

# Kinrara National Park Management Statement 2013

Park size:	7,732ha
Bioregion:	Einiasleigh Uplands
QPWS region:	Northern
Local government estate/area:	Tablelands Regional
State electorate:	Dalrymple

## Legislative framework

✓	<i>Aboriginal Cultural Heritage Act 2003</i>
✓	<i>Environment Protection and Biodiversity Conservation Act 1999 (Cwlth)</i>
✓	<i>Land Protection (Pest and Stock Route Management) Act 2002</i>
✓	<i>Nature Conservation Act 1992</i>

## Plans and agreements

✓	Bonn Agreement
✓	China–Australia Migratory Bird Agreement
✓	Japan–Australia Migratory Bird Agreement
✓	Nature Conservation (Koala) Conservation Plan 2006 and Management Program 2006-2016
✓	Republic of Korea–Australia Migratory Bird Agreement



Kinrara crater. Photo: Steve Mattox.

## Vision

Kinrara National Park protects some of Queensland's youngest volcanic features, including the Kinrara Crater. The unusual notophyll vine forest blanketing the volcano's interior continues to provide an island refuge for species otherwise unlikely to occur in this area.

## Conservation purpose

Kinrara National Park was gazetted in 2003 to protect some of Queensland's youngest volcanic features.

The Kinrara basalt flow extends beyond the park's eastern and southern boundaries into two nature refuges.

The park's major regional ecosystem is semi-deciduous vine thicket which is significant at a national scale. A shrubby blue gum and swamp mahogany woodland of conservation significance is also conserved within in the park.

Kinrara National Park's associated volcanic features retain cultural significance for the Gugu Badhun people.

## Protecting and presenting the park's values

### Landscape

The geological features and entire landscape of the park is of cultural significance to the Traditional Owners for the area. Its elevation ranges from 600 metres (m) to 760m at the well-preserved Kinrara Crater which is located in the north of the park.

Kinrara National Park protects the youngest volcanic features in the McBride lava province. Geological and scenic values have been minimally affected because of the rocky terrain, which discouraged access when the park was part of a grazing property. The Kinrara Crater in the north-east of the park was believed to have first erupted between 55,000 and 71,000 years ago. Volcanologists now consider the fresh surface conditions to be considerably younger and to have been recently active—less than 10,000 years (Stanton 1993), 13,000 years (Wilmott 2009). Gugu Badhun oral history supports these scientific assumptions.

The Kinrara lava flow covers most of the park. It consists of two main branches extending from the Kinrara Crater. The larger south-eastern flow extends some 30 kilometres (km) south of the park to the Burdekin River, while the smaller southern flow extends 20km south of the park boundary. There are lava tubes with numerous caves and collapsed sections in both branches of the Kinrara lava flow. The park is reasonably flat apart from the Kinrara Crater itself, which rises steeply to 60m above the surrounding landscape and the base of the crater. The notophyll vine forest growing in the interior of the crater, and the vine thickets and eucalypt woodlands on the lava flow, contribute to the park's scenic values.

Kinrara National Park does not contain significant watercourses. It drains to Expedition Creek on its western side and Glenlofty Creek on its eastern side. Both creeks flow into the Burdekin River.

### Regional ecosystems

Kinrara National Park protects excellent examples of vine thickets and open forests of conservation significance. It has two regional ecosystems of conservation significance (Table 1) covering more than 90% of the park.

Blue gum and swamp mahogany woodland on basalt flows do not occur on protected area estate outside Kinrara National Park.

The interior of the Kinrara Crater is a relatively moist microclimate supporting a notophyll vine forest with a number of species generally associated with the Wet Tropics bioregion.

### Native plants and animals

Limited plant surveys have recorded 47 species, including the near threatened species *Ipomoea saintronanensis* (Table 2).

