

Lantana camara National Priority Action Framework 2009-11

**Coordinate
management**

**Awareness and
education**

**Prevent
spread**

**Minimise
impacts**

**Monitoring and
evaluation**

**Research and
development**

Strategy Vision: The community working together to contain the range and minimise the impacts of Lantana in Australia.

Priority

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- ◆ Develop and deliver decision support tools that enable the identification of strategic management areas at national, state and regional scales
- ◆ Promote and engage support for the implementation of strategic management plans at all levels

- ◆ Deliver on the Lantana communications and behaviour change strategy
- ◆ Extend information on best practice management
- ◆ Highlight impacts of Lantana and benefits of control
- ◆ Continue the development and supply of key extension tools

- ◆ Provide stakeholders with regional mapping information to inform strategic decision making
- ◆ Ensure endorsement and support of national containment lines / areas
- ◆ Identify outlying infestations and support control in containment zones

- ◆ Identify strategic management areas –based on environmental, economic and social asset protection
- ◆ Control / eradicate lantana in high priority areas
- ◆ Identify and protect areas at high risk of infestation

- ◆ Map and monitor outcomes of strategic management activities
- ◆ Develop and promote implementation of long-term monitoring strategies for control sites
- ◆ Report on and promote program achievements

- ◆ Conduct a national lantana research forum to identify key priorities and establish cross-institutional partnerships
- ◆ Investigate interrelatedness of lantana populations (DNA research) – continuing
- ◆ Biocontrol research and establishment - continuing

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- ◆ Negotiate increased commitment by all stakeholders
- ◆ Develop incentives

- ◆ Build community capacity – e.g. support skills development for weed management personnel
- ◆ Support community biocontrol programs
- ◆ Raise awareness about the impacts of ornamental varieties

- ◆ Promote removal of sources of hybridisation (ornamental varieties)
- ◆ Identify and record areas free of lantana

- ◆ Support development of regional and local management plans
- ◆ Support the direction of regional funds to high priority areas
- ◆ Improve distribution of lantana biocontrol agents

- ◆ Research & monitor impacts of established biocontrol agents
- ◆ Assess changes in stakeholder attitudes to lantana management
- ◆ Seek stakeholder feedback on extension and education resources

- ◆ Research ecology and population dynamics of lantana
- ◆ Research impacts of fire management techniques
- ◆ Test for the transfer of genetic material from horticultural to weedy populations
- ◆ Investigate innovative methods of control

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- ◆ Work with industry groups to promote research investment and the adoption of best management practices
- ◆ Work with the nursery industry in promoting alternative horticultural species

- ◆ Develop student education strategies and resources
- ◆ Utilize up-to-date methods of information delivery

- ◆ Monitor and support regional and community projects

- ◆ Control lantana in medium and low priority areas
- ◆ Identify / quantify impacts on eco-tourism, and recreation

- ◆ Investigate herbicide control options for stress affected lantana
- ◆ Identify species that can out-compete lantana (e.g. pasture; native; forestry)
- ◆ Investigate native bio-control agents

Note: Priority actions were developed by the National Lantana Management Group in line with the National Lantana Strategic Plan. See detailed information on the following pages and the National Lantana Strategic Plan for more information.

Detailed information regarding the *Lantana camara* National Priority Action Framework

Lantana camara is one of twenty invasive plant species ranked as Weeds of National Significance (WoNS). It is currently distributed over more than 4 million hectares of Queensland and New South Wales, with isolated infestations in the Northern Territory and Western Australia, and sporadic incursions identified in South Australia and Victoria.

Economic and environmental impacts of this weed are significant. Lantana currently costs the Australian grazing industry in excess of \$121 million per annum in lost production and management costs and negatively affects more than 1300 native species including 279 plant and 93 animal species listed as rare and threatened.

Because of the wide spread distribution of Lantana, it is recognised that broad scale management is not feasible with current control technologies. Therefore, the National Lantana Management Group has prioritised their efforts toward activities that provide support for the identification and delivery of strategic lantana management outcomes, and which ensure the most economical use of existing resources.

Coordinate management

The key aim of these priority actions is to deliver land managers and strategic decision makers with the tools needed to confidently identify and prioritise management areas. This will ensure limited resources can be focused toward management activities that provide the greatest net return.

