

educational activities are conducted on the national park by local school groups and tertiary institutions.

Recreation and tourism

The topography of the island limits access to a small number of visitor sites, at which a range of recreational and tourism opportunities exist. These range from self-reliant activities such as camping to low-key resort activities.

Day use and camping are provided for at three locations in the national park. The Yanks Jetty and Pioneer Bay sites provide basic facilities, while the South Beach site has no facilities. All sites are generally undeveloped and provide for self-reliant, nature-based campers and bushwalkers.

The presence of the resort on the island provides visitors with the opportunity to experience the island's attractions while staying in a luxurious resort setting.

The island is currently used by commercial fishers and "boaties" who anchor overnight in the island's sheltered bays and by boat-based recreational fishers, campers and tourist operators. There are opportunities for commercial operators to take day trips from Townsville or Dunguness to sites on the national park. If use of the island's limited areas of access were to become heavy, it could cause unacceptable impacts.

Economic and social

The island's scenic and natural resource values make it a popular site for recreational use. The surrounding marine park has high economic value for low-key tourism and recreation.

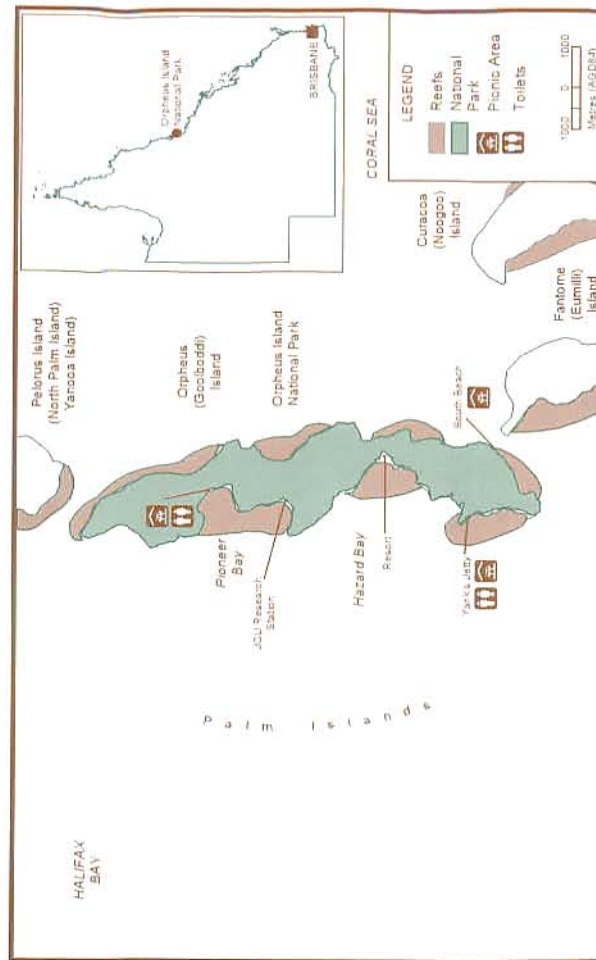
Orpheus Island National Park provides for the protection, conservation, rehabilitation, presentation and transmission to future generations, of values inherent with the Great Barrier Reef World Heritage Area.

Summary

This management plan provides the framework and guidelines on how Orpheus Island National Park will be managed. It sets out the considerations, outcomes and strategies that are proposed to form the basis on which day-to-day management decisions are made.

This plan was prepared in October 1999 and, in accordance with s 125 of the *Nature Conservation Act 1992*, will be reviewed not later than 10 years after its approval. For further information on this plan or the planning process, please contact the Queensland Parks and Wildlife Service Northern Regional Centre in Townsville on (07) 4722 5296.

This management plan was prepared by Queensland Parks and Wildlife Service staff. The principal author was Steve Christie. Thanks are due to those groups and individuals who made submissions in response to the draft plan.



