$5.00

QE II National Trust
For open space in New Zealand
Nga Kairauhi Papa

Open Space

MAGAZINE OF THE QUEEN ELIZABETH II NATIONAL TRUST

No.59, December 2003

IN THIS ISSUE Wairarapa • Birds • High Country Covenants • Carbon Credit Revenue

The QE II National Trust is an independent statutory organisation established to protect open space on private land.

The Trust helps landowners protect natural features including:

- Landscapes
- Wetlands
- Forests
- Tussock grasslands
- Cultural sites
- Streams
- Coastlines
- Lakes
- Geological features
- Archaeological sites

The QE II Act provides a legal mechanism to secure protection on private land - *an open space covenant*. It preserves ownership and management. As a resource and environment management tool, the QE II solution is simple, rigorous and highly cost effective.

An open space covenant is a legally binding agreement between a landholder (Covenantor) and the Trust to maintain an area of land or water as open space in perpetuity. The landowner retains ownership and management of the land. The standard covenant document includes provision to satisfy a covenant's specific requirements. The right of public access is encouraged but is not always appropriate. The Trust, as partner, offers advice and regularly monitors the covenant to ensure that the aims and objectives are being observed.

Establishing covenants in perpetuity can attract funding assistance from the Trust and/or local government towards fencing and survey costs. Covenanted land can attract rates remission under the Local Government (Rating Powers) Act 2002.

In addition to the legal mechanism of open space covenants, QE II offers a range of assistance in the preservation, protection and enhancement of natural features on private land.

This includes:

Term covenants. Open space covenants are generally in perpetuity, though there can be a case for a variable term-

- Kawenta, on Maori land which recognises tino rangatiratanga,
- Life of the Trees covenant, where individual trees occur in a managed landscape.

Landscape Protection Agreements. The use of this type of agreement is most appropriate where land may not have title such as road reserve.

Management Statements are often prescribed within the covenant document and provide detailed policies and methods for the ongoing management of the particular values for which the area is protected. They may include such things as species management, pest control and/or restoration methods.

Monitoring and ongoing support

Monitoring covenants is an important function of the Trust. Visits occur regularly, usually once every two years. The Trust offers management advice and support. Reports detail the ecological condition, trends, any threats and ensure covenant objectives are being met.

How your covenant helps New Zealand

Many plants, animals and landscapes found in New Zealand are unique to this country. Their uniqueness helps set us apart and define us as a nation. Unfortunately, many of these species and features are under threat. The decreasing diversity of our indigenous flora and fauna is regarded as one of our biggest environmental problems.

While there is a network of publicly owned conservation areas, the vast majority, 70%, of New Zealand's land remains in private ownership. Many habitats and features are found only in these areas. They can only be protected with the goodwill and action of landowners.

Practical land management and farm productivity

Many farmers are motivated to protect natural features because it makes good land management sense. Bush and wetlands help filter rain and runoff ensuring water quality. They encourage recycling of nutrients and reduce soil erosion. Forest remnants reduce wind, and provide shelter and shade, enhancing stock management and production. Fencing areas not only allows the regeneration of the bush, but also helps protect stream banks, water quality and keeps stock out of hard to manage areas. Healthy bush and natural landscapes beautify and add economic value to farm properties.

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www.converge.org.nz/ntsth

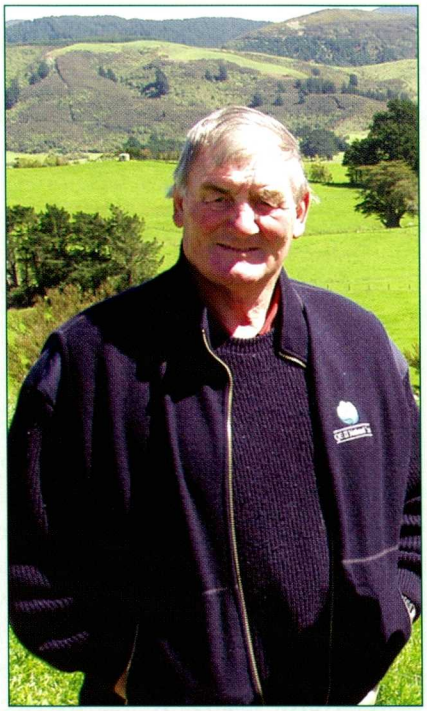
Aroha Island Ecological Centre
Tel: 09 407 5243

QE II Welcomes Sir Brian Lochore to the Chair

Former All Black and Wairarapa farmer Sir Brian Lochore is the new chairperson of the Queen Elizabeth II National Trust, replacing Sir Paul Reeves.

Sir Brian is well-liked and respected as a gentleman of the land. With his farming back-ground, and wonderful people skills, he will be a considerable asset to QE II.

He has previously been chairperson of the Hillary Commission and was an All Black from 1963 to 1970 and captain for five of these years. It was under his coaching that the All Blacks won the inaugural World Cup in 1987.



Sir Brian Lochore, recently appointed Chairperson of QE II.

Yvonne Sharp, Mayor of Far North and recently appointed Director of QE II, with Greg Blunden, QE II Rep for Far North.

Far North on the Board

Far North District Council Mayor Yvonne Sharp has been appointed as a Director to the Queen Elizabeth the Second National Trust Board.

Ms Sharp's appointment is seen as significant, as having a trustee with such extensive local body experience will be of immense value to the Board. QE II is working increasingly with local government.

In her mayoral work, Yvonne has promoted working with landowners to recognise and protect outstanding natural features. Her Council has adopted an accord with rural landowners and has a dedicated team committed to achieving a balance between sustainable development and the protection of natural assets.

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Cover photo: On the Hayes family property in Carterton, with their QE II covenant in the background, are: Margaret McKee-CEO; Aidan Bichan - Wairarapa Rep; Neil Hayes - covenantor; and Sir Brian Lochore, the newly appointed chairperson of QE II National Trust.

Celebrating our High Country Rep: Dr Brian Molloy

New kowhai species *Sophora molloyi* is "as tough as old boots" and like its namesake Brian Molloy, hardy in all extremes of weather.

Dr Molloy, QE II's High Country rep, is a scientist and research associate at Landcare Research. For more than 40 years he's been working in the fields of conservation, taxonomy and plant ecology.

In 2001 scientists Dr Peter Heenan of Landcare Research and Peter de Lange of the Department of Conservation named five new species of kowhai, including the one named after Brian Molloy.

Sophora molloyi has evolved to grow on harsh and inhospitable sites on dry, exposed headlands around Cook Strait, Kapiti Island, and parts of the lower North Island. It was Dr Heenan who described the species as "as tough as old boots".

The threatened *Sophora molloyi* flowers from winter to spring and reaches a height of 1.5 m in the wild. It is commonly marketed as Stephens Island kowhai, Sophora Earlygold and Sophora Dragons Gold.

Not much taller than his newly named plant, Brian's passion and enthusiasm for the outdoors and High Country is second to none. He is hugely respected for his wide knowledge of the flora, and real understanding of the practical aspects of farming in the High Country.

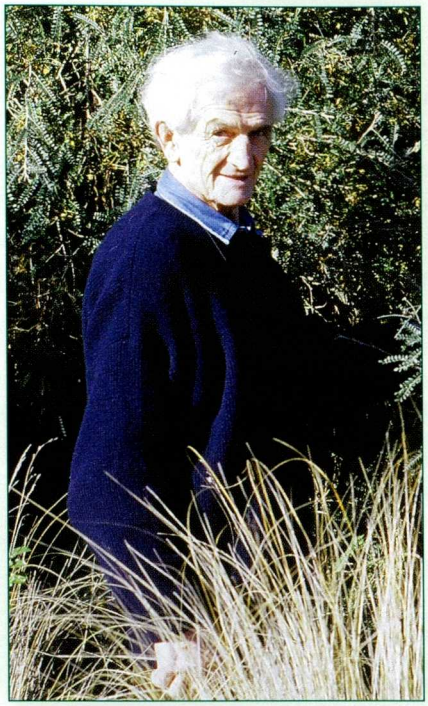


Photo Peter Heenan

Photo Green & Hahn

Brian has been involved with QE II since its inception, and was a director for nine years. His conservation philosophy has endeared him to many farmers. His beliefs result from 50 years of botanical work and observation throughout New Zealand.

He believes that the High Country's biodiversity is the outcome of 1000 years of cultural activity including 150 years of pastoral use. To maintain or enhance this biodiversity, it should be used at the same level it has been in the past - but with regular monitoring and appropriate adjustments to management.

"Once you shut these grasslands up you get rank growth of aggressive and better adapted exotic grasses, or a dominance of tall tussock and little else. As far as I know, no native plant has gone extinct in the High Country after 150 years of pastoralism. In fact many species have extended their range in the High Country as a result of cultural activities, both Polynesian and European. Often the most diverse and vigorous plant communities are found in areas of disturbance."

Brian is unstoppable. He is a man of many talents and comes from rugged stock. In 1957 he played five games for the All Blacks as half-back and also captained the Canterbury team for a year.

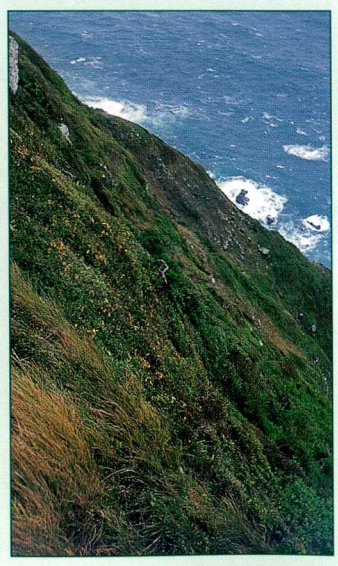


Photo Geoff Walls

Sophora molloyi *habitat, Stephens Island.*

Photo J. H. Johns

Molloybas cryptanthus.

Brian Molloy has a new genus of native orchid named in his honour. Brian has carried out pioneering studies into many plant groups, including orchids. *Molloybas* is a monotypic genus, meaning only a single species belongs to this genus.

Unlike the other members of the genus *Corybas*, to which it used to belong, *Molloybas cryptanthus* is the only species of this group lacking chlorophyll, even in its scale leaves.

The almost transparent flower, which opens between winter and spring, has a long tube-like frilled lip bent downwards and a tapering hood arching over this lip.

It's found in both the North and South Islands, usually in beech forest or under kanuka and manuka. It is almost completely buried within moss and leaf litter for most of its life, and accordingly is rarely observed.

