

Benarkin National Park Management Statement 2013

Park size:	218ha
Bioregion:	South Eastern Queensland
QPWS region:	South West
Local government estate/area:	South Burnett 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

✓	National recovery plan for the black-breasted button-quail <i>Turnix melanogaster</i>
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Thematic strategies

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



Brush-tailed rock-wallaby. Photo: NPRSR.

Vision

Benarkin National Park will be managed to conserve its high state and regional biodiversity significance as a remnant of intact forest in a highly modified regional landscape. The park includes endangered regional ecosystems and species of conservation significance. Park management will be focused primarily on conservation through the delivery of appropriate fire management and pest strategies.

Conservation purpose

Benarkin National Park, previously Benarkin Forest Reserve, was gazetted on 31 March 2006, as part of the South East Queensland Forests Agreement due to its high conservation value as remnant forest. The park comprises endangered and of concern regional ecosystems and provides potential habitat for the black-breasted button-quail *Turnix melanogaster* and the brush-tailed rock-wallaby *Petrogale penicillata*, both listed as vulnerable under the *Nature Conservation Act 1992* and *Environment Protection and Biodiversity Conservation Act 1999*.

Protecting and presenting the park's values

Landscape

Benarkin National Park is found in the Brisbane–Barambah Volcanics geological bioregion and as such is representative of rhyolitic and andesitic rocks, is relatively dry and contains extensive ironbark eucalypt woodlands and microphyll rainforests.

The north of the park is steep and inaccessible with little or no access from neighbouring properties, presenting challenges to fire management. Both open forest and vine scrub are represented, requiring careful fire management. To the south of Benarkin National Park is plantation forest, managed by Forestry Plantations Queensland Pty Ltd.

The regional ecosystems in this part of South East Queensland have been cleared extensively for grazing, making protection of the remnant areas of critical importance. There is a significant threat of pest plant invasion, pest animals and fire encroachment from park boundaries.

Regional ecosystems

The vegetation in Benarkin National Park is predominantly characterised by low microphyll rainforest and dry vine scrub. Ironbarks *Eucalyptus crebra* are found on the margins of the dry rainforest and are highly typical for this part of South Burnett.

Benarkin National Park protects two endangered regional ecosystems and one of concern under their biodiversity status (Table 1). The dominant regional ecosystem is the endangered semi-evergreen vine thicket with *Brachychiton rupestris* (12.9–10.15). Bottle trees *Brachychiton rupestris* do not thrive in cleared areas and so protection of the vine scrub serves to retain suitable habitat for this iconic species of tree. The two sub-dominant regional ecosystems are 12.9–10.7 and 12.9–10.8, which are grassy woodlands characterised by narrow-leaved ironbark *Eucalyptus crebra* and silver-leaved Ironbark *Eucalyptus melanophloia*.

The vegetation provides an important wildlife refuge given the extent of cleared land in the surrounding area and adjacent plantations.

Native plants and animals

The black-breasted button-quail has been recorded as present in Benarkin National Park. It is listed as vulnerable under both state and federal legislation and is typically found in dry rainforest, dry scrub and vine forest, each of which is represented in the park. The black-breasted button-quail has been given critical status under the Back on Track species prioritisation framework and is the subject of a national recovery plan. Habitat loss has been the most significant contributor to the reduction in button-quail numbers. The impacts of predation by feral animals on this species are not known, but they are considered likely. Weeds are known to degrade the vine scrub, reducing foraging opportunities and an assessment of pest plants on the park and their potential impact on local habitats would support delivery of the pest management actions.

The brush-tailed rock-wallaby is also listed as vulnerable under state and federal legislation and has been given a high status under the Back on Track species prioritisation framework. It has been sighted on adjacent properties and is assumed, but unconfirmed, to occur on the park. Its habitat, in contrast to that of the button-quail, is that of rocky outcrops adjacent to grassy open forest. This habitat requires a fire regime of periodic controlled burning.

Over 75 species of plants have been identified in the park, including the narrow-leaved parsonia *Parsonsia lenticellata*. The dry vine scrub provides habitat for this rare plant and its conservation relies on exclusion from fire.

Aboriginal culture

Prior to European settlement, the Wakka Wakka people of the South Burnett, and Jagera, and Yuppera and Ugarapul peoples of the Brisbane Valley lived and moved through the landscape. Every two or three years, thousands of Aboriginal people travelled from far and near to bunya festivals held in the Bunya Mountains and Blackall ranges and they would have passed through the Benarkin area. The extent of occupation specific to Benarkin National Park remains largely unknown. The local area still holds high importance to Aboriginal people and there are many sites of Aboriginal cultural importance across the region, but none have been recorded for the park as it has never been surveyed formally.

