



Lowly Greenhood *Pterostylis despectans* Endangered

Description

Pterostylis despectans is an annual, terrestrial orchid. It has 5 to 10 basal leaves forming a rosette flat to the ground, which emerges in winter and is withered by flowering time. It produces a single stout flower stem in late Oct-Dec (2-5 cm tall) with up to eight flowers. The flowers are green with translucent, white and brown stripes. The hood (galea) is up to 15 mm long and has a pointed tip (1 cm long). The lateral sepals are broad with fine marginal hairs and tapering tips (2 cm long) that usually trail on the ground. The lip (labellum) is 5 mm long, dark brown, with fine marginal hairs and two long forward pointing hairs (setae).



Flower of *Pterostylis despectans*. J. Quarmby

Habitat

P. despectans grows in grassy *Eucalyptus odorata* (Peppermint Box), *E. pruinosa* (Silver-leaved Box), *E. microcarpa* (Grey Box) woodland. The understorey is sparse and typically includes *Austrostipa* spp. (Spear-grass), *Austrodanthonia* spp. (Wallaby-grass), *Lomandra effusa* (Scented Mat-rush), and *Plantago gaudichaudii* (Narrow-leaved Plantain).

P. despectans usually grows in hard, clay loam over rock outcrops, covered with microphytic crust.

This habitat type has been extensively cleared on the plains north of Adelaide, and remaining fragments are typically small, isolated and often degraded.



Typical habitat of *Pterostylis despectans*.

J. Quarmby

Distribution and abundance

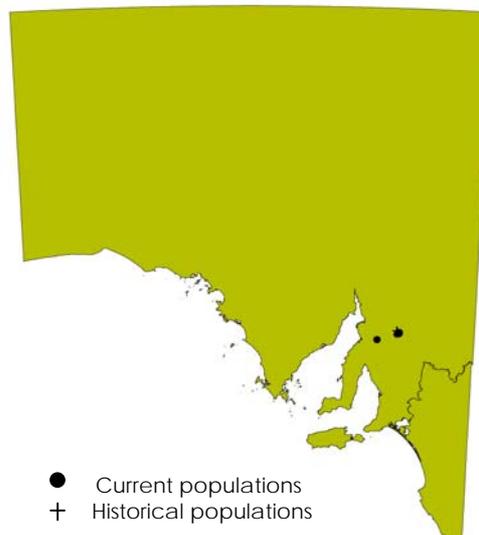
P. despectans has a disjunct distribution in South Australia and Victoria. In South Australia it is currently known from 4 populations in the Mid North region. Its range extends from Mt Bryan in the east to Yacka in the west.

The population size of *P. despectans* was estimated to be approximately 1300 mature plants in 2007.

Conservation Rating

P. despectans is listed as nationally **Endangered** under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*. It has a restricted and fragmented distribution, and all populations are under threat, especially from grazing.

Distribution of *Pterostylis despectans* in South Australia.



- Current populations
- + Historical populations

Threats



Climate Change



Weed Invasion



Road Management



Herbivory



Grazing



Lack of Pollination



Illegal Collection

P. despectans is under particular threat from grazing, especially by sheep and kangaroos. Weed invasion is also a threat to *P. despectans*, especially Bearded Oat and Box Thorn. All populations are also threatened by a lack of pollination and recruitment.

Recovery Actions

P. despectans is included in a recovery plan for 12 threatened orchids in the Lofty Block region, which outlines strategies and actions for species recovery, including:

- Monitoring population size and trends.
- Surveying historical and potential habitat for populations.
- Mitigating the threats to populations (eg weed control, rabbit control *etc*).
- Protecting and managing habitat (eg protecting land under Heritage Agreement, fencing *etc*).
- Collecting and preserving seed and mycorrhizal fungi.
- Preparing and implementing translocation proposals.
- Undertaking research related to the ecology and biology of the species.
- Informing, encouraging and supporting landholders and the community.

How you can help

If you think you have seen *P. despectans* please report it to the Department for Environment and Heritage (see contacts below).

You can also volunteer your time to assist with surveys, monitoring, weed control, fencing, and other recovery actions for the species.



Flowers and buds of *Pterostylis despectans*.

K. Bayley

Further reading

Quarmby, J.P. (2006) *Recovery plan for 12 threatened orchids in the Lofty Block region of South Australia 2007-2012*. Department for Environment and Heritage, Adelaide.

Bickerton, D. & Robertson, M. (2000) *Lowly Greenhood recovery plan*. Department for Environment and Heritage, Adelaide.

www.environment.sa.gov.au

For Further information please contact

Lofty Block Threatened Orchid Recovery Project Officer
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