

## Ecology on private land—South Marlborough survey complete

For three years ecologists employed by either the Marlborough District Council or the Department of Conservation have roamed large tracts of private land in Marlborough, assessing the condition and value of remaining areas of native vegetation.

The next step is to promote voluntary protection of these areas.

Landowners have participated voluntarily in the surveys, with many enjoying the opportunity to learn more about the natural values on their properties.



### Uniquely Marlborough

A plant species lost in Marlborough could be lost to the world.

During 80 million years of isolation from any other land mass, a rich diversity of plant and birdlife has populated New Zealand. Many of these species are endemic (or unique) to the country or region.

Endemic plants of Marlborough include pink broom and the Marlborough rock daisy. The black fronted tern found alongside the Wairau and Awatere Rivers are probably the most significant bird species, representing almost a third of the world's population. These plants and birds are extremely vulnerable to browsing and predation by deer, goats, pigs, possums, rats, cats, ferrets and dogs - introduced by humans into what was a mammal-free environment (apart from some bat species).

South Marlborough is one of five areas in New Zealand where important concentrations of native plant species are found, many endemic to the area and others at their northern or southern limits. A number of these are endangered.

## Landowners take steps to protect ecology on farms

Ecological surveys of Marlborough south of the Wairau River are now complete and farmers are taking steps to protect sites identified as significant.

Eight farmers in the Kekerengu, Medway and Waihopai ecological districts - the first surveyed under the Marlborough Significant Natural Areas Project initiated in 2000 - will fence 12 sites totaling about 350 hectares. All are participating in the Marlborough District Council's Pilot Landowner Assistance Programme which initially helps identify critical issues (such as weed and pest control) then looks at practical protection options for sites.

Areas fenced include coastal shrubland featuring rare species such as spinifex and sand tussock as well as native moths and skinks and remnants of once common but now threatened totara forest clinging to deeply gorged hillsides.

Landowners will pay only either 16 or 25% of costs. Half the bill is being picked up by Government, which has contributed \$76,000 from its Biodiversity "Condition" Fund, administered by the Ministry for the Environment and Department of Conservation. The remainder is to be split between the landowner (often as labour), Council and (in a couple of cases) the QEII National Trust.

A further \$17,000 from the Biodiversity "Advice" Fund is supporting development of a model for environmental farm plans relevant to South Marlborough, a study of future control options for Old Man's Beard and publicity.

The Marlborough District Council will again apply on landowners' behalf for Biodiversity funding in April/May of next year, to continue protection work.

***Anyone interested in the Pilot Landowner Assistance Programme is invited to approach Nicky Eade at the Marlborough District Council. Likewise, if your property missed out on being surveyed - either it was overlooked, access was refused at the time, ownership has changed, or you feel a feature of potential interest has been missed - Council is happy to arrange for the ecologist team to visit.***

## Community consultation builds goodwill

The success of efforts to identify and—if feasible—protect significant ecological areas in Marlborough rests on goodwill from the rural community.

This philosophy underlies the approach taken by the Council in relation to protecting natural areas on private land. Investment in genuine consultation at all levels has been the key. The involvement of farmers Chris Bowron and Ross Beech and Federated Farmers' Lewis Metcalfe on the Marlborough Natural Areas Working Group which manages the project at the top level has provided a valuable reality check.

"A key to prioritising areas for protection will be identifying those where input costs outweigh potential returns", says Chris. "In many cases these can be taken out of production without impacting significantly on overall productivity."

At an individual farmer level, participation in the ecological surveys has been voluntary. Follow-up programmes encouraging the protection of significant sites aim to be responsive to issues and priorities identified by landowners.



Chris Bowron



*"It's easier to entice people to do something than enforce them," comments Simon Harvey, pictured at a site on Glen Orkney to be covenanted through the QE II National Trust.*

## Simon says .... produce and protect

**M**edway farmers Simon and Lynda Harvey of Glen Orkney have followed up the identification of ecologically significant areas on their farm with a decision to fence two areas of remnant native forest under QEII Trust open space covenants.