Focus on:

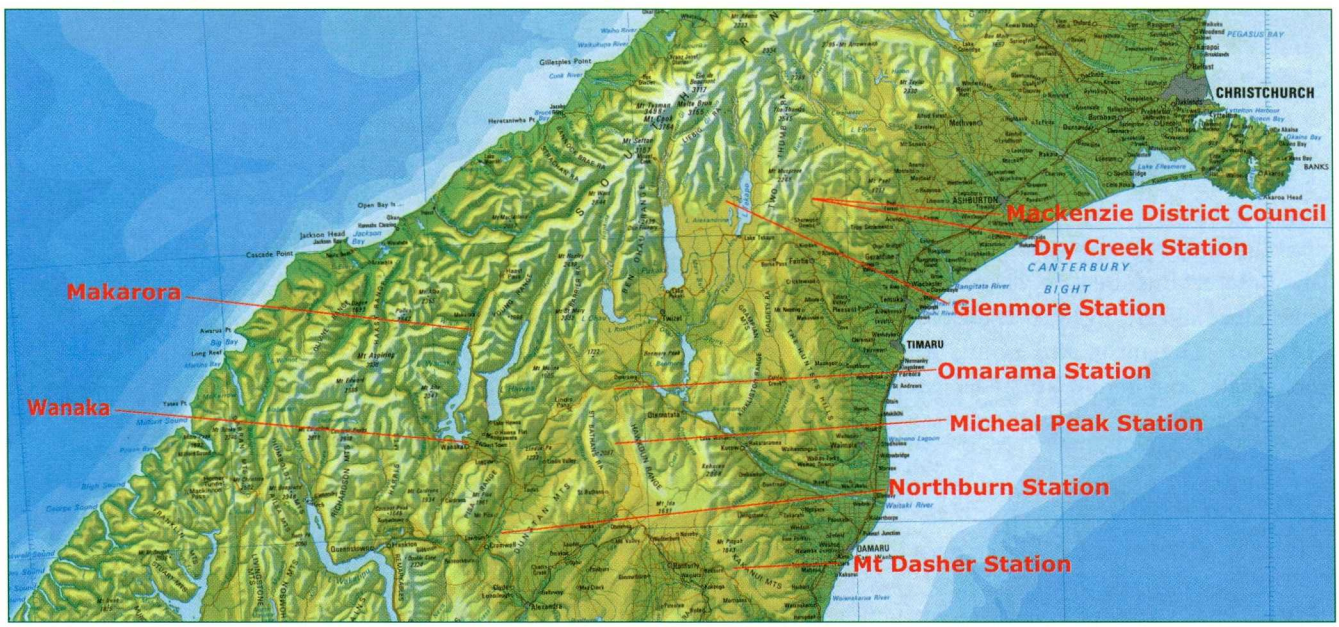
High Country Covenants

The High Country supports a breathtaking array of flora and fauna, from internationally important tussock grasslands to the wet western beech forests, and unique alpine plant and animal communities. It is also a region traditionally known for its large High Country stations and extensive pastoralism.

Within QE II's High Country Region, 10,594 ha are protected by 21 open space covenants and landscape protection agreements. On average, covenant size in the High Country is the largest throughout New Zealand (over 500 ha), ranging from 1 to 2,735 ha. A further 17 covenants have been approved and are being progressed towards registration, and will protect a further 4,700 ha.

Several of these recently registered covenants, in part or in whole, cover Recommended Areas for Protection (RAPs) under the respective Protected Natural Areas (PNA) programme.

Recently Registered Covenants in the High Country



One of a Kind

The covenant on **Harvey Hutton and Patsy Nolan's** 176 ha deer farm in the Makarora Valley was initiated by previous owner **Wattie Cameron** to protect the last remaining site in the district of a viable population of the tree daisy *Olearia lineata*. In addition, this 6 ha riparian covenant includes cabbage trees and flaxland, which are of considerable historic and cultural significance in the Makarora Valley. Next to Mount Aspiring National Park, this is a highly visible covenant viewed by those passing by on State Highway 6. Since fencing, the vegetation is showing signs of improvement, with seedling establishment of *Olearia* along the disturbed margins of the creek that runs through the covenant.

Flax and tree daisy in the Makarora covenant at the head of Lake Wanaka.

Outstanding Glacially Moulded Landscape

Photo Margaret McKee

Glenmore covenant looking west across Glenmore Tarns.

Glenmore Station is a large pastoral lease holding (19,400 ha) in the Mackenzie Basin, carrying merino sheep, cattle and deer. Farmers **Jim and Anne Murray** have protected 1,018 ha of the station, recognising that the glacial landforms of tarns and kame at Glenmore are of high national importance and are regarded as the best of their kind in New Zealand. The tarns and ponds are considered to be zoologically and limnogolically outstanding, and are habitat to significant aquatic and semi-aquatic plants. The covenant, which rises from 750 to 1,000 m, is also home to several threatened plant species including *Crassula peduncularis, Iphigenia novae-zelandiae* and *Isolepis basilaris*, as well as several diminutive grasses, other herbs and shrublets as yet undescribed. The permanent and ephemeral tarns are also habitat for a wide range of waterfowl and waders including the rare black stilt. QE II will be working closely with the young generation, **Will and Emily Murray**, who now manage the station, to safeguard this national treasure.

Autumnal Glory

On the outskirts of Wanaka, **Father Brian Fenton** has covenanted an arboretum containing a large and botanically important collection of introduced trees and shrubs. Many genera noted for their autumn colours, and rare species seldom seen in cultivation are represented. Continued planting on this 4.1 ha open space covenant is adding to the estimated 2,000 trees and shrubs planted to date, and enhancing the landscape and biodiversity values of this covenant. This relatively young arboretum also protects semi-arid native grasses and shrubs and vigorous colonies of ground orchids (*Microtis, Prasophyllum, Thelymitra*).

QE II Preserves Private Property Rights

- The landowner retains ownership and management of the land
- Visitor access is at the discretion of the landowner

In the years ahead this valuable genetic resource of exotic trees and shrubs, established by Father Brian Fenton, will become an autumnal icon within the rapidly expanding town of Wanaka.

Unusual Alluvial Tall-Tussock Grassland

In July 2001 5.4 ha of tall-tussock grassland was covenanted by High Country farmer **Brian Beattie** to complement an existing covenant of 8.6 ha registered in 1992 on **Dry Creek Station.** This covenant is located within a 13,800 ha pastoral lease at Polsons Flat north of Fairlie, and supports merino sheep, cattle and deer. The original covenant and extension are sited on the alluvial floodplain of the Orari River, and were once part of an extensive area of similar vegetation and soils now given over to developed farmland. The covenanted areas are dominated by narrow-leaved snowgrass (*Chionochloa rigida*) with lesser amounts of blue tussock, fescue tussock, spaniard, *Celmisia* species, matagouri, and a range of other native shrublets, herbs and grassland orchids. Associated with this covenant is a QE II Landscape Protection Agreement covering adjacent roadside land administered by the **Mackenzie District Council**. QE II has initiated similar agreements with other district councils in the hill and high country.

Dry Creek Station, showing the original ungrazed covenant (centre), the recent grazed extension (left) and the Lochaber and Mowbray Roads. Four Peaks Range is in the background.

Stone cairn erected by the Beattie family in the original covenant to acknowledge the initiative of the late Haldon Beattie in protecting this valuable alluvial tall-tussock grassland.

Geological and Biological Wonderland

Wayne and Joy Sim, of **Mt Dasher**, run a High Country station on the Kakanui Mountains near Oamaru, which is a mix of freehold and leasehold land, carrying merino and Perendale sheep and cattle. This open space covenant of 1,001 ha protects spectacular basalt domes and boulderfields, remnant shrublands, cushion wetlands and ponds, a rich insect fauna, rupestral flora, and tall-tussock grasslands dominated by narrow-leaved snow tussock on the lower slopes, slim snow tussock (*C. macra*) on upper slopes, and red tussock (*C. rubra*) on Siberia Hill. There is no similar combination of vegetation, flora, fauna, geology, soils and habitats within QE II's High Country covenants. The bulk of the covenant lies between 800 and 1,300 m and includes the dissected schist/basalt peneplain between Mt Dasher and Siberia Hill, with the latter and the basalt dome of Kattothryst emergent. This covenant represents a unique suite of Otago High Country natural values, generally in excellent condition. The main elements of this and similar covenants will be monitored regularly under continued pastoral use to ensure that the natural values are maintained, with adjustments to management if needed.

Wayne Sim and "Spot" amongst the basalt boulders of Siberia Hill (1,272 m) in the south-eastern part of the covenant.

Historic Cockayne Plots Protected

Tom Pinckney, owner of **Northburn Station**, near Cromwell, has protected the historic Cockayne Plots on his freehold station, thus continuing the initiative of the previous owner. It was here that an excellent example of early dryland pasture and tree research was conducted in New Zealand by Dr Leonard Cockayne (1855-1934), regarded as one of New Zealand's foremost research plant scientists. In 1918, he was appointed by the Department of Agriculture to undertake an economic investigation on the montane tussock-grassland of New Zealand. Among the many highlights of this seminal study of tussock grassland and mountain lands re-vegetation were Cockayne's re-grassing experiments in the depleted grasslands of Central Otago. The most notable of these were on Northburn Station where 13 of his plots, fenced from grazing and rabbits since the 1920s, remain.

These remaining Cockayne Plots are of high historic, cultural and scientific value. Though totalling only 1.3 ha, these plots are the only known plots remaining of this age and type in New Zealand.

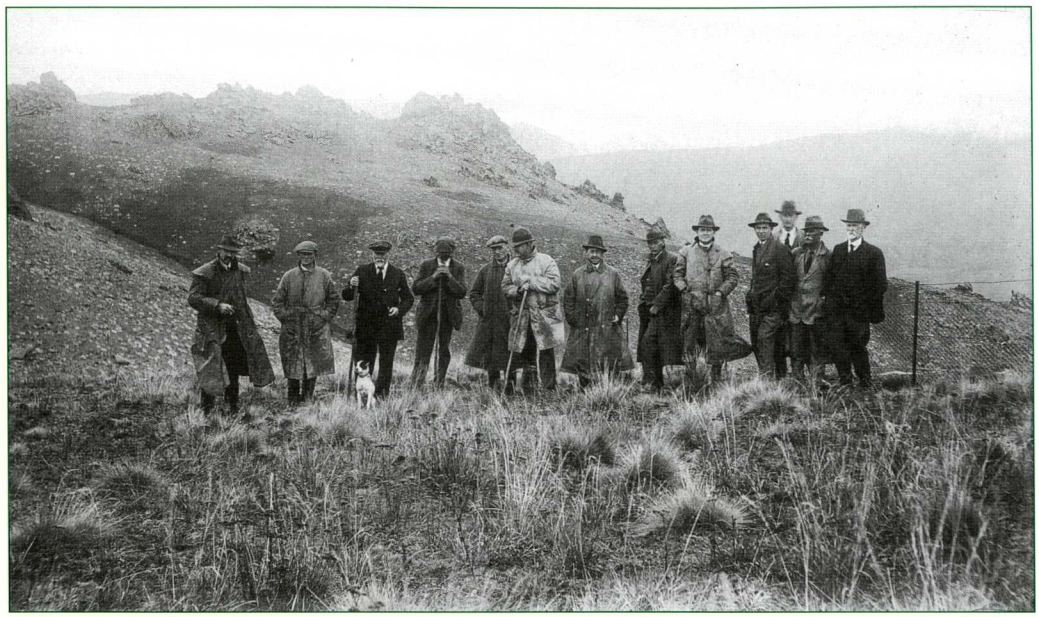


Photo W. D. Reid

Cockayne's plot 12 at 800 m on Northburn Station, Dunstan Range, showing inspection party 2 Nov 1922. Dr Cockayne on extreme right.

