

Chesterton Range National Park Management Statement 2013

Park size:	31,200ha
Bioregion:	Brigalow Belt South Mulga Lands
QPWS region:	South West
Local government estate/area:	Booringa Shire Murweh Shire
State electorate:	Gregory Warrego



Chesterton Range National Park. Photo: NPRSR

Legislative framework

a	<i>Aboriginal Cultural Heritage Act 2003</i>
a	<i>Environment Protection and Biodiversity Conservation Act 1999 (Cwlth)</i>
a	<i>Native Title Act 1993 (Cwlth)</i>
a	<i>Nature Conservation Act 1992</i>
a	<i>Queensland Heritage Act 1992</i>

Plans and agreements

a	China–Australia Migratory Bird Agreement
a	Japan–Australia Migratory Bird Agreement
a	Republic of Korea–Australia Migratory Bird Agreement

Thematic strategies

a	Level 1 fire management strategy
a	Level 2 pest management strategy

Vision

Chesterton Range National Park will continue to conserve the headwaters of the Warrego River system and protect the natural ecosystems of the Brigalow Belt bioregion.

The scenic values of rugged hills, undulating slopes and unusual rock formations that support significant species will be protected.

Conservation purpose

Chesterton Range National Park was gazetted in 1992 to protect representative examples of natural ecosystems occurring in the Brigalow Belt south bioregion.

The national park will be managed to protect and maintain viable populations of native plant and animal communities of the Brigalow Belt south bioregion including the habitat and populations of threatened species. This management goal includes the conservation of the natural ecosystems on the park and the identification and protection of cultural values. An important step in the maintenance of park values is the provision of visitor opportunities and encouraging research into the parks ecological processes.

Protecting and presenting the park's values

Landscape

Chesterton Range National Park is located 35km north of the township of Morven on the Warrego Highway in South West Queensland.

Rugged sandstone outcrops associated with Chesterton Range, and valley floors of deep sand with gently undulating plains of sandy to clay loams, support a variety of eucalyptus and acacia woodlands and open forests. Interesting rock formations and sudden vegetation changes provide scenic values to the park.

The park occurs at the western edge of the Brigalow Belt south bioregion and support examples of species from this bioregion and the Mulga Lands bioregion.

No erosion or soil compaction problems have been identified on the park.

Regional ecosystems

Chesterton Range National Park conserves a total of 17 regional ecosystems. Two have a biodiversity status of endangered and five have an of concern status (Table 1). Regional ecosystem 11.9.5 contains *Acacia harpophylla* and *Casuarina cristata*, which are showing regrowth in some sections of the park following a wildfire in 2000.

Many ecosystems present in the park have been modified in the past, and are showing steady recovery. Rain in recent years is promoting regeneration in previously drought affected and less vegetated areas.

Native plants and animals

Two vulnerable plant species *Shonia carinata* and *Lomandra teres* have been recorded on Chesterton Range National Park. *L. teres* has a very restricted distribution over an approximate range of 150km. Potential threats to *L. teres* include inappropriate fire regimes.

Four plant species are at, or approaching, their western limit of their known distribution, *Eucalyptus bakeri*, *E. crebra*, *E. panda* and *E. viridis* var. *latiuscula*.

The national park contains approximately 250 species of animals including one listed as endangered, six vulnerable and three near threatened under the *Nature Conservation Act 1992* (Table 2). Three vulnerable bird species have been recorded, including Major Mitchell's cockatoo *Lophochroa leadbeateri*, glossy black-cockatoo *Calyptorhynchus lathami* and squatter pigeon (southern subsp.) *Geophaps scripta scripta*. The endangered red goshawk *Erythrorchris radiatus* is regarded as a resident on the park while the near threatened grey falcon *Falco hypoleucos* has been noted as a vagrant species.

Populations of glossy black-cockatoos are concentrated around Chesterton Range National Park where remnant bullock *Allocasuarina luehmannii* forest habitat is conserved. Much of the bullock forest in the surrounding area has been cleared for grazing. Inappropriate fire regimes have been identified as a threat to glossy black-cockatoos through loss of bullock forest. Too frequent fires or too intense fires can destroy older trees.

