

# Kurrimine Beach National Park Management Statement 2013

Park size:	910ha
Bioregion:	Wet Tropics
QPWS region:	Northern
Local government estate/area:	Cassowary Coast Regional Council
State electorate:	Hinchinbrook



Kurrimine Beach National Park viewed from the adjacent State Marine Park. Photo: NPRSR.

## Legislative framework

a	<i>Aboriginal Cultural Heritage Act 2003</i>
a	<i>Environment Protection and Biodiversity Conservation Act 1999</i>
a	<i>Wet Tropics World Heritage Protection and Management Act 1993</i>
a	<i>Native Title Act 1993 (Cwlth)</i>
a	<i>Native Title (Indigenous Land Use Agreement) Regulation 1999 (Cwlth)</i>
a	<i>Nature Conservation Act 1992</i>
a	Nature Conservation (Estuarine Crocodile) Conservation Plan 2007 and Management Program 2007–2017

## Plans and agreements

a	Bonn Convention
a	China–Australia Migratory Bird Agreement
a	National recovery plan for the spectacled flying-fox <i>Pteropus conspicillatus</i>
a	Recovery plan for the southern cassowary <i>Casuarius casuarius johnsonii</i>
a	Wet Tropics Management Plan 1998
a	Wet Tropics of Queensland World Heritage Area Regional Agreement 2005

## Thematic strategies

a	Level 2 Fire Management Statement
a	Level 2 Pest Strategy Innisfail (draft)

## Vision

Kurrimine Beach National Park continues to protect the natural integrity of its coastal wetlands, forests and dune systems including the species of conservation significance that they support.

## Conservation purpose

Located within the Wet Tropics World Heritage Area, Kurrimine Beach National Park was gazetted in 1977, to preserve the nationally recognised significant coastal wetland values contained within the tidally influenced Melaleuca wetlands.

The beach area around the mouth of Liverpool Creek is a known nesting site for endangered little terns *Sternula albigrons* which are highly susceptible to predation from feral pigs and disturbance by vehicles.

## Protecting and presenting the park's values

### Landscape

Kurrimine Beach National Park encompasses a lowland coastal wetland extending south from the mouth of Liverpool Creek. Surrounding land use includes sand mining, a rifle range and agriculture and grazing.

Due to the park's location, it is subject to seasonal inundation from Liverpool Creek and is also prone to disturbance from tropical cyclones.

### Regional ecosystems

Kurrimine Beach National Park contains 13 regional ecosystems within 910ha. Seven of these regional ecosystems are endangered and four are of concern (Table 1). The dominant ecosystem on the park, which covers approximately 600ha, is the *Melaleuca quinquenervia* wetland (7.2.9). The park also conserves pockets of complex mesophyll vine forest on coastal dune systems and on poorly drained alluvial plains.

### Native plants and animals

Kurrimine Beach National Park protects plant and animal species of conservation significance (Table 2). Thirty-one species are recorded from the park or adjacent State marine park are listed in international agreements (Table 3).

A nesting site for the endangered little tern *Sternula albifrons* is contained within the park. Spectacled flying-foxes *Pteropus conspicillatus*, beach-stone curlew *Esacus giganteus* and estuarine crocodiles *Crocodylus porosus* also use the park.

The park provides essential habitat for the vulnerable southern cassowary *Casuarius casuarius johnsonii*.

The vulnerable arenga palms *Arenga australasica* occurs within Kurrimine Beach National Park.

### Aboriginal culture

Kurrimine Beach National Park is part of the cultural landscape of Aboriginal people. The area has significant cultural value for Traditional Owners and remains an important part of their story. The Mamu people have a native title claim over the park.

Traditional Owners used the area as a seasonal hunting ground. Midden sites are spread throughout the park. Traditional food sources found within the park include native bees, bush bananas, pandanus, white apple, silver quandong, mussels and sea turtles. The area is also a significant nesting site for little terns, another traditional food for Traditional Owners in the area. Access to traditional food sources such as mussel beds and native bush honey sites can be interrupted by significant forest disturbance caused by cyclones.

Traditional Owners are concerned that feral pigs will impact upon the nesting sites of both little terns and sea turtles and consider them a key threat within the park. The Traditional Owners have also identified use of the beach by vehicles and illegal fishing as problems requiring management.

### Tourism and visitor opportunities

Forested areas are largely inaccessible due to their wetland nature. However, the beach is used by recreational anglers.