Cockayne's plot 12 today. This is possibly the oldest fenced plot in the country and has not been grazed for 82 years.

With the assistance of grants from the South Island High Country Committee of Federated Farmers, the Community Trust of Otago, the Miss E.L. Hellaby Indigenous Grasslands Research Trust and the Dr Lucy B. Moore bequest to the National Trust, Dr Brian Molloy has compiled a facsimile of Leonard Cockayne's reports on montane tussock-grasslands. Much of what Cockayne wrote about eighty years ago is still relevant. Most of the plants and plant processes he described with such clarity can still be observed, and throughout his articles there are many perceptive statements on a variety of issues as pertinent today as they were then. Copies of the compiled reports have been published by QE II under the title *'An Economic Investigation of the Montane Tussock-Grassland of New Zealand (1918-1922)'.*

Copies of the publication can be obtained from QE II, PO Box 3341, Wellington. Payment of $5 per copy is required to cover packing & postage.

Transition Country

Covering 2,735 ha, the **Michael Peak** covenant in Central Otago is the third largest area in New Zealand protected by the QE II National Trust. Initiated by **Val** and the late **Vera Waldron**, and now managed by son **John**, this covenant is nestled between the Hawkdon and St Bathans Ranges and links the lower Mackenzie Basin and Central Otago via the Omarama Saddle. The covenant protects the headwaters of the Manuherikia River, extensive tall-tussock grasslands; snow totara, celery pine and grey scrub; and a rich rupestral and riparian flora, ranging in altitude from 800 to 1,800 m. The area is used for summer grazing with merino sheep at low stocking rates and will be regularly monitored to safeguard its natural values.

John and Val Waldron amidst narrow-leaved snow tussock with prostrate snow totara on boulderfield behind, grey scrub beyond, and the West Branch Manuherikia River below.

Looking down the eastern part of the covenant across Camp Creek from near the new Omarama Saddle showing extensive grassland of slim and narrow-leaved snow tussocks.

Glider Country

The **Omarama Station** covenant was initiated by former owner **Dick Wardell** to protect two separate areas totalling 1,285 ha of montane and sub-alpine tussockland. Situated alongside the township of Omarama, renowned as the gliding centre of New Zealand, this large pastoral property (approx. 11,000 ha) supports merino sheep and cattle. Current owners **Richard and Annabelle Subtil (nee Wardell)** are able to use these covenanted areas for pastoral farming in accordance with the terms and conditions of the covenant.

Dick Wardell on the Ewe Range looking north to Mt St Cuthbert. Covenant (Area B foreground) extends from 1,100 to 1,611 m, covering 420 ha.

Mt St Cuthbert looking north. Covenant (Area A) extends from about 900 m to the summit at 1,558 m covering 865 ha.

The summit of area A (Mt St Cuthbert), on greywacke terrain, has a dense healthy stand of slim snow tussock, regarded as the best in the southern Mackenzie Basin, descending through narrow-leaved snow tussock, with gullies, screes and boulder fields supporting mixed shrubland including celery pine, snow and mountain totara, coprosmas, olearias and the rare native broom *Carmichaelia kirkii*. Area B, on schistose terrain, supports high altitude slim snow tussock grassland with numerous cushion bogs, seeps and flushes, grading downslope to narrow-leaved snow tussock/ fescue tussock grassland, and some scrub on lower shaded faces. Several undescribed species of shrubs and herbs are present in both protected areas, as are several species of plants that are at their northern or southern limits. These two contrasting areas are excellent representatives of high altitude tussock grasslands and associated plant communities in the Omarama district.

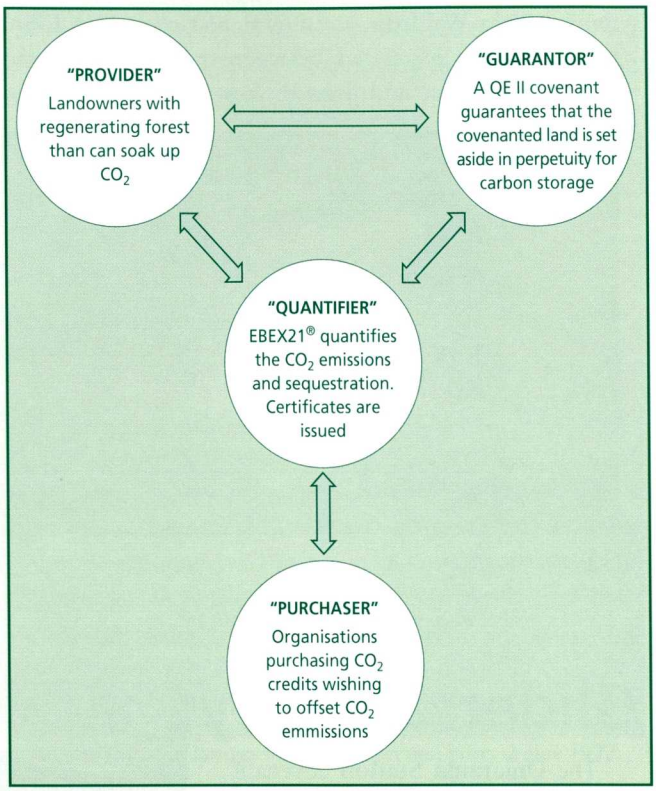
Are "Carbon Credits" for Regenerating Shrublands Becoming a Reality?

Fiona Carswell
EBEX21® Scientific Officer, Landcare Research.

The EBEX21® (Emissions/Biodiversity Exchange) project could provide "carbon credit" revenue to landowners with regenerating shrublands. The EBEX21® project of Landcare Research builds partnerships between organisations who are concerned about the amount of greenhouse gas emissions they are responsible for and landholders who can regenerate indigenous forest on their land "soaking up" CO_2 in the process. The Government has recently signalled its intention to allow landowners with a "non-harvest covenant" on post-1990 forests to sell the rights to the carbon accruing in their forest from 2008 to domestic and international buyers. Associated with "credits" will be liabilities i.e. the responsibility will lie with the landowner to soak up as much CO_2 (through tree growth) as they have been credited for and to protect the trees against damage by fire, storms, animal browsing etc. The landowner will be responsible for auditing and covenanting costs.

Plots are set up on individual landholdings to measure changes in carbon and biodiversity over time.

EBEX21® reduces the risk for individual landowners by allowing a national pool of owners of regenerating shrubland to act as a unit. The amount of carbon gained annually by all sites in the pool can be predicted, and the carbon and biodiversity actually gained at individual sites measured. A pilot study is underway whereby domestic organisations that are concerned about their greenhouse gas impact can offset some of their emissions before 2008 by providing revenue to landholders for forest regeneration. EBEX21® has formed a partnership with the QE II National Trust. QE II covenants effectively guarantee that carbon stored in the forests is protected in perpetuity.



Relationship between landowners, purchasers of CO_2 EBEX21®, and QE II National Trust

The key criteria for shrublands that are most suited to generating "EBEX CO_2 units" are:

- forests must be "new" i.e. have been regenerated or planted since 1990;
- forests must include trees that can reach five metres of height at maturity;
- by 2008 each hectare included must be at least 30% covered by trees;
- woody species are already present and there is indigenous vegetation nearby.

Results to date from the pilot project suggest that marginal pastureland is more suitable for accruing carbon than highly productive pasture. The costs of setting aside marginal pasture for forest restoration may be completely offset by this land use and revenue may increase beyond this level if the Kyoto Protocol goes "live" in 2008.

The EBEX21® project would like to hear from landowners with scrub and organisations interested in purchasing carbon offsets. Please contact:

Larry Burrows
(Scientific Officer for the Project)
BurrowsL@LandcareResearch.co.nz

or, Ian Turney
(Executive Officer for the Project)
TurneyI@LandcareResearch.co.nz

Best Practice on the West Coast

The Bennetts have covenanted 16 ha of highly under-represented coastal podocarp forest on their West Coast dairy farm at Cape Foulwind.

Farming practices on the West Coast are undergoing a noticeable change of scale and intensity. The use of nitrogen fertilizer dramatically improves grass growth and, as a consequence, increases livestock numbers. Earthmoving techniques such as "humping and hollowing" and "flipping" are making development possible in lands once considered intractable. Westland has more hydraulic excavators per square kilometre that any other region in New Zealand.

Wide scale development is not without environmental costs. To gain resource consents farmers must demonstrate how downstream impacts will be avoided or mitigated. Protecting important forest remnants and wetlands shows that farmers are serious in meeting best environmental practice.

There are only 15 QE II covenants on the West Coast but they greatly add to the landscape and biodiversity of the region. Some people say that because the conservation estate here already covers more than 80% of the landmass there is no need for further protection. This ignores the fact that much of the farming and other privately owned land is limited geographically to the narrow coastal plain.

There is little of the original unique biodiversity left on these farmlands, so protecting what remains is of immense value. For example, the formerly extensive matai-totara forests of alluvial floodplains have become a highly under-represented and threatened ecosystem type in New Zealand. Back in 1982, an ecologist found that 25% of matai-totara forest had been lost in the previous two years and grazing was preventing regeneration, particularly of matai.

Sadly, these losses are continuing. Ian James, QE II's new regional representative for the West Coast, says, "It is my personal goal to help farmers recognise the value of their matai-totara forests and give them the legal protection they deserve".

Several covenants are clustered around Westport where local landowners had the foresight to protect remnant areas of sand-dune coastal forests. Together with the farmers, QE II is seeking more funds to construct permanent fences around these covenants.

Bill Bennett and his son Andrew have covenanted 16 ha of sand-dune podocarp coastal forest on their farm just behind the settlement at Carters Beach. The covenant forms a highly visible backdrop from the Cape Foulwind Road and is seen by thousands of visitors en route to the Seal Colony. Bill was an early supporter of QE II and covenanted his bush back in 1991. The Bennett's farm balances farm development with biodiversity protection and is exemplary of the future for the dairy industry on the West Coast.

Art competition
– a sample of our covenantors talent

A study of puriri leaves, flowers and fruit. By Hamilton covenantor Michael Barker.

Kingfisher at spring-fed stream on Akikouka Road Covenant. By Peter Scaife of Greytown.

Variety is the spice of life

New Zealand biodiversity - how many native species do we have and why are they important?

Written by David Norton, School of Forestry, University of Canterbury

Photo David Norton

White flowered plants abound – mountain daisy.

While biodiversity is defined in national and international policy to include ecosystem, species and genetic diversity, biodiversity is most often used to refer to species. Yet, despite a general appreciation that there are an awful lot of species, few people have a good idea of the actual numbers involved. Current estimates range from 3 to 112 million species globally, with 12 to 18 million considered to be the likely number. The reason for the uncertainty is that only a small number of species (< 2 million) have ever been described.

This same uncertainty applies to New Zealand where current estimates suggest that there are as many as 80,000 species, of which only c. 30,000 have been described. The two biggest groups are invertebrate animals (insects, worms, nematodes, etc; 52,000 species) and fungi (22,000 species). In contrast there are only 1,500 vertebrate animal species comprising 1,235 fish (mainly marine), 149 birds, 65 frogs and reptiles, and 42 mammals (mainly marine).

