Flexible approach fills the feed gap

The purchase of a new property about five years ago gave Victorian farmer, Andrew Walta the opportunity to start from scratch. Andrew explained to Catriona Nicholls how he went about developing a productive and persistent grazing system from the ground up.

"When we had the opportunity to buy a run-down grazing property near our existing landholding, it was a blessing in a way," Andrew said.

"We were forced into a situation where we had a property with basically two paddocks, full of rushes and stumps and we put up yards, fences and laneways, cleared areas of land and then sowed the species we wanted.

A lot of farmers have properties that have been slowly degraded and they don't have a need to do immediate work — so they don't.

Government grants allowed us to fence off the creek and establish a 50 metre-wide belt of vegetation either side. The boundary fencing was replaced and biodiversity corridors established.

Not only did our improvement program result in an environmental award for tree establishment, but it has allowed us to radically improve the landscape and better manage our grazing.

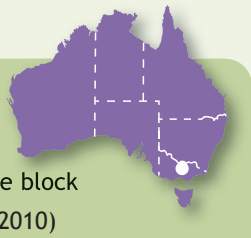
Trial and error

When we were looking at what sort of pasture species to establish we focused on getting something up and running quickly that would establish and persist in the dry rough conditions we were experiencing. At the time there was very little local knowledge and support for perennial pasture establishment.

key points

- Consider animal requirements when selecting pasture and fodder crop species.
- Paddock preparation through cropping aids weed control before pasture establishment.
- Grazing management offers opportunities to maximise production and profitability.
- On-farm trials offer evidence-based results that mimic real-life challenges.

farm info.



Case study: Andrew Walta
Location: Longwood, Victoria
Property size: 450 ha (trial site) and 150 ha home block
Mean annual rainfall: 670 mm (1100 mm during 2010)
Soils: Flood plains with an ironstone hill (50 ha) in it (trial site)
Enterprises: Cattle and cropping

Photos: supplied by Kate Sargeant

Andrew Walta (pictured third from left) believes on-farm research trials allow producers to see the benefits and challenges of systems in a real farm context. (from left: Christine Stott, Glenn Brydon, Andrew Walta, Jane Davey, John Kelly in a paddock of chicory).

We were encouraged to explore sowing different grasses and experiment with changes from set grazing strategies. As a consequence we began to focus on perennials and also decided to manage the pasture grown, adapting more rotational grazing system principles.

As a result, we used commercially-available ready-made pasture mixes based mainly on perennial ryegrass and phalaris — the ryegrass didn't persist but the phalaris did.

Over time the emphasis on rotational grazing to grow grass changed and I started to focus on the nutritional needs of our stock.

We ran sheep and cattle up to the drought of 2004-05, but found we were then stuck chasing agistment on other people's poor quality pastures and eventually something had to go — so the sheep went.

Since then we have been cropping mainly for better pasture establishment, but also use fodder crops, particularly ryecorn for grazing.

Our cows calve during spring and we wean during autumn.

We like to grow the weaners out to 460-480 kilograms liveweight during the following spring. This means our feed gap is during late summer-autumn and early winter — especially during the past 5-6 years.

We have used triticale but the past few years we have been using ryecorn. This tactic has produced a lot of strategic feed and interest from local farmers.

Compared with other cereals ryecorn seems to come out of the ground the quickest — we wait for an autumn break between the end of April to May and graze it by the middle of June. We get two or three grazings off it.

We also put in chicory to fill the summer-autumn feed gap. Chicory plays a similar role to lucerne, which we can't grow as we have acid soils and aluminium levels up to 20%.

The chicory has been absolutely amazing for the past three years in the amount of feed it can produce, the feed quality and its ability to respond to summer rainfall. However, it does require hay to balance the diet and I possibly should have put clover in with it

to provide nitrogen and get better winter production.

Perennial ryegrass and phalaris pastures across about 80% of the property support winter feed production.

It has only been five years and we are still learning, but last year was the first year that 30% of weaners were gone by October at 460 kg — normally we would have to take them through to January-March or onto agistment.

