

## Indigenous biodiversity

The term indigenous biodiversity describes our native plants and animals, the places they live, and how they interact within the environment.

Because New Zealand is geographically isolated from the rest of the world, our biodiversity is unique. Many of our indigenous plants and animals are found only in New Zealand.

However, our biodiversity has been in decline for years. Sixty-three percent of New Zealand's land area has been converted into farms, settlements, exotic forests and roads. And while a third of the country is managed for conservation, most of this is in upland areas and mountains.

Lowlands, river margins, wetlands, dunelands and coastal areas have relatively few natural habitats for our indigenous plants and animals. As a result many species are threatened, including:

- about 1,000 of our known animal, plant and fungi species
- three quarters of our native bird species, which are already amongst the most endangered in the world
- a third of the 29 identified species of indigenous freshwater fish.

New Zealand may have as many as 80,000 different indigenous species, but only 30,000 have been identified. It is likely that many of these presently unknown species are also threatened.

Halting the decline of indigenous biodiversity is a significant challenge for this country. We need to develop approaches that really do make a difference – it means building on existing successes, sharing information, motivating action, using legislation, and developing good science and management practices.

The network of public conservation lands already established is critical to protecting indigenous biodiversity. Many types of habitats are only found on private land however – like lowland and coastal forest remnants, wetlands and lowland grasslands.

## Biodiversity Package

In December 2000 the Government announced a package of initiatives to address biodiversity issues on private land. The Ministry for the Environment, the Department of Conservation, local government, and other agencies and individuals are getting these initiatives up and running.

The package has four main parts.

### 1. Funds for biodiversity advice and improving the condition of biodiversity on private land

\$3.6m (over five years) was committed to providing information and advice to land managers, to raise awareness and encourage biodiversity conservation.

\$6.5m (over five years) was committed to improving the condition of biodiversity on private land by providing financial assistance for pest and weed control, fencing and restoration projects.

A single committee will administer both funds.

#### What has happened?

- Terms of reference and a set of draft criteria to allocate the funds have been prepared.
- Various organisations were invited to nominate representatives for the committee.
- A committee is being selected and established.

The first allocation for successful projects will take place in 2002.

### 2. Local Government Project

*Local Government New Zealand* was invited to submit a proposal for a three-year funding programme to increase local government capacity and community participation in local biodiversity projects.

#### What has happened?

The Ministry is funding \$1.1m (over three years) towards *Local Government New Zealand's* project which is called Action Bio-Community. The project was launched in November 2001.

The project involves developing and testing practical approaches to biodiversity management at local and regional government levels. You can find out what is happening on [www.biocommunity.org.nz](http://www.biocommunity.org.nz)

### 3. National Policy Statement

A national policy statement (NPS) on biodiversity would be prepared. The purpose of the NPS is to state policies for the management of indigenous biodiversity. Ultimately the methods used to achieve these goals will be tailored to meet local needs.

#### What has happened?

- Preliminary wording was drafted and presented to the Central/Local Government Forum in June 2001.
- Consultative workshops were held with councils, iwi and other agencies during August and September 2001.
- A 'Reference Group' was formed to provide feedback on revised wording for the NPS. This group is made up of people who can provide comments from the viewpoint of farmers, environmental interests, tangata whenua, and local and central government.

Once final wording has been completed, the Minister for the Environment will appoint a Board of Inquiry who will publicly notify the NPS and call for submissions.

### 4. Resource Management Act

The Resource Management Act (RMA) would be amended to clarify the lead role of regional councils and the important role of territorial authorities in biodiversity conservation.

#### What has happened?

The Local Government and Environment Select Committee reported back to Parliament on the RMA Amendment Bill in May 2001. They recommended that:

- important new biodiversity management functions are given to regional councils and territorial authorities
- a definition of indigenous biodiversity is incorporated into the RMA.

The RMA Amendment Bill is awaiting its final stages through Parliament.

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Ministry for the  
**Environment**  
Manatū Mō Te Taiao



Protecting our native plants and animals

COMMUNITIES IN ACTION



## Farmer makes a commitment to biodiversity

Farmer Alan Totty from Staveley, near the Alford State Forest in mid-Canterbury has made a personal commitment to biodiversity.

“New Zealand’s biodiversity is really unique and well worth saving,” Alan says. “Managing a productive farm while conserving local native flora and fauna is an interesting challenge.”

Alan started thinking about how he could do his bit 20 years ago. About 10 hectares of his 260 hectare property is in assisted regenerating bush (remaining grass areas are desiccated when the beech trees are due to seed), and is protected by a QEII National Trust covenant.

So, when it came to planting three kilometres of shelterbelts near the covenanted area, there was no question for Alan – it had to be natives. “I like most native plants, and it also makes sense from a landscape perspective to plant natives when you are in close proximity to a large native forest,” Alan explains.

Alan initially planted hardy species for the shelterbelt – the farm sits against the hills, and the climate is harsh with cold winters. His nurseryman Peter Keller collected eco-sourced seed from trees growing within five kilometres of the farm – like kohuhu, broadleaf, olearia, lacebark, beech and ribbonwood. After the pioneer species were established, more species were added. The shelterbelts now contain more than 25 different species.

There were a few challenges along the way too. Keeping stock, hares and rabbits out was important. This meant installing a good fence and using animal repellents for the first year. Grass proved to be the biggest enemy, and meant Alan needed to use sprays for the first two years at least – but it’s all been worthwhile.