Photo Angus McIntosh

An endemic scree grasshopper.

While we don't know the exact numbers, as many as 80% of New Zealand species live on land or in freshwater. For these, the number of species tends to increase as you move northwards and to lower altitudes reflecting increasing warmth. For example, 10 to 20 canopy forming tree species can be found in one hectare of lowland Northland forest while only 2 to 3 species would occur in the same area in Southland. Similar trends occur for other groups such as invertebrates and birds.

There has been much debate about the origins of New Zealand plants and animals, but most have either arrived directly from Australia (or less often from further north) or, more commonly,

have evolved within New Zealand from ancestors that arrived across the Tasman Sea. There are a number of particularly distinctive New Zealand species that are regarded as having been in New Zealand since the breakup of Gondwana some 80 million years ago (e.g., podocarps, kiwi and tuatara). However, recent geological evidence suggests that some 30 million years ago much of New Zealand was under the sea and therefore very few species could have survived from Gondwanan times.

Whatever the origin of our plants and animals, New Zealand has been identified as one of 25 global biodiversity hotspots because so many of our species are endemic (occur only in New Zealand). For groups such as plants, insects, molluscs, freshwater fish and reptiles, the majority of species are endemic. A number of unique features also occur among our plants and animals reflecting our unusual evolutionary history. For example, the predominance of nocturnal flightless birds is thought to be due to an absence of mammal predators, while our plants lack the brightly coloured flowers of other countries (e.g., reds and blues) reflecting a lack of long-tongued bees and butterflies.

Taxonomic group	Estimated number native species	Number native species described	% described species endemic
Fungi (including lichens)	22,000	5,800	?
Algae (including seaweeds)	4,000	3,700	?
Plants			
- mosses & liverworts	1,100	1,060	30
- ferns & fern allies	200	189	46
- conifers	20	20	100
- angiosperms	2,100	1,813	84
Invertebrate animals			
- insects & spiders	24,600	12,600	90
- land & freshwater molluscs	1,300	500	100
- marine molluscs	3,500	2,000	?
- worms	17,500	1,500	>30
- others	5,300	3,900	?
Vertebrate animals			
- marine fish	1,200	964	11
- freshwater fish	35	28	90
- frogs & reptiles	65	65	100
- land & freshwater birds	88	88	57
- marine birds	61	61	30
- terrestrial mammals (bats)	2	2	100
- marine mammals	41	41	5

In the 7-800 years since humans first settled in New Zealand, the impact on New Zealand's biodiversity from habitat loss and the ravages of animal and plant pests has been huge. The most recent threat classification shows that 602 native species are directly threatened with extinction and a further 242 native species are in decline. Best estimates of extinction of native species include:

- nearly one-third of land and freshwater birds
- four plant species
- one fish, one bat and perhaps three reptiles
- three out of the seven frog species
- close to one-fifth of sea birds

Sources: New Zealand Threat Classification System Lists 2003, *Biowhat?* Preliminary report of the Ministerial Advisory Committee 2000.

Conservation Hero

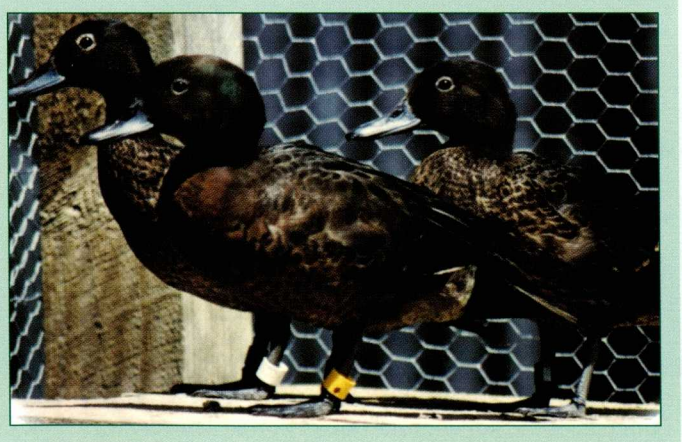
QE II covenantor Neil Hayes (*as seen on the cover of this issue*) is a conservation hero. With astonishing commitment he has pioneered the conservation of the small endangered indigenous duck the Brown Teal (*Anas chlorotis*) or pateke. (In 2002 the number of brown teal in the wild was approximately 1,000.)

"Gretel Lagoons" is the name of Neil and Sylvia Hayes 7.5 ha covenant in Carterton. The covenant protects a lowland podocarp forest remnant and wetland. Within the covenant several thousand kahikatea, totara, cabbage tree and flax have been planted. The property has had a major predator control programme in operation for over 10 years controlling feral cats, possums, hedgehogs, ferrets and stoats.

The Hayes family are waterfowl enthusiasts. They have successfully reared grey teals, mallards, shoveler and grey ducks. Without good predator control this would not have been possible. From captive reared birds the Hayes family have successfully established a sizeable population of NZ grey duck.

Neil is a founding member of Brown Teal Conservation Trust and the author of '*Natural History, Captive Management and Survival of the New Zealand Brown Teal*'.

For further information, email haltd@actrix.co.nz or phone 06 379 6692.



Focus on:

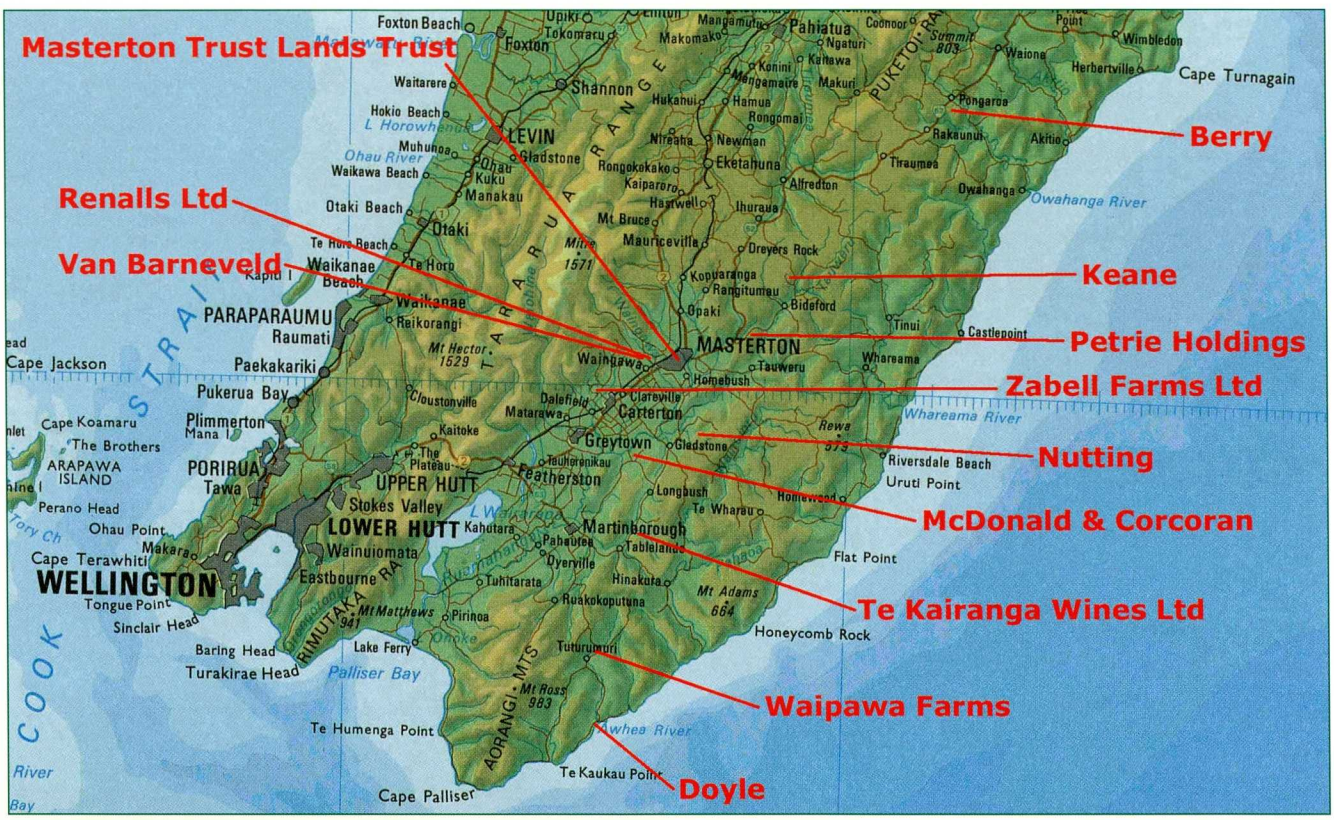
Wairarapa

The Wairarapa supports a complex mosaic of vegetation types and landuses. This includes internationally important wetlands, swamp forest remnants on the plains, dry eastern beech forests, and unique coastal plant and animal communities. There is increasing pressure from dairying, viticulture and subdivision in these rural areas. QE II hopes to ensure that the special characteristics of the Wairarapa are protected in perpetuity.

Within QE II's Wairarapa Region, 5,262 ha is protected by 138 open space covenants. Covenant size in the Wairarapa ranges from 1 to 824 ha. A further 24 covenants have been approved and are being progressed towards registration, and will protect a further 360 ha.

QE II Rep Aidan Bichan covers the area stretching from Pahiatua to Cape Palliser, south of Martinborough. Aidan is a dairy farmer based west of Carterton. He and his partner Janne Zabell have 2 covenants on their property (see page 16). "One of the bonuses of the job is meeting so many people with a deep commitment to conservation and a passion for the environment," Aidan says.

Recently Registered Covenants in the Wairarapa



Public enjoyment guaranteed

The **Millennium Natural History Reserve** (MNHR) in central Masterton was originally a paddock and trout hatchery until purchased by the Masterton Trust Lands Trust, and the Masterton South Rotary Club, assisted by Forest and Bird and Ducks Unlimited. They aim to develop the site into an indigenous forest similar in composition to that which originally existed in the locality. Thousands of trees have been planted and tended by many helpers including The Friends of the Millennium Native Forest Reserve, who look after the day-to-day management of the covenant.

Eight schools within one kilometre have a long-term relationship with the revegetation project. The old hatchery buildings are used by Masterton Intermediate School and include an Environmental Science Centre. Twice a year each class spends four consecutive days at the centre studying ecological and environmental topics.

While the MNHR has not been officially opened, there are usually committee members on site at weekends who can provide further information.

Protection for a Coastal Forest on the Tora Walk

This coastal bush forms part of the superb Tora Walk.

As hosts of a section of the increasingly popular Tora Walk, **Michael and Deborah Doyle** recognised the importance of native forest and bush. Feedback from the 800 to 1,200 walkers per year highlights the importance of protecting remaining areas of native forest. Families and people from throughout New Zealand and the world really appreciate being able to see and hear native birds in their natural surroundings.

Their property on the Wairarapa coast has 10 ha of karaka/ngaio forest on a steep coastal terrace face. Higher parts of the block were probably close to the original cover with wharangi and rengarenga lily present, both very unusual in the Wairarapa.

