

# Flora & Fauna Guarantee Action Statement

#73

This Action Statement was first published in 1996 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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Department of  
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Environment, 2003

Published by the  
Department  
of Sustainability and  
Environment, Victoria.  
8 Nicholson Street,  
East Melbourne,  
Victoria 3002 Australia

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ISSN 1448-9902

## Hairy-pod Wattle *Acacia glandulicarpa*



Hairy-pod Wattle (*Acacia glandulicarpa*)  
(Illustration by Mali Moir)



Distribution in Victoria (DSE 2002)

### Description and Distribution

The Hairy-pod Wattle (*Acacia glandulicarpa* F.M. Reader) is a dense, rounded, spreading and much-branched shrub. It is 1-2 metres high and has dull olive-green foliage. Branches are grey-brown, terete and pubescent, marked with small raised leaf bases along the stems. Phyllodes are obliquely oblong-obovate to more or less elliptic, 5-12 mm long and 3-6 mm broad, erect, thick, rigid, glabrous, minutely glandular, and sometimes viscid when young. The lower edges are usually undulate. Phyllodes are 2-nerved, the central nerve being more prominent. Lateral veins are few and obscure, and the apex is shortly mucronate. Inflorescences are simple and axillary, solitary or paired. The bright yellow flower heads carry 8-20 flowers during July-October, although this can be later in wetter years. Peduncles are about as long as the phyllode. Pods are narrowly oblong, 1.5-3 cm long and 2-3mm broad, straight or curved, viscid, and covered with glandular shining hairs (Jessop & Toelken 1986).

The Hairy-pod Wattle has been recorded only in western Victoria and at one site in South Australia. The Victorian population is scattered in about 100 woodland sites in the southern Wimmera, from south-west of Horsham to north of Nhill. In 1966 a small stand was located in the Burra Gorge area in South Australia (Jessop & Toelken 1986). The species is frequently associated with Yellow Mallee (*Eucalyptus costata/incrassata*), Dumosa Mallee (*E. dumosa*), Green Mallee (*E. viridis*) and Bull Mallee (*E. behriana*), part way up rises at the transition between gravelly soils and a sandy rise. Where soils are less well-drained, Hairy-pod Wattle is associated with Yellow Gum (*E. leucoxydon*), Grey Box (*E. microcarpa*) or Buloke (*Allocasuarina luehmannii*). The current distribution of the Hairy-pod Wattle suggests that it may have been relatively common on the now intensively utilised Grey Box and Buloke grassy woodlands and other plant associations throughout the Wimmera (Stuwe 1982). The majority of sites are on roadsides, railway reserves, or small Crown Land remnants

scattered within developed agricultural land, or on fringes of developed agricultural land. This coincides with the distribution of remnants on slopes in the transition zone between heavy and sandy soils.

## Conservation Status

### Current Status

*Endangered Species Act 1992*  
CNR (1994)

Vulnerable  
Vulnerable in Victoria

The Hairy-pod Wattle has been listed as a threatened taxon in Schedule 2 of the *Flora and Fauna Guarantee Act 1988*.

### Reasons for Conservation Status

Hairy-pod Wattle is restricted to about 100 scattered sites in the Wimmera and one small stand in the Burra Gorge area of South Australia. Many known stands are relatively small, fragmented and vulnerable to disturbance, with little opportunity to expand. Populations are frequently at risk: the species has disappeared from at least two known sites in recent years as a result of physical disturbance, and similar threats still exist at many sites. The Hairy-pod Wattle is present in the Little Desert National Park, conservation reserves at Gerang Gerung, and The John Smith Reserve. These stands are small and may not be sufficient to ensure the survival of the taxon. A few of the other stands are on public land not reserved for conservation purposes.

The number of plants remaining is currently not known accurately, but could exceed 10 000. These range from old senescing plants to young vigorous ones, but the population is predominantly ageing. Stuwe (1982) suggested a total population of 5000 plants, of which 1000 were in biological reserves. The populations that he referred to are still in a reasonable condition, and additional populations have been recorded in recent surveys. (Details will be available on completion of current survey.) However, the majority of these recently recorded sites are on roadsides or private land, so they are less secure without appropriate action.

