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Queen Elizabeth II
National Trust
For open space in New Zealand

Nga Kairauhi Papa

Celebrating 25 YEARS

Open Space

MAGAZINE OF THE QUEEN ELIZABETH II NATIONAL TRUST

No.56, December 2002

IN THIS ISSUE Focus on the lower North Island • David Bellamy and our Silver Jubilee

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

The Trust helps landowners protect natural features including:

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

How the Trust helps you

We administer a simple, effective mechanism that protects the special feature of your land forever, while letting you and those who follow enjoy continued ownership and management.

You enter into an open space covenant with the Trust, appointing us as permanent trustee.

You retain ownership and management of the land, and we visit regularly, usually every two years, to assist with specialist management advice.

The covenant is registered against the title of your property and binds subsequent owners. Most covenants are in perpetuity.

We provide assistance with the establishment of your covenant and meet standard legal and survey costs. Some councils will consider financial assistance with establishment fencing, weed and pest control and rate relief.

How your covenant helps New Zealand

A lot of the 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. In fact, experts consider the decreasing diversity of our indigenous flora and fauna as our biggest environmental problem.

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

Practical land management

Quite apart from the deep love and respect for nature, the practical dimension motivates many covenantors. Protecting natural features makes good land management sense.

Bush and wetlands help filter rain and protect water quality. They encourage recycling of nutrients and reduce soil erosion. Forest remnants reduce wind and provide shade and shelter, enhancing stock management and production.

Fencing covenanted areas allows regeneration of the bush, helps protect stream banks and water quality, and also keeps stock out of hard-to-manage areas.

Protecting bush and landscapes beautifies and adds value to farmland.

Other ways to support our work

We rely to a large extent on donations and gifts to fund our work. There are several ways you can help us:

- Make a donation or endowment. We are a statutory charitable Trust, and your gift will be tax-deductible.
- Make a bequest – it could be financial or property. Please contact us to discuss this option in confidence.

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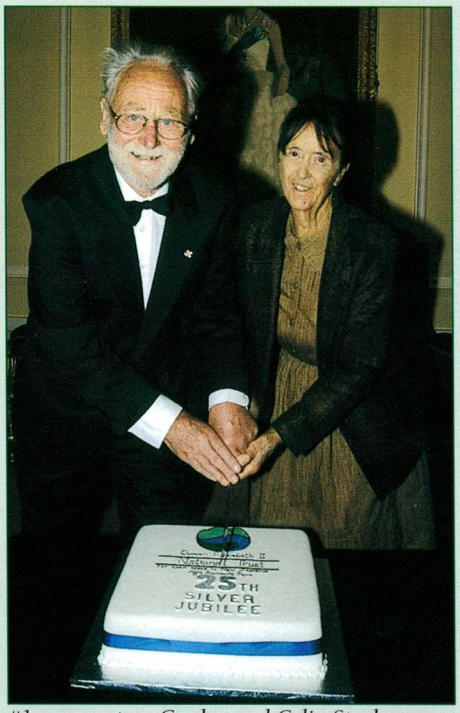
25-year birthday party – Government House 14th November 2002.

Dame Silvia chats with David Bellamy and the Hon. Chris Carter.

Dame Silvia addresses the party guests in the ballroom.



#1 covenantors Gordon and Celia Stephenson cut the cake.

Their Excellencies the Governor General of New Zealand, Dame Silvia Cartwright and Peter Cartwright kindly hosted a dinner to celebrate the Silver Jubilee of the Queen Elizabeth the Second National Trust. The dinner was a celebration of 25 years of conservation on private land, and commemorated the wonderful vision and commitment of over 1700 open space covenantors and the protection of over 60,000 hectares of unique natural features.

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Manatu Mo Te Taiao

Cover photo: A giant of a man with a giant of a tree.

Professor David Bellamy enjoyed meeting as many covenantors and visiting as many protected open spaces as possible as part of the Queen Elizabeth the Second National Trust's Silver Jubilee celebrations.

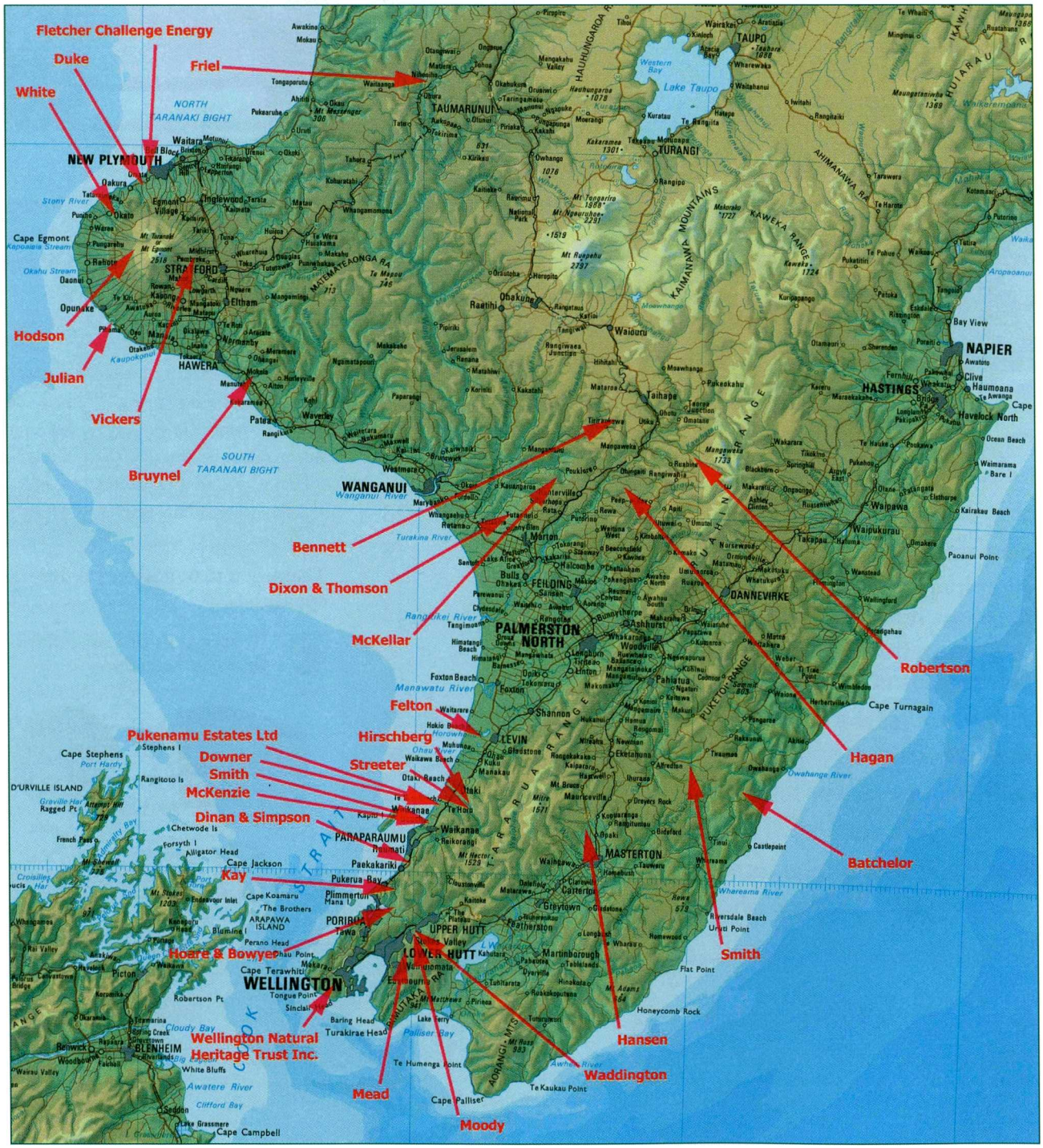
Pictured with David, from left to right, are Philippa Falloon, Margaret McKee (CEO of Queen Elizabeth the Second National Trust), Hon. Chris Carter (Minister of Conservation), and John Falloon. The ancient kahikatea behind them is part of a grove on the Falloons' Wairarapa property that is protected by open space covenant.

For more photos of David Bellamy, see page 25.

Focus on: the lower North Island

Featuring covenants and covenantors, Trust supporters and events in the lower North Island, including the Taranaki, Manawatu, Wellington, and Wairarapa regions.

The lower North Island is shared between Regional Reps Neil Phillips, Tim Park and John Kirby. This edition also includes several new covenants brought to fruition by Bruce Kirk – former Rep for the Wanganui/Manawatu region – who retired recently from the Trust.



Recently Registered Covenants in Taranaki, Manawatu, Wellington and Wairarapa

Taranaki's booming!

Taranaki Regional Rep Neil Phillips (pictured) divides his time between the National Trust, his dairy farm at Pukengahu, and his role as SNA (significant natural areas) officer for the South Taranaki District Council. Neil says interest in land protection in the province is high: Shell Exploration NZ Ltd are pushing things, and schools are on the bandwagon funded by the Regional Council as well as Shell to be involved in conservation work. Funding is available from the South Taranaki District Council and Taranaki Regional Council, and recently the New Plymouth District Council allocated $8250 to help fence a covenant.

The following eight open space covenants within Neil's territory were registered recently.

Photo: The Daily News

Wetland Forest Protected

By Neil Phillips

The high number of fruiting trees within the Hodson kahikatea forest make it an excellent food source for birds.

A number of significant wetlands in Taranaki have been protected with the QEII, including the one owned by **Rex Hodson** at the end of Kahui Road on the western side of Egmont National Park.

Approximately 7 ha of Rex's predominantly kahikatea forest have recently been registered as a covenant. This vegetation type is very different from that within the National Park despite bordering the Park.

The Taranaki Regional Council is very active in promoting the protection of wetlands and wetland forests throughout Taranaki. It completed an extensive report in 2001 recognising regionally significant wetlands that are worthy of protection. Only 1.5% of Taranaki's original wetland areas now remain, with only 0.2% of these outside Egmont National Park.

Council staff have been active in promoting this protection with landowners and have offered financial incentives such as paying 100% of fencing costs.

QEII is very grateful to the Taranaki Regional Council for the assistance of funding for fencing to ensure that this wetland forest is protected.

Encouraged by their children, retired farmers **Henrica and Cornelis Bruynel** have covenanted a small remnant (0.4463 ha) on their lifestyle block at Mokoia.

The forest is dominated by tawa, with a mixture of hinau, titoki, kahikatea, mapou, rewarewa, lacebark and pigeonwood at canopy level. Stock has been kept out for a number of years allowing good regrowth to take place, and an excellent range of seedlings is present. Some large tawa and kahikatea are present, but Cornelis and Henrica suspect that some of the largest straightest specimens were removed before they purchased the property.

Heavy frosts in early July 2001 affected the outer branches of tawa and rewarewa trees, and severe die-back occurred: mahoe and kawakawa were totally denuded. Fortunately, winter 2002 has been almost frost-free, and all new growth survived.

This bush is important aesthetically as it can be seen from both Ingahape and Whakamara Roads.

The Bruynel forest as seen from Whakamara Road.

Betty and Rex next to the fence protecting their forest.

The snowy slopes of Mount Egmont form a stunning backdrop to the Vickers covenant area.

Rex Vickers was a mountain guide on Egmont for most of his active life, and he and his wife Betty have always been staunch conservationists. They were concerned that once they left their property on the eastern boundary of the Egmont National Park, the bush would be removed for more intensive farming. So they turned to the National Trust for assistance, and now over 26 hectares of rimu-rata/kamahi forest is protected in perpetuity.

Each winter dairy cows would graze on the property. Over a kilometre of temporary electric fences would be put up to ensure that stock would not get into the forest and eat it out. At the end of the winter these would all be pulled down again. Therefore, fencing was a number one priority.

As this forest bordered the Egmont National Park, only the eastern boundary of the forest needed fencing. The exercise proved quite a challenge, not only in the development concept to seek the best lines and to incorporate as much of the bush into the covenant area as possible, but also in construction. As Neil Phillips commented, there was "rock, rock, rock, and more rock!!" He'd never seen such wide strainer holes – almost big enough for him to hop into. The fence was completed and the covenant has now been registered.

