

# **Conservation of New Zealand's Biodiversity into the New Decade — Opportunities and Challenges**

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*This paper is separated into two parts. The first part will consider biodiversity issues in New Zealand generally. The second will give a particular Auckland perspective.*

## **I. BIODIVERSITY ISSUES**

The 1997 *State of the Environment Report*<sup>1</sup> identified biodiversity conservation as New Zealand's most extensive and multi-faceted environmental issue. It went on to say that:

[The issue] ... is big because of the range of species and ecosystems encompassed by it, and also because it is linked to most of our other environmental issues, particularly those affecting land and water. These extensive links mean that tackling the biodiversity issue will inevitably lead to wider environmental benefits, particularly in land and water management.

Biodiversity conservation issues are also, of course, intimately linked to economic and social issues. It is because of these various linkages that environmental law plays an important role in biodiversity conservation.

### **1. The Key Biodiversity Challenges and Opportunities Facing New Zealand**

Before considering the role of environmental law, it is probably worth taking a whistle-stop tour through the key biodiversity conservation challenges and opportunities facing us.

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<sup>1</sup> Ministry for the Environment, *State of the Environment Report* (1997).

New Zealand is unique. Isolated from other land masses for eighty million years, without mammals, it developed a biota and ecology so distinctive that they have been described as the closest scientists can get to studying life on another planet. New Zealand had an age of birds (and large insects) when the rest of the world had an age of mammals.

When humans arrived around 1000 years ago, their impact was immediate and profound. Extinctions from direct hunting, habitat alteration and introduced mammals began with Polynesian colonisation and accelerated after Europeans arrived.

We estimate that extinctions affected:

- nearly one-third of indigenous and freshwater birds;
- close to one-fifth of seabirds;
- three out of the seven native frog species;
- one fish, one bat, perhaps three reptiles;
- at least twelve, and probably many more, invertebrates such as snails and insects; and
- at least eleven plants, with many more that have not been sighted for years.

Many of the species that have survived are in a perilous state. For example, while only one freshwater fish has become extinct, a third are threatened with extinction.

The key threats to biodiversity in New Zealand continue to be:

- predation by introduced animals;
- loss or degradation of habitat, particularly through:
  - clearance;
  - introduced browsers and grazers;
  - changes in hydrology;
  - changes in disturbance patterns such as fire; and
  - pollution, particularly by sediments and nutrients
- competition by introduced weeds; and
- over-harvesting by humans.

On the positive side, we have made real progress in biodiversity conservation over the last few decades, and developed a solid basis for future work.

Much of our biodiversity has legal protection against at least some threats. This protection reflects New Zealanders' strong desire to maintain their unique natural heritage. Recent controversies and reform processes have demonstrated a continuing public mandate for the Government's biodiversity conservation efforts.

In 1987, the Government undertook a major reform of conservation management agencies. Prior to these reforms, New Zealand had a typical conservation management regime, with numerous agencies, fragmented management, and conflicting objectives within agencies. The reforms resulted in the Department of Conservation, a unique institution internationally, which is able to carry out integrated management of most biodiversity across New Zealand.

The Department and previous agencies have been instrumental in developing new or better techniques in conservation management. For example, New Zealand is internationally recognised for its island pest eradication programmes and threatened species management work. Other key developments have been in border security, pest management, and fisheries management.

In recent years, there has been increasing effort to target scarce resources to achieve maximum benefits. The most significant recent development is the publication of a draft *Biodiversity Strategy for New Zealand*.

In summary, we are responsible for one of the world's most unique and precious assemblages of biodiversity, and have one of the largest biodiversity conservation problems in the world. But we are well placed to address these problems.