Knowledge is the key

We are not the only ones who are still learning — as a result of the lack of knowledge and experience in perennial pasture establishment and management we agreed to participate in one of two local Meat and Livestock Australia (MLA)-funded Producer Demonstration Sites as part of our *Best Wool Best Lamb* group program.

The trials are now in their second year of a three-year funded project and it provides an opportunity for farmers to see how species and management practices fare under real farming conditions.

On our site we have 10 x 1 ha plots with two repetitions each of summer-dormant cocksfoot (Uplands), summer active cocksfoot (Yarck), phalaris (Landmaster), brome (Exceltas) and a winter-active tall fescue (Flecha).

EverGraze Extension Leader Kate Sargeant and Beef Officer Alison Desmond (DPI Victoria) are managing the group and the sites, and collate data on grazing days, livestock growth rates, pasture growth rates, composition, quality and persistence of the pastures in the trials.

We have up to 25 animals rotating around the plots moving about once a week.

The species on the trial site were selected for drought tolerance, yet this year the site on our property was totally inundated with water for about two days.

One question was how the grass would cope — the cocksfoot was affected the most, but the greatest impact came from the stock.

Because the site has a rotational grazing strategy we've got a group of animals we didn't want to remove for too long and pugging became the biggest issue.

The differences between our site and the other local site (about 15 km away) are interesting. The other site is part of a cropping-orientated system and the paddocks were heavily cropped and cleaner than ours at establishment. We are now finding we have greater weed issues.

In an ideal world you would do the ideal thing, but because we use the trial to mimic a real farm, the trial has errors and we will learn from those. But certainly one lesson is that you would benefit from growing crops a bit longer and getting control over the weeds before sowing the pasture.

Grazing management

The other key lesson is about grazing management — progress will be made for beef producers when they get better control over their grazing. Grazing management can make an enormous contribution.

The aims we have of doubling food production will come from greater intensification, and rotational grazing makes an enormous difference to production.

Over the next few years I think we will get better data on grazing management from trials like ours. I think producers are still not quite crunching the numbers in their heads — they just want simple solutions.

There's no doubt I get more out of this trial than anybody else in terms of recognising the mistakes, understanding timing of stock movements, pasture measurements and how to cope with problems."

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science behind the story

By Kate Sargeant, DPI Victoria

- ***Our on-farm demonstration site is assessing the establishment, persistence and economic value of five perennial pasture species compared with an unimproved control and several annual ryegrass and grazed cereal crops.***

Results show that significant carrying capacity increases are possible with well-managed perennials — trial plots carried between 11 and 21 DSE/ha, with the phalaris and winter-active fescue the best performers. This compares with 5 DSE/ha on the control plots.

The contrast between weed levels between the sites has reinforced the importance of a cropping phase for successful establishment and persistence. Weed infestation has also affected recovery after flooding as did the impacts of pugging from livestock.

Andrew has successfully used ryecorn as a clean-up crop and a quick-establishing tool to offset the autumn-winter feed gap created in the establishment year.

Ryecorn produced 1853 DSE grazing days per ha during winter of 2009 compared with 1505 in a triticale paddock and 1006 in the control. Ryecorn was grazed just four weeks after establishment.

After the 2009 grain harvest, the ryecorn regerminated on early autumn rains and provided 2326 DSE grazing days per hectare through autumn-winter 2010 compared with 1032 in the control. Autumn-winter production is similar to established perennial grasses but it provides no quality spring feed.

Chicory carried an average of 22 DSE/ha for 2010 and more than 2000 DSE grazing days per hectare during winter, which was equal to phalaris and fescue and better than the other perennials. During summer 2009-10, chicory carried 1283 DSE grazing days/ha, provided high-quality feed to weaners and saved on high-protein supplements. However, low fibre levels meant cattle required ad-lib hay at rate of about 2 kg/hd/day, equating to a total 2010 cost of $242/ha.

While chicory provides the highest quantity and quality of summer feed, the other perennials also showed their ability to respond to summer rainfall during 2010.

For the full range of trial site results go to: **bestwoolbestlamb.com/groups/item/euroa_grazing/**

EverGraze is a FFI CRC, MLA and AWI research and delivery partnership. For further information, go to **www.evergraze.com.au**

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