

milestone report

MLA project code:	B.PDS.0004
MLA project title:	Persistent Productive Perennial Pasture for Euroa
Project leader:	Kate Sargeant
MLA project manager/coordinator:	Jane Weatherly
Milestone number:	4

Milestone

- Quarterly milestone report – December 2009 – March 2010

Abstract

The Euroa Grazing Group (EGG) Persistent Perennials Producer Demonstration Site (PDS) is continuing to create a large amount of interest for both the host group and the wider community. Since the December milestone report, three groups including EGG have visited the sites to see how the species have persisted over summer. Information on the establishment economics has also been presented to two groups including 200 people at the Whorouly Pastures for Climate Change field day. The summer composition at the sites demonstrated the advantages of using a cropping phase for better weed control with silver grass invading the Longwood plots which were in pasture the previous year. However, the worst-affected plot (due to slow establishment), Uplands Cocksfoot, is starting to demonstrate its resilience with a thick stand coming through the summer despite the heavy silver grass invasion. The Yarck cocksfoot demonstrated its ability to produce quality feed in response to summer rain, which also meant extra grazing days for this species during the summer period. At their March session, the EGG agreed that phalaris is looking the best of all the species so far. The group has worked out a sustainable autumn stocking rate and rotation system using growing stock which began in the last week of March. Autumn animal and pasture production data will be presented in the next milestone report.

Project objectives

1. Determine the establishment cost (including production loss) and first year growth of 5 perennial pasture varieties grazed by cattle on 2 sites (by December 2009).
2. Determine the monthly and yearly pasture growth of 5 established perennial pasture varieties on 2 sites, and compare data to that produced by the MLA rainfall-pasture growth tool (December 2010 and 2011).

3. Determine the level of establishment and persistence of each perennial pasture species (Yearly measurements reported December 2009, 2010, 2011)
4. Determine the kg Beef/ha produced on the perennial pastures.
5. Conduct a partial budget on the Moglonemby site to determine the cost/benefit of using perennial pastures compared to cropping, and on the Longwood site to determine cost/benefit of using perennial pastures compared to unimproved pastures.
6. Engage the Euroa Grazing Group through a progress update at each monthly meeting, and utilise group meetings to work through methodology, analysis of results and relevant guest speakers (ongoing)
7. Engage the wider beef producer community through 1 field day hosted by Euroa Grazing Group in 2011, and linkages with local Beefcheque groups and EverGraze through site visits and 1 article per year suitable for the Prograzier and EverGraze newsletters.

Success in achieving milestone

Communication:

The EGG website was initiated during December and monthly updates of the PDS results together with the December report have been posted on this site. The BESTWOOL-BESTLAMB (BWBL) program is encouraging other groups to create similar websites so that results of group activities can be shared across the network. The EGG website can be found at http://bestwoolbestlamb.com/groups/item/euroa_grazing/. Monthly photographs of the PDS's can be viewed within the newsletters at this site.

Kate Sargeant presented early results of the PDS to 200 people in February at the Pastures for Climate Change seminar in Whorouly. This presentation incorporated an analysis of the cost and pay-back period of the phalaris pastures in the trial using the new EverGraze pasture cost calculator. At the same day, our Longwood PDS site host, Andrew Walta, presented the first year of results from the ryecorn grazing crop used as a comparison to the perennials in the trial. The ryecorn focus has been an unexpected benefit of the PDS, with early results creating huge interest in the local and wider community. Tim Ekberg forwarded a copy of the PowerPoint slides and a podcast of the talks to the wide network associated with the climate change project. This is attached below. The cost of establishment talk was also presented to the Seymour BWBL group in March.



Climate change field day

During early March, two Whole Farm Planning groups (30 people) have visited the Longwood site for their pastures session.

