

"A healthy productive Murrumbidgee catchment and its communities working together – Yindymarra"

CSIRO and Harden-Murrumburrah Landcare Group Sustainable Farming Partnership

Harden-Murrumburrah Landcare Group (HMLG) and CSIRO celebrated the 20-year anniversary of the Oxton Park tillage trials on September 29 with a workshop that presented some results of the many trials that have been conducted on this site.

Since the inception of HMLG two decades ago, the partnership with CSIRO has provided a fundamental link between the invaluable scientific research done and the Landcarers who wish to implement their findings on a commercial scale. The trial commenced with the tillage experiments comparing tillage and stubble management techniques including narrow points at 'Oxton Park', which provided a platform for research and led to numerous ongoing projects. This site has become a focal point of collaboration and discussion with local farmers, consultants and HMLG.

The project was originally designed to develop sound research-based management strategies to sustain production while reducing soil degradation, and investigating the effects of management on soil condition and crop performance. Key research on the site includes crop sequence, research into soil ecology, effects of direct drilling and deep drainage, crop nitrogen management and weed bio-control.

The close working relationship with members of Harden-Murrumburrah Landcare Group has ensured research is both relevant and practical and provides a forum for interaction between the farmers, consultants and researchers.

It was the first time all the different trials on the site were presented together, giving the scope of the experiments. Speakers included John Kirkegaard - The effect of conservation farming on crop growth; Michelle Watt - Does direct drilling reduce seedling growth?; Julianne Lilley and Warren Bond - Soil water balance and deep drainage; John Angus - Crop nitrogen management; Gupta Vadakattu - The effect of conservation farming on diversity and activity of soil biota; Sarah Bruce - Growing canola in what stubbles; Clive Kirby - Soil carbon pools and building blocks; Judy West - Conserving remnant vegetation in a farming system; Jim Pratley - The importance of research and community, where to in the next 20 years.

The way we manage our land today has been shaped over the years by this partnership, one that will continue to prosper well into the future. Results concluded that conservation cropping can have significant impacts on productivity in the high-rainfall cropping region of Harden that are not obvious in lower rainfall areas. Many of these effects of direct-drilling can be overcome with strategies revealed in the experiments, while leaf diseases can be reduced by varietal selection and use of fungicides. In wet seasons it is likely that the problems reported in Harden will show up elsewhere. The results indicate that occasional tillage and stubble reduction through a late burn in a conservation

cropping system will not lead to soil degradation. The impacts on productivity should be balanced against the benefits of reduced erosion, improved soil properties, earlier sowing and lower costs of labour and machinery. Most growers will judge that the benefits outweigh the costs. However the lack of significant response of crop yield to the apparently improved soil conditions under conservation cropping remains a puzzle and is an important topic for further research. There are still opportunities for increasing yields under conservation cropping in general and with retained stubble in particular. Advances could come from breeding crops specifically for conservation cropping, and from further development of high-precision guidance to sow between the rows of previous crops. As in other improvements in crop productivity, a combination of breeding and changed crop management is likely to lead to the most rapid progress.

Copies of the workshop papers are available from:

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Murrumbidgee CMA Community Support Officer
Phone: (02) 6386 3954 / 0428 863 954
Email: louise.hufton@cma.nsw.gov.au



Listening to John Angus, on site at 'Oxton Park'

BINALONG LANDCARE

Subgroup of Harden-Murrumburrah Landcare

Landcare Meeting and End of Year Gathering Monday 21 December 2009, 7:30 pm Binalong Hotel

Members and guests are invited to attend the last meeting of the year to celebrate our achievements during 2009.

Please bring a plate of your favourite Christmas goodies and your ideas for Farm Walks and other activities in 2010!

Updates on the Native Grass Pastures Project
Enquiries: Libby Elliot 02 6227 4289 / Donna Reid 02 6227 4237
or 0412 660 057.

Jugiong Creek Stream Monitoring

The Jugiong Creek Community Stream Monitoring project has expanded salinity datasets from 2002 with new stream sampling sites. Data was collected at 38 principal sites and some 40 other sites, with a salt load data set also collected by Thiess Environment Services. The salinity datasets were interrogated by the Bureau of Rural Sciences (BRS) to rank each sub-catchment within the Jugiong Creek catchment for salinity mitigation, via targeted investment and intervention.

