DEPARTMENT OF SUSTAINABILITY AND ENVIRONMENT

Flora & Fauna Guarantee Action Statement

#30

This Action Statement was first published in 1992 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.

© The State of Victoria, Department of Sustainability and Environment, 2003

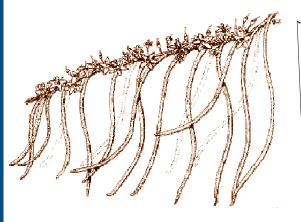
Published by the Department of Sustainability and Environment, Victoria. 8 Nicholson Street, East Melbourne, Victoria 3002 Australia

This publication may be of assistance to you but the State of Victoria and its employees do not guarantee that the publication is without flaw of any kind or is wholly appropriate for your particular purposes and therefore disclaims all liability for any error, loss or other consequence which may arise from you relying on any information in this publication.

ISSN 1448-9902



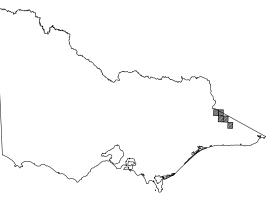
Slender Myoporum Myoporum floribundum



Slender Myoporum (*Myoporum floribundum*) Illustration by Simon Cropper

Description and Distribution

Slender Myoporum (Myoporum floribundum Cunn. ex Benth.) is an erect spindly shrub 2-3 m tall. Leaves are glabrous, dark green, very narrow and hang from spreading or drooping branches. Flowers are small, scented and white, with prominent stamens; they cluster along the branches from October to December. Fruit are numerous, small, and brown when mature. Slender Myoporum grows in Rain-shadow Woodland dominated by White Box (Eucalyptus albens) and Drooping Sheoke (Allocasuarina verticillata). All Victorian populations are on steep, gravelly, northfacing slopes in the Upper Snowy and Deddick River Valleys. The two largest populations both straddle the border of the Alpine National Park. One population is just west of Wheelers Saddle and the other is on Ingeegoodbee Track, south of Mt Menaak. The third population is on private land on the Bonang-Gelantipy Road east of McKillops Bridge.



Distribution in Victoria (DSE 2002)

Slender Myoporum was recorded further west before 1950 (Gullan *et al.* 1990) and two small populations have recently been recorded near Katoomba and Yerranderie in NSW. Populations with slightly wider leaves and pink flowers found scattered along the NSW south coast (as in Costermans 1981) have been recently described as a separate species not occurring in Victoria (*Myoporum batei*).

Flora & Fauna Guarantee Action Statement

Conservation Status

Current StatusBriggs & Leigh (1988)rareGullan, Cheal & Walsh (1990)endangered

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

Reasons for Conservation Status

Slender Myoporum is restricted to a narrow geographic range and in Victoria only occurs in three small isolated populations. The small populations (each less than 50 plants and occupying less than one hectare) are vulnerable to destruction by single events such as:

- roadworks-all known populations are on roadsides and could easily be destroyed by road widening or realignment works, particularly as two of the populations are immediately downslope very steeply from the road.
- wildfire-not thought to be fire tolerant, though it may regenerate well after fire.

In its final recommendations, the Scientific Advisory Committee (1991) determined that the Slender Myoporum 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 and distribution.
 - wildfire-not thought to be fire tolerant, though it may regenerate well after fire.

Major Conservation Objectives

- To maintain the habitat in its present condition.
- To maintain existing populations and determine optimum conditions for regeneration.
- To build up the genetic diversity of known provenance material in horticultural populations to ensure a seed source should replanting be required.

Management Issues

Ecological Issues Specific to the Taxon

The long-term viability of present populations is unknown because the life history of the taxon is not known. Current populations appear to be of mixed age (judging by the range of sizes from less than 1 to 3 m) and produce quantities of fruit. Slender Myoporum has disappeared from past reported localities but it is thought to be a pioneering species which dies out with increased competition. It is surmised that the species would regenerate well after fire, as does its closest relative, *Myoporum batei* (R.J. Chinnock pers. comm.) but it is not known whether germination is stimulated by the burning or the creation of bare soil. The effect of various intensities and frequencies of fire on this species and its habitat is not known. The effect of grazing is unknown but is not thought to be a problem. Members of the Myoporum genus generally have a high resin content and are considered unpalatable to native and introduced grazers (R.J.Chinnock pers. comm.). All known populations are near roads within large areas of relatively unsurveyed country, suggesting that there could be undiscovered populations away from roads.

