

The latest news from the Barossa Improved Grazing Group

[View this email in your browser](#)



Natural Resources
Adelaide and Mt Lofty Ranges



Natural Resources
SA Murray-Darling Basin



The BIGG Bulletin

OCTOBER 2016

In this issue

- BIGG Spring Pasture Walk- September
- Virtual Fencing a first for the Barossa
- Native Pasture Fertiliser Demo Site
- Current Soil Moisture Monitoring

BIGG Spring Pasture Walk



Producers got hands on with identifying

oestrogenic clovers at the Movulta PRS site with



The Keyneton PDS site demonstrated the

benefits of utilising forage cereals for grazing and

David Woodard.

the importance of having annual pastures in a pasture system.

The BIGG Spring Pasture Walk held on September 16 had 29 attendees from across the region.

The group's first stop was at the Keyneton MLA (Meat and Livestock Australia) Producer Demonstration Site where they observed annual pasture varieties which will help farmers become more resilient to climate variability.

The key take home message on the day was from Craig John, Project partner, Coopers Farm Supplies Mt Pleasant. He said, "Forage cereal varieties and annual ryegrass varieties produce high feed quality through being highly digestible which will maximise livestock production particularly in the late spring when these varieties will still be high in quality."

The group then attended the Moculta (MLA) Producer Research Site and went through Oestrogenic Clover identification with David Woodard (PIRSA) and Dr Kevin Foster (University of WA). Old clover varieties dominate a large amount of the Barossa grazing pastures, particularly if the pastures have not been renovated in the last 20 years.

Oestrogenic Clovers contains phytoestrogens which can cause infertility and other reproductive disorders in animals, in particular, sheep, who graze these pastures. In the small area of pasture over 8 varieties of clover were identified with all four of the oestrogenic varieties present.

Also observed was the BIGG (Barossa Improved Grazing Group's) subclover root disease project which is in it's third and final year.

This year the Project trialed a range of seed treatments and different fertiliser treatments, to try and combat the root disease.

"Sub clover root disease can result in reduction in germination of clover seed and severely reduce clover production and is prevalent across much of the Barossa," said Brett Nietschke, BIGG technical facilitator. "The results indicated that there was no significant effect from any of the treatments."

More information from Uni WA's Kevin Foster on Oestrogenic Sub Clover can be found on the [BIGG website](#)

Virtual Fencing- a first for the Barossa



Bruce Hancock, Rural Solutions SA:PIRSA, Roseworthy, Dick Evans, Wootoona, Angaston, and Robin Dobos, NSW DPI, Armidale at Angaston Ag Bureaus Recent Precision Livestock Forum.

Barossa Livestock producers heard it first at a recent forum at Mt McKenzie. Virtual fencing is now a when situation, not an if situation. Simplistically, virtual fencing means a producer could have normal boundary fencing, and then have all internal fencing / livestock constraint as flexible as they want, except for a few forcing areas of course. The livestock could be guided to graze an area based on land type, shelter for lambing, north or south facing slopes that produce different amounts of feed; and from a natural; resource management perspective, specific areas can be grazed according to groundcover and water courses and riparian zones could be protected or strategically grazed as part of bushfire preparation plans.

Virtual fencing consists of the livestock having some form of responder device on them, in their ear-tag, etc. and portable beacons /towers in the paddock that send out communications that activate the responder.

With many local properties recently affected by bushfire, and producers realising the cost of materials & erection and time of new conventional fences, the concept of constraining livestock via a virtual electric fence is very appealing.

The equipment is available overseas, and requires 2 important steps in Australia;

1. Legislative change to enable use of virtual fencing in livestock production systems.
2. Proof of concept trialing in Australian extensive grazing conditions.

Like all technology development, there will be hick-ups and challenges, but virtual fencing presents a significant potential improvement in extensive livestock grazing management, akin to the likes of the sheep dog, superphosphate, the motor-bike, genetics – Australian Sheep Breeding Values, handling equipment, electronic individual animal identification, smart phones and apps. And of the near future, unmanned aerial vehicles (UAV's) – which will be a future forum in 2017 hosted by the Angaston Ag Bureau.

Native Grasses Fertiliser Trial Site





The Keyneton Fertiliser Trial site with increased Kg DM/ha in response to different super phosphate application



The haresfoot clover responded in relation to the super phosphate application without reducing native grass plants

The second year of fertilise trials in native pastures has been measured in conjunction with the Recovery of Native Pastures after Bushfires Project which was supported by Natural Resources Adelaide Mt Lofty Ranges. The productivity of pastures is influenced by a number of factors including soil fertility. However different pasture species have different nutrient requirements with native pastures generally considered to require less nutrition than introduced species. The aim of this demonstration is to investigate the response of native pastures to superphosphate at various rates and whether it is an option to speed up the recovery of the pastures eg increase dry matter growth and improve ground cover after a fire.

The demonstration sites are located at Kirsty and Jason Treloars at Pine Hut and Joe and Graham Keynes' at Sedan Hill. The results last year showed no significance in any of the treatments which is thought to be a result of the poorer season.