On his 416 ha farm, 7km north of Ohura, **Kevin Friel** runs the Mt Mable Angus beef stud herd and a commercial cross-bred sheep flock.

Tucked into a narrow gully system in the dissected hill country is a compact 7.4-hectare block of tawa forest, which Kevin has protected by open space covenant. The canopy is even and leafy, and includes other species such as young kahikatea, pukatea, hinau and kamahi. The covenanted forest links well with many other protected blocks in the district, including the 80ha Piki Scenic Reserve, 500 metres to the west.

The covenanted forest is easily visible to the east of Waitewhena Road, and since being completely fenced, is developing a healthy undergrowth.

In the heart of Kevin Friel's covenant area.

Steve and his horses at work

Photo: Maggie Bayfield, Taranaki Regional Council.

Back To Basics

By Neil Phillips

Fencing contractor Steve Pivac, of Opunake, is one of a few who believes that keeping things simple is the way to go. When driving onto his property, it is soon obvious that he believes in self-sufficiency and straightforwardness. With no power poles in sight, and only a wind generator to be seen, it is quickly realised that he relies on wind and solar power to run the house.

In the paddock, happily grazing, are his Clydesdale horses. They are back home after spending the last few months carting fencing materials for him while fencing a very wet forest remnant near Opunake.

A large wetland forest remnant, owned by the Parininihi ki Waitotara Incorporated, has just had a 5-kilometre boundary fence completed by Steve and his workers. Even though it may take longer, Steve loves using his horses to help shift the fencing materials required for the job. At times he had problems, especially when the horses got stuck in the wet swamp, but he considers this to be part of the job when using the horses in this sort of country.

The swamp forest consists of different forest types including kahikatea-swamp maire, pukatea-kamahi, and kamahi-tawa forest.

This forest was fenced by the Taranaki Regional Council as part of their active protection and enhancement programme for wetlands in Taranaki. An open space covenant was approved over the wetland forest in 1999, and this is proceeding towards registration.

Duke's Bush

By Neil Phillips

Murray Duke and his mother, **Ida**, own a 15 ha property at Omata, on the southwestern outskirts of New Plymouth.

Within the property is a semi-coastal forest remnant and wetland located in a small gully. There are some very large pukatea with well-developed root buttresses in the centre of the stand, along with kahikatea and tawa on the ridge sides.

This type of semi-coastal forest is now not well represented in the Taranaki Land District due to land clearance and intensive farming practices.

Murray has spent many years planting and maintaining this remnant in his spare time. He approached the Trust to place a covenant on the area.

Fencing had to be upgraded in places and this was completed by the YMCA Conservation Corps group, under the supervision of John Bowie from New Plymouth.

The Taranaki Tree Trust has since supplied *Coprosma robusta* (karamu) to help with the restoration of this covenant.

For the bitterns

Omata Tank Farm ponds – home to Australasian brown bittern.

A fuel storage depot may seem an unlikely location for an important water bird habitat, but the Tank Farm ponds at Omata, near New Plymouth, are precisely that.

The tank farm property, owned by Shell Exploration NZ Ltd (formerly **Fletcher Challenge Energy Liquid Fuels Limited**) includes two areas of semi-natural wetland. The predominant vegetation types of the wetlands are raupo, flax, and *Eleocharis sphacelata* reedland. This has formed a good habitat for waterfowl, especially Australasian brown bittern (*Botaurus poiciloptilus*), which is a vulnerable species.

The wetlands were recommended for protection in the Egmont PNA Survey (Bayfield and Benson, 1986) and were listed in the Taranaki Regional Council's "Wetlands of Taranaki" publication. Recognising the wetlands' value, Fletcher Challenge fenced the wetlands, planted the margins with a variety of suitable native plants, such as *Coprosma* sp. and cabbage trees, and have undertaken ongoing management in accordance with advice from the Department of Conservation and the Regional Council.

In January 2001, Fletcher Challenge approached the Trust for assistance in giving the wetlands protection in perpetuity, by way of an open space covenant. Fletcher Challenge met all costs associated with registering the covenant on the property title, and this was finalised in February 2002. This process was supported, and continues to be supported, by Shell Exploration NZ Ltd as new landowners.

The protected wetlands are readily visible from Beach Road – the access route to the popular Back Beach. Shell is exploring opportunities for increasing awareness of these unique wetlands with the general public.

Two other Taranaki wetland covenants have recently been registered: those of **Carol and Amos White** and **Michelle and Richard Julian**. See *Open Space* #52 for stories about these areas.

Turakina tawa

A number of small forest remnants are scattered amongst the grazed pastures of the southern Turakina River catchment. One of these, comprising 7.4 hectares of podocarps, hardwoods and broadleaves along a narrow river valley off Morgans Road, was covenanted last year by landowners **Jan and Calvin Dixon and Reg and Hazel Thomson**, with the support of the Manawatu-Wanganui Regional Council.

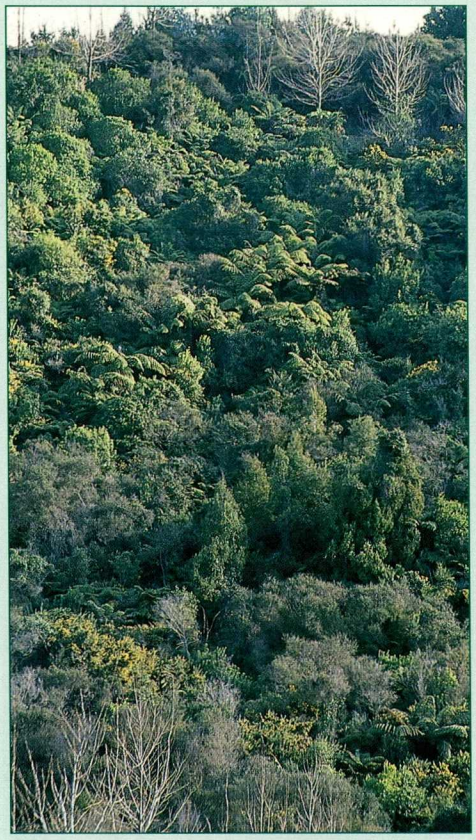
Photo: *Gail Thomson.*

Looking across the Dixon/Thomson covenant area. A creek that runs through this Valley of Trees can become a raging torrent at times.

On his first visit to the forest, Bruce Kirk was impressed by a large and very fine stand of tawa on the north side of the gorge, as well as some superb kanuka specimens. But even more impressive were the fine, relatively free-standing specimens of kahikatea and miro. He was also aware of numerous native forest birds, especially fantails, grey warblers, pukeko and kereru, who make their home there.

Sadly, Mr Reg Thomson passed away soon after the covenant was registered, but the now fenced and thriving forest is a living memorial to him.

Preserving and enhancing the delightful Rangitikei landscape



Regeneration from top to bottom on the new McKellar covenant area.

For all the right reasons, Hew McKellar is no stranger to the National Trust. Nor should he be a stranger to newspaper editors and Members of Parliament who have received bountiful correspondence from him over the years. Hew, and his wife Suse, have worked with the Trust since 1980 to protect areas of indigenous forest on their properties, and Hew has always been a strong and vocal advocate for the Trust.

Hew first approached the Trust in 1980 to protect a block of forest on the *Woodchester* property near Feilding, owned by McKellar Farmlands Ltd (of which he and Suse were directors). In 1984, a covenant was registered over 12.25 hectares of forest along Mangaone West Stream. The same year, the company purchased a property on Omango Valley Road, Hunterville, and Hew got cracking and initiated protection for large tracts of indigenous forest there, too. In all, over 60 hectares of the farm was set aside under open space covenant, and Hew has been devotedly caring for it ever since, killing possums and revegetating gaps.

Not content with that, in 2000, Hew contacted Bruce Kirk and suggested covenanting another area on the Hunterville farm. Before Bruce had had an opportunity to visit Hew and discuss the matter, Hew had already obtained funding from the Regional Council and almost finished the necessary fencing. **Hew and Suse McKellar** have now legally protected this 5.6-hectare block, of secondary mahoe forest with hardwood and podocarp regeneration, by way of an open space covenant.

Over the last two years, the local community has established the Otari Community Landcare Trust to take control of possums and *Clematis vitalba* (old man's beard) in a valley-wide programme – from Pohonui Junction to Sutherland's Bush. This is the mid-section of the Tuakina Valley. Phase 2 is fencing off the river and re-establishing native vegetation to replace the old man's beard.

Meanwhile, in the Manawatu/Wanganui region, Bob and Nancy Hagan run a family forestry business – Hagan Forestry Contractors Ltd – that specialises in forest establishment and silviculture. When Bob visited Roger and Karen Bird's Kimbolton property to plant forestry blocks, he was impressed by their two covenanted indigenous forest areas (see *Open Space* #37 & #45). As a result, Bob and his sons, **Kent and Gareth Hagan**, approached the National Trust and placed an open space covenant over a sizeable native forest remnant on their own property.

Kent and Gareth's covenant covers 11.5 hectares of podocarp and hardwood forest, which includes some fine kahikatea and tawa specimens as well as rimu, rewarewa (most towering above the canopy), hinau, totara and much more. The block bounds a large exotic pine area, which in turn is surrounded by sheep and beef farmland. A private joint venture partnership was set up to plant the pastureland in pine and a splattering of Eucalyptus. A National Trust covenant to safeguard the future of the native portion of the forest seemed to the Hagan family an excellent option.

Photo: Bob Hagan

Gareth (red) and Kent (blue), with Gus the dog, next to a kahikatea on the side of the forest.

Thanks to horizons.mw for their assistance with erecting an electric fence to protect the natives from future forest grazing that will begin in the winter/spring of 2003, and with the planting of various natives in small open grassed areas.

Visit the Hagan covenant area!

Kent and Gareth's covenant area is off Waipuru Road, not far from Vinegar Hill. The forest is a 25 minute walk from the road along a 4WD track. If you wish to visit, contact Gareth (phone 06 322 9727 or email waipura@xtra.co.nz) for permission and directions.

McNeill Bush – a tribute to four generations of farmers

Greg and Jocelyn Bennett used to live near Weber in the Hawke's Bay, where they covenanted over 33 hectares of native forest, naming it Te Whangai Bush (see *Open Space* #31 & #33). Now they farm at Tiriraukawa, and have recently covenanted a further 7.8 hectares of forest.

The new covenant area is named McNeill Bush, in recognition of the family who farmed the property for four generations. The canopy of this relatively unmodified podocarp/hardwood forest is dominated by tawa, but there is a good representation of rimu, miro, and many other species. Of particular interest is the strong kereru population (Greg and Jocelyn have seen more than 20 at a time) and the likely presence of native bats.

Looking down on the Bennett forest area.

Greg with the pride of the bush – a totara 5.3 metres round.

Visit McNeill Bush!

Although this covenant area is somewhat remote, Greg and Jocelyn welcome visitors who wish to view the forest. For permission and directions, please phone them first on 06 388 7555.

Forest on the Foxton sand dunes

West of Levin, off Hokio Sand Road, **Stella and John Felton** have covenanted a 1.7-hectare block of semi-coastal secondary forest within their lifestyle block. (The covenant was initiated by previous owner Jill Livestre, of Stika Associates, but the property was sold prior to registration.) The sand ridge forest is part of a 4-hectare area recommended for protection in the 1992 Foxton Ecological District Survey Report for the PNA Programme. The covenanted area includes regenerating pukatea and kahikatea, with ti kouka, titoki, karaka, tawa, and some dense kawakawa.

Endowment planting for Ian McKean Pinetum

Adjacent to the Ian McKean Arboretum in Renfrew Road, Rangiwahia, a 3-hectare area has been planted with Douglas fir and kahikatea to act as a backdrop and endowment for the arboretum. The endowment area has been covenanted by landowner **Elizabeth Robertson**, daughter of Flora and the late Ian McKean, to ensure that all proceeds from the plantation will be used towards management of the arboretum.

Thanks to the several nurseries that donated seedlings for the plantation, particularly Appletons, after which the endowment area is named.

An aerial view of Kateney's Bush.

