



Barossa 'Pasture Walk' Bus Trip

Producer Case Studies

Friday 19th October 2012

Review the successes and lessons learnt for this seasons soil, pasture and grazing management



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Supporting Partners:



Barossa Bus Trip Schedule- Friday 19th October 2012

Time	Property	Location	Address	Paddock Demonstration
9.00am	Leave Keyneton Park			
9.20	Landmark Trial Site	Springton	Cnr Cemetery Rd & Eden Valley- Springton Rd	Annual and perennial trial site
10.30	Jen Light	Flaxmans Valley	Cnr Flaxmans Valley Rd & Eden Valley- Angaston Road	Summer pasture trial
11.15	Vic Patrick	Flaxmans Valley	Mirooloo Road	Perennial pasture establishment
12.15	Lunch at Keyneton Park			
1.15	Joe & Graham Keynes	Keyneton	Blandford Road	Annual ryegrass trial
2.00	Hans Greatz	Keyneton	Cnr Blandford Road & Keyneton- Moculta Rd	Lucerne and plantain establishment
2.45	Greg Koch	Moculta	Glen Turret Rd	Grazing perennial pastures
3.45	Ian & Fiona Koch	Moculta	Parrot Hill Road	Increasing the biomass
4.30-5.00pm	Travel back to Keyneton Park			

Adelaide & Mt Lofty Ranges Producer Groups Winter Pasture Project

AIM: get producers talking, learning and taking action to improve the productive capacity of winter pastures while enhancing the Natural Resource Management (NRM) outcomes.

- Working with Producer Groups: Nth Rhine Sheep, Mt Pleasant Beef, Angaston Ag Bureau and Barossa and Mid North Dairy Groups
- Producer 'activity plans' to deliver improved winter pastures and NRM outcomes.
- Education events through spring and summer- collaborating within the group and between groups.
- Funded by the Adelaide and Mt Lofty Ranges NRM Boards Sustainable Industry Grants
- Supported by Angaston Ag Bureau, Sheep Connect, Landmark, Farmer Johns, Dairy SA and Tru-test.



Life Time Ewe Discussion Group

Acknowledgements

This Bus Trip is funded through the Adelaide and Mt Lofty Ranges Natural Resources Management Board's Community Action NRM Grant Scheme.

The Winter Pasture Project has also received funding through Caring for Our Country for the Grazing Management Rappa Project which is viewed at the Springton Trial Site and Greg Koch's.

The Project would like to thank all landholders who have provided their time and properties to make this trip and the project successful. We wouldn't be able to do it without you!

Contact List

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Moculta Pasture Walk



Farmers were taken on a tour of Moculta visiting four different enterprises including, beef, sheep and dairy farms, looking at different pasture mixes, rotational grazing systems, containment feedlots and methods of increasing pasture biomass in conjunction with the pasture measurements.

- Opportunity to learn about the important tools required to measure their pasture growth and composition
- Provided the opportunity for farmers to network and share ideas on all aspects of farming.
- Observed new species mixes being trialled including a mix of tetilla ryegrass and turnips to increase winter vigour of pasture.
- Observed trial increasing the pasture biomass using a mix containing a variety of species ranging from peas and beans, barley and wheat to chicory and sulla, to compete against annual ryegrass

Eden Valley Pasture Walk- July



As a result of the success of the Moculta Pasture Walk, farmers were again taken on a tour of the Eden Valley area to display the diversity of pasture species across the region and to look at different management systems. The pasture walk provided the opportunity for farmers to

- Observe an annual pasture demonstration site- looking at new pasture varieties including turnips, chicory and new ryegrass varieties.
- Explore different perennial pasture systems including a newly sown pasture and a 40 year old system still producing high quantities of pasture.
- Explore grazing management systems including strip grazing with beef cattle, rotational grazing with dairy cattle and grazing annual ryegrass pastures with sheep.
- Form networks with other producers in the region from different enterprises.

Keyneton Pasture Walk- August



In August the Winter Pasture Project facilitated a Pasture Walk around the Keyneton Area. The pasture walk provided the opportunity for farmers to

- Explore a 'before' and 'after' perennial pasture establishment to see the increased production and NRM benefits from the perennial species.
- Observe an annual ryegrass pasture demonstration site comparing different species of ryegrasses
- Observe the benefits of lucerne pastures and the tips to establish a successful stand.
- Form networks with other producers in the region from different enterprises

Summer Pasture Trial- Flaxmans Valley

Name: Jen Light

Rainfall: 600mm

Enterprise: Cattle

Paddock Size: 4Ha

Aim

- Increase pasture production of the paddock, particularly in the summer months to provide more feed, increase soil cover and help with grass and broadleaf weed control.
- Clean up the paddock to resow with a perennial pasture mix in the future
- Trial different summer pasture mixes to determine the effectiveness in the local area
- Compare mixes against what was originally in the paddock

Paddock History

- Traditionally very few amendments
- In the winter months the creek floods, preventing stock access
- Unproductive weedy paddock

Current Plan

- Divided into half, 2Ha each in size
- CONTROL
No further amendments
Annual grasses, broadleaf weeds, bare ground in summer months
- TREATMENT- Early October 2012
Complete knockdown with Roundup
Planted to summer pasture mix in consultation with Craig John at Landmark Mt Pleasant
 - 1 mix containing pearl millet and rape
 - 1 mix containing millet, apin turnip and titan rape

Key Successes

- 1.
- 2.
- 3.