The vulnerable eastern long-eared bat *Nyctophilus corbeni* and near threatened little pied bat *Chalinolobus picatus* have been recorded. Inappropriate grazing and fire regimes have been identified as threats to the eastern long-eared bat.

Two vulnerable reptile species, yakka skink *Egernia rugosa* and Brigalow scaly-foot *Paradelma orientalis* and one near threatened reptile the woma *Aspidites ramsayi*, have been recorded on the national park. Major threats to the yakka skink include clearing of vegetation, inappropriate grazing regimes and inappropriate fire regimes leading to a loss of habitat. The Brigalow scaly-foot occurs in spinifex *Triodia* sp. habitat and requires an appropriate fire regime to minimise vegetation thickening that is unsuitable for this species.

Seven animal species are at, or approaching, their western limit of their known distribution, including the Australian king parrot *Alisterus scapularis*, Pacific baza *Aviceda subcristata*, superb fairy-wren *Malurus cyaneus*, fire-tailed skink *Morethia teaniopleura*, Brigalow scaly-foot, *Oedura monilis* and *Carlia munda*.

Aboriginal culture

The protected area landscape is of intrinsic cultural value to the Bidjara and the Gungahlin and Nguri people.

There is currently one Aboriginal cultural heritage place listed for the area. An isolated small stone scatter and a message stone has been formally recorded on the Queensland Heritage Register. A number of scarred and carved trees are known to be on the park.

The extent of past occupation and the degree of its cultural significance to Traditional Owners remains largely unknown to Queensland Parks and Wildlife Service (QPWS).

Shared-history culture

Chesterton Range National Park includes evidence of shared-history. Its history illustrates changes of forest use over the years; examples include the historic Mount Mobil Homestead that dates from the turn of the century. Items of historic value have been removed from the homestead and recorded. The homestead has been maintained with security and fire protection measures implemented.

Winneba House has been upgraded for use by government staff during field trips. The Rabbit Board Hut was originally used at the turn of the century by the Rabbit Board for meetings. Messages and dates on the inside walls of the hut need to be preserved. Photographs have been taken of the inscriptions and fire protection measures are required.

The historical buildings have been assessed and recorded on the Cultural Heritage Database, with advice being provided on maintaining aesthetic value.

The fence between Two Mile and Six Mile dams, and a small section of the rabbit fence near the Rabbit Board Hut, has heritage significance. During the 1890s a number of rabbit control boards were established to control the spread of rabbits in Queensland. The preferred method of controlling the pest was to install rabbit proof fencing. The hut was built to house workers repairing the fence. Further assessment of the significance and future management of cultural heritage items is required.

Tourism and visitor opportunities

Chesterton Range National Park includes sections where there is little evidence of human impacts, providing visitors with a remote, solitary and natural experience. As there are no day-use facilities, current visitor numbers are low.

Education and science

Chesterton Range National Park is a valuable scientific reference area and provides opportunities for comparative research with more disturbed areas. Management of the park may be improved by an increased knowledge of the park's natural and cultural values and their ability to recover after the cessation of threatening processes.

Research to date has included comparing the different ecological processes that occur in cleared and undisturbed poplar box woodlands. Research into the park's ecological processes should be encouraged to complement key monitoring requirements that will guide management decisions.

Partnerships

Good neighbour relations are important in aiding management strategies including partnerships with all surrounding land managers and local government. Effectively managing the park requires cooperation with neighbours to address issues of common concern, such as fire and pest species.

Coordinated involvement of disaster organisations and the maintenance of adequate and appropriate communication systems will enable fast and effective responses to be directed during disaster events.

The development of relationships with the Morven local community is considered important for the future management of significant cultural heritage items such as Mount Mobil Homestead.

Other key issues and responses

Pest management

A draft pest management strategy has been developed for Chesterton Range National Park that details the nature and extent of threats, strategy and operations including monitoring and containment procedures.

There are approximately 15 non-native plant species recorded on Chesterton Range National Park. Velvety tree pear *Opuntia* spp has been recorded in isolated areas in eucalypt woodlands across the management area. Control of the grass *Pennisetum ciliare* is an ongoing management issue. It competes with native plants for resources and can alter the habitat structure and increase fire intensity.

