

**Commonwealth of Australia**

**Inclusion of ecological communities in the list of threatened ecological communities under section 181 of the *Environment Protection and Biodiversity Conservation Act 1999***

I, MALCOLM TURNBULL, Minister for the Environment and Water Resources, pursuant to section 184(1) of the *Environment Protection and Biodiversity Conservation Act 1999*, hereby amend the list referred to in section 181 of that Act by:

including in the list in the **critically endangered** category:

- Peppermint Box (*Eucalyptus odorata*) Grassy Woodland of South Australia; and
  - Iron-grass Natural Temperate Grassland of South Australia
- as described in the Schedule to this instrument.

Dated this 25<sup>th</sup> day of May 2007

Malcolm Turnbull

Minister for the Environment and Water Resources

## SCHEDULE

### **Peppermint Box (*Eucalyptus odorata*) Grassy Woodland of South Australia**

The Peppermint Box (*Eucalyptus odorata*) Grassy Woodland of South Australia ecological community is a type of open to dense woodland in which Peppermint Box (*Eucalyptus odorata*) is the dominant species of the tree canopy. Peppermint Box characteristically occurs in its woodland form with a single main trunk at the base with low branches. Other tree species that may be present in the canopy but are never as abundant as Peppermint Box include Grey Box (*E. microcarpa*), South Australian Blue Gum (*E. leucoxylon*), Sugar Gum (*E. cladocalyx*), Mallee Box (*E. porosa*), Drooping Sheoak (*Allocasuarina verticillata*), White Cypress-pine (*Callitris glaucophylla*) and Southern Cypress-pine (*C. preissii*). The tree canopy comprises low trees, generally 5-10m tall but sometimes up to 15m tall, with a typical canopy cover of 5 to 40% which can occasionally reach 70%.

The understorey, mainly comprising of a diversity of grasses and herbs, varies from a relatively dense and diverse layer in more open sites, to a sparse layer under more densely wooded sites. The grasses and herbs that most often occur include Wallaby Grasses (*Austrodanthonia* spp.), Spear Grasses (*Austrostipa* spp.), Iron-grasses (*Lomandra* spp.) and Black-anther Flax Lily (*Dianella revoluta*). Shrubs are sparse in the understorey with cover up to 30%. The most common shrub species present are Sweet Bursaria (*Bursaria spinosa*) and Golden Wattle (*Acacia pycnantha*).

The Peppermint Box (*Eucalyptus odorata*) Grassy Woodland of South Australia ecological community is restricted to South Australia. It extends from the southern Flinders Ranges to Lake Alexandrina. The bioregion in which it is mainly present is the Flinders-Lofty Block Bioregion with patches extending to the Murray Darling Depression, Kanmantoo, Eyre-Yorke Block and Gawler Bioregions. The Peppermint Box (*Eucalyptus odorata*) Grassy Woodland of South Australia ecological community typically occurs on gentle to moderate slopes, hilltops and adjacent plains. The soil types range from sandy-loam to clay-loam. The annual rainfall is between 310 and 610 mm/year.

To be considered part of the listed ecological community an area must be either:

- at least 0.1 ha in size **and** have more than 30 native plant species<sup>1</sup> **and** at least 10 native broad-leaved herbaceous species not on the disturbance resistant list<sup>1, 2</sup> **and** have at least five native perennial grass species<sup>1</sup>; **or be**
- at least 1 ha in size, **and** have more than 15 native plant species<sup>1</sup> **and** at least three native broad-leaved herbaceous species not on the disturbance resistant list<sup>1, 2</sup> **and** have at least two native perennial grass species<sup>1</sup>.

Legend: <sup>1</sup> As measured in a 50m x 50m quadrat; and, <sup>2</sup> the following species are identified as disturbance resistant species: *Ptilotus spathulatus* forma *spathulatus*; *Sida corrugata*; *Oxalis perennans*; *Convolvulus erubescens*; *Euphorbia drummondii*; and, *Maireana enchylaenoides*.

## Irongrass Natural Temperate Grassland of South Australia

The Iron-grass Natural Temperate Grassland of South Australia is a type of natural temperate grassland. Trees and tall shrubs are absent to sparse (cover less than 10%) and tussock-forming perennial grasses and Iron-grasses (*Lomandra effusa* and *L. multiflora* ssp. *dura*) dominate the ground layer. A range of herbaceous plant species occur in the inter-tussock spaces. Common herbs include the Bulbine Lily (*Bulbine bulbosa*), Yellow Buttons (*Chrysocephalum apiculatum*), Australian Bindweed (*Convolvulus erubescens*) and Scaly Buttons (*Leptorhynchus squamatus*).

Irongrasses are a characteristic feature of this ecological community. In the Iron-grass Natural Temperate Grassland of South Australia ecological community up to 70% of the ground area is covered by *Lomandra* spp. and there is a greater than 70% likelihood that *Lomandra* will be present in any given patch of grassland. Where the vegetative ground cover is minimal, *Lomandra* would still be expected to be a frequent species. *Lomandra* may be absent in small areas (less than 1 ha) of the listed ecological community, however if these patches, that lack *Lomandra* plants, sit within the context of areas that contain *Lomandra* then these small patches are still considered to be part of the listed ecological community.

The Iron-grass Natural Temperate Grassland of South Australia ecological community generally occurs on gentle slopes of low hills above 380 m above sea level. The soils on which it occurs are predominantly loams to clay loams. Surface pebbles are common at some sites and shale or sandstone rocky outcrops may also be present. The mean annual rainfall ranges from 280-600 mm/year.

The Iron-grass Natural Temperate Grassland of South Australia ecological community is considered to be endemic to South Australia. The Iron-grass Natural Temperate Grassland of South Australia ecological community primarily occurs within the Flinders-Lofty Block Bioregion. The main extant patches lie in the area between Clare and Peterborough. However, patches extend into the Kanmantoo, Eyre-Yorke Block and Murray-Darling Depression Bioregions.

To be considered part of the listed ecological community an area must be either:

- at least 0.1 ha in size **and** have more than 30 native plant species<sup>1</sup> **and** at least 10 native broad-leaved herbaceous species not on the disturbance resistant list<sup>1, 2</sup> **and** have at least five native perennial grass species<sup>1</sup> **and** at least one native perennial tussock per linear metre<sup>3</sup>; **or be**
- at least 0.25 ha in size, **and** have more than 15 native plant species<sup>1</sup> **and** at least three native broad-leaved herbaceous species not on the disturbance resistant list<sup>1, 2</sup> **and** have at least four native perennial grass species<sup>1</sup> **and** at least one native perennial tussock per linear metre<sup>3</sup>.

Legend: <sup>1</sup> As measured in a 50m x 50m quadrat; <sup>2</sup> the following species are identified as disturbance resistant species: *Ptilotus spathulatus* forma *spathulatus*; *Sida corrugata*; *Oxalis perennans*; *Convolvulus erubescens*; *Euphorbia drummondii*; and, *Maireana enchylaenoides*; and, <sup>3</sup> as measured along a 50m transect.

Areas that do not show sufficient biodiversity as described above are degraded and are no longer considered to be part of the listed ecological community.