

AG15 Update

- a natural resource management newsletter for irrigated cotton and grains growers

Susan Maas DPI&F Emerald - Phone: 4983 7401; susan.maas@dpi.qld.gov.au

Veronica Chapman DPI&F St George - Phone: 4620 8103 veronica.chapman@dpi.qld.gov.au

Environmental extension officers (Cotton) with DPI&F and the Cotton Catchment Communities CRC

Issue 8 December 2006

What's been happening in AG15?

At the recent National Cotton Extension Team workshop it was decided that there needs to be stronger integration of natural resource management messages with production issues where appropriate. This will ensure consistency of messages distributed by the extension team. This undertaking is important particularly as new regional extension staff join the team in Dalby, Goondiwindi and St George.

As our project - "Enhanced natural resource management in irrigated cotton and grains" - draws to a close in May 2007 we will be undertaking an extensive reporting and evaluation process. We will be conducting a formal process but please feel free to send us your comments about the project or where natural resource management extension should go in the future.

NRM case studies

We have been collating case studies on natural resource management in cotton production systems.

The 'Wyobie' case study features a dryland cotton production system on the Darling Downs. The main message from property manager, Richard Dowsett, was to consider natural resource management in the day-to-day management of the property rather than seeing it as a separate issue. In addition Richard sees value in working with Landcare, Cotton Australia, your local NRM body and government departments to assist in achieving your natural resource management goals - on your own farm and across your catchment.

Natural regeneration as an option for revegetation was the focus of a case study on 'Retreat' and 'Clearview' in Emerald. Graham Volk used this 'do nothing' approach to encourage Brigalow regrowth on 86 ha, starting with 36 ha at Retreat more than 10 years ago. These areas on 'Retreat' and 'Clearview' are being recognised for their biodiversity through a Fitzroy Basin Association (FBA) stewardship program, administered as part of Central Highlands Regional Resources Use Planning Cooperative (CHRRUP) Emerald Neighbourhood Catchment activities. In return for continued management for biodiversity FBA contribute structured payments until mid 2008.

Thanks to growers who agreed to participate in a case study. We hope your work is an example to others who may be considering tackling some NRM issues but were not sure where to start.

If you would like more details on the case studies or have an interesting natural resource management story to tell please contact us.

Cotton and grains irrigation workshop series

If you want to know more about irrigation issues such as planning, benchmarking, budgeting, scheduling and storage and distribution systems then a new series of workshops is just around the corner. The first four workshops of a new irrigation workshop series are in the final stages of development and should be ready for delivery in the New Year.

The workshops will generally run for about 3hrs each and will be delivered so that they can best incorporate local trial data or planning processes (such as the BMP Land and Water Module) or can be targeted to local issues as they arise.

Whilst they are flexible and practical, the workshops are also mapped to national training competencies, so they can contribute towards obtaining a nationally recognised qualification.

Further workshops are also on the drawing board, covering topics such as soils, pumps, surface irrigation systems and metering. These workshops should be completed and available for delivery following this summer season. A course on CP&LM systems is also available.

If you would like to attend a workshop on any of these issues, or have other issues that you would like to see covered, then contact your local Water Team member or call David Wigginton on 0427 789 498.

Christmas wishes

We would like to wish you a very happy Christmas and all the best for the New Year. May 2007 be a profitable, productive and sustainable year.



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Lippia information session at Dirranbandi

The Lippia information session will cover recent research findings and on-ground successes in Lippia management.

When: Monday 11 December – 2 pm – 4 pm

Where: New Dirranbandi Motor Inn

The event is being hosted by the Murray Darling Basin Lippia Working Group with support from Envirofund, QMDC and Namoi CMA.

Speakers include:

- Adam Logan – QMDC – Bio-control project
- Matt McDonald – UNE – Lippia ecology
- Tony Woods – Landholder – On-ground Lippia management
- Greg Mills – Go Ahead Business Solutions – Grazing systems to minimize Lippia
- David Illings – Pasture consultant

For further information please contact

Adam Logan 0427 749 436 or

Tyson Hosie 0427 707 868

Your NRM body – What can they offer?

Your local Natural Resource Management body can assist you with your natural resource management issues. The priority areas for each group are documented in their respective catchment plans available on their websites (listed below).

Priority issues include

- water quality and water use efficiency
- vegetation monitoring and health
- riparian management and
- soil management and health.

Each body works differently in the technical support and funding schemes they offer. So if you are interested in finding out more please contact Sue or Veronica and we can direct you to the relevant officer within your region.

Alternatively contact your local group directly on the numbers below -

- Queensland Murray Darling Basin Committee - www.qmdc.org.au – Border Rivers: 4671 7900; Maranoa Balonne: 4622 8446
- Condamine Alliance - www.condaminealliance.com.au -1800 181 101
- Fitzroy Basin - www.fba.org.au – 4999 2800

Climate Change

Scientific studies have linked global and Australian temperature increases to the enhanced greenhouse effect. Since 1979, all but four years have been warmer than average in Australia, with 2005 the hottest on record. It is predicted that surface temperature increases may lead to an increased frequency of drought and bushfires, while more extreme rainfall events may affect the frequency and severity of floods. Positive and negative impacts on crop yields due to climatic changes and atmospheric CO₂ concentration will vary across regions.

All major greenhouse gases are produced during cotton production and include:

- Carbon dioxide (CO₂) from tillage and fuel usage
- Methane (CH₄) from prolonged waterlogging
- Nitrous Oxide (N₂O) which is associated with high rates of N fertilizers.

While this is a global phenomenon, there are things that you can do to reduce greenhouse emissions including:

- Maintaining and planting vegetation as carbon sink to offset greenhouse gas emissions from cropping
- Reducing nitrous oxide emissions through improved nitrogen efficiency, improving water use efficiency and drainage, minimum till farming and banding of fertiliser. Improved nitrogen and water efficiency also improves yields and reduces costs.

For more information see the Greenhouse Gas information sheet and calculator on the Cotton Catchment Communities CRC web site (www.cotton.pi.csiro.au).