Currently other pest plants occur at very low densities, and are not considered a threat to natural integrity values. On-going monitoring will detect any future impact or expansion and guide appropriate control measures.

Isolated sightings of feral cats *Felis catus* have been made on Chesterton Range National Park. Rabbits *Oryctolagus cuniculus* have been recorded at Mount Mobil Homestead, Winneba House and along the road to the Pinnacle.

While occurrences of neighbouring cattle intruding into the park due to damage to gates or fences are minimal, stray cattle have the potential to have an unsustainable impact on the parks natural environment. Maintaining boundary fences and good relationships with neighbours will reduce stray cattle entering the park.

Fire management

Fire has long been an integral part of Australian landscapes. Many native plants, animals and communities are dependent on fire to sustain ecological processes and maintain balance.

A fire management strategy has been developed for Chesterton Range National Park. Suppression of wildfires is necessary to protect life and assets, and negative ecological impacts on the management area. Planned burns help to contain wildfires through reduced fuel loads and thereby reduce their impacts. No major change in biodiversity is expected on the management area if the fire management strategy is implemented and monitored.

There are a number of significant heritage sites in the national park that need to be protected from fire. In particular, fire protection measures require implementation around the Mount Mobil Homestead and Rabbit Board Hut. Management regimes will include firebreaks, back burning and removing excess vegetation by hand.

Fire monitoring has been undertaken to determine vital attributes of native plants, including structure and habitat diversity. Fires which are too frequent or too intense can destroy bullock trees that are an important feeding habitat for glossy black-cockatoos. Inappropriate fire regimes can also threaten the eastern long-eared bat and yakka skink through loss of habitat. A fire regime to maintain a spinifex understorey is required for the Brigalow scaly-foot skink.

Management directions

Desired outcomes	Actions and guidelines
<p>Regional ecosystems</p> <p>Vegetation shows recovery and regeneration of plant communities typical of the Mulga Lands and Brigalow Belt south bioregions.</p>	<p>A1. Establish or review key management objectives for plant species and communities of conservation significance. A particular focus will be on the following priorities:</p> <ul style="list-style-type: none"> · clarify the extent of the distribution of <i>Lomandra teres</i> populations on park · determine if there is a population of <i>Bertya calycina</i> on the park.
<p>Native plants and animals</p> <p>Knowledge of native animal species distribution and habitat requirements are used for future management decisions.</p>	<p>A2. Establish or review key management objectives for species of conservation significance. A particular focus will be on the following priorities:</p> <ul style="list-style-type: none"> · clarify the distribution of yakka skink <i>Egernia rugosa</i> on park · assess the bullock forest as an important feeding habitat for glossy black-cockatoos.
<p>Cultural heritage</p> <p>Aboriginal and shared cultural values of the protected area are identified and protected.</p>	<p>A3. Encourage and support Traditional Owners in conducting cultural heritage surveys of the park including recording stories, language names and cultural heritage places.</p> <p>A4. Encourage and support conducting a shared-heritage survey of the park and recording recent history.</p> <p>A5. Continue to maintain fire protection measures around the Rabbit Board Hut, Winneba House and Mount Mobil Homestead.</p>
<p>Tourism and visitor opportunities</p> <p>Visitor use of Chesterton Range National Park is sustainable.</p>	<p>A6. Investigate the feasibility of developing a low-key, self-drive, day-use area to enhance visitor and community appreciation of the protected area.</p>
<p>Education and science</p> <p>Knowledge of native animal species distribution and habitat requirements are increased and used for future management decisions.</p>	<p>A7. Encourage scientific research programs that focus on ecological processes, species conservation or broader science in Chesterton Range National Park.</p>
<p>Pest management</p> <p>The integrity of native plant and animal communities is maintained, and the impacts of pests are minimised through strategic, sustained management.</p>	<p>A8. Finalise and implement a pest management strategy for the management area in cooperation with adjoining landholders and other interested parties.</p> <p>A9. Work with neighbours to maintain boundary fences to keep stock out of the park and to remove stock quickly when detected.</p>
<p>Fire management</p> <p>Fire is managed to protect natural and biodiversity values of the national park.</p>	<p>A10. Continue to review and implement the fire management strategy to remain current with latest research findings.</p>