Results this year are more encouraging with the dry matter results show a good response of spreading single super on the Keynes site (Table 5) but the Treloar site was variable due to soil depth and rocks making it difficult to accurately assess. There was no visual decline in the native grass density after 2 applications of single fertilisers but visually the legumes (predominantly haresfoot clover), geranium, capeweed and wild oats responded. This is good quality feed and would help improve livestock production from the paddock.

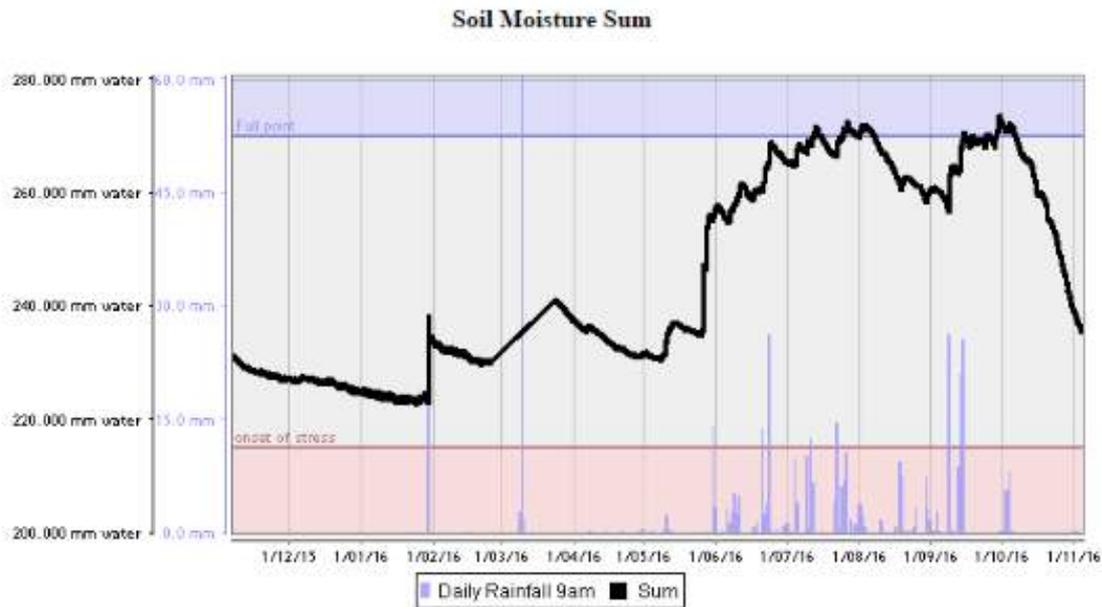
Table 5. Average Dry Matter per ha for each of Keynes's treatments

Control – 1060 kg DM/ha
50kg – 1340 kg DM/ha
100kg – 1570 kg DM/ha
150kg – 1760 kg DM/ha

This resulted in a cost of 6.6 cents/ Kg DM for the cost of extra dry matter grown for the 50Kg increasing to 7.9cents/Kg DM grown.

The full results can be found on [BIGG website.](#)

Soil Moisture Monitoring



BIGG's soil moisture probes at Keyneton, Eden Valley and Koonunga are still in operation and available to view on the [BIGG website](#).

With the wet conditions, the soil profile has remained full, or close to full from July through to October, however in the past month it has reduced by half from approximately 50mm to 25mm as a result of plant use and evaporation. This can be seen on the graph which is from the Keyneton site but other information such as plant available water, total rainfall, soil temperature and spray conditions.

From the Inbox...

- Long term pasture underpins Springton Dairy- Local Case Study [READ MORE](#)
- Keyneton will host the return of a South Australian Merino Sire Evaluation which will evaluate 16 different rams for wool and carcass traits in 2017 [READ MORE](#)
- Check out the MLA website for a range of tools such as pasture rulers, cost of production calculators and feed calculators. [VISIT MLA](#)
- Check out the Lifetime Ewe Management App, this can help you develop feed budgets, monitor condition scoring and keep track of your mobs. Search LTEM in your APP Store.

Your BIGG Contacts

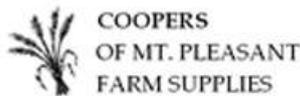
Technical Facilitators:

[Brett Nietschke](#): 0432 804 389

[Georgie Keynes](#): 0409 287 261

Communication Officer:

[Rebecca Barr](#): 0402 788 526



Government of South Australia
Department of Environment,
Water and Natural Resources

Disclaimer: No warranty is made that this material is free from computer virus or any other defect or error. It is your responsibility to check this email and any attachments and links for viruses. Any loss/damage incurred by using this material is not the sender's responsibility. The sender's entire liability will be limited to resupplying the material.

Copyright © 2016 Barossa Improved Grazing Group, All rights reserved.

[unsubscribe from this list](#) [update subscription preferences](#)



Follow BIGG on Facebook



Check our our Website

MailChimp