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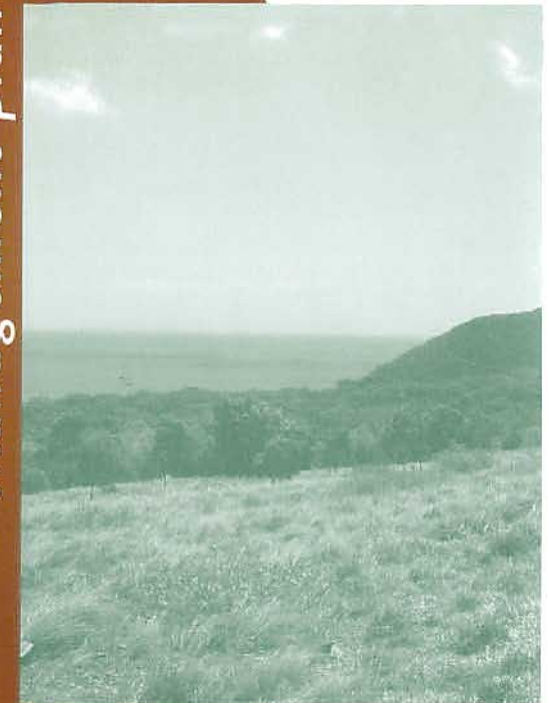
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Orpheus Island National Park

Management plan



Wet Tropical Coast Marine Biogeographic Region August 2000

I. Management directions and purposes

I.1 Management directions

Orpheus Island National Park is approximately 20km south-east of the coastal township of Lucinda and about 14km north-west of the Great Palm Island Aboriginal community.

The park will be managed to ensure that the natural and cultural values which have resulted in its inclusion in the Great Barrier Reef World Heritage Area, remain intact. The primary focus will be to maintain the integrity and diversity of the park's various vegetation communities, particularly the open grasslands.

Only low-key, nature-based, sustainable recreational, commercial, and educational activities will be permitted.

Scientific research, which provides more information on the island's natural and cultural resources will be encouraged.

I.2 Purposes

The major purposes of management will be to ensure that:

- natural plant and animal communities are conserved, particularly the open grassland communities, through the implementation of a fire management program and the control of feral animals and weeds;
- increased information on the natural and cultural values of the island is obtained;
- rare and threatened species are identified and conserved by implementing appropriate management strategies;
- opportunities exist for low-key, nature-based recreational, commercial, scientific and educational use, providing the activity does not compromise the ecological sustainability of the island;
- neighbours, Aboriginal groups, local government and other interested parties are made aware of park management issues and are provided with opportunities to contribute to the management of the park;
- the research station which is on a lease on the park, continues to operate with minimal impacts on the adjacent national park; and
- the special lease on the hill above the resort remains as a largely natural area, but necessary infrastructure including water tanks and bores continues.

2. Basis for management

2.1 Regional and management context

Orpheus Island is designated as a national park under the *Nature Conservation Act 1992* and will be managed according to the principles set out in s 17(1) of the Act.
17(1) A national park is managed to:

- a) provide, to the greatest possible extent, for the permanent preservation of the area's natural condition and protection of the area's cultural resources and values;
- b) present the area's cultural and natural resources and their values; and
- c) ensure that the only use of the area is nature-based and ecologically sustainable.

(2) The management principle mentioned in subsection 1(a) is the cardinal principle of management of national parks.

Orpheus Island National Park is the second largest island, and only national park, within the Palm Island group in the Great Barrier Reef World Heritage Area. With the exception of a few leases and esplanade areas, the island was gazetted as a national park in 1960.

The 1,300ha island lies within the Central Section of the Great Barrier Reef Marine Park and, more specifically, lies in the Ludinda Coast Management Area of the Townsville/Whitsunday Marine Park which extends to the high water mark. The majority of the area directly adjoining the island is zoned Marine National Park B, with the exception being the area from Hazard Bay to Harrier Point, which is zoned Marine National Park A.

The James Cook University Research Station is situated on a special lease on the national park at south Pioneer Bay. The Orpheus Island Resort is located on the shores of Hazard Bay. The resort is on land excluded from the park, but has a small special lease on the national park adjoining their own land.

The waters adjacent to the island are regularly used as an anchorage by commercial trawlers, recreational fishers and sailing vessels.

2.2 Native title

At the time of writing this plan, it was not clear whether native title rights exist over Orpheus Island National Park, however it is possible that such rights do exist. The *Commonwealth Native Title Act 1993* provides for the recognition and protection of native title. This plan does not intend to affect, diminish or extinguish any native title rights.

