

**REVIEW OF PROGRESS TOWARDS  
IMPLEMENTATION OF THE NATIONAL  
GORSE STRATEGIC PLAN**

*(2006 - 2007)*

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The National Gorse Task Force

WoNS Coordinators; Hillary Cherry, Dennis Gannaway, Sarah Holland-Cliff, Kelly Snell and Sandy Leighton

## **Background**

Gorse is a Weed of National Significance in Australia, originating from Central and Western Europe. The National Gorse Task Force and National Gorse Coordinator oversee the implementation of the National Gorse Strategic Plan. This report summarises the outcomes from activities during the 2006/2007 reporting period.

## **EXECUTIVE SUMMARY**

A number of actions from the Gorse National Strategic Plan were completed during the reporting period including:

- Production of the Gorse National Communications Strategy;
- Publication, launch and distribution of the National Gorse Best Practice Manual;
- Production of a television commercial for public awareness raising
- Improvement and production of a National Gorse Distribution Map, and
- Establishment of nationally strategic eradication programs

Completion of these actions has enabled the National Gorse Task Force to reach a wider and greater audience, to be able to provide consistent and high quality advice and to be able to raise public awareness of gorse management in Australia. Development of the National Gorse Best Practice Manual has led to an increase in capacity to manage gorse and an increase in on ground control of gorse nationally.

The greatest achievements of the National Gorse Task Force during this reporting period were realised through a resolution to focus efforts on creating eradication programs for gorse in areas identified as National Priority Eradication Areas by the Task Force.

A process was designed where a Memorandum of Understanding (MOU) was used to secure agreement and commitment in writing from relevant organisations. The MOU's were signed off by General Managers of organisations with the capacity to maintain long-term project commitment, support staff, invest and facilitate a change in thinking from ad hoc or no management to a focus on eradication.

During the reporting period a MOU was signed with the Kangaroo Island NRM Board. Confirmation in writing has been received from other organisations, which will ensure that gorse is eradicated from the Eyre Peninsula NRM Region and the Tasmanian Wilderness World Heritage Area.

This approach and the resulting eradication programs developed are a first for gorse management in Australia. In several areas of Australia where there has been little or no management in the past we now have written confirmation from organisations that they will eradicate defined infestations.

A major component of the eradication programs developed is that they are self-sustaining financially. Most programs sought no funding for establishment or operational costs. A shift in thinking from needing a handout to be able to get an on ground outcome has occurred in several areas nationally.

## **Future Priorities**

- Ensure all outlying gorse infestations are under eradication
- Production of a best practice DVD to enable further engagement of stakeholders, especially in core infestation areas

## **INTRODUCTION**

This report outlines how national coordination in gorse management, provided through various investment sources including Local, State and Australian Government and the Community has contributed towards implementation of the National Gorse Strategic Plan.

### ***Gorse its history and distribution in Australia***

Gorse (*Ulex europaeus*) which is a native of Central and Western Europe has spread widely throughout the temperate regions of the world and has naturalised in almost every temperate country, including North America, New Zealand and Australia. Gorse is a weed in Chile, India, South Africa, Iran, Spain, Italy and Poland.

Gorse was introduced to Australia during the early 1800s as a hedge and ornamental plant. In Tasmania gorse was planted for hedges, shelter and fodder into the 1940's. In NSW and ACT gorse was planted for hedges and as an ornamental into the 1980's.

Found across temperate Australia, gorse ranges over 23 million ha of land and infests up to 1 million ha of land. Potential distribution based on scientific modelling is in the order of 87 million ha. This includes most agricultural land in Victoria and Tasmania, coastal South Australia and much of south-west Western Australia.

Gorse can be recognised as a dense, extremely spiny shrub which can grow to 7m in height but more commonly grows between 1 and 2.5m in height. A major obstacle in gorse control and eradication is the long lasting seed, which can stay viable in the soil for up to thirty years. Seed production is high with up to 40,000 seeds/m<sup>2</sup> or 400 million per ha at a mature infestation site.

