**PLANT** 

# Prasophyllum murfetii

AUS	SA	AMLR	Endemism	Life History
CE	E	E	AMLR	Perennial

# Family ORCHIDACEAE



Photo: © Rosemary Taplin

# **Conservation Significance**

Endemic to the AMLR where the species' relative area of occupancy is classified as 'Very Restricted'.4

Future survival is precarious given its very restricted geographic distribution, fragmented sub-populations (mostly unprotected sites) and ongoing threats.<sup>6</sup>

# Description

Robust leek-orchid to 80 cm tall. Single, erect dark-green cylindrical leaf. Flowers produced in a dense to moderately dense spike of 15 to 35 and are coloured from greenish-brown to white, or light to bright pink (Jones 2000). Flowers are sweetly scented (Bates and Weber 1990). Distinguished from *Prasopyhllum frenchii* on the basis of flower shape and other floral features (Jones 2000).<sup>2,6</sup>

Synonyms: previously included in *Prasophyllum frenchii.*<sup>2</sup>

#### **Distribution and Population**

Very restricted distribution, known only from Fleurieu Peninsula.<sup>2</sup> Occurs in two locations, Mount Compass and Parawa areas, which are separated by the broad Inman Valley that does not contain any suitable habitat.<sup>6</sup>

Surveys in 2008 only re-recorded one sub-population in Stipiturus CP, containing 15 - 20 plants (J. Quarmby pers. comm. 2009). Many of the formerly recorded sub-populations have not been re-recorded for the past two to three decades and may be extinct. Most formerly recorded populations were on private land that is now degraded (J. Quarmby pers. comm. 2009).

Area of occupancy estimated at less than 1% of the swamp habitat that remains in good condition on Fleurieu Peninsula (Duffield and Hill 2002). Distribution is highly fragmented.<sup>6</sup>

Pre-1983 AMLR filtered records from Mount Compass and Parawa, with additional records around Mount Compass, and a single record near Finniss.<sup>4</sup>

There are also records from the shores of Lake Alexandrina.<sup>6</sup>

#### Habitat

Found in a variety of swampy habitats, in low-lying areas around the margins of permanent swamps or lakes (Bates and Weber 1990). Grows on brown to black, wet, loam soils (Jones 2000).<sup>2,6</sup>

Recorded with Leptospermum sp. growing on damp peaty soil.<sup>5</sup>

Within the AMLR the preferred broad vegetation group is Wetland.<sup>4</sup>

Within the AMLR the species' degree of habitat specialisation is classified as 'Very High'.4

## **Biology and Ecology**

Flowers from November to January. Visited by swarms of flower wasps on warm days.<sup>2</sup> Pollinated by the wasp *Labium montivagum*.<sup>5</sup>

Prasophyllum species are mature at five years and usually do not flower two years in succession. In the years they do not flower, they appear as a single leaf (R. Bates *pers. comm.* 2005).6

## Further information:

Biodiversity Conservation Unit, Adelaide Region Phone: (61 8) 8336 0901 Fax: (61 8) 8336 0999 http://www.environment.sa.gov.au/





# ADELAIDE AND MOUNT LOFTY RANGES SOUTH AUSTRALIA

Threatened Species Profile

Department for Environment and Heritage

Responds well to fire and disturbance (e.g. thinning of vegetation by slashing) (R. Bates *pers. comm.*).<sup>3</sup>

#### **Aboriginal Significance**

Post-1983 records indicate the majority of the AMLR distribution occurs in southern Ngarrindjeri Nation. Also present in southern Kaurna Nation (bordering Peramangk Nation).<sup>4</sup>

Orchidaceae species are recorded as being a traditional food source for Aboriginal people in NSW. The small tubers were roasted (Flood 1980).<sup>1</sup>

#### **Threats**

Threats include the loss of suitable habitat from vegetation clearance in swamp areas, changes in hydrology, grazing impacts, and slashing or burning of swamps.<sup>6</sup>

Removal of grazing or other disturbance can be detrimental if these actions allow weed invasion and monoculture overgrowth (e.g. *Melaleucas*) (B. Bates *pers. comm.*).

Approximately half of known distribution occurs within 2 km of confirmed or suspected *Phytophthora* infestations.<sup>4</sup>

Additional current direct threats have been identified and rated for this species. Refer to the main plan accompanying these profiles.

## **Regional Distribution**



Map based on filtered post-1983 records.<sup>4</sup> Note, this map does not necessarily represent the actual species' distribution within the AMLR.

#### References

Note: In some cases original reference sources are not included in this list, however they can be obtained from the reference from which the information has been sourced (the reference cited in superscript).

- 1 Australian National Botanic Gardens (2007). Aboriginal Plant Use NSW Southern Tablelands. Available from <a href="http://www.anbg.gov.au/apu/index.html">http://www.anbg.gov.au/apu/index.html</a> (accessed August 2007).
- **2** Bates, R. J., ed. (2007). *South Australian Native Orchids. Electronic version, August 2007.* Native Orchid Society of South Australia.
- **3** Coates, F., Jeanes, J. and Pritchard, A. (2003). *Recovery plan for twenty-five threatened orchid taxa of Victoria, South Australia and New South Wales 2003-2007.* Department of Sustainability and Environment, Melbourne.
- 4 Department for Environment and Heritage (2007). Adelaide and Mount Lofty Ranges Regional Recovery Pilot Project Database. Unpublished data extracted and edited from BDBSA, SA Herbarium (July 2007) and other sources.
- **5** Department for Environment and Heritage (2007). *State Herbarium of South Australia Database*. Unpublished data, extracted October 2007.
- **6** Threatened Species Scientific Committee (2006). *Listing Advice to the Minister for the Environment and Heritage (Commonwealth) on Prasophyllum murfetii.* Available from <a href="http://www.environment.gov.au/biodiversity/threatened/species/prasophyllum-murfetii.html">http://www.environment.gov.au/biodiversity/threatened/species/prasophyllum-murfetii.html</a>



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