

FLORA & FAUNA  
GUARANTEE

NOMINATION NO. 387  
ITEM NO. C1511

## FLORA AND FAUNA GUARANTEE - SCIENTIFIC ADVISORY COMMITTEE

### FINAL RECOMMENDATION ON A NOMINATION FOR LISTING

#### Dry Rainforest (Limestone) Community

Date of receipt of the nomination: 2 October 1995  
Date of preliminary recommendation: 3 November 1995  
Date of final recommendation: 19 July 1996

File No.:96/1479

#### 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.

Dry Rainforests are strictly limited to the most fireproof niches, such as deep rocky gorges, cliff bases and elevated scree slopes, in isolated rainshadow valleys in the foothills of East Gippsland, with a pronounced and extended hot, dry, summer season (Cameron 1992, Peel, pers. comm.). Dry Rainforest (Limestone) Community grows exclusively on the limestone riverine cliffs, colluvial rock screes which collect at the bases of these cliffs, in collapsed caves (dolines) and on the shores of lakes where where this geology is also exposed. It occurs from sea level to 240m. Structurally, many stands of Dry Rainforest (Limestone) Community are based around several very old emergent Kurrajongs *Brachychiton populneus* although not as consistently as in Dry Rainforest (Gorges) Community, with the sites on Tertiary Limestone generally not having this species present. Universally however, there is a continuous closed canopy of Sweet Pittosporum *Pittosporum undulatum* with occasional individuals of Drooping Sheoak *Allocasuarina verticillata* which is also a fire-sensitive tree able to regenerate in the absence of fire. Muttonwood *Rapanea howittiana*, although not recorded from quadrat data, is often present and can be present as a canopy species, and Lightwood *Acacia implexa* is also capable of population maintenance by root suckering in the absence of fire in this community. Less commonly Black Wattle *Acacia mearnsii* and occasionally the bird-dispersed Common Boobialla *Myoporum insulare* have been noted in these stands.

The canopy vine flora is not always well developed structurally, although Staff Climber *Celastrus australis* and Milk-vine *Marsdenia rostrata* and less commonly Wonga Vine *Pandorea pandorana* and Mountain Clematis *Clematis aristata* are present. The sub-canopy vine flora is dominated by Wombat Berry *Eustrephus latifolius*, Scrambling Lily *Geitonoplesium cymosum* and Austral Sarsparilla *Smilax australis*. The understorey is very open with a few scattered spiny bushes such as Prickly Currant-bush *Coprosma quadrifida* the only regular sub-canopy species, or Eastern Nightshade *Solanum pungetium* and Tree Violet *Hymenanthera dentata* usually present but most often restricted to the margins of the stands. Significantly there is often scattered individuals of Limestone Pomaderris *Pomaderris oraria* ssp. *calcicola* which is the main structurally dominant shrub of the adjacent Limestone Pomaderris Shrublands. There is strong evidence to suggest that Dry Rainforest is the climax successional stage for some communities of this ecological vegetation class (Peel 1993).

The fern flora is rich compared to Dry Rainforest (Gorges) Community, being represented by mainly lithophytes species such as Common Spleenwort *Asplenium trichomanes* ssp. *quadrivalens*, Green Rock Fern *Cheilanthes austrotenuifolia*, Bristly Cloak-fern *C. distans*, Narrow Rock Fern *C. sieberi* ssp. *sieberi*, Blanket Fern *Pleurosorus rutifolius* and Chinese Brake *Pteris vittata*. The other common ferns are the usual drought-tolerant species to be expected of this vegetation class, with Sickie Fern *Pellaea falcata*, Tender Brake *Pteris tremula* and the Necklace Fern *Asplenium flabellifolium* being the most common. Tree ferns and other moisture dependent fern taxa are consistently absent.