Tables – Conservation values management

Table 1: Endangered and of concern regional ecosystems

Regional ecosystem number	Description	Biodiversity status
6.5.1	<i>Acacia aneura</i> , <i>Eucalyptus populnea</i> , <i>E. melanophloia</i> open forest on undulating lowlands	Of concern
11.3.2	<i>Eucalyptus populnea</i> woodland on alluvial plains	Of concern
11.5.13	<i>Eucalyptus populnea</i> +/- <i>Acacia aneura</i> +/- <i>E. melanophloia</i> woodland on Cainozoic sand plains/remnant surfaces	Of concern
11.7.1	<i>Acacia harpophylla</i> and/or <i>Casuarina cristata</i> and <i>Eucalyptus thozetiana</i> or <i>E. microcarpa</i> woodland on lower scarp slopes on Cainozoic lateritic duricrust	Of concern
11.9.5	<i>Acacia harpophylla</i> and/or <i>Casuarina cristata</i> open forest on fine-grained sedimentary rocks	Endangered
11.9.10	<i>Eucalyptus populnea</i> , <i>Acacia harpophylla</i> open forest on fine-grained sedimentary rocks	Endangered
11.9.11	<i>Acacia harpophylla</i> shrubland on fine-grained sedimentary rocks	Of concern

Table 2: Species of conservation significance

Scientific name	Common name	Nature Conservation Act 1992 status	Environment Protection and Biodiversity Conservation Act 1999 status	Back on Track status
Plants				
<i>Bertya opposens</i>	-	Least concern	Vulnerable	Not assessed
<i>Boronia eriantha</i>	-	Near threatened	-	Low
<i>Homoranthus zeteticorum</i>	-	Near threatened	-	Low
<i>Lomandra teres</i>	-	Vulnerable	-	Low
<i>Shonia carinata</i>	-	Vulnerable	-	Low
Animals				
<i>Aspidites ramsayi</i>	woma	Near threatened	-	High
<i>Calyptorhynchus lathami</i>	glossy black-cockatoo	Vulnerable	-	Not assessed
<i>Chalinolobus picatus</i>	little pied bat	Near threatened	-	Medium
<i>Egernia rugosa</i>	yakka skink	Vulnerable	Vulnerable	Medium
<i>Erythrotriorchis radiatus</i>	red goshawk	Endangered	Vulnerable	High
<i>Falco hypoleucos</i>	grey falcon	Near threatened	-	Data deficient
<i>Geophaps scripta scripta</i>	squatter pigeon (southern)	Vulnerable	Vulnerable	Medium

Scientific name	Common name	Nature Conservation Act 1992 status	Environment Protection and Biodiversity Conservation Act 1999 status	Back on Track status
	subspecies)			
<i>Lophochroa leadbeateri</i>	Major Mitchell's cockatoo	Vulnerable	-	High
<i>Nyctophilus corbeni</i>	eastern long-eared bat	Vulnerable	Vulnerable	Medium
<i>Paradelma orientalis</i>	Brigalow scaly-foot	Vulnerable	Vulnerable	Medium
<i>Phascolarctos cinereus</i>	koala	Least concern	Vulnerable	Low

Table 3: Species listed in international agreements

Scientific name	Common name	Bonn	CAMBA	JAMBA	ROKAMBA
<i>Apus pacificus</i>	fork-tailed swift	-	ü	ü	ü
<i>Ardea modesta</i>	eastern great egret	-	ü	ü	-
<i>Coracina tenuirostris</i>	cicadabird	-	-	ü	-
<i>Hirundapus caudacutus</i>	white-throated needletail	-	ü	ü	ü
<i>Merops ornatus</i>	rainbow bee-eater	-	-	ü	-

Bonn – Bonn Convention

CAMBA – China–Australia Migratory Bird Agreement

JAMBA – Japan–Australia Migratory Bird Agreement

ROKAMBA – Republic of Korea–Australia Migratory Bird Agreement