



Queen Elizabeth II

Open Space

National Trust

No 50, December 2000

Nga Kairauhi Papa



The dramatic Kapiti escarpment, with State Highway 1 and the main trunk railway line skirting its base.

Unique agreement helps protect Kapiti escarpment

A unique agreement has been entered into between Tranz Rail Limited and the National Trust which is aimed at assisting in the protection of the Pukerua Bay to Paekakariki escarpment on the Kapiti Coast north from Wellington.

The escarpment, extending over a distance of four kilometres to the east of State Highway 1 and the main North Island railway line, has high landscape value, and the remnants of coastal forest growing on the hillsides are of considerable ecological importance.

Because of the underlying status of the land (being land without any certificate of title, held by the New Zealand Railways Corporation but leased to Tranz Rail), it was not possible to have a registered open space covenant over the land. Tranz Rail has therefore issued the National

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Photo courtesy of the Department of Conservation.



MERRY CHRISTMAS!!

Directors and staff of the National Trust wish all covenantors and Trust supporters a very Merry Christmas and prosperous New Year!!

We thank you for your support over the past year and are looking forward to working with you in 2001.

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Trust with a licence to occupy the land. The specific purpose of the occupation licence is to enable beautification and environmental protection activities to be undertaken.

There is approximately 85.5 hectares of land involved, which is currently dominated by rank pasture grasses, shrublands and forest remnants of varying size and quality. Kohekohe, mahoe, karaka, *Hebe parviflora*, nikau, wharangi, titoki and porokaiwhiri dominate the forest remnants. Apart from karaka, these plants generally occur naturally in the area. Karaka may have been introduced by Polynesians well before European settlement. Frequent gales along the coast have limited natural regeneration and have produced large areas of wind-shorn forests and shrublands.

In entering into the occupation licence with Tranz Rail, the Trust

foresaw major challenges in achieving the protection objectives for the escarpment. These require restoration and enhancement of the indigenous flora and fauna on the land, thus making it possible to ensure the aesthetic value of this highly visible feature are safeguarded.

The Trust has been fortunate indeed that an independent charitable group, known as the Nga Uruora-Kapiti Project Inc, led by Fergus Wheeler, has committed itself to day-to-day involvement and responsibility for on-site works.

Positive human interventions are being undertaken on site. These include fencing, animal pest control, and the implementation of a prioritised weed eradication, management and revegetation strategy. Key elements of that strategy include:-

- Immediate control of identified small populations of pest plants

- Identification of and control of introduced exotic and non-local New Zealand native plants
- Establishment of 'seed source' plantings throughout the escarpment - to enable hardy species to spread naturally.
- Biodegradable weed mat to be used, where possible, to smother weeds on lower slopes
- Co-ordinating weed control and revegetation activity with pest animal control programme.

This is a long term and very exciting project. The National Trust is indebted for the positive enthusiasm that has been demonstrated by Tranz Rail and the members of Nga Uruora-Kapiti Project Inc towards the project. Assistance has also been received from the Environment Heritage Fund of the Lottery Grants Board and the Wellington Regional Council.

By John Bishop

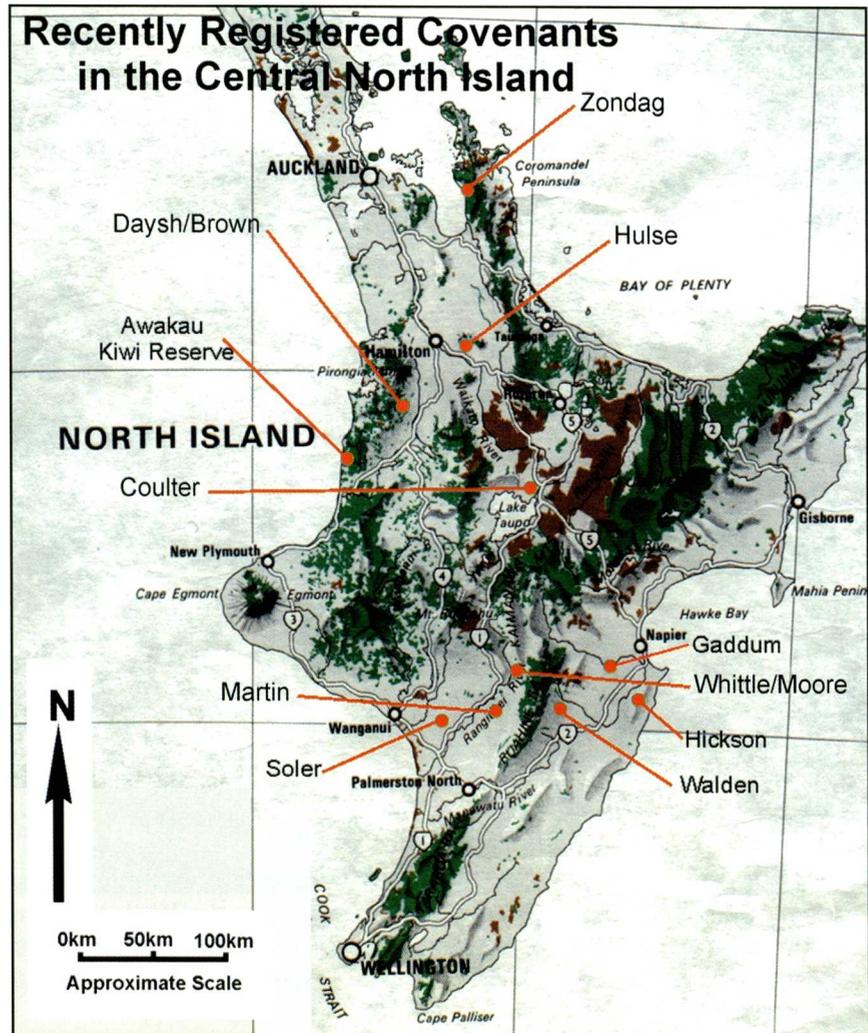
Focus on the Central North Island

With articles featuring covenants and covenantors in the Coromandel, Waikato, Hawke's Bay, Rangitikei and Taupo regions.

Gerry Kessels, the National Trust's Regional Representative for the Waikato, is delighted with the quality of the covenants that have been registered in his territory over the past year. For example, the Daysh-Brown covenant registered in June, protecting over 100ha of bush and limestone caves. Several more exciting covenants are being negotiated with landowners at present.

Gerry acknowledges the financial assistance given to the National Trust during the year by Environment Waikato, Waipa District Council and Waikato District Council. This generous support has allowed landowners and the Trust to fence several Waikato covenants. Environment Waikato's excellent "Key Ecological Site for Animal and Plant Control" programme has also focused much needed possum control on many covenants.

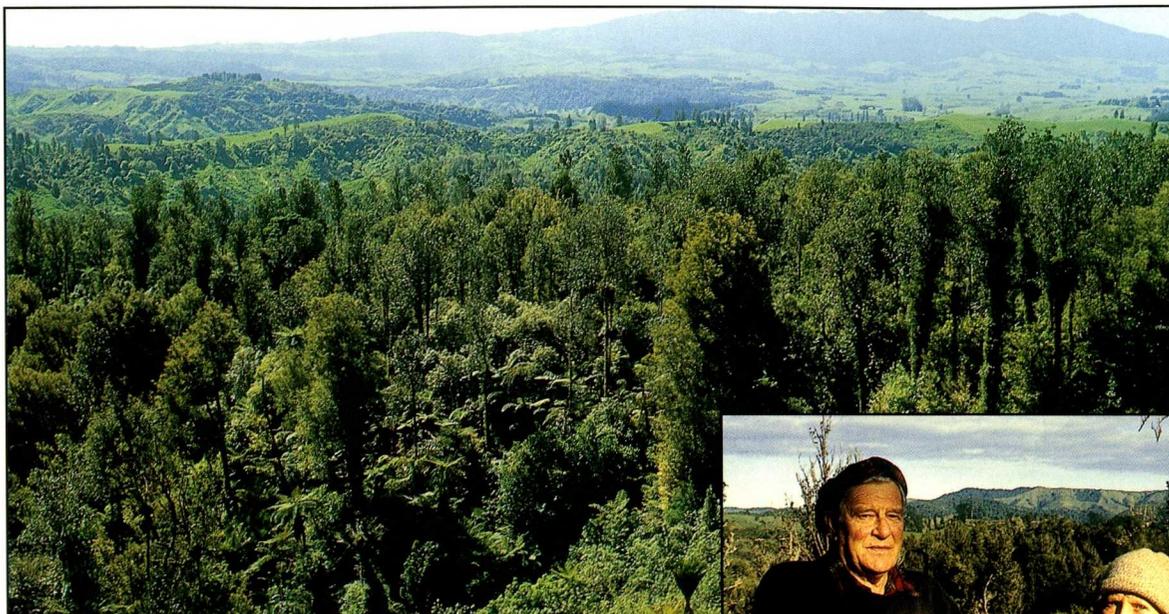
Based near Hamilton, Gerry is now the Regional Rep. for the whole Waikato and King Country region, including districts previously covered by retired reps Tim Oliver and Ross Bishop.



