

# Managing Drought Through Sustainable Farming Systems in the Murrumbidgee

Tony Pratt , Conservation Farming Officer, NSW DPI, Cootamundra

This project is being managed by Murrumbidgee Landcare Inc. with funding from the Woolworths Sustainable Farms Drought Program and support from NSW DPI and Murrumbidgee CMA. The aim is to compare a range of stubble management practices for their benefits in conserving soil moisture, providing a protective soil cover and improving crop productivity.

**Demonstration sites** have been set up across four Landcare districts in the South West Slopes cropping region. A range of typical farming systems have been selected at:

- Harden (5 paddocks 16 treatments)
- Henty (3 paddocks, 9 treatments)
- Junee Reefs (4 paddocks, 19 treatments)
- Mirrool Creek (4 paddocks, 13 treatments)

**Farming Systems** include:

- No Till and Minimum Till
- Livestock/Cropping
- Cropping only

**Seeding Systems** include:

- Tine Seeders
- Disc Seeders
- Modified Combines



## Stubble Treatments

In each paddock a range of different treatments have been done comparing normal farm practice with other treatments that each Landcare group selected. These included:

- High and low cut at harvest
- Grazed and Ungrazed
- Mulching
- Incorporated with nutrients/stubble breakdown products
- Burnt and unburnt stubble
- Stubble baled

**Measurements** include:

- Stubble Load (in and out of the header trail)
- Soil moisture (60 cm core)
- Stubble Height and Ground Cover
- Bulk density of soil at trial site
- Soil nutrient testing (15, 30, 45 & 60 cm)
- Plant Counts

Monitoring these paddock demonstrations will give an indication of the best stubble management practices that can be adapted to the different areas and to the farming systems used. This project will allow farmers to fine tune their cropping system to make better use of their stubbles.

For more information regarding these trials please contact Tony Pratt at NSW DPI on 02 69 424957.

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