The 19th of March was the first session for the year for EGG. The session was held at the Euroa PDS site at John Kelly's property. The following activities took place on the day:

- Visual assessment of the summer survival of the 5 species in the trial

Meat & Livestock Australia acknowledges the matching funds provided by the Australian Government to support the research and development detailed in this publication. 2

- Measurement of pasture availability, developing a rotation plan (days in each paddock) using the new EverGraze grazing management planning tool, and determining stocking rate for autumn.
- Calculation of fertiliser requirements for the site and decision for 2 test strips (potash and molybdenum) to go across the site (fertiliser supplied by Buttons in Benalla).
- Exercise to calculate grazing days.
- Listing of group members who are trialling different practices to address questions determined in the group planning session (in addition to the PDS perennials trial). This list is provided below.



EGG DEMOS 2010



Evaluation March
2010

Upcoming activities on the site include a visit from the Warrenbayne EverGraze Pastures for Place and Purpose group and a field day in August. The Euroa Grazing Group is also beginning the Pastures for Place and Purpose course in April 2010.

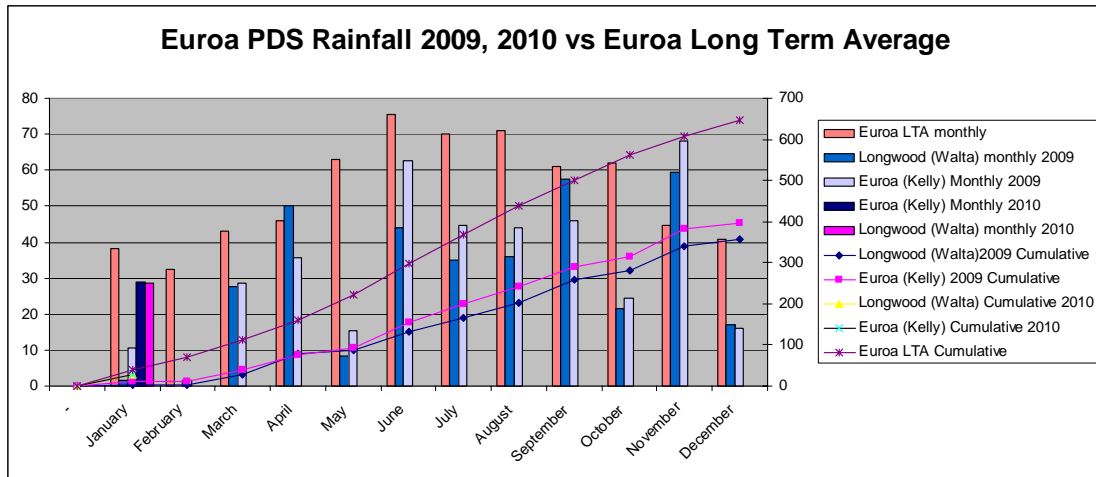
Links to other projects and engaging with next users

The PDS has presented numerous opportunities to link with both agency and private industry projects and activities. The project has developed strong relationships with project staff working on EverGraze, Temperate Perennial Pastures for Dry Climates, BWBL, Pastures for Climate Change, and Whole Farm Planning projects. Wrightsons Seeds, Stephens Pasture Seeds, Buttons Fertilisers, TasGlobal Seeds (Tasmania) and Tasmanian Institute of Agricultural Research have all been involved in the development and support of the project. These relationships have allowed increased intelligence and collaboration for increased value of the site itself, and have also broadened the producer network and audience beyond the local area.

Pasture persistence:

The March plant counts to determine summer survival are currently underway and will be reported in the next milestone. Good summer and early autumn rains have given the trial opportunity to produce and survive the summer. Visually, the phalaris and Uplands cocksfoot appear to have survived the summer best. The Yarck cocksfoot has had some plant death but has generally survived well. The Flecha fescue is patchy, particularly at Euroa in the lighter soils. The Exceltas brome suffered a large amount of plant death, but is regenerating in large numbers.

