

Weeds CRC Strategic Plan 2004–2008

Left: Beatrice Lagoon, NT, June 1986, a haven for birdlife, fish and other animals. Photo: Colin Wilson Right: Beatrice Lagoon, NT, July 1995, infested with the South American invasive plant Hymenachne amplexicaulis. Photo: Colin Wilson



The Cooperative Research Centre for Australian Weed Management was set up to enhance the sustainability of farming systems and natural ecosystems across Australia through the development and promotion of integrated weed management systems based on excellent science.

Why are weeds a problem?

- Weed infestations are degrading the Australian landscape displacing native plants and animals, polluting waterways and creating bushfire hazards
- Weeds cost the Australian economy \$4 billion each year
- Invasive plants threaten many endangered ecosystems, damage Australia's World Heritage areas and place pressure on threatened species
- Weeds can cause serious health problems through increased allergies and asthma
- Invasive weeds are still entering Australia legally.

| What we will do O A L S | We will achieve this by PUTS |
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| Provide tools for a coordinated national approach to the assessment, prevention and management of new weed incursions | developing a national list of exotic plants in Australia building national weed incursion detection capacity refining the weed risk assessment system used at Australia's border, based on best scientific principles developing comprehensive post-border weed risk assessment systems developing decision-support tools for incursion management |
| Reduce the economic and environmental costs of weeds in the main cropping systems | developing innovative control tactics for long-term weed suppression, using new biological, physical and chemical technologies adopting a national focus for weed management in Australian cropping systems developing tools to quantify weed risks as farming practices change, to assist farmers in management decisions |
| Improve the management of weeds in extensive land use systems | developing scientifically-based principles for weed management in three major habitats: riverine, rainforest and rangeland developing scientifically-based principles to manage four major weed types: bird-dispersed weeds, unpalatable grasses, aquatic weeds, invasive rangeland shrubs improving the efficiency and effectiveness of biological control as a weed management tool |
| Increase awareness of weed issues, improve skills in weed detection and management through education and training, and provide accurate knowledge on which to base policy and management decisions | increasing awareness of weeds and the damage they cause to natural and agricultural ecosystems providing practical and reliable knowledge about weed biology and sustainable weed management improving the skills of those currently responsible for weed management |





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This will result in

- a nationally accepted system to identify potential weeds outside and within national borders
- effective weed incursion detection systems at national and regional levels
- a national infrastructure for rapid responses to new weed incursions
- effective and economically viable tools for sustainable weed management in cropping systems, demonstrated through regional *best weed management* systems
- rapid and efficient transfer of outcomes of weed research to farmers and policy-makers
- reduced cropping weed costs nationally through improved management
- improved management of weeds of rangeland, rainforest and riverine habitats, based on an understanding of the processes of weed invasion and their impacts
- national support for biological control, based on effective strategies for agent selection, host-testing and field evaluation
- quality information on weed issues delivered to policy makers, weed managers, scientific experts and the general public
- excellent materials and programs developed for all educational sectors
- a national skills base of highly qualified people for weed research, policy and management





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Researchers are developing better ways for farmers to manage weed populations, such as this infestation of sowthistle (*Sonchus oleraceus*). Photo: Steve Walker

School children enjoy learning about weeds and related issues during Weedbuster Week, held in October each year. Photo: Peter Martin

The Weeds CRC is promoting weed awareness to land managers, community groups and the general public. Photo: Peter Martin

Plants raised in this nursery are used to test the host specificity of biological control agents. Photo: Sally Vidler

S The web of gorse spider mites, a biological control agent introduced to control gorse (*Ulex europaeus*), a Weed of National Significance. Photo: Peter Martin



Core participants

Adelaide University CSIRO Entomology Department of Agriculture Western Australia Grains Research and Development Corporation New South Wales Department of Primary Industries Queensland Department of Natural Resources and Mines Victorian Department of Primary Industries

Supporting participants

Australian Government Department of Agriculture, **Fisheries and Forestry** Animal and Plant Control Commission of SA Avcare Limited **CSIRO Plant Industry CSIRO Sustainable Ecosystems** Landcare Research New Zealand Ltd Northern Land Council Northern Territory Department of Infrastructure, Planning and Environment Queensland Department of **Primary Industries and Fisheries** Tasmanian Institute of Agricultural Research University of New England University of Queensland University of Western Australia, Faculty of Agriculture

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The Cooperative Research Centre for Australian Weed Management was formed in July 2001, replacing the Cooperative Research Centre for Weed Management Systems 1995–2001. It is part of the Commonwealth Government's Cooperative Research Centre Program.