master plan

for Queensland's Parks System

DISCUSSION PAPER

Queensland Government
Queensland Parks and Wildlife Service

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Queensland's first national park - Witches Falls at Mt Tamborine - was declared in 1908. Since the early days, people have fought for parks to protect forests and other places of great scenic beauty, protecting them from clearing and keeping them in public ownership.

Since that time, the Parks system has grown significantly, reflecting the importance our society places on the conservation of natural and cultural values.

In the last 25 years, managing the Parks system has become increasingly challenging, complicated and expensive. The area of the Parks system in Queensland has increased from just over 2 million hectares in 1979 to over 7 million hectares in 2000, as successive governments and the general community showed a commitment to building a comprehensive, adequate and representative reserve system. There are now much greater demands and pressures on Queensland's Parks system than there were a generation ago, and the community has higher expectations for effective, efficient and open management.

That's why we need to review the direction our Parks system should head over the next twenty years and into the future. The Master Plan will guide directions and strategies for managing our parks responsibly over the next twenty years, and will:

- review and reinforce the important role of parks into the 21st Century;
- affirm and pledge to continue the good work being done;
- identify where systems and management need to be improved;
- clearly state the visions and principles for park management over the next twenty years and into the future; and
- identify actions needed to achieve these visions.

The Master Plan is being developed through a cooperative process that will recognise a range of community needs, the priorities of Indigenous partners in management, and the conservation requirements of park ecosystems, species and genetic diversity.

This Discussion Paper has been developed by the staff of QPWS after consultation and input from a range of experts and an advisory forum consisting of people from a range of community organisations.

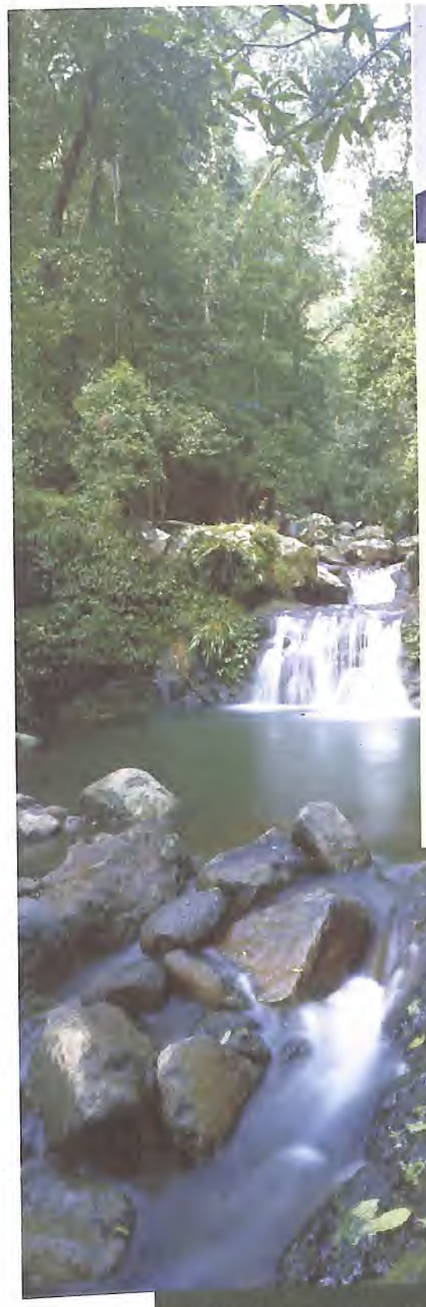
Now we would like to invite you to tell us what you think. Comments on this Discussion Paper are welcome. Your submission - as long or short as you wish - can be sent to us at -:

Master Plan,
Queensland Parks and Wildlife Service,
PO Box 155, Brisbane ALBERT ST 4002,
or masterplan@env.qld.gov.au

Every submission will be carefully read and considered in developing the Master Plan. The closing date for submissions to be considered is **30 March 2001.**

I look forward to your input.

Rod Welford
Rod Welford MP
Minister for Environmental Protection Agency and
Minister for Department of Natural Resources



Romeo Lahey, an energetic worker for the declaration of Lamington National Park.

