

MVG 11—EUCALYPT OPEN WOODLANDS

- Characterised by broad spacing between canopy trees often resulting in the appearance of a more dominant understorey.
- Overstorey is dominated by many of the eucalypts that typify the Eucalypt Woodlands (MVG 5).
- Dominant species in tropical Australia include *Corymbia dichromophloia*, *Eucalyptus tetradonta* (Darwin stringybark), *E. miniata* (Darwin woollybutt), *C. terminalis* (desert bloodwood), *E. pruinosa* (silver box), *E. brevifolia* (northern white gum) and *E. victrix* (smooth-barked coolibah).
- Co-dominants in the northern areas include *Acacia*, *Ventilago*, *Callitris* and *Casuarina*/*Allocasuarina* in the inland areas.
- The understorey varies from shrubs, heaths, tussock grasses and hummock grasses. Tussock grasses associated with Eucalypt Open Woodlands include *Sorghum*, *Heteropogon*, *Chrysopogon*, *Bothriochloa*, *Aristida*, *Themeda*, and *Austrostipa*. Variation in understorey structure and species reflects the range of climatic zones and site conditions supporting these open woodlands.
- Eucalypt Open Woodlands over hummock grasses are restricted largely to central Queensland, the Kimberley in Western Australia and northern Northern Territory supporting a range of *Eucalyptus* species over a *Triodia* and/or *Plectrachne* understorey.
- In South Australia the group includes *E. leucoxydon* (yellow gum) and *E. camaldulensis* (river red gum). In New South Wales the group includes the sparser communities of *E. camaldulensis* (river red gum), *E. largiflorens* (black box), *E. coolabah* (coolibah) and *E. populnea* (bimble box).
- Eucalypt Open Woodlands with low shrubs occur in south-west Western Australia and include *E. salmonophloia* (salmon gum), *E. loxophleba* (York gum) and *E. wandoo*.



Eucalyptus organophylla (mountain coolibah), north of Hughenden, Qld

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Facts and figures

Major Vegetation Group	MVG 11 – Eucalypt Open Woodlands
Major Vegetation Subgroups (number of NVIS descriptions)	Eucalypt low open woodlands with hummock grass (80) Eucalypt low open woodlands with tussock grass (320) Eucalypt open woodlands with shrubby understorey (93) Eucalypt open woodlands with a grassy understorey (354) Eucalypt low open woodlands with a shrubby understorey (47) Eucalypt low open woodlands with a chenopod or samphire understorey (26)
Typical NVIS structural formations	Open woodland (mid, low) Mid mallee woodland Mid open mallee woodland
Number of IBRA regions	73
Most extensive in IBRA region	Est. pre-1750 and present: Gulf Fall and Uplands (NT & Qld)
Estimated pre-1750 extent (km²)	498 663
Present extent (km²)	458 905
Area protected (km²)	28 202

Geography

- Occur in lower rainfall areas on the fringes of forested areas or where soil moisture or nutrients may limit tree growth.
- Extensive, particularly in the semi-arid interior and the tropics and cover many dry inland plains and undulating landscapes (the “downs”) and some rocky outcrops.
- Largely in northern Australia and eastern Australia; the inland areas of south-west Western Australia where annual rainfall levels are below 400mm to 500mm; scattered areas in southern South Australia and eastern Tasmania.
- Several *E. pauciflora* (snow gum) dominated communities of this MVG occur in Tasmania and New South Wales. In Victoria such communities have been mapped as Eucalypt Woodlands (MVG 5).
- Largest areas are in Northern Territory (222 030 km²) and Queensland (167 557 km²).
- Removed from some cereal cropping and sheep grazing lands in the south-east and south-west of Australia. Remnant occurrences have been extensively modified.
- In the northern parts of Australia they have been modified by pastoral activities and changes to fire regimes. In Queensland and New South Wales pasture improvement and tree thinning have been extensively employed and the shrubby understorey has often been removed to increase pasture growth.
- Due to their proximity to intensive agricultural areas and presence in pastoral areas, the fire regime in these communities has been modified leading to many Eucalypt Open Woodlands being impacted by invasive species, especially aggressive introduced plant species, such as rubber vine.
- Threats include fragmentation of woodland areas, regular or intense fires and overgrazing. Recent changes in community attitudes and land clearing policies has resulted in increased protection of these areas, as well as a focus on their sustainable use. Challenges remain in understanding and managing these open woodland areas for multiple values.

