

A statement for the purposes of approved conservation advice  
(s266B of the *Environment Protection and Biodiversity Conservation Act 1999*)

**Approved Conservation Advice for**  
**Natural grasslands of the Queensland Central Highlands and the northern Fitzroy Basin**

This Conservation Advice has been developed based on the best available information at the time this conservation advice was approved.

**Description**

The **Natural grasslands of the Queensland Central Highlands and the northern Fitzroy Basin** are native grasslands typically composed of perennial native grasses. They are found on soils that are fine textured (often cracking clays) derived from either basalt or fine-grained sedimentary rocks, on flat or gently undulating rises. These grasslands occur in areas with relatively high summer rainfall and a tree canopy usually absent, but when present projective crown cover is no more than 10%.

**Conservation Status**

This ecological community is eligible for listing as endangered under the *Environment Protection and Biodiversity Conservation Act 1999* (Cwlth) (EPBC Act) because its geographic distribution has undergone a severe decline and is currently restricted to smaller remnants that face continuing threats and because of the ecological community's severe reduction in integrity and rate of detrimental change.

**Distribution and Habitat**

The ecological community occurs entirely within Queensland. It extends from Collinsville in the north to Carnarvon National Park in the south. This ecological community occurs within the Brigalow Belt North and Brigalow Belt South IBRA bioregions and within the Fitzroy Basin, Burdekin, South West Qld, Border Rivers Maranoa-Balonne and Desert Channels Natural Resource Management regions.

**Threats**

The main identified threats to the Natural grasslands of the Queensland Central Highlands and the northern Fitzroy Basin ecological community are: Grazing, cropping and pasture improvement; weeds and pest animals; mining activities; construction of roads and other infrastructure. The main potential threats are lack of knowledge about grasslands and climate change.

**Research Priorities**

Research priorities that would inform future regional and local priority actions include

- Assess the vulnerability of the ecological community to climate change and develop adaptive responses.
- Design and implement a monitoring programme.
- Research into the basic ecology of key and threatened flora and fauna species and their response to common management practices.

## **Priority Actions**

The priority recovery and threat abatement actions required for the Natural grasslands of the Queensland Central Highlands and the northern Fitzroy Basin ecological community are identified below:

### **Habitat Loss, Disturbance and Modification**

- Monitor known occurrences to identify key threats or the progress of recovery, including the effectiveness of management actions and the need to adapt them if necessary.
- Identify occurrences of high conservation priority.
- Undertake survey work in potential habitat to locate remnants.
- Avoid mowing and slashing during peak flowering season from spring to summer.
- Ensure chemicals or other mechanisms used to eradicate weeds do not have a significant adverse impact on the ecological community.
- Ensure road widening and maintenance activities (or other infrastructure or development activities) in areas where the ecological community occurs minimise adverse impacts on known sites.
- Investigate and implement formal conservation arrangements such as the use of covenants, conservation agreements or inclusion in reserve tenure.

### **Invasive Weeds**

- Develop and implement management plans for the eradication of weeds such as Parthenium (*Parthenium hysterophorus*), Parkinsonia (*Parkinsonia aculeata*), Prickly Acacia (*Acacia nilotica* subsp. *indica*) and Buffel Grass (*Cenchrus ciliaris*).
- Manage sites to prevent introduction of invasive weeds, which could become a threat to the ecological community, using appropriate methods.
- Observe appropriate State protocols to avoid the spread of weeds. Implement good hygiene measures for mowing and grading equipment and take appropriate steps to avoid dispersing seeds when moving stock.
- Maintaining a good cover of native perennial grasses and spelling the grasslands from grazing are reliable methods of managing the risk of weed invasion.

### **Trampling, Browsing or Grazing**

- Grazing management should focus on maintaining a good cover of perennial grasses and legumes, especially the most palatable species and carrying vegetation cover through the driest years.
- Develop and implement a stock management plan for roadside verges and travelling stock routes.
- Manage known sites on private property to ensure appropriate cattle and sheep grazing regimes are conducted outside the growing season, i.e. when plants are not fertile.
- Provide and/or promote incentives for good management.
- Where possible, use an intermittent grazing regime in preference to burning. Avoid burning (or grazing or slashing) during peak flowering season (spring to summer).

### **Animal Predation or Competition**

- Develop and implement management plans for the control of the House Mouse (*Mus* spp.).

### **Conservation Information**

- Raise awareness of the ecological community within the local community. The production of region specific fact sheets or information brochures could benefit land managers.

This list does not necessarily encompass all actions that may be of benefit to this ecological community, but highlights those that are considered to be of highest priority at the time of preparing the conservation advice.

### **Existing Plans/Management Prescriptions that are Relevant to the Ecological Community**

- Butler DW (2007). Draft - Recovery plan for the “Bluegrass (*Dichanthium* spp.) dominant grasslands of the Brigalow Belt Bioregions (north and south)” endangered ecological community, 2007-2011.
- Goodland A (2003). More than meets the eye: Your guide to managing the native grasslands of Queensland’s Darling Downs.

### **Information Sources:**

Butler DW (2007). Recovery plan for the “Bluegrass (*Dichanthium* spp.) dominant grasslands in the Brigalow Belt bioregions (north and south)” endangered ecological community 2007–2011. Unpublished Draft - May 2007. Report to Department of the Environment and Heritage, Canberra. Queensland Parks and Wildlife Service, Brisbane.

Department of Environment and Water Resources (2007). Technical Workshop Report - Natural Grasslands on basalt and fine-textured alluvium of the Brigalow Belt South, Nandewar, western New England Tablelands, northern Sydney Basin and northern Darling Riverine Plains IBRA Bioregions (incorporating the *Austrostipa aristiglumis* Grasslands of the Liverpool Plains in NSW).

Chamberlain J and Gittens A (2004). *Parthenium* weed management. Queensland Department of Natural Resources and Mines, Brisbane.

Goodland A (2000). Grassy ecosystem significant sites of the Darling Downs, Queensland. Locations and management recommendations. WWF Australia, Spring Hill.

Goodland A (2003). More than meets the eye: Your guide to managing the native grasslands of Queensland’s Darling Downs. WWF Australia, Spring Hill.

Queensland Department of Primary Industries and Fisheries fact sheets for pest animals and weeds.

Available on the internet at:

[http://www.dpi.qld.gov.au/cps/rde/dpi/hs.xsl/4790\\_9154\\_ENA\\_HTML.htm#weeds](http://www.dpi.qld.gov.au/cps/rde/dpi/hs.xsl/4790_9154_ENA_HTML.htm#weeds)

e.g. for *Parthenium* at:

[http://www.dpi.qld.gov.au/documents/Biosecurity\\_EnvironmentalPests/IPA-Parthenium-PP2.pdf](http://www.dpi.qld.gov.au/documents/Biosecurity_EnvironmentalPests/IPA-Parthenium-PP2.pdf)

Queensland Department of Primary Industries and Fisheries. Ways to prevent weed spread.

Available on the internet at:

[http://www.dpi.qld.gov.au/cps/rde/dpi/hs.xsl/4790\\_7070\\_ENA\\_HTML.htm](http://www.dpi.qld.gov.au/cps/rde/dpi/hs.xsl/4790_7070_ENA_HTML.htm)