In its final recommendation, the Scientific Advisory Committee (1991) determined that the Hairy-pod Wattle is:

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

### Major Conservation Objectives

The major conservation objectives are to:

- protect from disturbance and maintain in a healthy condition all populations of Hairy-pod Wattle on public land (20 stands on public land reserves);
- encourage the protection of additional populations on private land and roadsides (targeted number of sites to be determined following results of the current survey); and
- provide conditions that will enable all known populations to expand.

## Management Issues

The remnant populations are widely dispersed, generally small, and vulnerable to a range of threats. Stands on protected public land have been identified, but specific management prescriptions have not been developed or implemented for them.

### Ecological Issues Specific to the Taxon

The ecological requirements of Hairy-pod Wattle have not been studied, and we can only make assumptions from looking at currently regenerating sites. Hairy-pod Wattle grows under a range of canopy species. The grassy woodland areas with Grey Box, Yellow Gum and Buloke occur on soils that are suited to agriculture, and as a result have largely been cleared and developed. Most such areas that have not been cleared are on sandier top soils and have been used for grazing; although the dominant trees may remain, the shrubby understorey containing Hairy-pod Wattle has been lost. Preferred soils range from sandy clay to sandy clay-loam to clay-loam, with some stands on ironstone gravel. (Hairy-pod Wattle does not occur on heavy clays.) These soils are generally found on the transitional zone between good and poor agricultural land. This has afforded the species some degree of protection, although the fragmentation of remnants restricts the potential for exchange of genetic material.

There is insufficient information available on regeneration, although it is known that seedling growth is possible in the absence of fire or soil disturbance (L. Morcom pers. comm.). In an experimental burn at Gerang Gerung Flora and Fauna Reserve, mature plants were killed by a relatively low intensity autumn burn, and there was no regeneration. This was most likely due to grazing by rabbits despite some rabbit control (L. Morcom pers. comm.). Young plants have reappeared along roadsides after being graded out or ploughed up in fire breaks, but generally such activities eliminate stands. Weed invasion on disturbed sites reduces the opportunity for regeneration. The thick and rigid phyllodes make the plant less susceptible to grazing, but in poor seasons they are grazed. Propagation from seed is relatively simple.

Superficially, the Hairy-pod Wattle can look similar to Hedge Wattle (*Acacia paradoxa*) and has been mistaken for Hedge Wattle and sprayed with herbicide during weed control programs.

To maintain the genetic diversity of the species, representative sites from across the range of the species need to be protected. Larger sites on protected public land should be managed to ensure the long-term survival of these populations and provide the opportunity for these stands to increase. Where practical, sites on private land should be offered similar protection.

### Wider Conservation Issues

The major issue relates mainly to the locations of remnant stands. Roadside stands are threatened by roadworks and the maintenance or installation of services such as power lines and optic fibre cables. This is also the case for some stands on railway reserves. Fire protection works are still carried out on road reserves at some sites, by burning or ploughing. Grazing, particularly in drought years, may inhibit regeneration.

Browsing by rabbits and ripping to control them also has an adverse impact. Generally, roadside Hairy-pod Wattle sites are adjacent to cropping country, and the use of agricultural herbicides, particularly from the air, can have a severe local impact. Protection of these sites will protect a much depleted community. Although dominant species remain in many areas, most do not contain understorey or ground-cover species.

Populations on public land are not necessarily adequately protected. Stands along the edges of the Little Desert National Park often fall within the 'twin strip' firebreaks, where the desired burning regime is to burn every 6-12 years. This may be too frequent and also opens the edge strip to weed invasion and increased competition. The Crown Land at Gerang Gerung and Winiam East containing Hairy-pod Wattle was reserved for 'the preservation of species of native plants' in 1989, and the 8 ha John Smith Memorial Reserve was reserved for the same purpose in 1988. This latter reserve is being extended by an additional 27 ha through a 'donation' by an interested landholder. In each case, the major threat is weed invasion due to the relatively small size of these reserves. All other known stands are on private land, roadsides, or unprotected public land.

Stuwe (1982) stated that the reservation and appropriate management of the Crown Land containing Hairy-pod Wattle 'should afford long-term protection for this species and attempts to conserve populations on private land and small roadside remnants are unwarranted'. Although it is difficult to protect all sites as mentioned below, these sites should not be ignored, and reasonable efforts should be made to minimise damage to all known populations.

