

Action Statement

Flora and Fauna Guarantee Act 1988

No. 86

Weeping Myall *Acacia pendula*

Description and Distribution

The Weeping Myall *Acacia pendula* is a medium tree, 5 to 10 metres tall, with greyish foliage and conspicuously drooping branchlets and phyllodes. The flowers are pale yellow, in sparse globular heads on slender peduncles in the phyllode axils. The seed pods are thick and somewhat woody. The species is fully described in Walsh & Entwisle (1996).

The species is widely distributed in NSW and southern Queensland, but only three stands in Victoria are thought to be natural (Walsh & Entwisle 1996). Those near Echuca and Kerang are in seemingly natural vegetation, in ecological situations very similar to the species' occurrence in NSW; that is, clay soils in drought-prone or low-rainfall areas.

The main Victorian stand is on heavy clay soil on the flood plain of Yarriambiack Creek. Although this stand is now isolated, it would have been within the original Black Box woodland that extended from the Yarriambiack Creek. There is strong evidence from early descriptions that this stand is a natural remnant, but there is a possibility that it was planted, perhaps as long as 90 years ago. It is now represented by three moribund trees and a small number of young trees which might be root suckers.

Conservation Status

Current status

Gullan *et al.* (1990)..... Endangered
NRE (1998)..... Endangered
SAC (1991)..... Threatened



Weeping Myall, *Acacia pendula*
(illustration of pod and branchlet by Mali Moir)



Distribution in Victoria [from Flora Information System, NRE 1998]

The Weeping Myall has been listed as a threatened taxon on Schedule 2 of the **Flora and Fauna Guarantee Act 1988**.

Reasons for conservation

Weeping Myall is extremely rare in Victoria and is in a precarious position, occurring naturally at no more than three Victorian locations. The disjunct Warracknabeal stand represents the southern limit of the species' range. Because of the long distance from other stands in NSW and the long time since the exchange of genetic material, this stand might be genetically distinct.

In its final recommendation the Scientific Advisory Committee (SAC 1991) has determined that Weeping Myall is:

- significantly prone to future threats which are likely to result in extinction; and
- very rare in terms of abundance or distribution.

Major Conservation Objectives

- To determine the genetic status of the main Victorian population.
- To protect and maintain the three natural populations of Weeping Myall in Victoria.

Management Issues

The main remnant population is situated on private land and also has an irrigation channel running through the stand. Weed invasion, fire and grazing by rabbits are potential threats to this isolated population. The use of herbicides in cropping of adjacent paddocks could pose a threat if spraying is from the air or under windy conditions.

Ecological issues specific to the taxon

Regeneration from seed in natural stands in New South Wales is not uncommon, but they are readily grazed by livestock. The species is also highly susceptible to attack by the bag-shelter moth *Ochrogaster lunifer* which can defoliate large trees to such an extent that they do not recover. The old trees in the Warracknabeal stand is highly susceptible to such an attack, as they are in poor condition and seed production is poor and apparently unviable. However, there are a number of small trees that in time might produce viable seed. A copse of these trees in on the opposite bank of the channel.

Some disturbance will result from channel maintenance but Wimmera Mallee Water has been made aware of the significance of the trees and will avoid them as far as possible. These trees are now producing seed but these have not been trialed for germination.

Grazing and introduced weed such as Horehound *Marrubium vulgare* are likely to reduce the potential for regeneration from seed.

The Weeping Myall has been widely planted throughout the Wimmera for many years. The seed used in all these plantings probably came from the Riverina, although it is possible that some seed from the Warracknabeal site was used in the early 1900s.

If the Warracknabeal stand is an isolated remnant at the extreme of the original range of the species it should show some genetic differences from the existing populations in New South Wales due to the long period of isolation. Mature plantations of Weeping Myall can be found throughout the Wimmera with the nearest less than 20km from the Warracknabeal site. The results of enzyme testing conducted by La Trobe University in 1994 indicate that the Warracknabeal, Riverina and 'planted' populations are genetically very similar. Similarly, the morphological variations between sites do not constitute a clear separation of the populations.

There are no wider conservation issues involved.

Social and economic issues

Social and economic impacts are not significant. The site, although on private land, is very small and on relatively unproductive land, and the landholder supports the conservation of the stand. If seedlings are successfully produced there is adequate space within the covenanted area for replanting. Management of the Warracknabeal site will have no implications for other sites. The other two Victorian stands that are likely to be natural are in natural bushland on public land.

