Cotton Catchment Communities CRC

NSW DEPARTMENT OF PRIMARY INDUSTRIES

COTTON *TALES*

Southern New South Wales

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Southern Regional Cotton Extension Officer

Hi Everyone

I would like to introduce myself as the new Regional Cotton Extension Officer for the Lachlan, Murrumbidgee and Lower Darling.

My role will be to provide information to growers and their consultants and provide a link to Cotton CRC researchers and others associated with the cotton industry. As part of this role I will be organising farm walks and field days throughout the season. This will provide an opportunity for local growers and consultants to meet some of our researchers and find out about the latest research results. The industry is a very open one in regards to information sharing and it is important to support these days by participating.

As we are all aware the season is not shaping up to be a good one in terms of water. We can only hope that the catchment receives some good falls very soon! On a more positive note the area has just had one of its best seasons in terms of yield and quality.

Please feel free to contact me on the above numbers should you have any suggestions for what you would like to see in cotton tales over the coming summer. I look forward to catching up with you over the next month or so and at the field days, crop walks and Cotton Grower Association meetings. I am currently planning meetings and I will advise dates as they are confirmed.

I would like to take the opportunity to thank David Williams for his efforts as acting Regional Extension Officer whilst the recruitment process took place.

Regards James Hill

Management of a Dry Storage

Did you know when you first fill your storage after it's been dry, you can lose in excess of 2.5 ML/ha of storage floor? A key recommendation from the Irrigation Association of Australia (IAA) is to manage your storage the same way as you would manage a dry land field. You want to conserve moisture and reduce cracking.

Therefore weed control is important. Growing a crop in your storage can cause significant drying and cracking in both the embankment and the floor and subsequent loss of valuable irrigation water. If the storage soil surface is allowed to dry and crack, soil evaporation losses increase and significant amounts of water can be lost as it runs down the cracks and the dry soil soaks up the water.

While your storage is dry, it is a good time to survey it and obtain an accurate depth-to-volume and surface area relationship. Often the storage was not accurately built to the "design" and actual volumes can differ by up to 20%. Over time, with a build up of silt and slumping of dam walls, the dimensions of your storage will change as well. Ideally a storage survey should be re-done after any remedial construction work on the banks or any other changes to the floor or borrow areas. Additionally, it is worth considering doing an EM survey at the same time to differentiate the soil types within the storage.

While your storage is dry your local surveyor can easily survey your storage. If you have access to GPS/Beeline you can survey your storage yourself and send the data to your local surveyor or engineering consultant for processing. To do this, drive in at least 2 pegs at ground level located near an inlet/outlet point as reference points or bench marks. It is necessary to drive back over these points several times during the survey to establish a good level as a permanent reference height.

It is also an ideal time to install a gauge board, or for greater accuracy, you could set up a permanent storage meter. One that is readily available is the IrrimateTM Storage Meter which consists of a pressure sensor that has an accuracy of ±10mm. It's easy to install and continuously measures and records storage volume and water surface area. Knowing exactly how much water you have gives you the ability to fine tune its use and assist with water budgets. Storage meters can also be used to get an accurate measurement of the amount of tail water and stormwater you recover and can be used to check pump capacity when pumping directly into your storage.

Once we receive some significant rain in our catchment, care needs to be taken when filling a storage that has been dry for some time. To avoid potential problems such as erosion and blow outs, dry storages should be filled slowly. If possible, the filling rate should be no more than 300 mm of water a day, and preferably less than 100mm a day.

Article by Janelle Montgomery and Peter Smith – NSW DPI.

New Cotton CRC website

The Cotton Catchment Communities CRC has a new website. This website has a wealth of information about the CRC, research and extension projects and many more things you want to know about cotton.
www.cotton.crc.org.au