

Crows Nest National Park Management Statement 2013

Park size:	1,800ha
Bioregion:	South Eastern Queensland
QPWS region:	South West
Local government estate/area:	Toowoomba Regional Council
State electorate:	Nanango



Crows Nest Creek. 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>

Plans and agreements

a	China–Australia Migratory Bird Agreement
a	Japan–Australia Migratory Bird Agreement
a	Republic of Korea–Australia Migratory Bird Agreement
a	Wildfire Response Plan

Thematic strategies

a	Level 2 Fire Management Strategy
a	Level 2 Pest Management Strategy

Vision

Crows Nest National Park will continue to conserve an example of the surrounding rugged topography of granite, sandstone and basalt formations with a diversity of habitats for plants and animals, including significant species such as the brush-tailed rock wallaby *Petrogale penicillata*. The park will provide opportunities for sustainable nature-based recreation.

Conservation purpose

The original Crows Nest National Park was declared in 1967 to preserve the scenic open forest landscapes and small areas of rainforest in sheltered valleys. Additional area acquired over the years increased the park to 1,018ha in three sections—Crows Nest Falls, Perseverance and Bungaree. Through the South East Queensland Forests Agreement, Perseverance State Forest (782ha) was incorporated into the park and all sections were amalgamated into one park on 10 August 2006 (1,800ha).

Crows Nest National Park will be managed to:

- maintain viable populations of species which are vulnerable and near threatened or species of special significance including the glossy black-cockatoo *Calyptorhynchus lathami* and Helidon ironbark *Eucalyptus taurina*
- maintain the natural integrity of open forests of blue gum *Eucalyptus tereticornis* and narrow leaf ironbark *E. crebra*
- maintain the biological diversity of flora and fauna species, communities and ecosystems
- provide opportunity for scientific research and monitoring
- provide opportunity for nature-based recreation and education in a rugged granite landscape.

Sixteen vulnerable and near threatened species have been recorded including Helidon ironbark, *Kunzea flavescens* and *Leionema obtusifolium*.

The brush-tailed rock-wallaby can be found commonly in granite boulder areas along Crows Nest Creek. The green thighed frog *Litoria brevipalmata* and tusked frog *Adelotus brevis* have been found within the creeks and drainage lines of the park.

Protecting and presenting the park's values

Landscape

The park provides for the protection of varying geological landscapes including an impressive gorge system through which the picturesque Crows Nest Creek flows. Within the Crows Nest Falls section the area is dominated by granite, whereas the Perseverance section is largely a sandstone area with some cliff features. These features provide scenic value to the recreation areas on Toowoomba Council dam areas.

Sections of the park are located along the Great Dividing Range and form part of the catchment for the Toowoomba Regional Council dams. In particular the Perseverance section adjoins Perseverance Creek which runs into Perseverance Dam. Crows Nest Creek drains through the Crows Nest Falls section of the park which flows into Cressbrook Dam. Overflow from Perseverance Dam also passes through the park to Cressbrook Dam.

Vegetation corridors exist along the rugged range area to the north of the park towards Cooyar and Yarraman. To the east of the park the Toowoomba Regional Council catchment areas provides a connection to Deongwar State Forest and Ravensbourne National Park.

Crows Nest town lies to the west of the park and its population continues to expand with some former grazing properties now being converted to lifestyle blocks.

Surrounding land uses include grazing, small rural holdings (lifestyle blocks), water reserves (dams and lands surrounding) and forestry plantations of exotic pine trees.

After heavy rainfall there has been some contamination of Crows Nest Creek from the common effluent disposal scheme at Crows Nest. Toowoomba Regional Council has undertaken maintenance works that should reduce the risk of this occurring in the future. No significant impacts have been seen in the park from these events which only occur during periods of high rainfall and hence high volumes of water in the creek.

There is potential for siltation and erosion to occur after fire events, in particular after wildfires. To encourage rapid vegetation regrowth and reduce erosion potential, planned burning activities are carried out during periods of high soil moisture.

The power line to the Toowoomba Regional Council area water supply pump station is along an easement through the Perseverance section. This line pre-dated the gazettal of the park.