“Some of the trees are flowering and fruiting, and producing seeds for the birds,” Alan says. “You plant the shelter primarily for livestock, but with the extra bonus of helping to preserve native species and birdlife in the district.”

Alan believes however that bird numbers are unlikely to increase significantly until a more effective stoat and ferret control programme is implemented.

Apart from work on his own property, Alan is a member of the Foothills Landcare Group that, in partnership with the Ashburton District Council, monitors local private native forests. The Landcare Group also co-ordinates and encourages possum control programmes on local farms.

Alan Totty of Staveley, Canterbury, plants native species on his land.



Members of the community group, Keep Golden Bay Beautiful, work on the estuary margins.

## Tasman District Council Riparian Management Project

The Tasman District Council has joined with the local environmental, farming and recreational groups to manage riparian issues in Tasman District.

After developing a Riparian Land Management Strategy, the council identified a need to broaden its investment in riparian areas to improve water quality and biodiversity values, as well as riverbank stabilisation and flood protection. “This was a shift in emphasis for us,” says Martin Workman, Policy Planner for the Council.

Initially the Council established a working party of stakeholders, who assisted the Council to identify what the specific issues in the area were. Their main concerns were poor water quality in lowland streams, rare habitats under threat, and the need to protect rare native fish that were only found in small parts of the district.

The Onekaka and Puremahaia catchments in Golden Bay have been the initial focus of the project, encouraged by the keen interest in those communities.

The catchments are a stronghold of the rare short-jawed kokopu, and a large variety of other native fish and birds. A local community group, Keep Golden Bay Beautiful, has been a driving force. They helped set up meetings and encouraged landowners to fence, plant and covenant riparian areas.

“We need to care for our waterways,” says Keep Golden Bay Beautiful Secretary Kathy Hindmarsh. “If our rivers are polluted, our coastlines will be, and the coastline is very important to us here in Golden Bay.”

Keep Golden Bay Beautiful also sourced funding from the World Wildlife Fund/ Tindall Foundation for plants for the catchment areas, and are currently growing 4,000 plants for next winter. The Council supplied fencing material to help landowners fence streams and get stock out of water.

“I’m always surprised at how much landowners are doing,” Martin says. “Often they’re very independent and want to be in control and doing things their way. But at the end of the day, we’re very much on the same wavelength trying to achieve the same thing.”

Five landowners of a high-value wetland have also joined together to covenant their properties. The Council is also working with local iwi to develop a restoration project for a wetland estuary and local urupā, which has significant cultural value.

Given the success of the riparian project in Golden Bay and elsewhere, the Council is now looking to use this approach for the broader issue of promoting the protection of biodiversity values in the Tasman District. The same working group is developing a regional biodiversity strategy and will oversee its implementation.

## Iwi and government find solutions for Motatau Forest

Te Rūnanga o Ngāti Hine and the Department of Conservation (DoC) are blending Māori expertise and western science to help the regeneration of the Motatau Forest in Northland.

The forest is home to many native species, some unique to the area. There are trees like the rata, totara, kahikatea, taraire, and kohekohe, plus plants like parataniwha and hangehange. Birds included the likes of the kiwi, kingfisher, tui and the native pigeon. But locals had watched the decline of the forest for many years.

“Rata trees were dying or standing dead,” explains Kevin Prime, the Environmental Co-ordinator for Te Rūnanga o Ngāti Hine. “Plant life was being ravaged by pests like possums, rats and goats.”

Concerned about what was happening to the forest, the rūnanga set to work in 1989. They set up a pest control scheme under a Department of Labour training programme and trained a team of workers who began pest eradication in the forest.

The team didn’t have the scientific knowledge to assess the state of the forest. All they knew was that trees were dying, and native species were disappearing from the forest. “Our trainees successfully eradicated the pests at Motatau and the surrounding area and later went from there up to the Puketū Forest near Waitangi to assist with pest control. Within weeks birds were coming back to the forest and we could see trees beginning to regenerate,” Kevin says.

Since 1994 the rūnanga has been working with DoC and Landcare Research at Motatau, to develop strategies to manage the biodiversity of the forest. This partnership has worked together through three phases:

- planning during 1995
- studies and research of the forests since 1996
- a pest control strategy which started during the 1997/1998 breeding season.

“Landcare Research has provided us with research and data, and DoC has worked with us on pest control,” Kevin explains. “Both parties have a deep passion for conservation and it was easy to find common ground over interpretations of Māori and Pākehā views,” says Gerry Brackenbury, Community Relations Officer for DoC’s Whangarei Area Office.

Pest control in the forest was not enough on its own however, because possums were still able to enter the forest from the surrounding privately-owned exotic forests. A meeting was called with neighbours so pest control could be carried out on their properties as well.

“By creating these buffer zones we got even more positive results,” Kevin says. “With the native wood pigeon we went from a 100% nest failure rate in the 1996/1997 breeding season, to a 100% success rate in 1998/1999 breeding season.”

With bird numbers now multiplying quickly, and the forest regenerating, the work at Motatau Forest is a wonderful example of how government agencies, iwi and communities can work together to protect indigenous biodiversity.



Workers get ready to carry out pest control in the rohe (area) of Ngāti Hine in Northland.