Kateney's Bush

Seventeen hectares of attractive bush-clad slopes and steep-sided gorge within **David and Sharon Smith**'s Tiraumea property were protected recently by open space covenant. The vegetation is a mosaic of forest ecosystems dominated by primary totara forest – including some very old and gnarled specimens - with occasional matai and abundant manuka. Lacebark is common, especially around the stream, and there are stands of lancewood with emergent rewarewa.

Sharon and David call the forest *Kateney's Bush* after their two young daughters Katie and Courtney.

Kateney's Bush is teeming with birdlife, including riflemen and kereru, and bats may also be in residence.

Pigeon Bush, NZNFRT's largest reserve

By Ben Thorpe of NZNFRT

The **New Zealand Native Forests Restoration Trust** (NZNFRT) purchased the first of the two hill country blocks in the Southern Wairarapa from the Brandon family of Pigeon Bush Station in 1994. The 824 ha block rises steeply to the south of the winding Rimutaka Hill section of SH 2, the route taken by many hundreds of people who travel between Wellington and the Wairarapa each day. In 2001, with a well-supported public appeal for funds, the southern block of 332 ha was added to achieve the permanent protection of this important link between the adjacent Tararua and Rimutaka Forest Parks. Recently, the NZNFRT formally resolved to amalgamate the two holdings into a single reserve. Protected by open space covenants, the 1156ha 'Pigeon Bush' is the largest of the NZNFRT's 24 reserves.

Many years of grazing has largely destroyed the original forest cover of Pigeon Bush, although traces remain. On the exposed northern side, especially on the higher areas (up to 600m), a mix of gorse, stunted manuka, and bracken fern predominates. In sheltered places, second-growth natives such as five finger and kawakawa are well established, and in one place, clearly visible from the state highway, a flowering hebe makes a grand show in spring. Here, the plants have attained 3-4 metres in height and are so closely spaced as to be almost impenetrable.

Photo: NZNFRT.

Looking east along SH2 towards Featherston. Pigeon Bush is above the road.

The southern, moister slopes carry small areas of black beech forest mixed with mature kanuka, manuka, five finger and hard beech, and the patchwork effect of many years of farming is clearly seen. Gorse, up to 2.5 m high in places, will be replaced in time.

On the positive side, DoC has suggested that the locally rare plants *Teucridium parviflorum*, *Coprosma pedicellata* and *Pittosporum obcordatum* might be reintroduced to the reserve in the future.

Travelling down towards the end of Tinui Valley Road in the Wairarapa, one's senses are assailed by the highly scenic broadleaf forest on Te Mai Station. It is very prominent, being one of the few areas of native bush in the district. The highly attractive area of bush contains some fine pukatea and hinau as well as many other varieties. **Peter Batchelor** was motivated to conserve the bush soon after purchasing the land in 1987.

Left: Mr Batchelor with one of the very large and very old pukatea trees within his covenant area.

Picture: Courtesy of Wairarapa Times-Age.

Can the wood rose rise again?

Wairarapa DoC officer Tony Silbery (pictured) was in the process of checking a potential site for covenanting in the eastern Wairarapa when he was astonished by the discovery of a wood rose (*Dactylanthus taylorii*).

This rare native parasitic plant feeds on the roots of host plants and is notable for its heavily perfumed flowers. The wood rose has all but disappeared from its former North Island forest haunts, where it co-evolved with short-tailed bats, which often pollinate it. Possums and other introduced animals have brought the wood rose to the verge of extinction.

This recent discovery, whose exact location must remain secret, is good news indeed.

A room with a view

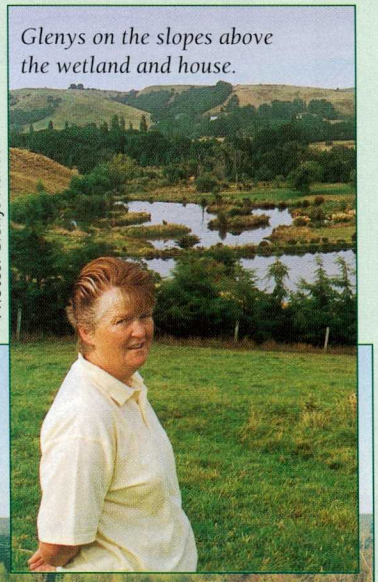
The **Hansen** family has protected a complex of lowland swamp and lakes on their property at Cootes Road, Matahiwi, 10km west of Masterton. The covenant covers 4.2 hectares of wetlands that form a sanctuary for endemic and native waterfowl. It is a breeding site for dabchicks and NZ scaup, and attracts many other species of birdlife, including grey duck, paradise shelduck, NZ shoveler, white-faced heron, pied stilt, kingfisher, fantail, tui and the occasional dotterel.

Glenys (the principal family member) runs a homestay (overlooking the bird sanctuary) that attracts many local and overseas human visitors to the property, and is becoming recognised as a key venue for tourists interested in birdwatching, with Mt Bruce National Wildlife Centre only 20 minutes drive away.

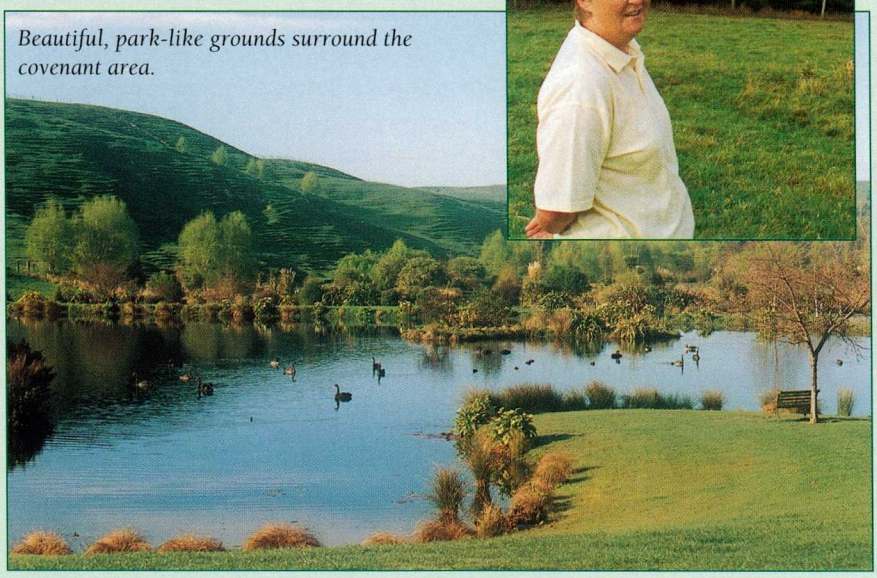
"Tidsfordriv Rural Retreat" – website: http://wairarapa.co.nz/accommodation/tidsfordriv

Discounted rates for National Trust members. Phone 06 378 9967.

Photos: Glenys Hansen



Glenys on the slopes above the wetland and house.



Beautiful, park-like grounds surround the covenant area.

Kapiti Coast Kohekohe

On the strongly rolling hill country inland from Raumati South, **Megan Dinan and Grant Simpson** have covenanted 11 hectares of kohekohe forest and manuka scrub on their Waterfall Road lifestyle block. This significant piece of bush is being well managed by its owners. Megan and Grant have put special effort into controlling possums - the main threat to the kohekohe forest - and the Regional Council recently culled fourteen feral goats.

This is the first covenant to be registered in an extensive forested neighbourhood worthy of protection. The forest can be seen east of State Highway One, from the Queen Elizabeth Park and Waterfall Road.

Duneland/Wetlands

By John Bishop

The registration of six covenants has increased the number and area of wetlands protected by the Trust in the Waikanae Beach – Te Horo locality.

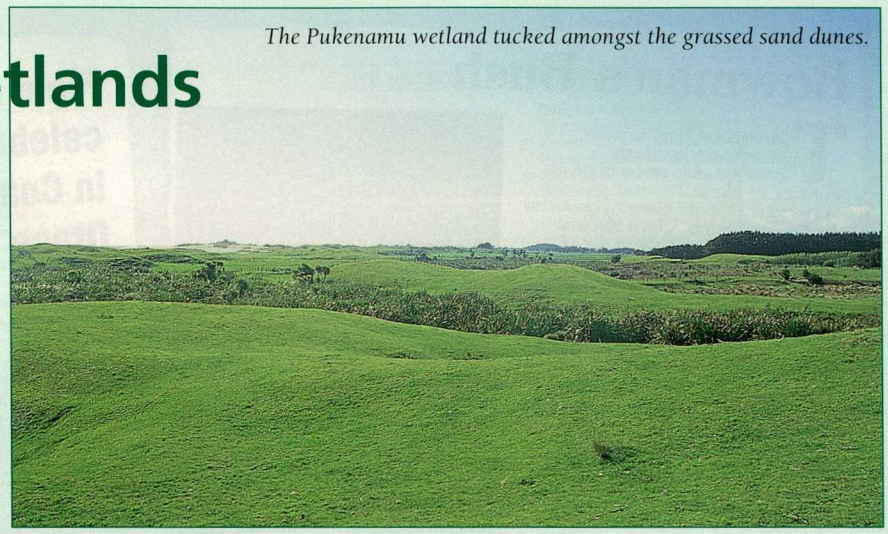
Sites such as those now formally protected have high ecological value due to the diverse habitat they provide for flora and fauna. With increasing intensification of subdivision into rural residential holdings, the remaining wetlands in this dune country are continually under threat.

The northernmost of the newly registered covenants covers 2.80 hectares of the Te Hapua Road Swamp RAP, identified in the Foxton Ecological District PNA Report. This new covenant is in the name of **Pukenamu Estates Ltd**. Previously, 11.62 hectares of the same wetland had been covenanted. A further 19.87 hectares of the same wetland/duneland complex is now also protected by covenants held by **Linda and Paul Crafar** (10.88 hectares of wetland) and **Alison and John Downer** (8.99 ha of coastal duneland).

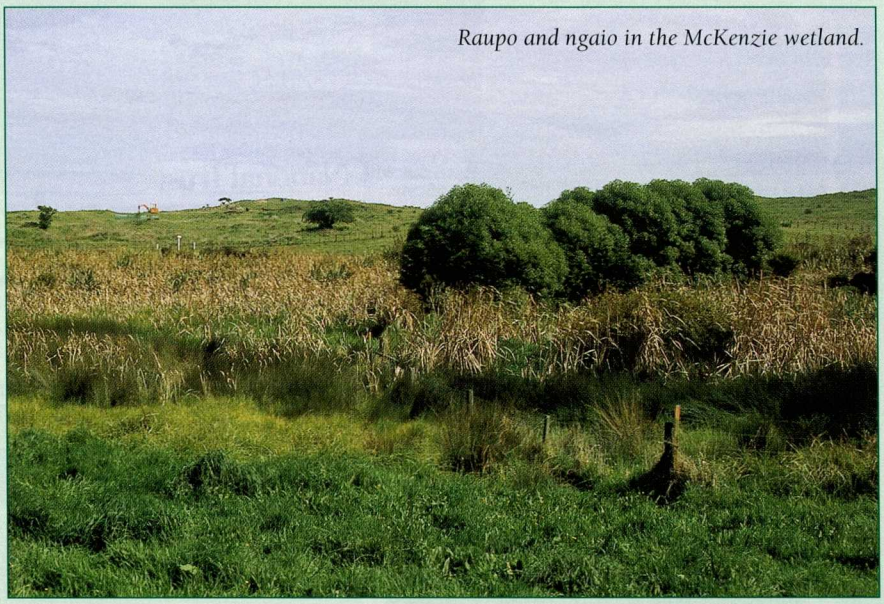
Further south, at Waikanae Beach, three additional portions of the Te Harakiki Swamp are now covenanted.

Two adjoining areas of raupo and flax, with some open water, were protected by Mr **Roy McKenzie** at the time his property was subdivided. He subsequently gifted 6.93 hectares of the wetland to the National Trust. Immediately adjacent to the Trust holding is 1.21 hectares owned and covenanted by Breams Trustees Ltd.

South of these parts of Te Harakiki Swamp, the **Smith** family (see also Open Space #47) has finalised an additional covenant to protect 20.80 hectares on their property. This new covenant has ensured a total of over 72 hectares of flax-dominated swamp and associated coastal swamp forest is protected on the Smith property.