Summer Pasture Trial- Flaxmans Valley

Key Lessons Learnt

- 1.
- 2.
- 3.



Hail Storm- Flaxmans Valley June 2012

Perennial Pasture Establishment- Flaxmans Valley

Name: Vic & Margie Patrick
Rainfall: 600mm
Enterprise: Fattening 130 steers
Paddock Size: 2.7Ha

Aim

- Remove the unpalatable fescue which was previously planted
- Increase pasture production using palatable pasture species
- Improve soil cover through the summer months
- Reduce weed

Paddock History

- Previously been used as an orchard, then as a paddock within a dairy enterprise.
- Vic originally planted the paddock to Farmer Johns Hills Mix 550 in 2007 which contained phalaris, fescue and clovers.
- Due to the unpalatable nature of fescue and the persistence it began to dominate the pasture.
- Soil test in 2007 indicating low organic carbon (1.8), nitrogen and nitrates (4.9) and copper (0.29mg/kg) and zinc (0.5mg/kg)
- pH(cac12) was 5 and 3 tonnes/Ha of gypsum was added in 2007
- Received 100kg/Ha super in the last 7-8 years

Current Plan

- Planted to a perennial ryegrass, phalaris and sub clover mix in early June 2012
- Sprayed with a complete knock-down using Roundup prior to sowing
- Has not been grazed
- In July 60% bare ground- plants just germinated



Perennial Pasture Establishment- Flaxmans Valley

Key Successes

- 1.
- 2.
- 3.

Key Lessons Learnt

- 1.
- 2.
- 3.



Annual Ryegrass Trial- Keyneton

Name: Joe and Graham Keynes

Soil Type: Sandy Loam

Rainfall: 500mm

Enterprise: Wool, Prime Lambs, Cattle and
Cereal Cropping

Paddock Size: 20 Ha

Aim

- Establish a productive pasture within a previously continuously cropped paddock
- As a result of the dry season, decided to postpone the establishment of a perennial pasture and planted annual ryegrass
- It was hoped the ryegrass would help to provide competition against weeds to ensure a clean crop for perennial pasture establishment next year
- Compare different types of ryegrass to see which produces the most feed

Paddock History

- 15 years continuously cropped with cereals and occasional vetch and oat hay break crops
- 2011 planted to a vetch and oat pasture to help with weed control prior to pasture establishment

Current Plan

- Planted two different annual ryegrass mixes (@ 20kg/Ha) to compare production and persistence
 - Tetila (100% tetraploid)
 - Grassmax (75% diploid ryegrass/ 25% tetraploid ryegrass)
- The diploid mix, due to its genetic makeup, is expected to provide feed further into the season than the Tetila.
- Sowed 25th May, after the 'break' in the season.
- Sprayed 25th Jul Prodigy, 750ml MCPA, 5g/ha Ally
- Spread 27th Jul 70Kg Urea
- Light Graze early July- to create tillering of the plants 400 wethers (1DSE/Ha)
- 28/08/2012 686 Composite x Mer Lambs Ave wt 22.5kg (35DSE/Ha)
- 26/09/2012 taken out Ave wt 31.5Kg = 300g/day
- 30/09/2012 21 Cows and calves for 14 days (14DSE/Ha)

Annual Ryegrass Trial- Keyneton

Variety	Tetila	Grassmax
1 August 2012	2160 kg DM/Ha	1960 kg DM/Ha
28 August 2012	3320 kg DM/Ha	2970 Kg DM/Ha
29 September 2012	2300 kg DM/Ha	2400 kg DM/Ha
1 October 2012		

Key Successes

- 1.
- 2.
- 3.

Key Lessons Learnt

- 1.
- 2.
- 3.