Regional ecosystems

There are 10 regional ecosystems recorded on the park. Of these five are listed of concern (Table 1) with the balance being not of concern at present.

Communities containing forest oak *Allocasuarina torulosa* are important habitat for glossy black-cockatoos and other fauna. Some low intensity burning has been undertaken in the Perseverance section in 2005, 2007 and 2008 burning approximately two-thirds of this section of the park.

Some of the creeks, creek banks and associated alluvial areas of the park are being impacted by woody pest plant species including lantana *Lantana camara*, large-leaved privet *Ligustrum lucidum* and native woody species making it harder to burn and changing the vegetation structure to a more scrubby community.

Sheltered rainforest gullies and riparian creek line communities on granite are present due to the topography and protection from fire. Some control of the pest plant cat's claw creeper *Dolichandra unguis-cati* has provided some protection of this community.

Native plants and animals

Crows Nest National Park supports many species of conservation significance (Table 2) including the vulnerable Helidon ironbark which is well protected growing between rocky outcrops. Areas of *Leionema obtusifolium* (vulnerable) were burnt by wildfire in 2006. No active management has been undertaken and further surveys for the distribution of this plant are required to understand its population density and health. There is currently no specific management for *Kunzea flavescens* (near threatened). The extent of this plant's distribution is not fully known. It has been assumed to have the same fire requirements as *Kunzea obovata* which is distinguished by its purple flower. Field surveys are required to determine the distribution of *K. flavescens*.

The vulnerable brush-tailed rock-wallaby is currently recorded along Crows Nest and Perseverance creeks. Population surveys for the wallaby are undertaken every six months and fox control is undertaken when required. Other populations of the wallaby occur on adjoining Toowoomba Regional Council land and upstream of Crows Nest Falls section. Local ranger staff in cooperation with other landowners, especially council, monitor numbers and threats to the different populations of the wallaby.

The vulnerable glossy black-cockatoo continues to require low intensity mosaic burning of the Perseverance section to maintain a population of mature forest oak. Although no active surveying for this animal is undertaken, rangers continue to see the cockatoo when on management duties.

The near threatened green thighed frog can still be found along tributaries to Crows Nest Creek despite a number of severe drought years prior to 2010. The rocky cliff lines provide breeding and roosting sites for the peregrine falcon *Falco peregrinus* which are regularly seen from Koonin Lookout.

Platypuses were regularly seen along Crows Nest Creek in the Falls section of the park adjacent to the picnic area. With the long drought these waterholes were dry for significant periods leading up to late 2009. Platypuses have not been seen in this area of the park since this period. They have continued to be sighted on Perseverance Creek and further upstream on Crows Nest Creek at the Bungaree section and are likely to return if the creek continues to hold water.

Aboriginal culture

Little is known by Queensland Parks and Wildlife Service (QPWS) about the Aboriginal cultural values of the park and no cultural sites have been identified. Surveys for cultural sites are encouraged to identify sites and aid in their protection and management. Recording of stories and history is encouraged where culturally appropriate.

The development of partnerships with the Traditional Owners of the area will provide improved knowledge and management of the park's cultural heritage.

No current native title claims have been lodged over the park area.

Shared-history culture

Little is known by QPWS about the shared-history cultural values of the park and no sites have been identified. Surveys are encouraged to identify sites and aid in their protection and management.

Tourism and visitor opportunities

The granite landscapes in Crows Nest section contain an impressive gorge system through which picturesque Crows Nest Creek flows. Walking tracks lead beside cascading streams, waterfalls and lookouts. Other sections of the park have rugged hills and ranges, cliff faces and majestic forests provide scenic views from both on and off the park.

Crows Nest Creek with its waterfalls, cascades and waterholes provide an important visitor value especially during the warmer months.

Walking tracks have been constructed in the Crows Nest Falls section of the park. The network of walking tracks lead to constructed lookouts at Koonin (Valley of Diamonds) and Crows Nest Falls. The Perseverance section of the park provides a more remote experience for bushwalkers. During the spring there is an array of wildflowers in bloom on the park.