The Pukenamu wetland tucked amongst the grassed sand dunes.



Raupo and ngaio in the McKenzie wetland.

REGIONAL PARTNERSHIP BRINGS RESULTS

Greater Wellington – The Regional Council (the new name for the Wellington Regional Council) is proud of the achievements of its joint programme with the National Trust. Since July 2000, 29 covenant proposals protecting 430 hectares have been approved, with funding assistance from Greater Wellington totalling $120,000.

"Greater Wellington has long recognised the unique relationship that QEII National Trust has with private landowners," says Greater Wellington chairperson Margaret Shields. "Supporting the protection work of the National Trust is a cost-effective way for our organisation to achieve its goals for private land biodiversity in the region."

The Council also provides biodiversity advice and intends to offer biodiversity management assistance to landowners with National Trust covenants. Greater Wellington's Biodiversity Co-ordinator (and former Trust Manager) Tim Porteous believes that such support will encourage more landowners to consider covenanting. "We want landowners in the region to enter into a covenant confident that there will be support available to them for such things as pest plant and animal control," says Tim.

For further information contact Tim Porteous on 04 384-5708.

Celebrating 2

Clippings from the T and magazines ove

Bowman's Bush

The National Trust formally recognised a significant contribution to conservation in Southland on March 23.

Chairman, Sir Peter Elworthy presented Mrs Majorie Bowman with a National Trust Benefactor Certificate at the 1.2 hectare reserve that bears her name. This marked the Trust's appreciation of Mrs Bowman's generosity, the faith she has placed in the Trust and the Trust's long term commitment to honour that.

The area has never been logged and the larger native trees are thought to be 300 to 500 years old. Trust Southland Representative, Roger Sutton, says the reserve is probably the best example of modified indigenous podocarp forest in the Southland coastal strip.

The bush was purchased by Mrs Bowman's father, the late Dr John MacDonald of Invercargill in 1920. He bought it for its natural values and fenced and maintained it until his death. Mrs Bowman then became the owner, continuing to maintain and protect the bush, in accordance with her father's wishes.

In February 1986, after moving from her home adjoining the bush to Lake Hayes, Mrs Bowman sold the area to the National Trust as one lot.

She could have sold the bush as three prime residential sites as it was the most financially rewarding option. In addition to her considerable generosity in selling the land at much less than the market value Mrs Bowman agreed to deferred payment period.

The Otatara Comm

Sir Peter Elworthy presenting Mrs Bowman with Certificate.

About 50 pe g functi cluded ies, Ro n Soc ors and esident

ovides a good source of supplejack, which is the main staple diet for kokako.

Their house is surrounded by the covenant, and they get

Covenantors Adrienne and Hugh Williams of Tikokino hosted a week-long Girl Guide Jamboree on their farm in early January. More than 2000 girls from all over New Zealand, and a large contingent from overseas, descended on the farm camping in a marvellous paddock surrounded by stately totara trees.
Despite a fair bit of rain, they packed in a solid week of activities, and many of them visited the Williams covenant, and the adjoining covenant on Kate and Spencer Macdonald's farm next door. Hunting the QE2 was a two-hour expedit up the creek which runs through the centre of the Williams covenant, with about 175 guides taking part throughout the week on both covenants.
Pictured at the end of their investigation were, from left, Maree Peterson of Auckland, Hayley Ackers and Trisha Bowering of Whangarei and Naomi D Lasenby of Waiuku. "I learnt heaps," Trisha reported, while Hayley said it "choice". Guiding the guides were covenantors Kate and Spencer Macdona Hawke's Bay Regional Representative, Marie Taylor. Photo: Marie Taylor

Field days & celebrations in Coastal Otago

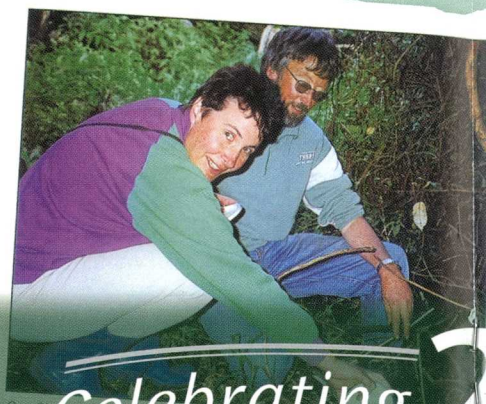
In April, approximately 25 people attended the celebration of the registration of the three OSCs beside Tomahawk Lagoons near Dunedin.

Covenantor Paul Clark talked of the integration of the protected areas into his farm management practice.

He emphasised the benefits to stock management in having the bush areas and fringes of the lagoons fenced off.

He also emphasised the fact that the areas added great landscape values and in working on his property.

Paul's partner, Sue Clark, assisted Ken Mason in reintrod curious peripatus inverte right



Sue Cl e a hawk l peripatus back into fo release was part of a practical field day ... new covenants

Photo: George Gibbs

"Even older than the tuatara"

The curious, caterpillar-like peripatus h in the flesh".
This insect-worm h

National Trust newsle

The Queen's Visit

In February the National Trust was honoured with a visit from Her Majesty the Queen to Taupo S The Queen had earlier requested that sh aspect of the Trust's work. Most of Trust protects, either by covenant or pu areas, remote from city centres, and Ta the one Trust property that was close places on the Royal Itinerary. However, propriate for Her Majesty to see it for a reason: its significance as open space.

Her Majesty the Queen escorted by Trust Chairman Ho Gandar to view Taupo Swamp.

people d and ues on th of luding Pest r and ulture

Open Space

Queen Elizabeth II National Trust
Nga Kairauhi Papa

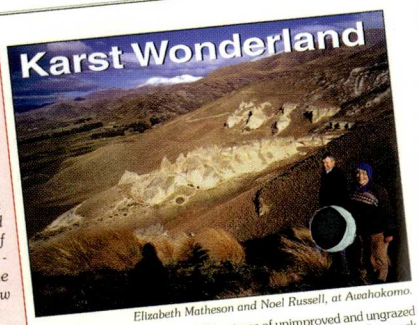
No 53, December 2001

Trust active in high country.

Visitors to the South Island high country, particularly the Mackenzie Basin - stretching from Burkes Pass in the north to Lindis Pass in the south and including the upper portion of the Waitaki River Valley - cannot help but wonder at the splendour of this area of New Zealand.

Much of the high country is under Crown control, being either held within the Crown conservation estate, leased for pastoral farming purposes or used for generation of electricity.

There are, however, portions of the high country in private ownership. On two of the private landholdings, the Trust has recently completed registration of open space covenants to protect sites of ecological and landscape significance. See this and the back page for their full stories.



Karst Wonderland

Elizabeth Matheson and Noel Russell, at Awahokomo.

This covenant protects 43.2 hectares of unimproved and ungrazed limestone outcrops surrounded by topdressed short and tall tussock grasslands and shrublands.

The covenant area forms a large part of two fenced blocks on the owner company's (**Matheson Roseneath Ltd**) property at Awahokomo, west from Kurow in the upper Waitaki River Valley.

The limestone vegetation includes a rich diverse flora of native and adventive plants. A total of 143 taxa have been recorded, of which more than 50% are indigenous and 85% are herbaceous. The limestone also has a rich fossil fauna of marine animals, both macro and micro.

The main vegetation types include mixed grassland/shrubland of the central limestone tower; dispersed rupestral communities of crevices and cracks in the limestone; dense silver/fescue tussock grassland of limestone colluvial cones; sparse to depleted silver tussock grassland on surrounding slopes; seepages on slumped surfaces; grey scrub of matagouri and coprosma on slumped surfaces; and narrow-leaved snow tussock (*Chionochloa rigida*) on upper hill slopes.

Of particular interest is the number of unresolved taxa (12), several of which are regarded as distinct and recognisable species, eg *Melicytu* cf. *alpinus*. Others are regarded as species in *ascensum*, eg *Festuc*

Continued on page

IN THIS ISSUE

Magazine of the Que

Trust Receives Lottery Support

The Trust was fortunate to be the recipient of two significant grants from Lottery Grants Board in 1996.

The first totalling $22,500 was to assist with the removal of wilding pines from the Trust's 177 hectare property at Miro Bay in the Marlborough Sounds.

A contractor was engaged and during August and September a total of 815 trees felled and 210 seedlings pulled.

Regeneration of a native forest cover, already well advanced in much of the property, will be enhanced as a result of the project.

The second grant received totalled $100,000 towar establishment of the Arc Island Ecological Centre article page 3).

The National Trust is most

Trust Chairperson Maggie Bayfield, receiving a replica of the Lottery Grants Board cheque from Internal Affairs Minister, Hon. Peter Dunne in August 1996.

25 YEARS

Trust's newsletters r the past 25 years.

Harwood Lookout

The A.D. Harwood Lookout on the top of Takaka Hill, Nelson, was officially opened by Hon. L. W. Gandar, then Trust Chairman. The lookout is in memory of the late Arthur Dick Harwood, former owner of the property where it is sited. The land is now owned by Mr and Mrs David Harwood, who run a sheep and cattle farm on the 12,000 hectares of river flats in the Upper Takaka Valley, the steep west side of Takaka Hill and the rolling but very rocky country at 900m sea level on the summit. The tone outcrops are known as karst topography and are formed by the action of water on the limestone. Karst landscapes are characterised by disappearing rivers, caves, sink holes, and curiously fluted rock outcrops, all of which occur on the Harwood's lar at Takaka.

An open space cov hectares of this rock

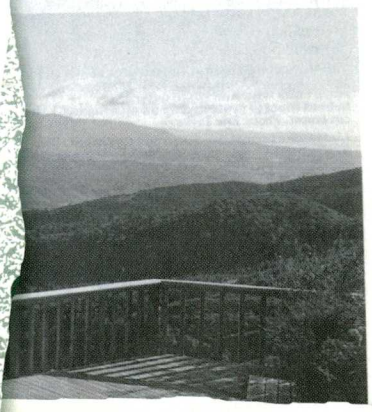
Harwood Lookout, Hill, looking down towards Golden B Mountains in the dramatic views m for locals and visi

rugged landscape, with rocky limestone outcrops interspersed with native shrubs and small stands of beech forest. A second open space covenant protects the 2 hectares around the lookout.

The construction of the lookout, co-ordinated by the National Trust, involved many local people. The Harwood family contributed to the cost uction, Baigent Forest plied the timber, il through nd he and

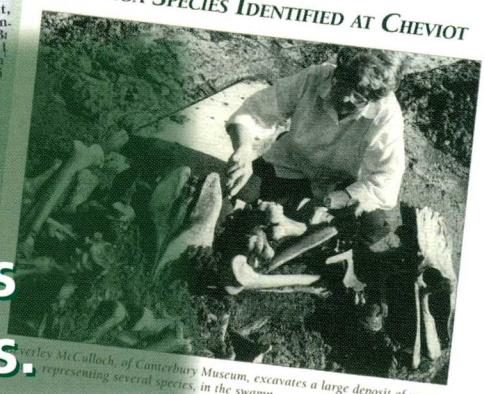
built by a local builder, Rex Bolwell. The interpretation panels provide the viewer with an interpretation of both the immediate landscape, of outcrop and vegetation, but also of the wide landscape beyond.

The Harwood Lookout is an example of "ecological signposting". This idea is based on the division of New Zealand into ecological regions and districts. An ecological district is an area of the countryside where geographical, topographical, climatic, and biological features together make up a characteristic landscape. An ecological region is a group of adjacent districts with clearly related characteristics. The Harwood Lookout



VEMBER 1994

Five Moa Species Identified at Cheviot



verley McCulloch, of Canterbury Museum, excavates a large deposit of moa representing several species, in the swamp.

Five different species of moa have been identified from the bones found in Ira and Yvonne McNabb's Cheviot moa swamp. Their recently registered 20 hectare covenant over the swamp on their Treasure Downs is an important site because real differences can be seen in the moa fauna when there are more than 30 birds present - and few sites contain that many birds.

