

Mount Binga National Park Management Statement 2013

Park size:	1,067ha
Bioregion:	South Eastern Queensland
QPWS region:	South West
Local government estate/area:	Toowoomba Regional Council
State electorate:	Nanango

Legislative framework

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

Plans and agreements

✓	Bonn Convention
✓	Japan–Australia Migratory Bird Agreement

Thematic strategies

✓	Level 2 Fire Management Strategy
✓	Level 2 Pest Management Strategy

Vision

Mount Binga National Park will be managed to conserve the natural and scenic values of the park by maintaining natural processes and general species richness. It will be preserved by limiting threatening processes such as invasive pests and inappropriate burning practices.

Conservation purpose

Originally part of Mount Binga State Forest, Mount Binga National Park was gazetted on 20 October 2006 under the South East Queensland Forests Agreement process. It is managed to preserve its high conservation values with several endangered and of concern regional ecosystems.

Protecting and presenting the park's values

Landscape

Mount Binga National Park lies in the Upper Brisbane River Catchment. The park contains flat to undulating country and protects a broad forest-type representation including vine forests, wet, moist and dry shrubby and grassy eucalyptus forests and creek line vegetation communities.

Most of the park lies over Tertiary volcanics, mainly basalt, and there are smaller areas of mixed volcanic and sedimentary rocks (Maronghi Creek beds, Sugarloaf Metamorphics, unnamed metamorph) in the north east and sedimentary rock (Bundamba Group, Landsborough Sandstone) in the southern corner.

The dominant neighbouring land uses are softwood plantations and grazing. The surrounding landscape has been extensively cleared for grazing and as such significantly increases the threat of fire encroachment particularly along the eastern boundary.

The national park joins Mount Binga State Forest and borders softwood plantations managed by Forest Plantations Queensland Pty Ltd, on its western boundary. The northern part of the national park is dissected by forestry plantation and two smaller plantation plots are surrounded by the national park. Mount Binga Outdoor Education Centre neighbours the northern parcel of national park.

Regional ecosystems

There are a considerable number of regional ecosystems conserved in Mount Binga National Park that are of high conservation significance (Table 1). Five are considered to be endangered and six are of concern under their biodiversity status. Of these, most are poorly conserved in the region.

Araucarian vine forest is the predominant vegetation type. It is easily degraded by weed infestation and can be damaged by fire along the margins. There are two endangered and one of concern vine forest communities in the park. Regional ecosystems 12.5.3 and 12.8.13 are locally characteristic to the Yarraman–Tarong–Boat Mountain district and have been extensively cleared for agriculture and hoop pine plantation.

Examples of the endangered gallery rainforest regional ecosystem 12.3.1 are found along alluvial creek lines in the park. These are noteworthy as this type of rainforest usually occurs closer to the coast and here it is reaching its geographical limit.

There is a broad representation of significant eucalypt communities present in the park. These include the endangered spotted gum *Corymbia citriodora*; grey ironbark *Eucalyptus siderophloia* and grey gum *E. propinqua*; and forest red gum *E. tereticornis* open forests, and the of concern mixed narrow-leaved ironbark *E. crebra*, rusty gum *Angophora leiocarpa* and grey box *E. moluccana* open forests. These have a variety of understoreys ranging from wet sclerophyll shrubby rainforest types, which occur as ecotonal forests adjacent for vine forest, to dry shrubby and grassy types.

Native plants and animals

The estate provides habitat for the black-breasted button-quail *Turnix melanogaster* which is listed as vulnerable under Queensland, New South Wales and Commonwealth legislation, and critical under the Back on Track prioritisation framework (Table 2). The black-breasted button-quail is a ground dwelling bird that occupies closed forests and ecotonal forests, as well as lantana thickets. Its greatest threats are habitat destruction and fragmentation, inappropriate fire and predation by cats and foxes. There is a national recovery plan that outlines its management and recovery objectives.

At least three species of migratory birds listed under International agreements have been recorded near the State forest/national park boundary indicating that these species may utilise habitat on the park. These are the black-faced monarch *Monarcha melanopsis*, rainbow bee-eater *Merops ornatus* and rufous fantail *Rhipidura rufifrons* (Table 3).

A plant list of 44 plant species has been documented for the park and includes a range of epiphytic orchids in the vine forest. The park joins the State forest which provides habitat connectivity.

Aboriginal culture

Wakka Wakka, Jarowair and Western Wakka Wakka peoples occupied and moved through the South Burnett and Brisbane Valley region. There are many sites of Aboriginal cultural significance throughout the area but there are no records of cultural sites on the park. There are no current native title claims over the park.

Opportunities exist to improve relationships with local Traditional Owner groups and involve them in park management.

Shared-history culture

In 1948, Mount Binga State Forest saw the first hoop pine *Araucarian cunninghamii* vine scrub cleared and planted with a hoop pine mono-culture, leaving a thin scrub buffer for protection. From 1950 to 1991 more scrub was cleared for plantation use. The forests over the current national park area were opened for leasehold grazing, and the large portions of vine scrub were also marked for future plantation development. These were later recognised for their high conservation values and in 2006, were converted to national park under the South East Queensland Forests Agreement process.

With the long-term grazing, lessees built stock yards and quarries. A forestry camp/station was assembled in the north-east corner of the State forest which has since been converted to an education centre. In the 1970s experimental plots were formed around the forestry station and two of these occurred on current national park estate.

Tourism and visitor opportunities

The park has no visitor facilities. There is limited motorised vehicle entry from the State forest. The tracks through the park are only suitable for four-wheel-drive vehicles and access may be difficult.