### ***Impacts of Gorse in Australia***

The impacts of gorse are felt socially, economically and environmentally. Impacts on agriculture include reduced carrying capacity, restricted stock and human access, harbouring feral animals and reducing land value. In forestry, gorse interferes with access, seedling establishment and harvesting. Annual cost of management to agriculture and forest industries in Australia was estimated at \$7 million in 2000.

In native vegetation gorse forms dense mono cultural stands, poses a fire hazard and detracts from landscape values across all land types. Gorse is a threat to the integrity of riparian zones in New South Wales and Victoria. In Tasmania, South Australia and Western Australia gorse impacts on biodiversity in native vegetation and on threatened species.

### ***A National Approach to Gorse Management***

The National Gorse Strategic Plan was produced in 2003. The development of the Strategy was overseen by the Tasmanian Department of Primary Industries and Water with full cooperation of all states, territories and the Australian Government.

The Strategy established five desired outcomes for gorse management in Australia:

1. Best Practice management of established infestations 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 gorse free
5. The strategy for gorse control is best managed at the national level.

Tasmania has developed a State strategy for the management of gorse and several other WoNS weeds present in the state. Victoria has a Gorse Control Strategy for the Ballarat region and is in the process of expanding this strategy to the whole of Victoria. South Australia has developed a Gorse Policy, Australian Capital Territory an ACT Broom and Gorse Management Plan, NSW DPI has developed an internal organisational plan and NSW Parks and Wildlife Service a gorse weed management program.

National Weed Program funds began in 2002 (till 2004) and provided a catalyst for a range of further actions in WA, SA, Victoria and Tasmania. Funding for a national gorse coordinator was secured and appointment made in July 2004 which has further assisted the implementation of the strategic plan. The Defeating the Weed Menace program funding (2005 – 2008) has enabled the development of the Gorse National Best Practice Manual, a WA led gorse seedbank eradication research program and the continuation of the national gorse biological control program.

Some financial data has been included in this report, however this information does not include all investment. Numerous stakeholders; including the Australian Government (via NHT, Defeating the Weed Menace program and the Envirofund), State agencies, local government, project proponents, individual landholders, community groups, Aboriginal organisations, utilities, research institutes, schools and regional NRM bodies contribute to the implementation of many of the strategies and actions listed in this report. However, at this stage no breakdown of funds allocated to particular strategic actions is possible.

## REVIEW OF PROGRESS TOWARDS THE GORSE STRATEGIC PLAN 2006/2007

### ***Outcome 1 - Best practice management of established infestations across Australia***

#### ***Gorse National Best Practice Manual***

The Gorse National Best Practice Manual was produced and published through investment from the Australian Government and in kind contributions from the Tasmanian Government. The Manual is a culmination of the most up to date knowledge and experience from around Australia of gorse management. It is the most comprehensive guide for gorse control available in Australia. Senator the Hon Eric Abetz launched the Manual in Sutton in New South Wales (16th October). Almost 6000 copies of the Manual have been distributed across Australia to all stakeholder groups.

Circulation of this Manual has enabled people to draw on the experience of others from around the country. It has provided a platform for people to feel confident in planning, undertaking and reviewing their gorse management programs. The National Gorse Task Force has received feedback that the provision of the manual has increased the number of gorse management programs across the country and has empowered people to undertake gorse control who had not done so previously.

#### ***Weedmercial***

A 30-second television commercial was produced as a tool to create awareness of the threat and financial burden of gorse particularly in a rural context. The commercial was filmed in Tasmania and features a landowner that relays his experience.

The Task Force resolved that the commercial should be screened in relevant areas nationally during the spring of 2007. At the time of writing the report initial investigations had been conducted in order to determine a suitable process to ensure national airing. The cost of airing the commercial has deemed that sponsored community announcement will be the most suitable avenue for broadcasting.

#### ***Working with Community, State and Territory Representatives***

All States and Territories where gorse exists have provided representation on the National Gorse Task Force. The Task Force also has representation from community and industry sectors which has been critical in providing a linkages and expertise for the Task Force.

Representatives have assisted the Coordinator in designing processes to achieve identified goals within the National Strategy. They have been available, in person to show the Coordinator infestations and programs within their regions. Without this support few outcomes would have been achieved, specifically those related to Outcome 3 of the National Strategy.