Just looking at the paddock isn't

ENGA

at present engaged in negotiations with the uthority, Waitemata City Co Department y and the Waitakere Ranges F Society a can be reached for the jo property at Bethells Beach

a property is thought to be an adjoining sand dune ar ty Council, and a wetland d Bird Society.

contains a wide variety of une impounded fresh water Auckland.

the Board's attitude until the Trust

Taupo Swamp Spill

On Thursday March 14 a fully loaded BP tanker carrying 27,000 litres of jet fuel ran off State Highway One into Taupo Swamp. The tanker was on a trip to Ohakea Air Force Base.

One of the tanker's 4000 litre compartments ruptured in the accident and 3000 to 4000 litres of fuel leaked into the Swamp.

ust helps in Waipoua Millennium Forest

Left: Ecologist Stephen King shows volunteer planters how to do it, with National Trust boa chairman, Sir Paul Reeves, looking on.
Above: Tree planters move on to the new cov (Photos: Malcolm Pullman)

Tane Mahuta seedl planted at opening

The National Trust is proud to be assc Waipoua Forest Trust in providing cove for land that has been acquired to establi Millennium Kauri Forest.

The Forest Trust has received funding the NZ Lottery Grants Board for its

wi Alert at Aroha

y night is day night whe ver one is. eryone who could help was btainable - simply out or for the weekend. The kiwi ared to be OK so we let her om a cardboard inside the to Aroha.

e following morning, I spent al hours searching the sides and likely places in the ve - all to no avail, well, no kiwi anyway. I listened at ate for three hours on the ing two nights to determine er there was a lonely e calling for her mate. were no unusual calling patterns so I assume that a kiwi wasn't run over in the first place. I certainly hope that is the case, as it would have been the eighth killed on the road to Opito Bay (from Kerikeri) since Sept 1998 - all adults, so bad news for future kiwi numbers in the area.

Anyway, that was our Friday night at Aroha. Oh, and drive carefully if you are passing through a kiwi area, and remember that kiwi don't look anything like possums!

Greg Blunden,
Manager Aroha Island Ecological Centre

the most comprehensive and interesting in New Zealand, with micro-climates that allow tropical succulents and alpine subjects to blend harmoniously within its boundaries.

Robert Houston Memorial Reserve

A gift, through the Trust to the people of New Zealand, has been accepted from Mr R. A. Houston of Hamilton in memory of his son.

The block of 255 ha. in regenerating bush near the Waitomo Caves, adjoins the Mahoe State Forest to the south and is otherwise surrounded by land previously farmed by the late Robert Houston.

Kurituni Stream runs through the Reserve. Birdlife is abundant. Young rimu, totara, matai and miro are growing well beside stands of Prince of Wales Feather fern, King Fern and a groundcover of mosses, filmy ferns, sedges and woody seedlings.

The existence of a Kokako population nearby has been confirmed by the Wildlife Division of Internal Affairs. The Robert Houston Reserve is a significant area in a wildlife corridor linking the reserves and forested parts of a region under pressure by farming development.

Waimapihi Wetland, Pukerua Bay

By Tim Park

Looking south over part of the toetoe/raupo wetland.

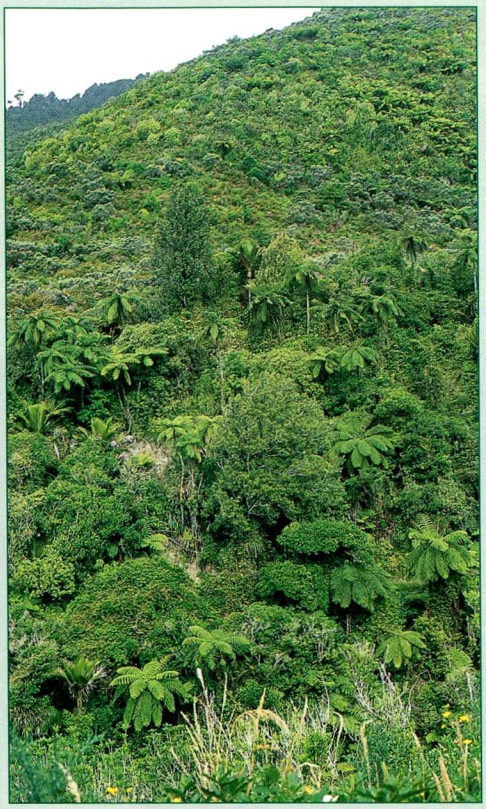
The Waimapihi wetland is one of the few protected wetlands in the Wellington region, where less than 10% of the original extent of wetlands remain. As a result the significance of this area is quite high. The spring fed wetland is made up mostly of raupo and toetoe but is bounded by a small podocarp-broadleaf forest and areas of regenerating manuka scrub. The area also contains various *Carex* spp. and cabbage trees. **The Kay Family** has owned this land for generations and is considering protecting more natural areas on its property with the Trust.

Simon and Helen Moody of Whiteman's Valley have a new 6.3 ha covenant on their property. A variety of landforms and disturbance regimes have influenced the diverse ecosystems on their property. Essentially there are three main ecosystems that make up the nature of their block. The majority of the area is a mixed red and hard beech and tawa dominant canopy. The sub-canopy is mainly mahoe with some kamahi. Occasionally there are magnificent specimens of what would have been the original beech forest trees. As expected with such forests, the understory and ground cover here is limited to those species that can tolerate very low light. There are perhaps only a few examples of this scattered through the forest but they are so visually dominant that their presence is worth noting. The other type is open rewarewa/kanuka forest on dry spurs where the understorey is sparse.

Otaki assets

By Charlotte Gordon

Twelve years ago, **Robert and Dawn Hirschberg** bought 6.3 ha of land on the hills overlooking Otaki. Their covenant covers 1.8 ha of near-vertical slope between two plateaus. The vegetation has been rapidly regenerating to bush, which has added considerable value to the property. "A lot of people want to have a piece of bush on their land, but we were still surprised that it added so much value," says Robert.



Protected regenerating forest in the Otaki Gorge.

At the same time as Dawn and Robert were buying their property, **Andrew and Margaret Streeter** were buying a more extensive block slightly further up Otaki Gorge, just outside the Tararua Forest Park. They had the intention of milling the rimu, but what started out as a business venture, turned into a conservation project. "We fell in love with the land," says Andrew, "so we decided to camp there instead." Summers spent in the bush, sometimes for up to eight weeks at a stretch, and walking among thousand-year-old rimu, gave Andrew and Margaret a new perspective on the importance of preserving the land.

The main purpose of the covenant was to protect the views of the bush from some potential house sites on Otaki Gorge Road that look down onto the land. Some 26 hectares of the 482-ha property has been covenanted, but Andrew says this is only the beginning. "It is not a difficult process, and we will add more to it when we can."

Tim Park is working with other landholders further downstream to protect the natural values of their properties too.

Covenants Update

As at 15th October 2002, there were 1649 registered open space covenants totalling almost 58,000 hectares. The breakdown by Land District (which differs from our Regional Representatives' boundaries) is as follows:

Region	No. of Covenants	Area Protected (ha)
North Auckland	369	6436
South Auckland	369	10520
Gisborne	78	9107
Hawke's Bay	91	2610
Taranaki	100	2535
Wellington	274	11960
Marlborough	17	693
Nelson	77	2177
Westland	6	180
Canterbury	116	4347
Otago	61	5363
Southland	94	2015
TOTAL	**1649**	**57,943**

Everything's chirpy in Lower Hutt

By Charlotte Gordon

Phillip and Joyce Waddington believe it was fate that led them to their 22ha block of land out the back of Stokes Valley. For years they had been looking for a piece of bush to protect, but it wasn't until they were telephoned accidentally by a land agent on behalf of a developer (looking for another Waddington) that they found it. "He asked if I had sold any land recently, or was looking to buy. I said I was, and so he told me about this block". It includes one of the few remaining examples of swamp kahikatea and old-growth beech forest that once covered the Hutt Valley. By buying the block, the Waddingtons rescued it. "It was going to be drained and subdivided," says Phillip.

Seven years after their purchase, the forest is flourishing. Tui and kereru are just two of the bird species that are thriving in the block, which is now almost free of predators. Phillip has used the area to test the stoat, possum and rat traps that he has developed, but they have been so successful that he can no longer test them on the block.

Phillip and Joyce have named their block *Te Oranga Whenua* - the Healing Land. "We believe that the land can heal itself and it can also heal others," says Phillip.

Just south of the Waddington covenant area is **Linda Mead**'s newly covenanted bush block in a steep valley above Naenae.

The 2-hectare block is surrounded on three sides by a large Hutt City Council reserve, but unlike the reserve, the covenanted forest includes mature pukatea and silver beech trees in the canopy and provides a valuable seed source. Linda is thrilled at how quickly the remainder of the area is regenerating. "A stand of self-sown pines was felled two years ago and was left lying. The logs provided shelter for young natives and the hillside is again green. Possum control has been carried out for the last five years and calls of tuis and bellbirds now ring out across the valley."

Prolific regeneration of ferns and nikau in the Mead covenant.

Recently registered covenants

A summary of covenants registered between 20th June and 15th October 2002 that have not yet been reported in Open Space.

Covenantor	Area (ha)	Open space type	District
Addens	64	Semi-coastal kanuka forest	Gisborne
Finlayson	3	Lowland modified primary podocarp forest	Kaipara
Gardner	3	Lowland swamp	Clutha
Heayns	4	Lowland secondary podocarp forest remnant	Ruapehu
Langdon	8	Restored wetland	Ashburton
McKay	12	Lowland podocarp/hardwood	Kaipara
Maly	0.4	Lowland forest remnant	Whangarei
Murray	1018	Montane tarn wetland	Mackenzie
Palmer	1	Lowland hardwood forest	Masterton
Ramsden	23	Primary coastal broadleaf forest	Tararua
Rumball	0.3	Lowland wetland and forest remnant	New Plymouth
Te Ata-i-rangi Kaahu	31	Broadleaf forest	Otorohanga
Tomlinson	6	Lowland kanuka forest	Gisborne
Williams	7	Lowland secondary riparian podocarp forest	Central Hawkes Bay

Long Gully Bush Reserve

Native regeneration, including mamaku, on the face below Long Gully Road.

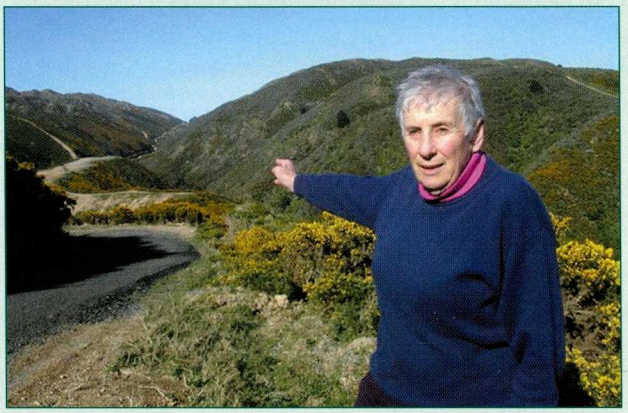
Acquisition and covenanting of the 50-hectare Long Gully Bush Reserve, in Karori, has been an initiative of the **Wellington Natural Heritage Trust Incorporated**, which has a strong commitment to the protection and enhancement of the forest.

The block includes a viable stand of representative secondary coastal forest growing in a district that has suffered an appalling history of poor land management, including total removal of original forest, overgrazing, repeated fires, soil erosion, and weed and pest invasions. The native vegetation is secondary forest and scrub dominated by mahoe and black tree fern on the lower and middle slopes, and mahoe and wineberry on the valley floors. The presence of fruiting miro and nikau are of particular value. The upper slopes include some rangiora. Stumps of large trees are visible at the highest points of the property, and a couple of decaying stems of large trees (possibly hinau) are present. Regenerating specimens of rimu are present in the secondary scrub, and some secondary tawa occur close by.

The age of the secondary forest is unknown, but much of it probably dates from the 1940-1960 period, based on the size of the trees. However, a map of the area dating from the 1940s shows that native forest was present at this site then and some of the larger trees in the valleys and near to Silver Stream are probably much older than 50 years.

The condition of the understorey is variable: in some places, goats have eaten all seedling and sapling growth, at other places there is a better assemblage of plants such as rangiora, kawakawa, hangehange and kanono. Altogether, 110 native vascular plants were recorded in a botanical survey of the block.

