Barossa Improved Grazing Group (BIGG)







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



Improving the Flexibility of the **Grazing System**

October 2012

Strategic annual planning of stocking rates, pasture management, animal husbandry and target markets is essential for a good livestock enterprise. Within your annual plan you need to be flexible and make good tactical decision depending on how the season unfolds. The 2012 season didn't unfold like many producers would have liked with a dry winter and spring. As a result Greg Koch changed his grazing plans to conserve more fodder from a sown feed paddock.

Background

In recent years, as a result of high machinery costs and increasing seasonal variation, Greg Koch has made a shift from cropping to livestock, resulting in Greg using the arable land to provide feed opportunities through grazing or conserving fodder crops.

The feed conserved from these paddocks is stored on farm in the form of hay or grain and fed back to stock in the paddock or in a confinement feeding area once the ground cover targets are triggered to remove stock from the paddock. In an average year the ground cover targets are 100% ground cover with 1200kg DM/Ha. This reduces the risk of soil erosion through wind and large rainfall events through the summer and early autumn. It also helps to maintain soil organic matter.

Supplementary feeding of stock is one of the strategies which allows Greg to have high stocking rates and maximise feed utilisation in above average seasons.

Utilising Fodder Crops in 2012

In early 2012 Greg sowed a 20ha paddock with a mix of Wintaroo oats, Morgan peas and Morava vetch to provide feed for his weaner lambs.

As the season progressed and the property received only half of the average rainfall though winter and early spring, Greg made the decision to conserve more fodder than he had originally planned. To facilitate this and continue to allow some grazing of the paddock Greg divided the paddock in half with temporary electric fence and the RAPPA™ system. This allowed one half of the paddock to be grazed while the other half was made into hay.

Farm Facts

Producer: Greg Koch Location: Moculta Property Area: 809 Ha

Enterprise: Wool/ Prime Lamb/ Fodder

Annual Rainfall: 450mm

The 10has that was not cut for hay was grazed with 290 merino ewe hoggets rated at 1.5 DSE from 26 September until 22 November. The stocking density was 43 DSE/ha for 26 days or 1118 DSE grazing days per ha. There was 2000kg of DM/ha on offer when the stock went in and they were removed when there was 400kg/ha which was the level required to maintain ground cover.

It was estimated that each hogget had an intake/ wastage/natural decay of 2.1kg of DM per head per day. If the paddock was grazed as a whole 20ha, this figure would have been greater due to more trampling, spoiling and wastage. The remaining 10ha produced 35 400kg bales of hay which was 1,400 kg of DM per ha.



A three wire electric fence erected using the Rappa system

Supporting Partners:



'Cut and Carry' Improves Feed Utilisation

The 10ha that was cut for hay could have been grazed and provided another 26 days of feed however, the feed quality would have been slightly lower. The amount of feed wasted can be reduced through grazing management but it is hard to ration feed intake out in the paddock without doing damage to the pasture and reducing surface cover.

The advantage of making the hay is that it can be rationed out in a confinement feeding area. In a confinement feeding area the hoggets require 1 kg of the good quality hay per day to maintain weight compared to the 2.1kg that they were eating/wasting when grazing in the paddock. Therefore in a confinement feeding area if 95% of the hay was utilised (estimating 5% wastage) the hay would have provided feed for the 290 hoggets for 46 days which is 20 days more than if the 10ha was grazed. Obviously there is more labour and cost involved with cutting and carrying feed but in a poor season such as the 2012 season getting an extra 20 days worth of feed out of your paddock is worth it.



Key Messages

- Temporary electric fencing provides flexibility to conserve excess fodder
- Temporary electric fencing is a flexible and efficient way of subdividing cropping paddocks
- The Rappa™ machine makes temporary electric fencing labour efficient

Using Temporary Electric Fencing in Cropping Paddocks

Temporary electric fencing as demonstrated in this situation shows the flexibility that it can provide by subdividing large cropping paddocks to improve feed utilisation.

Even though Greg is not investing in larger cropping machinery there are still many advantages of having larger paddocks for cropping even with the small equipment he operates.

Some of the benefits of making smaller paddocks include:

- Increasing stocking density which reduces selective grazing and provides for a more even graze
- · Facilitates rotational grazing
- Reduced tracking around the paddock and therefore trampling and feed wastage
- Isolate areas that stock camp. For example if there is a hilltop in the paddock the stock can be isolated from it.
- Maintaining ground cover above 70%
- Maintaining feed quality all over the paddock rather than some areas going rank and feed quality declining
- Utilising excess feed by making hay. The feed can be stored and used to fill a feed gap in autumn. If stored in a shed the hay would be better quality than if it was left in the paddock as standing feed
- Reduced spoilage through faeces and urine

Further Information



David Woodard, Georgie Keynes, Wes Seeliger and Damian Slade measuring pasture growth which is important to ensure correct pasture utilisation

BIG Group Facilitator/ Coordinator Brett Nietschke

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

www.biggroup.org.au