

BUSINESS APPROACH REAPS REWARDS FOR ENVIRONMENT

Agricultural researcher Jim Moll has seen first-hand the benefits of woolgrowers taking a whole farm approach to agronomy, economics and the environment.

Jim was responsible for crunching the economic numbers in Land, Water & Wool's groundbreaking study of how to run stock more profitably while improving the environment in the hill country of central Victoria. Land, Water and Wool was a \$20 million national program which aimed to boost the sustainability and profitability of wool growers.

Results from the project so impressed the Federal Department of Agriculture, Fisheries and Forestry that it funded the recent 'Green Graze' trial, where 16 wool growers tendered for financial incentives to modify grazing and management practices, to improve on-farm biodiversity.

Numbers against practical solutions

Green Graze is an innovative approach to natural resource management in primary production, and whilst the majority of participants were central Victorian graziers covering 18,000ha, Jim believes it has the potential to be applied elsewhere.

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A business-like approach to the management of native vegetation on hill country was a priority for Jim as project leader for Land, Water & Wool's farm businesses, wool production and biodiversity project.

The research involved 17 case study farms throughout Victoria, including the Springhurst, Maryborough, Ararat, Broadford and Violet Town districts.

It identified four management strategies to increase profit from wool and improve the condition of native vegetation, and at the same time, changed the attitudes of sceptical woolgrowers.

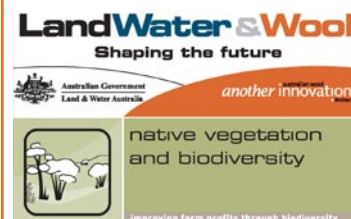
"They weren't sure you could look after the environment and be profitable, but the project was unique in putting financial numbers against the practical solutions that had been around for years," says Jim.

Returns on investment

While the research was done mainly in a 500-600mm rainfall zone, he says the four methods identified have the potential to be applied to 10.5 million hectares of grazing land in Victoria, New South Wales, South Australia and Tasmania.

Deferred grazing – partitioning off hill country and ensuring sheep are removed during summer months – increased profit by \$27 per hectare per year on average. Investment in extra fencing and watering points is usually required, however Jim says even a conservative 25 per cent increase in stocking rates as a result of more efficient grazing still meant a 10-20 per cent return on that investment.

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Land, Water and Wool was a \$20 million national program which aimed to boost the sustainability and profitability of wool growers. The program was a joint investment by wool growers through Australian Wool Innovation Limited and Land and Water Australia, with support also coming from Meat and Livestock Australia. For more information, visit www.landwaterwool.gov.au



The second method, intensive rotational grazing, showed a 16 per cent return on investment. Using the principles of cell grazing and allocating regular rest periods to replenish native pastures, it took longer to break even due to higher infrastructure costs.

Correcting nutrient deficiencies – the accurate use of fertiliser in the most productive paddocks – had the potential to more than offset the costs of managing 15 per cent of the area for native vegetation and biodiversity, and could return up to 30 per cent on capital.

“It’s pretty straightforward agronomy, to have soil tested and the right amount of fertiliser applied, but some of these areas have been running below their potential for a long time,” Jim says.

The project also investigated a low cost method of encouraging natural regeneration, by fencing off paddock trees and remnant vegetation patches and allowing them to regenerate naturally. Although the results could take 10 to 15 years, this equates to a return of \$6.50/ha/year or \$1/DSE/year, taking into account the benefits of shelter belts and natural regeneration, rather than the higher cost of direct seeding or tubestock.

Improving grazing management

After growing up on his family’s wool property at Derrinallum, in the Western Districts, Jim has gained much satisfaction from seeing growers take a whole farm approach to the business of managing sheep and the environment.

It was a natural progression after completing the four-year Land, Water & Wool project to take on the job of project leader for Green Graze, a pilot run by the Goulburn Broken and North Central Catchment Management Authorities with \$500,000 of Natural Heritage Trust funds provided by the Australian Government.

Sixteen graziers from Marnoo near St Arnaud, and the upper and mid Goulburn Broken catchment, received property management plans developed by Green Graze personnel, and then devised and submitted tenders to improve grazing management of native vegetation across their properties.

Around 18,000ha was assessed under the project, of which 35 per cent was put forward for management under Green Graze. In most cases, new investments in fencing and watering points were required, as well as significant changes to how livestock were managed.

For information on Land, Water and Wool, visit www.landwaterwool.gov.au

For information on Greengraze, visit www.gbcm.vic.gov.au

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