2.3 Values of Orpheus Island National Park

World heritage values

Orpheus Island National Park is part of the Great Barrier Reef World Heritage Area and it contributes to meeting the four criteria of outstanding universal value as set out in the World Heritage Convention:

- an example of a major stage of the earth's evolutionary history;
- an outstanding example of geological processes, biological evolution and peoples' interaction with their natural environment;

- a place with unique, rare and superlative natural phenomena; and
- a place which provides habitats for rare and endangered species of plants and animals.

These values will be described in more detail below.

Geology and landform

Orpheus Island is approximately 12km long and is made up of volcanic rocks formed about 280 million years ago. Ring dykes formed by intrusions of molten rock into granite bedrock cracks are a geological feature of the island. They create a spider web effect and can be seen on headlands and rocky shores where erosion has created caves and crevices. There is extensive fringing coral reef around the island and beaches on the west and southern sides of the island.

Plants and animals

No detailed surveys of plants and animals have been conducted to date. Seven broad vegetation types occur on the island ranging from eucalypt woodlands to mangroves and closed vine forests to open grasslands.

Incidental observations have resulted in 44 vertebrate species of wildlife and 137 plant species being recorded. It is likely other species will be discovered during future detailed surveys.

Cultural heritage

The national park contains both European and Aboriginal cultural sites. However, the full extent of the park's cultural status is currently uncertain. There are a number of Aboriginal sites of significance, also the remains of a shepherd's cottage and a World War II installation at Yanks Jetty.

The vegetation communities of the island provide a variety of Australian bush foods. Liaison with Aboriginal people holding traditional links to the island and the local Palm Island Aboriginal community is likely to increase the knowledge base of this and other cultural topics.

Scenic and aesthetic

Fringing reefs, rocky escarpments, beaches and a variety of vegetation types give rise to a contrast of textures and colours that significantly contribute to the area's scenic value.

Scientific and educational

The combination of the park's scenic, natural and cultural values gives the island significant value for scientific research and for education. The adjacent fringing reefs add to this value.

James Cook University has a research station at south Pioneer Bay. Research into the island's natural resources will continue to be encouraged. Due to the island's accessibility from Lucinda,

