

Invasive Native Scrub Research Program

Research Project Two: Soil Erosion and Invasive Native Scrub

What is this project about?

Soils in Invasive Native Scrub (INS) areas often lack groundcover, allowing high velocity water run-off and poor water infiltration. This can lead to serious erosion. INS also reduces the productivity of properties to a considerable extent by lowering herbage production and consequently the livestock carrying capacity of land.

This project will explore the relationship between erosion processes and variables such as vegetation, groundcover, soil properties, topography and history of management at a regional and paddock level.

Information obtained from a regional survey will help us to understand the mechanisms of erosion at a landscape level. Information about vegetation, groundcover, land use, soil properties and evidence of erosion by water will be linked to satellite images to assess the severity of erosion in the study area.

At a paddock level, a rainfall simulator will be used to examine rainfall infiltration, runoff and sediment production under different land use practices and across a variety of INS types.

This project is being run by Carlos Munoz from the University of New England.

Why is it being done?

The key objectives of the project are to:

- evaluate and compare water runoff, sediment production and water infiltration under different land use practices (INS, crop, pasture) using simulated rainfall
- identify key variables influencing gully erosion in managed and non-managed INS areas
- assess soil erosion at a regional scale
- develop recommendations for INS and erosion management.

The project will ultimately identify the key factors controlling soil erosion and will provide guidelines for managing INS and soil erosion.



How can I be involved?

Landholders are invited to contribute to this project through allowing researchers to conduct sampling on their properties in the regional survey.

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About the overall INS Research Program

A range of research and communication projects dealing with Invasive Native Scrub (INS) are being undertaken in central-west and western NSW. This is a serious issue across the region and can have an adverse impact on habitats, wider landscape health, communities and farming operations.

The research program builds on community involvement, landholder knowledge and scientific research to complement and update previous INS studies.

It will ultimately lead to a better understanding of how INS treatment options vary between areas and need to be accommodated. Our intent is that regulations, incentives and advice will facilitate rather than constrain good practice.

The overall product will be a resource outlining what we

have learned from landholders and the research projects – what INS management techniques work under different circumstances.

This resource will provide a means of distributing research findings widely amongst landholders, government agencies and policy-makers alike.

Preliminary information is expected to be released mid-2008.

Various researchers and organisations are running the research projects and the overall program is coordinated by the Central West and Western Catchment Management Authorities (CMAs).

Want to be involved?

We are keen to work with the farming community on these projects and hope you are able to help. Local knowledge and experience, and access to INS sites for research are vital to the success of the program.

To be involved or updated on the program's progress, please contact the Central West CMA:

Email: Rodney.campbell@cma.nsw.gov.au

Fax: 02 6881 3401

Post: PO Box 2105, Dubbo NSW 2830

Phone: 02 6881 3430

Your details:

Name: _____

Address: _____

Phone: _____

Email: _____

Area of interest:

- General interest in INS
- Interested in INS management information
- Have INS sites on my property available for research
- Would like to share experiences in managing INS
- Would like to share examples of INS treatment
- Other _____

Your personal information will remain within the Central West and Western Catchment Management Authorities (CMAs) and will not be divulged to other organisations.