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

Shared-history culture

The history of the local area is one of timber harvesting, milling and grazing. Post-settlement many hectares of native forests were cleared to make way for pastures and grazing livestock and later for their timber. The national park is still surrounded by native hardwood and pine plantations and by cattle grazing properties.

Benarkin State Forest has since been reforested with native hardwood and pine stands, but Benarkin National Park comprises 100 per cent remnant vegetation that has not been cleared or harvested and hence is of a very high conservation and social value.

Tourism and visitor opportunities

There are no visitor sites or facilities at Benarkin National Park and it is neither advertised nor promoted for visitor use. Tourism is directed to Benarkin State Forest, which offers a scenic forest drive leading through rainforest, hoop pine plantations and eucalypt forests. Visitor facilities in the state forest include camping and walking trails. There is no intention to provide visitor facilities at Benarkin National Park.

Education and science

There are no projects in place currently but research and education opportunities exist to monitor vine scrub condition as a habitat for species of conservation significance and as a benchmark area for undisturbed remnant vegetation.

Partnerships

The Queensland Parks and Wildlife Service liaises with neighbouring property owners, Forestry Plantations Queensland, and the Queensland Rural Fire Service to deliver the fire management strategy and with park neighbours to deliver the pest management strategy.

Other key issues and responses

Pest management

There is a pest management strategy in place for Kingaroy East, which covers Benarkin National Park. Mother of millions *Bryophyllum delagoense*, cats claw *Dolichandra unguis-cati* and tree pear *Opuntia* spp, have been identified in adjacent areas, but it's not known whether they currently present a problem at Benarkin National Park. Wild dogs *Canis lupus familiaris*, feral cats *Felis catus* and pigs *Sus scrofa*, foxes *Vulpes vulpes* and rabbits *Oryctolagus cuniculus* may be present on the park. Their numbers and impacts are not known.

Fire management

Benarkin National Park comprises plant communities of which some need fire and some from which fire must be excluded. The endangered semi-evergreen vine thicket is fire-intolerant and repeated scorching of the margins can cause damage. By contrast the dry sclerophyll open forest and moist sclerophyll open forest require periodic burns. Fire management is delivered according to the current fire management strategy for Benarkin State Forest and Benarkin National Park.

Management directions

Desired outcomes	Actions and guidelines
<p>Natural values</p> <p>Ecosystem health and species diversity are identified and maintained.</p>	<p>A1. Survey the park to identify and assess the type and extent of pest species and update the pest management strategy to identify appropriate control techniques and approaches.</p> <p>A2. Conduct plant and animal surveys to establish population sizes and community condition, including verification of the presence of the brush-tailed rock-wallaby <i>Petrogale penicillata</i> and to establish baselines to monitor ecological trends and inform management.</p> <p>A3. Incorporate the objectives of the recovery plan for the black-breasted button quail into the management objectives for Benarkin National Park, updating the fire and pest management strategies accordingly.</p>
<p>Fire management</p> <p>Manage fire to protect habitat.</p>	<p>A4. Protect the vine scrub from fire damage and conduct periodic burns away from the rainforest margins to prevent repeated scorching from adjacent fires.</p>
<p>Aboriginal culture</p> <p>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>

Tables – Conservation values management

Table 1: Endangered and of concern regional ecosystems

Regional ecosystem number	Description	Biodiversity status
12.9–10.7	<i>Eucalyptus crebra</i> woodland on sedimentary rocks. Open forest.	Of concern
12.9–10.8	<i>Eucalyptus melanophloia</i> , <i>Eucalyptus creba</i> woodland on sedimentary rocks. Open forest.	Endangered
12.9–10.15	Semi-evergreen vine thicket with <i>Brachychiton rupestris</i> on sedimentary rocks. Closed forest.	Endangered

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>Chalinolobus picatus</i>	little pied bat	Near threatened	-	Medium
<i>Petrogale penicillata</i> ¹	brush-tailed rock-wallaby	Vulnerable	Vulnerable	High
<i>Phascolarctos cinereus</i>	koala (in SE Queensland)	Vulnerable	-	Low
<i>Turnix melanogaster</i>	black-breasted button-quail	Vulnerable	Vulnerable	Critical

¹ Sightings relate to adjacent tenures/property.