Barossa Improved Grazing Group (BIGG)

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Angaston

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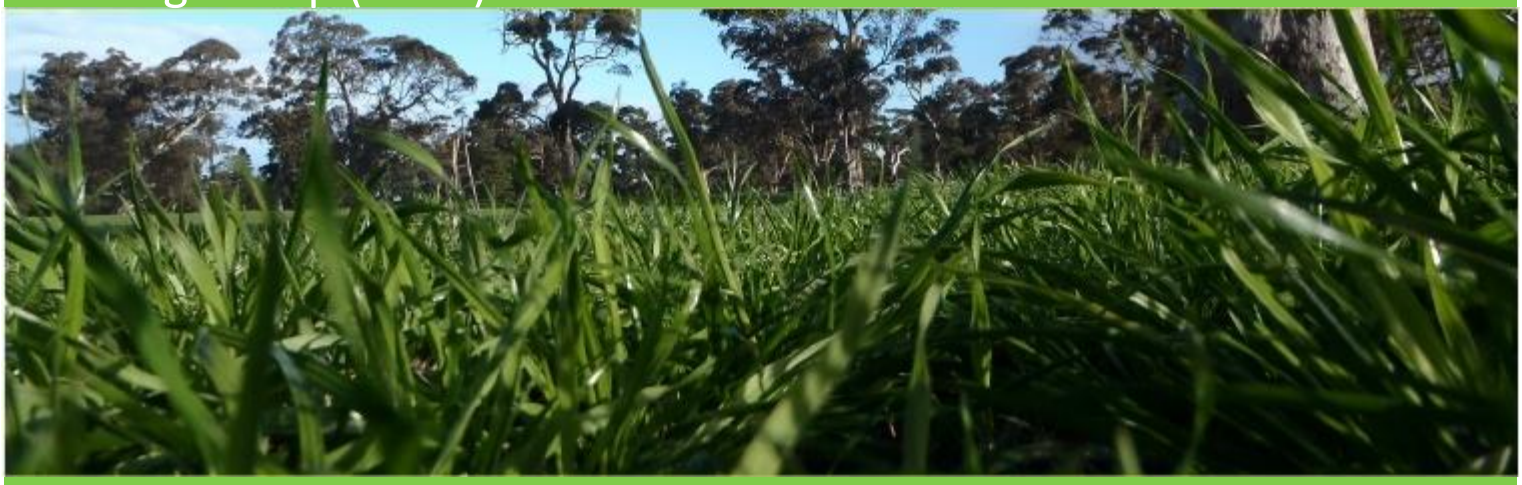


Making the Most of Early Feed Barley

June 2013

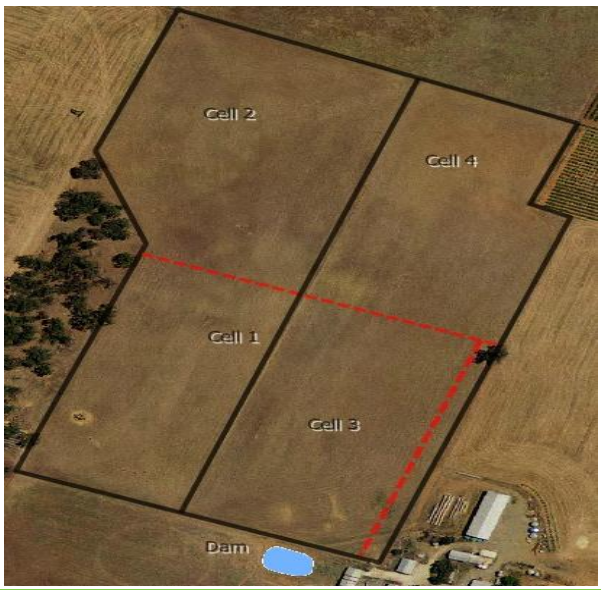
Glen Becker and his daughter Tracy have decided to pay more attention to increasing pasture utilisation and reducing the amount of feed that they waste in their grazing system by implementing a rotational grazing system. This will enable them to increase their winter grazed stocking rates and make their livestock enterprise more profitable.

Background

The Becker's decided to focus on a small area in 2013 to get an understanding of the practicalities of the system before expanding it over a larger scale on their property.

They chose two parallel 5ha paddocks close to the shearing sheds and cattle yards which could be monitored regularly and connect directly into an established electric fencing system. Due to the close proximity to the yards, the paddocks are grazed by weaner cattle and heifer calving mobs through the winter months and sheep at shearing time in September.

In 2013, the two paddocks were sown on 26 April with barley and DAP. The aim was to provide early feed to meet the winter feed gap demands and provide feed through the spring.



Farm Facts

Producers: Glen and Tracy Becker
Location: Koonunga (north of Nuriootpa)
Property Area: 404 Ha plus leased blocks
Enterprise: Cropping/ sheep/ cattle/ vineyard
Annual Rainfall: 480mm

Setting up the System

At the end of June the two 5ha paddocks were subdivided in halves to make four 2.5 ha paddocks using temporary electric fencing. A laneway was also constructed to provide access to water.

To prevent tracking through the laneway area, a wagon wheel style layout could have been used however it would have made the application of urea and progibb more difficult.