Awakau Kiwi Reserve

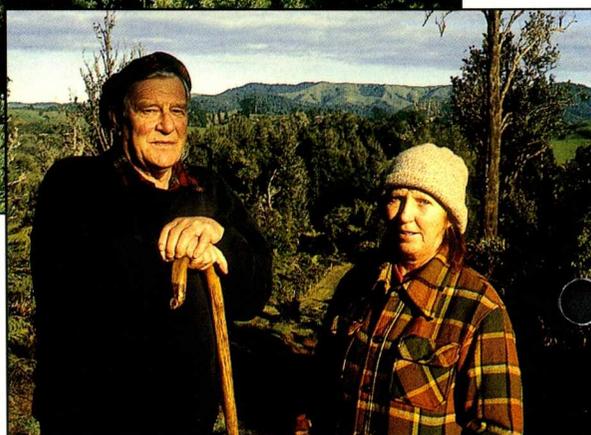
Just east of Awakino Gorge, the 91-hectare Awakau Kiwi Reserve, owned by the NZ Native Forest Restoration Trust, is now protected by a whole title covenant.

The indigenous lowland podocarp/broadleaved forest that covers the property links with forest on the adjoining Aorangi and Mokau Scenic Reserves and several other reserves close by to form sufficient habitat for a sustainable kiwi population. The combined area holds the largest known North Island brown kiwi population in the northern King Country. The stream through Awakau Kiwi Reserve is also a significant habitat for native fish.



Block A, looking northwest from house.

Fulfilling Wilma's Dream



Wilma Daysh with former National Trust Director Arthur Cowan.

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When Wilma Daysh bought 210 ha of marginal farmland and bush near Otorohanga in 1992, she had a dream. Her dream was to protect and restore a piece of native forest near where her family had farmed at the turn of the century. As a registered nurse and keen forest and birder who had worked in many parts of the third world, Wilma understood how important preserving remnant rain forest was to the health of present and future generations.

The National Trust helped her realise her dream and now 116 ha of the 210 ha farm is protected as open space covenant. The covenant was also made possible by generous donations from the Waikato Branch of the Royal Forest and Bird Protection Society, Greenscene, and Tony and Maxine Fraser.

The bush itself has been logged on the easier upper slopes, but large tracts of primary unlogged rimu, matai and tawa forest remain in the steep gully floors and river flats. Many interesting plants have been recorded in the main stand, including king fern (*Marattia salicina*), *Rhabdothamnus solandri*, a large hangehange with gnarled hollowed

truck over 0.5m in diameter, *Dracophyllum latifolium* and surprising clusters of *Tmesipteris* spp. The covenant is likely to shed many more botanical and zoological secrets as people explore the steep gullies.

The covenant is only a few kilometres from the Waitomo area (as the blue-wattled crow flies), so karst geology with exposed limestone ridges and outcrops (including fossils) is a landscape feature. In particular, two major cave systems provide safe and interesting caving for local and overseas visitors alike. However, as I realised first hand while inspecting the southern boundary fence line with a local fencing contractor, there are many more unmapped caves and tomos waiting to be discovered. As we walked along a narrow bush clad ridge, I commented to the fencer that there was a cool breeze blowing up from under my left shoulder, so we scabbled down the ridge to have a look. When we peered through the gloom, a huge (50-metre diameter) tomo emerged beneath us. We made a rapid retreat back to the safety of the top of the ridge.

As a result of this inspection it

was apparent that the back boundary fence required major repairs. Consequently, an application to Environment Waikato's Environment Initiatives Fund has yielded a very generous contribution of over \$11,000 towards the \$18,000 repair bill. With the willing help of the neighbours and a very brave fencer, it is hoped to have this boundary secure by the end of this summer.

Wilma and her partner, Peter Brown, have spent the last few years continually shooting goats and trapping possums and magpies: over 100 goats have been killed every year since 1992.

Earlier this year, soon after Wilma and Peter married and the covenant was registered, Wilma passed away. Peter is still carrying out the much-needed animal pest control and fencing work required to maintain a block like this.

Wilma loved the *Olearia* that is prevalent on the property. Her family intend to scatter her ashes amongst these pretty white flowers. She will always be there in the forest to ensure that we continue to fulfil her dream.

By Gerry Kessels

Kahikatea remnants break grassland monotony

by Gerry Kessels

When Captain Cook's ship, Endeavour, drifted up the Waihou River, on the Matamata Piako plain, Joseph Banks commented that: "... the finest timber my eyes ever beheld of a tree.....every tree as straight as a pine and of immense size; still higher we came the more numerous they were."

When Banks wrote these words, in 1769, kahikatea swamp forest stretched over most of the Waikato and King Country lowlands and obviously formed an inspiring landscape. Within 200 years, however, the cruel realities of "progress" reduced this kahikatea forest to less than one percent of its original extent within the Waikato Ecological Region. The desire for fertile flat farmland and non-tainting timber for butter boxes meant that lowland kahikatea forest soon became the most ravaged native forest type in the North Island.

Today, the small stands of kahikatea that remain are distinctive landscape features which break the monotony of seemingly endless fields of grass. Open space covenants are critical in preserving what is left of kahikatea forest on private land. For example, in the Hamilton Ecological District, only 0.1 percent of kahikatea forest remains today. Of this estimated 244 ha, 14 ha is protected by reserves (DoC & Councils) and 29 ha protected by open space covenants.

However, protection is not enough. Many of these stands are not sustainable without human

assistance. The reason being that land drainage has eliminated the natural, regular, seasonal flooding; and flooding with silt-laden water is considered essential for long-term successful regeneration of kahikatea seedlings. Furthermore, the remnants' small size results in "edge effects" drying up the forest floor, making regeneration even more difficult. Add to that the persistence

of forest-smothering weeds such as *Tradescantia fluminensis* (wandering Willy), and you'll appreciate the challenge that conserving these forest remnants presents.

Given this, Phil Bradfield and Rose Watson show courage to take on the restoration of their recently

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Above: Left hand feeder spring catchment of the Bradfield/Watson covenant area.

Below: View of the Bradfield/Watson kahikatea remnants and rush/sedge land from Tikikaru Road.



Determined efforts at Te Kowhai yield success.

At Te Kowhai, northwest of Hamilton, two long-time covenantors have shown that determined and vigilant efforts can restore kahikatea remnants to health.

John and Margaret Hodge, of Bedford Road, have transformed their forest block since they covenanted it sixteen years ago. In 1984, the forest floor cover and subcanopy had been totally removed by years of grazing. With plenty of hard work and a bit of

re-planting, it is now difficult to make your way through the dense vigorous undergrowth of native shrubs and trees.

Where owners do not have the time or resources to undertake restoration on their own, schools and local environmental groups can play an important role, as is the case with the Hartles covenant. Peter and Denise Hartles own a lovely 1ha kahikatea stand off Whatawhata-Horotiu Road. The block was covenanted by Duncan Crawford

eleven years ago, immediately prior to its sale to the Hartles. A few years after the block was fenced, Peter and Denise realised that rampant *Muehlenbeckia australis* and other weeds were threatening to smother regenerating shrubs and trees. The National Trust sought help from the local Forest and Bird Society, and the forest is currently being restored thanks to the efforts of willing volunteers from the Society and the local school.

By Gerry Kessels



Margaret Hodge and furry companion check out 15 years of regrowth in their forest block.

Kahikatea remnants break monotony continued...

registered three-hectare kahikatea stand and wetland on their property in the upper reaches of the Mokau River – southwest of Te Kuiti. However, Phil is no stranger to ecological restoration challenges, having been the Department of Conservation's Project Manager for New Zealand's first, and arguably most successful, mainland island project at Mapara. Nature is already

assisting Phil and Rose though. After less than one year, seedlings are popping up everywhere. Phil and Rose intend to alter the existing channelised stream so that it will flood the bush more often. In the next few months, a digger will be used to make shallow scallops and waterways in order to recreate an open-water/herbfield mineralised wetland on the remaining covenant area, which is presently in pasture.

Phil commented that Ross

Bishop, the then Regional Representative who co-ordinated the covenant, with his impressive botanical knowledge and practical advice about the bush and wetland, inspired Phil to extend the wetland enhancement project even further upstream. Phil and Rose leave one in no doubt that they will succeed in their endeavours and set an example of balanced land use practices for other landowners in the neighbourhood to follow.

DYNAMIC DUTCH DUO DOWN-UNDER

by Tim Oliver

Ten years ago in Holland, Berry and Marjolein Zondag were caught up in the pressures of business management and law. Now they are living on the other side of the world protecting native forest and water quality, whilst designing, building and landscaping houses on their own property.

Marjolein and Berry are the proud owners of Tapu Creek Farm, which lies three kilometres up the Tapu Valley on the Thames-Coromandel coast. As part of a subdivision of their land, the couple have placed a National Trust covenant over 93 hectares of the steep, well regenerated valley side to the north of the pretty Tapu River, with its sparkling clean water in a shingle and rock bed.

The owners have always made a high priority of keeping the forest intact, so the developed area of the property is restricted to the small campervan park and a scattered village-like settlement on the valley floor and foothills. The development has been co-ordinated with an overall



The tributary streams make an ideal habitat for a wide diversity of native trees, ferns and localised beds of Pterostylis and Corybas ground orchids.