The ability to manage many sites is consequently limited because of conflict with other uses. The 'Native Vegetation Retention' amendment to the State Planning Scheme restricts large-scale clearing, but as most sites on private land are small, other steps need to be taken to ensure their survival. This primarily requires the cooperation of landholders and the use of the Land for Wildlife scheme, conservation covenants or incentives to protect remnant native vegetation. These processes require a significant effort and can be extremely time-consuming. Departmental resources are severely restricted and other avenues must be explored if these measures are to be effective.

If roadside populations are to be adequately protected, they must be identified, mapped and documented. Land managers, particularly shires, must be advised of these sites and informed of the management implications.

### **Social and Economic Issues**

Roadside or railway works could lead to the complete or partial loss of a Hairy-pod Wattle site. Some losses might be difficult to avoid if there is a strong case for the works, and if the cost of alternatives which leave the site intact are prohibitive. Compromises in such cases might involve irreversible loss of the species at the site. It is important to guard against, and monitor, incremental and irreversible loss of sites which could, over 50 years or more, amount to significant loss of the species.

Remnant populations on private land are small and are often on poor agricultural land. It is generally more economic to further improve the productive ability of better agricultural land than to clear and develop these marginal remnants. There will be instances where landholders wish to develop land, particularly if they see prospects for short-term gain after taking account of development costs. In much of the Wimmera it is considered beneficial to leave these remnants intact due to the advantages they offer as shelter, reduced wind erosion potential, reduced runoff and a lowering of the watertable. The cost of fencing remnants can be offset by other benefits to the property. Assistance can be provided by NRE where protection of the remnant is deemed beneficial. Improved landscape and aesthetic values should not be ignored, even though it is difficult to place an economic value on them. The social and economic impacts of managing Hairy-pod Wattle are not likely to be significant.

### **Management Action**

#### **Previous Management Action**

##### **General**

Several small-scale surveys have been undertaken to locate the species. Little has been done to protect known sites on private land. Roadside and railway reserve sites have been adversely affected during road and rail maintenance and other activities, generally as a result of works proceeding without knowledge of the presence of the Hairy-pod Wattle. Larger public land sites have mainly been reserved but not actively managed at this stage.

##### **Site Protection**

The main public land sites identified by Stuwe (1982) have now been reserved for 'the preservation of species of native plants'. The main threats to sites in the Little Desert National Park are fire and weed invasion. This has been taken into consideration in the Fire Protection Plan for the park, but the small and patchy nature of stands means that they are still at risk of too-frequent burning and potential weed invasion while the 'twin strip' plan is operating.

Reserves have been created at Gerang Gerung (1989) and Winiam East (1989), and The John Smith Reserve has been expanded (1995) due to the significance of the plant community, including the presence of Hairy-pod Wattle. Grazing has been excluded and limited vermin and weed control has been undertaken. These reserves are not being actively managed for the protection of Hairy-pod Wattle at this stage, although managers are aware of the need to protect the species.

Sites on roadsides have been protected from road works and optic fibre cable-laying works if they were identified before the works commenced. Unfortunately, damage has taken place during works that do not require a planning permit or inspection prior to commencement. Contact with shires and other authorities has increased through the need for planning permits, with a greater awareness of the need to protect remnant vegetation.

There has been limited consultation with landholders, but some stands on private land may have been reduced or destroyed through lack of awareness.

## Survey

Incidental site recording over the last 10 years has shown considerable differences from earlier records and the surveys by Stuwe (1981-82). The Horsham Branch of the Field Naturalists Club of Victoria is currently undertaking a survey of sites in the Wimmera under the Botanical Guardians scheme. Preliminary results have indicated that there are many more sites than previously documented. However, most of these sites are on roadsides or private property and are by no means secure.

## Intended Management Action

All actions are the responsibility of NRE's South West Region, except where noted.

### General

- Identify major sites on all categories of land over the range of the Hairy-pod Wattle and develop and implement long-term management strategies for representative sites. A minimum of 4 reserved public land, 20 roadside/railway and 10 private sites of sufficient size for long-term viability (when determined) should be targeted.

