christchurch, New Zealand, pp 5–6

29. E Best, *The Maori As He Was,* Wellington, 1952, p 24

that Maori are not to be trusted with conservation and only 'western' science and government controlled ecological management can save endangered species.

The Wai 262 claim seeks the assistance of the Waitangi Tribunal in moving debate away from a nihilistic and unproductive casting of blame as between Maori and Pakeha. It must be the case that Maori will feel defensive if the extinction of the moa story is continually bandied around by Pakeha activists. Two members of the Rakiura Titi Committee, who are responsibly engaged with scientists in ensuring the viability of harvesting titi/sooty shearwaters, express their exasperation in these words:

Testimony of two muttonbirders

Two of us (MB and JD) would like to point out that prior to immigration of Europeans to Aotearoa, Maori had occupied this land for many centuries. Maori were the Kaitiaki (the care takers) and their impact was minimal compared to the later settlers. We are regaled with stories of the fires set by Maori, and of our eating all the moa. Certainly Moa were an important part of our diet and fire was an essential ingredient to our survival. But what of ferrets, stoats, weasels, ship rats, possums, gorse, broom; farming practices; redirection of rivers; draining swamps; pollution; and (horror of all horrors) fires that still become uncontrolled in this modern time and still destroy our wildlife? Why must Maori always defend their capability to conserve? Why is it that some groups cannot accept Maori know their own environment, respect it, and can use their resources in a sustainable manner? Maori have had to carry the burden of being shut out of managing their taonga in their own country. Why? Trust is a two way path, and history has proven that Maori have not done well when they have put their trust in Governments and other organisations. We sometimes question how capable Pakeha are at managing our resources. It is not too long ago that Acclimatisation Societies were doing their level best to remove as many eels as possible, and regarded the eel fingerling as only useful as food for trout. One wonders how long their training was, and whether they had the capacity to manage wisely?

MB's immediate family have birded on the same area for over a hundred years. She was taught by her father to respect the land not to cut down living trees, to care for the habitat of the titi and to leave the island in good order to hand on to her children.

Many descendants of those tupuna (ancestors) walk those same manu (birding grounds) as their people did before them. Rakiura Maori speak of 'ahi kaa' – that is, they kept their fires burning for succeeding generations. Each year Rakiura Maori return to their turangawaewae, their place of their ancestors, their place to stand on ancestral land.[30]

The Tribunal will be aware of the view already put to it by R N Holdaway during the Ngai Tahu hearings that 'the Polynesian peoples had, throughout the period of their occupation, no more or less claim to have lived in harmony with the environment, or to have a greater environmental or conservation awareness, than do the Europeans who followed them'.[31] In the Tribunal's view the scale of species loss can hardly be compared, however, with the extensive environmental loss since 1840[32]. I would also draw the Tribunal's attention to the work of scholars who suggest that, whilst all new colonisers have a tendency to plunder apparently plentiful resources, indigenous peoples over centuries adapt to their environment and become ecosystem people. Park eloquently puts the case that Maori in Aotearoa made the transition to being ecosystem people living in a sustainable way within the limits of the ecosystem which they considered themselves to be related to by whakapapa:

The few archaeological studies that have examined the nature–culture relationship in these environments suggest an intimate and highly deliberate connection had evolved by the 19th century. One, set in the Waikato when it was a landscape of forest, swamp and waterways, like the Waihou floodplain, was recorded in 1972 by Richard Cassells in the international journal *Mankind*. Cassells assumed that humans visited the Waikato swamplands, if not inhabited them, soon after they first occupied Aotearoa. However, his concern was less with the 'mistakes' of the Polynesian pioneers in the throes of adaptation than with how their subsequent ecosystem functioned. He depicted it as comprising nine 'resource zones' – poorly drained soils in semi-swamp kahikatea forest, peat swamp, raised bog, steepland broadleaf-podocarp forest, river, stream, lake and clearable land either in forest and fern or in kumara. Comparison between the food resources available in each with the ethnography of 19th century scholars revealed 68 plant species traditionally eaten by Maori. Settlement sites were nearly all beside forest or

30. T Taiepa, P Lyver, P Horsley, J Davis, M Bragg and H Moller, *Collaborative Management of New Zealand's Conservation Estate by Maori and Pakeha*, Zoology Department, University of Otago, 1996, p 14

31. R N Holdaway, 'Submission to the Waitangi Tribunal on Maori Conservation of Natural Resources in the Pre-European and Proto-Historic Periods of New Zealand History', Zoology Department, University of Canterbury, p 1

32. Waitangi Tribunal, *Ngai Tahu Report 1991*, vol 3, p 1189

fernland rather than clearable, croppable soils. All were close to water, half beside navigable streams and a third by rivers.