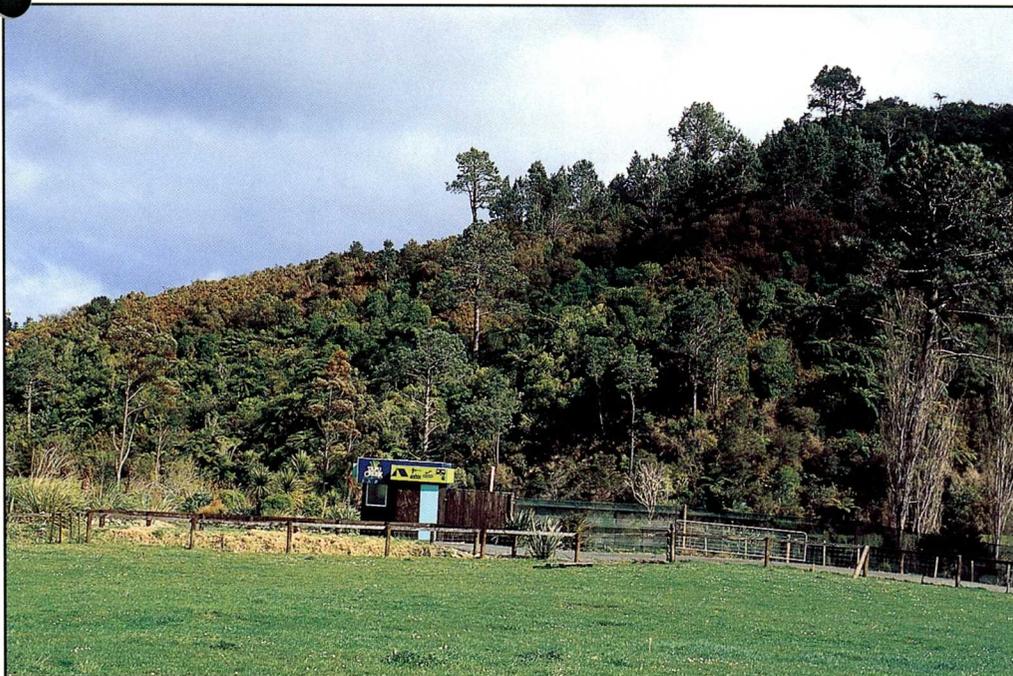
landscape plan, in which re-establishing native vegetation along the river, and in several wetland areas, is paramount. A small nursery has been set up where seedlings from the bush and other sources are grown.

Within the covenant area, manuka and kanuka dominate most of the regenerating open slopes and ridges. In the steeper gullies, though, the attractive tributary streams with their rocky chutes and small waterfalls make an ideal habitat for a wide diversity of native trees, ferns and localised beds of *Pterostylis* and *Corybas* ground orchids. A higher valley in the north west area has a grove of kauri, one with a diameter of 1.5 metres.

Nikau, pigeonwood, mahoe, rangiora, matipo and mamangi are widespread, and tawa, tanekaha, rimu and kahikatea are regenerating well. Marjolein and Berry are hoping that taraire and pohutukawa will appear soon.

There are occasional wilding pines on the land but Berry is dealing to those with his chainsaw. However, the main covenant management issue for Marjolein and Berry is control of goats and possums. Landowners in the valley are trying to co-ordinate a pest control group, so there is hope that pest numbers will reduce and be maintained at a low level.

Although they are not legally protected, the properties to the east and west have also regenerated so there is now a continuous wildlife habitat from the coast to the 1400 hectare unprotected Tapu forest and the Coromandel Forest Park. The smaller Church Hill covenant is almost directly opposite on the south side of the valley.



The forest forms an attractive backdrop to the Tapu Creek Farm holiday park.

Climbing Rata blooms in Whitehall Valley

Peter Hulse has protected nearly 24 hectares (in seven blocks) of tawa-dominant forest on his park-like property in Whitehall Valley, east of Cambridge. The attractive covenant areas, which are visible from French Pass Road, were preserved from complete destruction by Peter's grandfather. Although most large podocarps were taken out at the turn of the 20th century, there are still some rimu and kahikatea in the canopy. During a visit last October, then Regional Representative Tim Oliver noted with interest the presence of climbing rata (*Metrosideros carminea* - in flower) and 50-year-old silver beech (*Nothofagus menziesii*).

Peter's son, Ewen, now runs the property, and his good conservation ethic means the forest is in secure hands.



Peter, Stephanie & Ewen Hulse and their forest.

Oruanui Wetland Restored through Co-operation and Energy



Healthy swathe of flax at Oruanui Wetland.

Lying in a narrow part of the Te Rau-tehūia Stream valley, near Wairakei Village, the Oruanui Wetland performs many roles: habitat for birdlife, filter for run-off from surrounding farmland, buffer for major fluctuations in the local water table, and an attractive

component of the rural scenery.

The boundary between the Coulter family farm and that of their neighbour, Michael Bedford, ran through the middle of Oruanui Wetland. With the support and enthusiasm of the Taupo Branch of the Royal Forest & Bird Protection

Society, both parties agreed to protect the wetland with the National Trust. Rather than placing two separate covenants over the wetland, the landowners rearranged their title boundaries slightly and the whole wetland was placed under the ownership of the Coulter Family Trust and protected with one open space covenant.

Thanks to a generous grant from Environment Waikato, the wetland was fenced, and now enhancement work is underway. Tim Coulter, who runs the farm, wasted no time before tackling the willows, pines and broom: the willows were injected with weed killer, and the broom and pines were cut down. His next project was to revegetate open areas with some 4000 native plants – no mean feat – including cabbage trees, kowhai, *Coprosma* and *Pittosporum* species. The next priority is control of the pests – rats, mustelids (stoats, ferrets), feral cats, or a combination of all of them – which are a major threat to the bird population.

Solerdarity : A Family's Great Love of Trees

The Manawatu/Rangitikei is the territory of Regional Representative **Bruce Kirk**. As well as progressing several new covenants to registration, a high spot of Bruce's year was the official opening of the McKean Pinetum.

"Ernscliff" is owned and run by the Soler family.



ROTATE TO ELIMINATE. with FERAL CONTROL



Anyone travelling from Marton to Hunterville via the Mt Curl area could not fail to notice, amongst the increasingly broken hill country, some fine stands of native bush on the properties to the west of the road. One such property, "Ernscliff" is owned and run by the Soler family.

At the suggestion of one of the Solers' sons, Philip, the prospect of placing an open space covenant on one of their forest remnants was put to the family members who subsequently agreed the idea had considerable merit.

As you move around the Soler property you realise that trees have been a great love of previous generations, for the farm itself has some very fine exotic plantings. To the landowner's great credit stands of native forest still remain on steep faces.

This particular covenant boasts many fine examples of rimu, totara, tawa, rewarewa, rata, kahikatea, pukatea, kaikomako, matai, and black maire. Probably the greatest feature of this covenant is that it is highly representative of forests in the district. Birdlife is particularly strong, with abundant native pigeon, tui, bellbird and fantail.

By Bruce Kirk

Riparian Covenant Protects Attractive Fishing Spot



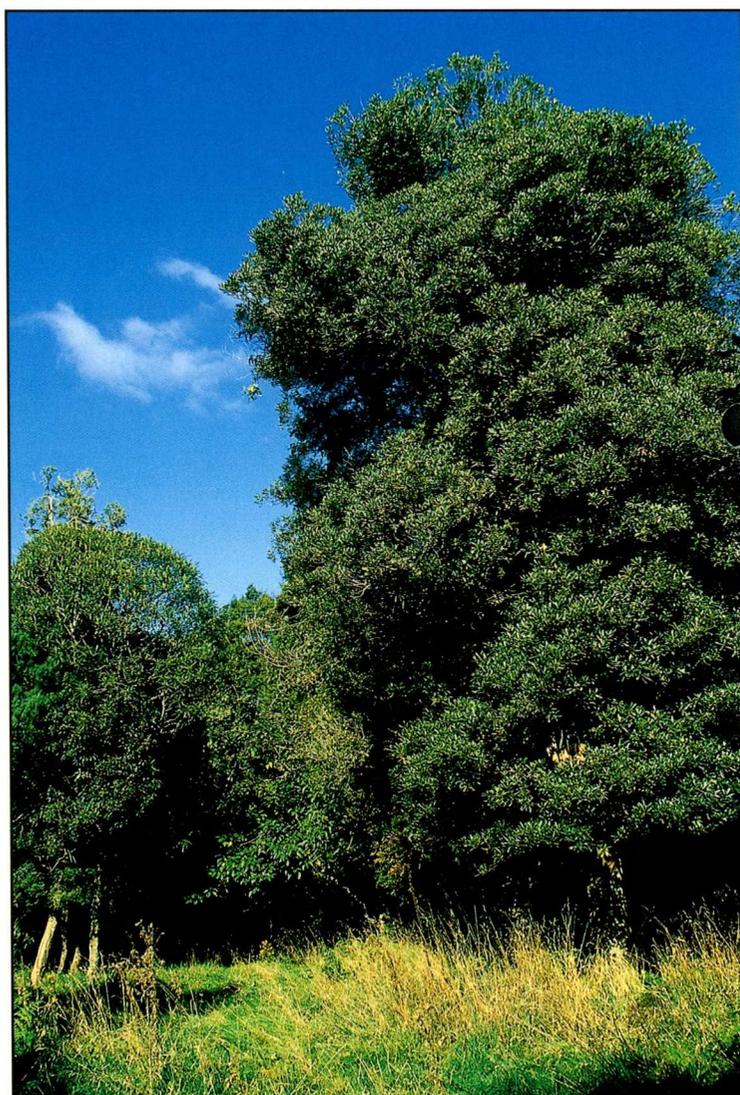
The protected Moawhango riverbanks.

