



## FLORA AND FAUNA GUARANTEE - SCIENTIFIC ADVISORY COMMITTEE

### FINAL RECOMMENDATION ON A NOMINATION FOR LISTING

#### Plains Grassland (South Gippsland) Community

**Date of receipt of nomination:** 23 April 1992  
**Date of preliminary recommendation:** 5 May 1994  
**Date of final recommendation:** 20 October 1994

File No. 92/3586

#### Validity:

The nomination is for a valid item and the prescribed information was provided.

The nominated community is accepted by the SAC as a valid community because it is adequately defined and described according to accepted practice, and it is described in such a way as to be distinguished from all other communities.

Although there are few remnants in existence, the original vegetation structure is likely to have been an open-woodland which included areas of very sparsely treed tussock-grassland, and shrubby zones associated with drainage lines (Frood 1991). One site supports a light tree cover including Manna Gum (*Eucalyptus viminalis*), Drooping Sheoke (*Allocasuarina verticillata*), Blackwood (*Acacia melanoxylon*) and Black Wattle (*A. mearnsii*). Shrub species recorded include Golden Spray (*Viminaria juncea*), Swamp Paperbark (*Melaleuca ericifolia*) and Prickly Tea-tree (*Leptospermum continentale*).

Character species for the community include Common Blown-grass (*Agrostis avenacea*), Smooth Wallaby-grass (*Danthonia laevis*), Heath Wallaby-grass (*D. semiannularis*), Mat Grass (*Hemarthria uncinata*), Finger Rush (*Juncus subsecundus*), Common Bog Sedge (*Schoenus apogon*), Common Tussock-grass (*Poa labillardieri*) and Blown Grass (*Agrostis aemula*).

There is some variation in the community reflecting variation in soil type, soil moisture and salinity. In drier variants or those of lighter soil types which may still be seasonally waterlogged, the vegetation is dominated by a dense sward of Kangaroo Grass (*Themeda triandra*) in association with Mat Grass. Common Tussock-grass is typically only a minor component of the sward in these sites. A range of *Danthonia* spp., forbs, geophytes and *Stipa* spp. are also present. Other common species include Kangaroo Grass, Milkmaids (*Burchardia umbellata*), Wiry Buttons (*Leptorhynchos tenuifolius*), Spiny-headed Mat-lily (*Lomandra longifolia*), Shady Wood-sorrel (*Oxalis exilis*), Five-awned Spear-grass (*Pentapogon quadrifidus*), Varied Raspwort (*Haloragis heterophylla*), Bidgee-widgee (*Aceana novae-zelandiae*), Reed Bent-grass (*Deyeuxia quadrisetata*) and Yellow Rush-lily (*Tricoryne elatior*). Wetter sites dominated either by Common Tussock-grass or Kangaroo Grass include species shared with seasonal wetlands, such as *Eleocharis* spp., Soft Twig-sedge (*Baumera rubiginosa*), Poison Lobelia (*Lobelia pratioides*), Floating Club-sedge (*Isolepis fluitans*) and Prickfoot (*Eryngium vesiculosum*).

Where Common Tussock-grass is conspicuous in the vegetation most of the additional character species for the drier site/lighter soils vegetation above, including Kangaroo Grass, are sparse to absent. The suite of associated herbaceous species varies between non-saline and brackish sites. The non-saline flora has marked similarities to plains grassland sub-communities from heavy black volcanic soils around Merri Creek, north of Melbourne eg. including species such as Common Woodruff (*Asperula conferta*), Brown-back Wallaby-grass (*Danthonia duttoniana*), Blown-grass (*Agrostis aemula* var. *setifolia*), Milky Beauty-heads (*Calocephalus lacteus*), Slender Speedwell (*Veronica gracilis*) and in more brackish sites Australian Salt-grass (*Distichlis distichophylla*). More saline sites can include saltmarsh species such as Sea Rush (*Juncus krausii*) and Round-leaf Wilsonia (*Wilsonia rotundifolia*).

