

# Action Statement

Flora and Fauna Guarantee Act 1988

No. 85

## Jumping-jack Wattle *Acacia enterocarpa*

### Description and Distribution

The Jumping-jack Wattle, *Acacia enterocarpa* (R. V. Smith), is a small, dense multi-branched, spreading, prickly shrub up to 1.5m tall. Flowering occurs in May to October. The seed pods are typically zig-zag shape and bear a resemblance to the fire cracker known as the Jumping-jack, hence the common name (Whibley 1980). The species is fully described in Walsh and Entwisle (1996).

The Jumping-jack Wattle grows in several widespread locations in South Australia. In Victoria it is restricted to the Diapur-Kaniva area of the Wimmera, mainly on the Lawloit Range (Stuwe 1980). One site is in the Sandsmere Flora Reserve, one is in the Diapur Flora Reserve, two sites in the Diapur Rail Reserve and one site on private land. The remaining populations are on roadsides. In 1977 the Lions Club of Nhill re-established the Jumping-jack Wattle in Diapur Flora Reserve, where it is believed to have once grown naturally (Stuwe 1980).

Although the species has a limited geographic range, it grows in a range of habitats, from Mallee Broombush *Melaleuca uncinata* on the highest parts of the northern Lawloit Range on gravelly duplex ironstone soils, to Mallee scrub and grassy

woodlands of Yellow Gum *Eucalyptus leucoxylon*, Grey Box *E. microcarpa* and Buloke *Allocasuarina luehmannii* on more fertile, brown loamy soils in adjacent areas (Stuwe 1980).



**Jumping-jack Wattle, *Acacia enterocarpa***  
(illustration of pod and branchlet by Mali Moir)



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

## Conservation Status

### Current status

ESP Act (1992).....Endangered (Aust.)

NRE (1998).....Endangered (Vic.)

SAC (1995).....Threatened (Vic.)

The Jumping-jack Wattle is listed as a threatened taxon on Schedule 2 of the **Flora and Fauna Guarantee Act 1988**.

### Reasons for conservation status

In Victoria the Jumping-jack Wattle is restricted to a few scattered sites in the Wimmera. The remnant populations are scattered and generally small, and most are vulnerable to a range of threats, with little opportunity to expand. In 1996 the total population was estimated to be 3 000 plants at 22 sites, ranging one or few individuals to more than 1 000 plants. The species has disappeared from at least one site in the past few years.

In its final recommendation the Scientific Advisory Committee (SAC 1995) determined that the Jumping-jack Wattle 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

The major conservation objectives are to:

- Protect and maintain natural and re-established populations of Jumping-jack Wattle in Victoria.
- Ensure that all populations have the opportunity to expand.
- Establish five new populations by 2004, through propagation and revegetation.

### Management Issues

#### Ecological issues specific to the taxon

Because Jumping-jack Wattle occupies a variety of habitats within its range, it might have been more widespread before clearing for agriculture. Largely undisturbed areas of remnant vegetation seem to be a prerequisite for the existence of major stands. Direct disturbance could destroy or severely damage plants.

The species is vulnerable at most sites, particularly through disturbance by road and rail maintenance

and fire protection works. Most roadside and rail reserve sites are adjacent to cropland. The aerial application of herbicides in these areas could have a serious impact on Jumping-jack Wattles. Grazing may affect regeneration, particularly in drought years when droving is prevalent, while rabbit control through ripping may disturb habitat. The installation of services such as power lines and cables might also disturb populations. Many of the sites are grazed by stock and used as rubbish tips or gravel dumps. The site on private land is not formally protected, but is largely uncleared. Parts of this block have been stripped for gravel - a process which, if continued, could seriously affect the Jumping-jack Wattle population.

Gall infestation might be the greatest threat to all populations, and was a major limiting factor in the revegetation of the Diapur Flora Reserve in the 1970s. Nine of 15 surveyed sites were infected in 1994, and the infestation was spreading. The poor condition of many plants possibly predisposes them to gall infestation.

Stuwe (1980) noted that the species regenerated on disturbed as well as seemingly undisturbed sites. Some regeneration does appear to be taking place on disturbed sites, even some that are gall-infested. However, at only one roadside site is there any evidence of regeneration in adjoining private land that is cropped or grazed, suggesting that these activities are unsuitable for the species' regeneration.

The isolated and scattered nature of sites may be causing a lack of genetic variability in some populations, whilst the proximity of infected plants may be locally aiding the spread of the gall.

Weed invasion may be a threat at one site in Diapur, where Slender Dodder Laurel *Cassytha glabella*, Small Leafed Clematis *Clematis microphylla* and Bridal Creeper *Asparagus asparagiodes* are spreading. Horehound *Marrubium vulgare* is a major weed in the Sandmere Flora Reserve.

#### Wider conservation issues

Most remnant stands in road and rail reserves which are at risk from road works, maintenance or fire prevention works, including burning and ploughing.

Retaining remnant roadside vegetation is seen as a positive land management practice in much of the Wimmera, which has been cleared extensively for agriculture. These remnants offer shelter for livestock, reduce wind erosion and water run-off, and reduce the infiltration of groundwater into the watertable. They are also a source of a variety of indigenous seeds for revegetation programs. Actions to conserve the Jumping-jack Wattle would

also enhance the conservation of other significant species that share its habitat, such as Hairy-pod Wattle *Acacia glandulicarpa*. It would also help to provide wildlife refuges and corridors. The Lawloit Ranges has been identified as a potential strategic corridor for targeted revegetation to link the Little Desert National Park to the Big Desert State Forest, Big Desert Wilderness and Wyperfeld National Park.

