

Case studies

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EverGraze

More livestock from perennials

More perennials
Better livestock
Healthier catchments

Case Study

Perennial pasture systems put in practice

The opportunity to be part of the EverGraze program could not have come at a better time for Ararat farmer Rod Vearing.

From his background as a builder to owning a small farm, Rod was able to achieve his ambition of becoming a full time farmer when he purchased 'Mooneys Gap' in 1999.

Rod spoke with Rob Shea.

farm info.

Producer: Rod and Bernadette Vearing

Location: Mooneys Gap, Ararat, Victoria

Property size: 1000 ha

Soils: Ordovician foothills rising to the steep hill country of the Dunneworthy Hills area of the Great Dividing Range.

Enterprises: fine wool Merinos, 1st cross ewes for lamb production. Area of crop (barley & oats) for preparing pasture paddocks

Pastures: phalaris, sub clover, annual grasses, native grasses, lucerne.

"I spent the first few years reducing the debt incurred in purchasing the farm. After that I embarked on a pasture improvement program to improve the property's productivity.

Unfortunately the very difficult seasons experienced in the last few years put a stop to these plans and also put a dent in the farm's profitability. I guess it also rocked my confidence to pursue an expensive pasture program.

I was invited to host a Perennial Pasture Systems (PPS) EverGraze Supporting Site. I became a member of the PPS group when it was formed in mid 2007 by a group of farmers frustrated with lack of pasture research in the region. In 2009 PPS successfully applied to EverGraze to develop a Supporting Site on my farm to add to the PPS trial sites.

There was great planning right from the start. PPS appointed their Project Manager, Rob Shea, and PPS Executive Member, Paul Harrington to manage the site and gained the services of Cam Conboy of PlantTech to provide honorary agronomic advice.

It was decided to establish two parts to the site on my farm; one trialling lucerne in the lower slopes of the Dunneworthy Hills and the other to establish a best practice phalaris site. This was to show

farmers the best way to manage it for persistence in an area which has had difficulties in maintaining good phalaris pastures.

The sites were established in May 2009. Lime and gypsum were applied and Holdfast GT & Atlas AT phalaris were direct drilled at 2kg/ha respectively along with a sub clover mix and 100 kg/ha of MAP. It established well and was managed with light grazings in September 2009 and January 2010 before entering the farm's regular grazing rotation in April 2010. I am hoping it will be a vigorous, productive, long term persistent pasture by managing it by strategic rotational grazing, improving fertility and keeping annual weeds to a minimum.

The lucerne was slower to get going. There was an uneven germination due to undulations in the stubble, which made the seeding depth control difficult.

The sporadic opening rains resulted in an uneven germination of annual grasses meaning that the initial



Cam Conboy (left), Rod Vearing and Paul Harrington

key points

- Two to three years planning prior to sowing is key to success of perennial pasture establishment
- Weed control in the year prior to sowing is essential
- Address soil fertility & acidity problems prior to sowing
- Lucerne and phalaris pasture need careful management to persist

"The success of the EverGraze site has given me the confidence to make long term plans for the rest of the farm"

knockdown was not totally effective and the use of a disc seeder did not incorporate the residual herbicide to its full effect. A further annual grass control spraying was carried out in July and a further spray for capeweed control was required in September.

By mid spring the paddock was looking good. The good late spring rains gave the lucerne a real boost and it had formed into a strong stand by summer's end. We had one heavy grazing in late September and the lucerne was then rested over summer to build up plant reserves and maximise root depth.

I was very excited by the lucerne paddocks transformation but any thoughts

science behind the story

The Mooneys Gap EverGraze Supporting Site aims to test the viability of lucerne and phalaris stands under changing climatic conditions. It will demonstrate the best establishment and management of the newer varieties of phalaris. If successful these will add to the profitability and flexibility of farm enterprises.

The poorly structured, low fertility soils, around Ararat, have always presented problems for successful perennial pasture establishment. The soils are acidic, low in phosphorus and sulphur as well as normally having high aluminium levels which need addressing prior to successful establishment of phalaris or lucerne. Phalaris has been the preferred perennial to be introduced into new pastures but in recent years there have been establishment and persistence problems due to poor weed control, low fertility, aluminium toxicity and poor grazing management.

