

## THREATENED SPECIES LISTING STATEMENT

## Midlands wattle, Acacia axillaris

Benth., Lond. J. Bot. 1: 341 (1842)

#### **Status**

Tasmanian Threatened Species Protection Act 1995	1 11
Commonwealth Endangered Species Protection Act 1999	vulnerable
	Vulnerable

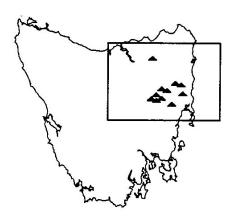


Louise Gilfedder

# **Description**

Midlands wattle is a shrub which reaches about four metres in height. The adult foliage consists of very narrow modified leaves (phyllodes) which taper to a very sharp point. Two to four flowers are borne on a short stalk, less than 1cm long in the junction between the phyllode and the stem (axil).

Midlands wattle belongs to the family Mimosaceae, and is also known as midlands mimosa It is distinguished from the more common species *Acacia riceana* (southern spiny wattle), *Acacia siculiformis* (dagger wattle) and *Acacia genistifolia* (spreading wattle) by its flowering parts and less distinctly by leaf shape. Refer to Lynch (1993) and Curtis and Morris (1981) for further details. Simple distinctions include the following: *Acacia riceana* 



bears its flowers in a cylindrical spike that is longer than the leaves; *Acacia siculiformis* bears a single compound flower (i.e. composed of several distinct parts) on a short stalk in the leaf axil and has round branchlets; *Acacia genistifolia* has one or two compound flowers borne on long stalks in the leaf axils and has angular branches.

This species was previously known as *Racosperma* axillare.

## **Distribution and Habitat**

Midlands wattle is found only in Tasmania, its main locations being Elizabeth River, St Pauls River, Dukes River, Mount Barrow, Lake River and Lake Leake Road.



Although midlands wattle is restricted in distribution, it occurs across a wide range of climate and altitude, from low altitudes in the eastern midlands to subalpine on Mount Barrow. Most stands are associated with watercourses or soaks. However, midlands wattle is not restricted to this type of environment and can be found extending further onto surrounding slopes.

# **Important Locations**

The Elizabeth River (Devils Elbow to Chimney Hill) and Big Den on the Lake River support the largest and most continuous stands of midlands wattle. These stands occur on private land and are subject to agriculture and forestry activities. The Dukes River population, although much smaller, occurs in a streamside reserve in State Forest and part of a population occurs in the Mt. Barrow State Reserve.

# Threats, Limiting Factors and Management Issues

The main threat to the long-term survival of midlands wattle is land clearance and a decline in the quality of habitat in agricultural areas. Along the Elizabeth and St Pauls Rivers, the extent of land clearance varies. In some areas there has been extensive removal of riparian (riverside) vegetation and a high level of natural vegetation modification through invasion by exotic (introduced) plant species. In other areas the riparian vegetation is still relatively intact with a low level of invasion by exotic plants. Midlands wattle habitat along the Elizabeth River (from Devils Elbow to Chimney Hill) is largely protected as it occurs within a gorge which is unsuitable for agriculture. Stock has access to the river in several areas and there is some invasion of exotic species. Some stands occur next to partial logging operations. Isolated stands along the St Pauls River are in poor condition having been fragmented by land clearance and invaded by gorse. A stand on the Lake Leake Road occurs in pasture which has a gorse problem. The effect of stock over these areas is unknown but it is possible that young midlands wattle plants are being trampled and grazed. Stock grazing occurs on almost all sites but varies in intensity.

At Dukes Marsh and Mt. Barrow, midlands wattle is protected under the Forest Practices Code. Conservation of the species could be enhanced in these locations if the protected area was extended to form a buffer of 20 metres around its habitat.

Stands of midlands wattle along the Elizabeth, Lake and St Pauls Rivers and along the Lake Leake Road all occur on private land. Protection and conservation of these stands requires the cooperation

of landholders through mechanisms such as land management plans.

### **Conservation Assessment**

## **Population Estimate**

A total of 47,000 (±5000) mature individuals was estimated to occur in 18 populations during a 1996 census (Barker and Johnson 1997). This estimate does not include some reaches of the Elizabeth River that were not sampled.