## **2. What Role can Environmental Law Play in Turning the Tide for Biodiversity?**

The law provides the framework of rights and obligations which underpin our society. For the conservation of biodiversity, the key areas it must address are:

- who owns the various elements that collectively make up our natural heritage;
- where the owner of biodiversity is a public body, how they will manage those elements for the benefit of society;
- where the owner of biodiversity is not a public body, what limitations on the use and management of that biodiversity society will choose to impose; and
- what activities that might impact on biodiversity should be regulated.

### *(a) Ownership of natural heritage*

New Zealand already has fairly complete law on the ownership of natural heritage elements. There are, however, two main areas of uncertainty or dispute:

- where ownership is uncertain, such as in relation to many riverbeds; and
- where the Crown's ownership is being challenged by iwi in the Courts or the Waitangi Tribunal (particularly in relation to rivers, foreshore and seabed).

It is not intended to discuss these areas of uncertainty in this forum as they raise not only legal issues, but also political and fundamental constitutional issues.

### *(b) Public management of biodiversity*

The law generally provides clear guidance on which public body will be responsible for each Crown asset, and how they will discharge that responsibility. Over the last twenty years, the law in relation to biodiversity assets has become progressively more detailed, with greater provision for public input, and greater practical recognition of Treaty obligations. This type of law reform is a constant

part of Government business, and there are a number of areas that the Department is currently addressing or examining.

For example, over the last year the administration of reserves by local authorities has been the subject of a review process jointly run by Local Government New Zealand and the Department. Some results of the review are now being implemented, and the Government is considering the proposals for legislation change. The result of law and administration changes identified by the review will be reduced administration costs, and increased control by local communities, to provide better outcomes.

Simplifying administration is an important part of law reform, because increased efficiencies allow more conservation outputs to be produced. Other legislative areas that may warrant similar reform to reduce administration costs are the management of recreational hunting, and the management of introduced wildlife species.

*(c) Management of biodiversity on private land and regulation of activities impacting on biodiversity*

The law relating to biodiversity on private land has been the subject of significant change over the last decade, with the enactment of the Resource Management Act 1991 (the "RMA") and the Forests Amendment Act 1993. These laws have, however, been the subject of significant debate about some aspects of the law, the adequacy of implementation, and the issue of compensation. The Minister for the Environment is currently considering further changes to the RMA, and the Government has announced its intention to develop a National Policy Statement on biodiversity issues to provide guidance on the implementation of the relevant parts of the RMA.

The Hazardous Substances and New Organisms Act 1996 and the Biosecurity Act 1993 have transformed the position in relation to the effect of animal pests and weeds on indigenous biodiversity. Constant improvement in this law will enable New Zealand to maintain an efficient response to these threats.

Overall, therefore, we have a fairly complete and broadly adequate legislative framework for biodiversity, which is subject to regular reform work to ensure it remains relevant and efficient. It is notable that the work to develop a draft Biodiversity Strategy did not find law change to be a significant need. So apart from keeping this law up to date, what are the challenges and opportunities for biodiversity law?

### **3. International Law and Jurisdiction Issues**

Many of our biodiversity problems arose because humans removed the biological barriers between New Zealand and other countries, and pests and weeds flooded across the border. The flood continues. The border control system intercepts

hundreds of unwanted organisms every year, and every year some make it through undetected and must be subsequently eradicated or controlled. To maintain our border, we need help and support from other countries. New Zealand is using a range of forums to encourage international efforts on alien species, and to preserve our ability to protect ourselves from them without breaching free trade rules.

Genetically modified organisms are also a potential threat to biodiversity. Again, international agreements will be critical, particularly to ensure that trade rules do not prevent the effective implementation of the Hazardous Substances and New Organisms Act, and to ensure that international processes prevent the development of particularly dangerous organisms.

International processes are also critical for fisheries and ocean management. New Zealand has one of the largest Exclusive Economic Zones in the world, and also a massive continental shelf. Our jurisdiction over these areas is determined by international agreements, as is the management of resources that straddle the boundary. An increasing number of forums are focusing on ocean issues, including most recently the Convention on Sustainable Development process chaired by the Hon Simon Upton.

