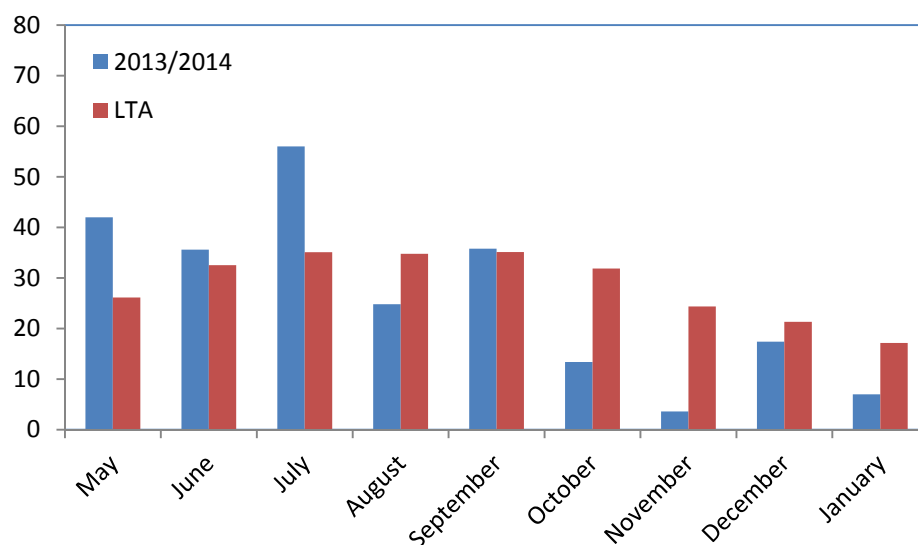


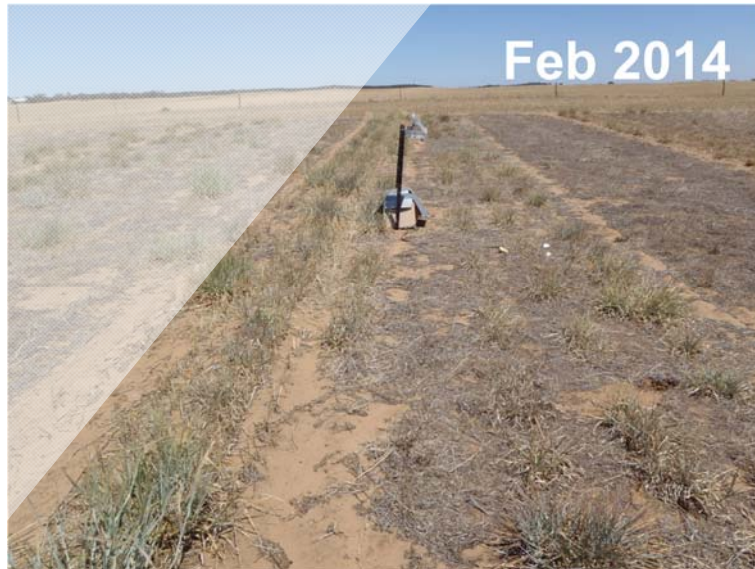
## Two months in the life of the Mallee's sub-tropical perennial grasses