Rainfall

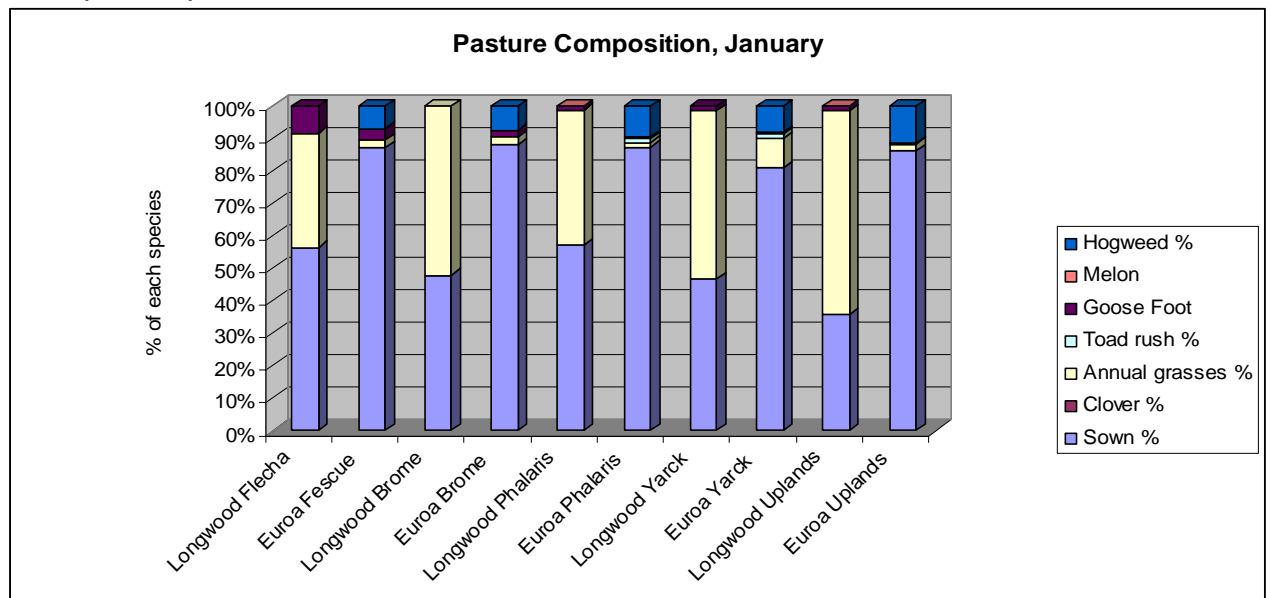


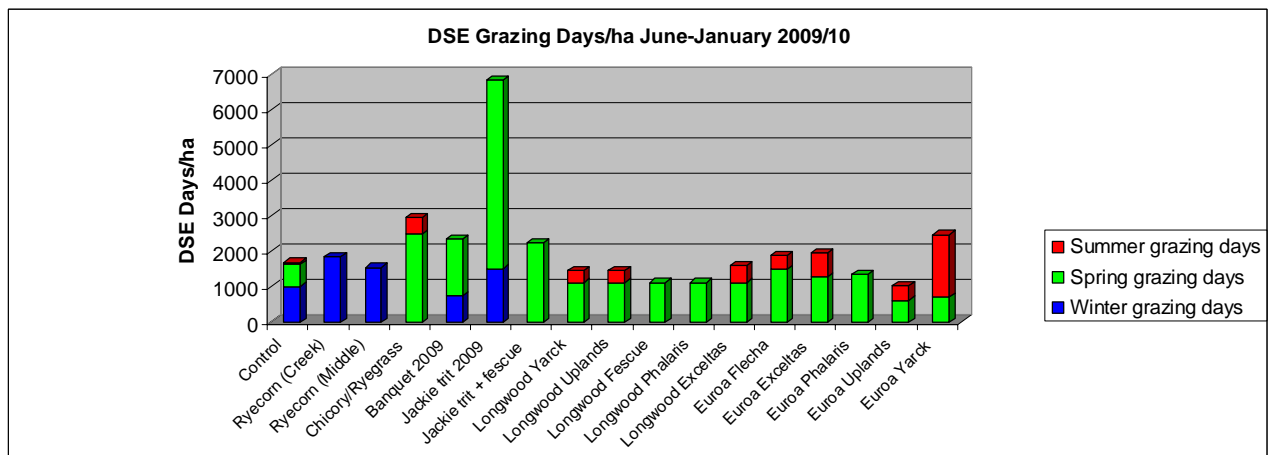
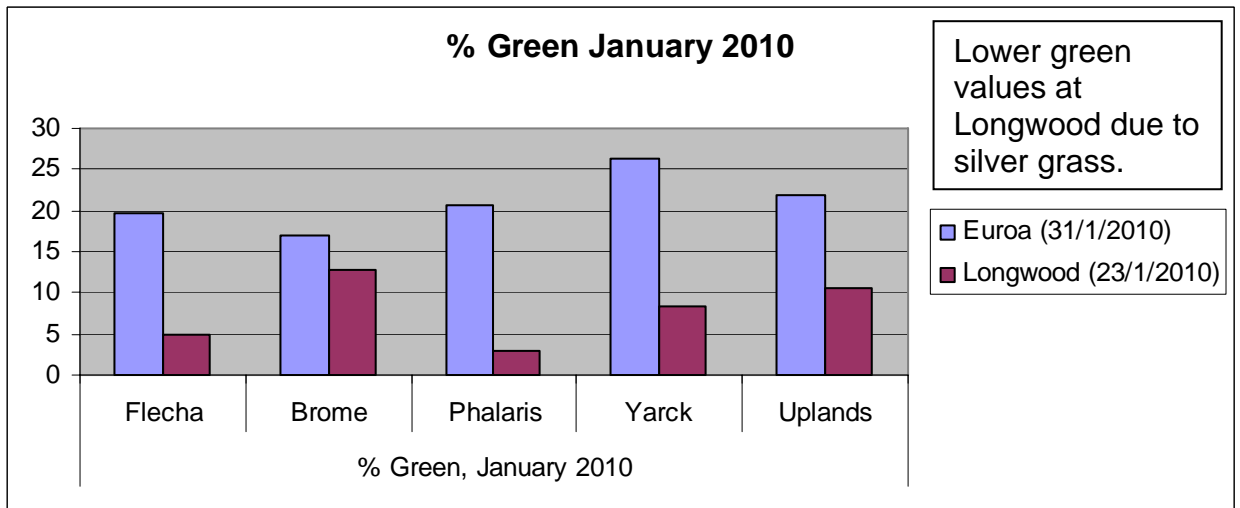