Bird life includes kereru, tui, shining cuckoo, grey warbler, fantail, silvereye and harrier. The adjoining Karori Wildlife Sanctuary is home to a wide range of native wildlife, including kiwi and saddleback which have both been reintroduced there. The covenanted forest will provide an extension of habitat for these species.



W.N.H. Trustee Barbara Mitcalfe points out Long Gully itself, which is part of the Wellington Fault line. The Wellington Fault is one of the two main active earthquake faults in the Marlborough-Wellington shear fault zone. The old airstrip, in the middle distance, is on a land block raised by fault movement.

Extension of Pauatahanui – Hutt Valley highway (for birds)

Initiated by Lorraine and Brent Cottle ten years ago, but put on hold whilst the property changed hands twice, this covenant over 1.7 hectares of indigenous forest at Judgeford has had a long gestation period. Late last year, just before the property was sold a third time, then owners Dean Hoare and Brian Boyer finalised the covenant, motivated by purchasers **Victoria and Keith Bowen.**

The tawa and hinau dominated forest lies on the eastern side of Mulherns Road. Although small in size, the rarity of forest remnants in this locality makes this new covenant area very valuable. It links with other protected pockets in the district and contributes to a bird access way between the Hutt Valley and the Pauatahanui-Paekakariki Hill Road areas.

The protected bush is an important habitat for native wildlife in this highly modified landscape.

Bed and breakfast in the bush

A luxurious soak in the bath; a deep and restful slumber; a delicious home-cooked breakfast served in the morning sunshine; and best of all, a walk through native forest, accompanied by kereru and waxeyes – these are the delights that await bed & breakfast guests at Bridget and Jim Austin's Korokoro home.

Bridget and Jim Austin's house featured recently in the Home section of The Dominion Post, but from the National Trust's point of view, the *pièce de résistance* is the 0.3-ha block of native hardwood forest, which was covenanted in 1999, and is easily accessible via well-made walking tracks. Visitors will note the strong regeneration of kawakawa, ribbonwood and karaka under the mahoe and kohekohe canopy.

Being in a residential area, there is a limitless source of weed species ready and able to colonise the bush, so Bridget and Jim have to be vigilant for unwelcome intruders. Sycamore has proved to be a particular problem: at least one very large tree has been cut down and Bridget is on the lookout to remove seedlings.

Open Space

welcomes contributions from Trust members.

If you have a question, suggestion, problem, story to share, comment on a previous article, book review, or whatever, send it to Sue Perry at the Trust's Wellington office.

email sperry@qe2.org.nz

Ecosystem Services: Benefits Supplied to Human Societies by Natural Ecosystems

By Gretchen C. Daily et al.
(Permission received from ESA to reproduce this item)

Summary

Human societies derive many essential goods from natural ecosystems, including seafood, game animals, fodder, fuelwood, timber and pharmaceutical products. These goods represent important and familiar parts of the economy. What has been less appreciated until recently is that natural ecosystems also perform fundamental life-support services without which human civilizations would cease to thrive. These include the purification of air and water, detoxification and decomposition of wastes, regulation of climate, regeneration of soil fertility, and production and maintenance of biodiversity, from which key ingredients of our agricultural, pharmaceutical, and industrial enterprises are derived. This array of services is generated by a complex interplay of natural cycles powered by solar energy and operating across a wide range of space and time scales. The process of waste disposal, for example, involves the life cycles of bacteria as well as the planet-wide cycles of major chemical elements such as carbon and nitrogen. Such processes are worth many trillions of dollars annually. Yet because most of these benefits are not traded in economic markets, they carry no price tags that could alert society to changes in their supply or deterioration of underlying ecological systems that generate them. Because threats to these systems are increasing, there is a critical need for identification and monitoring of ecosystem services both locally and globally, and for the incorporation of their value into decision-making processes.

Historically, the nature and value of Earth's life support systems have largely been ignored until their disruption or loss highlighted their importance. For example, deforestation has belatedly revealed the critical role forests serve in regulating water cycle – in particular, in mitigating floods, droughts, the erosive forces of wind and rain, and silting of dams and irrigation canals. Today, escalating impacts of human activities on forests, wetlands, and other natural ecosystems imperil the delivery of such services. The primary threats are land use changes that cause losses in biodiversity as well as disruption of carbon, nitrogen, and other biogeochemical cycles; human-caused invasions of exotic species; releases of toxic substances; possible rapid climate change; and depletion of stratospheric ozone.

Based on available scientific evidence, we are certain that:

- Ecosystem services are essential to civilisation.
- Ecosystem services operate on such a grand scale and in such intricate and little-explored ways that could not be replaced by technology.
- Human activities are already impairing the flow of ecosystem services on a large scale.
- If current trends continue, humanity will dramatically alter virtually all of Earth's remaining natural ecosystems within a few decades.

In addition, based on current scientific evidence, we are confident that:

- Many of the human activities that modify or destroy natural ecosystems may cause deterioration of ecological services whose value, in the long term, dwarfs the short-term economic benefits society gains from those activities.
- Considered globally, very large numbers of species and populations are required to sustain ecosystem services.
- The functioning of many ecosystems could be restored if appropriate actions were taken in time.

We believe that land use and development policies should strive to achieve a balance between sustaining vital ecosystem services and pursuing the worthy short-term goals of economic development.

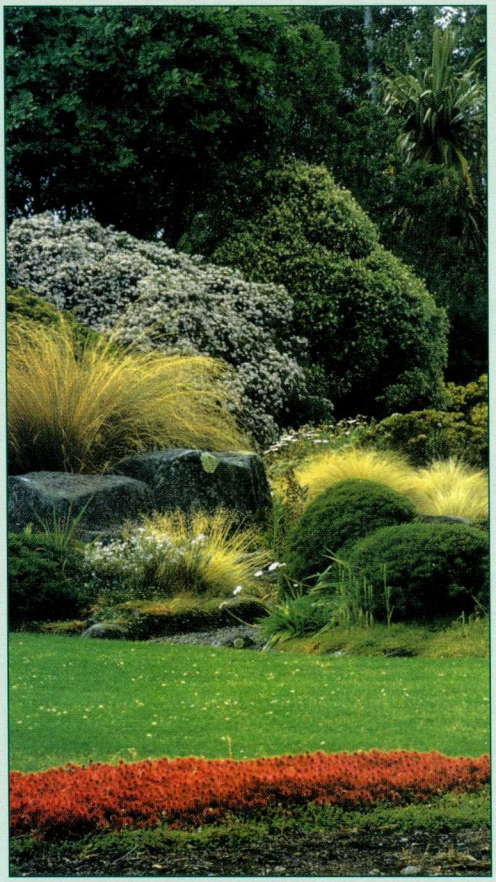
Source: "Issues in Ecology", found on the Ecological Society of America website – http://www.esa.org

BEATING AROUND THE BUSH

TIPS AND TECHNIQUES FOR NATIVE ECOSYSTEM MANAGEMENT

Planting natives in your garden and covenant

Tim Park



The Native Garden is a valuable reference/coffee table book written by Isobel Gabites and lavishly illustrated in wonderful colour photographs by Rob Lucas. It is a fantastic guide to how you can utilise native plants to enhance your property.

Planting natives in your garden may enhance the connection between the rest of your property and your covenant area. This can encourage local wildlife to come closer to your dwelling by providing more habitat for them. The book discusses how the associations of native plants in the wild can offer blue prints for the garden, and helps us translate the big picture into small garden settings that echo the natural palettes and distinctive character of the landscape in your locality.

The book identifies key species for many different localities, and delves into the issue of ecosourcing: many covenantors are actively undertaking restoration, and ecosourcing is a very important consideration when planning revegetation or even when doing ad hoc plantings. Please discuss options for sourcing plants in your locality with your regional representative.

Planting non-local natives can create an unwanted legacy for landowners and the Trust in the future. Non-local natives, such as puriri (*Vitex lucens*) in Wellington, lacebark (*Hoheria populnea*) in the South Island and lower North Island, and rangiora (*Brachyglottis repanda*) around Dunedin, have become weedy enough to cause concerned locals much distress. Some people may think we are being purists, but we are trying to maintain the ecological integrity of the areas we protect in the long term. The special nature of the local ecosystems that make New Zealand unique is valued by the Trust.

For those interested in ecosourcing, Waitakere City Council has developed a comprehensive guide.

The Native Garden is published by Godwit and should be available from your local bookstore or Manaaki Whenua Press.

Trust receives award for Aroha

On the 22nd November, Trust Director Dick Ryan and Aroha Island Ecological Centre Managers Gay and Greg Blunden were proud to receive a Northland Conservation Award on behalf of the National Trust. The award recognises the role of the Ecological Centre in raising public awareness of the need for habitat protection for threatened species. In making the award, the DoC Conservator described Aroha as "a safe anchor in what can be truly turbulent conservation waters".

Precautions for a warm windy summer ahead

Those involved in fire control are dreading the start of another fire season. For those with protected forest or scrub on their properties, now is the time to plan for the upcoming fire season, which promises to be a windy and hot one. This involves identifying key risk areas on your property and establishing preventative measures to reduce damage.

The most common cause of forest fire is human misadventure. This is usually from discarded cigarettes or sparks from machinery or vehicles, but also from out-of-control burns.

Reduce risk

Minimise highly flammable weeds like gorse adjacent to protected areas, especially along roadsides. Prevent unwanted access during the fire season by securing gates (dumping and setting fire to stolen cars in private forests is becoming more and more common). However, ensure that your gates are usable in an emergency situation, as easy and efficient access to protected areas and strategic water supplies is also important. Keep a fire extinguisher handy when using machinery.

Let's not see this on any covenant areas this summer.

What you should do:

- Write up an action plan to be ready for a fire.
- Identify or create a local strategic water supply.
- Contact your neighbours if they have similar risks on their property and work together.
- Keep your eye on your local fire sign to keep up to date with the danger levels.
- The most important thing of all: in the event of a fire – DIAL 111.

Asset or Liability?

Getting the best from your covenant fencing.

Part 4: No Strain, No Gain

Wire

The most common wire used for fencing in NZ is 2.5mm high tensile wire. This wire is manufactured from a medium carbon high strength steel coated with zinc to resist corrosion. 2.5mm HT wire has largely replaced 4mm mild steel wire (the traditional 'farmer's friend', No. 8 wire). The stretch and breaking strain are very similar for these wires.

One of the major advantages 2.5mm HT wire has over 4mm wire is the way it behaves when stretched. When a wire is tensioned, it stretches in two distinct steps. The first step is the elastic range, where, if tension were removed the wire would return to its original length – it acts like an elastic band. It will do this time and time again without any permanent effect. However, if it is loaded past its elastic range (or "yield point") into the plastic range, it is now damaged permanently and will not return to its original length. In normal use, wire should never be loaded beyond its yield point. To obtain the best results, correct wire tension is most important.

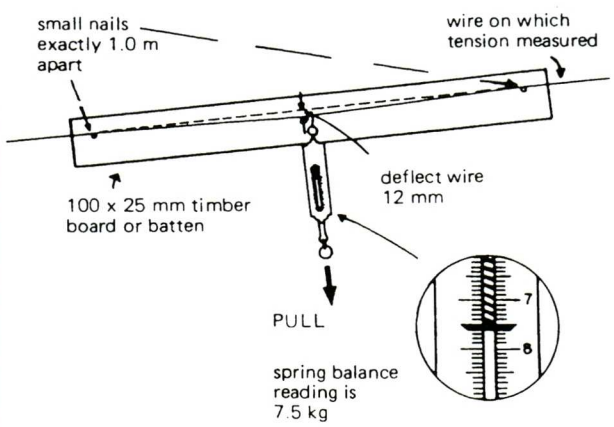
Wire Tension and Measurement

The recommended tension in a conventional stock fence is 150 kgf *, irrespective of the wire used. This figure has been chosen to provide stock-holding characteristics and does not unnecessarily load the components of the fence, particularly the strainer assemblies. Similarly, the recommended tension for electric fences is 90 kgf.

