

Natural Grasslands

worth protecting

Open fields of natural grasslands are home to special plants and secretive animals, and support productive cattle businesses by providing palatable feed.

Natural grasslands are an essential part of our local landscape and they need your help to survive.

IMPORTANT HABITAT

More than 340 species of plants and animals live in the grasslands of central Queensland. A number of these species are found only in grassland vegetation. Like rainforests, natural grasslands are complex in their structure. The large variety of grasses and forbs, along with varying inter-tussock spaces and soil cracks, provide different habitat niches for animals.

The narrow-nosed planigale (*Planigale tenuirostris*), a small carnivorous marsupial, forages and shelters in the deep cracking soils while several species of quail thrive in the thick ground level vegetation.

Sadly many species are unable to survive modification of their habitat or the introduction of weeds and exotic pasture species. The vulnerable king bluegrass (*Dichanthium queenslandicum*) is one species that is sensitive to habitat change, being unable to survive continued heavy grazing.

PRODUCTIVE PLACES

Natural grasslands are made up of perennial grasses, annual grasses and forbs; this diversity provides good quality fodder for grazing stock throughout the year. Native grasses and forbs are often sought after by stock for their high nutritional value and palatability. Research has shown the crude protein levels can be up to 10 percent with 62 percent digestibility.

IN NEED OF PROTECTION

Natural grasslands of the Central Highlands and the Northern Fitzroy Basin once covered an area of approximately 1.2 million hectares, extending from Collinsville in the north to Carnarvon National Park in the south. Now, less than half remains.

Threats to native grasslands include high grazing pressure, cropping and pasture improvement, weeds, mining activities and the construction of roads and other infrastructure.

Because of the severe decline and continuing threats to this ecological community these natural grasslands are now protected under the *Environment Protection and Biodiversity Conservation Act 1999*. The Fitzroy Basin Association Incorporated (FBA) is working to help conserve this significant grassland community through funding from the Australian Government's Caring for our Country.

Narrow-nosed Planigale
The Narrow-nosed Planigale lives and forages in cracking soils.



Australian Bustard (*Ardeotis australis*)
A nomadic bird that lives in grasslands, usually solitary or in pairs. Large groups may be seen where food is abundant (grasshoppers, crickets or mice). Once widespread across Australia, still common in northern Australia.

WHAT ARE NATURAL GRASSLANDS?

Natural grasslands are comprised of a large variety of grass and forb species including:

- Queensland bluegrass (*Dichanthium sericeum* subsp. *sericeum*)
- Satintop (*Bothriochloa erianthoides*)
- Several wire grasses (*Aristida* species)
- Native panics (*Panicum* species).

Native grasslands occur on land that is flat or with gentle undulating hills, and dark, cracking clay soils.

Grasslands are naturally treeless or sparsely wooded. Tree species that may be present include:

- Pink bloodwood (*Corymbia erythrophloia*)
- Mountain coolibah (*Eucalyptus orgadophila*)
- Black tea-tree (*Melaleuca bracteata*).



Queensland bluegrass
The seed head of the iconic Queensland bluegrass (*Dichanthium sericeum*).



King bluegrass (*Dichanthium queenslandicum*)
Now vulnerable but may have historically been a dominant species throughout the grasslands.

TIPS FOR MANAGING NATURAL GRASSLANDS

Grazing management: Spelling or light stocking over the summer growing period will encourage seed set and seedling establishment, and promote healthy perennial grass tussock and root growth.

Burning: Using fire to reduce fuel loads and rejuvenate pasture every 4–5 years will not degrade the grassland. Cool burns, in late spring after rainfall, prior to the wet season (November–February) are best. Low intensity patchy mosaic burns are recommended.

Weed control: Heavy infestations of parthenium and other weeds is an indicator that grasslands are in poor condition. Extended periods of spelling may be required to fully recover grasslands from parthenium and other weed infestations. Aerial and large scale weed control spraying can result in the loss of grassland species. There are many successful biological control agents available for parthenium control.

Cultivation: Keep in mind that small patches of grassland within a cultivation area are very important refuges for native plants and animals. It is important that chemical use and other farming practices do not have an adverse effect on these areas.

Rehabilitation: The use of native seed and local topsoil ensures that the integrity of the remaining grassland is maintained and the long term success of the rehabilitation project. The use of invasive pasture species such as buffel grass (*Cenchrus ciliaris*) or rhodes grass species (*Chloris* species) should always be avoided.






BELYANDO COBBLER'S-PEG

The endangered Belyando Cobbler's-Peg (*Trioncinia retroflexa*) was thought to be extinct until it was rediscovered at several locations near Springsure and Clermont in Central Queensland.

The Belyando cobbler's-peg is a short lived perennial daisy, surviving up to five years, found growing only in grasslands on basalt and cracking clay soils. It is drought and fire tolerant, however its current distribution suggest that it is sensitive to continuous grazing. Grassland communities within stock routes and other reserves are important habitat for the survival of this species.



NATURAL GRASSLANDS OF THE FITZROY BASIN

-  Natural grassland current extent
-  Natural grassland original extent
-  Rivers



HOW YOU CAN HELP

FBA would like to hear from interested landholders in the northern Fitzroy Basin, especially those in the Central Highlands, who wish to improve their natural grasslands or reduce any major threats. If your natural grasslands are in good condition we would still like to hear from you. Your feedback will help improve our knowledge and understanding of the grassland community.

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REFERENCES AND RESOURCES

Threatened Species Scientific Committee: Commonwealth Listing Advice on Natural Grasslands of the Queensland Central Highlands and the northern Fitzroy Basin (www.environment.gov.au)

World Wide Fund for Nature (WWF Australia) brochures: 'Getting down to grass roots', and 'More than meets the eye'.

Queensland Parks and wildlife Service brochure: Natural Grasslands in the Central Highlands – an Endangered Community

Tropical Forages factsheet: *Dichanthium sericeum* (www.tropicalforages.info)

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