The 40 km Tora Walk is spread over three days and nights, with walkers staying in farm cottages. Walkers have the option of a fully catered trip or may bring their own food. A novel approach has been to arrange with the local mail contractor to carry bags between cottages - leaving the walkers to enjoy the scenery carrying only a camera, a coat and a snack. For more information contact Mike and Deborah on 06 307 8866.

3 areas on Paetutu Station have been covenanted – protecting the valuable nikau.

Nikau preserved

Paetutu Station is home to covenantors **Geoff and Pam Nutting**. Located 12 km from Gladstone, this 225 ha hill country sheep and beef breeding farm has three protected areas. Totalling around 3 ha the covenants include a pukatea wetland forest with kahikatea and cabbage trees, titoki treelands and most unusually, nikau palms. There are almost no forest remnants within 10 km of the property.

Wines and vines

Expansion of **Te Kairanga Wines Ltd** has seen vineyards planted in various corners of the Wairarapa. The recently planted block 15 km north of Martinborough on Longbush Road provides a contrasting background to their steep-sided Whangaehu River bank covenant. This 5.3 ha lowland riparian secondary forest remnant, with totara, kanuka and a scattering of kowhai, forms a riparian corridor with three adjacent QE II covenants.

On the banks of the Whangaehu River, this covenant is part of a network of QE II covenants.

Lookout to the Wairarapa

The desire to formally protect an area of black beech forest on a hill face prompted **Janne Zabell and Aidan Bichan** to approach QE II. The 3.5 ha remnant had already been saved from the bulldozer when planting pines was popular, and they wished to ensure the 600-year-old trees survived for future generations. Less than 4 % of this forest type remains in the Wairarapa plains, little of which is protected. Stock has been excluded for 10 years and the understorey is thick with a wide range of trees regenerating.

Margaret McKee CEO, Aidan Bichan covenantor and QE II Rep with Sir Brian Lochore in front of Aidan's forest covenant and wetland covenant on the flats.

They also protected 1.1 ha of wetland, containing the uncommon brown mudfish and lamprey (a very rare primitive eel-like fish which migrate inland to spawn), bordered by remnant kahikatea, totara and hinau. Both of these protected areas adjoin *The John Fensham Sanctuary for Native Trees and Birds* owned by Forest and Bird.

As part of Greater Wellington's Enaki River Restoration Project, Janne and Aidan, like many of the nearby landowners, are fencing, planting, protecting and retiring the river margin to improve water quality and aquatic life.

Bats in the Belfry

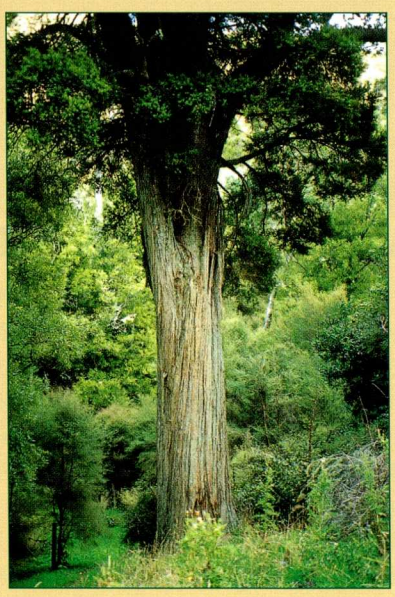
The gorge in the foreground is home to glow worms, birds and bats.

Glow worms line the gorge through **Peter and Elizabeth Keane's** 2 ha covenant at Bideford. Their covenant covers high quality bush including totara, rimu, kahikatea, matai and miro. The almost pristine hill country forest is home to a wide range of birds including kereru, tui, bellbird and morepork and is thought to have bats roosting in hollow trees.

Passing of a Conservationist

A lifetime commitment to conservation saw the late **Neil Petrie** protect some 48 ha of forest remnant on **Sulphur Wells** near Bideford, Masterton. In addition to fencing off these remnants, Neil was a keen observer of wildlife and kept up regular weed control and mustelid trapping campaigns. Neil passed away in January 2002.

Son "**Tundy**" and wife **Paula** are continuing the enthusiastic commitment with another covenant being added to the existing six protected areas. The latest addition is 2 ha of mature tawa, titoki, kahikatea, totara and matai forest. Of particular note are the number of large trees (over half a metre in diameter) and mature lancewood.



A magnificent totara on Sulphur Wells.

Ahiaruhe Lifestyle Block

Elisabeth McDonald and Brigid Corcoran own a lifestyle block of 6 ha at Ahiaruhe near Carterton. Overlooking the Ruamahanga River they have plans for a small vineyard and to run a few beef cattle. At the bottom of the property is 1.5 ha of terrace edge and bushed gully containing a mix of hardwood and podocarp lowland secondary forest. Species include kowhai, titoki, maire and kanuka, with kahikatea, totara and maire. Stock has been excluded and the understorey is flourishing.

Aerial shot of the protected forested gully from the north-west.

Linkwood Bush

Linkwood Bush is much photographed when kowhai is in flower.

Waipawa Farms Ltd has covenanted a 3.4 ha lowland secondary podocarp and hardwood forest remnant. Situated near Tuturamuri on the Tora Coast Road. A diverse and healthy block, with totara, kanuka, black and white maire, matai, kahikatea, kowhai and lancewood present. Of particular interest is green mistletoe, *Tupeia antarctica*, and the whitehead (popokatea) which normally inhabits the black beech forests rather than small forest remnants. The 470 ha hard hill country sheep and beef farm is managed by **Hamish** and **Sue Sims** who with father **Michael Sims** initiated the covenant.

Also on the farm is Linkwood Cottage, a farm stay in the old single quarters. Tastefully done up, the one bedroom self-contained building offers an excellent base to explore the district or to just blob out on the veranda. One of the features of a stay here is hot bread delivered every morning. Contact can be made with Hamish and Sue on 06 307 8108 or hs.sims@xtra.co.nz

Significant Plains Wetland Protected

Neighbours joined forces to protect the largest wetland in the Wairarapa.

In January 2000 the Department of Conservation published a survey report on the Wairarapa Plains and identified the **Waingawa Swamp** as a Recommended Area for Protection. Two adjoining land owners have covenanted the 9.6 hectare swamp, which is the largest example of lowland non-forest wetland left in the Wairarapa. In doing so, **Renalls Limited** and **A and P Van Barneveld** protected habitat for two nationally threatened birds, the dabchick and white heron, as well as a number of regionally threatened species.

A management plan involving many organisations including DOC and Greater Wellington Regional Council are providing predator control and assistance to enhance this important wetland.

Rare Plants in Wetland Covenant

Pongaroa is the site of an unusual wetland covenant containing a range of rare plants. The swamp-tree daisy *Olearia virgata* is the dominant vegetation with the brown clematis (*Clematis quadribracteolata*) present, which is recorded in only two other sites in the Wairarapa. **Carne and Ruth Berry** have added this block to their existing forest and waterfall covenants. This habitat potentially has the spotless crake and mudfish present, and possibly the swamp orchid *Pterostylis micromega*. Further investigations will be undertaken soon to verify this.

This swamp-tree daisy wetland may be home to a number of threatened species.

Birds in Covenants

While it is always a great joy to see and hear birds, they can also be very useful indicators of the general health of a covenant.

Birds play an important role in our ecosystems as browsers, predators and pollinators. Dispersal of the seeds of many plant species is also heavily reliant on birds. Populations are impacted by a range of aspects, including: the abundance of fruit and flowers, insect populations and predators such as possums, rats and stoats.

To monitor birds, and the health and condition of your covenant, the following tips may be helpful:

- Learn or improve upon your bird identification skills. The best way to do this is by spending time in your covenant with a pair of binoculars, trying to identify all the birds you hear or see. Spending time with someone who is an expert at bird identification is invaluable.
- Count the number of birds and the number of different species you see.
- Try to undertake bird counts at the same time each year and at the same time of the day (either in the early morning or around dusk).
- Try to undertake counts in the same weather conditions – ideally fine and still.
- Assess when birds are most conspicuous – generally in the breeding season between September and November.
- Have the same person do repeat measurements.

Photo Aaron Russ

Silvereye (tauhou).

Photo Aaron Russ

Bellbird (korimako).

Photo Aaron Russ

Tomtit (miromiro).

- Do counts at the same marked location.

Factors that will influence bird counts and cause variations can be;

- *Conspicuousness*: How lively and noisy birds are affects how likely we are to count them. If they are quiet and not moving around we will count less than if they are noisy and active – even though the actual number are the same. How noisy and active birds are varies with species, time of year, time of day and weather.
- *Observation skills*: People often have different levels of skill in identifying birds. These skills develop over time. Individual people are likely to get varying results.
- *Variation in the environment:* There are a number of ways in which the environment can cause variation in counts. Birds are easier to see and count in open forest compared to forest with a thick understorey and dense canopy. It can be easier to count birds on flat country compared to broken country where vision and sound is obstructed.

Methods

There are a variety of methods that can be used to count birds but some of these are more appropriate for detailed scientific studies.

Two techniques that are likely to be most useful for monitoring birds in covenants are -

Five-minute counts

All birds seen or heard over a five-minute period at a fixed listening point are recorded. Care is taken to avoid recording the same bird twice over the 5 minute period. Listening points are spaced at a minimum distance of 200 m.

Fixed area – 'slow walk' transects

This technique involves slowly walking along a transect and only recording birds that are present within a set distance, usually 10 m either side of the transect. Because only the nearby birds are included, this technique results in a much higher proportion of birds identified by sight. It is probably less affected by changes in conspicuousness. It also provides some measure of density because counts are area related.

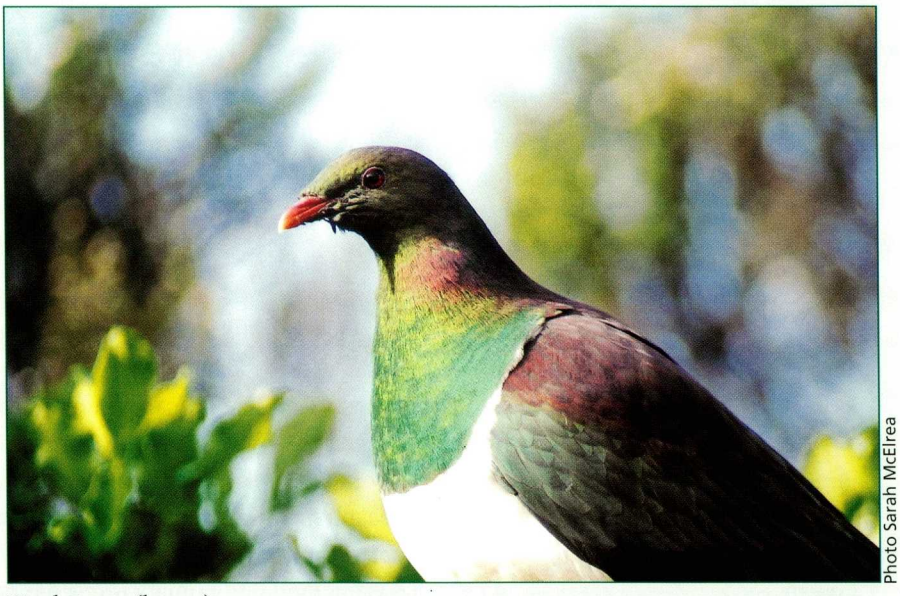


Photo Sarah McElrea

Wood pigeon (kereru).