#### 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 1991*.

## Evidence that criteria are satisfied:

**Criterion 2.2** *The community is significantly prone to future threats which are likely to result in extinction.*

### Evidence:

Inappropriate regimes of mowing and slashing, grazing, and control burning can result in invasion and displacement by introduced weeds (eg. *Anthoxanthum*, *Holcus*, *Paspalum* and *Phalaris*) or a succession of Swamp Paperbark and Pricky Tea-tree. Ploughing and fertiliser drift from adjacent land use will also significantly alter the structure of the community.

None of the existing remnants occur in areas managed primarily for conservation purposes. The small size and fragmented nature of the remnants of Plains Grassland (South Gippsland) Community make it susceptible to local environmental events.

**Sub-criterion 2.2.1** *The community is very rare in terms of the total area it covers or it has a very restricted distribution or it has been recorded from only a few localities.*

### Evidence:

The most intact remnants of the Plains Grassland (South Gippsland) Community exist at the Alberton Cemetery and Parkside Aerodrome, with very small remnants occurring near Jack Smith Lake State Game Reserve along a section of Stringybark Lane. The total area covered by the community is estimated to be about 15 hectares.

## Background Information

- There is anecdotal evidence that grasslands in South Gippsland were more widespread in the past.
- A floristic classification (Twinspan analysis) has indicated that there are similarities between Plains Grassland (South Gippsland) Community and northern Tasmanian grassland communities.
- Occasional small remnants of coastal vegetation with a substantial component of native grasses, particularly Kangaroo Grass do occur on some relatively fertile soil types. These are mostly considered referable to either vegetation of calcarenitic soil types or to basaltic plains grassland ecotones, rather than to Plains Grassland (South Gippsland) Community (additional expert opinion). Around the head of Western Port, at Officer and Cranbourne, remnant grassy vegetation along rail reserves may be referable to Plains Grassland (South Gippsland) Community. The total area of this vegetation on these reserves is less than 10 hectares.
- Taxa recorded within the community have been identified as regionally significant by Beaglehole (1984):

<i>Agrostis aemula</i> (Blown Grass)	<i>Haloragis heterophylla</i> (Varied Raspwort)
<i>Arthropodium minus</i> (Vanilla-lily)	<i>Lepidium pseudotasmanicum</i> (Shade Pepper-cress)
<i>Danthonia laevis</i> (Smooth Wallaby-grass)	<i>Plantago gaudichaudii</i> (Narrow Plantain)
<i>Deyeuxia minor</i> (Small Bent-grass)	<i>Prasophyllum frenchii</i> (Slaty Leek-orchid)
<i>Eleocharis pusilla</i> (Small Spike-sedge)	<i>Viola betonicifolia</i> (Showy Violet)
<i>Eryngium vesiculosum</i> (Prickfoot)	

## 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 a period of at least 30 days.

The preliminary recommendation was advertised in:

"The Age" - on 10 August 1994

"The Weekly Times" - on 10 August 1994

"The Yarram Standard News" - on 10 August 1994

*Government Gazette* - on 25 August 1994

Submissions closed on 30 September 1994.

## Further evidence provided:

No public comments were received by the Scientific Advisory Committee.

No evidence was provided to warrant a review of 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 also concludes that sub-criterion 2.2.1 has been satisfied and that no evidence exists to suggest that primary criterion 2.2 cannot be satisfied as a consequence of sub-criterion 2.2.1 being 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:**

Beaglehole, A. C. (1984) *The distribution and conservation of vascular plants in the South Gippsland area, Victoria*. Western Victorian Field Naturalis Club Association.

Frood, D. & Calder, M. (1987) *Nature Conservation in Victoria, Study Report Volume 1*. Victorian National Parks Association.

Frood, D. (1991) *Grasslands and Grassy Woodlands of the Yarram District*. Unpublished Report.

Gullan, P. K. (1978) Vegetation of the Royal Botanic Gardens Annex at Cranbourne, Victoria. *Proc. Royal. Soc. Vic.* 70: 225-40.

McDougall, K. & J. B. Kirkpatrick, J. B. (1994) [Ed.] *Conservation of Lowland Native Grasslands in South-eastern Australia*. World Wide Fund for Nature.

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

**Date**



**Dr. Malcolm Calder**  
**Convenor**

5 December 1994