

# EverGraze Update

More livestock from perennials

## Keeping you up to date with EverGraze developments

June 2009

Welcome to the **EverGraze** - *More Livestock from Perennials* e-newsletter issued to subscribers from our website. We welcome your feedback, contributions and comments.

EverGraze is using perennials in grazing systems with sheep and cattle to **increase profits by 50%** while simultaneously improving farm environments through improved water management, ground cover, biodiversity and soil health.

There are experimental Proof Sites in Western Australia, Victoria and New South Wales, with a network of Supporting Sites evaluating new ideas on farms.

EverGraze is a Future Farm Industries CRC, MLA and AWI research and delivery partnership.

Read on for the latest news and visit [www.evergraze.com.au](http://www.evergraze.com.au) for the latest results

## Minister for Agriculture Hon. Tony Burke visits EverGraze

In late May, the Federal Minister for Agriculture, Food and Fisheries, Hon. Tony Burke received a first-hand briefing on the EverGraze project by visiting the project's Hamilton Proof Site and touring a nearby farm in the company of EverGraze's National Advisory Committee and the EverGraze Regional Group.

The trip started with a visit to nearby Jigsaw Farms where he saw EverGraze farming systems in action.

Once at the Proof Site, the Minister heard about the research underway at Hamilton from Ralph Behrendt who emphasised that productivity gains experienced at the site were almost double district best practice.

The Minister made the most of his opportunity to talk with farmers during the whole trip, and conducted interviews with some of them for his web-site. He gained a sense of the power of good science-farmer collaboration supported by the passion of farmers in the region for EverGraze.



Hon Tony Bourke chats with Andrew Speirs and Don Price

## NSW ~ Promising results from native perennials



Recent field day at Mac Howarth's

The results at the Tambar Springs Support Site on Mac Howarth's property, 'Carthian Hill' are very promising. Mac is investigating grazing management, fertiliser use and pasture legumes in his native pasture country where he runs a self-replacing Merino flock.

In the Innovation paddock, Mac is testing more intensive grazing with the addition of sub clover and fertiliser to native pastures compared to his normal grazing system. Mac has applied 100kg/ha of SF45 with sub clover.

The results show that the Innovation paddock production was about 40% higher than the Control when looking at DSE grazing days per hectare. This is extremely encouraging when you also take into account the fact that ground cover, biomass (DM/kg/ha) and litter are all higher in the Innovation paddock compared to the Control.

For further information, email Simon Turpin, [simon.turpin@cma.nsw.gov.au](mailto:simon.turpin@cma.nsw.gov.au)

[www.evergraze.com.au](http://www.evergraze.com.au)

## WA ~ Kikuyu in mixed wool/cropping system



Daniel Simpson's kikuyu paddock (above tree line) in March, 2008, six months after sowing. Notable green pick available for stock when annual paddocks (foreground) have very little to offer.

and can't be shifted or for a small mob of wethers (or steers) that can be held over for some time without the added cost of hand-feeding. For further information, contact Paul Omedei, E: [paul@agvivo.com.au](mailto:paul@agvivo.com.au)

Daniel and Narelle Simpson of Kojonup, WA, sowed 8 hectares of kikuyu in the spring of 2007 to reduce the need for and cost of hand-feeding sheep during summer and autumn. Daniel used a high sowing rate (6 kg/ha) with good production results in its first establishment year with the only extra cost being the seed.

It was grazed twice in its first summer with weaner sheep. The green feed helped the stock maintain condition and provided some much needed Vitamin E. It was then set-stocked during winter with wethers at a modest stocking rate (15 DSE/ha). The wethers required no additional hand-feeding for months while grazing the kikuyu and annual pasture species.

Kikuyu is one exception to the perennial pasture rule – it can be set-stocked with good results. It works well for stock that are calving or lambing

## EverGraze - Strategies for managing native pastures.

Jim Virgona, leader of the Holbrook research site, defines a native pasture as “any pasture where native grasses are the dominant perennial species”. Native grasses are normally the only perennials in these pastures, and are important for reducing salinity, preventing erosion, increasing soil health (particularly ground cover, nutrient recycling, organic matter and moisture retention) and increasing stock performance. EverGraze is developing strategies to increase the proportion of perennial native grasses while also increasing animal production and performance from them.