The picture that emerges is of a developing give-and-take relationship between people and nature. The artificially created preferred environments were not very different from those that were naturally present anyway – such as the 'forest edge communities created wherever a stream ran through the forest'.

Such landscape manipulation, Cassells suggested, was a consequence of affinity with the land its life, its resilience and fragility. It grew as much from the observation that this means different ecological communities varied widely in the richness of resources – and that the richest were the *edges* between them – as from the common human practices of living as close as possible to key resources to conserve energy. Because Maori traditionally placed themselves at the centre of their environment, as long as this country of edges was their central food source it was cared for as a garden might be.

Against this, of course, is a wealth of evidence that these islands' first Polynesians predated unsustainably on the easy resources they encountered – docile seals that lay back on rocks and birds that did not take off when people approached. It is not uncommon to hear Maori blame the dramatic depletion of shellfish that has occurred around urban centres on Pacific Island immigrants. Neither is it difficult to imagine the colonising predecessors of Maori, accustomed to tropical growth rates and to thinking of nature as perpetually renewable, dealing to the new environment in precisely the same way.

As the pioneering phase passed, means of conserving crucial resources were developed. The people who met the *Endeavour's* shore-party 'with open arms' still cultivated the few domestic plants that had survived their ancestors' journeys from the tropical Pacific. But indigenous plants were their mainstay. Some were gathered from the wild, others cropped and intensively researched. In the 1870s, from a few North Island districts alone, the botanist James Hector recorded some 70 Maori names for different flaxes, where the Linnaean system recognised two species. Each of the 70 was known for its special use.

The early Maori were capable of burning forests, and certainly did. Centuries of hunting led to the extinction of many bird species. But the natural forest cover of plains country, with slow-growing, fruit-bearing

trees like kahikatea, matai and hinau, was kept intact because these rainforests were often a better source of food than cultivated land or second-growth vegetation. Before the arrival of European crops and domesticated grazing animals, nature's diversity and richness – in fertile, coastal environments like these plains – could hardly be improved upon. Wild land of this kind was as valuable as cultivations.

It has taken over a century for wildlife ecologists to establish how vital the lowland plains were to the native Aotearoa ecosystem in presettlement times; and as long to appreciate the huge areas of forest which the larger and most endangered native birds need to survive and multiply, and recognise the need of many species to move daily or seasonally between the inland hills and the richer, warmer coastal lowlands.[33]

I have obtained a copy of the appendix to James Hector's report on flax (phormium tenax) which lists the Maori names of flax varieties and it is included in this chapter as an example of the intimate and detailed knowledge Maori had of the world within which they lived.

At the end of the day, however, the Tribunal's jurisdiction does not require an evaluation of the competing assessments of Maori conservation values during the fourteenth and fifteenth centuries. What is required is an assessment of the laws of Parliament and the policies of the Crown informed by Treaty jurisprudence and by evidence of tikanga Maori and matauranga Maori as it has evolved and as it is now, in the present day circumstances of iwi and hapu. I turn, therefore, to evidence of Maori relationships with the environment understood as kaitiakitanga and customary practices relating to the species mentioned in the Wai 262 Statement of Claim.