In trying to achieve positive outcomes in international fora, New Zealand needs to focus not only on the content, but also on the way the agreements operate. The interplay between various conventions and agreements is critical to their effectiveness. The relationship between environment and trade agreements is a current focus, as is the way in which various environmental agreements mesh and co-operate. New Zealand is also focusing on the efficient operation of convention processes, and compliance issues relating to individual agreements.

#### **4. Domestic Marine and Fisheries Issues**

Marine and fisheries management are not just an international issue. Both because of international pressures, and also because of rapidly changing understandings and pressures within New Zealand, marine law and administration is an area of active development.

#### **5. Pest Management**

Significant reform processes may also be needed in other areas. One potential area for reform relates to the four Acts that affect the status and management of potential pest organisms — the Biosecurity, Hazardous Substances and New Organisms, Wild Animal Control and Wildlife Acts. The relationship between these Acts has been highlighted by the experience with deer in Northland and ferrets nationally and rainbow lorikeets in Auckland. It will be necessary to resolve jurisdictional boundaries, and target responses if we are to avoid unnecessary impacts by pests and reduce the costs of control.

## **6. Treaty Issues**

The final area that needs to be highlighted is the implications of the principles of the Treaty of Waitangi. Iwi are using the Waitangi Tribunal process to deal with historic grievances, and other Treaty settlement negotiations are proceeding through the Office of Treaty Settlements and Crown Negotiating Teams. Iwi are also turning to the Maori Land Court and other litigation processes, particularly in the High Court, to challenge legal and property rights. The challenge for the government is to find ways to maintain the Crown's obligations to the wider community and the environment under Article I of the Treaty (relating to Kawanatanga), while also providing an effective response to iwi concerns in relation to the matters in Article II (relating to Tino Rangatiratanga). The Department is involved in many of these processes, and is one of the agencies working to develop better co-operative conservation models. Where appropriate, such models are used to share responsibilities, management and other obligations between the Department and tangata whenua. Nga Whenua Rahui kawenata and reserve vestings are two mechanisms already in place and operating successfully.

## **7. Summary**

Biodiversity conservation in New Zealand is primarily a management rather than a legal issue. But domestic and international law have a key role to play in clarifying ownership and jurisdiction, in establishing objectives and processes for decision-making, and in resolving tensions between public and private property rights, and between the Crown and its Treaty partner. There are exciting challenges ahead in biodiversity law.