The deeply incised Moawhango River flows south from the Kaimanawa Mountains to join the Rangitikei River near Taihape. The Moawhango is well known to anglers as a prime trout fishing spot, with the varied native vegetation lining the banks making an attractive setting. However, none of the flax-clad cliffs and forested steep-sided slopes of the riverbanks were legally protected: that is, until local farmers Edward and Margaret Whittle took action and initiated a National Trust covenant on their portion (over 8 ha) of the riverbank. They recognised the value of the riparian forest to the landscape, wildlife and soil conservation values of the district. The covenant was registered this year.

Conspicuous Covenants

Bruce and Lisa Martin's immaculate dairy farm at Apiti is a fine compliment to the energy and commitment of these young farmers. They have now ensured that two blocks of indigenous forest on their land are permanently protected by open space covenant. The larger covenant area (3.7 ha) is on land the couple acquired from their neighbour John Bielski. Mr Bielski had expressed the desire that this piece of forest be protected. It is a discrete forest stand, just north of Conspicuous Road, with hinau, miro, rimu and a few tawa forming the canopy. The other block (of 5000m²) is adjacent to the existing Hopkins (originally Stewart) covenant area on the northern terraces of the Oroua River, and includes miro, tawa, hinau and cabbage trees, with some beech forest at the edge.

Right: Good-sized trees within Conspicuous Road covenant area.



The National Trust protects biodiversity on private land.

THE MCKEAN PINETUM

An Account of the Official Opening on 31 March 2000

What started as an overcast drizzly day with many brightly coloured umbrellas under the pine trees, turned into a brighter warm day as the proceedings progressed. Nearly 150 people, including family, friends, covenantors and members of the International Dendrological Society and Farm Forestry Association, turned out despite the predicted inclement weather conditions to commemorate the life work, or 'mad hobby', of the late Ian McKean.

This "life work" is the 12ha Ian McKean Pinetum, which is located 6km northwest of Rangiwahia,

believed to be the longest lived organisms on earth, living up to 5000 years in their native and very harsh, high altitude western USA habitat. With the mild climate and high fertility soil, these planted specimens may have a shorter life, but that was not of great concern to anyone on the day!

Following speeches from Hew McKellar of Farm Forestry and Tim Cossar of the National Trust, and Ian's wife Flora's personal insight into Ian, Mayor Audrey Severinsen officially opened the Pinetum. Audrey's father, the Hon. Duncan McIntyre, cut the ribbon. As a former

Minister of Lands and Forests, he emphasised the importance of conifers to New Zealand. The site of the opening was a newly constructed gazebo with a rustic appearance provided by well weathered totara posts and battens – a reminder of the durability of one of New Zealand's own great conifers.

Since the earlier article in *Open Space* about Ian and the Pinetum, other developments have included more planting and silviculture work by local volunteers, and especially by members of the management committee which has formed to continue Ian's work. A local surveyor, Bruce Stern, has accurately mapped the whole collection by GPS, again voluntarily. This will allow a database of information about each specimen to be linked to each tree on the ground, creating an invaluable source of information and guide for dendrologists, foresters, gardeners and nurserypeople.

Our thanks to the McKean family for the opportunity to commemorate Ian's work. In the life of the bristlecone pines, this Pinetum is 'but a few days old', but it truly is a wonderful heritage Ian has left us.

By Philip Lissaman



Above: Regional Rep. Bruce Kirk welcomes the gathering.

Manawatu. Much has been written about the Pinetum, including articles in the *New Zealand Treegrower* (Farm Forestry), *International Dendrological Society Yearbook* 1990, and *Open Space* #45.

Ian started planting in 1958, and prior to his death in 1998 had planted some 1000 trees, covering over 300 different species and 48 genera of conifers, and importantly includes over 100 species of pines, possibly one of the most complete collections in New Zealand if not the Southern Hemisphere.

To this can now be added five bristlecone pines planted at the opening by Ian's grandchildren and family, and representatives of the Farm Forestry Association and the National Trust. Bristlecone pines are

Below: Ian's grandchildren plant bristlecone pines, assisted by Charlie Palmer of the National Trust.



Visit us!

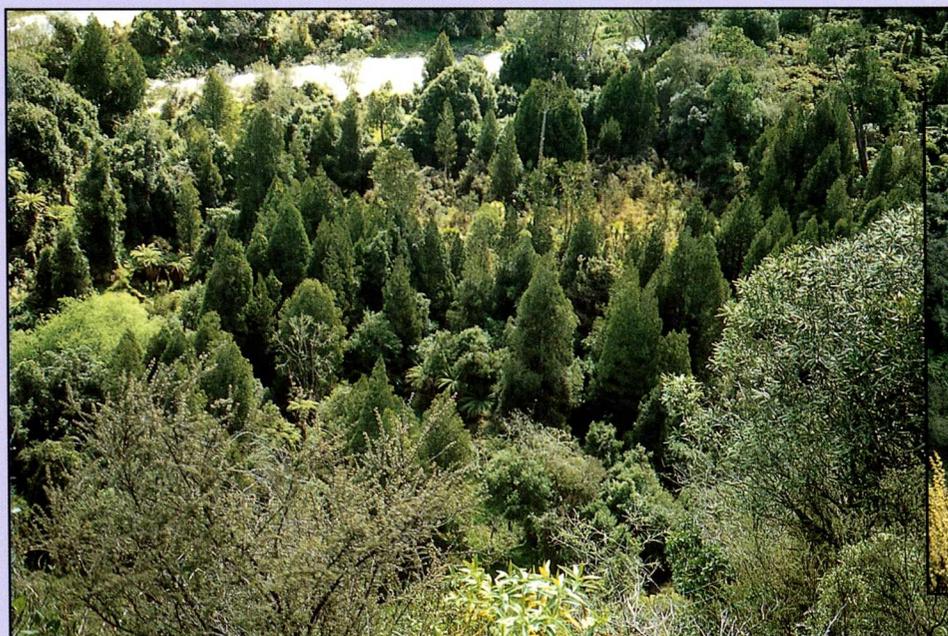
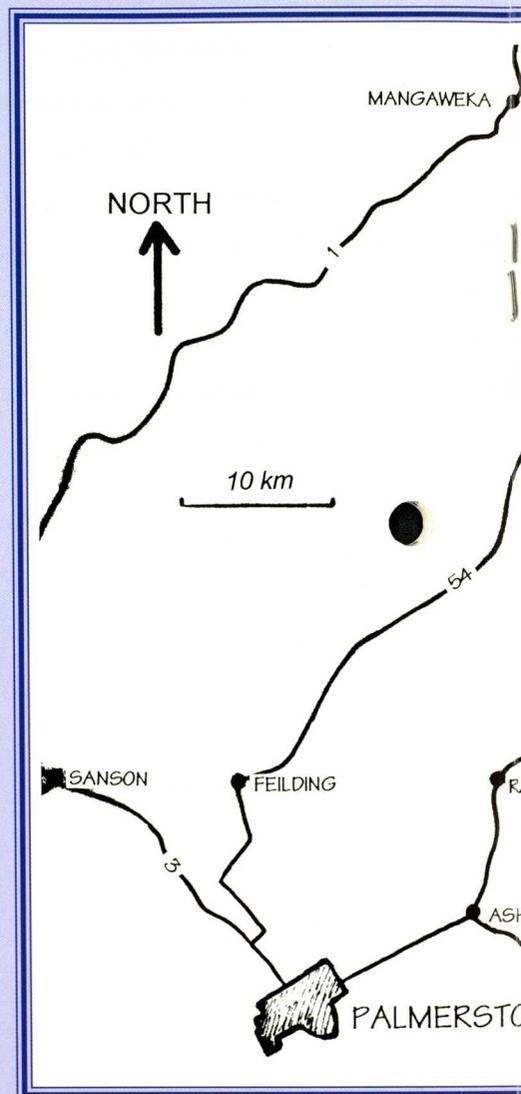
Visitors are welcome by arrangement. Contact: Ross Geary, tel 06 328 2849

A Scenic Tour of the

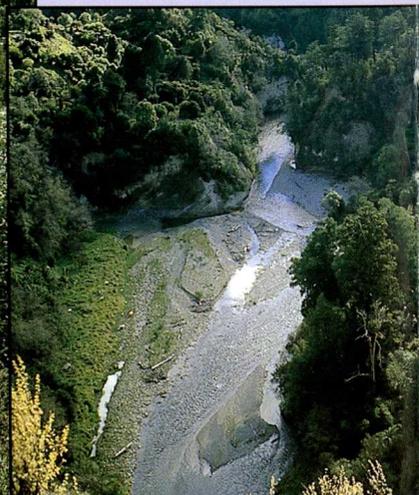
For those planning a visit to the region, Regional Rep. Bruce Kirk recommends this scenic tour, incorporating possible overnight stops, walks and picnic spots. All these places are an easy drive from Feilding or Palmerston North.

Please remember: open space covenant areas are private property - always ask permission from the landowner before entering.