Liverpool Creek forms the northern boundary of Kurrimine Beach National Park and is a popular destination for local fisherman. The wetland provides an excellent nursery for juvenile fish giving Liverpool Creek healthy fish stocks. Local people regularly use the beach for walking and fishing.

### Education and science

Kurrimine Beach National Park provides opportunities to examine the dynamics and species composition of the remnant coastal wetland. The opportunity also exists to monitor impacts associated with water table alterations and land clearing associated with proposed sand mining on adjacent tenures.

## Other key issues and responses

### Pest management

Small infestations of pond apple *Annona glabra* (class 2 declared pest plant) exist in the northern section of the park and into Liverpool Creek. Pond apple is a key threat to the health of wetland areas and water systems and is listed as a Weed of National Significance (WONS).

Upstream in the Liverpool Creek system there is a multi-agency program focused on the control of Siam weed *Chromolaena odorata* (class 1 declared pest) which is a major threat to the natural integrity of the park. Olive hymenachne *Hymenachne amplexicaulis* (WONS) also occurs on property adjacent to the park and is a major threat to the natural integrity of the freshwater wetland areas of the park.

Feral pigs *Sus scrofa* (class 2 declared pest) are known to cause significant environmental damage and prey on native plants and animals, including sea turtle eggs.

### Fire management

Fire management is used to maintain the floristic and structural diversity of the wetland, as well as to control pest plants. Fire intensity, frequency and timing are critical in maintaining the balance between existing grassland and *Melaleuca* communities.

## References

Australian Government Department of Sustainability, Environment, Water, Population and Communities, Directory of Important Wetlands, accessed 18 May 2012 <[http://www.environment.gov.au/cgi-bin/wetlands/report.pl?smode=DOIW&doiw\\_refcodelist=QLD144](http://www.environment.gov.au/cgi-bin/wetlands/report.pl?smode=DOIW&doiw_refcodelist=QLD144)>

## Management directions

Desired outcomes	Actions and guidelines
<p><b>Landscape</b></p> <p>Landscape and natural values including water quality, are maintained and enhanced.</p>	<p>A1. Protect and maintain the natural integrity of Liverpool Creek, the freshwater Melaleuca wetland, coastal littoral rainforest and sand dune woodland system, through the implementation of an appropriate fire and pest management regime.</p>
<p><b>Native plants and animals</b></p> <p>The native plants and animals are preserved through effective management of the landscape.</p>	<p>A2. Manage invasive pest plants and animals in order to mitigate impacts and retain biodiversity.</p> <p>A3. Improve ecological understanding of the park through the implementation of monitoring programs.</p> <p>A4. Implement and refine a fire management program that retains the ecological integrity of the endangered ecosystems.</p>
<p><b>Aboriginal culture</b></p> <p>The park continues to hold significant cultural values and land use opportunities for Traditional Owners.</p>	<p>A5. Liaise with Traditional Owners to help preserve their bush tucker and traditional food sources, historical midden sites and species of particular concern in the area.</p>
<p><b>Tourism and visitor opportunities</b></p> <p>The park area remains accessible for low key nature based experiences.</p>	<p>A6. Maintain the low key, nature based visitor experience.</p>

## Tables – Conservation values management

**Table 1: Endangered and of concern regional ecosystems**

Regional ecosystem number	Description	Biodiversity status
7.1.2	<i>Sporobolus virginicus</i> grassland, samphire open forbland to sparse forbland, and bare salt pans, on plains adjacent to mangroves	Of concern
7.2.1a,e	Mesophyll vine forest on beach ridges and sand plains of beach origin	Endangered
7.2.3e,f	<i>Corymbia tessellaris</i> and/or <i>Acacia crassicarpa</i> and/or <i>C. intermedia</i> and/or <i>C. clarksoniana</i> woodland to closed-forest on beach ridges (predominantly Holocene)	Of concern
7.2.4d	<i>Eucalyptus</i> spp. (often <i>E. pellita</i> or <i>Corymbia intermedia</i> ) open-forest and/or <i>Lophostemon suaveolens</i> (swamp mahogany) open-forest on swampy sandplains and Pleistocene beach ridges	Of concern
7.2.7a	<i>Casuarina equisetifolia</i> +/- <i>Corymbia tessellaris</i> open-forest +/- groved vine forest shrublands, on strand and foredunes	Endangered
7.2.8	<i>Melaleuca leucadendra</i> open-forest to woodland on sands of beach origin	Endangered
7.2.9a,b	<i>Melaleuca quinquenervia</i> shrubland to closed-forest, or <i>Lepironia articulata</i> open to closed sedgeland, on dune swales and swampy sand plains of beach origin	Endangered
7.3.10	Simple-complex mesophyll to notophyll vine forest, on moderately to poorly-drained alluvial plains, of moderate fertility	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
<b>Plants</b>				
<i>Arenga australasica</i>	arenga palm	Vulnerable	Vulnerable	Low
<b>Animals</b>				
<i>Aerodramus terraereginae</i>	Australian swiftlet	Near threatened	-	Low
<i>Casuarius casuarius johnsonii</i>	southern cassowary	Endangered	Endangered	Critical
<i>Crocodylus porosus</i>	estuarine crocodile	Vulnerable	-	Low
<i>Cyclopsitta diophthalma macleayana</i>	Macleay's fig-parrot	Vulnerable	-	Low
<i>Ephippiorhynchus asiaticus</i>	black-necked stork	Near threatened	-	Low

