

# Action Statement

Flora and Fauna Guarantee Act 1988

No. 191

## Kilsyth South Spider-orchid *Caladenia* sp. aff. *venusta*

### Distribution

The Kilsyth South Spider-orchid *Caladenia* sp. aff. *venusta* (Kilsyth South) is endemic to Victoria occurring in Kilsyth within the Victorian Gippsland Plain Bioregion. The Kilsyth South Spider-orchid is considered to be a short-range endemic at present as no records exist to indicate a formerly more widespread distribution. However, searches through Herbarium material may reveal mis-identified specimens placed with *Caladenia venusta* or closely related taxa. Approximately 23 plants are known in the wild, in a single population. Former abundance is unknown but likely to have been at least twice current numbers at the existing site. The Kilsyth South Spider-orchid occurs on private property and is not reserved.



The Kilsyth South Spider-orchid *Caladenia* sp. aff. *venusta*  
(Photo: Jeff Jeanes)

### Habitat

Kilsyth South Spider-orchid occurs in *Eucalyptus radiata* - *Eucalyptus cephalocarpa* open forest with scattered *Exocarpos cupressiformis*, and a shrubby understorey of *Banksia marginata* and *Leptospermum continentale* somewhat modified by slashing. The ground layer is species rich, but mainly consists of *Joycea pallida*, *Patersonia fragilis*, *P. occidentalis*, *Thelionema caespitosum* and *Sphaerolobium minus*, with patches of exposed ground and a profuse orchid flora. Critical habitat is yet to be determined but is likely to include an open heathy understorey maintained by suitable disturbance regime.



Distribution in Victoria (DSE 2004)

### Conservation status

#### National conservation status

The Kilsyth South Spider-orchid has been listed as 'endangered' under the Commonwealth **Environment Protection and Biodiversity Conservation Act 1999**.

An assessment using the IUCN Criteria has been undertaken. The Kilsyth South Spider-orchid has been assessed as 'critically endangered'.

#### **Victorian conservation status**

The Kilsyth South Spider-orchid has been listed as 'threatened' under the **Flora and Fauna Guarantee Act 1988**.

The Kilsyth South Spider-orchid is considered 'endangered' in Victoria (DSE 2004).

#### **Decline and threats**

##### **Current threats and perceived level of risk**

###### Biology/Ecology

High - Conditions for maintenance of pollinator and fungal activity unknown; increased extinction risk due to single population; response to fire unknown.

###### Site access

High - access is denied to Maroondah Shire and NRE staff at present so that implementation of *in-situ* recovery actions is not possible at present.

###### Weed invasion

Low - relatively weed free with only a few woody species confined to small areas at present (eg. *Pittosporum undulatum*, *Erica quadrangularis*) (Carr 1998).

###### Grazing

Low - rabbit numbers are low.

###### Reservation status

High - unreserved at present. Attempts to purchase the property by the Shire of Maroondah have been unsuccessful.

##### **Potential threats and perceived level of risk**

###### Illegal collection

Low at present - probably highly sought after by collectors but access to property is difficult.

###### Inappropriate fire regimes

Low- site has not been burnt recently although response to fire is unknown, but could be assumed to be similar to that of *C. venusta*.

###### Deliberate damage

Unknown - landowners have been informed of its legal status.

##### **Other issues**

- The site has been assessed as having State conservation significance and *C. sp. aff. venusta* (Kilsyth South) as being of national

conservation significance (Carr 1998; EPBC Act 1999).

- The landowners have been refused permission to remove vegetation by the City of Maroondah and by the Victorian Civil and Administrative Appeals Tribunal (VCAT).
- VCAT has recommended that the property should be placed in public ownership.
- Attempts to purchase the land have been unsuccessful.
- Access to the property is denied to Local and State Government staff.
- City of Maroondah is endeavouring to raise additional funds to assist with purchase.
- The property adjacent to the site was visited during preparation of the recovery plan.

##### **Existing conservation measures**

- City of Maroondah have offered to purchase the property, but consider the current asking price to high.
- The site has been assessed for biological significance (Carr 1998).
- The site is included in shire planning overlays.

##### **Conservation objectives**

###### **Long term objective**

That the Kilsyth South Spider-orchid can survive, flourish and retain its potential for evolutionary development in the wild.

###### **Objectives of this Action Statement**

1. To establish sympathetic management of the population and its habitat.

###### **Intended management actions**

1. Endeavour to negotiate an agreement with the landowners by which the Kilsyth South Spider-orchid and its habitat can be protected and managed.

*Responsibility: DSE (Parks, Flora and Fauna Division), DPI (Port Phillip Region)*

2. Pursue voluntary acquisition of the property.

*Responsibility: City of Maroondah, NRE (Parks, Flora and Fauna Division, Port Phillip Region)*

Subject to the success of Action 1 or 2 above, the following actions will be undertaken:

3. Determine current conservation status by clarifying taxonomy and acquiring baseline population data.

*Responsibility: DSE (Parks, Flora and Fauna Division), DPI (Port Phillip Region), Centre for Plant Biodiversity Research, Canberra*

4. 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 (Parks, Flora and Fauna Division), DPI (Port Phillip Region)*

5. Determine habitat requirements of the key population. Conduct surveys, identify ecological correlates of population and prepare habitat description.

*Responsibility: DSE (Parks, Flora and Fauna Division), DPI (Port Phillip Region)*

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

*Responsibility: DSE (Parks, Flora and Fauna Division)*

7. 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 (Parks, Flora and Fauna Division), Royal Botanic Gardens*

## References

- NRE (2000) Rare or Threatened Vascular Plants in Victoria - 2000: An alphabetic list of vascular plants of conservation significance. Department of Natural Resources and Environment, East Melbourne, Victoria.

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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 has been prepared under section 19 of the Flora and Fauna Guarantee Act 1988 under delegation from Professor Lyndsay Neilson, Secretary, Department of Sustainability and Environment, September 2003.

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