### **Mapping**

A national gorse map was researched and finalised. A consultant was engaged to collect gorse distribution data for New South Wales, which had been a gap in knowledge of gorse distribution from a national perspective.

Production of an accurate national map assisted with negotiations with State and regional bodies to determine 'containment' and 'eradication' areas at a sub regional, state and national scale. The Coordinator worked with State Gorse Contacts to develop agreed Eradication and Containment Areas in South Australia, Tasmania and New South Wales.

While the concept of 'containment lines' has recently been superseded for a more project-based approach to eradication of outlying infestations, the basic idea of containment zones assisted the Task Force with prioritisation of infestations for listing as National Priority Eradication Areas. The production of a national map assisted the Task Force in determining its focus for 2007/2008.

### **Biological Control of Gorse**

Release of biological control agents continued nationwide, with releases being conducted in South Australia, Victoria, New South Wales and Tasmania. The release of the Gorse Soft Shoot Moth (*Agonopterix ulicetella*) from quarantine in Victoria has now been approved and the first field releases are scheduled for Victoria and Tasmania in early spring, 2007. Once this agent is released there will be three foliage-feeding agents and one seed-feeding agent contributing to the biological control of gorse.

Additional agents will still be required to further reduce the vigour of gorse to a stage where it will be more cost effective to control than at present. Surveys for a possible fungal pathogen were conducted in Portugal, France and Spain in 2006/07. Results from these surveys should be available by November 2007. If a potential pathogen can be found, additional research will need to be conducted to determine whether the agent is suitably host specific to enable its introduction to Australia.

### **Asset Protection and Prioritisation**

The focus during the last half of this reporting period was the development of long term programs for the eradication of scattered and isolated infestations. To ensure that there was progress made with management of core infestation areas the Task Force has supported the Coordinator making active investigations of the prevalence and risk of gorse infestation in an assets based approach.

The major component of this work will occur in the 2007/2008 reporting period. Initial investigations have occurred in World Heritage Areas in Tasmania, where a true eradication project has been developed, assisted by investment from the Southern Tasmanian NRM Region and participating stakeholders. Existence of gorse in other high value asset areas will be conducted and programs established for control or eradication where appropriate in 2007/2008.

## ***Outcome 2 - Prevention of spread from established infestations***

### ***Declaration***

Gorse is widely declared and prohibited from importation to Australia, satisfying action 2.4.1 of the National Strategy. The degree of control or eradication required under various state acts varies as a result of density and practicality of control/eradication and is generally reasonable.

The only case where the Coordinator found that gorse was not declared was in Tenterfield Shire in northern NSW. The Coordinator spoke with Michael Michelmore of the NSW DPI who said that lack of declaration was not an impediment to control or eradication. Since this time the Tenterfield Shire council have agreed to eradicate gorse from this area and have entered into a MOU with the National Gorse Task Force to recognise this effort.

### ***Seed Bank Eradication Research***

During 2006-2007 a Defeating the Weed Menace funded National Gorse Seed Eradication Techniques project, led by John Moore from WA Department of Agriculture and Food was underway looking at techniques that will assist with depleting the seedbank.

Various treatments were applied to seed to determine their practicality and effectiveness in the field. Of particular note is a technique where seed banks are buried, on the infestation site, to a depth at which germination either does not occur or seed dies shortly after germination as a consequence of absent sunlight. This technique has proven cost effective and successful in cases where soil structure is deep and infestation sites are small (0.2ha).

### ***Hygiene***

Engagement and better practice from stakeholders with capacity to reduce the spread of gorse seed is still a major challenge. While active gorse management programs may be in place in many areas the transport of seed in these areas continues to create new infestation sites.

The Coordinator visited Western Australia where seed transport is an issue in the Albany region. Local government is often a critical player in this regard and has capacity to limit or prevent seed transport at development sites, from quarries and along roadways. Such advice was given to the South Coast NRM Region who have an active control program and need better support in terms of hygiene from local government to achieve the goal of eradication of gorse from this area.