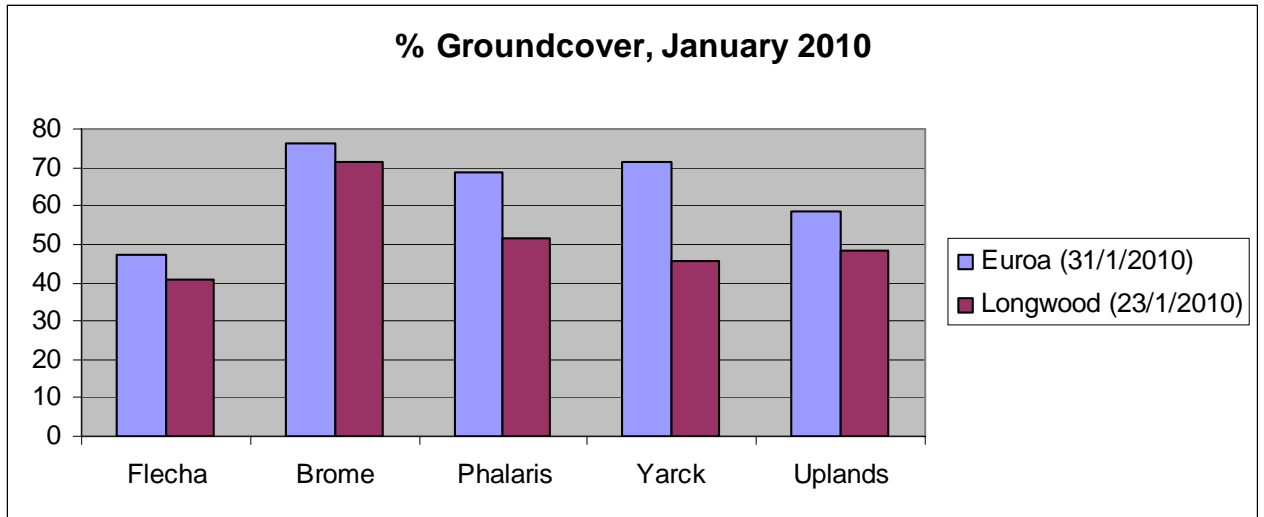
Soil tests:

Soil tests have been taken for 2010 and we are currently waiting for the results.