3 Management strategies

Current situation	Desired outcomes	Policies, guidelines and actions
<p>Native plants and animals</p> <p>The distribution of plant and animal communities is related to climatic conditions and the island's fire history.</p> <p>No detailed plant or animal surveys have been conducted. Preliminary surveys indicate that the vegetation is of scientific interest. Rare and threatened species may be present. A priority for management is the conservation of all plant and animal communities including identifying and protecting significant or fragile communities.</p> <p>Threats to native plants and animals include feral goats, rabbits, weeds and wildfires.</p>	<p>The integrity and diversity of plant and animal communities are conserved subject to natural processes.</p> <p>Comprehensive plant and animal species lists are available.</p> <p>Threatened species are protected.</p>	<p>Research programs will be undertaken or encouraged to monitor the ecology of plant and animal communities with emphasis on threatened species and communities, and species of conservation significance.</p> <p>Permanent monitoring sites will be established.</p> <p>A comprehensive ecological data base on all plants and animals will be established.</p> <p>Management strategies will be developed for threatened species and communities, and species of conservation significance, to ensure their conservation.</p> <p>Threatening processes are identified and controlled.</p>
<p>Introduced plants and animals</p> <p>The types of weeds and degree of invasion within the park are not completely known.</p> <p>Potential exists for weeds to be introduced from adjoining leases and at campgrounds. Weeds may also be introduced via the wind or sea.</p> <p>Feral goats and rabbits inhabit the island. Significant effort has been directed to trying to eradicate goats. While not achieved, this has significantly reduced goat numbers and their impacts.</p> <p>There has been liaison and co-operation with neighbours and other agencies to control exotic plants and animals.</p>	<p>Park neighbours and other agencies provide input into pest species management.</p> <p>Feral animals and weeds are eradicated or, if this is not possible, numbers are reduced to the point where they are not causing significant impact on the natural ecosystems of the island.</p>	<p>Ensure as far as possible that further weeds and feral animals are not introduced to the park.</p> <p>Conduct periodic surveys to determine the presence and species of exotic plants and animals.</p> <p>Develop action plans dealing with weeds and feral animals.</p> <p>Conduct weed and feral animal control programs with a view to eradicating significant problem species. Particular attention will be given to the eradication of goats and rabbits.</p>
<p>Fire management</p> <p>Fire is a natural element of several vegetation communities within the park. Fire is required to maintain their floristic diversity and health. Other communities are intolerant of fire and require fire to be excluded.</p> <p>Although there is no approved fire management plan in place, vegetation communities requiring prescribed burns are identified and burnt according to approved yearly action plans.</p> <p>There has been liaison and co-operation with neighbours and other agencies regarding fire management issues.</p>	<p>The integrity and diversity of plant communities is maintained by appropriate fire regimes.</p> <p>Human life, park and neighbouring property and cultural sites are protected from fire.</p>	<p>A fire management plan will be developed in consultation with neighbours, traditional Aboriginal people and other interested parties.</p> <p>Prescribed burning programs will be undertaken to maintain the integrity and diversity of the park's plant and animal communities and to protect life and property.</p> <p>Monitor the effects of fire regimes on plant and animal communities. Use appropriate research and monitoring methods to evaluate the objectives of the fire management plan.</p>
<p>Landscape, soil and catchment protection</p> <p>Fringing reefs, rocky escarpments, a mosaic of vegetation types and beaches significantly contribute to the Great Barrier Reef World Heritage Area's values.</p> <p>Feral goats, rabbits and wildfires have caused erosion.</p>	<p>The island's natural landscape values are maintained.</p> <p>The effects of erosion caused by non-natural processes are reduced.</p>	<p>The island's landscape values will be maintained by implementing appropriate management strategies including the control of feral animals.</p> <p>Approval will not be granted for any developments which may affect landscape values. This includes transmission towers, navigation aids and the like. Exceptions may be made where it can be demonstrated that the development is essential for the protection of human life and there are no alternative sites.</p>
<p>Native title and cultural heritage</p> <p>The national park contains both known European and Aboriginal cultural sites. However, the full extent of the park's cultural status is currently uncertain. There are a number of identified Aboriginal sites of significance, including a midden at the JCU Research Station. There are the remains of a shepherd's cottage and a World War II installation at Yanks Jetty.</p> <p>The vegetation communities of the island provide a variety of Australian bush foods. Liaison with Aboriginal people holding traditional links to the island and the local Palm Island Aboriginal community is likely to increase the knowledge base of this and other cultural topics.</p>	<p>Aboriginal people with traditional links to the area are involved in the management of park cultural heritage issues.</p> <p>Cultural sites are identified and protected in accordance with the wishes of Aboriginal people with traditional links to the park.</p> <p>Any native title rights are not compromised by management actions.</p>	<p>Aboriginal sites will be identified.</p> <p>Cultural sites will be managed in co-operation with representative Aboriginal groups with links to the area.</p> <p>Consult with relevant Aboriginal people to establish principles and guidelines to co-operative management of native title, cultural heritage and other issues.</p> <p>Work programs and management activities will consider the requirements of native title legislation to ensure native title rights are not compromised.</p> <p>The boardwalk at the midden at the Research Station will be maintained.</p>

Recreation and tourism

The island is used by commercial and recreational fishers who anchor overnight in the island's sheltered bays, recreational campers, bushwalkers and tourist operators.

Basic facilities are provided at some locations, however none are provided at the South Beach area. The principal focus of the island's visitor sites is to provide for self-reliant, nature-based campers and bushwalkers.

There is a resort which offers low-key nature-based activities at Hazard Bay.

Recreation and tourism is focused at a number of sites. The topography of the island generally limits access to these areas, and a jetty and pontoon were previously provided at Yanks Jetty. Recreation and tourism are also focused on the associated fringing reefs and island beaches.

Opportunities for low-key, nature-based activities are provided.

No impacts that compromise the island's ecological sustainability occur.

