

Marlborough landowners embrace conservation

Marlborough landowners have in the last three years protected 680 hectares of land identified as ecologically significant, at a cost of around \$500,000.

Most of the 35 sites protected are regenerating bush (25) along with wetlands (5) and coastal sites (5). Twenty five are in South Marlborough and 10 in the Sounds. About \$200,000 of the funding comes from central Government's Biodiversity fund. The rest is shared (roughly equally) between the Marlborough District Council and landowners.

A Biodiversity funding round is held twice a year. In the most recent round, grants of \$12,000 to \$17,000 were made for four large fencing projects, two in South Marlborough and two in the Sounds. This covered half the costs, with landowners and Council splitting the remainder 50/50.

Fifteen of the protected sites are covenanted to the QEII Trust, which means landowners retain title but the site is protected for perpetuity. For more on QEII in Marlborough, see the back page.



Sounds survey draws to a close

The Significant Natural Areas survey of North Marlborough is now three quarters complete. Noel and Debbie Moleta of Waitui in the outer Marlborough Sounds are among over 250 Marlborough landowners who have welcomed ecologists onto their properties, as part of MDC and Department of Conservation supported ecological surveys of North and South Marlborough.

Satisfying conclusion to SNA surveys

By Philip Simpson

About six years ago I first walked onto a Marlborough farm as part of the District Council's SNA programme. Since then I, along with Geoff Walls, have surveyed hundreds of natural areas on private land, usually farmland, mostly in the dry parts of Marlborough, but also in the wet valleys and Sounds of the north. I now have a pretty comprehensive understanding of species composition, vegetation types, problems faced and survival solutions.

Surveying now nears an end and monitoring has begun. I have had the pleasure of returning to some sites identified several years ago, some now protected natural areas following, in many cases, well over a century of fires, grazing and wild animals.

It's a real thrill to have been involved from start to finish.

It's been an extreme pleasure to discuss the sites with landowners and go with them up the gully to

learn about the history of the area, usually picking up invisible gems that can make all the difference in interpretation. Sometimes we've never met, yet I can be grateful for their actions.

Take Taimate for instance. I visited the property on the basis of an area of scrub shown on the topo map. When I got there, I saw it wasn't suitable for mapping as an SNA. However, an adjacent slope with emergent conglomerate bedrock caught my eye, growing cabbage trees, lowland flax and grey scrub. A closer look revealed a distinctively large native iris with orange leaves that occurs on rock in the Wither Hills and on sandstone at nearby Limestone



Ridge to the east but otherwise local. A second surprise was a patch of scrambling *Fuchsia perscandens* which I now know is scattered throughout the dry hills on South Marlborough, usually in wet gullies. Along with coastal NW Nelson, this is a national stronghold for the species. This rocky Taimate hillside has since been fenced generously to include an apron of grassland which has been planted in cabbage trees and flax. It is even more special now because close inspection reveals a large population of angelica (*Gingidia montana*) growing on the previously grazed rocks. Another discovery was sprawling angelica (*Gingidia geniculata*, previously seen only on Limestone Ridge in the South Marlborough survey), here having a very different growth habit, forming small dark patches. A grove of mapou (*Myrsine australis*) - one of the only examples in the dry country - indicates that this small tree was once present in the original vegetation and therefore could be restored to other appropriate places. Following fencing the flaxes have regenerated and the

mistletoe (*Ileostylus micranthus*) is spreading on the porcupine bush making a large local population. The once scrubby hillside has become a protected landscape with a group of characteristic and distinctive species adapted to this very dry part of Marlborough. The owners have responded brilliantly and the area can be used as a model to restore other similar places. When I walk there I feel a great sense of achievement. My work has contributed to the interests of the landowners, the value of the property and the sustainability of this part of New Zealand.

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www.marlborough.govt.nz/enviromonitoring/ecology.cfm

Vineyard owners protect outstanding Rapaura wetland

What may be the sole remaining mamaku on the Wairau Plain has been discovered in a Rapaura vineyard wetland.

Three years ago the black tree fern was hidden by a dense thicket of crack willows. Today, it is surrounded by about 5000 newly established native plants and sheltered by two remaining willows.

The transformation of a spring-fed wetland off Rapaura Road is the work of Peter and Patricia Cashin, Kiwis who returned to New Zealand in 2001, after 27 years in Canada.

The wetland was what attracted the Cashins to the property as well as grapegrowing potential. With vines then in short supply, they turned their attention to the willow-choked wetland that bisects the vineyard beginning the huge task of removing the trees with the idea of planting natives.

A visit to the Department of Conservation to ask which species would be suitable led to ecologist, Geoff Walls, surveying the wetland under the MDC's Significant Natural Areas (SNA) programme. His report described the discovery of the mamaku on the arid plains as "a total surprise" and identified the site as "one of the best examples of spring-fed wetlands left in the lower Wairau Valley."

Restored and nurtured, the wetland would become a showpiece but would always require human input to control weeds and animal pests, Geoff advised.