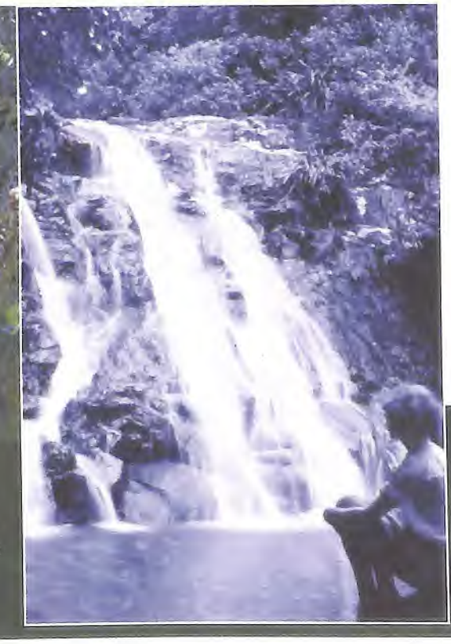
The fight for Lamington National Park

A campaign to conserve the now famous Lamington National Park began in the 1890s and was a prolonged process. Although some people were sympathetic to the new ideal, many others saw the land as a potential farm or timber supply and thought the whole conservation concept was dangerous.

One of those in favour of conserving the forests was Beaudesert district grazier and later parliamentarian Robert Collins, who first heard of the national park ideal on a trip to the United States in 1878. After making journeys into the McPherson Range and studying Aboriginal languages and customs, he began lobbying to create a national park in the mountains. He was fighting those who wanted the area for timber getting or pastoral development, but the greatest obstacle was public apathy and lack of understanding.

The National Park concept was new and barely understood, there was plenty of land available and most people could not see sixty years ahead to a time when unspoilt natural areas would be scarce. After Collins' death, the battle was continued by Romeo Lahey, member of a local timber milling family, and the area was finally declared a national park in 1915, almost twenty-five years after Collins suggested the idea.

Today, Lamington National Park is internationally renowned for its ecological importance and inherent beauty. Lamington was declared part of the World Heritage-listed Central Eastern Rainforest Reserves of Australia (CERRA) in 1994.



The 20,500 ha Lamington National Park includes a series of densely forested valleys and ranges rising to more than 1100m on the crest of the McPherson Range which marks the Queensland-New South Wales border.

Executive Summary

This Discussion Paper outlines for public discussion a future for management of the Queensland Parks system over the next 20 years. Once community response to this has been received, a Master Plan will be completed. This document will be aimed at a strategic level, and it will be complemented by an Implementation Plan and by more detailed Strategies, which will provide staff and the community with blueprints for actions in park management.

The Discussion Paper is divided into three sections.

In this summary, our commitment, a summary of park values, and a set of 12 principles for park management are put forward.

'Queensland's Parks - an overview' discusses the significance and values of our Parks system in the 21st century and briefly outlines the challenges facing park management.

'The Plan - parks on track for the future' proposes a strategy for bringing the 12 principles to life over the coming years, with aims and strategic actions for short-term and longer-term enhancement of park management.

THE PARKS FUTURE - OUR COMMITMENT

Recognising:

- that parks are cornerstones of an integrated strategy to conserve nature, including biological diversity and cultural heritage in Queensland, as part of a national and global system;
- that Indigenous peoples maintain strong links with the land on which many parks have been established;
- that parks should ensure the conservation of natural and cultural values for all time; and
- that continuing engagement between the community and parks, including opportunities for all people to visit and enjoy parks, is a fundamental purpose of management.

Swamp banksia *Banksia robur*, Fraser Island

Tommy George, traditional owner of parts of Lakefield National Park

Queensland is committed to maintaining for future generations a parks system which:

- protects and conserves comprehensive, adequate and representative samples of the State's natural and cultural values;
- inspires and encourages the community to engage with, understand, appreciate, and conserve parks, nature and cultural heritage; and
- is recognised and supported by the community as an important part of Queensland's social, cultural and economic life.

Hinchinbrook Island National Park

Parks

THE PURPOSE OF PARKS

Protected areas (including national parks and other reserves) play a vital role in the survival of the earth as a sustainable, functioning ecosystem, and thus in the future of people and other living things. Though parks alone will not ensure conservation of biodiversity, ecological processes or cultural values, a protected area system is the core of programs to maintain the diversity of ecosystems, species and wild genetic resources.

The Queensland Parks system consists of national parks and other types of protected areas, totalling over seven million hectares. Country protected in the Parks system ranges from rainforest to desert sand dunes and includes some of Australia's most spectacular scenery.