Table 1: Locations and population size of midlands wattle

Pop	NVA	Location	Pop. size
No.	ID		_
1	1080	Dukes Marsh	350+
2	1060	Royal George (St Pauls	100+
		River)	
3	1061	Elizabeth River	5000+
		(Devils Elbow to	
		Chimney Hill)	
4	1082	Lake Leake Rd	250+
5	1081	Big Den (Lake River)	35,000+
6	1048	Mount Barrow	500+

#### **Reservation Status**

Part of one population of midlands wattle is reserved in the Mt. Barrow State Reserve. Further protection is required to secure the species as the reserved stand accounts for less than 2% of the total number of individuals. The remainder of the Mt. Barrow and Dukes Marsh populations is protected within informal reserves under the Forest Practices Code.

## **Assessment Criteria**

Midlands wattle meets the criteria for listing as vulnerable on the Tasmanian *Threatened Species Protection Act 1995* because

- the area of occupancy is limited
- the area of occurrence is restricted
- most individuals occur in less than 10 populations

It qualifies as Vulnerable using the 1994 IUCN (World Conservation Union) Red List criteria.

# **Recovery Program**

## **Objectives**

- identify critical habitat
- stop habitat clearance
- stop degradation of habitat quality due to weed invasion, grazing etc
- develop land management plans for critical habitat on agricultural land
- increase the proportion of populations contained in formal reserves to 25%



#### **Existing Management**

All records have been verified in the field and prioritised for conservation management. Flora protection zones have been established in State Forest as part of Forestry Tasmania's management classification system. Midlands wattle is protected within two *Phytophthora cinnamomi* (root rot fungus) management areas in which hygiene measures are enforced.

Research was undertaken into the germination ecology of midlands wattle as part of the Endangered Species Program (Lynch 1993). The species is included in a multi-species Recovery Plan written in February 1998 (Barker and Johnson 1998).

#### **Actions Needed**

- remove weeds from habitat by cutting and poisoning
- exclude habitat from fuel reduction burns
- develop land management plans and land management agreements between private landholders and the Parks and Wildlife Service
- determine the impact of stock on the regeneration of midlands wattle (including post fire regeneration, grazing and trampling)

#### **Further Information**

**Contact details:** Threatened Species Unit, Department of Primary Industries, Water and Environment, GPO Box 44 Hobart Tasmania Australia 7001. Ph (03) 6233 6556 fax (03) 6233 3477.

**Specialist Advice:** Naomi Lawrence, Threatened Species Unit, Department of Primary Industries, Water and Environment

#### **Source Material**

#### References

Askey-Doran, M.J. 1993. *Riparian vegetation in the Midlands and eastern Tasmania*. Parks and Wildlife Service, Department of Environment and Land Management, Hobart, Tasmania.

Barker, P.C.J. 1994. Phytophthora cinnamomi: *The susceptibility and management of selected* 

Tasmanian rare species. Forestry Tasmania and ANCA, Hobart.

Barker, P.C.J. and Johnson, K. 1997. Research and recovery requirements for the management of threatened species in Tasmania's commercial forests. Report to the Tasmanian RFA Environment and Heritage Technical Committee.

Barker, P.C.J. and Johnson, K.A. 1998. *Recovery Plan - Selected Tasmanian forest associated plants*. Forestry Tasmania: Hobart.

Curtis, W. and Morris, D. 1981. *The Students Flora of Tasmania*, Part 1. Tasmanian Government Printer, Hobart.

Lynch, A.J.J. 1993. Conservation biology and management of 16 rare or threatened Fabaceae species in Tasmania. Parks and Wildlife Service, Department of Environment and Land Management, Hobart. Tasmania.

Lynch, A.J.J., Gilfedder, L. and Kirkpatrick, J.B. 1995. The Tasmanian endemic shrub, Acacia axillaris Benth.. Conservation ecology applied to the question of rarity or vulnerability. *In:* Gilfedder, L. and Kirkpatrick, J.B. The conservation ecology and management of ten threatened species of lowland grassy ecosystems in Tasmania.

**Statement Prepared:** September 1998

Prepared by: Phil Barker and Karen Johnson

**Review Date:** 2003 or as new information is received.

**Cite as:** Threatened Species Unit 1998. Listing Statement Midlands wattle *Acacia axillaris*. Department of Primary Industries, Water and Environment, Tasmania.

View: http://www.dpiwe.tas.gov.au

& follow the links to Natural Environment, Threatened Species, then List of Threatened Species.

**Permit:** It is an offence to collect, possess or disturb this species unless under permit.