Measurements

Summer pasture composition, ground cover, availability and green vs dead were collected in January. Of particular note was the high proportion of green feed provided by the cocksfoots during summer. This also resulted in extra grazing days on this species. The other point to note was the high proportion of silver grass residue in the Longwood paddock. It was evident that the cropping phase of the Euroa paddock had done a better job of cleaning up the annual grasses prior to establishment than what had been achieved with a single summer crop at the Longwood paddock. This was a good learning for the group. The extent of the silver grass infestation was greatest in the Uplands treatment which was the slowest to establish. Interestingly, despite being blanketed with silver grass for the whole summer, it appears that very few Uplands plants have been lost.



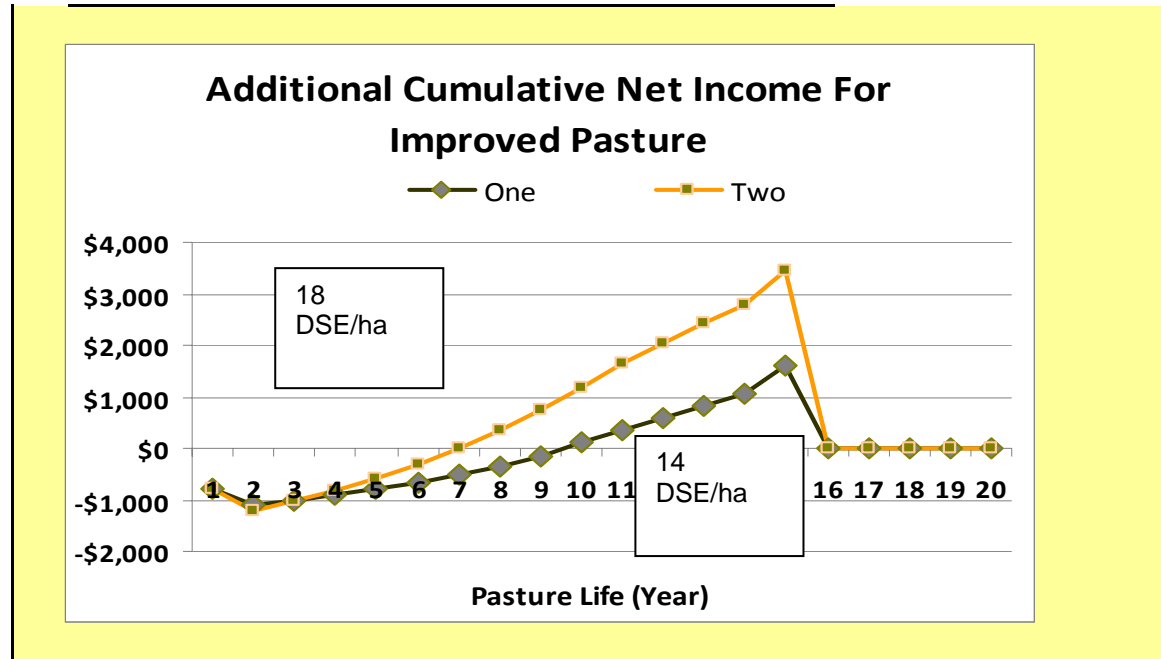


Economics

The cost of establishment and estimated payback period have been analysed using the EverGraze pasture cost calculator. These initial results have been presented to the group, although they will need to be modified when we start to get actual production values from the pastures. The estimates for phalaris are provided below. The stocking rate used prior to establishment is 8 DSE/ha which was the stocking rate achieved on the control in 2009. Two