Short-beaked echidna *Tachyglossus aculeatus*

Queensland's parks are vital for safeguarding Queensland's natural heritage.

The Parks system is becoming a comprehensive, adequate and representative system which maintains and restores ecological processes and dynamics of ecosystems in their landscape context. Parks protect biodiversity at all levels from genes to landscapes, and a complete system will conserve viable examples of all ecosystems and viable populations of native species conserved throughout their natural ranges. Parks also protect genetic diversity and allow for ongoing evolution and for response to natural and human-induced climatic change. Parks provide effective protection to threatened and endangered plant and animal species.

Sophora tomentosa

Queensland's identity is associated with its natural landscapes, and natural, scenic and cultural values significant to our culture are protected in the Parks system.

The scenic landscapes, cultural values and historic sites in parks represent the living history of our relationships with the land. They are unique, irreplaceable parts of our identity, and should be protected and interpreted for the enjoyment of present and future generations.

Queensland's parks provide for the continued expression of Indigenous relationships with the land and waters, recognising traditional owners' rights and interests which coexist with the protection of natural values.

Significant Indigenous rights and interests continue to exist over many protected areas. The Government and traditional owners will develop agreements and cooperative arrangements regarding tenure, use and management of these areas to achieve the shared goal of maintaining the natural condition and Indigenous cultural heritage to the greatest possible extent.

Presentation of Queensland Parks provides visitors with enjoyment, inspiration and spiritual nourishment, nurturing a deep appreciation and respect for nature or attachment to the natural environment, and respect for traditional Indigenous culture.

Presentation provides an important means for achieving protection and transmission to future generations of natural and cultural heritage. Presentation of parks will involve an assessment of likely impacts to ensure the level and nature of visitation is consistent with the long-term conservation and the management principles of the parks.

Protected areas are community accessible resources which provide for recreational use through a range of opportunities, and as a specialised and significant part of the state's nature-based tourism activity with access based on the capacity of the resource and the maintenance of park values.

Parks generate substantial economic benefits and jobs for Queenslanders.

Our national parks are one of Queensland's biggest tourist attractions, hosting more than 12.5 million visits each year.

Parks provide vital 'ecosystem services' to the community.

For example, many of our parks protect watersheds, resulting in a clean, relatively reliable supply of water flowing from them to agricultural and urban lands downstream. Adjacent lands are protected from salination and erosion, common effects of widespread land clearing. People are now also aware of the value of parks as the large uncleared tracts of natural vegetation absorb greenhouse gases.

Parks are benchmarks for achieving ecologically sustainable management across all lands.

Where surrounding properties have been cleared or grazed for many years, parks remain as places where the natural diversity of plants and animals can be seen and monitored, and where the landscape remains healthy.

Parks are necessary elements in environmental education.

and in better understanding the importance of the natural environment for sustaining human life. Not only do they provide opportunities for further scientific research, but they also provide benchmarks for environmental standards in areas outside park boundaries. Queensland's protected areas provide valuable benchmarks against which landscape changes can be monitored.

Yellow-footed rock-wallaby *Petrogale xanthopus celeris*

BASIC PRINCIPLES OF PARK MANAGEMENT

Hakea meconochieana

Primary obligation

The Queensland Parks & Wildlife Service has an over-riding obligation to the community and the Government to protect the natural systems and cultural heritage contained in the parks estate. The protected area system must be managed as a key component of state-wide conservation efforts.

Squirrel glider *Petaurus norfulcensis*

CONSERVING NATURAL AND CULTURAL HERITAGE

The Queensland Parks system will be protected vigorously into the future.

The Parks system will be comprehensive, adequate and representative of Queensland's biological and landscape diversity, will include outstanding examples of natural and cultural heritage values, and will maintain the values of World Heritage Areas as key elements of the Parks system.

The natural integrity of parks will be conserved, with their natural values protected and presented, and parks will be integrated with good land management across the landscape.

The cardinal principle of national park management is to 'provide, to the greatest possible extent, for the permanent preservation of the area's natural condition and the protection of the area's cultural resources and values' *(Nature Conservation Act 1992)*. Maintaining natural integrity, cultural values and natural landscapes across time is the highest priority of national park management.

Intermediate egret *Ardea intermedia*

The cultural heritage values of parks will be protected and presented.