The Jugiong Creek catchment salinity datasets allowed for the identification of high salinity areas within sub-catchments. High stream salinity in the Jugiong Creek catchment was identified in the north and eastern regions. The addition of salt load data allowed for a cross coding system to rank for salt contribution. As a result, Currawong, Spring and Coppabella Creek sub-catchments were identified as high salt contributors. Fresh water sources in the Jugiong Creek were up-stream of Coppabella Road, Illalong Creek and its tributary Duneralligo Creek and the lower reaches of the Bogolong Creek.

Due to prolonged low rainfall conditions during the four-year sampling period, interpretation of the datasets indicates that groundwater discharge, base-flow was measured in many sampling events. As a result of base-flow measurement, several groundwater flow systems in the Jugiong Creek catchment have been identified as salt contributors.

This is a collaborative project between BRS, the Murrumbidgee CMA and HMLG and has received financial support from the Australian and NSW governments through the National Landcare Program and the National Action Plan for Salinity and Water Quality.

At the conclusion of the presentation, many members of the group agreed they would like to continue to monitor their patch, anticipating a wet season just around the corner and therefore data collected under high flow conditions. Whilst the group doesn't have funding for monitoring to continue, it is hoped the collection of data will be analysed as part of a future project.

The complete final report is now available from the Murrumbidgee CMA Harden Office. Please contact Louise Hufton if you would like a copy.



Photo right: Maree Stewart and Jim Ryan reviewing a dry monitoring point.

Alternative Fertiliser Trial

Aim: To investigate a range of alternative fertiliser products for use on native perennial grass-based pastures in the district to increase soil fertility and pasture productivity. The trial is to be run over a three-year period.

The three alternative fertiliser trial sites in the Binalong and Bookham area are successfully up and running. Trial sites were pegged out in November 2008 and baseline soil tests were taken. The first year of product was spread on the trials in May 2009. Initial pasture composition measurements were taken over winter 2009. The first year of spring pasture growth measurements were taken on all plots in late October and early November 2009. This initial pasture growth dataset is yet to be analysed.

Annual comprehensive nutrient soil testing (including two types of microbial soil testing) is due to occur on rain before the end of the year. We hope that our recent efforts in applying for funding will yield extra funding to help us continue the trials.



Binalong Landcare members on site at the Alternative Fertiliser Trial, inspecting results three months after the application of fertilisers.

Managing Cereal Stubble Trials 2009

HMLG stubble management demonstration trials for 2009 are underway and we are collecting yield data at all sites where possible. We have use of a weigh bin trailer (courtesy of the Weeds Unit at EH Graham Centre) and are collecting actual plot weights wherever possible with co-operators indulging our whims at an important and busy time of year.

This yield data, coupled with other stubble and soil moisture information, will hopefully give some leads on the more effective stubble management practices that might be employed on farms throughout the region, to conserve important soil moisture.

Woolworths *Sustainable Farms Drought Program* has provided on-going funding for 2010 trials. Holbrook Landcare Group will join Harden-Murrumburrah, Henty, Junee Reefs and Mirrool Creek Landcare groups in the trials next year. We hope to build on some of the information and experience of the 2009 trials and have updates, field days and stubble management demonstrations for 2010. A case study of the co-operators and trial outcomes will be available early 2010.

By Tony Pratt: Conservation Officer, Industry & Investment NSW (Cootamundra)

Dates for your diary

CHEMICAL ACCREDITATION TRAINING

Tuesday 8 December 2009

Cootamundra

2080 handling and on-farm fumigation

Cost: \$255 (1 day) / Refresher \$165 (1/2 day)

For details or to register:

Phone: 02 6884 8812

Email: rdiamond@ruralbiztraining.com.au

BINALONG LANDCARE CHRISTMAS PARTY

21 December 2009

Binalong Pub

RSVP to Libby Elliot (02 6227 4289) or Donna Reid (02 6227 4237 or 0412 660 057).