Previous Management Actions

Site protection

The land on which the Warracknabeal stand lies has been covenanted through the Victorian Conservation Trust. Materials have been supplied to the landholder to fence the area from grazing stock. Wimmera Mallee Water has been made aware of the need to conserve the stand, and has developed a maintenance regime for the site that will have minimal impact on these trees.

Propagation

It is believed that seed collected from the Warracknabeal trees in the late 1940s was used for planting at the Kewell school and possibly at Byrneville, about 20 km to the south. Seed from the Kewell trees has been used at the Wail Nursery for propagation. The Warracknabeal site was examined on a number of occasions in the 1980s

by Wail Nursery staff for a seed source, but what little seed was collected failed to germinate.

Genetic analysis

In 1994, material from the Warracknabeal site, natural stands near Deniliquin in NSW, and planted stands in the Wimmera were compared by La Trobe University using enzyme analysis.

The results suggest that the Warracknabeal population is genetically very similar to the natural stands in NSW and the planted stands in the Wimmera. However, further enzyme analysis that would include the Echuca and Kerang populations is needed to confirm the results.

Intended Management Action

1. Arrange for more extensive enzyme analysis to be conducted by La Trobe University, including plants from the Echuca and Kerang populations. If this is inconclusive, consider DNA testing.
2. Ensure that all people whose actions could affect the Warracknabeal stand are aware of its location and management requirements.
3. Liaise with the landholder at Warracknabeal to ensure that fencing is erected before stock are grazed in the surrounding area and that fences are maintained in a stock-proof condition; control weeds, especially Horehound, with the cooperation of the landholder and Wimmera Mallee Water; and reduce the risk of wildfire by maintaining low fuel loads in the immediate area around the site. (Excess grass may be burnt where there are no young Weeping Myalls).
4. Arrange a survey of the sites near Echuca and Kerang to establish the size, health and security of these populations.

Other Desirable Management Action

5. Coordinate germination trials on Warracknabeal seed by the Natural Resources Conservation League Nursery at Wail, and request that the source of all seed used for plantings be recorded.
6. Coordinate the documentation and mapping of all mature stands in Victoria and investigate any that could potentially be natural remnants.
7. Investigate appropriate ways of protecting sites near Echuca and Kerang, if required.

Legislative Powers Operating

Legislation

Catchment and Land Protection Act 1994 – provides for the integrated management and protection of catchments and the control of noxious weeds and pest animals. It also encourages community participation in the management of land and resources.

Conservation Forests and Lands Act 1987 – provides for the management of public land under the Act, the co-ordination of legislation administered by CNR and for the preparation of codes of practice.

Crown Land (Reserves) Act 1978 – provides for reserving areas as public land and for making a specific reservation status for existing public land.

Flora and Fauna Guarantee Act 1988 – provides for the protection of flora and fauna in Victoria through a range of mechanisms including controls over the handling or protected flora.

Planning and Environment Act 1987 – provides for the protection of native vegetation through the State section, and for regional planning controls in all planning schemes.

Victorian Conservation Trust Act 1972 - allows for conservation covenants over private land.

Licence/permit conditions

Permits for seed collection will only be given when this is in accordance with conservation objectives.

Consultation and Community Participation

Local tree groups and the Field Naturalists Club have been informed of the population at Warracknabeal. Their assistance will be sought in documenting other mature stands in the Wimmera.

The Natural Resources Conservation League Nursery at Wail will be asked to assist in propagation trials with seed from Warracknabeal. The seed source of all Weeping Myall produced for sale is to be identified. Wimmera Mallee Water should also be kept informed of all management proposals.

Implementation, Evaluation and Review

NRE Regional Managers at Swan Hill and Horsham are responsible for the implementation of this Action Statement. The Statement is to be reviewed and, if necessary, revised before 2004.

Contacts

Management

Co-ordinator, Flora and Fauna, NRE Horsham.
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Selected References

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Further information can be obtained from Department of Sustainability and Environment Customer Service Centre on 136 186.

Flora and Fauna Guarantee Action Statements are available from the Department of Sustainability and Environment website: <http://www.dse.vic.gov.au>

This Action Statement was first published in 1999 and remains current. This version has been prepared for web publication. It retains the original text of the action statement, although contact information, the distribution map and the illustration may have been updated.

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