

Action Statement

Flora and Fauna Guarantee Act 1988

No. 151

Late Helmet-orchid

Corysanthes sp. aff. *diemenicus* (Coastal)

Distribution

The Late Helmet-orchid *Corysanthes* sp. aff. *diemenicus* (Coastal) is endemic to Victoria, occurring in the Victorian Gippsland Plain Bioregion (Cape Schanck, Mornington Peninsula National Park-MPNP) and Wilsons Promontory Bioregion (Cotters Lake, Wilsons Promontory National Park-WPNP). It could be expected to occur in similar habitat in southern Victoria, but no records are yet available. Fewer than 500 plants occur in the wild, in two populations. It is likely that the Late Helmet-orchid was naturally rare but more common prior to landscape scale disturbance particularly from weed invasion and clearing of Woolly Tea-tree scrub. The Late Helmet-orchid is reserved at Wilsons Promontory National Park and Mornington Peninsula National Park.



Late Helmet-orchid
Corysanthes sp. aff. *diemenicus* (Coastal)
(Photo: Jeff Jeanes)

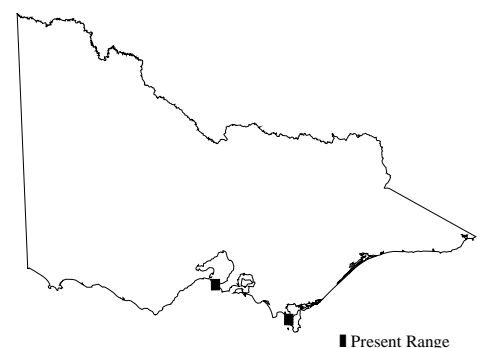
Habitat

The Late Helmet-orchid occurs in closed scrub dominated by *Leptospermum lanigerum*, typically associated with *Leucopogon parviflorus* in swamps and along water courses on moist, black, peaty alkaline soils overlying calcarenite. Understorey is relatively open, with a herbaceous ground layer which may include *Viola hederacea*, *Lobelia anceps*, *Selliera radicans* and *Geranium molle*. Critical habitat has not been determined but likely to be restricted to alkaline soils and may require occasional creation of canopy gaps for regeneration.

Conservation status

National conservation status

The Late Helmet-orchid has not been listed under the Commonwealth **Environment Protection and Biodiversity Conservation Act 1999**.



Distribution in Victoria (DSE 2004)

An assessment using the IUCN Criteria has determined that Late Helmet-orchid is Critically Endangered in Australia.

Victorian conservation status

The Late Helmet-orchid has been listed as threatened under the **Flora and Fauna Guarantee Act 1988**.

The Late Helmet-orchid is considered endangered in Victoria (DSE 2003).

Current and potential threats and their risk

Current threats

Weed invasion

Extremely high at Mornington Peninsula National Park - the known site is severely weed invaded (predominantly *Senecio angulatus*); Moderate at Wilsons Promontory National Park - *Hypochaeris radicata*, *Solanum* sp.

Grazing

Low - populations are reasonably well protected from grazing.

Inappropriate fire regimes

Low - at present, sites are protected from fire.

Site disturbance

Low - Site at Wilsons Promontory National Park is close to a track and at some risk of damage from management vehicles.

Potential threats

Illegal collection

Low - no evidence of collection in the past.

Ecology/biology

High - conditions for seed recruitment and maintenance of pollinator and fungal activity unknown; increased extinction risk due to small population size at Mornington Peninsula National Park; response to fire unknown but likely to require protection.

Other issues

- The site at Mornington Peninsula National Park appears to have dried out somewhat, and plants have not been seen in recent years. Woolly Tea-trees are also showing signs of senescence and the site is significantly degraded by invasive pest plants, predominantly *Senecio angulatus*.
- Searches in similar habitat in the Mornington Peninsula are urgently required (eg. Buckleys Reserve, Balnarring).

- All Parks Victoria staff at Wilsons Promontory National Park and Mornington Peninsula National Park, including seasonal field staff, should be made aware of the location of populations to prevent damage to plants.
- Some careful hand weeding may be required at Wilsons Promontory National Park.