### Survey and Monitoring

- Complete the survey being conducted by Horsham Field Naturalists and prepare detailed site maps and status reports. Highly significant and representative sites should be identified and targeted for long-term protection. All targeted sites should be monitored annually and remaining sites at least biennially. Ideally this should be conducted by the Horsham Field Naturalists or another local interest group, with support from NRE.
- Monitor major sites on protected public land (National Parks Service). Document threats to any sites and prepare and implement measures to alleviate identified threats. In areas where it is suspected that stands of Hairy-pod Wattle exist on private land, the cooperation of landholders should be sought to search for, document, and protect such stands.
- Enter all sites on NRE's Register of Significant Sites and supply information to all relevant land managers.

### Site Protection

#### Public Land

- Manage conservation reserves at Gerang Gerung and Winiam East, and The John Smith Memorial Reserve, to protect the local plant communities, with an emphasis on the Hairy-pod Wattle and other significant plants such as the Kamarooka Mallee and *Swainsona* sp. (National Parks Service). This should also apply at other targeted public land sites, and at remaining sites all reasonable steps should be taken to

protect the Hairy-pod Wattle where this does not conflict with the primary objective for that land.

- Provide relevant shires, VicRoads, Country Fire Authority brigades and Public Transport Corporation with maps detailing numbers, condition and management regimes of all linear sites to avoid unnecessary damage to roadside and railway populations.
- Incorporate planned control activities into work schedules where weed invasion presents a threat to identified sites.

#### Private Land

- Inform and consult all landholders who have stands of Hairy-pod Wattle on their land. Where practical, these sites should be protected with assistance and advice from NRE and Landcare groups.

#### Propagation

- Recommend Hairy-pod Wattle for planting at suitable sites within its known range in revegetation works on public and private land. Planting should be from local seed sources, but seed collection needs to be closely monitored to avoid depleting local stocks and limiting natural regeneration at existing sites.
- By 1997, identify 20 sites suitable for re-establishing Hairy-pod Wattle.
- Approach the Natural Resources Conservation League nursery at Wail to assist in propagating Hairy-pod Wattle from identified seed sources for local plantings.

#### Other Desirable Management Actions

- Encourage further study of the ecology of the species in relation to regenerative capability, longevity and optimum requirements to ensure that management actions will have the best effect.

#### Legislative Powers Operating

##### Legislation

*Catchment and Land Protection Act 1994* - provides for the integrated management and protection of catchments, including control of noxious weeds and pest animals.

*Conservation Forests and Lands Act 1987* - provides for the management of public land under the Act, the coordination of legislation administered by NRE, and 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.

*Country Fire Authority Act 1958* - provides for fire protection and suppression in country areas and requires that authorities take practical steps to prevent fires.

*Fences Act 1968* - provides guidelines for the control, maintenance and repair of dividing fences for landholders.

*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 of protected flora and listed fish.

*Forests Act 1978* - provides for the management of forests, and includes controls over the taking of forest produce.

*Local Government Act 1958* - provides for the making of local council by-laws and conservation regulations (e.g. permit requirement for land clearing).

*Mineral Resources Development Act 1990* - provides for the management of mineral resources, including controls over exploration and mining activities to minimise impacts on the environment.

*National Parks Act 1975* - provides for the preservation, protection and management of natural areas and includes controls over taking native flora and fauna from parks.

*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* - provides for the establishment of conservation covenants on land titles.

*Vermin and Noxious Weeds Act 1958* - Provides for the control of pest plants and animals.

### **Licence/Permit Conditions**

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

### **Consultation and Community Participation**

The Horsham branch of the Field Naturalists Club of Victoria has been actively involved with surveys for the Hairy-pod Wattle and has provided valuable information to assist in the preparation of this Action Statement. Local Farm Trees Groups will continue to encourage the planting of local indigenous species, such as Hairy-pod Wattle, in appropriate areas using local seed.

### **Implementation, Evaluation and Review**

The Manager, NRE South West Region will be responsible for coordinating the implementation of this Action Statement. The Flora and Fauna Guarantee Officer, NRE Horsham, will monitor the annual implementation of actions.

### **Contacts**

#### ***Management***

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## Compiler

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## Further information

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>

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## Personal Communications

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