Action Statement

Flora and Fauna Guarantee Act 1988

No. 167

Marsh Leek-orchid

Prasophyllum niphopedium

Distribution

The Marsh Leek-orchid *Prasophyllum niphopedium* D.L. Jones is endemic to Victoria, occurring in the Mt Cobberas-Benambra area within the Victorian Alps Bioregion. It has not been recorded elsewhere but may be more widespread throughout the Snowy Mountains Range in NSW and Victoria. Approximately 200-500 plants are known from five populations; however, population sizes fluctuate from year to year (D. Rouse *pers. comm.*). Former abundance is unknown but likely to have been naturally rare. The Marsh Leek-orchid is reserved in the Alpine National Park, which is managed by Parks Victoria (Victoria East Region).

Habitat

The Marsh Leek-orchid occurs on snow plains in grassy alpine heath dominated by *Hakea microcarpa*, *Epacris gunnii*, *E. brevifolia*, *Baeckea gunniana*, *Poa clivicola* and *P. sieberiana* var. *sieberiana*, usually near watercourses. Soils are dark brown organic loams, seasonally poorly drained. Critical habitat has not been determined but populations occur above 1400 m above sea level and plants are likely to require open habitat protected from feral horses.

Conservation status

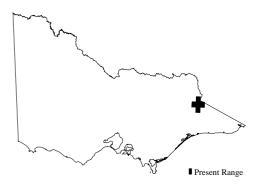
National conservation status

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

An assessment using the IUCN Criteria has been undertaken. The Marsh Leek-orchid was assessed as vulnerable.



The Marsh Leek-orchid, *Prasophyllum niphopedium*Photo by John Eichler



Distribution in Victoria (DSE 2004)



Victorian conservation status

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

The Marsh Leek-orchid is classified as 'Endangered' in Victoria (DSE 2003).

Decline and threats

Current threats and estimated risk

Grazing

High – feral horses and cattle are common in the area.

<u>Inappropriate fire regimes</u>

Likely to be low – sites are long unburnt and plants are unlikely to rely on fire for regeneration.

Site disturbance

Moderate- some sites are vulnerable to damage from off road vehicles.

Soil disturbance

High - pugging of soil by cattle, feral pigs and feral horses.

Potential threats and estimated risk

Weed invasion

Low – exotic grasses and opportunistic sedges may establish at the site with disturbance by cattle, feral pigs and feral horses.

Illegal collection

Low - no evidence of collection in the past.

Ecology/biology

Low - conditions for seed recruitment and maintenance of pollinator and fungal activity unknown; disturbance requirements are unknown.

Other issues

 Control of feral animals at the known sites is urgently required and methods to maintain open, undisturbed habitat should be investigated.

Existing conservation measures

- Parks Victoria has in place a contract with the Alpine Brumby Management Association (ABMA) to remove feral horses from parts of the Eastern Alps Unit of the Alpine National Park.
- A Feral Horse monitoring program for the Cobberas Wilderness Area is being developed, prior to the commencement of horse removal from this area.
- Feral Animal Control Programs are being undertaken in the Cobberas Management Unit of the Alpine National Park.

Conservation objectives

Long term objective

That the Marsh Leek-orchid can survive, flourish and retain its potential for evolutionary development in the wild.

Objectives of this Action Statement

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

Overall approach

Site condition and the extent and severity of disturbance from feral animals will be evaluated. Appropriate habitat management strategies will be implemented to prevent damage by vehicles, cattle, feral horses and feral pigs. Recovery will be jointly managed by DSE and PV. Community involvement will be sought if necessary.

Intended management actions

The intended management actions listed below are further elaborated in DSE's 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 by acquiring baseline population data.
 - Responsibility: DSE (Biodiversity & Natural Resources Division, Gippsland Region), 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, Gippsland Region), 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, Gippsland Region), Parks Victoria
- 4. Incorporate actions to protect, enhance and restore the Marsh Leek-orchid habitat into the East Gippsland Regional Catchment Strategy or its 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: East Gippsland Catchment Management Authority

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

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

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

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

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

Responsibility: DSE (Biodiversity & Natural Resources Division, Gippsland Region)

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.

Compiled by Dr Fiona Coates, Arthur Rylah Institute, Department of Sustainability and Environment: Melbourne.

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, October 2002.

© The State of Victoria, Department of Sustainability and Environment, 2003

Published by the Department of Sustainability and Environment, Victoria. 8 Nicholson Street, East Melbourne, Victoria 3002 Australia

This publication may be of assistance to you but the State of Victoria and its employees do not guarantee that the publication is without flaw of any kind or is wholly appropriate for your particular purposes and therefore disclaims all liability for any error, loss or other consequence which may arise from you relying on any information in this publication.

ISSN 1448-9902