

# Farmers motivating farmers with innovative cropping & grazing systems

- Location:** Central West Slopes and Plains
- Region:** Central West and Lachlan
- Industry:** Dryland farming and grazing
- Group:** Central West Conservation Farmers Association (CWCFA) and Stipa Native Grasses
- Issue:** Ground cover, soil health and sustainability of dryland farming systems
- Key Outcomes:**
- Conservation cropping methods devised and demonstrated that provide adequate groundcover throughout the year including those compatible with native grass-based pastures such as pasture cropping and advanced sowing
  - Landholders increasingly using native plants to improving pasture perenniality and persistence
  - Grazing management principles for native and exotic pastures developed and demonstrated that prioritise the health of soil and pastures (rather than the stock)

## Background

In pre-European times the majority of NSW cropping and grazing zones supported natural grasslands that are now minor remnants dominated by non-native pastures and grain crops of conventional farming and grazing systems. These traditional systems have led to soil erosion and soil structure decline, loss of biodiversity and water quality, rising water tables and worsening dryland salinity. Research indicates salinity would be significantly reduced by a reduction in recharge of 10-15 mm per year by improving soil water holding capacity and water use in cropping and grazing systems. Increased water use efficiency in pasture and cropping systems is the key to reversing the detrimental effects of agricultural production while increasing farm profitability.

## The Project

The success of CWCFA and Stipa lie in their ability to access the improved management techniques of skilled croppers and graziers and extend the information to members through field days, bus tours, newsletters, website, workshops and conferences. They run annual seminars and field days attracting thousands of participants and are recognised as premier conservation farming organisations in central and southern NSW. The project relies heavily on mentoring processes that draw on the expertise of local farm managers who have successfully reversed land degradation while remaining commercially viable. These key farmers are already being utilised to good effect and this project enables them to maintain and expand their impact.

## Outcomes

The project will increase soil health on farms in the Central West and Lachlan catchments by increasing soil organic matter through the maintenance of adequate groundcover for a greater portion of the year. The expansion of perennial groundcover in the form of native and exotic pastures, annual crops and stubbles will also increase water use efficiency; reduce recharge to saline aquifers; increase soil health, biological activity and diversity and reduce rill, sheet and gully erosion and the resulting salinity and turbidity in local and regional rivers. As already demonstrated on leading properties, improvements in groundcover and reduced compaction from machinery and stock through controlled traffic, controlled grazing, strategic use of (deep) tillage and application of ameliorants will improve soil bulk density, moisture holding capacity, water use efficiency and overall farm profitability.

## The Future

The project will significantly increase the productivity and profitability of many landholders in the Lachlan and Central West catchments. By contributing to sustainable management across entire catchments and providing both a public and private good to locals and those downstream it will contribute to other portions of the Murray Darling Basin. The two Catchment Management Authorities also plan to develop best management practice guidelines for perennial species, soil management and remnant vegetation.



Farmers at the CWCFA/Stipa annual field day at Wellington inspecting minimum till equipment. (Photo: Neville Gould)

Darryl Clough of Stipa introducing farmers to various native grasses, their growth habits and production attributes. (Photo: John Dalton)