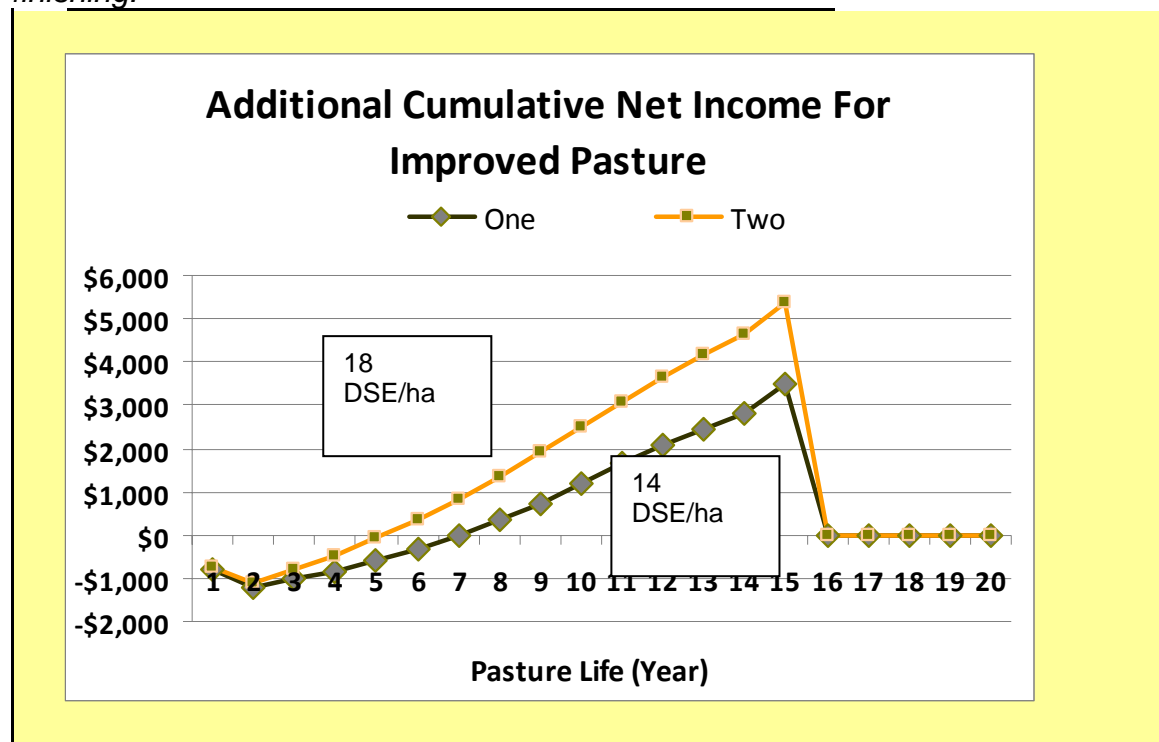
stocking rate analysis are provided below. The second graph indicates the payback period when the enterprise is changed from a breeding paddock (as in the control) to growing out steers (as is occurring on the plots), producing 50 kg beef/hd more per year. This considerably shortened the payback period. The analysis also indicated that there were very small changes in payback period for small changes such as the cost of seed, application of lime or grazing the plots in the first year. This learning was important for the group to learn not to cut corners in the establishment phase.

Payback period of new pasture increasing from 8 DSE/ha to 14 and 18 DSE/ha



RESULTS	14 DSE/ha (increase by 6 DSE)	18 DSE/ha (increase by 10 DSE)
Net Present Value	\$995	\$1,859
Internal Rate of Return	17.2%	24.5%
Peak Debt	-\$1,082	-\$1,212
Year of Peak Debt	2	2
Break Even Year	10	8

Payback period for pasture when paddock use is changed from breeding to finishing.



RESULTS	Breeding	Finishing
Net Present Value	\$1,864	\$2,760
Internal Rate of Return	24.6%	34.7%
Peak Debt	-\$1,211	-\$1,088
Year of Peak Debt	2	2
Break Even Year	7	6

Overall Progress of the PDS

Overall, the PDS is continuing to be of great value to EGG and the wider community. The establishment year of 2009 has created large interest and some interesting results. Production and persistence data to be collected on the plots, controls and on other farms within the group during 2010 will go a long way towards helping producers in the group to make decisions relating to perennial pastures.