

WEEDS

1. “State of Play”

1.1 What do we know?

- ❖ Weeds are second only to vegetation clearing as a threat to the biodiversity within Southeast Queensland
- ❖ Weeds have the ability to:
 - grow profusely at the expense of native plants and their community;
 - capitalise quickly on disturbance of an area;
 - survive in a wide diversity of environments;
 - cause adverse impacts on the natural environment, economic productivity and/or human health; and
 - produce seed prolifically;
- ❖ Weed management and control costs Queenslanders hundreds of millions of dollars each year.
- ❖ At least 65% of the weed species in our wild places are garden escapees (species from suburban gardens.
- ❖ Early botanists and acclimatisation societies are largely responsible for the flora we have here today.
- ❖ Many 'weed' introductions have been deliberate in an effort to 'acclimatise' an area.
- ❖ More than 1000 plant species have been introduced to Brisbane and become naturalised.
- ❖ Not all have invaded native vegetation or become environmental weeds, though a large proportion still have the potential to.
- ❖ There is an estimated 30 species arriving into South East Queensland per year.
- ❖ Non-natives were planted in the early days of European settlement to 'enhance' the environment or improve the productivity of the agricultural industry
- ❖ A number of other plants have been unintentional 'hitchhikers' using their 'weedy' nature to immigrate to the Brisbane area.

- ❖ A strategic approach that integrates a number of actions is essential. The actions depending on the extent of a weeds infestation range from:
 - monitoring and preventing the entry of new species;
 - eradication of recently introduced species before they spread;
 - containment of those that can't be eradicated; and
 - management of species that cannot be contained.
- ❖ Weeds aggressively out-compete native plants, destroy natural habitat for native animals, choke our waterways and contribute to flooding and poor water quality
- ❖ Weeds are spread easily by people dumping prunings and garden waste, the wind, birds and water run-off
- ❖ State legislation and Council local laws require you to eradicate and manage weeds on your land.

1.2 Current Issues/Knowledge gaps

- ❖ There are three key areas of research activity that are being actively addressed nationally through the Australian CRC for Weed Management including; weed incursion and risk management; integrated weed management in cropping lands and landscape management.
- ❖ There is a definite need to improve the scale of accuracy for weed distribution to make it more useable at the local catchment and property level.

1.3 What is accessible?

- ❖ Information on identification of weeds
- ❖ Information on treatment of weeds (DNRM&E Fact Sheets)
- ❖ Regional strategy on environmental weeds

1.4 What is not so easily accessible?

- ❖ best methods to eradicate weeds
- ❖ alternative native plants to weedy species
- ❖ detailed understanding of the impacts on urban biodiversity
- ❖ a guide to the common weeds you are likely to encounter in or near natural areas
- ❖ hints and tips for removal, disposal, avoidance
- ❖ non-invasive introduced plant lists

- ❖ problem associated with planting declared, environmental or ‘weedy’ species in your gardens
- ❖ community recognition of weeds as an environmental issue
- ❖ which plants are suitable to plant near reserve areas

1.5 Adaptive Management Principles

- ❖ Management actions should preferably be based on compiling and assessing knowledge of the current and predicted distribution of weed species.
- ❖ Investment in weed management is a long-term commitment and if not maintained will inevitably result in greatly increased costs in the future.
- ❖ The invasion of weed species occurs irrespective of land tenure and strategic weed management actions needs to be undertaken on a holistic basis across the full distribution of a weed rather than piecemeal.
- ❖ Prioritisation of weed management actions is best based on an evaluation of the extent to which a species can be effectively eradicated. In some cases this will not be possible. It is suggested that a hierarchy of “Deny entry, Eradicate, Contain/Quarantine, Control, Monitor” be considered for adoption.
- ❖ Weed management actions need to be determined with consideration of the ecology of the species, particularly its means of dispersal. This may dictate the best locations to commence treatment.

1.6 People involved in weed management

- ❖ Australian Government
- ❖ State government
- ❖ Local governments
- ❖ National Weed Strategy
- ❖ CRC Weed Management
- ❖ SEQ Regional Environmental Weeds Strategy Coordinating Committee
- ❖ Bushcare groups e.g. Habitat Brisbane
- ❖ Catchment groups

2. Information Sources

2.1 Documents:

- ❖ ARMCANZ and ANZECC, 1999. The National Weeds Strategy. A Strategic Approach to weed problems of National Significance (Revised Edition).
- ❖ Barton, A. (2003) Weeds. In Wild Plants of Greater Brisbane (Ryan, M)
- ❖ Cooperative research Centre for Weed Management Systems, Annual Report 1998-99.
- ❖ CRC, 2000. Weed navigator resource Guide. Cooperative research Centre for Weed Management Systems
- ❖ DNRM&E, 2000. What about weeds Brochure.
- ❖ George N. Batianoff and Don W. Butler. 2002. Queensland Herbarium, Environmental Protection Agency.
- ❖ Green Garden Guide. 2002. Brisbane City Council.
- ❖ IUCN, 1998. IUCN Guidelines For The Prevention Of Biodiversity Loss Caused By Alien Invasive Species.
- ❖ Parsons, W. T. and Cuthbertson, E. G. 1992. *Noxious weeds of Australia*. Inkata Press, Melbourne.
- ❖ Sindel, B. M. 2000. *Weeds and their Impact*. In Australian Weed Management Systems (ed. Brian M. Sindel, R.G and F.J Richardson) Melbourne.
- ❖ Sinden, J., Jones, R., Hester, S., Odom, D., Kalisch, C., James, R. and Cachio, O. 2004. *The Economic Impact of Weeds in Australia*. Technical Series No. 8. CRC for Australian Weed Management: Adelaide.
- ❖ Spafford Jacob, H., Randall, R. and Lloyd, S. 2004. *Front Door Wide Open to Weeds: an examination of the known weed species permitted for import without weed risk assessment*. WWF Australia: Sydney.
- ❖ Suburban and Environmental Weeds CD ROM - an identification and information system (South East Queensland). 2000. University of Queensland.

2.2 Legislation:

- ❖ *Land Protection (Pest and Stock Route Management) Act 2002*

2.3 Websites:

- ❖ Brisbane City Council
<http://www.brisbane.qld.gov.au/>
- ❖ Department of Natural Resources, Mines and Energy - Weed Fact Sheets
<http://www.nrm.qld.gov.au/factsheets/groups.php?group=Pest+plants>
- ❖ Department of the Environment and Heritage
<http://www.deh.gov.au/biodiversity/invasive/weeds/index.html>
- ❖ Greening Australia, Queensland - Weed Guide
<http://www.qld.greeningaustralia.org.au/weedguide/index.html>
- ❖ The CRC for Australian Weed Management
<http://www.weeds.crc.org.au/>
- ❖ The National Weeds Strategy
<http://www.weeds.org.au/>
- ❖ WWF Australia
<http://www.wwf.org.au/>