"Protecting these sites fits our vision for Glen Orkney in the future," says Simon. "Over time, we would like to see the bulk of the property established into a stable livestock regime with a sound pasture base. Smaller pockets of land not ideal for grazing could be fenced and allowed to revert to native vegetation, providing a break in the landscape and a more interesting environment to live and work in."

After the Harveys received the survey results they were visited by environmental planning consultant Paul Millen, on behalf of the Marlborough District Council's Pilot Landowner Assistance Programme. They found him both sympathetic - to their philosophy that conservation should go hand-in-hand with profitable productivity - and helpful in suggesting what sites could be practically protected and how.

Both blocks - of one and 10 hectares - are reasonably rough, out of the way gullies, having "escaped the fires that used to keep the country clear for livestock." Species include a few mature totara and "lovely big lancewoods."

When surveyed, the Harveys had already privately fenced about a hectare of native vegetation close to their home.

QEII National Trust Nelson Marlborough field officer Philip Lissaman has "talked us through" the process of registering covenants with the trust and the implications. Before the open space covenant can be registered on their title the remaining fence must be erected and the areas surveyed.

Half of the cost of fencing the covenanted blocks was met by the Ministry for the Environment/Department of Conservation administered Biodiversity Fund which will also help cover old man's beard control. The remaining half is split between the Harveys (as landowners, in labour), the Marlborough District Council and the QEII National Trust.

## Some opportunities for protection

### Marlborough District Council Pilot Landowner Assistance Programme

This programme is a first point of contact for farmers wanting to protect sites identified as significant in Protected Natural Area (PNA), or Significant Natural Area (SNA) surveys. Practical options for protection are assessed on the ground with landowners and a funding package developed. Information on other agencies offering protection options is also available. Contact Nicky Eade, Marlborough District Council, 578 5249

### Biodiversity Condition and Advice Funds

Established by Government to encourage the protection of indigenous vegetation and species on private land. [www.biodiversity.govt.nz/land/nzbs/land/condition.html](http://www.biodiversity.govt.nz/land/nzbs/land/condition.html)

**NZ Landcare Trust** encourages land user groups to integrate the conservation of native species with sustainable production. Grants are available to help with relevant projects. Contact Barbara Stuart, 03 545 0443

**QE II National Trust** - see box on this page. Contact Philip Lissaman, 03 540 3442

**Nature Heritage Fund** Government administered, the fund will purchase natural areas at a fair market price if the landowner wishes to sell. Contact Simon Moore, DOC Nelson 03 546 9335

**Nga Whenua Rahui** Provides funding to help Maori owners identify and protect land with significant indigenous forest on it. Contact Jack Hayward, DOC Nelson 03 546 9335

**The Department of Conservation** Staff will advise on nature conservation values. Contact Steve Cranwell 572 9100

## QE II National Trust preserves ownership

*The Harveys are among several Marlborough landowners who have opted to protect ecologically significant sites on their property through registration with the QE II National Trust.*

*Open space covenants with the Trust legally protect natural features while preserving private ownership and management.*

*Nelson/Marlborough regional representative Philip Lissaman says the Trust will look favourably at covenanting any Marlborough sites identified as significant, following Natural Areas surveys. The Trust assists with costs, including fencing and surveying covenant areas.*

*As at 20 August 2003, there were 1762 registered open space covenants in New Zealand totaling over 64,000 hectares. Nineteen are registered in Marlborough, totaling 733 hectares.*

## Farm planning project underway



**H**ow can biodiversity on South Marlborough farms be protected without compromising productivity?

Biodiversity Advice Funding has been dedicated to a farm planning project overseen by environmental management consultant, Paul Millen (left), who stresses he is "seeking, not providing," answers. The project grew from many farmers involved with the Marlborough District Council's Pilot Landowner Assistance Programme asking how they could best protect significant sites.