Change

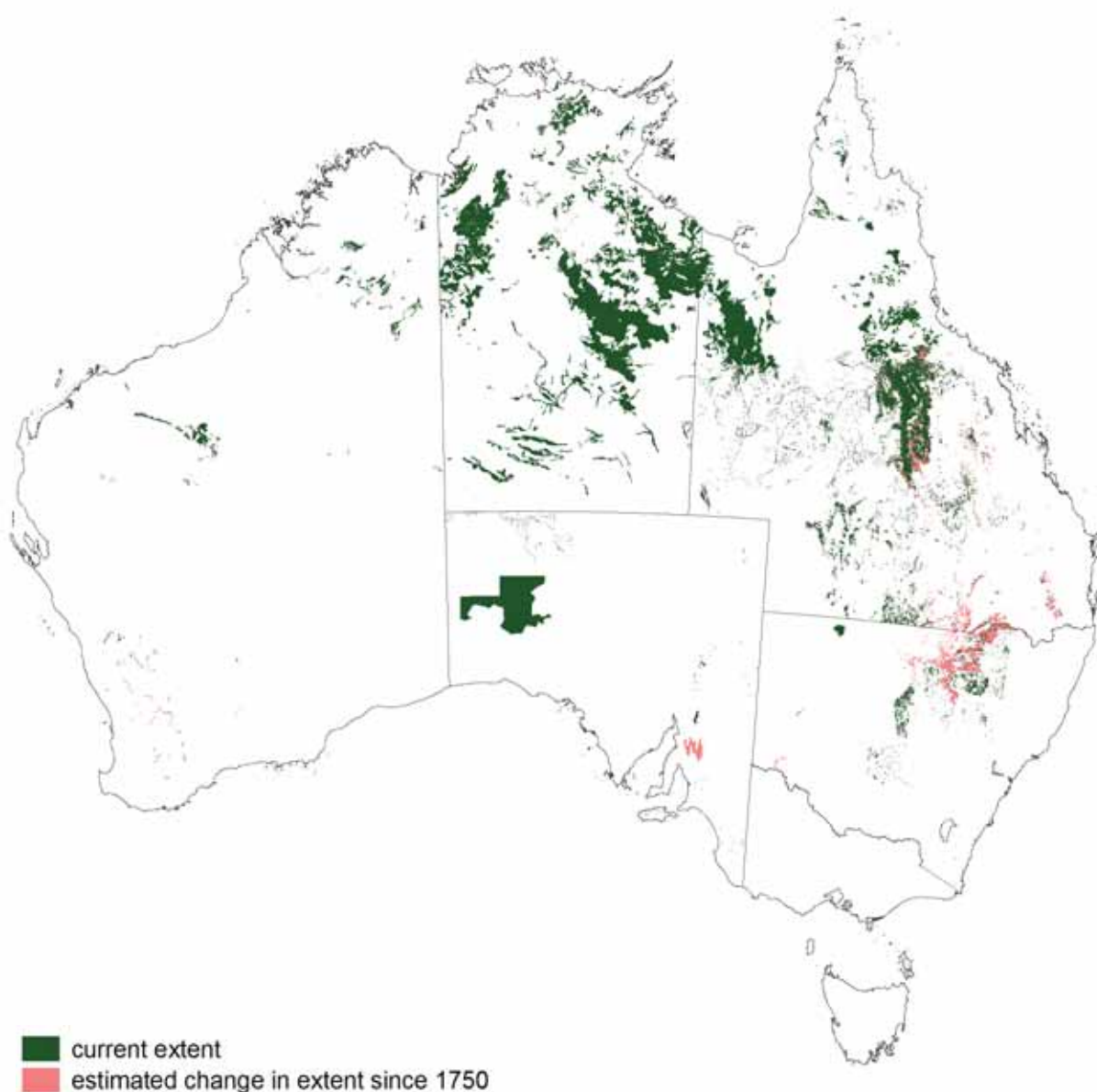
- Approximately 8% of the estimated pre-1750 extent cleared accounting for 3.9% of total clearing in Australia.
- Approximately 40 000 km² cleared since European settlement.