Establishment of a Lucerne Pasture- Keyneton

Name: Hans & Petra Greatz

Soil Type: Sandy Loam

Rainfall: 500mm

Enterprise: Wool, Self Replacing Merino Stud, Prime Lambs and Cereal Cropping

Paddock Size: 33 Ha

Aim

- Establish a lucerne pasture to wean lambs onto in Spring
- Compliment successful lucerne pasture establishment in 2010
- Divide paddocks into smaller sizes to improve grazing management

Paddock History

- Unimproved pasture paddock with good subclover base however low perennial grasses.
- Fertilised every second year for maintenance
- Spray topped in 2011 to control grasses prior to sowing in 2012
- Paddock is associated with recent subdivision into 7 paddocks and a laneway

Current Plan

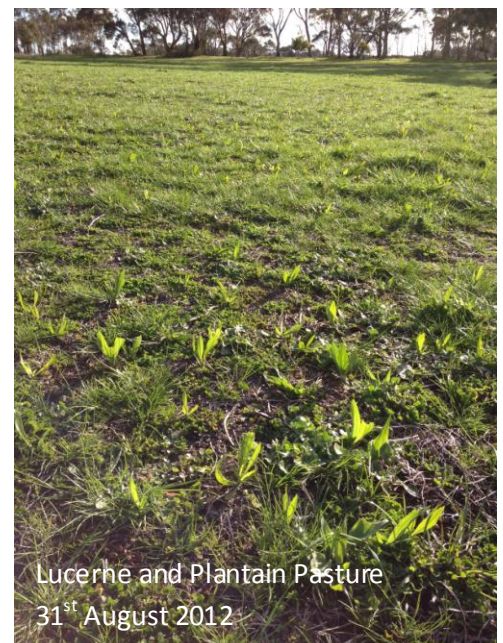
- Dry sown early May to – 5kg/Ha Lucerne with a winter dormancy of 9
 - 2kg/Ha Plantain
 - 1kg/Ha subclover
- In August 2012, 2% lucerne, 5% plantain, 40% clover 15% bare ground. Remaining grasses and broadleaves.
- About to graze with 850 lambs (25DSE/Ha)

Key Successes

- 1.
- 2.
- 3.

Key Lessons Learnt

- 1.
- 2.
- 3.



Lucerne and Plantain Pasture
31st August 2012

Establishment of a Lucerne Pasture- Keyneton



Lucerne & Plantain Pasture 31st August 2012

Grazing Management of Perennials- Moculta

Name: Greg Koch

Soil Type: Clay Loam

Rainfall: 530mm

Enterprise: Wool, Prime Lambs and Cereal
Cropping

Paddock Size: 38Ha



Aim

- Divide perennial based pasture paddocks in half to improve grazing efficiency, reduce pasture wastage and improve soil cover
- Provide good quality pasture to wean approx 600 lambs onto in spring

Paddock History

- Continuously cropped until 2006
- Planted to a perennial mix containing phalaris, cocksfoot, fescue and sub clovers in 2006
- Divided into 4 even sections with central watering point in association with pasture renovation
- Greg has found that, particularly in the spring months, the pasture grows faster than the 600 lambs can eat. This leads to the later sections becoming 'rank' which reduces the quality of the pasture.

Current Plan

- To improve grazing efficiency, the grazing pressure must be increased by either making larger mobs or smaller paddocks. Rather than increasing the mob size, which will not fit Greg's system, he has decided to trial a temporary electric fence system called a Rappa.
- Rappa system sits on the back of a quad bike and facilitates the rolling and unrolling of up to 4 temporary electric wires which makes it easier to further divide each of the sections up.
- 1st October- 5Ha paddock divided into 2x 2.5Ha paddocks using 3 line electric with the Rappa
- 640 lambs were placed in 1 section containing 850kg/DM/Ha (140 DSE/Ha)- total of 2125 kg DM within the section
- 4th October lambs moved on to next section.

Grazing Management of Perennials- Moculta

- Measurements: 460kg/DM/Ha with 80% ground cover- no tracking or camping areas
- Lambs ate 740g DM/Day (2000kg DM for the mob for 4 days) indicating very little wastage (2125 – 2000 = 125 kg DM)

Key Successes

- 1.
- 2.
- 3.

Key Lessons Learnt

- 1.
- 2.
- 3.



4th October: 460 kgDM/Ha (left) after 4 days grazing
960 kg DM/Ha (right) prior to grazing



Daniel Schuppan (Landmark) demonstrating the Rappa system

Increasing the Biomass- Moculta

Name: Ian & Fiona Koch

Rainfall: 530mm

Enterprise: Cropping/ Merino Wool Self-
Replacing Stud/ Prime Lambs

Paddock Size: 20Ha

Aim

- Increase the biomass of the pasture by using a variety of pasture species.
- Trial a mix of cereals, legumes & broadleaves sown into a cereal stubble to control resistant ryegrass and produce late winter/spring sheep feed over 2 yr period.
- Trial new plant varieties- turnip & sulla

Paddock History

- Continuously cropped
- Resistant Ryegrass infestation
- Soil test indicated pH optimum so no lime added

Current Plan

- 26 April: Knockdown spray for Salvation Jane & Ryegrass
- 22 May: Pasture Mix sown and fertilised 40-50kg/Ha DAP
- Moculta Pasture Walk visited in June- 300kg DM/Ha , 50% bare ground
- Set stocked with lambs in August

Key Successes

- 1.
- 2.
- 3.

Key Lessons Learnt

- 1.
- 2.
- 3.

Increasing the Biomass- Moculta