

MVG 20—HUMMOCK GRASSLANDS

- Dominated mainly by *Triodia* spp. often with associated sparse eucalypt and or acacia overstorey.
- Commonly known as spinifex or porcupine grasses, but not to be confused with *Spinifex* spp. of coastal areas.
- Hummock forming evergreen perennials, which appear as mounds up to 1 m in height. In between the mounds or hummocks the ground is usually bare or exposed.
- Common and widespread, but areas of spinifex as the dominant overstorey species are relatively limited in distribution as acacia and eucalypt species occur as occasional emergents in many of the communities.
- Species include *Triodia pungens*, *T. basedowii*, *T. irritans*, *T. wiseana*, *T. brizoides*, *T. longiceps*, *T. bitextura*, *T. schinzii*. *Zygochloa paradoxa* occurs in western Queensland. *Zygochloa paradoxa* also occurs in inland sandy areas such as Simpson Desert, Strzelecki Desert and Tirari Desert (Shepherd, 1992).
- Provide shelter for a large variety of reptiles and small marsupials in inland Australia.
- Associated species have a large range of short-lived ephemeral plants that proliferate after seasonal or cyclonic rains. Although the spinifex species vary in their time of flowering, they tend to flower in mass which provides a colourful feature in the landscape.



Photo: T. Rostling

Triodia basedowii and *T. pungens* (porcupine grasses) hummock grassland, south-west of Alice Springs, NT

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Facts and figures

Major Vegetation Group	MVG 20—Hummock Grasslands
Major Vegetation Subgroups (number of NVIS descriptions)	Arid and semi-arid acacia low open woodlands and shrublands with hummock grass (69) Mallee with hummock grass (18) hummock grasslands (308) Mulga (<i>Acacia aneura</i>) woodlands and shrublands with hummock grass (9)
Typical NVIS structural formations	Hummock grassland with a range of covers and heights
Number of IBRA regions	37
Most extensive in IBRA region	Est. pre-1750 and present: Great Sandy Desert (WA and NT)
Estimated pre-1750 extent (km²)	1 368 861
Present extent (km²)	1 367 973
Area protected (km²)	135 637