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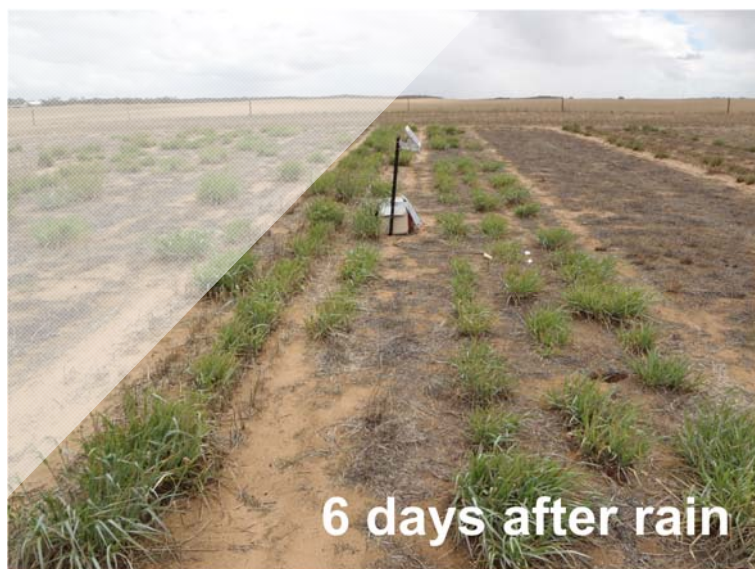
The rainfall in 2013 through to the start of February 2014 at the Future Farm Industries CRC EverCrop sub-tropical grass experiment at Karoonda in the SA Mallee was a pretty sad state of affairs. Despite good rains around sowing, it would be an understatement to say that from October through to the end of January there was not a lot of rain compared to the long term average (LTA)!



For mixed farms (those with crops and livestock), by February 2014 things were looking pretty tight in term of feed - with all most of the stubbles gone or little of much value left - and farmers starting to think about feeding costly grain. The experimental plots were looking pretty dry, with the having shut down their growth due to lack of soil moisture.



.... But then the much needed rains came – 75 mm on the 13<sup>th</sup> and 14 February. After 6 days the sub-tropical grasses were off and away, making the best out of the summer moisture.



Some 13 days after the rain there was up to 0.5t/dry matter per ha in some treatments.



And by 20 days there was a good amount of leafy green feed ready for grazing.



Also by 20 days a couple of things in particular were very apparent: the Panic plots have a great capacity to rapidly exploit available water and available nutrients.





In places like Queensland they can produce enormous amounts of dry matter. Although they are less productive in the Mallee where water and nitrogen are relatively scarce, they are certainly a more attractive alternative than other grass species available for hungry livestock in summer ... or not on offer as is often the case.



So three weeks after the summer rain disappeared and with the onset of shorter days and colder nights, it was time to graze back (or in the case of the field experiment slash) the plots in anticipation of the grasses entering their autumnal-winter dormancy period.



... however, on the 8<sup>th</sup> and 9<sup>th</sup> of April, a further 27 mm fell and 6 days later there is already a lush green stand of feed ready to graze again



Another thing that has become apparent is that species such as Rhodes Grass (not to be confused with the weed Feather topped Rhodes Grass), although they might have lower feed quality, with their creeping growth can provide some highly valuable cover at a critical time of the year when Mallee landscapes are highly vulnerable to wind erosion.





The Panics will offer good ground protection too and may even probably be more persistent under grazing and prolonged drying cycles

So how often do they get a summer storm at Karoonda? Well unfortunately three inches of rain, and the follow up of another inch doesn't occur too often at Karoonda! Mind you, according to climate scientists, summer storms might happen more and more often. But before we look too far forward it might be worth looking back at the rainfall record and see what the long term data can tell us. The rainfall station at Karoonda has just ticked over its 100 year birthday (the card from the Queen should be in the mail!) and so it is a good chance to look at the full record. Assuming that a summer rainfall event is 20 mm of rain which should be enough to get some biomass (summer active perennial plants are very efficient at producing biomass) there is a 54% chance of at least one 20 mm event in the Jan to Mar period. In other words, every other year, the statistics say that there should be enough rain to provide some feed to fill the feed gap.

If you are a Mallee farmer and have about 20 hectares on which you would like to try some summer active grasses then contact Andrew Smith ([andrew.p.smith@csiro.au](mailto:andrew.p.smith@csiro.au) or 0413951794) who is leading the EverCrop project efforts to develop the role of sub-tropical perennial grasses in low rainfall regions. EverCrop is a Future Farm Industries CRC project supported by GRDC and is aimed at developing the role of perennials to improve mixed farming systems.