Herbs and grasses particularly can be abundant with both life forms quite diverse on Devonian Limestone, but much less so on Tertiary Limestones. The majority of grasses found in this community are not found in Dry Rainforest (Gorges) Community. Unless otherwise indicated these species consistently occur beneath the canopy, and include Barb-wire Grass *Cymbopogon refractus* (gaps only), Weeping Grass *Microlaena stipoides*, Grey Tussock-grass *Poa sieberiana* (mostly gaps), Common Wheat-grass *Elymus scaber*, Kangaroo Grass *Themeda triandra* (gaps only), and the highly shade tolerant species Feathery Wheat-grass *Australopyrum retrofractum*. Long-leaf Wallaby-grass *Notodanthonia longifolia* is the only species consistently and commonly found in both Dry Rainforest floristic communities. The common herbs in Dry Rainforest (Limestone) Community are also drought tolerant species. Those found primarily in gaps are Austral Tobacco *Nicotiana suaveolens* (Devonian Limestones), Australian Stonecrop *Crassula sieberiana*, Australian Hound's-tongue *Cynoglossum australe*. Beneath the canopy where shade tolerance is needed, species such as Kidney-weed *Dichondra repens*, Saloop Saltbush *Einadia hastata*, Nodding Saltbush *E. nutans*, Cockspur Flower *Plectranthus parviflorus*, Shade Pellitory *Parietaria debilis* and Scrub Nettle *Urtica incisa* are found.

Dry Rainforest (Limestone) Community also has a reasonable complement of graminoids, other than the grasses already mentioned, which regularly include Short-stem Sedge *Carex breviculmis* and Black-fruit Saw-sedge *Gahnia melanocarpa*, with the sedge-like drought-tolerant Black-anther Flax-lily *Dianella revoluta* also common. There are no vascular epiphytes recorded from this community.

### **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:*

The community is threatened by grazing by domestic stock, fragmentation and loss of fringing ecotones and weed invasion.

**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.*

The community occurs at three sites in the Murrindal River valley and one disjunct stand in the Lake Tyers State Park.

### **Background Information**

- Two distinct communities of the ecological vegetation class of Dry Rainforest are recognised in Victoria; Dry Rainforest (Gorges) and Dry Rainforest (Limestone) (CNR, in prep).
- All of the limestone flora recorded from this community is considered significant since most of this geology has already been cleared for agriculture (Peel 1993). Seven taxa considered threatened in Victoria (CNR 1994), have been recorded within the community:
  - *Asplenium trichomanes* ssp. *quadrivalens* Common Spleenwort (rare)
  - *Australopyrum retrofractum* Feathery Wheat-grass (rare)
  - *Bulbine glauca* Bluish Bulbine-lily (rare)
  - *Desmodium varians* Slender Tick-trefoil (rare)
  - *Pomaderris oraria* ssp. *callicola* Limestone Pomaderris (rare)
  - *Pteris vittata* Chinese Brake (vulnerable)
  - *Vittadinia tenuissima* Delicate New Holland Daisy (vulnerable)

### **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 29 May 1996
- “The Weekly Times” - on 29 May 1996
- “The Bairnsdale Advertiser” - on 27 May 1996
- “The Snowy River Mail” - on 29 May 1996
- Government Gazette* - on 30 May 1996

Submissions closed on 5 July 1996.

#### **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 and research data provided to the SAC have 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 SAC also concluded 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:**

Cameron, D. (1992) *A portrait of Victoria's rainforests: Distribution, diversity and definition*. In: *Victoria's rainforests: Perspectives on definition, classification and management*. [Ed. Gell, P. and Mercer, C.] Department of Geology and Environmental Science, Monash Publications in Geography No. 41.

CNR (1994) *Victorian Flora Species List (including vascular and non-vascular taxa)*. Flora Section, Flora and Fauna Branch, Department of Conservation and Natural Resources, Victoria.

CNR (in prep) *Rainforests and Cool Temperate Mixed Forests of Victoria*. Flora and Fauna Branch, Department of Conservation and Natural Resources, Victoria.

Peel, B. (1993) *Limestone Pomaderris Shrublands: Distribution and Significance*. Flora Section, Flora and Fauna Branch, Department of Conservation and Natural Resources, Victoria.

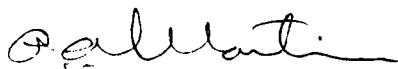
Peel, B. & Coram, J. (1993) *Rainforest of the Lower Snowy River*. Department of Conservation and Natural Resources, Orbost.

Thackway, R. and Cresswell, I. C. (1995) [Ed.] *Interim Biogeographic Regionalisation for Australia: A Framework for Setting Priorities in the National Reserves System Co-operative Program*. Australian Nature Conservation Agency, Canberra.

Endorsement by the Convenor of the Scientific Advisory Committee

Date

30 October 1996



**Dr. Angus Martin**  
Acting Convenor