Wider Conservation Issues

Rain-shadow Woodland is a restricted vegetation community and any management actions will need to include an assessment of the impacts on the community as a whole.

Social and Economic Issues

There are no major social or economic issues associated with achieving the conservation objective since a majority of known plants are within the Alpine National Park. However protecting this species could constrain roadworks, though none are yet planned for these areas.

A small number of plants (in two separate locations) are on private land which is not cleared or fenced. As the areas containing the Slender Myoporum are so small and on property boundaries, it would have minimal, if any, economic impact on the owners if they were to be left out of any future development or clearing of the properties.

Both populations within the Alpine National Park are in areas subject to current grazing licences. Grazing is not thought to be a threat, but if future studies indicate that it has an impact on this species, excluding stock from these sites should be considered.

Slender Myoporum is grown as a garden plant; however, it is thought that most current horticultural populations are clonal. Wild stock is needed to increase the genetic diversity in the current cultivated populations to enable selection of 'improved' cultivars for horticulture and to provide a genetically diverse seed source of known provenance material to re-establish populations if current ones are destroyed.

Management Action

Previous Management Actions

The population at Mt Menaak was protected by the creation of a Special Protection zone (Alpine National Park Proposed Management Plan 1989). However, there are no specific management actions for Slender Myoporum as its management requirements are not known.

Intended Management Action

Survey

Survey areas of similar vegetation type to determine if other populations exist.

Monitoring

Monitor all known populations to assess if they are regenerating, declining, or remaining stable.

Liaison

Liaise with relevant Shire and DCE personnel and private

Flora & Fauna Guarantee Action Statement

landholders so that they know of the plant's presence and so any roadworks in the vicinity are carefully planned and carried out to minimise damage.

Research

Encourage research into the ecological requirements of the species, such as its fire and grazing tolerance, by recommending it to tertiary institutions as a topic for study.

Propagation

Provide seed and cutting material from a number of plants to the Bairnsdale SGAP Group and the Royal Botanic Gardens (Melbourne) to conduct propagation trials and build up a diverse genetic stock of known provenance material outside current populations, as a safeguard should current populations decline.

Legislative Powers Operating

Legislation

Flora and Fauna Guarantee Act 1988: provides protection for listed species.

National Parks Act 1975: provides protection for flora and fauna within National Park boundaries.

Licence/Permit Conditions

Permits for the collection of Slender Myoporum seed would only be issued for propagation work in accordance with the conservation objectives.

Implementation, Evaluation and Review

The Flora Branch at Kew will carry out the initial survey work and with the Flora And Fauna Guarantee Officers in Bairnsdale and Orbost will coordinate the monitoring and propagation programs.

Contacts

Management Flora and Fauna Guarantee Officer, DCE Bairnsdale Flora and Fauna Guarantee Officer, DCE Orbost Biology Flora Branch, DCE Kew Dr. R.J. Chinnock, Adelaide Herbarium

Flora & Fauna Guarantee Action Statement

Compiler Jane Dickens

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

References

- Briggs, J.D. & Leigh, J.H. (1988) *Rare or Threatened Australian Plants*. Special Publication No. **14**, Australian National Parks and Wildlife Service, Canberra.
- CFL (1989) *Alpine National Park -Cobberas-Tingaringy Unit. Proposed Management Plan.* Department of Conservation Forests and Lands, Melbourne.
- Costermans, L. (1981) *Native Trees and Shrubs of Southeastern Australia*. Rigby, Melbourne.
- DSE (2002) Flora Information System (Electronic Flora Database). Parks, Flora & Fauna, Department of Sustainability & Environment, East Melbourne.
- Gullan, P.K., Cheal, D.C. & Walsh, N.G. (1990) *Rare or Threatened Plants in Victoria*. Department of Conservation and Environment, Melbourne.
- LCC (1977) Report on the Alpine Study Area. Land Conservation Council, Melbourne.