Parks will be cared for and presented in a manner that recognises and respects the links, both past and present, between the land and its people. Places and objects of cultural significance will be protected and presented according to current best practice standards. Indigenous cultural heritage will be protected, and where appropriate presented, in partnership with the traditional owners.

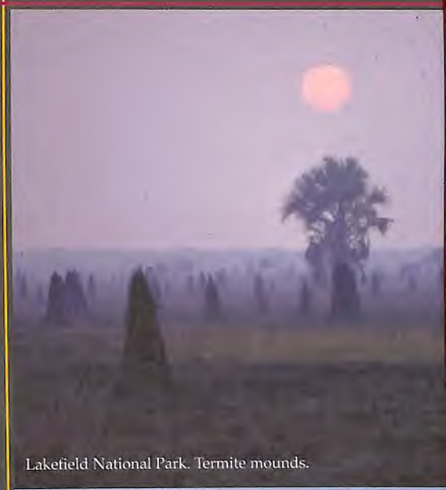
WORKING WITH COMMUNITY PARTNERS

Responsibilities, interests and aspirations of Indigenous peoples will be respected in relation to their lands, and their roles in park management will be supported.

The Parks system will be managed with a high level of cooperation between Indigenous peoples and the Service in a manner appropriate to Indigenous cultural heritage and the protection of natural and cultural values.

Parks will be managed in the context of surrounding landscapes with consideration of local community needs and aspirations.

Parks will be managed as models of resource management for the community through reciprocal 'good neighbour' relationships. Cooperation and partnerships in the management of parks and adjacent lands will be fostered with neighbours, local communities and local government. The important role of conservation on private lands will be appreciated and promoted.



Lakefield National Park. Termite mounds.

Great Sandy National Park. Lake Wabby Lookout.

Aboriginal art, Carnarvon National Park

Banksia aemula

SUSTAINING RECREATIONAL AND TOURISM OPPORTUNITIES

Opportunities will be provided for visitors to enjoy parks, and interpretive programs will enhance visitor awareness, appreciation and protection of nature and cultural heritage.

Parks will continue to provide opportunities for people to connect with nature across a wide range of landscapes, from rainforest to desert. Parks will attract visitors and provide opportunities for nature-based recreation in ways that enhance community support for conservation in Queensland and maintain the natural integrity of parks.

The Parks system will be managed to provide substantial and sustainable environmental, economic and social benefits to the Queensland community while maintaining the intrinsic values of all parks.

While parks have a fundamental conservation purpose, they make a major contribution to the economic and aesthetic well-being of Queensland and require investment for each of these purposes. This should be increasingly recognised by Government, community and industry. The primary function of conservation should never be made subordinate to any commercial use of parks.

Community awareness, appreciation and involvement in conservation will be encouraged through interpreting and presenting the Parks system.

Queensland Parks will provide current and future generations with enjoyment, inspiration and spiritual nourishment arising from appreciation and respect for nature or attachment to the natural environment. The community will be involved in park management through a range of partnerships, including participating in research and monitoring programs, volunteering in a range of park activities, and active community involvement in planning and management of parks.

ENHANCING MANAGEMENT CAPABILITIES

The Queensland Parks system will be planned and managed skilfully, effectively, adaptively and efficiently to maintain park values in conjunction with other private and State lands.

The Parks system will be managed through a comprehensive, integrated and transparent planning and policy framework. Park management will be based on plans, policies information systems and agreed standards which outline the basis for effective and efficient management.

Good management decisions will be made, based on high standards of information and wisdom and community involvement in decision-making.

Management actions will be based on good science and sound knowledge. Management will provide wise environmental stewardship based on applied science, a thorough knowledge of ecosystems and their components and park usage and impacts, and, where possible, Indigenous and community knowledge and experience.

A dedicated, skilled and motivated workforce will manage parks, with clear policies, directions and standards.

The Service values its staff as a professional, committed and dedicated resource, with clear reciprocal responsibilities between staff members and managers. The Service will have the necessary skills, resources and capability to protect, monitor, restore and present Queensland Parks.

Continual improvement in park management will be fostered through evaluation, learning, and reliable and logical allocation of resources.

Resourcing for Queensland's parks should reflect their irreplaceable value to the public, not only in conserving nature, but also in providing essential ecosystem services such as clean water, carbon sinks and gene pools, and in making a significant contribution to the local, regional and state economies. In addition to protection of park resources and appropriate presentation, core funding will provide for interpretation, research, inventory, monitoring and adaptive management to maintain and, where necessary, restore values and integrity, and for the development of cooperative arrangements with traditional owners.