### **Outcome 3 - Eradication of isolated and scattered infestations**

The National Gorse Task Force's focus during the last half of the 2006/2007 reporting period was to ensure eradication of scattered and outlying gorse infestations nationwide.

To secure agreements for eradication organisations with capacity to maintain a 25-year commitment to annual inspections and control of infestations were invited to sign a Memorandum of Understanding (MOU) with the National Gorse Task Force. The MOU stipulates what requirements are needed to ensure eradication rather than merely control is achieved (appendix 1) and acts as a point of securing support for such projects at a management level.

The following agreements were finalised or under negotiation at the end of the reporting period.

<b>Eradication Project</b>	<b>Lead Proponent</b>	<b>Status</b>
Tasmanian Wilderness World Heritage Area (entire area)	Tasmanian Parks	Agreement in writing secured – MOU to be signed
Kangaroo Island NRM Region (entire region)	Kangaroo Island NRM Board	In Place
Eyre Peninsula NRM Region (entire region)	Eyre Peninsula NRM Board	Agreement in writing secured – MOU to be signed
Northern and Yorke NRM Region (part region)	Northern and Yorke NRM Board	Agreement in writing secured – MOU to be signed
South Australia Murray Darling NRM Region (part region)	South Australia Murray Darling NRM Board	Agreement in writing secured – MOU to be signed
Northern NSW	Individual Council Shires	Negotiations under way
Western Australia (entire state)	State and South Coast NRM	Negotiations under way
East Gippsland CMA Region (entire region)	Victorian State Government	Negotiations under way

Table 1. Eradication project negotiated or under negotiation 2006-2007

The outcome of these agreements has been that infestations previously under ad hoc management now have been targeted for eradication. Eradication programs have been designed which, if maintained by the lead proponents, will ensure eradication of the infestations, rather than just managed.

A major component of the eradication programs developed is that they are self-sustaining financially. Most programs sought no funding for establishment or operational costs. A shift in thinking from needing a handout to be able to get an on ground outcome has occurred in several areas nationally.

This approach using the MOU is a first for gorse management in Australia and many of the projects listed here serve as ideal case studies to motivate and inspire other regions within the country.

#### ***Outcome 4 - Management of at risk areas to maintain them gorse free***

Many states have undertaken weed risk assessments for gorse during the reporting period. Assessments have informed local authorities of the risk and threat gorse poses in their regions which has informed regional weed plans and facilitated ranking of gorse to provide a form of prioritisation for this weed.

South Australian NRM Regions began the process of weed risk assessments for all declared weeds including gorse enabling a formalisation of an approach in this state. Despite gorse having a low ranking in some regions the NRM Boards have still undertaken to eradicate infestations in many instances.

#### ***Outcome 5 - The strategy for gorse control is best managed at the national level.***

##### ***Communications Plan***

The National Communications Plan for gorse was completed this reporting period enabling the Task Force to consider and put into place appropriate and effective communications activities.

One such achievement was the production and distribution of a newsletter titled, 'The Gorse Report.' Two issues (spring 06 and autumn 07) were made of this newsletter to a stakeholder database of around 350 individuals. The newsletter acts as a forum to inspire stakeholders, to inform and to share information in a national context.

##### ***The National Gorse Task Force***

During this reporting period there was a change of Coordinator. Sandy Leighton resigned and the position taken over by Dean Vincent. This change in Coordination meant that there was a gap of approximately four months where the position was not active.

Despite this gap in Coordination the majority of outputs planned for the period were achieved. The work plan has changed with a strong focus now on Outcome 3 of the National Strategy (Eradication of isolated and scattered infestations) and the Task Force is committed to and has achieved tangible outcomes in this regard.

##### ***Investment in Gorse Management***

During this reporting period the Australian Government and other project partners invested in a Defeating the Weed Menace project to control outlying infestations. The Coordinator will work with the five project managers to develop a long-term commitment to ensure that these infestations are eradicated. The total value of this project is \$360,000.

