



THREATENED SPECIES LISTING STATEMENT

ORCHID

Tadgell's leek orchid

Prasophyllum tadgellianum R. S. Rogers 1923

Status

Tasmanian *Threatened Species Protection Act 1995*

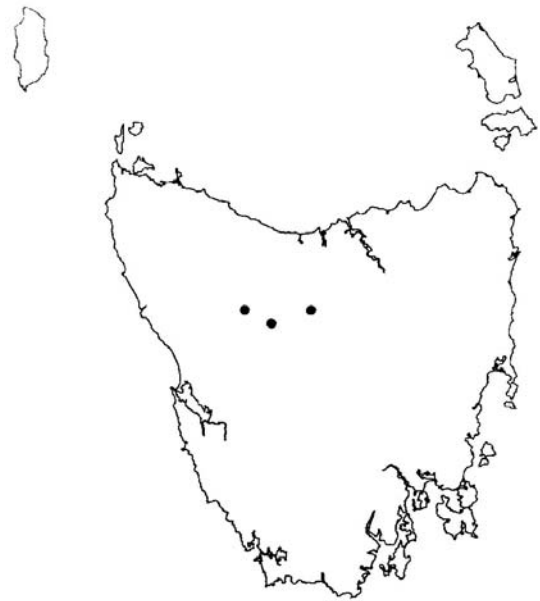
.....rare

Commonwealth *Environment Protection and Biodiversity*

Conservation Act 1999.....Not listed



Phil Collier



Description

Tadgell's leek orchid belongs to a group of orchids commonly known as leek orchids because the erect hollow leaf has some resemblance to that of a leek. *Prasophyllum* species are deciduous terrestrials with small, fleshy, round or oval tubers and a few fleshy, irregular roots. Most species are dormant over summer and autumn and begin growth in early winter. The single leaf is reddish at the base as opposed to green as in onion orchids (*Microtis*). The flower spike emerges through the side of the leaf above the middle, with the portion of leaf above the point of emergence being free and often withered by the time the flowers open. The flower spike bears many flowers that are held upside-down and are often fragrant. The labellum, often with prominent wavy or frilly margins, produces quantities of nectar on which a wide range of insects feed. Some of these, particularly native bees, wasps and beetles, are effective pollinators.

The leaf of Tadgell's leek orchid is shiny and dark green with a white to green base, the free part stiff and 5 to 8 cm long. It flowers in January and in flower, the plants are 10 to 28 cm tall. They have 8 to 20 flowers in a crowded spike 4 to 8 cm long. The ovary is light green. The flowers are scented, 10 to 12 mm long and 4 to 5 mm wide and are dark greenish brown to dark reddish brown with a greenish, whitish or pinkish labellum. The lateral sepals are united except at the tip. The petals are 5 to 5.5 mm long and 1 mm wide and are incurved at the tip. The labellum is shortly stalked and erect to recurved in the distal half. It does not have prominently wavy margins. The shiny green callus on the labellum is fleshy and raised and extends nearly to the labellum apex.

Prasophyllum tadgellianum can be distinguished from *Prasophyllum alpinum* by its larger flowers,

nearly sessile labellum and leaf tip, which usually remains stiff and turgid at flowering time.

Distribution and Habitat

In Tasmania, Tadgell's leek orchid is restricted to two locations in the Cradle Mountain area and one near Bastion Bluff in the Great Western Tiers. It

extends over an area of approximately 450 square kilometres. It favours subalpine grassland and grassy woodland on well-drained loam, often in moist places near streams and bogs. It also occurs in Victoria, New South Wales and the Australian Capital Territory.

Important Locations

Locality	1:25,000 mapsheet	Year last seen	Area (ha)	Number
Near Bastion Bluff Central Plateau Conservation Area or adjacent Meander Forest Reserve, World Heritage Area	Lake Mackenzie	1994	unknown	unknown
February Plains Cradle Mountain-Lake St Clair National Park, World Heritage Area	Rowallan	1983	unknown	unknown
Fury Plains (about 6 km before Waldheim) Cradle Mountain-Lake St Clair National Park, World Heritage Area	Cradle	1974	unknown	unknown

Threats, Limiting Factors and Management Issues

Only three records are known for Tadgell's leek orchid. Precise locations were not recorded, making the populations difficult to relocate and no information is available on population size or potential threats to the species. The species flowers freely in the absence of fire and is unlikely to be at risk from adverse fire regimes in its subalpine habitat. The species has been listed due to stochastic risks associated with its restricted extent of occurrence.

Conservation Assessment

Population Estimate

There are three known records for Tadgell's leek orchid. No information is available on the size of populations. The scarcity of records is unlikely to be due to a spasmodic flowering pattern typical of some leek orchids in response to firing and disturbance as Tadgell's leek orchid flowers freely in the absence of fire.

Reservation Status

Tadgell's leek orchid is reserved in the Cradle Mountain-Lake St Clair National Park. All known populations of Tadgell's leek orchid occur in the Tasmanian Wilderness World Heritage Area.

Assessment Criteria

Tadgell's leek orchid meets the criteria for listing as rare on the Tasmanian *Threatened Species Protection Act 1995* because

- it extends less than 2,000 square kilometres

Recovery Program

Objectives

- prevent the loss or degradation of known populations
- increase the number of known populations through survey

Existing Management

Two populations of Tadgell's leek orchid occur in Cradle Mountain-Lake St Clair National Park for which a management plan has been prepared. The plan was prepared prior to the identification of the species and will need to address the requirements of Tadgell's leek orchid when next updated.

Actions Needed

- include the species in the next update of the Cradle Mountain-Lake St Clair management plan
- relocate populations, record precise locations and determine the number of individuals, area occupied and potential threats to the populations
- establish a mechanism to ensure management intervention when required
- further survey

Information Needed

- precise location of populations, numbers of individuals, area occupied and potential threats
- determine whether there are any more populations in existence

Management Advice

For the land owner/land manager

- monitor populations for threats and declines

For everyone

- search for new populations in January, when the plants are in flower
- help us to monitor known populations, particularly at flowering time

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: Hans Wapstra, Vegetation Section, Department of Primary Industries, Water and Environment

Source Material

References

Jones, D. Wapstra, H., Tonelli, P. and Harris, S. 1999. *The Orchids of Tasmania*. Melbourne University Press.

Jones, D.L. 1998. Contributions to Tasmanian Orchidology –6: A Taxonomic Review of *Prasophyllum* R. Br. in Tasmania, *Australian Orchid Research* 3: 94-134.

Statement Prepared: October 2000

Prepared by: Wendy Potts and Hans Wapstra

Review Date: 2005 or as new information is received.

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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.