Capparis loranthifolia, Mariala National Park

Herbie

Herbie - a symbol for conservation

The Herbert River ringtail possum has been the symbol of the Queensland Parks and Wildlife Service (and its predecessor Q.NPWS) since 1976.

This distinctive possum is restricted to Queensland, living only in the tropical upland forests between the Herbert River Gorge and Cooktown. It is rarely seen as its habitat is quite restricted, it is active at night and it moves around in the highest branches of the forest.

It is dependent for its survival on careful conservation of the environment, and is a symbol of our need and responsibility to care for our natural heritage.

QueenslandParks – anoverview

QUEENSLAND'S PARKS ARE PART OF A WORLD PARKS SYSTEM

'It is essential to have our eyes firmly fixed on future generations to focus first and foremost on the goal of preserving functioning ecosystems, with public use and enjoyment accommodated in ways that are compatible with that primary goal'

Bing Lucas, 1999

Visitor awed by a strangler fig on the Scenic Circuit at Bunya Mountains National Park.

Girraween National Park. Rock rose *Phebalium rotundifolium.*

Protected areas (including national parks and other reserves) play a vital role in the survival of the earth as a sustainable, functioning ecosystem, and thus in the future of both people and other living things. Though parks alone will not ensure conservation of biodiversity, ecological processes or cultural values, in most countries a protected area system is the core of programs to maintain the diversity of ecosystems, species and wild genetic resources.

The world network consists of over 30000 protected areas, with most countries having now established, or at least planned, national systems.

A protected area is defined by the IUCN (World Conservation Union) Commission on Protected Areas as: 'An area of land and/or sea especially dedicated to the protection and maintenance of biological diversity, and of natural and associated cultural resources, and managed through legal or other effective means' (IUCN 1994).

Protected areas include national parks and a range of other types of reserves.

This Master Plan covers Queensland's protected areas declared under the Nature Conservation Act 1992 *and refers to these as 'parks'. Marine parks are not included in this Plan, though island national parks within the marine parks are included.*

World Conservation Union (IUCN) (1994). *Guidelines for protected area management categories.* Gland, Switzerland. IUCN.

PHOTO - Kerry Trapnell

Functions and benefits of a protected area system

A protected area system provides safeguards for:

- *natural and modified systems that are essential for maintaining life-support systems, conserving wild species and areas of particularly high species diversity, and supporting scientific research;*
- *culturally important landscapes (including places that demonstrate harmonious interactions between people and nature), historic monuments, and other heritage sites in built-up areas;*
- *sustainable use of wild resources in modified ecosystems;*
- *traditional, sustainable use of ecosystems in sacred places or traditional sites of harvesting by indigenous peoples; and*
- *recreational and educational uses of natural, modified and cultivated ecosystems.*

Protected areas can be especially important for communities when they:

- *conserve water and soil in zones that are highly erodible if the original vegetation is removed, notably the steep slopes and upper catchments and river banks;*
- *regulate and purify water flow, notably by protecting wetlands and forests;*
- *shield people from natural disasters, such as floods and storm surges, by protecting water-shed forests, riverine wetlands, coral reefs, mangroves and coastal wetlands;*
- *maintain natural vegetation on soils of inherently low productivity that would, if transformed, yield little of value to human communities;*
- *maintain wild genetic resources or species important to medicine;*
- *protect species and populations that are highly sensitive to human disturbance;*
- *provide habitat that is critical to harvested, migratory or threatened species for breeding, feeding or resting; and*
- *provide income and employment, notably from tourism.*

Source: IUCN et.al.*1991, p.37*

National parks play vital roles in catchment protection.

Eungella National Park.
Azure kingfisher *Alcedo azurea.*

World Conservation Union (IUCN), United Nations Environment Program (UNEP) and World Wide Fund for Nature (WWF) (1991). *Caring for the earth: a strategy for sustainable living.* Gland, IUCN.