Lucerne has traditionally been restricted in the Ararat district to small areas such as

of grazing were tempered by the advice from Paul and Cam to allow it to spell until autumn. Sometimes I just come down and look at it. I can't wait for the contribution it will make to my farming system.

It has been a great experience being involved with an EverGraze Supporting Site, PPS and with dedicated and innovative farmers and advisors.

The success of the EverGraze Site has given me the confidence to make long term plans for the rest of the farm.



Established phalaris pastures at Rod Vearings property

One of the valuable lessons I have learnt is the importance of long term preparation. I am delaying any further pasture sowing until 2012 and in the meantime I am preparing the pasture paddocks with a regime of crop and brassica sowings to control weeds and improve soil fertility prior to sowing".

Table 1. Pasture Improvement Calculator results

	2005-2009	2010
Internal rate of return	27.0%	49.6%
Peak debt	\$11,523	\$7,220
Year of peak debt	2	1
Break even year	7	4

river flats, where better drained alluvial soils are situated. The dry winters over the past ten years have opened the possibility of extending lucerne pastures into the lower foothill country. The lowering of the water table allows the lucerne plant to push its root zone well into the soil profile without suffering water logging. On a nearby farm, long term bore measurements have shown a drop in the water table of one metre over a ten year period.

The lucerne had two strategic grazings over in its first season and is now ready to make its contribution to the overall farm performance by joining the winter rotation of first cross ewes. Grazing management is important to the successful establishment and persistence of lucerne.

Early results from the phalaris site have been run through the EverGraze Pasture Improvement Calculator using

two scenarios (see Table 1). The first uses financial figures generated from the past (5) years. The second uses financial figures reflecting the current high sheep prices. The results show the combined effect of successful establishment, high sheep prices and a projected 15 year life of the pasture.

A series of fact sheets on phalaris, lucerne and rotational grazing and the Pasture Improvement Calculator are available at www.evergraze.com.au

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



EverGraze

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Opportunity presented profits

Although the wet summer conditions of 2010/11 caused many headaches for farmers in the Ararat district of western Victoria, it also created an opportunity for a windfall profit for Rod & Bernadette Vearing.

The Vearing's property Mooneys Gap is host to an EverGraze Supporting Site conducted by the Perennial Pasture Systems (PPS) group. The site has two paddocks which are sown with lucerne and Holdfast GT phalaris respectively. The paddocks produced spectacular growth through the wet spring and summer, with the phalaris being rotationally grazed and the lucerne cut for hay. A first cut was undertaken but was severely rain damaged. The spoiled hay was baled to remove residue. The lucerne was then grazed prior to a second cut for hay which was undertaken in late February. The paddock yielded 116 round bales at 3.1 tonnes/ha. The lucerne was returned to the grazing rotation when the regrowth allowed.

Rod takes up the story. "We had 280 white suffolk/merino lambs left from our 2011 drop of 1500 which hadn't made enough weight gains to sell to the trade. Normally these would be sold as stores to a lamb finisher. We were confident that the EverGraze paddocks would continue to produce enough feed to finish the lambs so we decided to keep them on."

The 280 lambs were joined by 120 first-cross ewes in the rotation which had the paddocks stocked at 15 DSE/ha. Rod said "We set about looking in the high lamb prices that were available in early 2011 when it became apparent that even with below average autumn rains there would be sufficient feed to finish the lambs. With the assistance of Landmark

Ararat livestock manager Kelvin Donnan, we contracted the lambs for July delivery at 640 cents/kg. This proved to be around \$1/kg better than the spot price at delivery, so the EverGraze paddocks have again proven their value."

In fact the EverGraze paddocks may have worked too well as 94 of the lambs weighed outside of the 26kg contract price and were discounted for being too heavy. "This is another issue of managing these high production pastures that we will need to take account of in the future", Rod said.

