

Action Statement

Flora and Fauna Guarantee Act 1988

No. 160

Pale Golden Moths

Diuris ochroma

Description and distribution

The Pale Golden Moths *Diuris ochroma* D.L. Jones displays a disjunct distribution between Victoria and New South Wales. In Victoria, it is confined to the Wonnangatta Valley, within the Victorian Highlands - Southern Fall Bioregion. In New South Wales, it occurs in the South eastern Highlands, in the Wadbilliga, Kydra and Kybean areas. In Victoria, thousands of plants are known from approximately six populations. Former abundance is unknown but likely to have been naturally rare with a fluctuating population size. In NSW, the estimated total population size is fewer than 500 plants, known from three populations. Its former abundance in NSW is unknown. The Pale Golden Moths is reserved in the Alpine National Park.



Pale Golden Moths *Diuris ochroma*

Habitat

In Victoria, the Pale Golden Moths occurs in montane herbfield in silty clay to peaty soils (Jones 1994). It grows either on flats just above the river flood plain in grassland/herbfield or on lower slopes in woodland with a herbaceous understorey. Critical habitat has not been determined but may require open herbaceous vegetation maintained by regular burning.

Conservation status

National conservation status

The Pale Golden Moths has been listed as vulnerable under the Commonwealth **Environment Protection and Biodiversity Conservation Act 1999**.

An assessment using the IUCN Criteria has been undertaken. The Pale Golden Moths has been assessed as vulnerable.



Distribution in Victoria (DSE 2004)

Victorian conservation status

The Pale Golden Moths has been listed as threatened under the **Flora and Fauna Guarantee Act 1988**.

The Pale Golden Moths is considered vulnerable in Victoria (DSE 2003). National conservation status

Threats and estimated risks

Current threats

Weed invasion

- Moderate - St Johns Wort (*Hypericum perforatum*) has been controlled by strategic burning but readily invades in the absence of fire.

Grazing

- Low - some native animals but orchid populations are large enough to withstand current grazing pressure.

Inappropriate fire regimes

- Moderate - fires lit by vandals occur occasionally, but have not damaged populations to date. Prescribed burning also occurs frequently and extensively in this area.

Site disturbance

- Low - Wonnangatta Valley is accessible to off road vehicles but strategies to control visitors have been implemented with partial success.

Potential threats

Illegal collection

- Low - no evidence of collection in the past

Ecology/biology

- Low in Victoria - Populations appear to be responding well to current management.

Other issues

- The site is not readily accessible during winter.
- The existing monitoring method should continue, populations mapped and included on the Parks Victoria Geographic Information System (GIS) layers.
- Improved understanding of the life history of Pale Golden Moths and its response to fire regimes would assist its conservation. Winter burns appear to be destroying soil stored St John's Wort seed and seedlings, and hence are effective in controlling this weed (requires confirmation). Pale Golden Moths plants probably sustain some leaf damage from winter burns but maximum flowering tends to occur in the year following fire. Prescribed burning also occurs in other seasons.
- Grazing pressure may need to be assessed.

Existing conservation measures

- The site is regularly visited by Parks Victoria staff.
- All known sub-populations are monitored annually.
- Strategic ecological burning has restored *Themeda triandra* grassland in the general area and reduced the risk of weed invasion.
- A draft Environmental Action Plan for the Wonnongatta catchment has been prepared by Parks Victoria, including specific actions to manage Pale Golden Moths and its habitat.

Conservation objectives

Long term objective

That the Pale Golden Moths 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

Habitat will be managed at the known site to prevent accidental damage by vehicles and suppression of plants by over-abundant introduced herbs or native grasses; the response of the population and its habitat will be monitored. Recovery will be jointly managed by DSE and Parks Victoria. Community involvement will be sought.

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. 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

5. 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), Parks Victoria

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

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

References

- DSE (2003) "Advisory List of Rare or Threatened Vascular Plants in Victoria - 2003". Department of Sustainability and Environment, Victoria, Australia.
- DSE (2004) *Flora Information System* (electronic flora database). Department of Sustainability and Environment: Melbourne.

Consultation

Parks Victoria (East Victoria Region: Heyfield and Bairnsdale); DSE Sth East (Heyfield); D. Rouse (Centre for Plant Conservation Biology, Canberra).

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

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.

© 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