33. G Park, *Nga Uruoara: The Groves of Life*, Wellington, 1995, pp 46–47

List of names of the varieties of *Phormium tenax* distinguished by the natives. Source: Report of the New Zealand Flax Commissioners, *Phormium Tenax as a Fibrous Plant*, Colonial Museum and Geological Survey Department, Wellington, 1872

Name		District and Authority		Remarks
Aonga	....	Bishop Selwyn		A variegated flax.
		East Coast, Heaphy	....	Awanga (?).
Arotara	..	Waikanae, Native	..	Poor fibre; yellowish-green leaves; dark-brown edge.
Ate	....	Hauraki, Bishop Selwyn		*Haro:* requiring to be scraped by a shell.
		Wanganui, Woon	....	Strong fibre; used for eel-nets and baskets.
Atewhiki	..	Taranaki, Kelly	..	Fibre, very white; used for best garments; leaf narrow; reddish tinge; edge and keel narrow; bright-scarlet line.
		Taranaki, Hursthouse	..	First-rate quality.
		Opunake, Native	..	Breaking strain, 77*
Atiraukawa	..	East Coast, Heaphy	..	*Hatiraukawa?* Used for finest mats. Probably same as *Oue*.
		Taranaki, Kelly	..	Best and most abundant fibre, not large, but a quick grower; leaf bronze when mature, light olive-green when young, rather pointed, edge dull dark-brown, light in inner margin, sometimes brown, relieved by a bright-red line.
		Ngatiruanuui, Woon	..	Lengthy and strong fibre.
		Opunake, Native	..	Breaking strain, maximum 90.*
		Christchurch Domain, Armstrong	..	Leaf broad, light-green, abrupt at the point, edges light-brown.
Harakeke	..	Mantell	..	Also *Haraheke*.
		Waikanae, Native	..	Common swamp-flax.
		Otaki, Native	..	Name for all flax except *Wharariki*.
		Waikato, Hutton	..	Strip of leaf 1/8 in. broad broke a 42lb.
Hewara	..	Opunake, Native	..	Breaking strain, 77.*
		Waikanae, Native	..	Broad, buff-green leaf, with dark narrow edge.
Huhiroa	..	Mantell	..	Or *Uhiroa (?)*.
		West Coast, Heaphy	..	Yields best fibre. Probably *Oueroa*.
		Wanganui, Woon	..	Long fibre; used for fine and *porae* mats, fishing lines, nets, ropes etc.
		Taranaki, Kelly	..	Good fibre, easily separated from gum; leaf bluish-green; narrow edge black or very dark brown; keel reddish-chocolate; leaf gradually narrows to a point.
		Opunake, Native	..	Breaking strain, 98.*
		Christchurch Domain, Armstrong	..	Leaf very long, tapering at the point; edges light-brown.
Huruhuruhika		Taranaki, Kelly	..	Used for rough garments; bears a general resemblance to *Takaiapu*.
		Opunake, Native	..	Breaking strain, 87.*
Karuamoa	..	Waikanae, Native	..	Good fibre; tapering leaf; dark-chocolate edge.
Kauhangaroa	..	Hawkes Bay, Nairn	..	Used only for baskets and matting; easily breaks with a jerk.

