Managing gorse (*Ulex europaeus* L.) in Australia
Gorse
National Best Practice Manual

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Foreword

Gorse is one of the most invasive and costly weeds in southern Australia. It is like a green cancer, invading and infesting pasture, cropping land, plantations, roadsides, urban blocks, river banks, native vegetation and degraded sites. Currently gorse invades over 23 million hectares of Australia, actually covering and making unusable up to 1 million hectares of land. Its potential range covers 87 million hectares of mainland Australia and Tasmania.

Gorse imposes a huge financial burden on land managers. It reduces carrying capacity of pasture, is a serious fire hazard, harbours feral animals, degrades native vegetation, carries significant control costs and reduces land values. These are just some of the gorse-imposed costs with which land managers have to cope, and for which the general community ultimately pays.

The *Gorse National Best Practice Manual* is a fully integrated best practice document which includes comprehensive instructions for mapping gorse, planning a program, undertaking the work and following-up. It is the definitive guide for land managers to inform themselves about how to plan gorse control and ultimately eradicate gorse from their properties and the Australian landscape. The manual describes the latest trialed best practice gorse management with enough detail in easy-to-understand language to allow land managers to confidently take on gorse and win.

We always hear people saying “Gorse cannot be eradicated” and using its persistence (gorse seed is viable for at least 25 years and there can be up to 400 million seeds per hectare in the soil) as an excuse to do nothing. We all know it is hard to eradicate gorse but nonetheless, we also know successful gorse control and eradication has been demonstrated and is now possible. All you need to do is develop a staged plan and work to that plan. All these processes are clearly explained in this manual.

The *Gorse National Best Practice Manual* contains descriptions of gorse, plus clear instructions for management methods and their costs, guidelines for preventing the spread of gorse and for undertaking integrated control on established infestations. We have included tailored decision support tools so that land managers can make informed decisions for their own individual situation. There are also 13 gorse control case studies from across Australia. These real life case studies showcase effective primary control and follow-up methods for successful integrated gorse control. They demonstrate that gorse control is feasible on commercial grazing properties and in remnant native vegetation.

The development of the *Gorse National Best Practice Manual* was made possible with funding from the Australian Government’s Defeating the Weed Menace program.

Accurate mapping of gorse distribution is a vital part of nationally strategic best practice management. To facilitate this, we have included the Bureau of Rural Sciences’ new *A field guide for surveying and mapping nationally significant weeds* as a CD attachment in the back of the *Gorse national best practice manual*. This is an Australian first for Weeds of National Significance manuals, and will give government and community land managers in all states the tools they need to map gorse consistently.

The responsibility for gorse control lies with managers on both public and private land. Good planning, cooperation, primary control and follow-up by these managers over the long term is crucial for success against this invasive weed. This manual will help anyone who manages gorse-infested land to achieve success. It is the most valuable resource for gorse control at present; I recommend the manual to all land managers who need to control their gorse.

Ian Sauer
Chairman
National Gorse Taskforce
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In response to the threat posed by gorse, a national strategy for its management was produced in 2003. This was overseen by DPIW, with full cooperation of all states, territories and the Australian Government. The strategy establishes five desired outcomes for gorse control in Australia:

1. Best practice management of established infestations implemented across Australia
2. Prevention of spread from established infestations
3. Eradication of isolated and scattered infestations
4. Management of at-risk areas to maintain them free of gorse
5. The strategy for gorse control is effectively managed at the national level.

Implementation of the strategy is led by the National Gorse Taskforce. This group was formed in November 2004 and is an Australia-wide body representing production, conservation, government and community organisations. The Taskforce has identified national eradication and containment zones for gorse. Each year progress against the National Gorse Strategic Plan is documented at www.weeds.org.au/WoNS/gorse.

Nationally strategic isolated and scattered infestations with the potential to be eradicated are in Western Australia; the ACT; all of South Australia (other than Clare, Barossa, Mt Lofty and Fleurieu areas); the majority of NSW including New England, the south coast and Southern Tablelands; East Gippsland and Wimmera Catchment Management Areas in Victoria; Waratah, Wynyard, Devonport, Dorset, Flinders, Kentish, King Island, Sorell and Tasman Council areas in Tasmania.

Introduction

Gorse – a Weed of National Significance

Gorse (Ulex europaeus L.) is an exotic plant from Europe. It has been identified in Australia as a Weed of National Significance (WoNS) due to its invasiveness, impacts, potential for spread and effects on socioeconomic and environmental values.

Who is affected by gorse? Who can use this manual?
- Farmers and graziers
- Local and regional weed officers
- Bushcare and Landcare groups
- Rural-residential land owners
- Infrastructure/utility managers
- Other community groups
- Native vegetation managers
- Weed control operators.

The gorse problem originated in the early 1800s when gorse was planted for hedges, used as an ornamental plant, and used as fodder; ornamental planting of gorse continued until the 1980s. Today, gorse ranges across 23 million hectares of the continent, and infests up to 1 million hectares. Its potential range is 87 million hectares.

Impacts on agriculture include reduced carrying capacity, restricted stock and human access, harbouring of feral animals and reduced land value. In forestry, gorse interferes with access, seedling establishment and harvesting. The impact of gorse on these sectors alone was valued at $7 million in 2000. In native vegetation, gorse forms dense monocultural stands. It poses a fire hazard and detracts from landscape values across all land types. Gorse is a threat to the integrity of riparian zones in NSW and Victoria. In Tasmania, South Australia and Western Australia gorse impacts on biodiversity in native vegetation and on threatened species.
Using this manual

1. *Chapter 1* describes the biology of gorse and its impacts on Australia

2. *Chapter 2* describes the control options for gorse

3. *Chapter 3* describes programs for gorse control in pasture, bush and riparian zones

4. *Chapter 4* is a collection of real life case studies about how Australian land managers have controlled their gorse

5. *Chapter 5* has useful information on herbicides, website addresses and phone numbers for weed control