Wire tension cannot be "felt" or guessed accurately and therefore must be measured using a wire tension meter. Although commercial models are available, this very important piece of fencing equipment is both simple and cheap to make. You need a piece of 100 x 25mm timber just over 1 metre long, 2 small nails and a spring balance. See Figure 1. Bang the nails into the wood exactly 1 metre apart, and rule a straight line between them. Make a mark 12mm (at right angles) from the centre of the ruled line.

Wire tension is measured by pulling the spring balance until the wire has deflected 12 mm. The tension (in kgf) then equals the reading on the balance (in kg) multiplied by 20. Therefore, as 2.5mm HT wire should be tensioned to 150 kgf, the reading should be 7.5 kg.

Figure 1: Wire Tension Meter



* **Note**: The unit used here for load and tension is kgf (kilograms force). In the SI metric system, Newtons (N) is the unit for force. To convert kgf to N, multiply by 9.81.

Source: Farm Technical Manual, edited by Peter Fleming. Copies available from "Manual Sales", Applied Management & Computing Division, PO Box 84, Lincoln University, Canterbury. This manual contains an extensive range of technical information about farming and forestry.

Weed profile: Madeira vine (Anredera cordifolia)

By Tim Park

A destructive plant pest, which is very difficult to control, threatens to get established nationwide. Help prevent this plant spreading along our coastline, in our gardens and in our forests.

A smothering vine

Madeira vine is a climbing plant that has the potential to smother large areas of our country. It is capable of covering trees up to 30m high, and will eventually cause the death of any host plants.

It can establish in most frost-free areas, such as along the coastline, and particularly affects disturbed forest areas, forest margins, gardens, hedges and coastal gullies.

It is also known as mignonette vine, or *Boussingaultia baselloides*. Its flowers are occasionally referred to as 'lambs tails'.

Difficult to control

Madeira vine does not spread quickly. However, when established it is very difficult to control.

Any rhizomes left in the ground will sprout new growth, and the plant carries aerial tubers on its stems that readily fall off and sprout as well. Stems will also occasionally resprout.

It is already a significant problem in Australia, the Pacific and in parts of the North Island.

What to look for

The most distinctive features of Madeira vine are the knobbly, aerial tubers that form on the stems. When disturbed, they readily drop off onto the ground.

Other characteristics of the plant:

- Leaves are fleshy, rounded and heart-shaped - typically between 2-11cm long.
- Flowers are small, white and fragrant. They appear on drooping racemes, from January to April.

- Stems are reddish and slender. Madeira vine typically grows in a climbing manner, twisting around host trees.
- Roots have fleshy rhizomes. They can form a large mass up to 30cm long.
- No fruit formed.

Physical Control

Remove every ground tuber and stem tuber to a very safe place. This will require removal of every scrap of vine from the trees above as well.

Disposal

The preferred option is to burn all tubers on site. If removal is necessary be sure not to drop any bits on the way. Please ensure the utmost in care is taken if burning or removing vegetation. Alternatively the roots and rhizomes can be placed in black plastic and left to cook in the sun.

Chemical Control

Escort®, Roundup® and Pulse® mixture applied to plants and tubers as soon as green sprouts have two or four leaves on each sprout.

- 50g/100 litres Escort®
- 2 litres/100 litres Roundup®
- 200 ml/100l Pulse®
- Marker dye

Recommended Approach

This vine is very hard to kill with herbicide because of its tubers. Plants will be defoliated and the nearest tuber killed but will resprout from the next section of the tuber. Remove every tuber from the trees and ground. Spray as above and monitor closely for regrowth and then spray again. It is important that the second and subsequent sprayings be just as soon as regrowth from the tuber has sufficient leaf to convey herbicide to the tuber. If the leaves are allowed to grow for a longer period new tubers will be formed underground.

Contact

Please consult your Regional Representative and your local regional council if you believe you have Madeira Vine on your property as it is classed as a nationally banned pest plant. They may be able to help with the control effort.

Sources: The New Zealand Pest Plant Manual and www.marlborough.govt.nz/regulatory/plants_main.asp

Thanks to Landcare Research for allowing us to reproduce the following article from its 2001 Research Report. Part 1 was published in Open Space #55.

ECOSYSTEM SUCCESSION

Part 2: Succession under gorse & kanuka

The loss of key species, such as when a weed completely replaces the dominant native species, often has a major impact on the ecosystem function of the plant communities. The introduced shrub gorse (*Ulex europaeus*) has replaced the native tree kanuka (*Kunzea ericoides*) over many thousands of hectares of New Zealand. A small multi-disciplinary group led by Peter Williams has been examining 14-year-old stands of kanuka and gorse near Nelson, on similar sites with the same soil types. Comparisons were made at several levels—from the soil up to the birds in the branches. (Work on the insects is continuing).

Kanuka soils were less leached than soils under gorse. Although gorse is a legume that fixes atmospheric nitrogen, this was not reflected in greater levels of soil nitrogen. A great deal of the fixed nitrogen is bound up in the woody stems and crowns, and is released only when the 15–30 year old crowns collapse and decay. Eventually kanuka also collapses and decays releasing nutrients, but this takes nearer 100 years.

Gorse litter is much higher in nitrogen that kanuka litter, but the latter has more calcium and potassium. Kanuka has much higher levels of phenolic compounds that usually slow litter decomposition. However when litter was placed out in mesh bags, it decayed faster in kanuka than in gorse stands. This agrees with the thin layers of litter commonly found under kanuka and the thicker layers under gorse, and it seems likely that factors other than chemical composition are at work. Numbers of soil microfauna were similar, although some groups, particularly copepods, were more abundant in gorse. Moisture may be greater under the kanuka, where the crowns are intact, compared with the gorse where crowns are collapsing after 14 years allowing the sun and wind into the stands. In the early years, there is no evidence that the nitrogen fixed by gorse has any over-riding effect on vegetation succession.

There were major differences in the numbers and types of animals and birds. Ship rats and possums existed in low numbers in both kanuka and gorse, whereas mice were far more common in gorse. The fallen gorse crowns provide shelter for mice, and the gorse seeds and associated gorse seed weevils provide an ample food supply. On the other hand, endemic native birds (bellbirds, brown creepers, fantails and grey warblers) were more common in the native kanuka, probably because it was taller and the flowers provide nectar (gorse flowers do not). The ubiquitous silvereye and introduced species such as California quail were more common in gorse than in kanuka. "Seed rain" from wind and fruit-eating birds was trapped throughout the stand for over a year. The species composition of seedlings beneath the stands closely reflected this seed rain, which in turn reflected the adjacent vegetation. In the kanuka stands, seedlings tended to be browsed by rabbits and hares. Under the collapsing gorse canopy, seedlings have faster growth rates and higher survival rates as there was more light and they were protected from grazing animals.

Overall, it appears that the different morphology, structure and stand dynamics of the gorse and kanuka stands have the greatest influence on ecosystem and succession processes.

Ref: Williams, P.A., Karl, B.J., 2002. Birds and small mammals in kanuka (*Kunzea ericoides*) and gorse (*Ulex europaeus*) scrub and the resulting seed rain and seedling dynamics. *New Zealand Journal of Ecology* 26 (1): 31-41.

Contact: Peter Williams (Nelson), **email:** WilliamsP@landcare.cri.nz

Watch this space!

During the summer of 2002/03, Peter Williams, together with Susan Timmins and John Sullivan of DoC, will be continuing his studies into the differences in succession between gorse and kanuka stands. He expects the results of this research to be published around August/September 2003.

AROUND THE COUNTRY

Patoka neighbours win Norsewear Conservation Award

By Marie Taylor

Three neighbouring farming families associated with the National Trust won this year's prestigious Norsewear Conservation Award in Hawke's Bay.

Pauline and Bruce Gloyn, Judy and Mark Nelson, and Michelle and Roger Thomsen all worked together towards a common goal.

The project started in 1995, with Michelle and Roger Thomsen beginning to fence and protect all the gorges on their farm. It was a team approach between the Thomsens, the Hawke's Bay Regional Council and the National Trust. They planned on two kilometres of new fence a year, building on previous work of Roger's parents. The gorge sides, which had been previously fenced, were thick with bush, preventing stock from falling over the edge, and also protecting the water quality by preventing stock access.

Then their neighbours – Bruce and Pauline Gloyn, whose own gorge area is now completely surrounded by the Thomsens, and upstream, Judy and Mark Nelson – came on board.

The fencing project was finished a year or two ago, and altogether eight kilometres of the Opau and Waipuna Streams are fenced off on both sides. Covenants have been registered over 42 hectares of bush on the Gloyn and Nelson properties (see *Open Space* #54), and covenants are in progress to secure a further 102 ha on the Thomsen and Nelson properties. Goats have been shot out, and possums controlled.

Their work has been contagious, with a great deal more protection going on in the district.

Snell's Bush Gift

By John Bishop

In 1998, Wally Snell, a long-time landowner on hill country at Urquhart's Bay on the eastern side of Whangarei Harbour, offered to gift to the Trust a bush-covered portion of his farm. The Trust Board agreed to accept the offer. Before formalities could be finalised, Mr Snell died, in March 2000. His wife Anne and his family asked that Wally's intentions be honoured.

Transfer of title to the 7.36-hectare block of coastal pohutukawa broadleaf-podocarp-kauri forest to the Trust occurred in September of this year. The Trust is very grateful indeed to the Snell family for this gift.

Though relatively small in area, the block is strategically located near Bream Head. The vegetation cover on the land adjoining Snell's Bush to the east, north and west is a continuation of the same forest type. In this locality, the forest is regarded as being of national and international importance due to its diverse flora and value as habitat for threatened native bird species.

Due to Snell's Bush being "landlocked", public access is not generally available. A management plan for the block is being prepared which will include policies on public access and use.

Snell's Bush with Mt Manaia in the background.

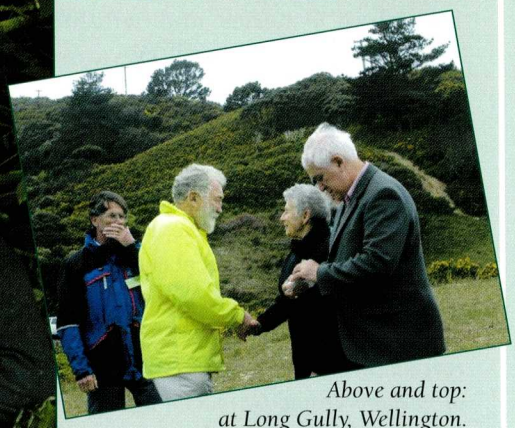
Native trees planted to beautify and protect Otago river mouth.

Photo: Otago Daily Times.

Regional Rep Helen Clarke and Steve Milton (pictured) plant a totara on the riparian, coastal estuarine margin on the north bank of the Kakanui River in North Otago. The land is a mixture of crown land, road reserve, and private covenanted land owned by Steve and Nicky Milton. The area has been a revegetation/restoration project since 1990, initiated by the Kakanui ratepayers association. Between 1990 and 1998, the ratepayers association planted and tended many hundreds of plants on the site. Money for this year's plants came from the Otago Regional Council's biodiversity fund. Members of the local community, the ratepayers association, regional councillors and staff from the council joined the planting day in fine sunny conditions at the end of July.

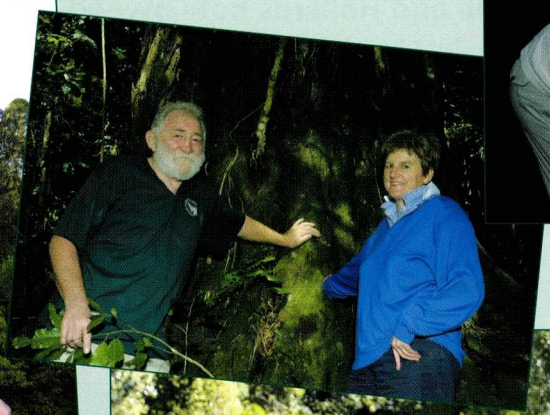
David Bellamy's Silver Jubilee Tour

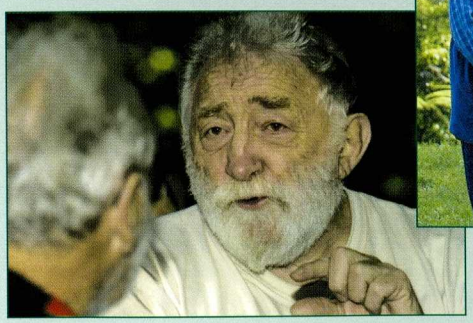
A highlight of the National Trust's Silver Jubilee celebrations was the visit of our special guest, world renowned conservationist Professor David Bellamy. During his all-too-brief stay in mid-November, Professor Bellamy travelled the length and breadth of New Zealand, thrilling covenantors and Trust supporters with his enthusiasm, knowledge and encouragement. This photographic chronicle gives just a hint of the pleasure and interest engendered by Professor Bellamy's visit.