Animal records for Kinrara National Park are limited. In 1993, a colony of 3,000 eastern bent-wing bats *Miniopterus schreibersii oceanensis* and little bent-wing bats *Miniopterus australis* was recorded in a cave in the park. Koalas *Phascolarctos cinereus* are known to inhabit the park. Limited land snail collecting has discovered two endemic camaenid land snails living in the park's vine thickets, including one belonging to a genus otherwise restricted to the Wet Tropics.

## Aboriginal culture

The entire landscape, including geological features and biodiversity, has cultural significance for the Gugu Badhun people. The park contains significant Aboriginal cultural heritage including the Kinrara Crater and surrounding area.

Sites of significance have been surveyed and documented by Gugu Badhun Traditional Owners and Giringun Aboriginal Corporation. The park is within the area subject to a Native Title Claim (Gugu Badhun People 2 QUD85/05).

Accounts by Gugu Badhun people, European explorers and early settlers indicate a substantial use of the park and surrounding area by the Gugu Badhun people. Collaborative management arrangements involving Queensland Parks and Wildlife Service (QPWS) and Gugu Badhun Traditional Owners will seek to develop and implement appropriate cultural heritage management and monitoring arrangements.

No formal agreement presently exists between Traditional Owners, neighbouring landholders and QPWS to ensure Traditional Owners are able to access the park.

It is uncertain if 'Kinrara' is a Gugu Badhun name. Traditional Owners are investigating the origins of this name.

## Shared-history culture

An inventory of shared-history cultural heritage is yet to be collated for the park.

The upper Burdekin district, including Kinrara National Park, was opened to pastoralists in 1861. During conflict with pastoralists in the 1860s the Kinrara lava fields offered Gugu Badhun people a refuge from the Native Mounted Police. Later, Gugu Badhun people were employed on stations where a reliance on Indigenous labour continued into the twentieth century.

Although it was part of the Kinrara Pastoral Holding up until 2003, the Kinrara National Park area was not extensively grazed, due to its uneven surface of decomposing olivine basalt. It is difficult for cattle to traverse and too young for sufficient development of soil structures to support palatable herbage.

## Tourism and visitor opportunities

There is no gazetted access to Kinrara National Park. Formalising access and developing visitor opportunities in the park is not a priority, as nearby Undara Volcanic National Park enables visitors to experience volcanic geology, including lava tubes and a pyroclastic ash cone volcano crater (Kalkani Crater). Forty Mile Scrub National Park offers an interpretive walking track in a vine thicket.

## Education and science

Kinrara National Park offers scientific research opportunities relating to Cainozoic volcanism.

Surveys of native plant and animal species are lacking for the park.

A cultural heritage assessment of a section of the park was conducted during 2008.

## Partnerships

QPWS consults the Traditional Owners on park management issues including fire and pest management and the development of new infrastructure and signs. QPWS and the Traditional Owners liaise with the owners of the Kinrara Pastoral Holding to obtain their agreement on access to Kinrara National Park. A Memorandum of Understanding between QPWS and the Giringun Aboriginal Corporation in association with Gugu Badhun Traditional Owners (2010) guides the collaborative management arrangements of the park.

Fire management programs including planned burns and wildfire events involve QPWS, the Rural Fire Service and surrounding landowners.

## Other key issues and responses

### Pest management

A systematic survey of pest plants has not been undertaken on Kinrara National Park but three pest plants have been recorded: lantana *Lantana camara*, rubber vine *Cryptostegia grandiflora* and the non-declared plant, marsh cress *Rorippa palustris*.

Lantana has infested areas of the Kinrara Crater and other vine thickets throughout the park and presents a serious threat. Only minor infestations of rubber vine have been recorded.

A number of additional pest plants, such as parthenium weed *Parthenium hysterophorus* and ponded pasture species, occur in surrounding areas and may potentially be present in the park or invade the park in the future.

Feral pigs *Sus scrofa* have been recorded in the park, and additional feral animals may be present.

