

Case Study

Perennial pasture systems put in practice

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.

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.

"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”



Established phalaris pastures at Rod Vearings property

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

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.

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”.

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

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

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

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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