Rod joined PPS when it was formed by a group of farmers in the upper Wimmera in 2007 and commented that being part of the group has changed his outlook on his farm management. "I used to be reluctant to discuss pasture issues with leading farmers in our area as their pasture management seemed superior to mine, but I soon found out that the PPS group was pushing to further everyone's knowledge and became confident in planning pasture improvement on our farm.

When we were asked to host the EverGraze Supporting Site at Mooneys Gap, there was no looking back. We have had great support from the site coordinator and PPS project manager, Rob Shea, as well PPS executive member, Paul Harrington, who provides advice on the site's management. They have been joined by Cam Conboy from Gorst Rural (ex Seedmark) who provides honorary agronomic advice. We all learn



Rod Vearing (right) with the EverGraze team

key points

- Lucerne and phalaris have both persisted well so far since their establishment in 2008
- Lucerne maximised the benefits of a wet summer providing the option to finish lambs on quality feed and the confidence to lock them into contract.
- 3.1 tonnes of hay was an added bonus

something extra each time Cam inspects the site."

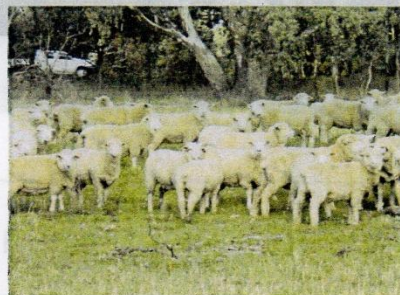
PPS has grown so far since their involvement as well as having several agronomists who are members of the group. PPS President, Simon Brady, commented "the funding provided through the EverGraze project and by the Caring For Our Country EverGraze Supporting Site has combined with MLA Producer Demonstration Site support to allow PPS to embark on several projects

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as well as providing information to our members through newsletters and field days. This support has provided us recently with an opportunity for 19 PPS members to travel to Tasmania to learn more about the TIAR plant breeding program and newly developed varieties, which may also have potential for southern Victoria."

Rod and Bernadette are continuing development of Mooneys Gap which they purchased in 2000.

They are currently replicating the EverGraze Supporting Site with an adjoining paddock sown with Holdfast GT phalaris this year and another paddock in crop in preparation for lucerne establishment in 2012.



The lambs on the EverGraze phalaris site in March 2011

science behind the story

Mooneys Gap Site Coordinator & PPS Project Manager, Rob Shea, compares the returns from the management decisions made by the Vearing's in relation to the carry over lambs.

The table below compares the gross returns from the possible scenarios which were available in November 2010.

Prior to the EverGraze pastures being established, the area was a rundown annual pasture which would not have finished the lambs, even in a wet spring like last year. This meant that the lambs would have been sold as stores returning approx \$70 per head (Scenario 1).

The highly productive pastures established on the site in 2009, now give the Vearing's the ability to finish lambs in suitable seasons and this is laid out in scenario 2. It is assumed that the lambs would have been finished and sold on the spot market in July 2011. This shows that the return for the lambs would have produced a return over double that which would have been achieved if the lambs were sold as stores.

The actual scenario in the table shows a further higher return from the ability and

Table 1. Estimated gross returns from the possible scenarios in November 2010.

Scenario	Meat price \$/kg	Lamb av. dressed weight kg	Skin value	Average Lamb value	Total Gross return
1) 280 lambs sold as stores 11/10	n/a	n/a	n/a	\$70	\$19,600
2) Uncontracted 280 lambs sold at spot market 7/11	\$5.34	24.4 kg	\$16	\$146.29	\$40,961
ACTUAL 157 lambs sold under contract + 94 over contract weight & 29 light weight at spot market 7/11	Contract \$6.40 Spot \$5.34	24.4 kg	\$16	\$166.25	\$46,550

confidence that the EverGraze paddocks would achieve the required weight gains in the lambs and allowed Rod to lock in a contract at the high prices that were available in early 2011. The extra return is still significant despite over a third of the lambs being discounted for exceeding the maximum contract weight.

It should be noted that the lambs also had a further 120 ewes running with them during the finishing period. Prior to the pasture renovation these ewes would probably have made up the total

stocking rate for the run down paddocks, so it is a fair assumption that the extra profit from the lamb finishing gives a clear reflection of the advantage of the EverGraze paddocks.

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