For further information, and useful references, please refer to *"NATIVE FOREST MONITORING – A guide for forest owners and managers"* written by Peter Handford.

This publication can be obtained from PA Handford & Associates Ltd, PO Box 52, Paekakariki, or is available on the internet at www.fronz.com/pubs.html

Baldrick leaves Aroha for home

Imagine being huddled under a patch of fern on the edge of a huge pine forest and not having dinner put out for you! The ruru (morepork) are singing to each other, maybe a possum snarls nearby, and a rat scurries about its night-time activities. "Hang on, I can smell a worm. Yum, there weren't many of these where I came from."

Baldrick, our newest kiwi release from the Trust's Aroha Island, is one of 12 monitored kiwi in Waitangi Forest. Baldrick is pictured with Gay Blunden of Aroha Island and Phil Stocker of Northland Forest Managers, and Peter Mold, who found the eggs.

The kiwi with a bald patch on his forehead had reached 1,200 grams and it was time to return home to the eastern side of the forest - where the eggs were found. Unfortunately, Queenie, Baldrick's sister, died when about 700 grams, so Baldrick had to go out into the world by himself.

Lynette Denton, from the Department of Conservation in Kerikeri, placed a radio transmitter on Baldrick which helps her monitor his movements through the production pine forest.

Recently registered covenants

A summary of covenants registered between 5th July 2003 and 20th October 2003 that have not yet been reported in Open Space.

Covenantor	Area (ha)	Open space type	District Council
Baxter	15	Lowland secondary podocarp forest	Far North
Bannister	3	Lowland podocarp/broadleaved forest remnants & wetland	Far North
Waldron	15	Lowland modified primary taraire forest & shrubland	Far North
Blunden	90	Lowland modified primary rewarewa/towai-taraire forest	Far North
Goodwin	47	Coastal shrubland and pohutukawa treeland	Far North
Irvine	1	Lowland modified primary podocarp forest	Whangarei
Apteryx Limited	2	Lowland secondary podocarp forest	Whangarei
Puriri Downs Limited	2	Lowland secondary hardwood forest	Kaipara
Cournane	21	Lowland modified primary tawa-tariare forest	Manukau
Smugglers Cove Holdings Ltd	17	Coastal broadleaved forest remnant	Thames-Coromandel
Cowan	11	Lowland modified primary forest remnants	Otorohanga
Goulding	17	Lowland and riparian totara forest remnant	Hastings
Jones & Williams	25	Coastal shrubland & flaxland. Landscape feature	Gisborne
Maritime Safety Authority of NZ	4	Coastal shrubland & flaxland. Landscape feature	Gisborne
Bayly & James	1	Semicoastal modified primary kahikatea-pukatea forest	New Plymouth
Cowley & Young	2	Lowland regenerating wetland forest remnant	New Plymouth
Burmeister	1	Semicoastal modified primary karaka-kaikomako forest	South Taranaki
Strachan	2	Lowland podocarp/hardwood forest remnant	Rangitikei
Falloon & Wall	4	Lowland podocarp/hardwood forest remnant	Masterton
Chapman	2	Lowland modified primary totara treeland	Masterton
Cunningham	1	Lowland forest remnant, reedland and flaxland	Kapiti Coast
MacFarlane	4	Coastal kahikatea/tawa forest, kanuka scrub and reedland	Nelson
Stringer	2	Semicoastal secondary palustrine flax wetland	Nelson
Thawley	27	Protection of rural and production landscape	Tasman
Crosbie	188	Southern rata and rimu podocarp/hardwood forest	Southland

Covenants Update

As at 20 October 2003, there were 1795 open space covenants totalling 64,620 hectares. The regional breakdown, based on Regional Council boundaries, is as follows:

Region	No. of Covenants	Area Protected (ha)
Northland	259	5404
Auckland	147	1391
Waikato	294	9576
Bay of Plenty	115	8447
Hawke's Bay	95	7349
Gisborne	65	2279
Tarankai	86	1442
Manawatu-Wanganui	183	3673
Wellington	144	4646
Nelson	8	400
Marlborough	21	748
Tasman	63	1490
West Coast	15	562
Canterbury	128	8640
Otago	69	6351
Southland	103	2222
TOTAL:	**1795**	**64620**

New Zealand Geographic have an 18 page feature article on QE II National Trust in the November-December 2003 magazine (Issue 66)

NOT TO BE MISSED!

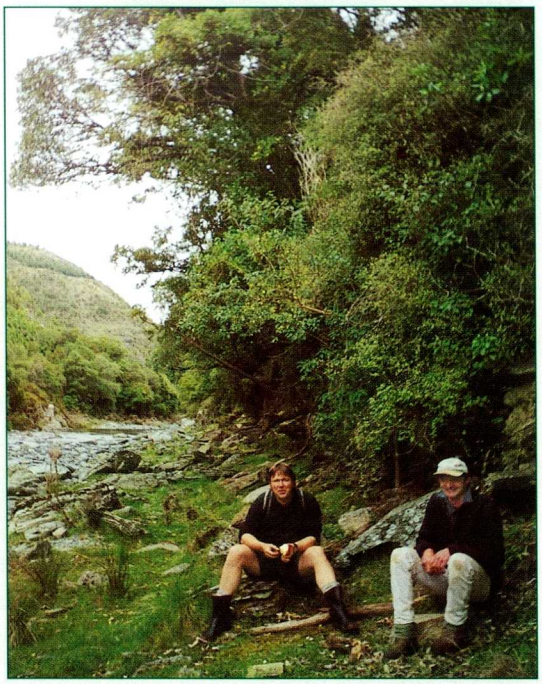
Councils – what can they offer?

QE II, while an independent organisation, is working to build relationships with regional and district councils. Where it is possible to work together, it is possible to achieve more. This has involved close liaison with Local Government New Zealand and Action Bio-Community (ABC), a project building capacity for biodiversity management in councils and communities across New Zealand, (for more information on ABC visit their website at www.biocommunity.org.nz).

While some landowners might have concerns about the way some councils are imposing restrictions on the use of their land, many others are welcoming assistance from councils to look after such areas in conjunction with QE II. Some councils are providing funding for fencing, advice and/or assistance with animal and plant pest control for areas that are covenanted with QE II. About two-thirds of regional councils now provide some assistance to landowners to look after covenanted natural areas.

George Bulled, covenantor, and Simon Stokes, land management officer for Hawke's Bay Regional Council at the Bulled covenant west of Napier. The Council have contributed to fencing and survey costs.

Additional funding from central government through the biodiversity package has enabled QE II to achieve more. However, the ongoing demand for covenants always exceeds the available funding. The way councils support covenanting varies around the country, but wherever the fencing costs are split between three or more parties it means that each party has to contribute less, including the landowner. Projects that seemed expensive suddenly become more achievable. Such partnerships enable QE II to work with more landowners to protect further valuable natural areas.



Landowner Bryce Burnett (right) and Aalbert Rebergen (Otago Regional Council biodiversity officer) take a break in this recently approved covenant near Oamaru. The Otago Regional Council contributed one-third of the costs of fencing to protect 30 ha of lowland broad-leaved forest beside the Kauru River.

South Taranaki District Council and Taranaki Regional Council have worked with QE II and the landowner to protect and restore a sand dune system at Oaonui.

Behind the scenes support such as provision of aerial photographs can also reduce the costs for QE II of processing a covenant and is greatly appreciated. A few councils also support the covenanting process by funding assistance for survey costs. Survey and definition on the title are important measures to be able to ensure that future landowners adhere to the conditions of the covenant.

Rate remission by councils for areas permanently protected with QE II is now being provided by nearly all councils. In this way councils are acknowledging the value of covenants, and the personal contribution made by landowners, to the community.

Councillors and staff of Kapiti District Council admire a recent covenant to which the Council and Greater Wellington contributed fencing funds.

ACTION BIO-COMMUNITY
local capacity in biodiversity management

Summary of QE II National Trust Annual Report for the year ended 30 June 2003

QE II National Trust has a statutory requirement to report to Parliament. The full Financial Report can be viewed on www.qe2.org.nz or phone 04 472 6626 and we will post you a copy. The following are extracts from the 2003 Annual Report to Parliament.

Chairman and CEO's Report

The Queen Elizabeth II National Trust is the pre eminent organisation preserving, protecting and enhancing natural features on private land and offers 25 years experience.

This last year has seen a turning point for the Trust with its quiet reshaping. Results for the year ending 30 June 2003 were very pleasing and well ahead of estimates. This significant increase in profile and activity was achieved through a combination of improved administration efficiencies and additional resources becoming available from the gifting of Tupare and Hollards Gardens.

Undoubtedly the supreme highlight of the year was the Silver Jubilee Celebration Dinner at Government House in November hosted by the Governor General. It was a very grand occasion and will be remembered by all that attended for a very long-time. Professor David Bellamy was the guest speaker. Our sincere thanks to our sponsors, Federated Farmers, Landcare Research, Department of Conservation and the Ministry for the Environment.

There is an increasing awareness for the need and desire to protect biodiversity and natural features on private land. The Trust is delighted to report the increasing number of individuals and groups investing time and money in private conservation projects.

The Trust continues to forge stronger links with local government. This gives an enormous boost to planning, resources and the ability to leverage additional funds. A local government strategic plan is being developed further.

The Trust has invested in improving its science and technology capability. A number of research programmes from the public funded pool are now investigating specific issues for the Trust's needs. We have received additional funding for the development of our own geographical informational system.

Increased resources were committed to the monitoring and management of covenants. Adherence to covenant conditions is high with more than 82 percent of landowners exceeding the terms and conditions of their covenants. Less than three percent of covenants required remedial action to maintain the integrity of the covenant and ensure conditions are met. This reflects an incredible level of goodwill and commitment among covenantors. Monitoring statistics show that the decline in indigenous biodiversity has been halted or reversed in about 95 percent of covenanted areas. Threatened species are stable in 51 percent of covenanted areas and a further 41 percent of areas are improving.

Sadly we farewelled Sir Paul Reeves who retired after 8 years as a Director of the Trust the last three as Chair. We were honoured to have the time and energies of one of New Zealand's great men. For someone who held position as Governor General and Bishop he shared his wisdom, professionalism and love for the land with our covenantors. In June the Minister hosted a farewell function in the Grand Hall at Parliament to acknowledge Sir Paul's wonderful contribution.

We look forward to another very satisfactory year with a significant increase in funding. This has been granted in recognition of the excellent work the Trust has quietly achieved on very modest budgets and also the enormous opportunity that exists on the 70 % of land in private ownership. The protection of natural features and the natural character of our land benefits all New Zealand.

Bill Garland. Margaret McKee.

