Marlborough's natural environment

Summary highlights conservation opportunities

The Marlborough District Council has published an overview of biodiversity in South Marlborough, based on ecological surveys of private land carried out from 2001-2003.

The eight ecological districts of South Marlborough are covered; Kekerengu, Medway, Waihopai, Hillersden, Blenheim, Wither Hills, Grassmere and Flaxbourne. The 80-page book is illustrated with maps and photographs capturing the character and special features of each area.

The overview concludes that many private landowners in South Marlborough support the protection of natural values on their land. It recommends that the Marlborough District Council Landowner Assistance Programme be continued, using ecological reports as the basis for discussing and designing effective conservation initiatives and sourcing appropriate funding and advice.

Despite extensive modification leading to the loss of original vegetation cover and native wildlife, the summary identifies plenty of opportunities for ecological protection, enhancement and restoration. This ranges from protecting special plants to managing extensive tracts of land in a way that balances conservation and production values.

The large number of places where fire, stock and wild animals cannot reach such as rocky outcrops, river gorges and coastal cliffs means that there are sources for species to regenerate and potential for survival and recovery.

Conservation management challenges identified in the summary include fencing and stock, feral animals, weeds, fire, farm development and subdivision and water abstraction.

The 265 South Marlborough sites identified as ecologically significant on the 135 properties surveyed totalled 21,420 hectares, with the majority being small remnant areas.



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The South Marlborough Significant Natural Areas Project summary can be requested from the Marlborough District Council, 5785249. Limited copies of the South Marlborough Planting Guide are also available.

Propagating totara and other native plants in Marlborough

Totara are a rare sight in much of Marlborough, but that could change with seed being collected from remnant female trees this autumn.

The trees were identified on private properties involved with SNA and PNA ecological surveys. There are two lowland sites in South Marlborough and two, possibly three, in North Marlborough.

Nets are being rigged to catch the seed as it falls, and will be monitored with landowners' help. The seed will be supplied to commercial and private nurseries in



A small group of totara trees growing along the riparian margin of the Flaxbourne River on Jack Taylor's property is one source of seed being collected this autumn. This is possibly the driest known site of lowland totara.

Jack is pictured next to a 1.3 metre diameter totara stump cut from a dead tree dug from the river's edge. A log from the tree was successfully milled and Jack has timber in storage for furniture making. Marlborough, to propagate seedlings for sale or their own use.

Local landowners are interested in planting totara to enhance biodiversity and in some cases for timber production, says environmental consultant Paul Millen, employed by the MDC to identify suitable seed trees and organise harvesting. It's desirable that locally-sourced seed be used, both to maintain the integrity of the scarce local population and to maximise survival.

Once common, totara has largely disappeared from both North and South Marlborough. Relatively easy to propagate and establish, it is a good choice for use with other pioneer species in native revegetation projects and can be managed in a long term forest plantation to produce highly valuable timber, prized for its fine texture, colour and durability.

Landowners with knowledge of totara trees on private properties in South Marlborough or the Marlborough Sounds not recorded through SNA or PNA surveys, or interested in obtaining totara seed or plants can contact Paul Millen; 574 1001, 021 662 147 p.millen@xtra.co.nz

A few landowners have started collecting seed material from native plants on their properties. Anyone interested in forming a group to share seed or expertise to carry out restoration propagation and planting, should contact Nicky Eade at the MDC with contact details, including email address if possible.

MDC CONTACTS:

Nicky Eade/Ian Shapcott Ph 5785249 nea@marlborough.govt.nz/ ish@marlborough.govt.nz/ www.marlborough.govt.nz/ environment/ecology and biodiversity

Landowners protect significant sites

Marlborough landowners are taking steps to protect ecologically significant sites identified on their farms by ecological survey.

Around 20 sites on 11 predominantly South Marlborough properties are now protected, with more in the pipeline. Nine have been covenanted with the QEII National Trust.

Packages for protecting the sites – ranging from two to 145 hectares - have been pulled together under the Marlborough District Council's Landowner Assistance Programme (LAP). This involves Council applying to the Ministry for the Environment and DoC administered Biodiversity Condition fund, which typically meets half the costs involved.

The remaining 50% is split between the landowner (often as labour), the MDC and (if covenanted) the QEII Trust.

South Marlborough shrubland, coastal vegetation, bluffs and forest are represented in the sites protected, as well as forest in the Okaramio and Havelock areas covered in the early stages of the North Marlborough/Marlborough Sounds SNA survey now underway. Applications currently being considered include a wetland.

The majority of the conservation packages cover fencing and revegetation, although one involves wilding pine and sycamore control.

"Satisfying and inspiring" process

Knowledge gained about locally adapted sand tussock and coprosma species growing on their property by Cape Campbell family the McConways has made involvement in the Significant Natural Areas programme a satisfying experience. The family appreciated environmental consultant Paul Millen's advice and support through the project, which has added interest to a previously insignificant corner of their farm.

A creek mouth has since been fenced under the MDC's

LAP Programme, and last winter was planted in about 500 locally sourced plants including toi toi, flax and cabbage trees.