The sandstone cliffs of the Perseverance section provide an important back drop for users of the adjoining dam and travellers along Perseverance Dam Road. The lookouts located on the Crows Nest Falls section of the park also provide scenic panoramas.

The park provides an important resource for outdoor education and learning bush skills. Nearby outdoor education centres use the park on a regular basis.

At the Crows Nest Falls section there is a developed picnic area with gas-fired barbecues, picnic tables, shelter shed and toilets. There is also a camping area which provides wood-fired barbecues, picnic tables, bush showers and toilets. The facilities provided complement other visitor destinations in the region.

There is bitumen road access to the main visitor site in the Crows Nest Falls section. During heavy rainfall events the gazetted road access from Crows Nest can become impassable. These events are reasonably short, usually lasting only a few hours.

Pedestrian access is available to the Perseverance and Bungaree sections. However there are authorised vehicle tracks on the Perseverance section to assist park management. These tracks can remain boggy for a significant period of time after rain due to some clay type soils.

Approximately 60,000 people visit the park each year. The camping and day visitor facilities are well used. The area is promoted by local tourist organisations. The park is one of a few areas that people can view brush-tailed rock-wallabies along with numerous bird species.

There is a relatively low level of use of the remote areas of the park for bushwalking off formed tracks. Nevertheless this provides an important opportunity to walk in areas where contact with other people will be minimal. Bushwalkers in the remote areas of the park are to be self-reliant and well prepared.

The constructed visitor assets on the park provide an opportunity for commercial operators to undertake tours. This infrastructure provides a framework that encourages visitors to the region, supporting local accommodation and retail outlets.

There is an opportunity to raise public awareness and appreciation of the regions natural values and cultural values, in particular for rare and threatened species and the special habitats protected within the reserves. Located at the higher used visitor sites is information about the natural environment and personal safety advice.

Following the 2011 floods rangers observed rock falls on the access track and swimming hole below the Crows Nest Falls. A geotechnical engineering report was commissioned as to the stability of the cliffs around the waterhole which advised that the cliffs were unstable with rock falls creating a significant safety hazard. Therefore access to this pool was closed and a new walking track created to an alternative swimming hole a few hundred metres away (the bottlebrush pool).

Some minor impacts on the park are caused by people walking off track in high visitor use areas. There are some impacts from motor bikes and other recreational vehicles using the access tracks especially in wet periods, however these are minor at present.

Education and science

The vulnerable brush-tailed rock-wallaby occurs on the park and at nearby locations on other tenures. Access to these sites is easy, making them well suited for education and research. Populations of noteworthy plant species can provide similar opportunities for research.

Some drought monitoring sites were established in the early 1990s when the drought was causing the leaves on most eucalypts to go brown due to the lack of moisture. This monitoring was last done in 2009.

Opportunity for further research into the effects of fire on individual species and ecosystems should be encouraged.

A University of Southern Queensland field study centre located close to southern boundary of the reserves may be available to assist in research activities.

QPWS will encourage use of the area as an educational resource to be utilised by school groups and tertiary institutions for studying the geological, biological, ecological and historical features.

Various scientific purposes permits are issued over the park covering a variety of species. Most of the permits are for researchers undertaking taxonomic studies.

Partnerships

Opportunities exist to continue building relationships with Toowoomba Regional Council to complement management activities.

Other key issues and responses

Pest management

The control of pest species is being addressed through the implementation of the Level 2 pest management strategy and species specific plans. Other pest species like cat's claw creeper and lantana can smother an ecosystem changing the structure of the community and its values.

Listed below are the higher priority pest species.

Cat's claw creeper can have a significant impact on riparian areas of the park especially along Crows Nest Creek where it has grown up tree trunks to the canopy. Control of this pest plant has been undertaken in the past by chemical spraying. Biological control of the plant has not been undertaken.

Large-leaf privet is present and has a medium impact in all riparian areas. Privet does have some higher densities near Perseverance Dam and creek. Some limited control of the plant has been undertaken.