Education and science

Currently, there are no scientific studies being undertaken. The Mount Binga Outdoor Education Centre access the park for educational purposes. There is potential for the park to be used for further educational field trips and wildlife research.

Partnerships

Queensland Parks and Wildlife Service (QPWS) engages other interested parties such as Department of Agriculture, Fisheries and Forestry Forest Products, Forest Plantations Queensland, Mount Binga Outdoor Education Centre and neighbouring land owners in management issues of mutual concern such as fire and pests.

Other key issues and responses

Pest management

Lantana *Lantana camara* is the main pest plant found on the park. It has invaded disturbed areas such as empty plantation plots. Major infestations pose a great threat to the integrity of the vine forest and open forest communities by outcompeting native flora, suppressing seedling recruitment, increasing the fire fuel load and competing for nutrients.

Cattle encroachment, particularly in the northern part of the park has been observed and potentially impacts on forest integrity through trampling and consumption of understorey flora and facilitating the spread of weed species.

A Level 2 pest management strategy is in place for the Kingaroy South management area, which covers Mount Binga National Park. It identifies a number of feral animal and plant species that generally occur on the park as a potential threat to habitat.

Fire management

There is a current Level 2 fire management strategy in place for Kingaroy South management area which covers Mount Binga National Park. The management guidelines will be followed to protect life and property both on park and on neighbouring lands, and to maintain habitat diversity and assist in pest plant control.

Most of the park supports vine scrub which tends to inhibit fire as well as providing a natural buffer around the adjacent native plantation plots. However intense fire can impact the edges of these scrubs and eventually modify the vegetation structure.

Other management issues

Powerlink are proposing to build a 500kV transmission line between the existing Springdale Substation, 9km north of Gatton, and Halys Substation, 22km west of Tarong Power Station. The proposed route currently takes in Mount Binga State Forest and Mount Binga National Park, dividing the estates in half from west to east. The proposed route of the easement passes through 'of concern' regional ecosystems.

There are two apiary sites in the open forest area of the park.

Management directions

Desired outcomes	Actions and guidelines
<p>Natural values Ecosystem condition and species diversity is maintained.</p>	<p>A1. Conduct plant and animal surveys to establish baseline data, to monitor species population sizes and ecological trends and inform management. A2. Manage the black-breasted button-quail core habitat as outlined in the recovery plan.</p>
<p>Pest management Impacts of pests are reduced without compromising the natural integrity of the park.</p>	<p>A3. Assess stock encroachment to identify appropriate management techniques. A4. Implement the Level 2 pest management strategy.</p>
<p>Aboriginal culture Traditional Owners have meaningful involvement with park management planning and direction.</p>	<p>A5. Encourage Traditional Owners to identify and document values, sites, artefacts and places of cultural heritage significance so that management strategies and decisions relating to fire regimes, access and track maintenance minimise potential threats to these values.</p>
<p>Infrastructure management Infrastructure management is efficient and environmentally sustainable.</p>	<p>A6. Identify and assess roads and tracks to develop an access infrastructure management plan. A7. Identify and map grazing infrastructure within the park.</p>

Tables – Conservation values management

Table 1: Endangered and of concern regional ecosystems

Regional ecosystem number	Description	Biodiversity status
12.3.1	Gallery rainforest (notophyll vine forest) on alluvial plains	Endangered
12.5.2	<i>Eucalyptus tereticornis</i> , <i>Corymbia intermedia</i> on remnant Tertiary surfaces, usually near coast. Usually deep red soils	Endangered
12.5.13	Microphyll to notophyll vine forest +/- <i>Araucaria cunninghamii</i> on remnant Tertiary surfaces	Endangered
12.5.6	<i>Eucalyptus siderophloia</i> , <i>E. propinqua</i> , <i>E. microcorys</i> and/or <i>E. pilularis</i> open forest on remnant Tertiary surfaces. Usually deep red soils	Endangered
12.8.13	Araucarian complex microphyll vine forest on Cainozoic igneous rocks	Of concern
12.9-10.3	<i>Eucalyptus moluccana</i> on sedimentary rocks	Of concern
12.8.24	<i>Corymbia citriodora</i> open forest on Cainozoic igneous rocks especially trachyte	Endangered
12.9-10.7	<i>Eucalyptus crebra</i> woodland on sedimentary rocks	Of concern
12.9-10.16	Araucarian microphyll to notophyll vine forest on sedimentary rocks	Endangered
12.11.14	<i>Eucalyptus crebra</i> , <i>E. tereticornis</i> woodland on metamorphics +/- interbedded volcanics	Of concern
12.12.24	<i>Angophora leiocarpa</i> , <i>Eucalyptus crebra</i> woodland on Mesozoic to Proterozoic igneous 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
Animals				
<i>Turnix melanogaster</i>	black-breasted button-quail	Vulnerable	Vulnerable	Critical

Table 3: Bird species listed in international agreements

Scientific name	Common name	Bonn	CAMBA	JAMBA	ROKAMBA
<i>Merops ornatus</i>	rainbow bee-eater	-	-	✓	-
<i>Monarcha melanopsis</i>	black-faced monarch	✓	-	-	-
<i>Rhipidura rufifrons</i>	rufous fantail	✓	-	-	-

Bonn – Bonn Convention

CAMBA – China–Australia Migratory Bird Agreement

JAMBA – Japan–Australia Migratory Bird Agreement

ROKAMBA – Republics of Korea–Australia Migratory Bird Agreement