Existing conservation measures

- Both sites were visited during Action Statement preparation.

Conservation objectives

Long term objective

To ensure that the Late Helmet-orchid can survive, flourish and retain its potential for evolutionary development in the wild.

Objectives of this Action Statement

1. Improve knowledge of population sizes, trends and habitat requirements.
2. Protect sites and manage habitat.
3. Maintain and/or increase existing population sizes

Overall approach

Searches for new populations to re-locate known populations will be conducted, and baseline data collected with assistance of Field Naturalists. Weed management will be investigated at MPNP in the immediate vicinity of the known population and strategies to maintain and regenerate habitat will be investigated. Risk management at WPNP will include site protection by ongoing track closure and inclusion on Environmental Information System. Recovery will be jointly managed by DSE and PV.

Intended management actions

The intended management actions listed below are further elaborated in Actions for Biodiversity Conservation database. Detailed information about the actions and locations, including priorities, is held in this system and will be provided annually to land managers and other authorities.

1. Determine current conservation status, including clarifying taxonomy and acquiring baseline population data.

Responsibility: DSE (Biodiversity & Natural Resources Division, Port Phillip and Gippsland Regions), Parks Victoria

2. Measure population trends and responses against recovery actions. Conduct annual censusing of populations, collate, analyse and report on census data and re-prioritise and

adjust recovery actions and/or threat management

Responsibility: DSE (Biodiversity & Natural Resources Division, Port Phillip and Gippsland Regions), Parks Victoria

3. Determine habitat requirements of key populations. Conduct surveys, identify ecological correlates of populations and prepare habitat descriptions.

Responsibility: DSE (Biodiversity & Natural Resources Division, Port Phillip and Gippsland Regions), Parks Victoria

4. Incorporate actions to protect, enhance and restore Late Helmet-orchid habitat into relevant Regional Catchment Strategies or their subordinate strategies via Biodiversity Action Plans. Implement these actions, according to priority, as resources become available, in conjunction with other agencies, community groups and landholders.

Responsibility: West Gippsland Catchment Management Authority, Port Phillip Catchment and Land Protection Board

5. Manage risks to populations. Identify and implement strategies to control threats, especially weed invasion, and identify disturbance regimes to promote regeneration and recruitment for key populations and their habitat.

Responsibility: Parks Victoria, DSE (Biodiversity & Natural Resources Division, Port Phillip and Gippsland Regions)

6. Promote *in situ* recruitment by preparing habitat for seedling recruitment and restocking populations with seed.

Responsibility: DSE (Biodiversity & Natural Resources Division, Port Phillip and Gippsland Regions), Parks Victoria

7. Undertake or encourage and support research, including the description of life history and evaluation of natural pollination levels.

Responsibility: DSE (Biodiversity & Natural Resources Division), Parks Victoria

8. Increase populations *ex situ*. Hand pollinate plants, collect and store seed and determine seed viability. Collect and store mycorrhizal fungi. Establish and maintain cultivated populations and record such collections in a database of threatened orchid taxa in cultivation.

Responsibility: DSE (Biodiversity & Natural Resources Division), Royal Botanic Gardens

9. Develop and implement materials for land manager, landholder and community information, including technical information on *in-situ* recovery techniques.

Responsibility: DSE (Biodiversity & Natural Resources Division)

10. Involve community groups in recovery actions where appropriate and provide support under the Botanic Guardians scheme.

Responsibility: DSE (Biodiversity & Natural Resources Division, Port Phillip and Gippsland Regions)

References

DSE (2003) *Advisory List of Rare or Threatened Plants in Victoria - 2003*. Department of Sustainability and Environment: East Melbourne. (available on the DSE web site)

DSE (2004) *Flora Information System* (electronic flora database). Department of Sustainability and Environment: Melbourne.

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Further information can be obtained from Department of Sustainability and Environment Customer Service Centre on 136 186.

Flora and Fauna Guarantee Action Statements are available from the Department of Sustainability and Environment website: <http://www.dse.vic.gov.au>

This Action Statement was prepared under section 19 of the Flora and Fauna Guarantee Act 1988 under delegation from Chloe Munro, Secretary, Department of Natural Resources and Environment, November 2002.

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