Name		District and Authority		Remarks
		Hawkes Bay, Native	..	Good white fibre, soft and silky.
		Government Domain, Christchurch		Two variegated forms; percentage of fibre, 19.6; leaves large coarse edges, and base dark-brown.
Kohunga	..	Maungatautari, Bishop Selwyn		*Tihore*.
		Maungatautari, Mantell	..	Fine kind.
Korako	..	Taranaki, Kelly	..	Used for best garments; dark-green leaf; edge a narrow line of dark-brown; keel a pale yellow.
		Taranaki, Hursthouse	..	First-rate quality.
Koura	..	Wanganui, Buller	..	Best fibre for *korowai*, or shaggy mats.
Kuroa	..	Christchurch Domain, Armstrong		Percentage of fibre, 17.8.
Kuru	..	Opunake, Native	..	Breaking strain, 95.*
Manunu	..	Taranaki, Kelly	..	Used for rough purposes.
		Opunake, Native	..	Breaking strain, 90.*
		West Coast, Heaphy	..	Or *Manunui (?)*. Good for cordage.
		West Coast, Mantell	..	Best variety.
Matoroa	..	Pipiriki, Woon	..	Strong and durable; short fibre, used for borders of fine mats.
Motu-o-rui	..	East Coast, Heaphy	..	Also, *Awanga* – a variegated kind; fibre unserviceable for manufacture.
Ngaro	..	Taranaki, Kelly	..	Used for rough garments.
		Waikato, Jenkins	..	Good fibre; bluish-green leaf; black edge.
		Raglan, Schnackenburg	..	Best of all the kinds, for all purposes.
		West Coast, Heaphy	..	Stiff fibre.
Ngarowaka	..	Waikato, Jenkins	..	Good fibre for mill purposes; leaf bright-green, red edge.
		Waiuku, Constable	..	Cultivated; soft, fine fibre.
Nga otomawe	..	Opunake, Native	..	Breaking strain, 84.*
Ngutunui	..	Taranaki, Kelly	..	For best garments; quick grower; leaf similar to *Takaiapu*, but has a blunt point, and is red at the butts.
		Opunake, Native	..	Breaking strain, 95.*
		Waikanae, Wi Tako Ngatata	..	Much-esteemed leaf; dark olive-green, with dark-red edge.
		West Coast, Heaphy		
Ngutuparera	..	Taranaki, Kelly	..	For rough garments.
		Opunake, Native	..	*Parera (?)*; breaking strain, 95.*
		West Coast, Heaphy	..	Or *Ngutuparura (?)*.
Okaoka	..	Waiuku, Constable	..	One of the best varieties; cultivated.
Oue	..	Christchurch Domain, Armstrong		Leaf narrow, very strong, edges orange-coloured; percentage of fibre, 34.1.
		Taranaki, Kelly	..	Leaf narrow, of an olive-green; edge and keel orange-coloured; used for best garments.
		Hawkes Bay, Locke	..	Fine fibre, next to *Tapoto*.
		Whakatane, Native	..	Best variety, white and soft; breaking strain, 91.*
		Waikato, Hutton	..	Typical *Tihore*.
		Waikato, Mantell	..	A fine fibre; also *Ouhe*.
		East Coast, Heaphy	..	Also *Tapoto*, cultivated at Coromandel, Kawhia and Waikato; glossy leaves, rather red at the edge; has a general orange-green appearance at a distance.

Name		District and Authority		Remarks
		Maungatautari, Bishop Selwyn	..	*Tihore.*
Paheke	..	Opunake, Native	..	Breaking strain, 87.*
Parekoritawa	..	Taranaki, Kelly	..	Variegated variety; leaf, very bright green, longitudinal stripe of sulphur colour; fibre very good; edge and keel orange colour.
		Opunake, Native	..	Breaking strain, 79.*
		Waitara, Woon	..	Very white and strong fibre.
		West Coast, Heaphy	..	Yields best fibre.
		Christchurch Armstrong	..	Percentage of fibre, 18.8.
Paretaniwha	..	Whakatane, Native	..	Strong fibre for fishing lines, nets etc; breaking strain, 95.*
		Opunake, Native	..	Breaking strain, 83.*
		Maungatautari, Bishop Selwyn	..	A *Tihore.*
		Waikato, Hutton	..	Yellow hill-flax; strip of lean 1/8in. broad broke at 42lb.
Pato	..	Taranaki, Kelly	..	Used for rough purposes.
		West Coast, Heaphy	..	Stiff fibre.
Poitaniwha and Ngutukaka	..	Waikato, Jenkins	..	Or *Paretaniwha (?)*; good fibre for mill purposes; dark-green leaf.
Papu	..	Waikato, Jenkins	..	Yellowish-green; brown butts, red edge; good fibre for mill purposes.
Rataroa	..	Taranaki, Kelly	..	Said to be used for best purposes; taper, acuminate, bronzy-green leaf; dark-purple keel and edge, fading on the upper side.
		Waiuku, Constable	..	Best *Tihore*; varies from 3ft to 8ft according to soil; red edge.
		St John's College, from East Cape	..	The strongest of all the fibres; breaking strain, 117.*
		Christchurch, Armstrong	..	Percentage of fibre, 21.6.
		Waikanae, Native	..	Scarce; very taper, light yellowish-green leaf, narrow dark edge.
Ratawa	..	Hauraki, Thames, Bishop Selwyn	..	A *Tihore*; probably misprinted for *Rataroa.*
Raumoa	..	Taranaki, Kelly	..	Used for rough garments; light-green leaf, reddish-brown keel and edge; narrower underneath.
		Opunake, Native	..	Breaking strain, 76.*
Ruumoa	..	Waikanae, Native	..	Darkish green leaf; broad red-brown edge on upper side, narrow red-brown edge below.
		Taranaki, Bishop Selwyn	..	*Raro.* Requiring to be scraped with a shell.
Rerehape	..	West Coast, Heaphy	..	*Yields best fibre; good for cordage.*
		Maungatautari, Bishop Selwyn	..	A *Tihore.*
		Mantell	..	Fine kind.
Rongoinui	..	East Coast and Bay of Plenty, Heaphy	..	Used for fishing-nets and cordage; best fibre for mill purposes.
Taihore	..	Taranaki, Kelly	..	Light-green leaf, with wide black edge.
Takaiapu (Kiapu)	..	Opunake, Native	..	Breaking strain, 95.*
		Taranaki, Kelly	..	Fibre very strong; leaf erect, brown edge.
		Opunake, Native	..	Breaking strain, 76.*
Tapoto	..	Hursthouse	..	First-rate quality.