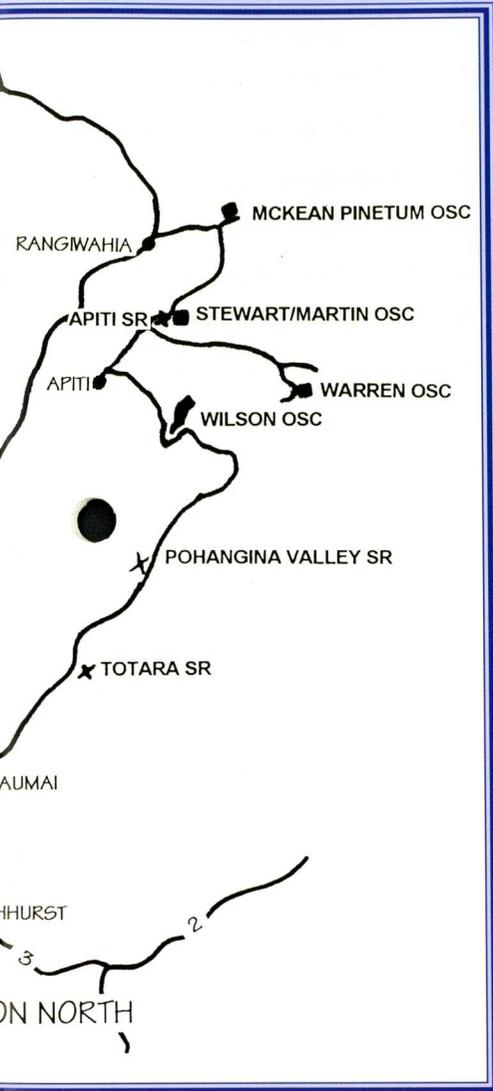
- Drive northwards up Pohangina Road from Ashhurst, and turn right across the river just past Raumai. Continue north up the Pohangina Valley East Road. As you travel along the river terraces, take in the mixed podocarp/broadleaved forest of the Totara Scenic Reserve on your right, then the kahikatea forest of the Pohangina Valley Scenic Reserve (including the short Kahikatea Walkway) on your left. Continue up the Pohangina Valley East Road out the top of the valley before turning left into Makoura Road.
- As you cross Coal Creek bridge, view the Wilson covenant, which extends up the gully on your right.
- Perhaps spend a night at Makoura Lodge, then continue to Apiti.
- Head northwards out of Apiti on the Oroua Valley Road. After about 4 kilometres turn right into Table Flat Road, which becomes Petersons Road, and observe the other end of the Wilson covenant, plus the Upper Oroua Gorge and nearby Heritage Lodge (with numerous superb walks).



Pockets of kahikatea surround Coal Creek ravine in the Wilson covenant area.

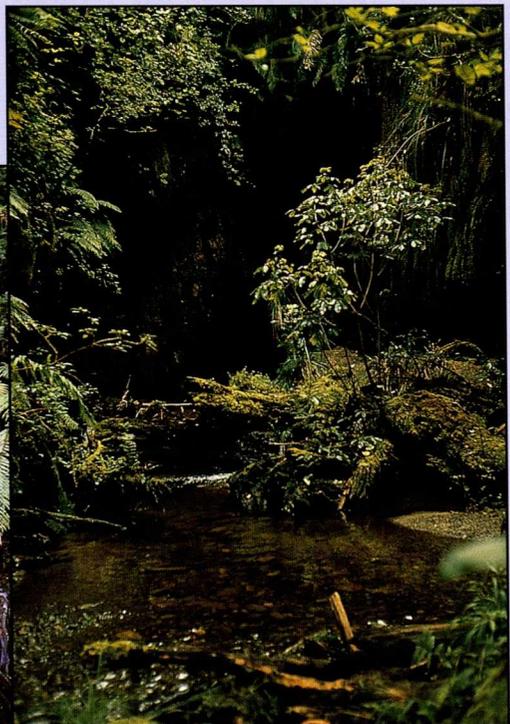
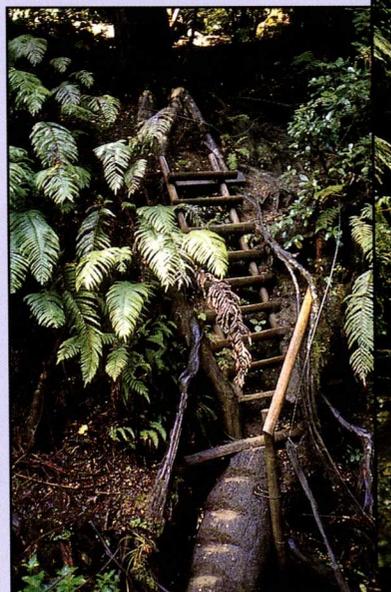


Rangitikei – Manawatu



- Back-tracking slightly and turning south along Limestone Road takes you to the limestone gorge and glow worm cave of the Warren covenant. The public are welcome to visit the glow worm cave: please phone Mr & Mrs Warren on 06 328 4818 for permission first.
- Sixtus Lodge (an outdoor education centre for school pupils) with the quite remarkable limestone cliffs opposite, and the Deerford Track are also on Limestone Road. This is a no-exit road, so return along Table Flat Road to the Oroua Valley Road intersection.
- Travel northwards along the Main South Road, passing through the podocarp-beech/broadleaved forest of Apiti Scenic Reserve before crossing the Oroua River. The podocarp forest of the Hopkins (originally Stewart) and Martin covenants covers the escarpment on the northern side of the gorge. Another kilometre or so further north, just past the intersection with Conspicuous Road, you'll see on your right another stand of forest also protected by the Martin covenant.
- At the intersection with Renfrew Road and Te Parapara Road, turn right and proceed for about ½ km along Renfrew Road to see the covenanted Mckean Pinetum, then turn around and onto Te Parapara Road to get to State Highway 54.
- Returning south along State Highway 54 affords excellent views of the Oroua Valley.

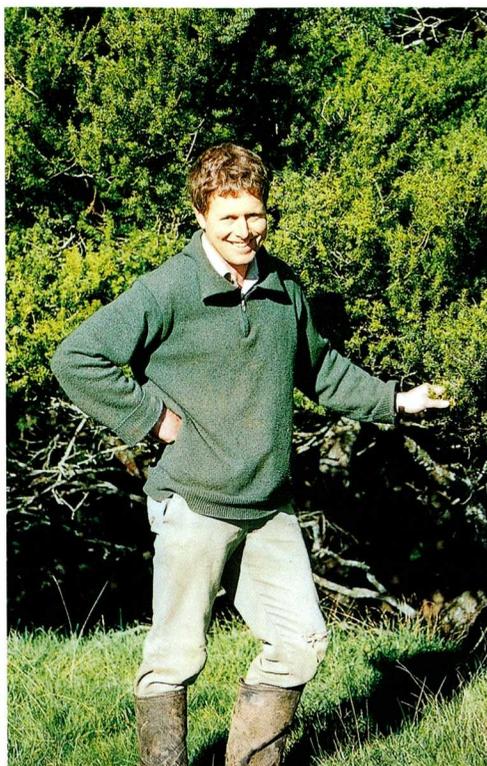
A ladder/steps and stream-bed track lead to the glow worm caves of the Warren covenant area.



Two Attractive Totara Landscapes

On paper, John and Debbie Waldin's covenant at Ashley Clinton looks very wiggly, with plenty of angles. But it fits snugly into gullies surrounding the Parikaka Stream, which feeds into the Tukipo River. The covenant covers 8.6 hectares of the stream and an adjacent gully, and it's a real feature of the eastern part of their sheep and cattle farm.

The streamside is vertical in many places, and up to 30 metres high. Totara is the main canopy species and the defining feature of the covenant. The surrounding terrace country, and much of the Ashley Clinton district, is dotted with totara, creating an attractive landscape.



Marie Taylor is the National Trust's Regional Representative for Hawke's Bay working from her home base just north of Napier. She describes here three newly registered covenants in her territory, each protecting remnant podocarp forest.

Left: John Waldin on the edge of his totara forest.

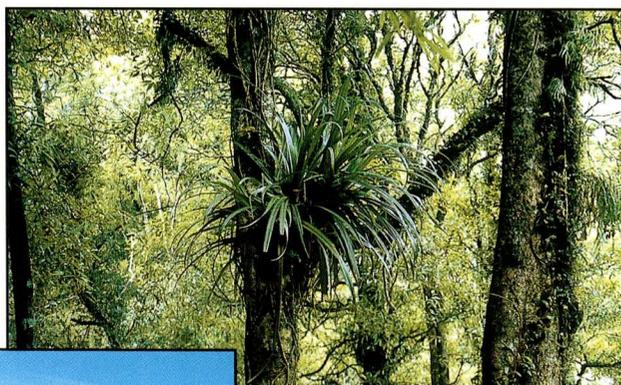
Deep bush-clad streams dissect the Kereru fertile terrace country west of Hastings. Driving west through this area towards Mangleton, a spectacular new covenant area can be seen from the road not long after the Ohara Stream is crossed. Richard and Linda Gaddum and their family have protected 38 hectares of this landscape, which features totara forest on flats by the stream with a backdrop of cliffs. Kahikatea and matai are common, and the forest canopy is made up of totara and titoki.

