



## Hindmarsh Valley Greenhood *Pterostylis bryophila* Critically Endangered

### Description

*Pterostylis bryophila* is an annual, terrestrial orchid. It has 3 to 5 basal leaves forming a rosette that emerges in autumn. It produces a single flower stem in May-July (10-20 cm tall) with 4 to 5 cauline leaves and a single flower. The flowers are green with translucent, white and dark green stripes. The sepals have free-points (2 cm long) held above the hood (galea). The galea has a pointed tip (2-6 mm long) and a prominent thick sinus. The lip (labellum) is dark brown and protrudes from the galea.



Flowers of *Pterostylis bryophila* J. Quarmby

### Habitat

*P. bryophila* grows in *Eucalyptus leucoxylon* (South Australian Blue Gum) and *E. fasciculosa* (Pink Gum) grassy woodland. The understorey usually includes *Acacia pycnantha* (Golden Wattle), *A. paradoxa* (Kangaroo Thorn), *Dodonaea viscosa* (Sticky Hop-bush) and *Bursaria spinosa* (Christmas Bush). The groundcover is dense with mosses, grasses, ferns, lilies and other herbs.

*P. bryophila* usually grows in moist, shady areas (eg in gullies and along creek lines) in fertile loam soils.

This habitat type has been extensively cleared on the Fleurieu Peninsula, and remaining fragments are typically small, isolated and often degraded.



Typical habitat of *Pterostylis bryophila* G. Fishlock

### Distribution and abundance

*P. bryophila* is endemic to South Australia and is currently known from only 3 populations in the Fleurieu Peninsula region. Its range extends from Talisker in the south to Hindmarsh Valley in the north.

The population size of *P. bryophila* was estimated to be approximately 1100 mature plants in 2007. The majority of plants are found within one location in the Hindmarsh Valley.

### Conservation Rating

*P. bryophila* is listed as nationally **Critically 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 weed invasion.

Distribution of *Pterostylis bryophila* in South Australia.



## Threats



Climate Change



Weed Invasion



Wildfire



Herbivory



Phytophthora



Trampling



Illegal Collection

*P. bryophila* is under particular threat from weed invasion, especially Bridal Creeper, Sweet Pittosporum and Watsonia. Herbivory from kangaroos and rabbits is also a threat. *P. bryophila* is also at risk from wildfires.

## Recovery Actions

*P. bryophila* 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, caging, 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. bryophila* 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.



Flower of *Pterostylis bryophila*.

J. Quarmby

## 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. (2001) *Recovery plan for Pterostylis bryophila*. Department for Environment and Heritage, South Australia.

### For Further information please contact

Lofty Block Threatened Orchid Recovery Project Officer  
Department for Environment and Heritage

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