Cape Palmerston National Park Management Statement 2013

| Park size: | 7,200ha |
|-------------------------------|-----------------------------------|
| Bioregion: | Central Queensland Coast |
| QPWS region: | Central |
| Local government estate/area: | Mackay Regional Isaac Regional |
| State electorate: | Mirani |



Spectacular views of Cape Palmerston National Park looking back from the cape to Mount Funnel. Photo: NPRSR.

Legislative framework

| а | Aboriginal Cultural Heritage Act 2003 |
|---|--|
| а | Environment Protection Biodiversity Conservation Act 1999 (Cwlth) |
| а | Native Title Act 1993 (Cwlth) |
| а | Nature Conservation Act 1992 |

Plans and agreements

| а | Bonn Convention |
|---|---|
| а | Berni Centention |
| а | China-Australia Migratory Bird Agreement |
| а | Japan-Australia Migratory Bird Agreement |
| а | Republic of Korea–Australia Migratory Bird Agreement |

Thematic strategies

a Cape Palmerston National Park Fire Strategy 2013

Vision

Cape Palmerston National Park conserves the coastal beach scrubs, woodland, riparian and wetland systems representative of the Central Queensland Coast Bioregion. The integrity of Aboriginal and shared-history cultural heritage values is maintained. Outdoor recreation activities and commercial tourism opportunities that are in keeping with the area's natural values will be encouraged.

Conservation purpose

The park is managed to conserve its natural values, particularly the diverse vegetation communities and coastal landscapes. The park contains important habitat for shorebirds and the water mouse *Xeromys myoides*.

Research opportunities and educational use, where relevant to park values are encouraged.



Protecting and presenting the park's values

Landscape

Cape Palmerston National Park is located about 100km south, south-east of Mackay. The nearest parks in Queensland with significant coastal landscapes are Sandringham Bay Conservation Park, south of Mackay and Byfield National Park north-east of Rockhampton.

The coastal waters adjacent to the parks are part of the Great Barrier Reef Coast Marine Park (State Marine Park). The zoning on this section of coast includes general use, habitat protection and marine national park.

The landscape in Cape Palmerston National Park is intact and in its natural condition. A third of the park consists of low lying estuarine deposits supporting mangrove, samphire and marine grasslands. Adjacent marine areas are characterised by high nutrient waters of the inner coastal strip, which supports significant seagrass meadows. The reserve contains much of the eastern watershed of Mount Funnel, a conspicuous landmark rising to 344m above sea level. To the east are extensive sand dunes supporting beach scrubs and fringing foredune forests. Dune swales and other low-lying areas are characterised by swamps and freshwater sedgelands. A striking feature is the rocky headlands along the north-east boundary of the park.

Much of the landscape outside the park, particularly the areas to the west, has been significantly altered by clearing for farming and grazing.

Access roads and tracks associated with grazing, recreational and commercial fishing have had an impact on the landscape in some areas of Cape Palmerston National Park. A number of tracks are in poor condition with some having limited recreation value and are not needed for access or management purposes.

Regional ecosystems

Cape Palmerston National Park lies within the Central Queensland Coast Bioregion and within the Sarina to Proserpine Coastal Lowlands Sub-region. However, the reserve contains some land types, and regional ecosystems, which have close affinities with the Byfield Sub-region. In addition, the area contains several regional ecosystems that are considered more typical of continental islands within the bioregion.

There are 20 mapped regional ecosystems, of these eight are endangered and eight are of concern (Table 1). Ten of the regional ecosystems have a low representation in other protected estate.

Native plants and animals

The area contains a wide diversity of plant and animal communities typical of the Central Queensland Coast Bioregion. Thirty-five vegetation communities have been described and mapped within the reserve. Vegetation monitoring plots are established in five vegetation types.

Important plant communities include:

- coastal beach scrubs
- · black she-oak Casuarina littoralis and coast banksia Banksia integrifolia on sand
- · silver-leaved ironbark Eucalyptus melanophloia
- · broad-leaved paperbark Melaleuca spp and black oak on tertiary sand and clay plains
- the only example of blue gum/poplar gum hybrid on the mainland
- · extensive estuarine communities including mangrove, samphire and marine grasslands

Limited animal surveys have been conducted. A number of incidental sightings, and small-scale animal surveys give an indication of the diversity of species present.

A number of significant animals are found in the area including:

- shorebirds
- waterfowl associated with freshwater
- · beach stone-curlew Esacus neglectus
- water mouse Xeromys myoides—for which the park is one of only three known protected areas within the Central Queensland Coast Bioregion. The water mice occur adjacent to the access road to Cape Creek and are

likely to occur elsewhere in the park

- squatter pigeon Geophaps scripta, black-chinned honeyeaters Melithreptus gularis and plum-headed finches Neochmia modesta which are typically found in drier inland areas
- · estuarine crocodile Crocodylus porosus
- · dugong Dugong dugon—in the Ince Bay Dugong Protection Area.