This is a beautiful new covenant area, and the Gaddums hope one day to put a hut in the clearing between the forest and the stream.

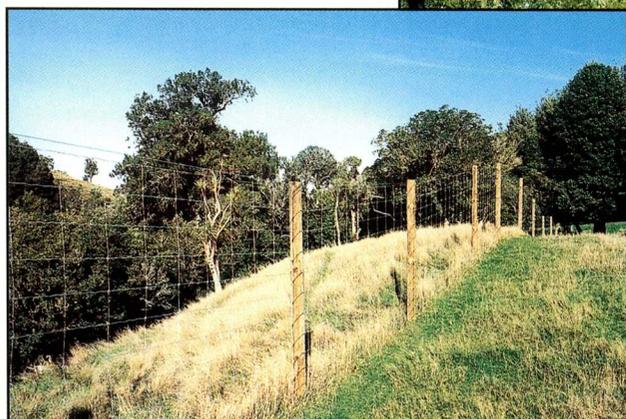
Tawa at Maraetotara

Tucked into the back corner of Penny and Craig Hickson's Maraetotara deer farm is a picturesque area of tawa forest.

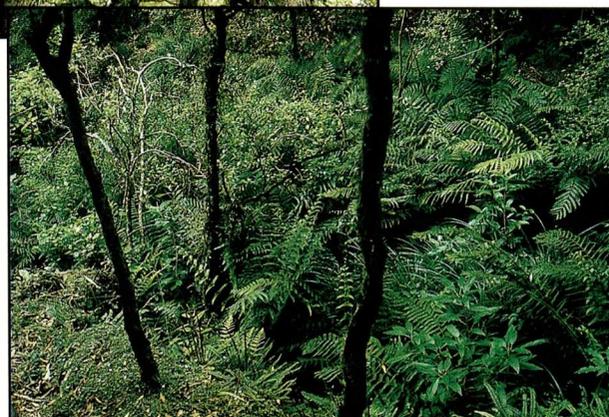
It's just a short tui flight from larger areas of bush on the Maraetotara Plateau – such as Mohi Bush and the Maraetotara Scenic Reserve – to this new 4.5 hectare covenant area. High numbers of kereru and tui live on the plateau, so this new covenant is a valuable addition to the other protected areas in the district. The bush includes very tall rimu trees, kahikatea and totara, along with lancewood, pigeonwood, pukatea and titoki.



Left: Epiphytes on the Hickson Maraetotara deer farm.



The Hicksons' new fence securing the covenant.



Below: Dense ferns are typical ground cover in wet areas.

COVENANTING: AFFIRMATIVE ACTION

Covenanted land to protect biodiversity is an affirmative action on the part of a landowner; a genuine commitment and expression that they wish to protect their valuable piece of biodiversity or open space in perpetuity for the benefit of New Zealand.

In my first year with the National Trust, I continue to be awed by the growing number of landowners who voluntarily offer their land for protection using National Trust open space covenants. In many ways, the growing number of proposals coming to the Trust reflects a belief that landowners are, and will continue to be, a key to protecting biodiversity in the developed lowlands, semi-coastal and coastal areas, where development and continual modification of the natural landscape is most intense.

The New Zealand Biodiversity Strategy addresses the issue of private land protection and how best native biodiversity on

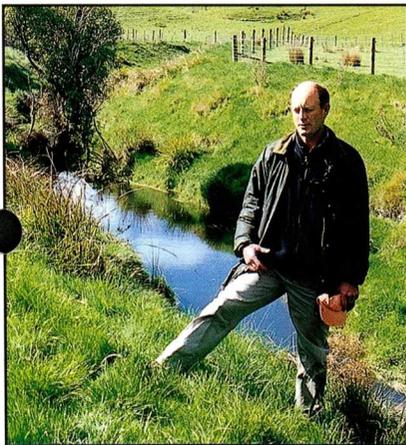
private land can be protected. No doubt, the presentation of the Ministerial Advisory Committee's recommendations on private land protection will further the debate and hopefully move it forward in a positive way. The Committee certainly consulted on a broad scale throughout New Zealand. Let's hope some of the very good input provided by landowners is acknowledged.

In my view, the key to the success of any biodiversity strategy is affirmative action and actually doing things to protect biodiversity and the landscape. Endless talkfests are fine but real action on the ground is what counts. Covenanting is positive action, a commitment that a landowner wishes to protect something of intrinsic value to themselves and New Zealand as a whole. The decision by the landowner to covenant should be seen by all as part of an important process of protecting what remains

of the nation's biodiversity. Recognition for this commitment by landowners is often not fully acknowledged by many in decision-making positions. Voluntary covenanting is a critical tool in the nation's biodiversity protection suite. The Trust is continually proving that working with landowners in a positive and affirmative way is leading to more land being offered voluntarily for protection. It is in this area that the Trust will continue to make a real and practical difference.

If New Zealand wants to protect its remaining biodiversity in the lowlands, semi-coastal and coastal areas, then voluntary covenanting of biodiversity on private land is a credible and well-proven method that enables this to be achieved. What's more, it is working, landowners seem to like it and, most importantly, it is affirmative action that is making, and will continue to make, a real difference.

By Tim Cossar CEO



James Hunter wins environmental award

Congratulations to Porangahau farmer and covenantor James Hunter who has won a Hawke's Bay environmental award for his work transforming his property.

Presented by Hon. Marian Hobbs, the Minister for the Environment, the award recognises the work James has done to protect

the remaining natural vegetation, fence off the Huatokitoki stream, develop wetlands and protect wet areas including dams.

His covenant, the neighbouring Pharazyn covenants at Motere Station, and the nearby Fuohy covenant are all progressing towards registration.

Glow Worm Evening & Bush Walks

Two Hawke's Bay covenantors are hosting two half-day bush walks through their spectacular bush gorges in February next year.

The Macdonald family of

Tikokino, and their neighbours the Williams family are hosting the walk as a fund-raiser for the local Tikokino primary school.

The walks are all catered – including a sumptuous evening meal – and include an evening stroll to a magical glow worm colony on

Spencer and Kate Macdonald's farm.

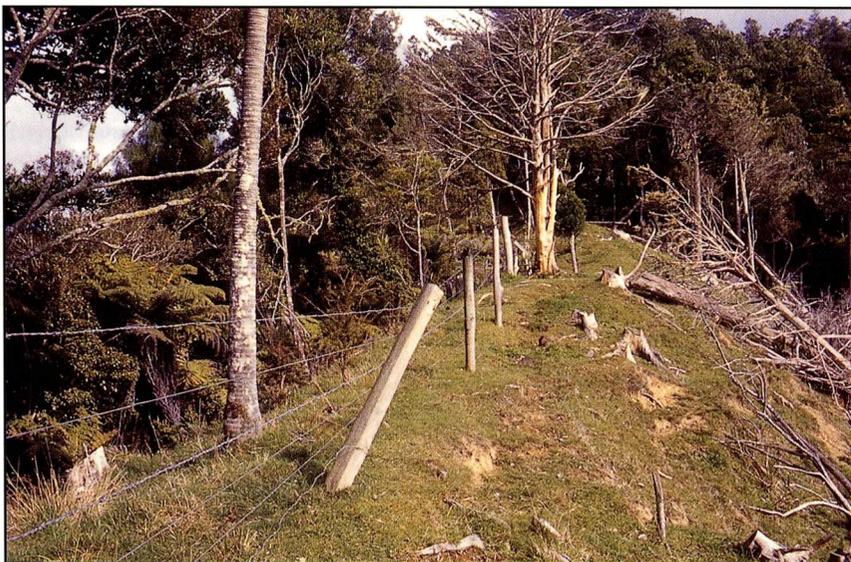
Scheduled for Saturday February 24 and Sunday February 25, the walks are being organised by Julia Tatam at 06 856 6852 or fax 06 856 6500 or by email djtatam@voyager.co.nz.

ASSET OR LIABILITY?

Getting the Best from your Covenant Fencing

The Trust estimates that the total replacement cost for fencing around all the existing registered covenants would be about \$30 million. From a conservation viewpoint those fences are an enormous asset, from a financial viewpoint they are an enormous liability. Fences are therefore deserving of serious consideration and effort to ensure that they are built and maintained as cost-effectively as possible.

Much has been said, but little written, about the best way to protect covenant areas from livestock entry. With an increasing number of covenants owned by people with little farming experience, this is an attempt to get ideas on paper for others to consider or try. This article is the first in a series discussing the best and most economical ways to fence covenant areas.



These fences won't keep stock out!



Principles of forest covenant fencing

The National Trust has two key principles for fencing of forest remnants and other protected vegetation:

- The fence must secure the covenant area from livestock intrusion. This is essential to allow natural regeneration and prevent trampling, pugging or weed introduction.
- While some may argue that there is regeneration in their 'grazed forest', careful investigation will show the lack of diversity, particularly of palatable species that are preferred by livestock.
- The preferred fence type is the norm for the farm and one which the owner is willing to maintain (as required by the covenant document). The Trust doesn't impose fences that are not wanted by landowners.

Continued on page 17

COVENANTORS!

Selling your property?

Please let the National Trust know.

Making contact with the new owner, and keeping in touch with you, is important to us.