This priority is interlinked with those identified under prevention of spread, minimisation of impact and monitoring and evaluation. All decision support tools/information is designed to be useable at localised, regional and state-wide scales. A critical requirement in the coming years will be the communication of decision support tools to relevant stakeholders and the negotiated inclusion of these resources in state and local pest management plans and strategies.

This addresses strategy 2.5.1 from the National Lantana Strategy.

Awareness and education

Ongoing support for the delivery of the Lantana Communications and Behaviour Change Strategy is required to generate public interest in the management of lantana and achieve the strategy's vision of: "the community working together to contain the range and minimise the impacts of lantana in Australia". Funding support for the extension, reproduction and distribution of key extension resources is critical to this aim and to satisfactorily capitalise on the investments made in their production. A key target audience for future activities will be the peri-urban population – a group that has been identified as a major avenue of continued lantana infestation and spread.

Future projects to extend best practice management information developed through the recent integrated control trials project are a specific priority. To achieve the best results it is proposed that a 'train the trainer' style program is established and delivered to key government, industry and community contacts for further dissemination.

This addresses strategies 2.1.1, 2.1.3, 2.3.2, 2.3.3 and 2.3.4 from the National Lantana Strategy.

Prevent spread

Continued work to identify and confirm containment lines and exclusion zones is required over the coming years to ensure a halt to the further spread of lantana. Information drawn from the lantana remote sensing project (due for completion in June 2009) will be used to support the establishment of national containment lines and zones. Regional mapping information will be provided to all relevant stakeholders to support strategic management decisions at localised scales.

Predictive modelling work (see coordinate management above) should also enable the identification of areas vulnerable to invasion (based on climatic, abiotic and disturbance based variables) so monitoring and management efforts can be better focussed. The eventual aim will be to assess this information against climate change scenarios to 'future-proof' Lantana prevention-of-spread management strategies.

Ongoing support for on-ground management activities outside containment areas will also be required to consolidate achievements to date and ensure the capacity to manage remaining outlying infestations.

This addresses strategies 2.1.4, 2.4.1 and 2.4.4 from the National Lantana Strategy.

Minimise impacts

These priorities are focussed on the minimisation of impacts within the core distribution of Lantana. Key projects include:

- the implementation of outcomes from the national Lantana Threat Abatement Plan. This will ensure the most vulnerable species and ecosystems are protected from the impacts of Lantana
- identification of areas at risk of Lantana invasion – based on predictive modelling undertaken in conjunction with the Lantana remote sensing project
- development and adoption of a consistent risk assessment framework for economic, environmental and social assets requiring protection from Lantana
- facilitate adoption of the integrated control decision support tool
- ongoing biocontrol research and establishment.

These projects will encourage active management within the core distribution by providing surety that resources are being targeted to areas where the best outcomes can be achieved.

This addresses strategies 2.1.1, 2.1.2, 2.1.4 and 2.4.3 from the National Lantana Strategy.

Monitoring and evaluation

Monitoring of the success of management and extension activities is key to ensuring program outcomes (as compared to outputs) are achieved.

Of particular importance is the implementation of long-term monitoring practices at priority outlying and conservation management sites.

This addresses strategy 2.1.4 from the National Lantana Strategy.

Research and development

Despite a long history of Lantana research, there is still a considerable dearth of information with regard to the genetic variation of Australian Lantana biotypes, general population dynamics and responses of Lantana and natural environments to management techniques. A key priority for the National Lantana Management Group is to conduct a national research forum to establish priorities and research partnerships.

Research priorities include:

- Genetic research to determine the interrelatedness of Australian Lantana varieties in comparison to varieties from Lantana's natural range (subject of a preliminary project by CSIRO). Benefits of this research include more informed selection and targeted release of future biological control agents; potential for tailoring management techniques to specific Lantana biotypes; better predictions of environmental tolerances and response to climate change; determination of the level of threat posed by horticultural varieties due to genetic drift.
- Development of population dynamics models to determine life stage vulnerabilities. This requires further research to provide information on basic biological variables.
- Integration of fire management techniques into standard management regimes.

This addresses strategies 2.1.2, 2.1.3, 2.2.1 and 2.4.5 from the National Lantana Strategy.