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Tenure

Eucalypt Open Woodlands occur on a range of land tenures.

Australian Capital Territory:	leasehold land, protected areas
New South Wales:	freehold land, protected areas, state forests, some leasehold land
Northern Territory:	leasehold land, protected areas, some freehold land
Queensland:	leasehold land, freehold land, some protected areas and state forests
South Australia:	protected areas, leasehold land, little on freehold land
Tasmania:	scattered areas on freehold land
Western Australia:	leasehold land, other crown land, protected areas, isolated small areas on freehold land



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Key values

- Biodiversity including some of the most restricted communities in Australia.
- Many of the eucalypt open woodlands occur within catchments of the main Australian water supply dams.
- Remnant populations of a wide range of vertebrate and invertebrate species.
- Ecotourism and scenic landscapes.

The value of Eucalypt Open Woodlands for Indigenous communities, conservation and tourism has been recognised through a variety of government supported projects.

Management considerations

- Control of clearing and other threats on the edges of remnants.
- Restoring connectivity between remnants (e.g. wildlife corridors).
- Fire—particularly in terms of changes to ‘natural’ fire regimes brought about by the increased fuel

loads from introduced grasses and grazing land management practices.

- Weed control.
- Total grazing pressure from domestic, feral and native animals.

Management requirements are associated with protecting the range of values of woodland areas. The majority remain in private ownership, raising issues of equity relating to stewardship and management costs to enable protection for multiple values.

References

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Photo: M. Fagg

Eucalyptus largiflorens (black box) open woodland, 20 km south of Pooncarie, NSW

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National Land & Water Resources Audit (2001) *Australian Native Vegetation Assessment 2001*. National Land & Water Resources Audit, Canberra, 332pp.

Data sources

Interim Biogeographic Regionalisation for Australia (IBRA), Version 6.1.

Land Tenure in Australia's Rangelands (1955 to 2000), National Land and Water Resources Audit.

National Vegetation Information System, Version 3.0. 1996/97 Land Use of Australia, Version 2.

Collaborative Australian Protected Areas Database—CAPAD 2004—Terrestrial.

Species Profile and Threats (SPRAT) database Australian Government Department of the Environment and Water Resources; online at URL: <http://www.environment.gov.au/cgi-bin/sprat/public/sprat.pl>.

Notes

- With new descriptions for Western Australia's vegetation types, some areas previously treated as Eucalypt Open Woodlands (MVG 11) were allocated to Eucalypt Woodlands (MVG 5) in NVIS 3.0.
- Vegetation types where *Sorghum* spp. are the dominant understorey grasses to eucalypts with an open woodland structure have been assigned to Tropical Eucalypt Woodlands/Grasslands (MVG 12).
- Larger areas of this group have been identified in Queensland, based on improved NVIS data.
- A large area in South Australia's far west derived from gap-filling (non-NVIS) data requires improved vegetation mapping.
- See the [Introduction to the MVG fact sheets](#) for further background on this series.



Eucalyptus crebra (narrow-leaved ironbark) open woodland, west of Atherton, Qld

Photo: M. Fogg