PLACESTORIES TRAINING

Wednesday 24 & Thursday 25 February 2010

Harden

Bookings essential

Contact: Louise Hufton

Phone: 02 6386 3954 or 0428 863 954

YASS VALLEY WIND FARM

(BOOKHAM- COPPABELLA HILLS AREA)

Monday 14 December 2009

Epuron Pty Ltd proposes to construct and operate a 547 megawatt wind farm (including up to 152 wind turbines), approximately 20-35 kilometres west of Yass. NSW Department of Planning has placed the Environmental Assessment on public display from November 12 2009 - December 14 2009. The assessment can be viewed at:

www.planning.nsw.gov.au or on the Harden Shire website: www.harden.nsw.gov.au

Hard copies of the environmental assessment documents and a photomontage booklet can be viewed at the Harden Shire Council Chambers and Harden Library or Binalong Post Office.

MERRY CHRISTMAS!

Wishing you and your families a very merry Christmas, a wet and happy 2010 and many thanks for the support you have given me throughout the year – Louise Hufton

News and events

PLACESTORIES TRAINING

PlaceStories is a digital way of telling the story of your natural resource management projects, monitoring the progress of changes on your farm or your business, or simply recording events in your life. The program is *very* user-friendly and easy to use, and great manual comes with the training. To get a feel for the types of stories and how they are presented visit: www.placestories.com. A second course will be conducted by the Murrumbidgee CMA in Harden on Thursday 24 and Friday 25 February 2010. Bookings essential! Contact Louise Hufton on: 02 6386 3954 / 0428 863 954.

MUSEUM CALLS FOR BOTTLES FROM THE BASIN

In partnership with ACT Waterwatch the National Museum of Australia is looking for a water sample from all local rivers and lakes along with analysis and images.

The project *Bottles from the Basin* is an outreach event to coincide with the Museum's major international exhibition 'Water: H₂O=Life'. It explores how water has determined and shaped life on the planet and the issues and challenges of water management.

Information collected will be plotted on an online map showing people and places that have contributed, along with information on water quality and issues that communities are dealing with. For more information and to claim your free 100ml plastic bottle, contact Adam Blackshaw (National Museum of Australia) on 02 6208 5230 or email: bottles@nma.gov.au.

FARMREADY REIMBURSEMENT GRANTS

FarmReady Reimbursement Grants, for courses completed prior to 30 May 2012, assist primary producers and land managers to attend approved training courses aimed at improving their capacity to adapt to climate change and increase self reliance and preparedness. Application forms need to be lodged and approved prior to attending courses, followed by submitting the claim for reimbursement (up to 30 days after the completion of the course). Managed by the department of Agriculture, Fisheries and Forestry. Further information and application/claim forms can be accessed at www.farmready.gov.au.

COMMUNITY GRANTGURU WEBSITE

GrantReady has developed the community GrantGuru website which provides easy search and browse functions for non-profit organisations to find suitable grants to enhance their projects. The website lists grants in one place and is free and easy to browse. It also assists users with grant applications and ongoing support. The site will assist your organisation to take the first step to tap into the billions of \$\$\$'s offered each year by the Australian Government, corporate and philanthropic organisations. Visit community GrantGuru on line: www.community.grantready.com.au.

HMLG Landcare Awards 2009

Winner: Danny Flanery

Runners up: David and Carol Cusack, JMK Partnership

Thanks to the sponsors:

The Clark Family who provided the prize of a week's holiday at Culburra Beach;

The Murray Darling Basin Authority for the book prizes.

Let us know...

Event coming up? Something worth sharing? NRM issue you're passionate about? Let us know... contact:

Louise Hufton
Murrumbidgee CMA Natural Resource Office
Phone: 02 6386 3954
Email: louise.hufton@cma.nsw.gov.au

Stay in the Loop

Communication is far more efficient, regular and cheaper if we have your email details. Please take the time to send in your address or change of details to Louise Hufton to ensure you receive the most current information.

www.murrumbidgee.cma.nsw.gov.au

For further information:

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Australian Government



New South Wales
Government