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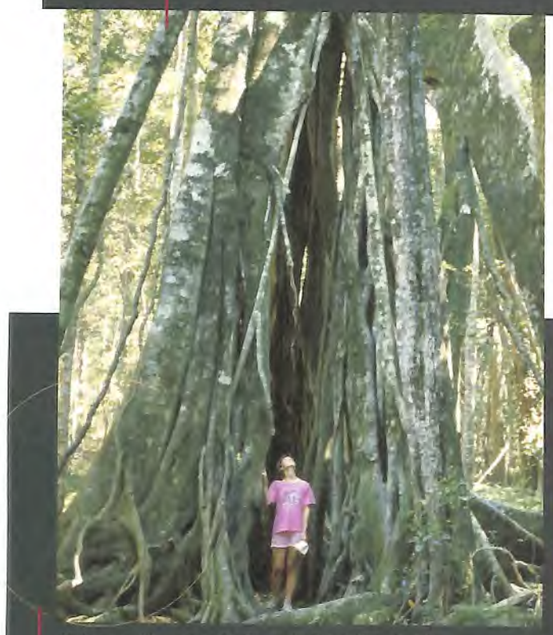

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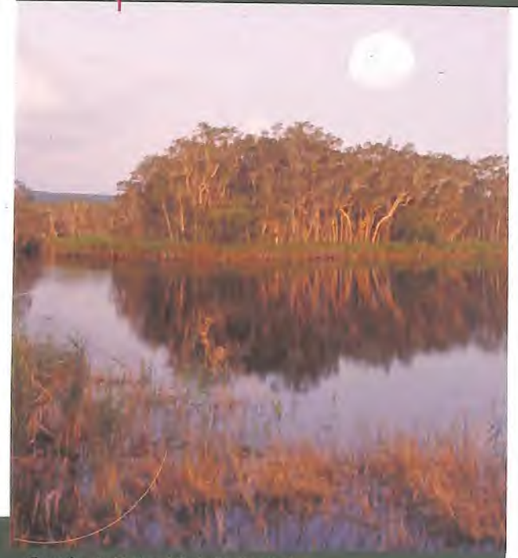
WHAT KINDS OF PARKS OR PROTECTED AREAS DO WE HAVE?



Great Sandy National Park, Fig Tree Lake.

The Parks system in Queensland includes a total of 482 parks (protected areas), from a range of different types or classes. This range allows for different kinds of parks to be declared for different functions. Some parks are very strictly protected, while others are multi-use reserves allowing for both conservation and production, and may be declared by agreement over private land to protect specific values.

Parks are protected by law. Under the *Nature Conservation Act 1992*, 12 different classes of protected areas can be declared to protect Queensland's biological diversity and outstanding natural and cultural features.

The classes are-:

National parks (Scientific)

National parks

National parks (Aboriginal land)

National parks (Torres Strait Islander land)

National parks (Recovery)

Conservation parks

Resources reserves

Nature refuges

Coordinated conservation areas

Wilderness areas

World Heritage Management Areas

International Agreement Areas

The management principles for each of these classes are spelt out in the following pages.

Protected area type	Number	Area
National parks	212	6,623,575
National parks (scientific)	7	52,181
Conservation parks	169	34,663
Resources reserves	39	350,715
Nature refuges	55	17,040
Coordinated conservation areas	1	1170
	Total	7,079,344

Queensland parks statistics at November 2000

NATIONAL PARKS

Most protected areas in Queensland are national parks. The management principles for national parks are:

- ***As the cardinal principle***, to provide, to the greatest possible extent, for the preservation of the natural condition and the protection of cultural resources;
- Present the area's cultural and natural resources, and their values; and
- Ensure that the only use of the area is nature-based and ecologically sustainable.

Girraween National Park, Sphinx Rock.

NATIONAL PARKS (SCIENTIFIC)

National parks (scientific) are established to protect places or species with exceptional scientific value. This type of protected area gives a high level of protection for nature. Scientific study and monitoring are allowed under strict conditions, and parks can be managed as necessary to control threatening processes. Entry to a national park (scientific) is by special permit and there is no provision for recreational use. Epping Forest, the site of the last remaining colony of the endangered northern hairy-nosed wombat, is a national park (scientific).

Epping Forest National Park (Scientific), home of the endangered northern hairy-nosed wombat *Lasiorhinus krefftii*.