Examples of good quality stock-proof fencing, with diverse regeneration where stock can't reach



Covenant fencing continued from page 16

Favourite forest fence - the seven wire and post

This is the most commonly used fence for securing a forest remnant from sheep and cattle. It would consist of 7 (maybe 8) 12½ gauge wires (top wire at 1.15m) and 1.8m x 100-125mm tanalised wooden posts (round or half round) with 4-5m spacing between them.

Points to note:

- The wires should be on the outside (animals' side) of the posts and must be strained correctly to prevent stock pushing through or over.
- An electric outrigger and maybe a barbed top wire can be a valuable addition to deter stock from pressuring a fence by reaching through or over.
- Battens are an optional extra preferred by most landowners, especially in the North Island: South Islanders enjoy a joke about the expensive North Island 'wind breaks'. However, around forest blocks battens can be a nuisance when branches or trees start falling (naturally) as the forest matures: re-straining a fully battened and stretched fence can be a nightmare.



As the forest matures, a battened fence (as below) can become harder to maintain.



Future articles will cover correct straining of wire, electric fencing, fencing in coastal areas, fence placement and more.

Landowners and covenantors! - We would like to hear your ideas and experiences of dealing with fencing problems – your knowledge is valued and may help someone else with a difficulty.

By Philip Lissaman

BEATING *around the bush*

tips and techniques for native ecosystem management

A photo is worth a thousand words...

What makes *Open Space* appealing? Admit it, it's the pictures! In any book on nature or history, no matter how well written, it's the illustrations we're most drawn to. Magazines, newspapers, TV, the cinema; all work because they're graphic and they're immediate. We're mightily attracted by colour and shapes and have the imagination to match that curiosity. This makes photography a powerful and handy tool in conservation management. We can use it to document changes and to show the causes of change.

For decades I've observed and measured ecological changes in many sites around New Zealand. That's my profession. I've made detailed site descriptions, measured vegetation plots, done bird counts and taken samples of wood, water, soil and rock. Good robust data-gathering and analysis; lots of meticulously written reports. What's made the difference though has been the photos I've taken, and I wish I'd known that earlier. Managers, planners, landowners, legal people, friends and family have all responded far more to my photos of places, plants, animals and people than to all my written and spoken evidence. Maybe I'm a pretty hopeless writer and speaker, but I don't think it's that. They've been able to get closer to the subject through the photos.



Forest interior at Big Bush, Chatham Island. In 1990 (Figure 1), sheep and cattle had free access and there was absolutely no undergrowth. In 1996 (Figure 2), after being fenced for only four years, there were saplings waist high. By 1999, when I last had a look, the undergrowth was taller than me and almost impenetrable.





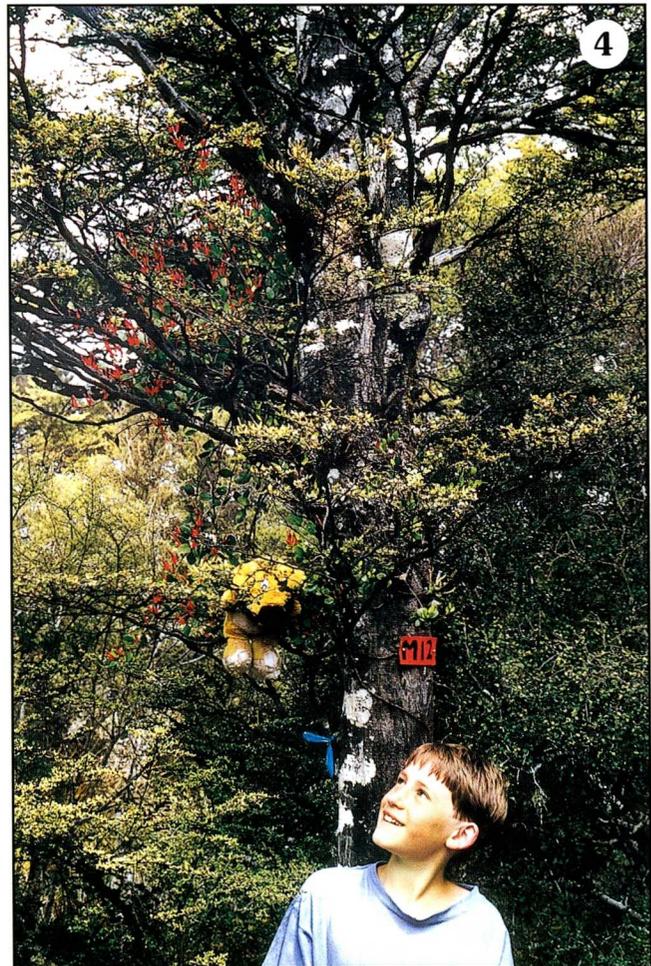
Figure 3
The scratch marks on this totara tell us there's something wrong in the forest: possums are numerous, probably damaging the canopy and ground cover alike.

Anyone who's watched a piece of bush, scrub, beach or wetland over the years can tell you that changes have taken place. Sometimes quite big changes. Perhaps the titoki has died back, lancewood has begun poking through the manuka, slips have healed, the pingao has gone or the raupo has expanded dramatically. How often are there photos to show that though? Not often. Without them, we may have many good stories but little tangible evidence. To find out how effective conservation management has been, photography can provide a wealth of information quickly and cheaply. You don't have to be a brilliant photographer or have expensive gear, but you do need to think about what you're recording and why.

The most impressive evidence of change comes from photos taken from the same point but at different times. Regeneration on a forest floor or on a fenced-off hillside shows up within a few short years, as in these photos taken at Big Bush on the Chathams. How I wish I'd set up such photopoints in our open space covenant on D'Urville Island. Then you'd believe me when I say the frightening thickets of stinging ongaonga in the bush gullies were totally replaced by kawakawa within 10 years, and that the present wind-combed blanket of manuka now covers what used to be bare eroding clay faces.

Figure 4

Red mistletoe (Peraxilla tetrapetala), a highly sensitive ecological indicator, growing on a mountain beech in Kaweka Forest Park, Christmas 1998, and admired by my son Finn and his soft mate. I recorded the recovery of this plant from a chewed stub into a flourishing beauty within five years of the start of systematic possum control. Even foliage within reach of deer wasn't browsed, a sign that the hunters were effective in the area. The lack of open flowers indicated that the tui population was seriously low.



The causes of change, and the indicators of deterioration or recovery, can be photographed too. Possum bite-marks, deer-browsed tree bases, and the size and health of saplings and highly palatable plants such as mistletoes, succulent ferns and tree fuchsia, are excellent indicators. Forest and wetland edges are where change is often fastest and most dramatic. Every open space covenant area has such signs and sites. So get out your camera, find a place that'll tell a story, nail a tag to the nearest strainer and take the picture that will show your grandchildren how it used to be.

**By Geoff Walls
 Trust Director**

KILLING WITH KINDNESS

Killing pest animals is a necessary element of covenant management. Veterinarian and covenantor Marjorie Orr outlines the most humane options of pest control available to us.

Whether an animal is a pet or a stray or feral, it can feel hunger, pain and fear. Even though many feral animal species are classed as pests, we have an obligation to treat them humanely.

Pest animals have to be killed, and it's something most of us feel uncomfortable about. We have to control the numbers of rats and mice, possums, rabbits, ferrets and stoats in our environment, but they are all sentient mammals worthy of respect.

There are various methods of killing pest mammals, of course. The pros and cons of each have to be considered, and cost and convenience are usually prime considerations. We should also choose a method that causes the animals as little suffering as possible, and which keeps the risks to other animals and to the environment to a minimum.

Shooting and cage traps

Shooting by a skilled hunter may be one of the best options. For those who don't shoot, cage traps may be effective and humane. The cages should be inspected frequently, at

least once daily, and any trapped animal shot or killed by one quick and effective blow to the head. It's not easy to do this, and it's very important to get training from an experienced trapper to ensure your technique is effective and humane.

Another killing method for animals in cage traps is gassing using car exhaust fumes. The cage is enclosed in a plastic bag, and car exhaust fumes are piped into the bag through a tube which is long enough to cool the gases before they reach the cage. This method is certainly safer for the handler and possibly less stressful for the animals than any other option which involves handling the animal.

Leg hold traps and kill traps

If shooting or use of cage traps are not practical options, then an effective kill trap such as a Timms trap should be used. If leg-hold traps must be used, then select types that will minimise any physical injuries, such as the Victor Soft Catch traps. Traps such as the Lanes Ace gin trap should not be used because they frequently cause excessive injuries to captured limbs and there are alternatives which are significantly more humane.

Poisons and antidotes

Most of the commercially available feral animal poisons appear to be relatively humane in the pest

species they target. The most commonly used, 1080 and cyanide, can only be used by licensed operators trained to make sure they are used effectively with a minimum of risk to operators, members of the public and non-target species. The operators publicise the poisoning operation locally and it is important for animal owners to heed these warnings.

Dog owners should take particular care when 1080 poison has been used. There is no antidote and it causes every appearance of extreme distress in dogs. Poisoned carcasses can remain poisonous to scavenging dogs for many weeks and even for months if the carcasses have been preserved in very dry conditions.

Anticoagulant poisons are readily available and are widely used to kill rodents. These poisons can also kill dogs which eat bait or poisoned carcasses. It is important to take sensible precautions when using rodent poisons to prevent other species from getting access to them. Fortunately there is an effective antidote to anticoagulant poison, although treatment is expensive and prolonged. Animals poisoned accidentally should be taken to a veterinarian as soon as possible after the bait has been eaten.

