File No.: 91/0554



# FLORA AND FAUNA GUARANTEE - SCIENTIFIC ADVISORY COMMITTEE FINAL RECOMMENDATION ON A NOMINATION FOR LISTING

# **Alpine Bog Community**

Date of receipt of the nomination:

13 December 1990

Date of preliminary recommendation:

22 May 1991

Date of final recommendation:

18 October 1991

## Validity:

The nomination is for a valid item and the prescribed information was provided. The nominated community was clearly described so as to be distinguished from all other communities.

It is defined by McDougall (1982) as unit 7A of a "mesic-hydric alpine complex", and is commonly described as bog or mossbed. The vegetation is dominated by *Empodisma minus* (Spreading Rope-rush), *Richea continentis* (Candle Heath), *Poa costiniana* (snowgrass) *Sphagnum* spp. (Sphagnum moss), *Baeckea gunniana* (Alpine Baeckea), *Astelia alpina* (Silver Astelia) and *Carex gaudichaudiana* (sedge). It is restricted to permanently wet sites along drainage lines and valley floors with a low to moderate slope. Sphagnum tends to form an extensive cushion or terrace, absorbing and restricting water flow.

The nominated community is also described by Walsh et al. (1984) as "Wet Alpine Heathland" (sub-communities 9.2, 9.3, 9.4 and 9.5).

# Eligibility for listing as a community under the Flora and Fauna Guarantee

The nominated item satisfies at least one criterion of the set of criteria prepared and maintained under Section 11 of the Flora and Fauna Guarantee Act 1988, and stated in Schedule 1 of the Flora and Fauna Guarantee Regulations 1990.

### Evidence that criteria are satisfied:

Criterion 2.2 the community is significantly prone to future threats which are likely to result in extinction Evidence:

The main threat to the community is physical disturbance and damage, caused primarily by trampling, by cattle, and by hikers and cross-country skiers. This leads to loss of cover and damage which causes channelling of waterflows through the bog, leading to erosion. This alteration of drainage patterns reduces the bog's water holding capacity, accelerates damage and make the community more vulnerable. This physical damage and channeling cause the community to drain, and it ceases to be a bog.

Cattle grazing is being phased out in parts of the alpine country, but the alps are subject to increasing use by humans, so it is likely that these threats will continue and may increase in severity of effects.

# **Background Information:**

- There is unconfirmed evidence for decline of the community. It would once have occurred in the depression now covered by the Rocky Valley Dam.
- The overall extent of the community has not decreased greatly, but it is often dissected, weed-infested and eutrophicated.
- Cattle excreta may raise nutrient levels in the bogs, leading to eutrophcation, although there is not clear evidence that this is threat.

#### Advertisement for public comment

In accordance with the requirements of Section 14 of the Flora and Fauna Guarantee Act 1988, the preliminary recommendation was advertised for public comment for a period of at least 30 days.

The preliminary recommendation was advertised in:

"The Age" - on 10 July 1991

"Alpine Observer" - on 9 July 1991

Government Gazette - on 10 July 1991

Submissions closed on 12 August 1991.

# Further evidence provided:

A submission was received, but no new evidence was provided to challenge the Scientific Advisory Committee's preliminary recommendation that the community is eligible for listing.

#### **Documentation**

The published information provided to the SAC has been assessed. To the best of their knowledge, the SAC believes that the data presented are not the subject of scientific dispute and the inferences drawn are reasonable and well supported.

# Final Recommendation of the Scientific Advisory Committee:

The Scientific Advisory Committee concludes that on the evidence available the nominated item is eligible for listing in accordance with Section 11(1) of the Act because primary criterion 2.2 is satisfied.

The Scientific Advisory Committee recommends that the nominated item be supported for listing on Schedule 2 of the Flora and Fauna Guarantee Act 1988.

#### Selected references:

- Barnett, J. (1987) The effects of Alpine grazing on conservation values. Victorian National Parks Association, Melbourne.
- CFL (1989) Alpine National Park: Bogong Unit Proposed Management Plan. Dept. of Conservation, Forests and Lands.
- Costin, A.B. (1958) The grazing factor and the maintenance of catchment values in the Australian Alps. Div. of Plant Industry Tech. Paper No. 10. CSIRO.
- McDougall, K. (1982) The alpine vegetation of the Bogong High Plains. *Env. Stud. Publ.* No. 357. Ministry for Conservation, Victoria.
- McDougall, K.L. (1989) The effect of excluding cattle from a mossbed on the Bogong High Plains, Victoria. Arthur Rylah Inst. Env. Res. Tech. Rep. Ser. No. 95. Department of Conservation, Forests and Lands, Victoria.
- Papst, W.A. and Williams, R.J. (1990a) The ecology of alpine and sub-alpine ecosystems in Victoria. Alpine Ecology Training Workshop, Howman's Gap, 2-4 February 1990.
- Papst, W.A. and Williams, R.J. (1990b) High mountain flora and vegetation. Alpine Ecology Training Workshop, Howman's Gap, 2-4 February 1990.
- Van Rees, H. (1984) Behaviour and diet of free-ranging cattle on the Bogong High Plains, Victoria. *Env. Stud. Publ.* No. 409. Department of Conservation, Forests and Lands, Victoria.
- Walsh, N.G., Barley, R.H. and Gullan, P.K. (1984) The Alpine vegetation of Victoria (excluding the Bogong High Plains region). *Env. Stud. Publ.* No. 376 Department of Conservation, Forests and Lands.

**Endorsement by the Convenor of the Scientific Advisory Committee** 

**Date** 

18 October 1991

Dr. Neil Murray