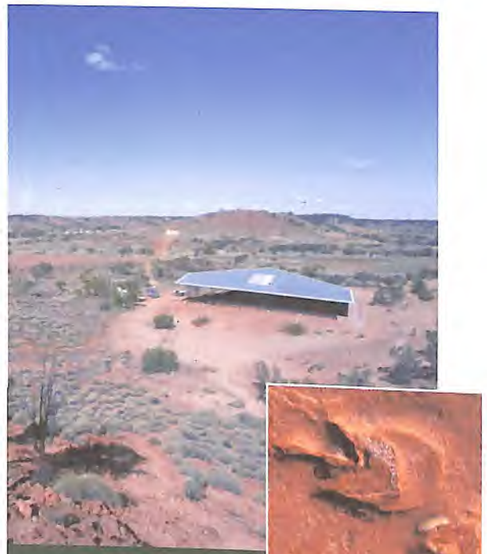
Conservation parks

Like national parks, conservation parks are managed:

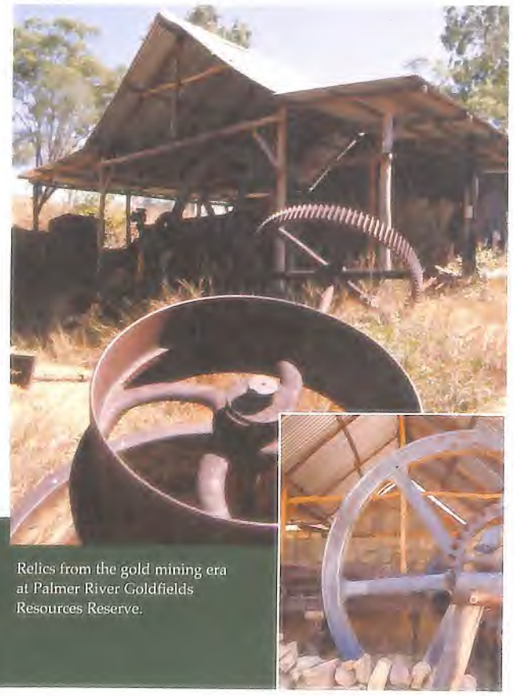
- to conserve and present the area's cultural and natural resources and their values; and
- to permanently conserve the area's natural condition.

Though the primary purpose is still conservation, a greater range of activities can be undertaken on conservation parks than on national parks. Any commercial use of the area's natural resources such as fishing and grazing must be ecologically sustainable. Educational activities and nature-based recreation are encouraged.

Conservation parks can be managed or co-managed by trustees, such as local government. Conservation parks protect and manage scientific sites and special natural features, such as the turtle rookery at Mon Repos near Bundaberg and dinosaur tracks at Lark Quarry outside Winton.



The dinosaur tracks at Lark Quarry Conservation Park are protected from the elements.



Relics from the gold mining era at Palmer River Goldfields Resources Reserve.

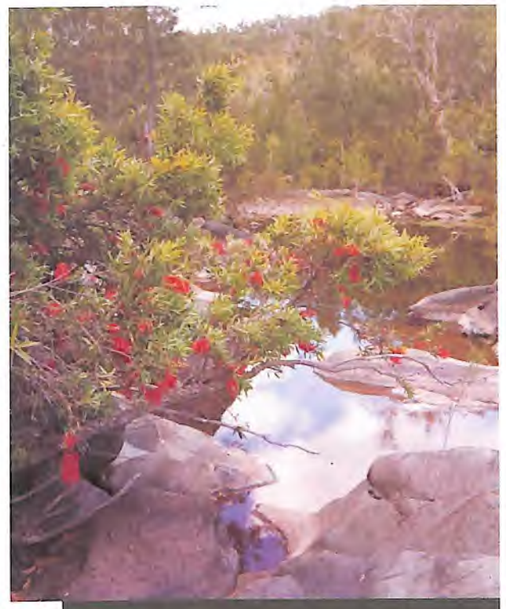
Resources reserves

Resources reserves are declared over land which has high conservation value but cannot be reserved as national or conservation park: for example, areas subject to fossicking, mining or intensive tourism. Sometimes resources reserves might protect land which will eventually be converted to national park but need to be rehabilitated first.

Resources reserves are managed to:

- recognise and protect the area's cultural and natural resources;
- provide for the controlled use of those resources; and
- ensure the area is kept mainly in a natural condition.

Trustees can be appointed to manage a resources reserve. An example of this type of protected area is Palmer River Goldfields Resources Reserve in north Queensland.



Burwood Nature Refuge near St Lawrence protects several regional ecosystem types, some of which are not well represented within protected areas along the Central Coast.

Nature refuges

Private landholders can help protect native wildlife and wildlife habitat by having their property declared refuge.