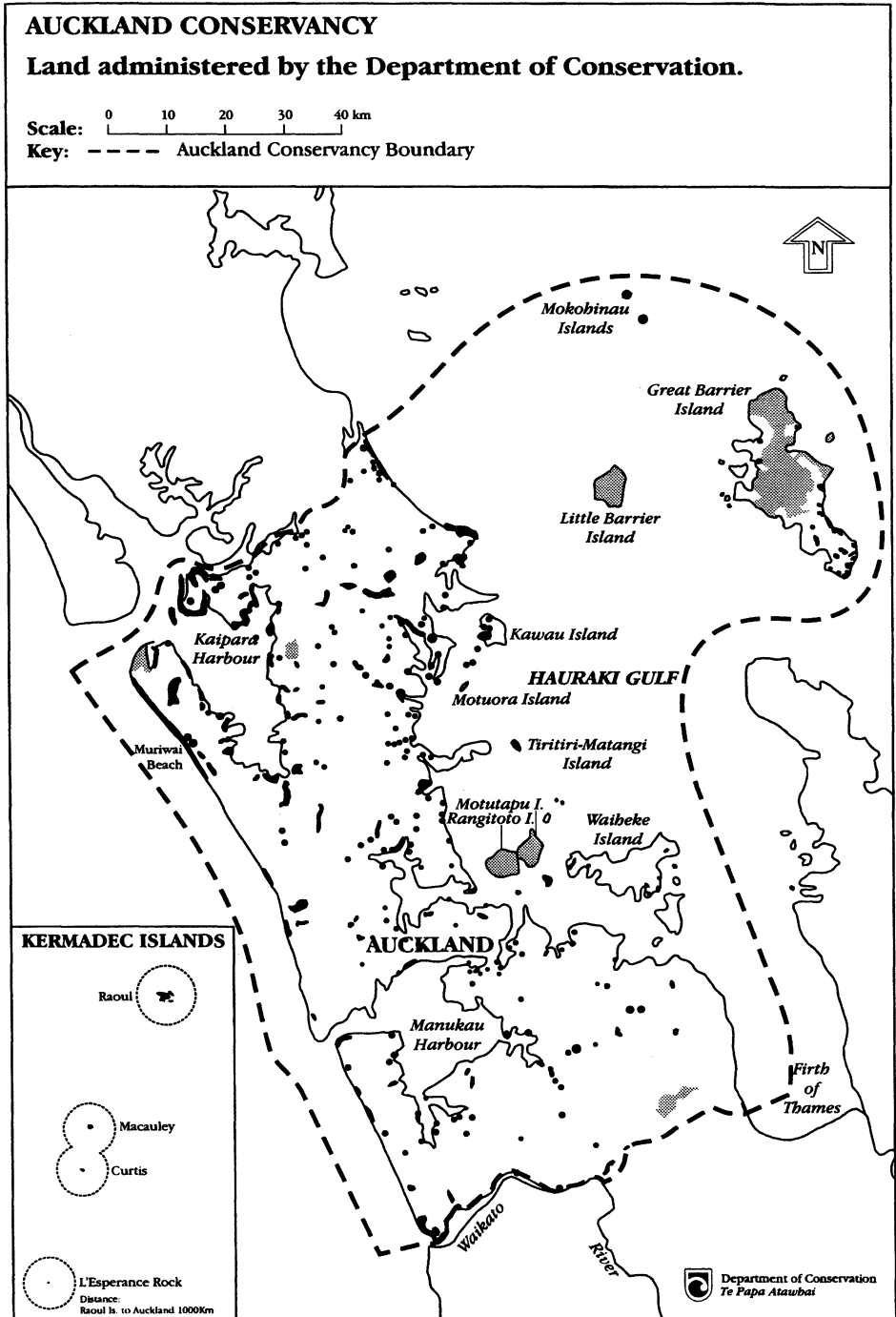
## **II. AN AUCKLAND PERSPECTIVE**

While promotion of legislative reform and development of national strategy and policy is a national function carried out largely in Wellington, delivery of most conservation outputs and management of local and regional issues is delegated to conservancies.

Fig. 1 (opposite) shows the land managed by the Department within the Auckland Conservancy. It can be seen that most of this land is on offshore islands and indeed extends beyond the map as far as the Kermadecs. Mainland holdings are restricted to many small, mostly disconnected areas, bringing with them lots of neighbours! The only extensive protected mainland areas are the Auckland Regional Council regional parks. The Waitakeres and Hunuas in particular are of high biodiversity value.

The work of Auckland conservancy is directed or guided by the national

Figure 1



non-statutory strategic business plan<sup>2</sup> and the Auckland Conservation Management Strategy — a statutory document with a ten-year time frame due for review by 2005. The national Strategic Business Plan identifies key factors that affect the Department. These include:

- continued threats from past and present human actions;
- uniqueness of New Zealand's biodiversity;
- local impacts of global climate change;
- international trends of globalisation of market-based solutions;
- increasing size of territorial local authorities;
- growth in international visitor numbers;
- Maori expectations and implications of Treaty claims settlement;
- changes in conservation management technology;
- public opposition to some methods and techniques; and
- the political agenda of the government of the day

These are common to all conservancies but differently weighted according to geography and demography.