Bill Garland, Deputy Chair — Margaret McKee, CEO
18th September 2003

Performance Report

1. New Covenants	ESTIMATED No.	ESTIMATED Hectares	ACTUAL No.	ACTUAL Hectares	2001/02 No.	2001/02 Hectares
Approved Open Space Covenants	120	3,500	211	4,865	128	3,209
Registered Open Space Covenants	100	2,500	120	8,237	101	1,817
Cost	**$1,334,221**		**$1,420,672**		**$1,307,517**	

2. Maintaining covenants	ESTIMATED	ACTUAL	2001/02
Monitoring registered covenants	775	786	760
Contribution to replacement fencing	3,000m	9,018m	4,284m
Cost	**$528,597**	**$559,749**	**$392,853**

The Trust visits each covenant every second year, or when ownerrship changes

3. Properties Maintenance of Trust Properties	Estimated	Actual	2001/02
Properties acquired	3	1	4
Annual property inspections completed	25	27	24
Management Plans reviewed	3	4	2
Cost	**$355,684**	**$319,458**	**$412,112**

Statement of Financial Performance for the Year Ended 30 June 2003

2002 Actual $		2003 Actual $	2003 Budget $
	Revenue		
1,673,778	Government Grant	1,851,555	1,851,554
28,800	Lottery Grants Board	6,000	-
244,780	Interest	259,693	190,000
59,021	Donations and Other Grants	130,331	82,000
224,048	Other Revenue	208,876	272,106
2,230,427	Total Revenue	2,456,455	2,395,660
	Expenditure		
553,956	Administration	546,843	542,819
548,078	Field Operations	659,442	624,500
469,182	Covenant Expenditure	610,832	582,658
67,699	Marketing and Communications	96,105	96,319
411,540	Property Operations	305,875	372,206
62,037	Depreciation	80,782	-
2,112,492	Total Expenditure	2,299,879	2,218,502
117,935	Net Surplus before Property Acquisitions/ Disposals	156,576	177,158
	Surplus/ (Deficit) on Property Acquisitions/ Disposals		
(833,692)	Loss on Sale of Property by Trust	(16,000)	-
111,000	Property Gifted to Trust	36,000	-
(604,757)	Net Surplus/ (Deficit)	176,576	177,158

Invasive Wild Ginger

There are two species of wild ginger, Kahili ginger (Hedychium gardnerianum) *and Yellow ginger* (Hedychium flavescens). *Both species can form dense colonies in New Zealand bush, smothering young native plants as well as preventing native seedling establishment, thus changing native forest function and structure.*

Description

The wild gingers are herbaceous perennial plants. This means their life-span extends for more than two years and they do not accumulate woody tissue. Wild ginger grows from large, branching rhizomes (tuberous roots). These rhizomes, up to 3.5 cm in diameter and 10 cm in length, produce vertical stems annually. Beds of living rhizomes can form a dense layer up to one metre thick.

The adult stems grow up to 2 m high and produce large, ovate alternate leaves (20 to 45 cm long and 10 to 15 cm wide). Yellow ginger leaves are slightly narrower than Kahili ginger leaves.

Kahili ginger flowers are lemon yellow with conspicuous red stamens. Flowering is between February and April, then red seeds are produced during the autumn and winter. Yellow ginger produces cream to light yellow flowers during late autumn/early winter. Yellow ginger flowers do not produce seed.

Wild ginger grows in most places including damp forests and forest margins, alongside streams, and in shrublands. Although the young plant is frost tender, it will grow readily beneath the forest canopy.

Invasion

Both wild gingers spread outwards along the ground by way of rhizomes, with new stems sprouting annually. New plants may develop from rhizome portions that have become detached from the parent plant. The major source of this spread is by the illegal dumping of wild ginger rhizomes on roadsides or in the bush. Kahili ginger is also spread by birds that eat and disperse the seed.

Yellow ginger.

Control Options

Kahili ginger flowers can be cut and dropped on the ground before the seeds are formed to prevent seeding. Digging is an effective method of removing small stands of wild ginger, providing all the roots are removed intact and disposed of safely at an authorised refuse transfer station.

Kahili ginger.

Alternatively, having chopped down the foliage, Vigilant® gel can be applied directly to the rhizomes.

Prune all the shoots horizontally at the rhizome and apply a 3 – 5 mm layer of Vigilant® across the cut surface of the rhizome immediately after cutting. If the plant has lots of rhizomes between the shoots (more than 4 rhizomes per shoot) then additionally:

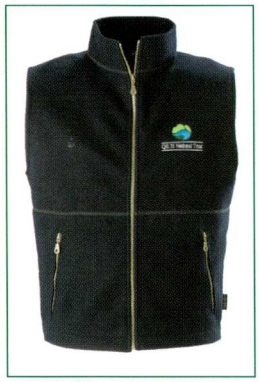
Drill a 10 mm hole into every fourth rhizome from a shoot to 80 % of the depth of the rhizome and fill this hole with Vigilant®.

Escort™ herbicide will also control wild ginger. Spray the leaves, stems and root system making sure that coverage is complete, or alternatively cut the plants down to their rhizomes before spraying. Wait until stalks and leaves brown-off before removing them. Follow the label rates and instructions carefully when applying herbicides.

This information was sourced from the Environment Bay of Plenty Plant Pest Control Fact Sheet Series.

FRAGMENTS

QE II Swanndri® Vest



If you would like to purchase a Swanndri®, merino wool vest, embroidered with the QE II logo please complete the form below and post with payment to QE II National Trust, PO Box 3341 Wellington or Fax to 04 472 5578 or Phone 04 472 6626

Price: $165 including GST and postage (Navy only)

Sizes available:	S	M	L	XL	2XL	3XL
Chest (cm)	94	99	104	114	124	134
Waist (cm)	80	85	90	100	110	120

Name.....

Address (for courier delivery).....

.....

Telephone.....

Size(s)..... Quantity:.....

Method of payment – ❑ Cheque ❑ Mastercard ❑ Visa

Total $..... ❑ Please send a receipt

Credit card details – Number

Cardholder name..... Expiry date.....

Signature.....

Ballance Farm Environment Awards

For info on the Balance Farm Environment Awards visit **www.ballance.co.nz/fea.html** or phone 04 385 4488

Election Notice.

The QE II National Trust is managed by a Board of Directors. Trust members elect two directors and the other four are appointed by the government to represent rural, Maori and conservation interests.

Preliminary notice is given that the members of the Trust have the opportunity to vote for two directors for a three year term effective 1 April 2004. Nominations will be called for in December, voting papers distributed in February, with voting closing in March. Financial members intending to vote must ensure subscriptions are paid by 31 December 2003.

The two current directors elected by the members are Mr Bill Garland, a farmer from Cambridge, and Mr Geoff Walls, an ecologist from Christchurch. Both are eligible for re-election.

Useful reference websites:

www.bush.org.nz – for information about ecological restoration

http://nzflora.landcareresearch.co.nz – for information on native plants

www.biodiversity.govt.nz/land/nzbs/land/condition.html – for funding information

www.maf.govt.nz/mafnet/rural-nz/people-and-their-issues/access – access information

http://www.wwf.org.nz/conservation/habitat_protection_fund.cfm – for further info about funding opportunities

Weedbusters

Weeds are one of the greatest threats to the environment, but each of us can make a difference. Weedbusters, an interagency programme aimed at involving all New Zealanders in preventing the spread of weeds, was launched by Conservation Minister Chris Carter in Wellington in mid October.

For more information about invasive weeds or pest plants near you, contact DoC or your Regional Council. To register your interest email weedbusters@doc.govt.nz

Congratulations Marie

Hawke's Bay based QE II Rep Marie Taylor has won the prestigious Bank of New Zealand Farm Business Writing Award for 2003. Her winning story was on foreign exchange hedging in the beef industry and written for the Meat Producer magazine.

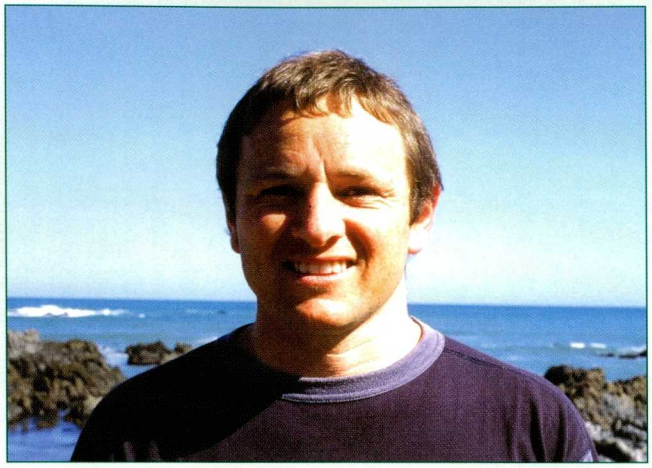
Judge Geoff Burton says her story was "a complex but topical business subject which was clearly explained and presented in an interesting and attractive manner".

Photo Country-Wide

TRUST PEOPLE

Coromandel/Hauraki

Hamish Kendal is the new QE II representative for the Coromandel/Hauraki Region. This area was formerly covered by Gerry Kessels who is now focussing on Waikato and the King Country.



Hamish Kendal.

Hamish has worked privately as a contract ecologist since completing his post-graduate Diploma in Parks, Recreation and Tourism at Lincoln University in 1996 (he also has a degree in physical education from Otago University). He has a diversity of experience with threatened species monitoring and pest management and has undertaken ecological work in the Waikato and Bay of Plenty regions.

Hamish was born and raised in Hamilton, a city that has now expanded northwards over what was his grandparents' farmland around the Flagstaff area. He and his wife live beside the Whangapoua Harbour on the Coromandel Peninsula, and have a new baby daughter Pipi.

Northwest Auckland

Rodney Straka.

Rodney Straka joins QE II as the Regional Rep for Northwest Auckland - Waitakere, North Shore and (ironically) Rodney Districts. He is a descendant of some of the early settlers in this part of the country. Rodney has been working in the ecological restoration and reserve management field following his graduation from Lincoln University where he studied Resource Studies. Rodney has been restoring a number of forest and wetland remnants on his family's farm at Tahekeroa, near Orewa. He is increasingly taking over the management of the family's sheep and beef farm with his brother and sister.

Farewell

Ruth James retired in October after fifteen and a half years as Accounts Officer for the Trust. Ruth was widely respected for her dedication and loyalty. She acquired a range of endearing 'nick names' and we shall all miss our 'Miss Marple"! Ruth is looking forward to spending more time with her family and we wish her every happiness in her well-earned retirement.

Covenantors Win Smallfarmer of the Year

Covenantors **Robert & Dawn Hirschberg's** small-holding farm won them Smallfarming New Zealand's Small Farmer of the Year Award. Located above the Otaki River Valley midway between the foothills of the Tararua Ranges and the Kapiti coastline, their 6.5 hectare farm includes a 1.8 hectare open space covenant protecting a semi-coastal/lowland secondary hardwood forest remnant.

Since owning the property in 1997, the Hirshbergs have undertaken much weed and pest control work on their farm, and have culled over 150 magpies in 2 years. Having previously been farmed for goats, a number of goats were eradicated from the steep forest remnant. This, along with fencing out the stock, allowed for the rapid regeneration of the understorey. Robert and Dawn farm beef and sheep, and utilise the wind power and small stream on their property to produce their own electric power. They have also established a native forest plantation to provide future generations with high quality native timber.