National investment in gorse management is difficult to estimate. What can be said is about 80% of core infestations have received investment during the reporting period, representing a total investment value of at least \$2,500,000 nation wide. This indicates the fact that that the remaining 20% are not managed. The Coordinator has approach organisations with capacity to manage these areas. An example is the infestation in the Clare Valley area of South Australia. This infestation has received virtually no management in its lifetime. Initial discussion with the Northern and Yorke NRM Board have secured that the infestation will be at least mapped.

**Appendix 1- Memorandum of Understanding Template**

**Draft MEMORANDUM OF UNDERSTANDING**

**BETWEEN**

**XXXXXXXXXXXXXX**

**AND THE**

**NATIONAL GORSE TASK FORCE**

***Eradication of Gorse from the XXXXXXXX area***

**1. Purpose**

To permanently eradicate Gorse (*Ulex europaeus*) a Weed of National Significance (WoNS) from the xxxxxxxx area

**2. Back Ground**

Eradication of outlying infestations such as the infestations listed below (Item 3) in the xxxxxxxxxx area is a Nationally Strategic Priority for the National Gorse Task Force and is of major significance in managing the impacts of gorse nationally.

Gorse is one of Australia's twenty worst weeds. Gorse ranges across 23 million hectares of land, infesting up to 1 million hectares. Its potential range is 87 million hectares of land. Impacts to primary industry alone, in Australia are in excess of \$7 millions dollars per annum.

The National Gorse Task Force (NGTF), formed in 2004 is an Australia-wide body representing production, conservation, government and community organisations. The NGTF oversees the implementation of the National Gorse Strategic Plan. Outcome 3 of the National Gorse Strategic Plan is 'Eradication of isolated and scattered infestations.'

Control of above ground gorse is carried out successfully around the country. Seed viability of gorse is in the order of 25 years and remains a major obstacle in eradication of gorse infestations. Eradication of infestations is possible providing that seed is not transported from the infestation and control of all regeneration of the infestation is conducted for the life of the seed bank.

### 3. Scope.

This eradication project is to be conducted in the xxxxxxxxxx of xxxxxxxxx.

The infestations recorded in the following table represent the scope of the infestations at the date of this MOU.

#### Example Only

Locality	Infestation Size	Easting and northing	Description
Place name	0.1 ha		100m long hedge on council land.

### 4. The National Gorse Task Force will

- Provide a letter of context to all landowners who have gorse infestations to assist in facilitating the eradication project
- Provide mapping and best practice gorse control advice to ensure that the management approach of the infestations will lead to eradication in the shortest practical time
- Provide coordination and facilitation when requested to assist in the eradication project
- Promote and highlight the eradication project in the media for the benefit of all parties who have entered into this MOU
- Contact **the project contact**, annually to seek an update on the eradication of the infestations

### 5. The **xxxx organisation** agree to

- Map the infestations to the National Mapping Standard as developed by the Bureau of Rural Science
- Ensure that gorse seed from infestations is not moved to infest other areas in the Region
- Facilitate eradication of all living gorse plants within twelve months or before the next seed set
- Undertake annual inspections and have destroyed any regrowth or seedling germination to ensure that the infestation does not produce seed again
- Report annually to the National Gorse Task Force so that progress on the National Gorse Strategy can be tracked
- Ensure that other land managers such as Local Government are working cooperatively towards the goal of eradication of the listed infestations

### 6. Memorandum of Understanding Duration

The duration of this agreement is for twenty-five (25) years. This is typically the duration of gorse seed viability in the soil.

### 7. Termination of this Memorandum of Understanding

Termination of this Memorandum of Understanding may occur at any stage of the agreement duration. However, a party seeking to terminate this agreement must first write to the other party and express the conditions by which they seek to terminate the agreement. Both parties will attempt in good faith to resolve the situation.

## 8. Relevant Agreements, Policies, Plans and Strategies

The relevant references to the MOU are;

- The Australian Weeds Strategy
- The Gorse National Strategic Plan
- The Gorse Best Practice Manual
- The Determination of the Weeds of National Significance
  
- **Insert relevant Acts or Document Names**

**Effective date.**

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SIGNATURE BLOCK  
XXXXXXXXXXXX

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(Date)

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SIGNATURE BLOCK  
**Ian Sauer**  
**Chair**  
**National Gorse Task Force**

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(Date)