Name		District and Authority		Remarks
		Hawkes Bay, Nairn	..	Leaves narrow, erect, deep-purple margin; strong lustrous fibre, used for sewing threads or weft of fine mats.
		Hawkes Bay, Locke	..	Sometimes called *Tihore* or *Takiri*; best variety.
		East Coast, Heaphy	..	Also *Oue*; fibre glossy, silky, but brittle; used for *Kaitaka* mats.
		Opunake, Native	..	Breaking strain, 101.*
		Christchurch, Armstrong	..	Similar to *Tihore*; percentage of fibre, 18.7; tapering at the points; edges red.
Tarariki	..	Taranaki, Kelly	..	Used for rough purposes.
		Opunake, Native	..	Breaking strain, 70.*
		West Coast, Heaphy	..	Stiff fibre.
		Wanganui, Woon	..	Fine and soft texture, used for *Potas* or ornamented mats; tapering acuminate leaves; dull olive-green, lighter on the outer side; dark-red keel and edge, and keel on the upper side gradually shaded away, forming a dark coloured band 1/8in to 3/8in broad; 2in or 3in of the point of the leaves of the same dark colour.
Tawai-kakako	..	Napier, Native	..	Dark colour when first scraped, but it is put into baskets and kept to improve its colour.
Tiheru	..	Opunake, Native	..	Breaking strain, 98.*
Tihore	..	Takanaki, Kelly	..	Plant of any variety?
		Christchurch, Armstrong	..	Leaves linear, very strong, dark-red edge; percentage of fibre, 19.8.
		Raglan, Native	..	Breaking strain, 99.*
		West Coast, Heaphy	..	Best fibre.
		Waikato, Hutton	..	Best variety, cultivated; strip of leaf 1/8in broad bore a strain of 48lb.
Tipuna	..	Taranaki, Kelly	..	Used for rough garments.
		Hursthouse	..	*Tepuna (?).*
Tito—o-moe-wai	..	Taranaki, Kelly	..	Used for rough garments.
Tuau	..	Waikanae	..	Coarse plant, not used for fine work.
Tuawhitu	..	Bay of Islands	..	Fine and soft fibre; leaf tapering, thin texture, bronzy colour, lined and smeared at the upper end, narrow dark-red edge.
Tumara	..	Waikato, Jenkins	..	Good fibre for mill purposes.
Turepo	..	Waikanae	..	Small yellow variety; grows in wet swamps, and has a white silky fibre; brown edge and keel.
Tutaiwiki	..	Taranaki, Hursthouse		
Wararika	..	East Coast, Heaphy	..	Also *Mangaeka* – fibre of ordinary character.
Wharanui	..	Hawkes Bay, Nairn	..	Soft fibre, used for fine mats.
		Hawkes Bay, Locke	..	Next to *Oue*.
		Mantell	..	Or *Waranui (?).*
Wharariki	..	Hawkes Bay, Nairn	..	Weak fibre, only used for kits etc; very broad and tall leaf; grows in richest soils.

Name		District and Authority		Remarks
Phormium colensori	..	Taranaki, Kelly	..	Used for rough garments.
		Waikanae, Native	..	Never used.
		Heaphy	..	Stiff fibre.
		Mantell	..	Also *Wharaeki*.
		Bishop Selwyn	..	*Whararipi*.
		Waikato, Hutton	..	Strip of lean 1/8in broad broke at 34lb.
Witau	..	East Coast, Heaphy	..	Poor fibre.

** Breaking strain relative to Manila fibre = 100*