Lantana is having a high impact over disturbed and riparian areas of the park and is slowly spreading. Given the density and widespread distribution of lantana large scale control programs will not be possible. However, control of lantana will be undertaken along tracks to keep them open.

African love grass and green panic are having a medium impact along roads and similar areas and drainage lines. Limited control actions on these plants are undertaken. Plant and equipment hygiene will be important to reduce the potential spread of these plants.

Tree pear exists generally as scattered individual plants across the park. There are some higher infestation areas in the western sections of Perseverance. Control actions have been undertaken on these heavier infestation areas, mainly using direct injection of chemicals.

The fox *Vulpes vulpes* can have a high impact on several significant species especially the brush-tailed rock-wallaby. Control programs have been targeted at foxes to reduce the impact they have on the fauna of the park. Incidental monitoring program by ranger staff for foxes along the walking tracks is providing information for the control of the animal.

Red deer *Cervus elaphus* have a low to moderate impact over some areas of the park especially in the Perseverance section. Currently Toowoomba Regional Council with University of Queensland is currently doing research into the deer population in the area.

On occasions neighbour stock including cattle and horses have been found on the park and having limited impact.

Fire management

Fire is an important management tool for the protection of life and property and for managing the health of ecosystems across the park. Fires which are too frequent or have very long intervals between fire events can change habitats and have an impact on the plants and animals of the park.

Heath communities on sandstone contain uncommon and significant plant species with restricted distribution. The fire regime for this community requires a fire interval of between four and 20 years depending on the understorey. Other open forest communities with a grassy understorey will require shorter fire frequency period of 3–6 years and shrubby understorey a longer period. Some planned burns have been undertaken in the area.

Relic rainforest communities occur in some sheltered gullies within the Perseverance section. The dry scrub species have continued to expand in extent even through the drought years as there has been limited impact from fire, especially wildfire, in the last 20 years.

A Level 2 fire management strategy has been developed for the park which outlines guidelines for the planned burning program. The implementation of this strategy will have a significant effect on the vegetative structure of the forest areas of the park, in particular determining whether a grassy or shrubby understorey prevails.

QPWS will continue to work with local rural fire brigades and adjoining landholders including Toowoomba Regional Council to manage fire in the landscape.

A wildfire response plan has been developed for the park to assist rangers with the control of wildfire and is updated annually. The document provides important information for the management of fire including location of fire breaks, water points and built assets.

The terrain and relatively small areas provides additional challenges when burning on the park. Major wildfires have occurred on the park but these are not regular events.

Other management issues

Beekeeping

There are nine apiary sites on the Perseverance section of the park as an outcome of the South East Queensland Forests Agreement. In September 2011 four of the nine sites had permits over them.

Management directions

Desired outcomes	Actions and guidelines
<p>Native plants and animals</p> <p>Native plant and animal communities are conserved and habitat diversity maintained.</p> <p>Knowledge of native plants and animal species distribution and habitat requirements are increased and used for management decisions.</p>	<p>A1. Establish or review key monitoring objectives for plant species and communities of conservation significance. A particular focus will be on monitoring programs for:</p> <ul style="list-style-type: none"> • recruitment of the vulnerable <i>Leionema obtusifolium</i> • recruitment of near threatened <i>Kunzea flavescens</i> • the population health of the Helidon ironbark • the distribution and population of the tusked frog and green thighed frog • habitat requirements and population density of the brush-tailed rock wallaby. <p>A2. Encourage tertiary institutions and special interest groups to undertake surveys and scientific studies of the area.</p> <p>A3. Drought monitoring data is maintained and sites are monitored every five years.</p> <p>A4. Continue to update and implement the Level 2 pest management strategy to remain current with latest research findings and control techniques and inform management.</p> <p>A5. Work with neighbours to maintain boundary fences to keep the stock from wandering and to remove stock quickly when detected.</p>
<p>Cultural heritage</p> <p>Aboriginal and shared cultural values of the protected area are identified and protected.</p>	<p>A6. Encourage and support Traditional Owners in conducting a cultural heritage survey of the park including recording stories, language names and cultural heritage places.</p> <p>A7. Encourage and support conducting a shared-heritage survey of the park.</p>
<p>Fire management</p> <p>Fire is managed to protect natural and biodiversity values of the national park.</p>	<p>A8. Continue to review, update and implement the Level 2 fire management strategy to remain current with latest research findings.</p> <p>A9. The wildfire response procedure is updated annually.</p> <p>A10. Continue maintenance of fire breaks to allow for wildfire protection and planned burning programs, including existing firebreaks and access roads extend through Perseverance section.</p>
<p>Visitor and tourism opportunities</p> <p>Opportunity will exist for people to experience sustainable nature-based recreation.</p> <p>Cater for a range of sustainable vehicle-based camping and picnicking opportunities at Crows Nest Falls section to complement those in nearby council and private reserves.</p> <p>Provide a range of graded-track walking opportunities at Crows Nest Falls and remote bushwalking in the Perseverance section.</p>	<p>A11. A visitor management strategy is to be developed for the park.</p> <p>A12. Continue to manage the diving or jumping prohibition for improved visitor safety.</p> <p>A13. Manage visitor impacts on the park through the construction and maintenance of appropriately designed infrastructure and management of unsustainable/inappropriate activities.</p>