Scientific name	Common name	Nature Conservation Act 1992 status	Environment Protection and Biodiversity Conservation Act 1999 status	Back on Track status
<i>Esacus giganteus</i>	beach stone-curlew	Vulnerable	-	High
<i>Haematopus fuliginosus</i>	sooty oystercatcher	Near threatened	-	Low
<i>Pteropus conspicillatus</i>	spectacled flying-fox	Least Concern	Vulnerable	High
<i>Sternula albifrons</i>	little tern	Endangered	-	High

**Table 3: Species listed in international agreements recorded on Kurrimine National Park and the adjacent State Marine Park area**

Scientific name	Common name	BONN	CAMBA	JAMBA	ROKAMBA
<i>Actitis hypoleucos</i>	common sandpiper	ü	ü	ü	ü
<i>Anous stolidus</i>	common noddy	-	ü	ü	-
<i>Apus pacificus</i>	fork-tailed swift	-	ü	ü	ü
<i>Ardea modesta</i>	eastern great egret	-	ü	ü	-
<i>Arenaria interpres</i>	ruddy turnstone	ü	ü	ü	ü
<i>Calidris acuminata</i>	sharp-tailed sandpiper	ü	ü	ü	ü
<i>Calidris ruficollis</i>	red-necked stint	ü	ü	ü	ü
<i>Charadrius leschenaultii</i>	greater sand plover	ü	ü	ü	ü
<i>Charadrius mongolus</i>	lesser sand plover	ü	ü	ü	ü
<i>Coracina tenuirostris</i>	cicadabird	-	-	ü	-
<i>Crocodylus porosus</i>	estuarine crocodile	ü	-	-	-
<i>Egretta sacra</i>	eastern reef egret	-	ü	-	-
<i>Haliaeetus leucogaster</i>	white-bellied sea-eagle	-	ü	-	-
<i>Hirundapus caudacutus</i>	white-throated needletail	-	ü	ü	ü
<i>Hydroprogne caspia</i>	Caspian tern	-	ü	ü	-
<i>Limosa lapponica</i>	bar-tailed godwit	ü	ü	ü	ü
<i>Numenius madagascariensis</i>	eastern curlew	ü	ü	ü	ü
<i>Numenius phaeopus</i>	whimbrel	ü	ü	ü	ü
<i>Pandion cristatus</i>	eastern osprey	ü	-	-	-
<i>Philomachus pugnax</i>	ruff	ü	ü	ü	ü
<i>Plegadis falcinellus</i>	glossy ibis	ü	ü	-	-

Scientific name	Common name	BONN	CAMBA	JAMBA	ROKAMBA
<i>Pluvialis fulva</i>	Pacific golden plover	ü	ü	ü	ü
<i>Pluvialis squatarola</i>	grey plover	ü	ü	ü	ü
<i>Rhipidura rufifrons</i>	rufous fantail	ü	-	-	-
<i>Sternula albifrons</i>	little tern	ü	ü	ü	ü
<i>Sterna sumatrana</i>	black-naped tern	-	ü	ü	-
<i>Symposiarchus trivirgatus</i>	spectacled monarch	ü	-	-	-
<i>Thalasseus bengalensis</i>	lesser crested tern	-	ü	-	-
<i>Tringa brevipes</i>	grey-tailed tattler	ü	ü	ü	ü
<i>Tringa nebularia</i>	common greenshank	ü	ü	ü	ü
<i>Xenus cinereus</i>	terek sandpiper	ü	ü	ü	ü

BONN – Bonn Convention

CAMBA – China–Australia Migratory Bird Agreement

JAMBA – Japan–Australia Migratory Bird Agreement

ROKAMBA – Republic of Korea–Australia Migratory Bird Agreement