

Integrating conservation and production in the high country

A MAF Sustainable Farming Fund research project with financial support from the High Country Accord Trust, High Country Section Federated Farmers and Merino Inc.

Why this project

The current interpretation and implementation of the Crown Pastoral Land Act (CPLA) has tended to view conservation of native biodiversity and economic production as incompatible activities, with restoration of land to full Crown ownership and management as the only option to sustain native biodiversity. Alternative approaches such as covenants have been largely ignored. However, no actual data has been presented to support the current view. In this project we aim to address this by:

1. Quantifying the economic and conservation costs and benefits of different land management strategies at a whole property scale for three representative high country properties.
2. Determining the optimum way to include an integrated approach to sustainable land management within a whole farm covenant.
3. Disseminating the results of this work through the farming community.

What we will do

We have selected three high country properties as representative of a range of high country ecosystems and will use these as study sites for the research. For each property we will undertake assessments of native biodiversity and economic production values at the scale of landscape units. We will then use a Geographical Information System (GIS) to model the likely consequences of different management scenarios for both biodiversity and production values. For example, we will be able to determine the costs and benefits for both native biodiversity and economic production of a change in grazing regime (e.g., the effects on weed species and wool production).



We will then develop whole-property management plans and covenants as a basis for ensuring long-term sustainable management of these properties. A whole-property management plan will include visions and goals for the property, factors that are likely to constrain the farmers ability to achieve these goals, a subdivision of the property into different management units, an outline of the tools that are available for management, a time-line for implementing sustainable management, and the requirements for monitoring. Covenants enable these management plans to be formalised and ensure that they are implemented in the long-term.



In addition to this, we have also received research funding from the University of Canterbury to purchase six Global Positioning System (GPS) collars to put on merino sheep. These enable the tracking of sheep location several times a day and will run for 2-3 months before they need to be retrieved. This will provide us with accurate information on how merino ewes and wethers utilise their summer grazing country and can be compared to detailed inventories of vegetation pattern for these areas.

Benefits for the high country

The current debate over tenure review seems to have become bogged down in political ideology that appears to allow little room to consider alternative approaches in tenure review as provided for in the Crown Pastoral Land Act. Our research will provide the high country farming community, including those negotiating for tenure review, those who wish to retain pastoral leases and those with freehold land, with vital information for assessing the relative costs and benefits of different approaches to farm management and a detailed assessment of what will be involved in developing a whole farm management plan and the role that a covenant can play in formalising such management.

Time frames

The research has been funded for two years and runs from 1 July 2004 through 30 June 2006. The base-line surveys of biodiversity and economic values will be undertaken during 2004-2005 while the GIS modelling will be undertaken in 2005-2006. The GPS monitoring of merino wethers and ewes in their summer grazing ranges will be undertaken over both years.

Outputs

We will shortly be establishing a web page that will provide updates on the project and will be accessible from either the Federated Farmers (www.fedfarm.org.nz) or High Country Accord (www.highcountryaccord.co.nz) web pages. We will also produce 6-monthly newsletters that provide a summary of progress with the project and will be sent to the high country farming community and other interested parties. A number of reports will also be produced during the project and will be available from the project web site.



Who is doing the research

The project manager is Rodney Patterson (High Country Accord Project Manager), while the other members of the project reference group are Richard Burdon (Merino Inc.), Ben Todhunter (High Country Section Federated Farmers) and Assoc. Prof. David Norton (University of Canterbury). The research is being undertaken by David Norton with colleagues and students from the University of Canterbury.

If you have any questions about the project please contact us:

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