Tables – Conservation values management

Table 1: Of concern regional ecosystems

Regional ecosystem	Description	Biodiversity status
12.11.9	<i>Eucalyptus tereticornis</i> open forest on metamorphics +/- interbedded volcanics. Usually higher altitudes	Of concern
12.11.14	<i>Eucalyptus crebra</i> , <i>E. tereticornis</i> woodland on metamorphics +/- interbedded volcanics	Of concern
12.12.3	Open forest complex with <i>Corymbia citriodora</i> , <i>Eucalyptus siderophloia</i> or <i>E. crebra</i> or <i>E. decolor</i> , <i>E. major</i> and/or <i>E. longirostrata</i> , <i>E. acmenoides</i> or <i>E. portuensis</i> on Mesozoic to Proterozoic igneous rocks	Of concern
12.12.9	Shrubby woodland with <i>Eucalyptus dura</i> usually on rocky peaks on Mesozoic to Proterozoic igneous rocks	Of concern
12.12.12	<i>Eucalyptus tereticornis</i> , <i>E. crebra</i> or <i>E. siderophloia</i> , <i>Lophostemon suaveolens</i> open forest on granite	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>Eucalyptus taurina</i>	Helidon ironbark	Vulnerable	-	Low
<i>Kunzea flavescens</i>	-	Near threatened	-	Low
<i>Leionema obtusifolium</i>	-	Vulnerable	Vulnerable	Low
<i>Paspalidium grandispiculatum</i>	-	Vulnerable	Vulnerable	Low
Animals				
<i>Accipiter novaehollandiae</i>	grey goshawk	Near threatened	-	Low
<i>Adelotus brevis</i>	tusked frog	Vulnerable	-	Medium
<i>Calyptorhynchus lathami lathami</i>	glossy black-cockatoo (eastern)	Vulnerable	-	-High
<i>Delma torquata</i>	collared delma	Vulnerable	Vulnerable	High
<i>Geophaps scripta scripta</i>	squatter pigeon	Vulnerable	Vulnerable	Medium
<i>Litoria brevipalmata</i>	green thighed frog	Near threatened	-	Medium
<i>Ninox strenua</i>	powerful owl	Vulnerable	-	Medium
<i>Petrogale penicillata</i>	brush-tailed rock-wallaby	Vulnerable	Vulnerable	High

Scientific name	Common name	Nature Conservation Act 1992 status	Environment Protection and Biodiversity Conservation Act 1999 status	Back on Track status
<i>Phascolarctos cinereus</i> (South East Queensland bioregion)	koala (South East Queensland bioregion)	Vulnerable	Vulnerable	-
<i>Pseudomys novaehollandiae</i>	New Holland mouse	Common	Vulnerable	Low
<i>Tyto tenebricosa tenebricosa</i>	sooty owl	Near threatened	-	Low

Table 3: Species listed in international agreements

Scientific name	Common name	Bonn	CAMBA	JAMBA	ROKAMBA
<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