On 28 June a Rappa™ machine was used to roll out the two temporary electric fences. The Becker's used two live wires and tredins spaced every 10 meters apart. To facilitate grazing for both sheep and cattle the wires were placed on the top and middle holes of the tredins, creating a top wire at 1.2m and a bottom wire at 0.6m. However it was noted that some of the tredins were being pushed around by the cattle

The temporary fence linked into the existing off-set single line electric fence system which was powered by a mains energiser located in the shearing shed.

Grazing Management

The Becker's decided to utilise the feed with 250kg Murray Grey x Angus weaners. They also had the option to graze with a mob of 20 rams which graze in vineyards near the trial paddocks.

Nine weaners went into the first cell on 30 June with 2000kg DM/hectare feed on offer. On 12 July, when there was 1200kg of DM/ha remaining they were moved to the next cell. The stocking rate of the 2.5 ha paddocks was 43 DSE/ha and an overall stocking rate of 10.8 DSE/ha for the whole 10ha.

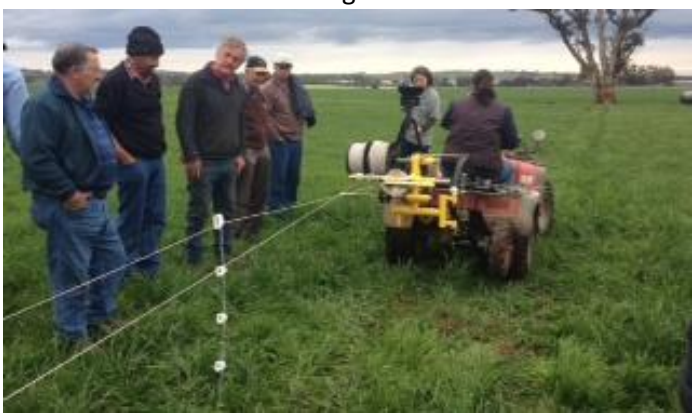
The nine weaners were unable to keep up with the growth rate of the barley resulting in pasture in the other cells going rank. Therefore twenty rams (40 DSE) were used to graze Cell 4 to utilise the feed and maintain the quality.

Some areas of the first cell were being pugged and areas of the feed were trampled and wasted. This was a result of the stock being in the in a cell for too long (12 days).

If the paddocks had not been subdivided some areas of the paddock would been over grazed because the weaners would have continued to graze the short more nutritious regrowth in their favourite part of the paddock This would result in less pasture produced and utilised while other areas of the paddock would go rank.

Lessons Learnt

Start grazing earlier as cereals can be grazed, once anchored, to a height of 10cm. Stock can intake the same from a 1000kg DM/ha short dense pasture as a 300kg DM/ha cereal. Just be aware that it will not last as long.



Erecting the fence: two live wires and tredins spaced 10m apart

Key Messages

- *Start grazing cereals early but let them rest and recover to ensure productivity*
- *Understand pasture growth rates and feed budget to set stocking rates and improve feed utilisation*

A shorter graze period with a higher stocking rate would benefit the plant by not grazing the regrowth and allow the plant to re-energise.

Shorter graze periods would reduce the pugging problem by preventing camping and tracking. If pugging is still an issue, the animals should be shifted or be spread over the whole 10ha (eg. 2 weaners in each cell).

Have more volts in the fence to create a larger field around the wire and prevent the cattle rubbing on the tredins.

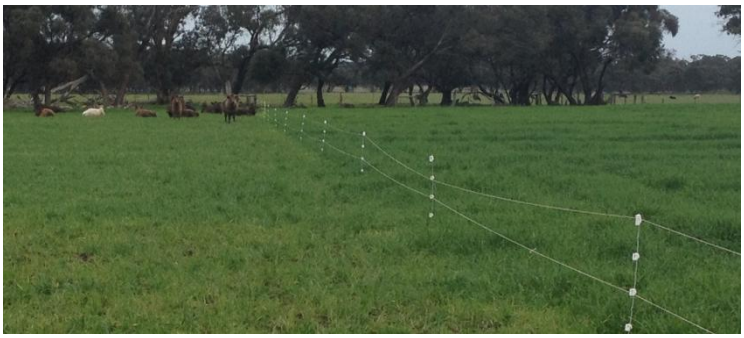
Have the water system set up with a pipe along the edge of the paddock so a portable trough can be shifted with the cattle. Quick release fittings or cam locks can be utilised to make shifting quick.

A simple feed budget and understanding pasture growth rates allows you to match an appropriate stocking rate. If the crop is growing at 20kg of DM/day then it can be stocked at 20 DSE per hectare (allocate 1 kg of green DM per DSE per day).

Example 1 When the weaners were put in at 2000kg DM/ha, just to keep up with the growth rate it should have been stocked at 200DSE (10ha x 20kg DM/ha/day growth). The Becker's stocked the 10ha at 108 DSE so you could predict that the feed would get ahead of them.

Example 2 If the Becker's wanted to take the barley back from 2000kg DM/ha to 1200kg DM/ha they had 2000kg of DM available to eat on 2.5ha. If you allocate 1 kg of DM per DSE per day to graze the 2.5ha in 5 days (not taking into account any new growth) the Becker's would have required 33 weaners (rated at 12 DSE -aiming for growth rate of 1.2-1.5kg LW per day)

Further Information



Grazing in cell 1 (Left) at 1200kg DM/Ha prior to grazing Cell 2 (Right)

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