Yanks Jetty will be managed to provide for recreational day use, camping and moderate levels of commercial day use. Camping will be limited to a maximum of 30 (8 sites) people at any one time. The location is suitable for single groups up to this size. Applications by schools for larger camping numbers associated with educational excursions will be assessed on their merits. Commercial day use will be limited to groups of no greater than 50. Barbecue and toilet facilities will be provided. The re-establishment of the jetty and pontoon at this location is considered appropriate.

South Beach will be managed to provide for self-reliant recreational day use and camping. Camping will be limited to a maximum of 12 people in 4 sites at any one time. The location is suitable for groups of up to 6 people. A toilet will be provided if monitoring shows there is a need, but no other facilities will be provided. Commercial day use of this location will not be permitted, however camper drop-offs at this location are appropriate.

Pioneer Bay will be managed for recreational day use and camping. While some opportunistic commercial access may be permitted, the location is not considered appropriate for regular use by commercial operators. Camping will be limited to a maximum of 12 people in 2 sites at any one time. The location is suitable for groups of up to 6 people. Toilet facilities will be maintained at this location.

The maximum duration of camping at the above sites will be 7 nights.

Recreational and commercial activities will be monitored for adverse impacts and maintained at a level that does not compromise the park's natural and cultural values.

If unacceptable levels of impact occur, numbers using certain sites may be limited, or areas may be closed temporarily or permanently.

Fires will not be permitted.

Visitors will be responsible for the removal of their rubbish.

Management of special leases

There are two special leases on the national park. One at south Pioneer Bay is held by James Cook University for a research station. The other is held by the resort and is situated on the hill behind the resort. It is used for water tanks, bores and some drains to divert runoff from the resort buildings.

Both leases are managed according to lease conditions and only approved infrastructure is present.

Staff will undertake regular inspections of the lease areas and hold continuing discussions with research station and resort management.

On the resort special lease, no construction will be permitted that extends above the skyline or is otherwise visually obstructive. Any facilities for guests (other than approved water tanks etc.) must be able to be removed if required.

Education and interpretation

The park has no education or interpretation facilities. A basic visitor information sheet has been produced for the island and surrounding waters.

James Cook University has a research station at south Pioneer Bay. The primary focus of the research is the adjacent fringing reef.

Park visitors are provided with information to help them understand and appreciate the values of the park.

Continue to distribute the island visitor information sheet.

Plan implementation and monitoring

Priorities for management implementation are to establish an appropriate fire regime, obtain more information on the natural and cultural resources of the island and control feral animals and weeds.

The park is managed according to the principles of this plan.

Priority will be given to fire management, continuing control of feral goats and rabbits and to obtaining ecological information on plants, animals and cultural resources of the park.

The final plan will be implemented as resources become available.

Information collected as specified in this plan will be utilised to modify management strategies as required according to the principle of ecological sustainability and maintenance of cultural values of the park.

Complementary management of adjoining areas

The national park, adjacent leases and the surrounding marine park are managed in an integrated, complementary manner to ensure the ecological integrity and diversity of the terrestrial and marine ecosystems are maintained.

Day-to-day management of Orpheus Island National Park and the adjacent waters in the Great Barrier Reef Marine Park and the State Marine Park is the responsibility of QPWS. Management of both terrestrial and marine areas are closely linked, as most visitors to the national park enter through the marine park. Often the best methods of managing terrestrial use is by control of anchoring and other marine access issues. Facilities and structures, such as pontoons, in some areas may detract from the natural values of the landscape as would mooring sites for large vessels or activities such as paraflyng, waterskiing and jetskiing.

The national park and adjacent marine park are managed under their respective legislation in a co-ordinated and complementary manner.

Continue to liaise with neighbours, Aboriginal people with traditional links to the area, park users and other interested parties regarding park management issues and the values of the Great Barrier Reef World Heritage Area.

If impacts on Orpheus Island National Park reach unacceptable levels, the management of the surrounding marine park may need to consider limiting use levels through mechanisms such as controls on anchoring and permits for commercial use.

Issues that are likely to affect management of the national park, such as motorised water sports and the further development of pontoons, jetties and aquaculture projects, will need to be considered in any plan for the adjacent marine park.