Barossa Improved Grazing Group (BIGG)







Government of South Australia Adelaide and Mount Lofty Ranges Natural Resources Management Board



Summer Pasture Trial

December 2012

Jen Light trialled a summer fodder crop to create livestock feed and also to prepare a paddock for a perennial pasture renovation.

Paddock Selection

Jen had the ideal paddock to demonstrate a summer fodder crop. The 3ha paddock is situated along the North Para River which floods in winter preventing livestock access and machinery access. The pasture was unproductive prior to the demonstration, consisting of annual grass weeds such as barley grass and wild oats.

Jens aim was to grow a summer fodder crop to control weeds, improve surface cover and produce higher quality feed through summer and autumn. Jen also planned to plant a perennial pasture in 2013 so the trial was used to help clean up the paddock prior renovation.

Demonstration Details

The 3ha paddock was divided into two 1.5ha paddocks. One area contained the summer fodder crop and the other provided a control area allowing comparison between the two pastures. The areas were divided using a three wire temporary electric fence powered by a portable battery operated energiser.

The fence was 100m long with tredins spaced every 10m. The RAPPA™ machine was used to put the wire out and pick it up. This process took 20 minutes to roll the fence out and 10 minutes to pick it up.

Summer Fodder Crop

On 17 October, after receiving 17mm of rain, the paddock was sprayed with a complete knockdown using Roundup and sown to different mixes of pearl millet, titan rape and apin turnip.

Feed quality

On 5 December a sample of the summer fodder crop was sent away for a feed analysis. The results showed that the feed was 28% dry matter, had a Metabolisable Energy (ME) of 10.5 MJ/kg Dry Matter (DM) and a protein of 12.8 %.

Farm Facts

Producer: Jen Light **Location:** Eden Valley Property Area: 120 Ha **Enterprise:** Prime Lamb **Annual Rainfall: 650mm**

This was considerably higher than the dry grass in the control area which was estimated to be 7-8 ME and 6-7% protein.

The feed quality provided by the summer fodder crop was well above maintenance feed quality of 8 ME and 8% protein required for Jen's dry ewes.



Supporting Partners:



Grazing Results

To prevent overgrazing within the demonstration area, the two areas were grazed separately with 150 Border Leister X Merino dry ewes (rated at 2 DSE), which resulted in a stocking pressure of 120 DSE/ha. The ewes respected the electric fence which was cruical considering they had never experienced an electric fence before.

Grazing of the Control Area

The control was grazed for 9 days from 11 December. At the start of grazing there was 3500kg DM/ha and the sheep were taken out at 1500 kg DM/ha resulting in 1.85kg of dry matter being consumed/wasted per DSE per day.

Grazing of the Fodder Crop

The fodder crop had 3 days of grazing. The first grazing was on 20 December, the second grazing on 7 January and the third grazing on 3 March. Each time the pasture was around 1000-1200kg DM/ha and taken down to 600-800 kg DM/ha. The total dry matter utilised was 1,550kg per ha which was 2.8 kg consumed/wasted per DSE per day.

During the demonstration period the paddock only received 51mm of rain after a dry winter and spring. The summer fodder crop did not perform in this season but it did demonstrate that the varieties used could survive in a dry summer even though they did not produce large amounts of dry matter.



Summer trial area prior to March grazing at 1000kg DM/Ha

Key Messages

- Temporary electric fencing can be used to control graze summer fodder crops
- Be aware of the animal health issues with grazing summer fodder crops
- Summer fodder crops can provide higher quality feed in summer and autumn than dead annual grass

In a normal spring and summer the summer fodder crops should perform well and provide improved grazing days.

In retrospect, having a run off paddock with dry feed would have been ideal within this situation, so the ewes could mix their diet preventing any toxicity issues which can occur with summer fodder crops.

Grazing Considerations

The following should be considered when grazing summer fodder crops:

- Have a good fresh water supply and quality hay, oats or a run off paddock
- · Ensure correct timing of grazing
- Don't put hungry stock on the crop
- Consider the use of mineral supplements such as sulphur when grazing sorghum
- Understand the livestock disorders/toxicities which can occur under certain conditions and check stock regularly.
- Stock should have a consistent feed supply. It takes around two weeks for the rumen to adjust to different feed so once grazing a summer fodder crop it is good if the stock can stay on for a long period. Therefore complete a feed budget to work out the area required or how many sheep are required
- Consider different varieties and planting times which can spread the timing of grazing

Further Information

Ewes respecting the fence prior to grazing the trial area (front) December 2012

BIG Group Facilitator/ Coordinator Brett Nietschke

brett.nietschke@biggroup.org.au 08 7513 7122 / 0432 804 389

www.biggroup.org.au