

Native Grassland

Regional Ecosystem 11.3.21



Technical Information

Description: Grassland of Queensland bluegrass *Dichanthium sericeum* and/or Mitchell grasses *Astrebla* spp. (eg. *A. elymoides*) on alluvial soils.

Protected areas: Carnarvon NP.

Extent reserved: Low.

Special ecological values: Habitat for rare and threatened flora species including *Thesium australe*, *Picris evae*, *Stemmacantha australis*, *Dichanthium queenslandica*, *Bothriochloa biloba* and *Digitaria porrecta*.

Comments: Extensively utilised for cropping and pasture.

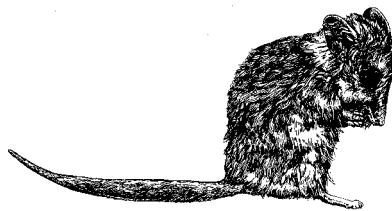
Estimated extent: Less than 10% remains in Province 31; 10-30% remains elsewhere.

Conservation status: Endangered.

Habitat values

Many animal species occur predominantly in grasslands including the superb collared-frog *Cyclorana brevipes*, birds such as the little button-quail *Turnix velox*, banded lapwing *Vanellus tricolor*, spotted harrier *Circus assimilis*, zebra finch *Taeniopygia guttata* and

small mammals like the tiny, carnivorous fat-tailed dunnart *Sminthopsis crassicaudata*.



Fat-tailed Dunnart *Sminthopsis crassicaudata*. Qld Parks and Wildlife Service.

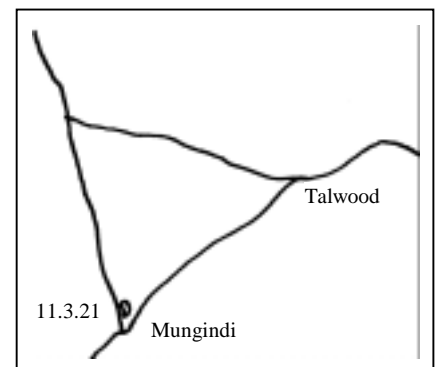
Production values

Queensland blue grass is extremely valuable fodder for livestock. It is palatable, nutritious and high-yielding and also makes good hay (Anderson 1993).

Queensland bluegrass can be used as an indicator of good pasture condition on heavy soils. The seeds of this species have special adaptations which enable partially germinated seeds to become dormant if exposed to moisture stress during germination. The seeds can then rapidly resume germination when favourable conditions return (Anderson 1993). This enables this species to endure the water stress characteristics of the grassland alluvial flats (Fensham 1998).

Did you know....

- These temperate native grasslands are now extremely fragmented and recognised as one of Australia's most endangered ecosystems
- The seeds of Queensland bluegrass can become dormant during germination if they experience water stress
- Rail and road reserves are important in the conservation of some native grass species that are sensitive to grazing pressure



Locations in Province 36: North of Mungindi on Road to St George 6.5-8km from road junction to Talwood in Mungindi.



Photo: Kym Sparshott QPWS

Eryngium plantagineum is a plant of unusual appearance found in these grasslands.

Management notes

The native grasslands of south-eastern Australia occur on fertile soils and have consequently been reduced by broadscale conversion to introduced pasture or cultivated crops, particularly cotton in Province 36 (Fensham 1998). These temperate grasslands are now extremely fragmented and susceptible to invasion by exotics and are recognised as being among Australia's most endangered ecosystems (Fensham 1998).

Careful management is required to protect the biodiversity values of remnant grasslands. Grazing is a threat to these ecosystems, altering the structure and composition of the vegetation and promoting the spread of exotics (Fensham 1998). Some native species, including the rare and threatened taxa *Picris euae*, *Stemmacantha australis* and *Thesium australe* may not survive in remnants even moderately grazed by stock. For the survival of the range of species some remnants will have to be managed

Further reading:

Anderson E. (1993). Plants of central Queensland - their identification and uses, QLD Government DPI, Brisbane, QLD.

Dorricott K., Voller P. and Lawrie B. (1998). Balancing production with nature conservation - case studies from southern inland Queensland. Department of Environment, Brisbane, QLD.

Fensham R.J. (1998). The grassy vegetation of the Darling Downs, south-eastern Queensland, Australia. Floristics and grazing effects. *Biological Conservation* 84 (3): 301-310.

under light stocking rates (Fensham 1998).

Rail and road reserves, and stock-routes provide some of the most viable habitat for plant species sensitive to total grazing pressure. Therefore it is essential that these remnants be protected from other forms of disturbance such as mechanical disturbance or herbicide spraying (Fensham 1998). Where it is unavoidable to use these remnants for gas pipelines, electricity lines or Telstra cables it is desirable to use a common strip for all these purposes to minimise the total area of the remnant that is disturbed.



Photo: Alison Payne QPWS

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