### Fire management

Vine thickets cover most of Kinrara National Park, which does not have a recent history of fire management or wildfire. The western park boundary is close to the interface between the vine thickets inside the park and sclerophyll woodland on adjoining properties. The park does not have a current fire management strategy.

## References

Allingham A 1993, *Burdekin Frontier in Race Relations in North Queensland*, Ed, H Reynolds, James Cook University: Townsville.

Mattox S 2012, <http://volcano.oregonstate.edu/>

Stanton D 1993, *Morphology and geochemistry of the Kinrara volcano and lava field: An examination of a Holocene volcanic feature in the McBride lava province, North Queensland*, Honours thesis (unpub.), James Cook University

Willmott W 2009, *Rocks and Landscapes of the National Parks of North Queensland*, Geol. Soc. Aust. Inc. Qld. Div: Underwood.

## Management directions

Desired outcomes	Actions and guidelines
<p><b>Native plants and animals</b></p> <p>The composition and extent of the vegetation communities and species of conservation significance are mapped and maintained subject to natural change.</p>	<p>A1. Prioritise the monitoring of regional ecosystems and plant species of conservation significance.</p> <p>A2. Undertake biological surveys of Kinrara National Park, including targeted vegetation surveys and surveys for animal species of conservation concern.</p>
<p><b>Aboriginal culture</b></p> <p>Traditional Owners are involved in identification, conservation, protection and appropriate interpretation of natural and cultural heritage.</p>	<p>A3. Involve Traditional Owners in park management, particularly in regard to identifying, documenting and protecting Aboriginal cultural places and providing advice on other cultural interests and concerns.</p> <p>A4. Establish the correct Gugu Badhun name for the Kinrara National Park in conjunction with agreed collaborative management arrangements and rename if required.</p>
<p><b>Partnerships</b></p> <p>Good working partnerships with stakeholders are retained and further developed.</p>	<p>A5. Continue to participate, support and encourage strategic and holistic landscape management through partnerships with Traditional Owners, community groups, neighbours, researchers and other government departments.</p>

Desired outcomes	Actions and guidelines
<p><b>Pest management</b></p> <p>Pest plants and animals are controlled so that their effects on park values are not significant.</p>	<p>A6. Develop a level 2 pest management strategy.</p>
<p><b>Fire management</b></p> <p>Fire is used to maintain the natural and cultural values of the park.</p>	<p>A7. Develop a level 2 fire strategy for Kinrara National Park.</p> <p>A8. Establish a fire line along the western boundary of the park.</p> <p>A9. Work with Traditional Owners in fire management practices, including planning and onsite implementation. Utilise Traditional Owner knowledge in fire management practices, where possible.</p>

## Tables – Conservation values management

**Table 1: Of concern regional ecosystems**

Regional ecosystem	Description	Biodiversity status
9.8.7	Semi-evergreen vine thicket on cones, craters and rocky basalt flows with little soil development.	Of concern
9.8.10	Blue gum <i>Eucalyptus tereticornis</i> and swamp mahogany <i>Lophostemon suaveolens</i> woodland, +/- a shrubby understory on basalt flows.	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
<b>Plants</b>				
<i>Ipomoea saintronanensis</i>	-	Near threatened	-	Critical
<b>Animals</b>				
<i>Phascolarctos cinereus</i>	koala	Least concern	Vulnerable	Low
<i>Nettapus coromandelianus</i>	cotton pygmy-goose	Near threatened	-	Low

**Table 3: Species listed in international agreements.**

Scientific name	Common name	BONN	CAMBA	JAMBA	ROKAMBA
<i>Plegadis falcinellus</i>	glossy ibis	✓	✓	-	-
<i>Ardea modesta</i>	eastern great egret	-	✓	✓	-
<i>Gallinago hardwickii</i>	Latham's snipe	✓	✓	✓	✓

BONN: Bonn Convention

CAMBA: China–Australia Migratory Bird Agreement

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ROKAMBA: Republic of Korea–Australia Migratory Bird Agreement