Aboriginal culture

Aboriginal people have a strong affiliation with places in the park. The involvement of traditional owner groups will form an important component of all management and interpretive activities.

An archaeological survey of the coastal sections of the park in 1992 identified a number of shell middens and artefact scatter sites. Several of the identified sites are currently being impacted by either the current road network or existing camping areas. Many sites are associated with fore-dunes or clearings at the supra-tidal zone adjacent to terrestrial vegetation and are therefore unlikely to be impacted by fire. There is no information about the cultural values in the western section of the park. No cultural heritage surveys have been undertaken in this area.

There are no registered Native Title claims groups over the park as at 6 November 2013.

Shared-history culture

Historically, much of Cape Palmerston National Park was used for cattle grazing. There is also an extensive history of commercial and recreational fishing and oyster leases. Some of the infrastructure associated with these activities remains in the park. Remaining evidence of historic grazing and fishing is generally in a poor state of repair. No significant historic values have been associated with any sites or associated infrastructure. The park contains disused infrastructure associated with grazing and the operation of oyster leases. This infrastructure is generally in poor repair.

Tourism and visitor opportunities

Cape Palmerston National Park is within close proximity to Mackay providing self-reliant day use and camping opportunities in a remote coastal environment. The coastal area and the tidal creeks at Cape Palmerston are popular recreational fishing spots. Mount Funnel is a recognised local bush-walking destination. The coastal section of Cape Palmerston National Park contains an extensive vehicle track network and a number of basic camping facilities. Basic camping facilities are provided at Windmill Bay and Cape Creek. Both sites have single pit toilets and vehicle control barriers. The Cape Creek camping area is located on a sand spit and is subject to erosion associated with ongoing coastal processes. As well as impacting Cape Creek, severe weather events often impact on the vehicle access track to Clark Bay. Beach camping occurs regularly at scattered locations between the southern beach access and Cape Palmerston.

While visitor use appears to be seasonal, there is a constant visitor presence in the park with campgrounds typically full during school holiday periods and long weekends. Campfires are currently permitted in the camping areas of the national park and on the beach of the marine park. Firewood collection is not permitted in the national park. Tree damage, presumably from firewood collection, is evident at Cape Creek and Windmill Bay campgrounds. Scars from camp fires and partially burnt rubbish are evident at several of the camping locations.

Camping data, for the five years from May 2001 to 2006, shows about 1,000 camper nights per year. This figure only records the permitted camping and may underestimate the camping use on the park by 50%. There are currently no figures on day use.

Most vehicle use on the park is associated with camping and recreational fishing. The majority of the park is undeveloped and has no vehicle access, retaining a remote, natural character. Vehicle access requires a four wheel drive and involves beach driving. Vehicle access along the main beach is restricted by the tide.

Limited commercial use occurs on the park. Commercial tag along four-wheel-drive (4WD) tours use the park irregularly. Park visitors and commercial fishers using the park often use generators in the camping areas.

Fishing is the main activity for most park users. Much of the recreational fishing occurs from small boats which are launched on the beaches and at several locations on Cape Creek.

Commercial fishing occurs in the coastal areas and tidal creeks at Cape Palmerston; several commercial fishers use the park to access fishing areas. There are a number of oyster leases in the marine park adjacent to the national park.

Education and science

The area provides good opportunities for nature-based education and scientific research.

Research opportunities based on the parks natural and cultural values are numerous. Archaeological surveys conducted in 1992 identified numerous further research opportunities. To date no archaeological assessment has been carried out for the western section of the park. The information collected in these projects may be useful in guiding management.

Partnerships

There is currently no organised community involvement in management or presentation activities.

Other key issues and responses

Fire management

The park has an approved fire management strategy. The structure and distribution of much of the vegetation in the park is linked to the presence or absence of fire. Wildfire events may cause significant changes to the landscape in the park. Fire impact on vegetation communities on sand dunes is a major concern. Fire degrades these communities and can give rise to further erosion and pest plant infestation. Fires frequently occur as a result of lightning strike on Mount Funnel.

Pest management

The park has an approved pest management strategy. Many of the existing pest plant infestations are associated with the access roads, tracks and camping areas. Vehicles using these areas have the potential to introduce and spread pest plants in the park.