The wetland feeds Spring Creek, one of the only fully spring-fed water systems in New Zealand. It is a remnant of the Wairau Plain's once extensive wetlands, drained for the growing of grains, seeds, pasture and grapes.



The discovery of a mamaku in the Cashins' Rapaura wetland was "miraculous" according to ecologist Geoff Walls.



Patricia Cashin patrols her wetland planting for weeds.

Restoration was a high priority for the MDC, which (through its Landowner Assistance Programme) helped the Cashins apply to Government's Biodiversity Fund for assistance with the cost of revegetation and weed control. The application was successful with the Fund providing \$10,000, the MDC \$7500 and the Cashins contributing considerable cash.

Planting was carried out in September last year by forestry contractor Tony Pruden and staff, overseen by Paul Millen. Species selected include flax, toetoe, kowhai, manuka, carex, cabbage trees, akeake, small-leafed coprosmas, hebes, olearia, kohuhu and lowland ribbonwood. Kahikatea seedlings were sourced from the only remaining grove on the Wairau Plain, on an MDC reserve at Spring Creek only a stone's throw away.

"Getting rid of nasty weeds" is now Patricia's focus, especially convolvulus bindweed and Queen Anne's Lace which proved resistant to pre-planting sprays and extremely difficult to control.

Annual holidays at their bush-surrounded bach in the Marlborough Sounds through years of exile deepened the Cashins' appreciation of native vegetation. Native species "felt right", and should also survive local conditions with hopefully not too much maintenance once they outgrow weeds.

So far, five wetlands are in the process of being protected under the Marlborough District Council's Landowner Assistance Programme.

Recommended Reading

For those who would like to know more about the ecology of Marlborough, the following publications are available from the MDC;

- The South Marlborough Significant Natural Areas Project Summary
- The Wairau Ecological Region Protected Natural Areas Report (DoC)
- The South Marlborough Planting Guide
- Marlborough's Freshwater Flora & Fauna – a field guide
- Brochures on wetlands, old man's beard control, other pests & weeds
- Threatened Plants of South Marlborough; a field guide.

Restoring Native Forest workshop and field day

A workshop and follow-up field trip on restoring native forest in the Marlborough Sounds will be held on Friday, April 20 and Saturday, April 21.

The Marlborough District Council and Envirolink have sponsored the event, organised in response to growing interest in returning areas of the Marlborough Sounds to bush. Sessions investigate how this can be done, with a focus on removing wilding pines.

Details of the Blenheim workshop and field day programme are outlined in the flyer, included. More information is available from the MDC 570 7400.

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Totara to return to Marlborough landscape

A project aimed at restoring once abundant totara to the Marlborough landscape has resulted in the germination of thousands of seedlings, which should be ready for planting this in 2008.

The Marlborough District Council-supported project saw over 2.2kg of totara seed collected in especially designed nets strung in trees at eight Marlborough sites last autumn; three in the Marlborough Sounds and North Marlborough and five in South Marlborough.

Over 3000 seedlings have now germinated and are being pricked out, with many more expected to emerge over the next couple of months.

Seeds collected from the eight sites have been kept separate, and seedlings' origin will be identified when they are sold.

Planting locally sourced totara seedlings maintains the integrity of scarce local populations and improves their chance of surviving local conditions, says Marlborough Sounds based forestry and environmental consultant Paul Millen, who oversees this project.

Totara collection sites range from the driest known site for lowland totara at the Flaxbourne River near Ward, to temperate Clova Bay in the Marlborough Sounds. Most seed was sown at Morgan's Road Nursery in Blenheim, with some also provided to Adam's Land Nursery (Blenheim) and Appletons Nursery (Nelson).

Landowners are extremely cooperative and enthusiastic about the project, says Paul. Many were interested in planting totara to enhance biodiversity and, in some cases, for timber production. Relatively easy to propagate and establish, totara is a good choice for use with other pioneer species in native revegetation projects, he says. Once established, trees can live up to 1000 years and grow to a large size.

Paul picks totara as having the greatest potential of any native species as a timber tree for Marlborough.



Locally sourced totara seedlings are expected to be ready for planting in 2008.

Pilot goat project focuses on Medway

Medway farmers and the Marlborough District Council will meet early this year, to discuss working together to control goat numbers and reduce damage to the natural environment.

A pilot goat control project is being considered for the Awatere's Medway Valley, following recommendations in a report written and researched for the MDC by pest and weed consultant, Tom Stein.

Tom identifies the aggressive climbing vine old man's beard and browsing by feral goats as serious threats to ecological values in Significant Natural Areas in South Marlborough. Medway farmers have been sent a copy of the report, and asked to consider what could be achieved by controlling goats and the best methods, who should pay and whether this is a spending priority.

The Medway was selected for the project because;

- There are 27 ecologically significant SNA sites
- Feral goats are found throughout the area,
- The Awatere River forms an effective barrier to the northwest and DOC undertakes goat control to the southeast creating a buffer zone.
- Landowners are supportive.

The proposed control area is approximately 10,000 hectares. Stein estimates the cost of an initial knockdown at \$100,000 plus \$40,000 for annual follow-ups. Monitoring costs could be around \$104,000 initially and \$49,200 annually thereafter.