"It's been satisfying and fun building on our knowledge of native plants," says Leefield landowner Linda Rold. Ecologist Geoff Wall's excitement at plant species found and the abundance of birdlife, especially robins, was infectious.

Linda and Per Rold have conservation fenced 145 hectares of regenerating forest with help from the LAP Programme. The block will be covenanted to the QEII Trust. Wilding pine and sycamore control has been funded on a further 155 hectares, which will now be only lightly grazed.

"I have appreciated the way that people working with the programme inspired rather than pressured us into protecting significant areas," says Linda.

Soil conservation field day

The Starborough Flaxbourne Soil Conservation Group is hosting a field day in the Wither Hills, on March 1 (1-4.30pm).

The focus is lessons learned from soil conservation projects, with Ward farmer Doug Avery (575 7208) the contact for this Landcare Group. Meet at the Redwood Street entrance to the Wither Hills Farm Park with 4WD if possible.

The Starborough Flaxourne Group is supported by the **NZ Landcare Trust** which assists land user groups with integrating conservation and sustainable production. Other Marlborough groups with Landcare support include Mill Stream, Wairau Valley (contact Peter Wilhelmus 572 2770); Rai Valley Schools nursery and river restoration group (Julie Steer & Muff Newton); the Rarangi Landcare Group (Trudie Lasham 570 5073) and the Blind Creek Landcare Group (Margaret Peace 570 5612 and Phil Hunnisett 570 5188).

NZ Landcare Trust grants are available for specific projects. *Contact Barbara Stuart, 03 545 0442.*

Farm plans clarify goals

A number of farm plans have been drawn up for the sustainable management of native vegetation areas on South Marlborough farms. Plans were first trialled with Kevin and Carol Loe of The Homestead (Ward) and Simon and Lynda Harvey of Glenorkney (The Medway) who helped develop a series of questions aimed at identifying production and protection priorities. Several more farm plans are now in the pipeline.

Susan King of Peggioh said the farm plan process had helped clarify ecological and farming goals and identify areas



where further advice was needed. A follow up visit by ecologist Phillip Simpson provided further advice on how production and protection could be achieved on a problematic block and incorporated a new site suggested by the owners.

Since completing their native vegetation management plan, Rob and Sally Peter of Cape Campbell along with neighbours Kevin and Carol Loe have established a walkway on the properties, with special ecological values promoted as a feature.

MDC contract ecologist Philip Simpson - pictured on a follow-up visit to Peggioh – has recently published a book, 'The Iron-hearted Trees: pohutukawa and rata'. This follows on the success of 'Dancing Leaves: the story of New Zealand's cabbage tree, ti kouka'.

With interests in 'people and plants', Philip specialises in ecological surveys and restoration. For 20 years he worked for the Department of Conservation.

Dryland project tackles biodiversity decline

Landowners surveyed under the Marlborough District Council's SNA programme will be asked whether they are willing to make property reports available to researchers seeking to reverse biodiversity decline in dryland areas.

SNA property reports are confidential to each landowner, explains MDC Land Resources Officer, Nicky Eade. For this reason, all those involved with the survey will be individually asked whether they are willing for information from their property to be incorporated into a woody vegetation map of South Marlborough.

Landcare Research scientist Susan Walker of Dunedin assures

landowners that the project team appreciates the confidentiality of SNA sure results are translated into onreports.

The eight-year Dryland programme focuses on New Zealand's diverse. 50,000 km² dryland zone, looking for practical, broad-scale methods for restoring and enhancing native woody vegetation.

Information on scattered surviving remnants is being pieced together to provide a picture of what grew in dryland areas pre-settlement; information that will be useful to groups and individuals involved with restoring and enhancing native woody vegetation.

Landcare Research's role in Dryland

is to oversee the research and make the-ground projects. The Marlborough District Council is a partner along with DoC and QEII.

FIND OUT MORE: WalkerS@landcareresearch.co.nz



Sounds survey hits halfway

An ecological survey of North Marlborough (including the Marlborough Sounds) is about halfway through.

The survey covers the Fishtail, Para, Pelorus, Sounds and D'Urville ecological districts, moving roughly west to east.

With significant areas of forest remaining in North Marlborough, contract ecologists Geoff Walls and Philip Simpson are focusing on coastal vegetation including remnant kohekohe and podocarp forest, and alluvial fans.

Wilding pines have been identified as a significant ecological threat in parts of the Sounds, especially to the distinctive vegetation found in ultramafic mineral belt areas. A separate MDC project is investigating the extent of wilding pine spread, and effective control methods.

Hopai represents the Sounds on the SNA working group which brings the MDC, ecologists, landowners, the Department of Conservation and other interested parties together to oversee the surveys and follow-up projects.

She describes the property visit by contract ecologist Geoff Walls as "a one-off opportunity to gain a wealth of information about native plants and animals on your land. The picture being drawn of Sounds ecology is fascinating, with species differing not only between bays but even between catchments in the same bay."