Pest plants include para grass *Brachiaria mutica*, grader grass *Themeda quadrivalvis*, thatch grass *Hyparrhenia rufa*, lantana *Lantana camara*, snake weed *Stachytarpheta* sp., giant rat's tail grass *Sporobolus natalensis*, pink periwinkle *Catharanthus roseus*, prickly pear *Opuntia* spp. Hymenachne *Hymenachne amplexicaulis*, mother-of-millions *Bryophyllum* spp., siratro *Macroptilium atropurpureum*, caltrop *Tribulus* spp. and Mossman River grass *Cenchrus echinatus*. Mossman River grass and caltrop presents visitor access problems or discomfort at Clarke's Cove camping area and is prevalent at Windmill Bay campground.

Pest animals include the red fox *Vulpes vulpes* (mainly seen in the estuarine areas), pigs *Sus scrofa* and cats *Felis catus*, whilst horses *Equus caballus* and rusa deer *Cervus timorensis* have been seen occasionally on the southern section of the park.

The park is partially fenced to prevent stock impacting vegetation.

Management directions

| Desired outcomes | Actions and guidelines | | | |
|---|--|--|--|--|
| Landscape Landscape integrity (including visual amenity) is retained. The existing road network is managed to minimise impacts and maintenance requirements. The road network does not impact on the landscape values or the remote character of the park. | A1. Minimise visual impact from new and existing roads, tracks and recreation facilities. A2. Manage roads identified for closure in priority order and rehabilitate as resources allow. | | | |
| Regional ecosystems Regional ecosystems are maintained and where necessary rehabilitated. | A3. Maintain the diversity of regional ecosystems and improve the condition of degraded areas through appropriate pest and fire management. | | | |
| Aboriginal culture Aboriginal cultural heritage values, including archaeological sites, are protected. | A4. Re-route roads, where practical, to avoid known archaeological sites.A5. Encourage further investigation and research into the Aboriginal cultural heritage values of the park. | | | |
| Shared-history culture Community memories and stories associated with historic grazing and fishing activities are preserved. Physical infrastructure poses no safety risk. | A6. Maintain records of historic use and associated infrastructure and appropriately manage disused infrastructure.A7. Identify safety risks associated with remaining structures and manage accordingly. | | | |
| Tourism and visitor opportunities The park provides a range of recreational and tourism activities which highlight its special character and complements other local and regional opportunities. Recreation and tourist access and facilities on the national park complement the natural setting and do not compromise natural and cultural values. Infrastructure will be focused primarily on provision of access. Facilities on the park are located outside the erosion prone areas and maintained in a safe and presentable condition. Park visitors are provided with information and facilities to make visits safe and enjoyable and to increase their understanding of the area. Amenity of the park is not disturbed by excessive noise. | A8. Maintain vehicle access tracks to a basic, sustainable and well drained 4WD standard. Future development of the vehicle track network and/or upgrading the existing network will be considered where necessary to manage environmental impacts. A9. Camping facilities, where provided, will include basic toilet facilities. Other infrastructure at camping locations will not generally be provided unless required to manage environmental impacts. A10. Avoid construction of infrastructure in areas subject to coastal erosion processes. Where practical, existing roads and facilities in erosion prone areas should be removed or relocated. A11. Provide visitor safety information to enable visitors to be aware of the remote nature and hazards of the park. A12. Generators will be managed to minimise impacts on other park users. | | | |

| Desired outcomes | Actions and guidelines | | | |
|--|--|--|--|--|
| Education and science | A13. Encourage local schools and education providers to use the area. | | | |
| Local schools and education providers are using the park for education and study. | A14. Encourage research projects that focus on understanding values and guiding park management. | | | |
| Park values are further investigated and information is used to guide management. | | | | |
| Partnerships | A15. Engage Aboriginal people with traditional affinities to the area and investigate | | | |
| To have the park valued by the broader community. | opportunities to involve them in park management. A16. Develop cooperative liaison with user groups to ensure that the park is | | | |
| Aboriginal people with traditional affinities to the area are actively involved in the management of the park. | promoted in a manner appropriate with the level of services and facilities provided. | | | |
| Pest management | A17. Implement pest plant control program as defined in the parks pest activity | | | |
| Pest plants are managed to minimise adverse impacts on natural, cultural and recreational values. | plan. A18. Conduct regular inspections of roads, tracks and visitor use areas for pest plant infestations, and carry out incidental control of new or emergent pest plant problems as required. | | | |
| No new pest plant species are established. | | | | |
| The impacts of pest animals on the area are understood. | | | | |
| Pest animals are managed to levels that have minimal adverse impacts on park values. | | | | |