Meredith Mitchell, leader for the Albury/Wodonga Proof Site has three rules for increasing the proportion of native grasses and seeding recruitment:

- ◇ Management that gets more seed in the soil;
- ◇ Open spaces and soil moisture for the seeds to germinate; and
- ◇ Reduced competition from resident plants to ensure that the seedlings persist.

**Increased grazing pressure during spring** reduces competition from annuals such as barley grass and silver grass. This encourages early growth of summer active perennials and reduces competition from germinating annuals in autumn. Increased sub clover is an added bonus of this strategy. Native grasses seed after rainfall during late spring and early summer. **Removing stock** from the pastures when seeding occurs is critical to increase the seed bank. **Graze native pastures** in mid-summer when the seeds become mature to create spaces for germination in autumn. If germination and follow-up rainfall occurs, **reduce or defer grazing for about 6 weeks** to allow new seedlings to establish.

We know that fertiliser alone will increase pasture production and feed quality, particularly through increased growth of clover. However, when set-stocked, fertilised native grasses are out-competed by annuals such as barley grass and capeweed. EverGraze experiments at Albury/Wodonga and Orange are testing fertiliser application combined with rotational grazing to increase production and maintain native grasses. Early results from the Orange Proof Site show that dry matter production on a weeping grass, wallaby grass and red grass native pasture was substantially increased using rotational grazing.

At Holbrook, Jim Virgona is testing strategies that benefit production and persistence of native pasture and a productive phalaris pasture in one grazing system. At Chiltern combinations of fertiliser and grazing systems are being tested on native pastures. Results from these sites will be included in future Update articles.

For further information, contact Kate Sergeant, E: [Kate.Sergeant@dpi.vic.gov.au](mailto:Kate.Sergeant@dpi.vic.gov.au)

## Lucerne – Another reason to grow it

The EverGraze team often talks about ‘Right Plant, Right Place, Right Purpose’. What we normally mean by this is that you should look at your farm, land class, soil types, climate and then look at the range of pasture species which could potentially be grown on your property.

Lucerne is a species that has performed particularly well in the Hamilton EverGraze Proof Site and we regularly recommend it for its high quality feed and response to summer rain.

Another reason to grow lucerne is that it makes an excellent firebreak. The photo below shows a fire that came out of the Grampians National Park in January 2006 and burnt fiercely across farmland between Willaura and Stawell. As you can see, even a short stand of lucerne, at the height of a severe drought, stopped the fire within a few metres. It also provided a refuge for many of the livestock on the property that day.



Photo by David Marland, DPI Ararat, 28 Jan 2006

Consider growing lucerne on the north and west of your farm house and other buildings – even if the soil type is not what we would normally consider ideal.

For further information, contact Steve Clark, DPI, Hamilton, [steve.clark@dpi.vic.gov.au](mailto:steve.clark@dpi.vic.gov.au)

## NSW ~ More lambs from perennials



Mark Suthern scanning ewes

The EverGraze Supporting Site at Jugiong is proving that the results from EverGraze research are working. Grazier Mark Suthern of “Westlyn” was very pleased with the results from Merino ewes joined on lucerne compared to a control mob joined on summer dry/dead grass based pasture.

Although there was limited feed (1200 kg DM/ha) in either paddock, the ewes that were joined on the lucerne were in better condition and showed a greater percentage of twins when scanned in late March.

This Supporting Site aims to achieve similar results to those at the Wagga Proof Site. At Wagga it has been shown that synchronised Merino ewes grazing lucerne prior to ovulation has increased ovulation rates compared to the control mob grazing dry/dormant grass pasture. The increases observed have been up to 22% higher.

The scanning results from the Support Site indicate 12% more lambs in the Westaroo mob of ewes that grazed lucerne during joining. The scans showed 10% extra twins contributing to this increase in potential lambing percentage.

“This is valuable research because the more lambs I get on the ground per ewe, the more profitable and productive my business becomes”, said Mark.