Paul is now working with Ward farmers Kevin and Carol Loe (pictured below), to identify commonsense approaches to protecting significant ecological features on their property, The Homestead, while maintaining productivity. These techniques will then be tested on the Glen Orkney property of Simon and Lynda Harvey and should ultimately be developed into a biodiversity management model applicable across South Marlborough.

Farming can be viewed as the balancing of several "layers" such as livestock, water, soil, pests and fertiliser, says Paul. Information gathered in the PNA and SNA surveys could potentially add another layer; biodiversity.

"The aim is to identify a number of tools for protecting valuable landscapes in South Marlborough while maintaining (or even improving) productivity. This need not always involve the fencing of sites but perhaps considering where pest control should be focused, avoiding overgrazing or considering tourism possibilities."

The Loe property has now been mapped and biodiversity values are being identified. The next challenge will be recording the information in a form that's applicable to other farms then balancing production with practical and cost-effective protection, says Paul.



## Keeping tabs on old man's beard

Landowners in the Medway and Ure areas are being asked to pinpoint the location of old man's beard on their properties.

Ecological surveys of Marlborough are highlighting a number of threats to remaining native habitats, identified by both landowners and ecologists. Old man's beard and goats are seen as major problems in especially the Medway and Ure areas.

"Old man's beard provides a conundrum" says the Marlborough District Council's Nicky Eade, "because while in some cases stock are damaging areas of native bush and farmers are keen to fence them out, grazing pressure keeps the weed under control."

A questionnaire - sent to 30 farmers - kicks off a study aimed at discovering the extent of old man's beard and what level of control would be most effective.

Council has contracted pest management consultant Tom Stein (below) to carry out the study, with funding from the Department of Conservation and Ministry for the Environment's Biodiversity Fund.

Tom will ground-survey the areas of old man's beard identified by farmers to discover the weed's distribution, density and potential pathways for spread. Based on the results and other research he will recommend what level of control - from eradication to spread-prevention - is achievable at a regional, catchment and site-by-site basis.

While the survey will focus on the Medway and Ure catchment areas, an effort will be made to map distribution across the whole of South Marlborough.

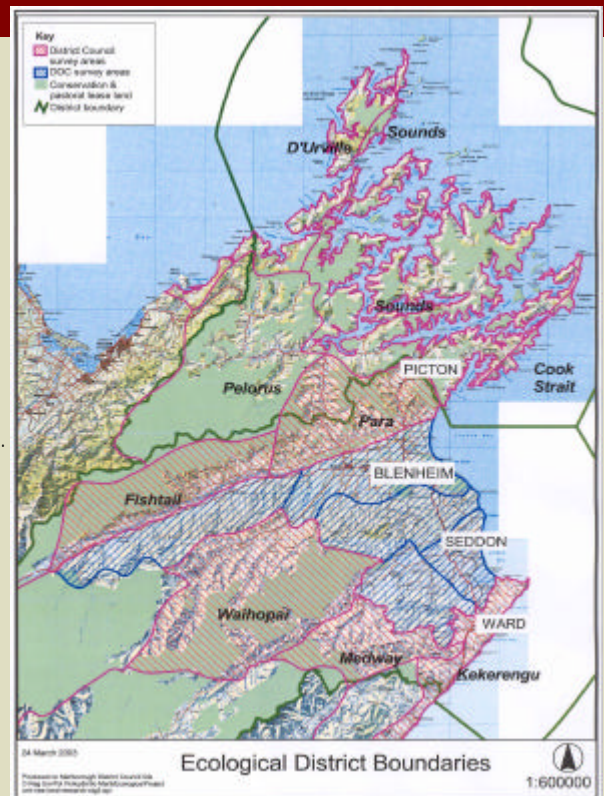


## Other biodiversity related projects and contacts in Marlborough

- **Wairau Plains Landscape Plan** working groups  
*Ian Shapcott, Marlborough District Council, 5785 249*  
*ish@marlborough.govt.nz*
- **Grovetown Lagoon Community Restoration Project**  
*Lynda Neame, Marlborough District Council, 578 5249*  
*lne.marlborough.co.nz*
- **Koromiko Deer Park Restoration Project**  
*Robin Dunn, 578 5249 and Susan King 578 7168*
- **Marlborough Rural Environment Awards** *Nicky Eade,*  
*Marlborough District Council 578 5249*  
*nea@marlborough.co.nz*
- **Rarangi Landcare Group** *Trudie Lasham 570 5073*