Tables – Conservation values management

Table 1: Endangered and of concern regional ecosystems

| Regional ecosystem number | Description | Biodiversity status |
|---------------------------------|---|---------------------|
| 8.1.2 | Samphire open forbland to isolated clumps of forbs on saltpans and plains adjacent to mangroves | Of concern |
| 8.1.3 | Sporobolus virginicus grassland on marine sediments. Estuarine wetland | Of concern |
| 8.1.5 | Melaleuca spp. and/or Eucalyptus tereticornis and/or Corymbia tessellaris woodland to open forest (estuarine wetland) with a ground stratum of salt tolerant grasses and sedges, usually in a narrow zone adjoining tidal ecosystems | Endangered |
| 8.2.1 | Casuarina equisetifolia open forest to woodland with pomoea pescaprae and Spinifex sericeus dominated ground layer on foredunes | Of concern |
| 8.2.2 | Microphyll vine forest on coastal dunes | Endangered |
| 8.2.6 | Corymbia tessellaris + Acacia leptocarpa + Banksia integrifolia + Melaleuca dealbata + beach scrub species open forest on coastal parallel dunes | Of concern |
| 8.2.11 | Melaleuca spp. woodland in parallel dune swales (wetlands) | Of concern |
| 8.3.2 | Melaleuca viridiflora woodland often with emergent eucalypts and grassy/herbaceous ground layer, on seasonally inundated alluvial plains with impeded drainage | Endangered |
| 8.3.3 | Melaleuca leucadendra or M. fluviatilis +/- Casuarina cunninghamiana open forest to woodland, fringing watercourses | Of concern |
| 8.3.4 | Freshwater wetlands with permanent water and aquatic vegetation | Endangered |
| 8.3.5 | Corymbia clarksoniana + Lophostemon suaveolens + Eucalyptus platyphylla woodland, or E. platyphylla woodland on alluvial plains | Endangered |
| 8.3.13 | Eucalyptus tereticornis and/or Corymbia tessellaris and/or Melaleuca spp. open woodland to open forest on alluvial and old marine plains, often adjacent to estuarine areas | Endangered |
| 8.5.3 | Eucalyptus drepanophylla +/- Corymbia clarksoniana, +/- E. platyphylla +/- C. dallachiana +/- Melaleuca viridiflora woodland on broad low rises and gently sloping Tertiary sand plains | Endangered |
| 8.5.6 | Melaleuca viridiflora and Allocasuarina littoralis woodland with Eucalyptus spp., on Tertiary sand plains | Of concern |
| 8.12.13 | Xanthorrhoea latifolia subsp. latifolia or Imperata cylindrica grassland, including some areas recently colonised by Timonius timon shrubland, on slopes of islands and headlands, on Mesozoic to Proterozoic igneous rocks and Tertiary acid to intermediate volcanics | Of concern |
| 8.12.27 | Eucalyptus tereticornis, Corymbia tessellaris, Livistona decipiens +/- C. intermedia +/- rainforest pioneering spp. open forest, on low hills on Mesozoic to Proterozoic igneous rocks | 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 | | | | |
| Accipiter novaehollandiae | grey goshawk | Near threatened | - | Low |
| Esacus magnirostris | beach stone-curlew | Vulnerable | - | High |
| Geophaps scripta scripta | squatter pigeon (southern subspecies) | Vulnerable | Vulnerable | Medium |
| Haematopus fuliginosus | sooty oystercatcher | Near threatened | - | Low |
| Melithreptus gularis | black-chinned honeyeater | Near threatened | - | Low |
| Numenius madagascariensis | eastern curlew | Near threatened | - | Low |
| Tadorna radjah | radjah shelduck | Near threatened | - | Low |
| Xeromys myoides | water mouse | Vulnerable | Vulnerable | High |

Table 3: Species listed in international agreements

| Scientific name | Common name | Bonn | САМВА | JAMBA | ROKAMBA |
|---------------------------|-------------------------|------|-------|-------|---------|
| Haliaeetus leucogaster | white-bellied sea-eagle | - | ü | - | - |
| Hydroprogne caspia | Caspian tern | - | ü | ü | - |
| Limosa lapponica | bar-tailed godwit | ü | ü | ü | ü |
| Merops ornatus | rainbow bee-eater | - | - | ü | - |
| Myiagra cyanoleuca | satin flycatcher | ü | - | - | - |
| Numenius madagascariensis | eastern curlew | ü | ü | ü | ü |
| Numenius phaeopus | whimbrel | ü | ü | ü | ü |
| Pandion cristatus | eastern osprey | ü | - | - | - |
| Rhipidura rufifrons | rufous fantail | ü | - | - | - |
| Symposiarchus trivirgatus | spectacled monarch | ü | - | - | - |
| Xenus cinereus | 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