Kristen stresses that property reports are confidential. There is no requirement to change management of sites identified as significant, although help can be given with voluntary protection through the MDC's Landowner Assistance Programme.

Kristen Gerard of Elie Bay and



The dark side of Table Mountain - a dominant feature of Elie Bay - boasts a diverse mixture of bluffs, regenerating forest and mature virgin bush including a stand of the aromatic raukawa (Raukaua edgerleyi). Ecologist Geoff Walls ranked this area as having high ecological significance.

Opportunities for protection

Marlborough District Council biodiversityrelated projects in Marlborough include; The MDC Landowner Assistance 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. Contact Nicky Eade, MDC.

The Wairau Plains Landscape Plan working groups are encouraging incorporation of landscape values on public and private land. Contact Ian Shapcott, MDC.

The Grovetown Lagoon Community Restoration Project brings together groups and individuals committed to enhancing the Grovetown Lagoon environment. Contact Lynda Neame, MDC.

The Koromiko Deer Park Restoration Project is protecting and enhancing a remnant of native forest. Contact Robin Dunn, MDC.

Also supporting biodiversity in Marlborough are;

Central Government's Biodiversity Condition and Advice Funds, help finance protection of indigenous fauna and flora on private land. www.biodiversity.govt.nz/land/nzbs/land/ condition.html

The Nature Heritage Fund purchases important natural areas at a market price from willing landowners.

The QEII National Trust administers conservation covenants. Contact Phillip Lissaman, 03 540 3442.

The Marlborough Rural Environment Awards are held every second year, promoting sound environmental management by rural businesses. Contact Nicky Eade, MDC.

The Roval Forest and Bird Protection Society is an active advocate for nature conservation Contact Andrew John 573 5509.

Early days for carbon farming

What are the opportunities for generating income by claiming carbon credits for encouraging regeneration of indigenous vegetation in Marlborough?

Crown Research Institute Landcare Research has developed an Emissions Biodiversity Exchange – EBEX21® - aimed at addressing both climate change and biodiversity decline. Exotic and indigenous forests can help mitigate global warming by absorbing carbon dioxide and storing it as carbon.

Landcare Research estimates that up to one million hectares of regenerating forest could be suitable for 'carbon farming', mostly marginal hill country. Already one Marlborough Sounds property owner, Ron Marriott, is claiming EBEX21® credits. Payments come from New Zealand companies which voluntarily purchase the credits for environmental responsibility reasons.

"There is currently a high supply of landowner forest carbon credits but limited demand from buyers," says a recent EBEX21® newsletter.

Sites suitable for registration in the EBEX21® database

- are 50 hectares plus
- were in pasture or had less than 30% tree cover in December, 1989
- have native seed sources within a kilometre
- are at low-mid altitude
- are protected from stock
- are intended to remain in forest.

Requirements include a 1000mm minimum rainfall, which would exclude grey shrublands of South Marlborough where regeneration to forest would be too slow for income to exceed auditing and administration costs. However, many sites in North Marlborough are likely to be suitable.

"This may change, if the value of carbon credits increase over time," says Stuart McKenzie of Landcare Research.

For more information check the website www.EBEX21.co.nz

Pest and weed catch-up

The spotlight is on pest and weed species identified by ecologists as threats to indigenous biodiversity in certain areas of South and North Marlborough.

- Old Mans Beard is a significant plant pest in South Marlborough, where the small size and shrubby nature of remnant areas of native vegetation means it is easily overwhelmed by the rampant vines. A study of the weed's history, ecology and distribution in South Marlborough has been completed as well as a costed assessment of control strategies including reducing its range in high priority areas and control on targeted sites.
- Goats are a particular threat in South Marlborough, where they can target some vulnerable native plant species. In consultation with landowners, the MDC is investigating the feasibility of controlling goats to a low level in two pilot areas in South Marlborough, in consultation with landowners.
- Wilding pines are a problem in both South and North Marlborough. A study of their history, ecology and distribution across the Marlborough region has been completed and a number of control options considered. Some containment work is to be carried out jointly by the MDC and Department of Conservation in the Waihopai/Wye area of South Marlborough.

Growing native trees workshop

Growing native trees for timber and environmental values, is the theme of a workshop to be held at the Marlborough Wine Research Centre on Friday, March 10.

The workshop is being held by Tanë's Tree Trust, with the aim of encouraging the planting of native trees to provide future supplies of high quality timber.

Organisers suggest that people interested in establishing forests for conservation purposes will glean useful information, as the principles involved growing native trees for conservation and production are the same.

The programme includes ecological principles to be considered when establishing commercial indigenous forest (Dr Bruce Burns, Landcare Research); basic principles for establishing indigenous forests on bare ground (Mark Dean, Naturally Native New Zealand Plants); and Marlborough's totara restoration project (Paul Millen, environmental consultant) with a field visit to the Victoria Domain in Picton.

Registrations should be made to Nicky Eade at the Marlborough District Council by Friday, March 3 with a \$10 charge covering venue hire, morning tea and handouts.



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