## South Marlborough survey complete

- In the three years since the ecological study of private land in Marlborough began, 163 properties have been surveyed and 318 sites of natural significance identified.
- Around 65% of the farmers approached, chose to participate in the surveys.
- Surveys of South Marlborough—where many rare and endangered plants are found but little of the area is within the public conservation estate - are now complete.
- At this stage it is not planned to survey pastoral lease properties given that a separate process of assessment under the tenure review programme is underway.
- North of the Wairau River, surveys have been completed in the red shaded areas and are now underway in the western Marlborough Sounds.
- The survey project has been divided between the Council's Significant Natural Areas (SNA, shaded in red) and the Department of Conservation's Protected Natural Areas (PNA, shaded blue).
- Those surveyed under SNA have each received a report on the ecology of their property including significant sites while the PNA survey results will be published early in 2004, as a single report.
- Together, the surveys provide an up-to-date overview of existing natural areas in South Marlborough. The Council's Landowner Assistance Programme, set up to encourage voluntary protection of sites by landowners, applies to both SNA and PNA sites.



## What's hot in South Marlborough?

South Marlborough boasts extreme natural diversity with its complex geology, dramatic topography and climatic extremes.

"Generally, this is a harsh, dry landscape bare of forests," say SNA ecologists, Geoff Walls and Philip Simpson. "Yet here uniquely tough Marlborough flora reach full expression."

Natural features such as forest remnants and thriving wetlands in arid landscapes, good populations of endemic Marlborough plants including pink broom and New Zealand lilac and rare species such as fieræ lancewood, shrubby tororaro and sand tussock were among significant discoveries.

Other species were located at their limits of distribution. Marlborough rock daisies, for example, were found at their northernmost coastal limit (just south of Cape Campbell) and highest ever recorded altitude (at 1350 metres). Black beech was located at its driest extreme (near Ward) and the last remnants of lowland totara in dry country near the Omaka and lower Awaterere Rivers.

For PNA survey leader, Mike North, some of the most exciting finds were remnants of broadleaved and podocarp forest which covered much of South Marlborough before being destroyed by massive fires around 600 to 800 years ago.

It is not only rare and endangered plants which are significant, says Mike. Characteristic of South Marlborough and thus precious is the "grey scrub" that some farmers spend a lifetime fighting. Similarly, manuka/kanuka scrubland is distinctive; in some areas widespread but in others becoming threatened.

*"This project is revealing the majestic natural tapestry of Marlborough and community goodwill towards restoration."*

"Shrublands appear to have survived because under most farming regimes they will be knocked back but not destroyed, then will recover and regenerate."

At the time of European settlement, densely growing silver tussock covered vast tracts of the Wairau district, having replaced the original forest cover where burning had occurred. Continual burning confined large areas of tussock to the southern half of the Flaxbourne district, lower Awaterere and a small part of central Hillersden, Mike observes.

A surprise was several large tracts of cabbage trees growing on south-facing, mid-altitude hill-slopes often alongside harakeke and bracken; "a unique combination of vegetation and landform."

Mike remarks on the black fronted tern as probably Marlborough's most significant bird species. Populations alongside the Wairau river and the Awaterere represent "almost one third of the world's total".

In parts of South Marlborough, forest birds like bellbirds, robins and wood pigeons which once would have been common, are now few and far between due to a lack of suitable habitat.

"The reception from landowners has been outstanding," says Geoff Walls. "Those who agreed to ecological surveys have been welcoming, hospitable and interested. They have shared their time, insights and knowledge building what feels like a true partnership."

"In all, this project is revealing the majestic natural tapestry of Marlborough and community goodwill towards restoration."



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