In addition to the permanent reservation of several stands on public land, there is a need to adequately conserve the total remaining gene pool by securing the most common habitat for this species: Mallee Broombush on infertile ironstone soils. The best fragment of this habitat type remaining is probably the rail reserve near Diapur.

### **Social and economic issues**

Protecting existing populations on road reserves may affect the manner in which road works, maintenance or services installations are conducted. The cost of redirection of services such as powerlines or optical fibre cables may be prohibitive, as may be the cost of road realignment. In such a case, alternative strategies for conserving populations might need to be canvassed. The development of local government native vegetation management plans may help to avoid this problem.

Landholders in the ironstone ridge area might lose potential income from gravel extraction if remnant stands on freehold land is set aside for conservation.

NRE will need to ensure that it has adequate on-ground representation and a commitment to continuing community education about conservation within resource management, particularly focusing on rare plant species such as Jumping-jack Wattle.

### **Previous Management Action**

#### **Site protection**

The Lions Club of Nhill undertook works to establish the Diapur site as a flora reserve, including removing rubbish, constructing fences, planting trees and shrubs, and erecting signs. Four native plant reserve signs were erected on the rail reserve sites in 1990 to minimise accidental.

Detailed maps of roadside stands of Jumping-jack Wattle, with management information, have been provided to local shires, although the roadside sites are not signposted. Contact with shires and other authorities has increased through the need for planning permits, environmental education and a greater awareness of the need to protect remnant

vegetation. NRE's Wimmera Revegetation Strategy emphasises community education to raise awareness of Victorian Rare or Threatened Species.

### **Survey and monitoring**

Several small surveys to locate the species were conducted by D. Venn and T. Overman between 1990 and 1996.

### **Propagation and revegetation**

In the 1970s the Forests Commission reportedly tried to grow Jumping-jack Wattle at Diapur to establish plants as seed sources and prevent the loss of the species. It is doubtful whether this project met with any success. A small plantation of Jumping-jack Wattle was established in the Lonsdale Forest Block near Stawell in 1976 by the Forest Commission as a seed source for Wail Nursery, and is in a healthy, gall-free condition. In 1996 the Sandmere Flora Reserve was scheduled for major revegetation with local species which should be compatible with Jumping-jack Wattle.

### **Intended Management Action**

#### **Site protection**

1. Identify all sites on public and private land, and negotiate the protection of the sites, provide management advice to landholders and land managers, and erect signs at roadside sites.

#### **Survey and monitoring**

2. Conduct annual survey and monitoring of all known sites, investigate reports of other populations, and ensure all monitoring data is included on NRE databases.

#### **Research**

3. Investigate the nature and cause of gall infestation and methods to prevent its damage and spread.

#### **Propagation and revegetation**

4. Revegetate the species on five suitable sites through local seed collection, propagation and horticulture.
5. Investigate the use of fire as a management tool to promote regeneration from soil stored seed-bank.

## Other Desirable Management Action

6. Test a range of alternative management regimes at several sites.
7. Reserve part of the Water Reserve at Diapur and two roadside sites along the Kaniva-Broughton Road to protect Jumping-jack Wattles.
8. Protect Jumping-jack Wattle sites from seasonal droving.
9. Control environmental weeds at Site 6 in Diapur.
10. At Sandsmere Flora Reserve, eliminate grazing, control rabbits and weeds, undertake fire protection, and continue to revegetate the site with indigenous species.
11. Utilise the gall free plants in the Lonsdale Block plantation as a genetic resource for comparison with inflected plants, and as a possible seed source if the origins can be confirmed.
12. Raise public awareness of the species and its significance.

## 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 NRE and for the preparation of codes of practice.

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

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

**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.

**Local Government Act 1958** - provides for 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 and includes 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.

### Licence/permit conditions

Permits for seed collection will be given only when the intended action is in accordance with conservation objectives and management actions in this Action Statement.

## Consultation and Community Participation

The Horsham Branch of the Field Naturalists Club of Victoria has been involved in surveys for Jumping-jack Wattle. The West Wimmera Tree Group has also been involved in surveys and was consulted in the preparation of this Action Statement. Local shires, the Country Fire Authority, the Public Transport Corporation and VicRoads have been informed about on the locations of this species. Greening Australia, through Greening the Wimmera has been consulted in the preparation of this draft as have other NRE businesses. Landholders adjoining roadside stands should also be consulted as well as landholders who have sites on their land. The Natural Resources Conservation League at Wail may be asked to help propagate Jumping-jack Wattle from identified seed sources for local planting.

The Wimmera Catchment and Land Protection Board has been consulted in the preparation of this Action Statement.

## Implementation, Evaluation and Review

Primary responsibility for implementing and assessing the effectiveness of the management actions lies with NRE's Horsham office. The results

of monitoring will be assessed in 2001. The action statement will be reviewed before 2004.

## Contacts

### Management

Flora and Fauna Guarantee Officer, NRE Horsham.

### Biology

Parks Flora and Fauna Division, NRE East Melbourne.

National Herbarium, Melbourne.

## 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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