If a dog eats poison or poisoned carcasses, it must be made to vomit immediately. If it can't be taken to a vet immediately, it can be made to vomit by making it swallow a concentrated household salt solution or by pushing a crystal of washing soda (sodium carbonate) down its throat. It is important not to use caustic soda (sodium hydroxide).

Neuter farm cats

Another important point for farmers to remember is that farm cats regularly contribute to the growing feral cat problem through uncontrolled breeding. To help minimise the number of feral cats, all domestic and semi-domestic cats should be neutered, even if they are farm cats.

Open Space

*welcomes contributions from
Covenantors, Trust members
and friends with ideas, views
or stories to tell.*

Covenants Update

As at 2 November 2000, there were 1397 registered Open Space Covenants totalling 50778 hectares.

The breakdown by Land District (which differs from our Regional Representatives' boundaries) is as follows:

| Land District | No. Covenanted | Area Protected |
|----------------|----------------|----------------|
| North Auckland | 302 | 5450 |
| South Auckland | 305 | 9169 |
| Gisborne | 69 | 8756 |
| Hawkes Bay | 70 | 2011 |
| Taranaki | 88 | 2455 |
| Wellington | 232 | 10933 |
| Marlborough | 13 | 643 |
| Nelson | 72 | 2103 |
| Westland | 6 | 180 |
| Canterbury | 104 | 3224 |
| Otago | 52 | 4040 |
| Southland | 84 | 1814 |
| TOTAL | 1397 | 50778 |

Secret of Lord of the Rings trilogy revealed

According to our own "Open Space" gossip columnist, the multi-talented Dr Brian Molloy (botanist and National Trust's Regional Representative for the South Island high country) is making his acting debut in the much anticipated Peter Jackson film trilogy "Lord of the Rings". Apparently, the

casting crew was so impressed by Brian's physical attributes and acting flair, he was given two very special roles. Unfortunately, the secrecy surrounding the making of the films precludes us from saying more, but look out for Brian's cameo appearances when "Lord of the Rings" comes to a cinema near you.



Greg Fife and his father, Robert, pictured soon after Greg finished the covenant fence.

Trust People

Nancy takes over from Francie

There has been a change of faces in the Legal Group at Head Office.

Covenant advisor Francie Pedersen left the National Trust in August to join the Resource Consent section of the Wellington Regional Council. Francie was on the Trust staff for nine years. We all wish her the best in her new position.

New staff member Nancy Watters is settling into the position. She has come to the Trust from the Citizenship section of Internal Affairs, where, as she puts it, "I worked for 18 months turning ex-foreigners into Kiwis". Prior to that she was a mature student returning to continue a BA begun many years before - and still to be completed! She did, however, successfully complete a law degree and go on to be admitted to the bar. She's a mother of two boys and says that what little spare time she has is devoted to gardening. She says, "I'm excited about joining the Trust and look forward to meeting and working with a diverse group of people".

Congratulations to covenantors Greg and Helen Fife, of Hokianga, who recently received a Conservation Award from the Department of Conservation. The award recognises their work in protecting kiwi habitat. Greg and Helen's coastal property includes 10 hectares of regenerating forest, which has been protected by open space covenant since 1997. This is almost the only forestland protected in the Hokianga Ecological District.

Oops! Our apologies to Mr Soanes, of Landcorp Farming Ltd, for referring to him as Mr Sloane in the last issue of Open Space.

Trust People

Trust Chairperson on safari in deep south

Regional Reps Helen Clarke and Gay Munro accompanied Trust Chairperson Sir Paul Reeves on a tour of covenants in the Otago region last month.



Above: Sir Paul with Louise Rosson of Otago Regional Council and the Gardner family (Brent, Robyn & young Jackson) by the Gardners' new wetland covenant at Balclutha.



Left: Deep in the forest of Shanks's Bush, Papatowai are (from left to right) Fergus Sutherland, Philip Lissaman, Mary Sutherland, Gay Munro and Sir Paul Reeves.

Musings of a new Board Director

I suppose I could have been termed an "environmentalist" twenty five years ago when I retired from the Royal Navy and commenced my long delayed higher education, specifically in social sciences and alternative technologies. I carried my new found belief that the world had to change, when returning to live in New Zealand with my family.

Twenty years ago, as Director for the somewhat optimistically titled Commission for the Future, I felt we had a real chance of acting as a beacon for that change. I had a vision for our country as an independent, energy self-sufficient, small scale networked society, using automated industry while growing organic food

and fibre. A self-reliant and sustainable idyll in the South Seas which seemed to be well within our capacity to achieve. Unfortunately, the political leadership at the time was dead set against change, and when inevitably that status quo was overturned, the new momentum was to take the Nation in the opposite direction!

This left me with little option but to put into practice what I had been preaching. At least in so far as I was able, in that economic climate. Consequently for the last fifteen years my family and I have been living on a biodynamic smallholding, raising beefalos, chickens, pigs and trees, and running a cottage industry

making sheepskin slippers for export and sale on the internet. We are also passionate advocates for curbing the urge for overdevelopment which appears to be endemic in popular places like Kerikeri.

For these reasons I am delighted to be involved with the National Trust in encouraging the good auspices of private landowners in protecting our environmental heritage. As NZ delegate to the 1979 Berlin Conference that coined the expression "Think globally – act locally", I appreciate that saving a small forest here is an important small step in saving our small Planet.

By Dick Ryan

TRUST BOARD ACTIVITIES

Membership Elections - March 2001

In early December, National Trust members should have received papers advising of the forthcoming membership election. In March 2001, members have the right to vote for two Trust Board Directors, both of whom will represent members on the Board for a three year period. Members should have received a copy of the Trust Rules and a form calling for nominations.

Only members can nominate, or be nominated as, Directors. Nominations must be received no later than Friday, 19th January 2001.

If you require additional nomination forms or copies of the Trust Rules, please contact Kriston Ware at Head Office.

Email: kware@qe2natrust.org.nz

Board Meeting dates

The next meetings of the Trust Board are scheduled on February 13th & 14th, and April 10th & 11th, 2001.

Annual Report

The Annual Report of the National Trust has been mailed out to members who previously indicated they wished to receive it. If you would like additional copies or did not receive your copy, please contact Trust Secretary Susan Halse at Head Office. Email: shalse@qe2natrust.org.nz

AROHA ISLAND



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Email kiwi@aroha.net.nz
Or write to Box 541 Kerikeri

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The Story of “Gretel Lagoons” in the Wairarapa

We had been looking for a Wairarapa lifestyle block. In 1989, a colleague breezed into my office at the Open Polytechnic and dropped a property advert on my desk – Carterton; 15 hectares with duck pond; \$60,000.

We immediately visited the property and within a few days had made a successful offer for the block.

There were several striking features about the block, such as: over 300 mature kahikatea and totara; numerous tawa, matai, kowhai and titoki; an outstanding 8 hectare oxbow lagoon; and numerous bush birds and abundant waterfowl.

Our first visit also revealed a very large population of grey teal (*Anas gibberifrons*) which prompted a friend, Brendan Coe, to suggest we call the place GRETTEL LAGOONS after the “Operation Gretel” name Ducks Unlimited gave to the very successful grey teal nesting box programme.

So it came to be that in 1992 with considerable assistance from the then QEII representative, Ben Thorpe, an open space management plan was produced and an open space covenant was established over 7.5 hectares of bush and wetlands. The Carterton District Council also decided to eliminate all rates on the covenanted area.

At our house, which is 150m from the main lagoon, we have an important waterfowl collection. Management includes purpose-built aviaries for the breeding of the endangered NZ brown teal – a project we have been part of since the early 1970s. In September last year, one of our early brown teal – a pinioned female – died at the age of 24!



Above: Gretel Lagoons oxbow (Photo courtesy Pete Nikolaison, Masterton).



Left: Broadlands Lagoon at the end of the oxbow. Created in 1991 with a grant from the Broadlands Wildfowl Trust. (Photo courtesy Pete Nikolaison).

A major achievement has also been the establishment of a sizeable population of high quality NZ grey duck. The pinioned grey duck on the house pond are breeding well and their free-winged progeny are also breeding well on the main lagoon.

The open space covenant allows for limited recreational hunting opportunities and the hunting is undoubtedly world class. Numerous visitors, from New Zealand from overseas, also come to view Gretel Lagoons, and we have had the pleasure of showing them ever increasing numbers of wildlife and their habitat.

There is no doubt in our minds that Gretel Lagoons and its environs will eventually rank as one of ‘the’ important wildlife habitats in the Wairarapa.

Acknowledgements

We would like to take this opportunity to thank the QEII National Trust for its considerable support for what we have achieved at Gretel Lagoons.

Our sincere thanks also to the Broadlands Wildfowl Trust, Reporoa, for the major financial contribution towards wetland creation and enhancement work and towards the construction of our brown teal aviaries.

Thanks also to John Kirby of the National Trust and to the Carterton District Council.

And a very special thanks to all our friends who have helped us establish a unique wildlife environment.

Visit Gretel Lagoons!

Do call in and see us. Phone 06 379 6692
and we will tell you exactly how to find us.

By Neil Hayes
Covenantor