Visiting Covenants

For those of you who like to visit other covenants and covenantors, an online register to allow easy access to this information is being compiled.

Categories will include:
- Arboretum
- Ecotourism
- Accommodation
- Other.

If you would like to have your covenant included, please send an email to smcelrea@qe2.org.nz with a contact name, contact number, location, covenant size and a brief description (50 words max) of the covenant/facility/service offered.

Please send multiple descriptions if more than one category applies.

Below is a list of arboreta protected by open space covenants which may be visited. For further details, or to arrange a time to visit, please contact the covenantor. Please note that Hackfalls Arboretum and Eastwoodhill Arboretum charge a small entrance fee. This information is correct at the time of publication.

Panikau Aboretum	Whangara	Michael Murphy	06 862 2683	Initially the aim of the planting was to stop erosion – this has become a highly valued 18 ha lowland arboretum, located 50 km north of Gisborne. Many species of oak, maple, fir, alder, chestnut, birch and pine have been planted, to name a few.
Eastwoodhill Arboretum	Ngatapa		06 863 9003	One of New Zealand's hidden treasures. With 3,000 taxa, on 70 ha near Gisborne, this arboretum is New Zealand's largest international tree collection. W. Douglas Cook started farming Eastwoodhill in 1910. During World War 1 he served in both Gallipoli and France and was injured, losing the sight of an eye. Whilst he was recovering in Scotland he saw 300 year-old gardens. These gardens inspired him to see what he could create at Eastwoodhill. www.eastwoodhill.org.nz
Hackfalls Arboretum	Tiniroto		06 863 7091	Visit Hackfalls, near Gisborne, and see a wide range of trees and shrubs in a 50 ha hill setting enhanced by natural lakes. Fantastic spring flowers and autumnal colours. Many different alders, cherries, birches, magnolias, maples, oaks, rhododendrons. Outstanding is a large collection of evergreen and semi-evergreen Mexican oak species. Hackfalls holds what is probably the largest collection of Mexican and other oaks in the Southern Hemisphere. Of the 200 species, hybrids and cultivars of oaks in the Arboretum, 70 are Mexican and this is about half of the total oaks in Mexico. www.hackfalls.com
Hollard Gardens	New Plymouth	Taranaki Regional Council	06 765 7127	The 3.8 ha central Taranaki garden is the work and vision of dairy farmer/horticulturist, Bernie Hollard, who began intensively gardening part of his farm close to Mount Taranaki/Egmont in 1927, and built up a unique and significant heritage plant collection. Hollard Gardens today is a living, heritage showcase and comprehensive national resource for plants and garden education, and for recreation. While much respected by gardening enthusiasts it remains largely a hidden treasure.
Ian McKean Pinetum	Rangiwahia	Don Tantrum	06 388 0635	Over 300 of the world's 500 conifer species are represented in this 12 ha arboretum located southeast of Taihape.
Sargent's Arboretum	Upper Hutt	Tony Sargent	04 526 6611	Established only 5-6 years ago, 180 species are represented in this 16 ha arboretum. Planted species include beech, rimu, blackwood, eucalyptus and oak. A network of walking tracks, with a bridge and a good swimming hole are additional features.
Deepdale Arboretum	near Fairlie	Peter Anderson	03 685 5755	Located 40 km west of Timaru, this 5 ha lowland arboretum was established in 1970. Deepdale is home to a mix of 170 species of pine, larch, fir, cedar, spruce and yew.
Jolendale Park	Alexandra	Enny & Jolyon Manning	03 448 9399	Developed over the past 43 years, this 5 ha semi-arid woodland on Alexandra's Bridge Hill is of international significance with its collection of semi-arid habitat tree species from all parts of the world.

Steps in Progressing a QE II Open Space Covenant

Enquiry. Landowners interested in protecting special natural features on their property should contact the Trust and arrange for a QE II representative to visit.

Evaluation. Potential covenants are evaluated on a wide range of criteria including; the sites ecological importance, biodiversity values, naturalness, sustainability, linkages to other protected areas creating ecological corridors, wildlife, special features, cultural and heritage values, landscape values, management needs, threats, landowner motivation and sources of funding available.

Approval. The QE II Board of Directors formally considers individual assessment reports for all proposed covenants. Following approval, covenant documents are prepared and forwarded to landowner to sign.

Fencing. If required, this usually begins after the documents have been signed.

Survey. On completion of satisfactory fencing (where required), a covenant plan is prepared. LINZ may require a survey plan or aerial photodiagram. Once the plan is finalised and signed by the landowner, formal registration commences.

Registration. Covenants are registered on the title of the land with Land Information New Zealand. The Trust lodges the covenant document for registration with LINZ, when the legal description of the land and the area to be covenanted are complete and consent from all parties registered on the certificate of title have been obtained.

Establishing covenants in perpetuity can attract funding assistance from QE II and/or local government towards fencing and survey costs. Covenanted land can attract rates remission under the Local Government (Rating Powers) Act 2002.

The QE II National Trust is an independent statutory organisation established to protect natural features on private land for the benefit of New Zealand. QE II helps landowners to protect features including landscapes, streams, wetlands, coastlines, forests, lakes, tussock grasslands, geological features and cultural and archaeological sites.

QE II is always in need of greater financial and moral support for its work, you can help by joining as a member.

In return for your membership you will receive the following benefits:

- A year's subscription to our magazine Open Space – three issues a year.
- Free entrance to properties owned or administered by the following organisations: The National Trust (UK), National Trust for Scotland, National Trust of Australia (all states), Barbados National Trust, Bermuda National Trust, National Trust for Fiji, Georgia Trust for Historic Preservation, Gibraltar Heritage Trust, Japan National Trust, National Trust for Zimbabwe.
- Entitlement to nominate and vote two members onto the QE II National Trust Board of Directors.

Please fill out this membership application form and send it to:
QE II National Trust, PO Box 3341, Wellington or Free-phone 0508 732 878.

Name.....

Address.....

.....

Telephone..... Email.....

Membership Type – tick appropriate category

❑ Individual $30 ❑ Corporate – business (on application)
❑ Family $45 ❑ Corporate – non profit organisation $50
❑ Life $550

Donation – optional (tick box): Donations over $5.00 are tax deductible

❑ $100 ❑ $50 ❑ $20 ❑ Other $.....

Method of payment – ❑ Cheque ❑ Mastercard ❑ Visa

Credit card details – Number

Cardholder name..... Expiry date.....

Signature.....

Total $..... ❑ Please send a receipt

Please send me information on:

❑ Making a bequest to the Trust ❑ Open Space Covenants

Gift Membership

Gift to: name & address.....

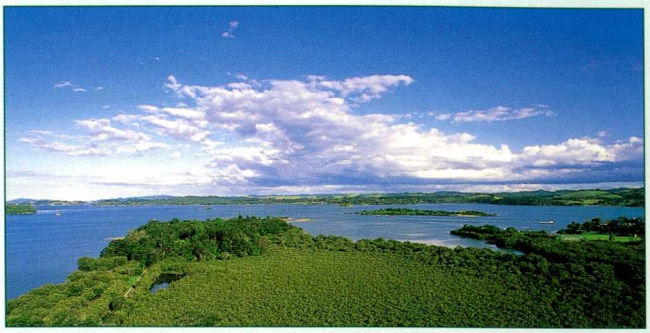
.....

Send next year's renewal to me ❑ to the recipient ❑

A place to visit:
Aroha Island seven years on.....

"There is nothing quite like kayaking into the bays either side of Aroha at dusk to hear the close of the day and opening of the night sounds, or to picnic on a vantage-point, watching and listening to nature's sounds and cycles: cicadas, crickets and kiwi; plover, heron and oystercatchers flying on moonlit nights; ruru calling to each other across the bay, often imitating their mates the kiwi, or singing just for the pleasure of it".

– Greg and Gay Blunden, Managers



Aroha Island – a haven in the Kerikeri Inlet.

Margaret and Colin Little covenanted their Aroha Island property in 1984 and then with much generosity and vision transferred ownership to QE II National Trust in 1991. Nestled in the Kerikeri Inlet in the Bay of Islands, Aroha Island comprises of 12 hectares of regenerating coastal hardwood forest and estuarine mangrove forest.

At Aroha, people can see first hand the diverse range of ways that we can each help to protect New Zealand's native flora and fauna. It is one of the few places in New Zealand where you are almost guaranteed to hear or even see a kiwi in the wild.

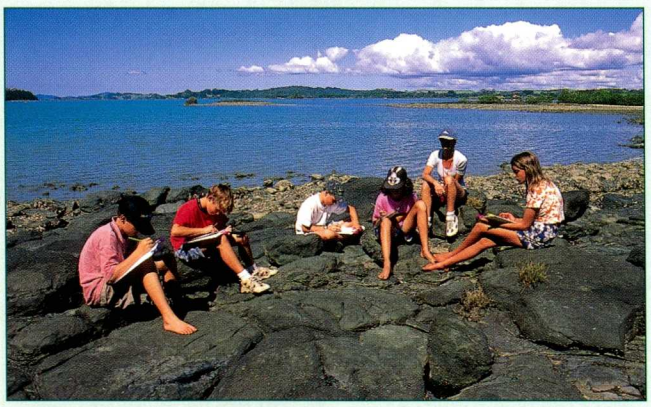
Launching kayaks and dinghies from the beach at Aroha.

The Information Centre at Aroha provides a wealth of information on kiwi protection and management, advice on trapping pests, which trees to plant to attract native birds, and how to manage your bush or wetland block. If you arrive at dusk, banded rail are likely to nip across the causeway in front of you, tui will be issuing their last raucous calls of the day, a strident male or a growling female kiwi may be calling, and you will feel the tranquility of the island.

Seven years after the Ecological Centre was opened to the public, the values of Aroha Island have been significantly enhanced. Some 1,500 plants have been planted annually, walking tracks have been upgraded and weed pest species including moth plant, peach, privet, wattle, and ivy have been mostly eradicated. The birds are thriving due to the comprehensive pest management undertaken at Aroha.

The addition of an observation deck in the mangroves this year provides a wonderful vantage point from which to view marine life and the mangrove ecosystem.

With kayaks and dinghies for hire, barbecue and camping facilities, and a cottage for hire, Aroha Island Ecological Centre is a fantastic place to visit and is a great base for a holiday in the Bay of Islands and also for the Far North.



School children undertaking seashore studies on a summer's day.

Location:

Aroha Island is linked to the mainland by a causeway off Rangitane Road, 12 km north-east of Kerikeri.

When:

Open Tuesday – Sunday 9.30 am to 5.30 pm. Closed Mondays except Public Holidays (including Christmas – New Year holiday period) and to casual visitors from after Queens Birthday to 1st September.

How to get there:

Drive through Kerikeri, past the Stone Store and follow the road signs to Opito Bay and Aroha Island. Turn right towards Rangitane and Aroha is 100 metres on the left.

Accessibility:

Drive to the Information Centre, wheelchair access.

For more information:

Phone 09 407 5243
Fax 09 407 5246
Email kiwi@aroha.net.nz
or visit our website at www.aroha.net.nz