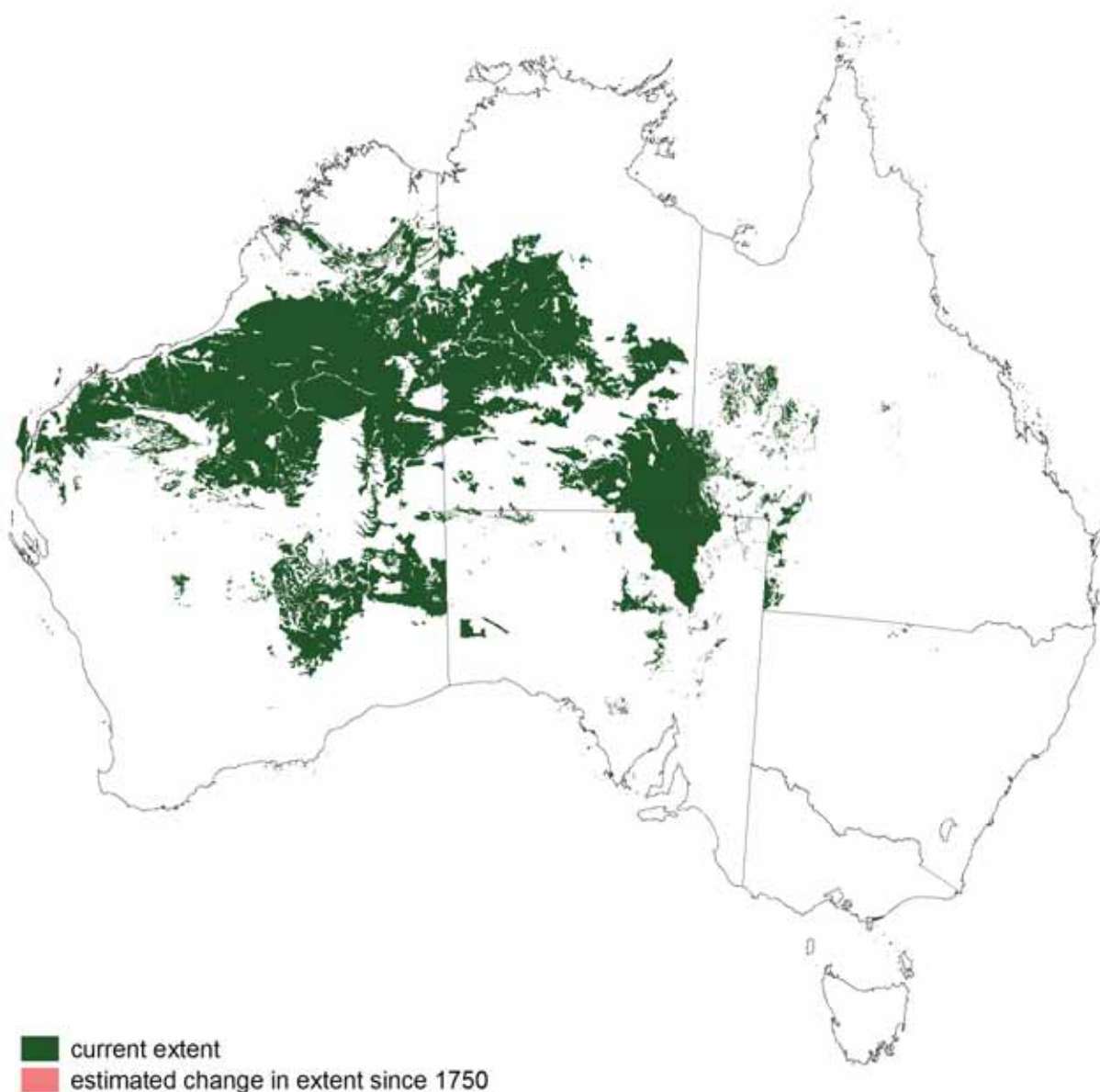
Photo: M. Fagg

Eucalyptus terminalis, *Triodia basedowii* (lobed spinifex), *Acacia ligulata*, *Cassia nemophila*, north-west of Warri Gate, Qld

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Geography

- Occur in Western Australia, Northern Territory, Queensland and South Australia. They are the largest MVG in Western Australia (804 062 km²).
- Occur where temperatures are extreme and rainfall is highly variable (between 200 mm and 300 mm annually).
- Soils are sandy or skeletal with flat, undulating or hilly terrain from near coastal limestone islands (e.g. Barrow Island in Western Australia) to extensive sandy plains inland in semi-arid and arid areas of Australia.
- Support a large range of species, partly as a result of the geographical range and partly as a result of the variation in soils and site conditions.



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Change

- Causes of the changes appear to relate to seasonal conditions (including extremes such as drought and cyclonic events), land management practices and fire regimes.
- Generally, Hummock Grasslands have not been cleared or extensively grazed. Some grazing occurs by some domestic stock but mostly by feral animals. Some Hummock Grasslands are palatable to cattle when the growth is young and soft.
- Changes that have occurred tend to be related to the effects of different fire regimes and the impacts of feral animals on the flora and fauna.
- Alternative fire regimes can have marked effects on the species composition of this MVG.

Tenure

Hummock Grasslands occur across a range of tenures.

New South Wales:	small areas on leasehold land
Northern Territory:	leasehold land, freehold land, protected areas, other crown land
Queensland:	leasehold land and protected areas
South Australia:	protected areas, leasehold land, freehold land
Western Australia:	other crown land, leasehold land, reserved crown land, protected areas

Key values

- Biodiversity including a variety of species and communities.
- Ecotourism including bushwalking and landscape features.

Management considerations

- Fire is used as a tool in some areas, although the understorey species can be modified by the intensity and regularity of fire regimes.
- Weed control (e.g. aggressive weeds such as buffel grass and ruby dock).
- Feral animals and their pressure on native flora and fauna.
- Total grazing pressure from domestic, feral and native animals, especially in times of drought and around watering points.

References

- Australian Surveying and Land Information Group (1990) *Atlas of Australian Resources. Volume 6 Vegetation*. AUSMAP, Department of Administrative Services, Canberra, 64pp. & 2 maps.
- Beadle N.C.W. (1981) *The Vegetation of Australia*. Cambridge Univ. Press, Cambridge, 690pp.
- National Land & Water Resources Audit (2001) *Australian Native Vegetation Assessment 2001*. National Land & Water Resources Audit, Canberra, 332pp.
- Shepherd M. (1992) *The Simpson Desert. Natural History and Human Endeavour*. Royal Geographical Society of Australasia, Giles Publications, Adelaide.

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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.

Notes

- Many areas of this group identified in NVIS 1 have been assigned to other groups, based on improved vegetation description data.
- The area protected has increased by approximately 10 000 km² in the past five years.
- See the [Introduction to the MVG fact sheets](#) for further background on this series.



Kimberley, WA