Small SNA sites are especially vulnerable to damage by browsers including sheep, cattle and deer and threatened by weeds, which Tom suggests also require long-term management.

With plentiful food, good shelter and low hunting pressure, a goat population can double within 18 months.

Strategy flags ecological pests

The Marlborough District Council is on track to approve a new Regional Pest Management Strategy (RPMS) by the middle of this year, marking a move towards regarding ecological as well as agricultural pests as a priority.

Council spending on pest control has traditionally been focused on agricultural pests seen as potentially impacting the local economy, says rural services manager, Alan Johnson.

However, submissions to a pest management discussion document and Proposed RPMS circulated last year revealed a strong public desire to also target pests affecting the natural environment.

The Proposed Strategy includes three

new plant pests; all ecological rather than agricultural threats. These are cathedral bells (a perennial evergreen vine that can displace native species), parrots feather (a perennial semi-aquatic plant which forms tangled mats of vegetation) and Senegal tea (a perennial semi aquatic herb which quickly covers water bodies with dense floating mats).

It is proposed to upgrade the status of ecological pests Chinese pennistum, spartina and evergreen buckthorn to total control.

Old mans beard, banana passionfruit, pampas grass and hieracium have been shifted from the surveillance list to an ecological pests appendix

alongside magpies; climbing asparagus; crack willow; feral cats, deer, goats and pigs; stoats; weasels; ferrets; possums; rats; wandering jew and wilding pines.

A site rather than species-led approach is set out in the Proposed RPMS. This signals that while these species don't pass the required cost benefit analysis for control or surveillance across the entire Marlborough district, intervention on ecologically valuable sites as part of a broader protection programme could be justified.

On protected significant natural areas for example, pest control could be an important part of protecting, restoring and improving ecosystem functions and maintaining indigenous biodiversity, says Alan.

SNA monitoring programme

The third stage of the Significant Natural Areas project – monitoring – is underway.

The first stage involved the identification of sites on properties and the second began actively protecting some of these sites to sustain their natural values for the long term.

Revisiting of some of these sites and observing and measuring changes will allow the MDC and owners to keep track of what's going on and to evaluate the effectiveness of protection actions like fencing to remove stock, and weed control. From the Council's perspective, having concrete evidence of success in protecting sites using voluntary methods rather than regulation is important.

MDC-employed ecologists Geoff Walls and Philip Simpson are setting up the monitoring programme on all sites where protection is in place. The QEII National Trust will monitor covenanted sites.

Monitoring methods will include observation of ecological trends and condition within a site as well as the effectiveness of management efforts and any other issues which arise and need attention. Photo points are being established to help build a chronological picture of changes in vegetation.

The MDC is also investigating what animals live within some of these sites. Staff member Mike Bell will be looking for native animals including insects, lizards and birds and keeping an eye out for signs of feral animal pests. This information will help clarify habitat value and also what might need to be done to control predatory animal pests to give native species an improved chance of survival.



Mike Bell checks a pitfall trap for signs of lizard life.

Packages for protection

Funding options available to help Marlborough landowners protect ecologically significant sites include;

The MDC's Landowner Assistance Programme, a first point of contact for landowners wanting to protect sites identified as significant by ecological survey. For conservation projects costing \$10,000 or less, the MDC will generally split costs 50/50 with landowners. For projects costing more than \$10,000, the MDC will generally apply to the Ministry for the Environment and Department of Conservation's Biodiversity Fund for money to cover protection measures such as fencing, weed control and planting. Typically, 50% of funds will be sought from the biodiversity fund with the MDC and the landowner splitting the remainder. Potentially, all or part of the landowner share can be labour. For both the above contact Nick Eade, MDC, 520 7400 nicky.eade@marlborough.govt.nz

The NZ Landcare Trust provides Transpower grants to land user groups with projects integrating the conservation of native species with sustainable production. Contact Barbara Stuart, 03 545 0443.

Various covenanting options are offered by DoC. These include Nga Whenua Rahui, a source of funds to help Maori owners identify and protect land with significant indigenous vegetation on it. Contact Jack Hayward, DoC Nelson 03 546 9335.

The QEII National Trust assists with protection costs including surveying and fencing covenant areas. Open space covenants with the Trust legally protect natural features while preserving private ownership and management. If the project has MDC and/or biodiversity funding, QEII will split landowners' share bringing their contribution as low as 16% in capital, or potentially labour.

Other potential funding sources include the Nature Heritage Fund, the Ministry for the Environment's Sustainable Management Fund, The Department of Internal Affairs Pacific Development and Conservation Trust, New Zealand Community Trust, BOC Where There's Water Community Environmental Grants, the World Wide Nature Habitat Protection Fund and Lottery Environment and Heritage Grants.



To find out more about QEII covenants in Marlborough, contact field officer, Anna Polson, 574 1194

If you would like your property surveyed for ecologically significant sites or to enquire about protection options, contact Nick Eade at the MDC 520 7400 nicky.eade@marlborough.govt.nz