Key biodiversity features of Auckland Conservancy are:

- high level of endemism of plants and animals, notably on the Kermadec and outer Hauraki islands;
- nationally and internationally significant island sanctuaries — Little Barrier Island — Hauturu and Tiritiri Matangi;
- long and complex coastline with most of our outstanding natural resources concentrated into this area; and
- strong community interest in the restoration of degraded ecosystems whether it be cleaning up Otara Lake, riparian planting of urban streams or habitat restoration of offshore islands: eg, Tiritiri Matangi, Motutapu and Motuora Islands.

Key biodiversity issues of particular importance in Auckland and of concern to the department are the:

- pressure for urban development and high recreational usage of our coast;
- importance of marginal strips, esplanade reserves and other natural corridors for linking or protecting areas of high biodiversity value across a highly urbanised landscape;
- high level of visitation to our offshore islands — expected to be boosted by up to 200,000 during the America's Cup — bringing dog problems, fire risk and potential for escape of rats and mice onto rodent-free islands;

2 The plan's title, "Restoring the Dawn Chorus", reflects the unique and valuable diversity of birdlife in New Zealand.



- higher potential for introduction of marine invaders and oil spills due to the size and activity of the Port of Auckland;
- higher level of trade in endangered species (both legal and illegal) through Auckland International Airport than elsewhere in New Zealand;
- vital role of provisions of the RMA and Biosecurity Act 1993 for protection of biodiversity both on and off the DOC estate; and
- complex iwi relationships with many iwi with overlapping rohe, and differing traditional connections, aspirations and concerns.

The Department is proactively involved in Auckland with a number of organisations including:

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| • Auckland Conservation Board            | Statutory role under Conservation Act 1987                               |
| • Ngati Wai                              | Co-operative conservation management (Hauturu), whale stranding protocol |
| • Auckland Regional Council              | Kokako and other species recovery  |
| • Auckland Zoo                           | Captive breeding of threatened species                                   |
| • Botanical Gardens                      | Threatened plant conservation  |
| • Supporters of Tiritiri )               |  |
| • Motutapu Restoration Trust )           |  |
| • Motuora Restoration Society )          | Biodiversity restoration and other                                       |
| • Miranda Naturalist Trust )             | activities   |
| • Little Barrier Island — )              |  |
| • Hauturu Trust )                        |  |
| • Royal Forest & Bird Protection Society | Regular liaison meetings   |

A new farsighted but controversial initiative aimed at improving protection of the Hauraki Gulf through integration of management is currently before the Transport and Environment Select Committee.<sup>3</sup> The legislation, if it passes, will present significant challenges in its implementation. Whether or not it passes it is hoped we will see a continuation of the Forum of Local Authorities and Government Departments and its expansion to include iwi. The forum has an important role in information exchange and co-ordination of statutory functions.

Finally, a few words about Aotea — Great Barrier Island. The largest island off the North Island coast with 60 per cent of its land area in formal protection, it is blessed with the absence of possum, deer, hedgehogs and mustelids (although two recent sightings are of concern). Eradication of feral goats is a realistic goal.

3 Hauraki Gulf Marine Park Bill 1998 (reported back to Parliament with commentary in 1999).

A stronghold for North Island kaka, banded rail, spotless crane and North Island fernbird, it also boasts the largest remaining population of Brown Teal. It is a principal nesting site for Black Petrel, hosts thirteen species of lizard, fifty species of nationally or regionally threatened vascular plants and two endemic flowering plants. It has spectacular dune systems, wetlands and underwater environments.

With a small resident rural community, interested and involved iwi (Ngati Rehua/Ngati Wai) and a significant number of regular visitors who appreciate and respect its values, it offers a magnificent opportunity to pilot the New Zealand Biodiversity Strategy across a self-contained ecosystem including the human component.

If we could achieve sustainability of natural resources on Aotea Great Barrier Island there is just a chance we could achieve it throughout mainland Aotearoa New Zealand.