Above and top: at Long Gully, Wellington.

Above and below: David with first covenantors Gordon and Celia Stephenson and the Trust's Margaret McKee and Gerry Kessells, on the Stephenson's Putaruru property.





Above: David with Margaret McKee and three generations of Garland family covenantors. They are, from left to right, Sue & Bill, Rosamond, Paul, and Sue & Bill's daughter Michelle (now a Galbraith).

TRUST PEOPLE

Keeping Faith with Fin & Feather –

that's the title of a new book by former Southland Regional Rep Roger Sutton. The book is a collection of reminiscences summarising events related to fisheries and wildlife management from the mid 1950s to the beginning of the 21st century. Mostly it relates to the far south of New Zealand, but to some extent also the wider national scene. Roger has devoted a chapter of the book to the Trust, and here is one of the comments he makes.

"...I have come to believe that these covenants [QEII National Trust open space covenants], created under this separate Act of Parliament and by mutual agreement between landowners and the trust, are more secure than Crown parks and reserves which can, given political will and ambition, be modified or revoked by the stroke of a ministerial pen."

The book can be purchased from Fish & Game in Southland, telephone 03 215 9117.

Congratulations to:

Ms Marge Maddren of Whangarei, who is the Loder Cup winner for 2002. Ms Madren has always been a strong supporter of the National Trust, and many covenants in Northland are in place thanks to her.

Geoff Whiteman – farmer, nurseryman, woodworker and covenantor of Waimate – who won the 2002 Green Ribbon Award for caring for our biodiversity.

Gifts and Bequests

The Trust is always grateful for cash gifts or bequests, as these assist the Trust in its work.

If you are contemplating making a gift or leaving a bequest to the Trust, or would like to talk about possibilities, contact me at any time at either the Trust Office, Wellington, or by way of my home telephone (04) 970 7496.

John Bishop, Estate Manager

Obituary – Free to explore the bush forever

The Trust notes with deep regret the recent death of former Regional Rep Ross Bishop. After eight successful years with the Trust, Ross retired in 2000 due to ill health. On the 16th November, the NZNFRT opened the Ross Bishop Memorial Reserve – their newly covenanted King Country property – in recognition of Ross's work. Ross was widely respected as a botanist, had particular skills in negotiation, and was able in his own unique manner to demonstrate the advantages of formally protecting natural sites on private land.

Farewell and thank you to Regional Reps John Kirby and Bruce Kirk

John and Bruce retire from the Trust in December. John Kirby joined the Trust in 1993; Bruce in 1994. Both were well prepared for the challenge, with backgrounds in farming and education, and they have been outstanding ambassadors for the Trust in their regions. Best wishes are extended to them and their wives Stephanie and Adrienne for the future.

New appointments to these positions will be announced in the next *Open Space*.

Annual Report 2001/2002

This is now on our web site – www.qe2.org.nz

Copies are available on request. Please phone 0508 732 878

Trust Board Activities

Tupare and Hollards now owned by people of Taranaki

The Trust was delighted to pass ownership of Hollard Gardens and Tupare to the Taranaki Regional Council on June 30th 2002. Both properties are Taranaki treasures and best secured as regional facilities and managed within the community.

Tupare was purchased by the Trust from the Matthews family in 1985. Bernard and Rose Hollard gifted Hollard Gardens to the Trust in 1983.

A function was held at Tupare to celebrate the occasion of the vesting of the gardens with the Taranaki Regional Council.

Pictured are Sir Paul Reeves (Chair QEII National Trust), John Matthews (whose family previously owned Tupare), Milton Hollard (whose family previously owned Hollard Gardens), and David Walter (Chair Taranaki Regional Council).

Board meeting dates for 2003 are as follows: - February 18 & 19, May 6th & 7th, July 15th & 16th, September 16th & 17th, November 18th & 19th.

HELP US PROTECT OUR LANDSCAPE AND NATURAL HERITAGE

JOIN THE QEII NATIONAL TRUST

The QEII National Trust is always in need of greater financial and moral support for its work.

You can help by joining as a member. In return you 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 for two members onto the QEII National Trust Board of Directors. The current directors elected by members are Bill Garland of Cambridge and Geoff Walls of Christchurch.
- A copy of the Trust's Annual Report.

Please fill out this membership application form and send it to the address shown.

If you are already a member, please pass the form on to a friend, or use it to gift a membership to a friend or family member.

Membership Application

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): ❑ $100 ❑ $50 ❑ $20 ❑ Other $.....
(Donations over $5.00 are tax deductible)

Method of payment

❑ Cheque ❑ Mastercard ❑ Visa Total $..... ❑ Please send a receipt

Credit card details – Number ☐☐☐☐ ☐☐☐☐ ☐☐☐☐ ☐☐☐☐

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

Signature.....

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 ❑

Mail this form to: QE II National Trust, PO Box 3341, Wellington or simply free-phone us on 0508 732 878

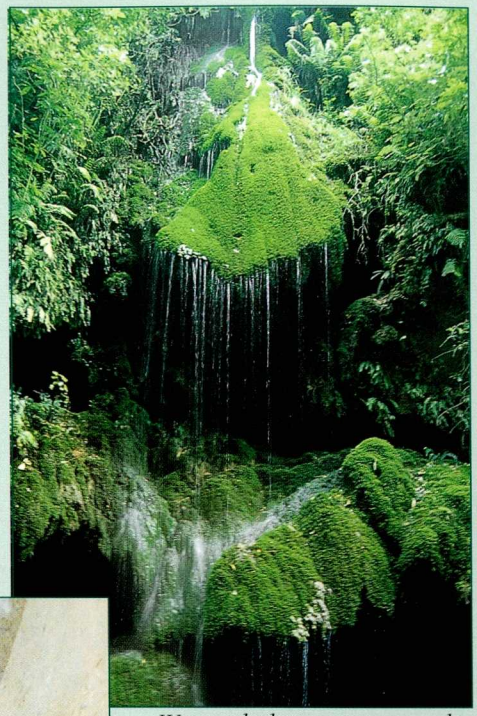
A place to visit: Chasm Bush in the Wairarapa

On offer:

A guided walk through *The Chasm* - an awesome limestone ravine that is up to 50-metre deep and is a spectacular natural wonderland of maidenhair ferns, mosses, orchids, waterfalls, fossils, stalactites, and rock gardens. Overhead is a canopy of indigenous hardwood and beech forest trees.

Fossils exposed in the Pliocene-age coquina limestone rocks include *Phialopecten triphooki* and *Crassostrea ingens.*

A botanical survey in 1998 of the forest above *The Chasm* found two plants of the regionally rare fern *Asplenium lyallii*, and about 11 species of orchid. The regenerating forest also includes manuka, kanuka, mahoe, mingimingi, rangiora, rewarewa, kawakawa, tawa, tutu, pigeonwood, tauhinu, *Hebe* spp., five finger, putaputaweta, black beech, totara, supplejack, *Coprosma* spp., weeping matipo, *Fuchsia* sp, bush lawyer, flax, mamaku, crown fern, and *Blechnum pennamarina.*



Water splashes over mossy rocks.

History:

The Chasm is part of a 22.5-hectare area protected by open space covenant. The covenant was put in place in 1994 by then landowners John, Colleen and Nigel McLeod. The covenant fencing was doubly beneficial: the forest is now regenerating and healthy, and unwary farm animals are no longer lost into the ravine.

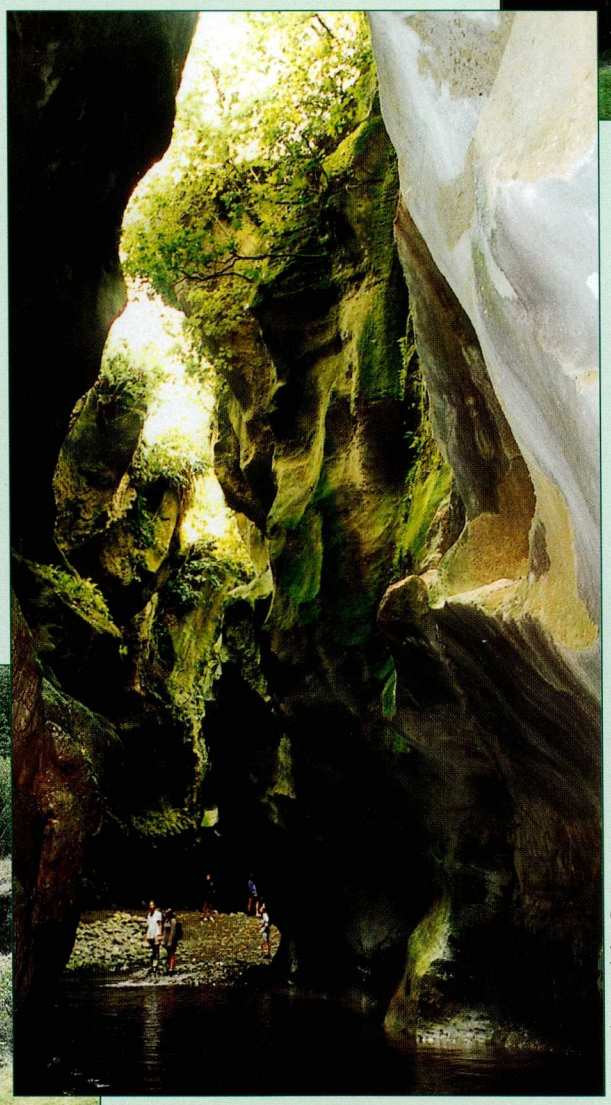
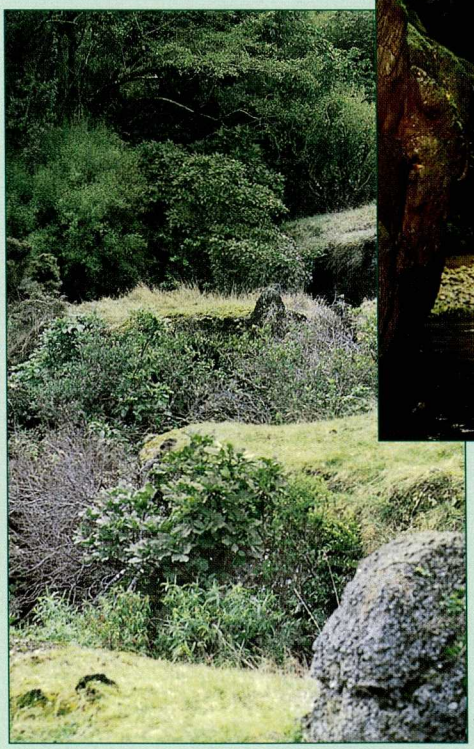


Photo: The Dominion Post

Above: The midday sun peeps in the top of the chasm. Reflections of the rippling water dance on the white limestone bluffs.



Left: The top of The Chasm is less than 2-metres wide in places. Until the covenant area was fenced, unsuspecting farm animals regularly disappeared into the ravine.

Location:

17km south of Martinborough, in the southern Wairarapa.

When to go:

The Chasm is open to visitors from spring to autumn.

How to get there:

Contact the landowner - Mr Alan Wilkinson – to arrange a time to visit and get directions. His address: Patuna, RD 1, Martinborough. Telephone 06 306 9966. Email alan@patunafarm.co.nz . School parties welcome, by prior arrangement

Accessibility:

Suitable for pedestrians only. The Ruakokopatuna River flows through *The Chasm* - be prepared to get wet feet. Access into *The Chasm* involves a climb down a 10-metre ladder.

For more information:

Visit the www.patunafarm.co.nz website.