



The BIGG Bulletin

April 2014

If you can't measure it you can't manage it!

That was the take home message from **BIGG's Soil Moisture Monitoring Workshop** held at Keyneton on April 11. Local producers left the workshop enthused about the value of measuring the moisture levels in their soils and its potential to help make smarter management decisions.

Various industry experts shared their knowledge and experience with participants at the workshop. **Peter Toome**, Managing Director of EnviroPro Dielectrics gave participants an overview of water use efficiency and moisture monitoring. His talk outlined the theory of soil water holding capacity, the concept of the 'soil water bucket' and the importance of determining how much water is available in the bucket for plants to use.

Tony Craddock, a consultant to various grower groups for Rural Directions, highlighted his experience with monitoring soil moisture in dryland cropping systems. For example, through measuring the rate and depth of water use, his clients had greater confidence in applying urea late in the season to improve crop yield and quality. This was backed up by **Callum March**, a grain grower from Balaklava who gave an insightful presentation on how he uses soil moisture data generated from his farm

to guide decisions on urea application, crop selection and grain marketing. This even included having the confidence early in the season to take up a good deal on a new tractor!

Adam Pietsch, Farmer Johns Viticulture Advisor then rounded out the presentations by discussing how he uses soil moisture monitoring information to assist vignerons make irrigation management decisions, which is especially critical through dry seasons or prior to a heat wave.



Participants inspecting the Keyneton demonstration weather station at the BIGG Soil Moisture Monitoring Workshop

The workshop also included a visit to a pasture paddock at Keyneton where a weather station has been set up as part of the BIGG project, **Monitoring Soil Moisture to Improve Productivity and NRM in Grazing Systems**. Participants witnessed first hand the technology used to collect data (including soil moisture and soil temperature to a depth of 85cm, rainfall, air temperature and relative humidity) and how the data can be interpreted. For example, on the 9th and 10th of April the Keyneton site

received 50mm of rain which penetrated to a soil depth of 35cm.

The workshop concluded with a discussion on how soil moisture monitoring information can be used to guide management decisions for livestock producers (e.g. destocking, time of pasture sowing). The key is to understand how much moisture is available in the soil profile for pasture growth and the rate which plants are using it.



The technology used to collect soil moisture, rainfall, temperature and humidity data for BIGG's Soil Moisture Monitoring Project

BIGG's project on soil moisture monitoring is funded by Caring for our Country and the Adelaide Mt Lofty Ranges NRM Board. As part of the project, weather stations have been set up at Flaxman Valley, Keyneton and Koonunga.

To access the live climate data generated from these sites, including the presentations from the Soil Moisture Monitoring Workshop visit the [BIGG website](#).

EverGraze Seminar and Research

EverGraze is a national project that aims to design, test and implement farming systems based on perennials. The project has been running for ten years and has the mantra:

Putting the Right Plant in the Right Place for the Right Purpose with the Right Management.

This means the right combination of perennial pastures put in the right part of the landscape for the right purpose and with the right management can extend the growing season, increase profitability, and maintain ground cover and perennial persistence.

In February, EverGraze held an all-day

seminar in Melbourne to present the key messages from its ten years of research. The seminar was attended by researchers and consultants, including a contingent from SA; Tim Prance (T Prance Rural Consulting), Simon Ellis (Ellis Farm Consultancy), Fraser Mulvaney (Rural Solutions SA) and Brett Nietschke.

EverGraze's research findings are summarised on its [website](#) and although the research has been largely conducted in the eastern states it has some valuable learnings for local producers and their on-farm decision making. Of key relevance are the fact sheets under the [on-farm options](#)

and the [tools and calculators](#) (particularly the Stocking Rate Calculator).

As part of the EverGraze project, relating training courses have also been delivered for producers. These are yet to be conducted in SA, but this should change with several SA consultants soon being trained to run the courses.

EverGraze
More livestock from perennials

From the INBOX

Sheep Management Workshop

Over several sessions throughout May (starting from May 6, with remaining dates flexible) the AMLR NRM Board is running a [free](#) Sheep Management Workshop at Williamstown. The workshop is aimed for lifestyle producers and will be run by Simon Ellis. For further info and to register contact Jessica Cavallo on 08 8523 7725 or Jessica.Cavallo@sa.gov.au

SA Sheep Industry Forum

Presentations from last months SA Sheep Industry Forum are now available on the SheepConnect SA [website](#).

Woolworths Agribusiness Scholarship

For those of you between 20-35 and involved in agriculture, horticulture or land management this [Woolies scholarship](#) is worth checking out.

Further Information

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