There are five EverGraze Supporting Sites funded and supported by the Murrumbidgee Catchment Management Authority carrying out these demonstrations and putting scientific research into practice on the farm.

For more information please contact; Janelle Jenkins, Murrumbidgee CMA, [janelle.jenkins@cma.nsw.gov.au](mailto:janelle.jenkins@cma.nsw.gov.au)

or Jim Meckiff, NSW DPI, [jim.meckiff@dpi.nsw.gov.au](mailto:jim.meckiff@dpi.nsw.gov.au)

Table 1. Scanning percentages for Lucerne VS control pasture

	Scanning	Single %	Twin %	Dry %
Lucerne	141	52	44	4
Control	129	61	34	5
Dead Grass Pasture				



## NE Vic ~ Ewe conception rates on native pasture

The conception rate of 142% for CentrePlus Merino ewes grazing native pastures at the Chiltern experiment of the Albury Wodonga Proof Site was surprisingly good given the low rainfall (45 mm) for January and February and limited feed on offer (580 kg DM/ha). At Chiltern, the ewes only graze native pastures and they were not supplementary fed until joining commenced in February. The ewes were condition score 2.6 at joining compared to 3.1 in 2008. Of the 134 ewes, 83% became pregnant within the first 3 weeks of joining compared to 61% in 2008. Overall conception rates were similar in both 2008 and 2009 suggesting that good lambing performance can be expected from highly fecund Merinos grazing native pastures.

With the poor autumn break (92 mm for March, April and May), good winter and spring rains are needed to ensure the target of 1200 kg/ha of green feed on offer is reached by lambing to ensure high survival and growth rates for the lambs. The ewes are currently condition score 2.7 and are being supplementary fed 0.5 kg/hd/day of pellets with a ME of 12.6MJ/kg to ensure their energy requirements are met as there is limited pasture available on the plots (average FOO is 900 kg DM/ha). The ewes will shortly be split into singles and multiples for better management of feed requirements up to and during lambing.

For further information contact *Dr Lysandra Slocombe*,  
E: [Lysandra.Slocombe@dpi.vic.gov.au](mailto:Lysandra.Slocombe@dpi.vic.gov.au)



Meredith Mitchell, EverGraze Proof Site Leader checks out the native pastures at Chiltern

## News & Events

### New EverGraze Action ~ Identifying native pastures of eastern Namoi

A recent publication about native pastures in northern NSW has been coordinated by Lochie Rowling of NSW DPI Tamworth. National EverGraze Coordinator, Geoffrey Saul, said the new native pasture brochure "**EverGraze Action – Identifying native pastures of eastern Namoi**" contains details of 20 major native perennials found in the region, where they occur in the landscape, their value to livestock and management to improve production and persistence.

"Native pastures are the mainstay of many grazing operations in northern NSW and a key part of the EverGraze program in the region is to understand ways to better manage and use these pastures in conjunction with areas of sown pastures such as sub-tropical legumes and lucerne" Geoff added.

"The native pastures fact sheet summarises the current information and best practise to manage and use pastures in the region" Geoff said.

**EverGraze Action – Identifying native pastures of eastern Namoi** can be downloaded from the website, [www.evergraze.com.au](http://www.evergraze.com.au) or contact Lochie Rowling, E: [lachlan.rowling@dpi.nsw.gov.au](mailto:lachlan.rowling@dpi.nsw.gov.au)

### Events not to be missed!

Where	When	What	For further information
Tamworth Proof Site	<b>Friday 23rd October</b>	Bus tour of the EverGraze Proof Site at Tamworth	Dr GM Lodge P: 02 6763 1176 M: 0412 066 275 E: <a href="mailto:greg.lodge@dpi.nsw.gov.au">greg.lodge@dpi.nsw.gov.au</a>
Stewarts Range Supporting Site	<b>Friday 28th August 1-5pm</b>	Pastures Day by South East Prime Livestock Group,	Dr Nick Edwards P: 08 8762 9184 M: 0427 012 810 E: <a href="mailto:Edwards.Nick@saugov.sa.gov.au">Edwards.Nick@saugov.sa.gov.au</a>

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