A nature refuge can be declared over any land, State or freehold, to protect significant natural resources, such as wildlife habitat, and to provide for controlled use of those natural resources, taking into account the landholders interests. This does not change the ownership of the land.

Properties which could become nature refuges might:

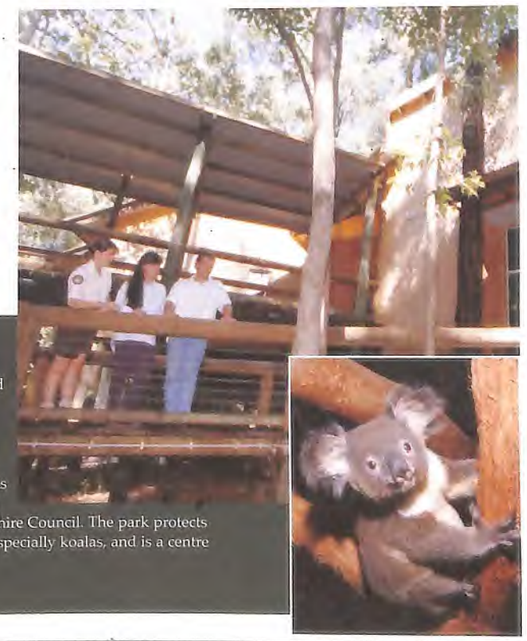
- have significant wildlife values;
- provide a wildlife refuge during drought;
- contain special features, such as geological formations or fossils; or
- contain rare and/or threatened plants and animals or communities.

Once a property (or part of a property) becomes a nature refuge, a voluntary conservation agreement is developed to protect the land's conservation values and to guide the way the property is managed. This agreement is between the State of Queensland and the landholder, and is usually binding on future landholders.

Activities and management arrangements are detailed in the conservation agreement. The property can still be used for agriculture, grazing, timber production and tourism, provided those activities are ecologically sustainable.

Coordinated conservation areas

A coordinated conservation area provides for consistent management of adjacent areas of varying tenure to conserve the area's natural and cultural values, and take account of educational, commercial, recreational and other values. Landholder interests must be maintained.



Koala Bushland Coordinated Conservation Area covers 1170 hectares of remnant bushland in areas held by Department of Natural Resources, Queensland Parks and Wildlife Service, Logan City Council and Redland Shire Council. The park protects habitat for native animals, especially koalas, and is a centre for interpretation.

National parks (Aboriginal land) and National parks (Torres Strait Islander land)

National parks made available for claim under the *Aboriginal Land Act 1991* or the *Torres Strait Islander Land Act 1991* can also be made national park (Aboriginal land) or national park (Torres Strait Islander land). These areas are managed as national parks but, as far as practical, any Aboriginal tradition or Torres Strait Islander custom which apply to the area are respected and protected.

Traditional use of native plants and animals is possible, according to a management plan. For example, some native animals may be hunted on such parks under certain conditions.

National Parks (recovery)

Where an area is intended to become national park, but has been degraded and needs some manipulation of its natural resources to restore its conservation values, it can be declared a national park (recovery) or in effect a 'national park in waiting'. On this kind of park, for example, native vegetation might have been cleared in the past and replaced with a plantation of exotic trees. The restoration activity might be removing the unwanted plantation timber, followed by active planting or passive regeneration of the damaged land.

As well as the restoration activities, the management principles require that the park is managed to protect or restore the park's natural condition and protect its cultural values so it can be declared a national park. Any commercial or other use of the park's natural resources to restore its conservation values must be consistent with an approved regeneration plan, and other uses of the park must be nature based.

Parks which are strictly protected (such as national parks) will be managed in a different way from 'multiple use' parks which have both conservation objectives and other uses, such as nature refuges. All types of parks have important, but different, roles to play in conservation.

National parks provide a high level of protection for natural and cultural values and have many important functions.

Multiple-use parks can set an example for the community in the management of land which is used for production but also protects key natural or cultural resources such as an endangered animal, a unique habitat or an historic site.

World Heritage management areas

Any area on the World Heritage list can be protected under this category. If an area were declared a World Heritage management area, the area would be managed to:

- meet international obligations;
- protect the outstanding cultural and natural resources and biological diversity of the area; and
- convey the area's World Heritage values to the community.

A management plan must be prepared before a World Heritage management area can be declared.

Wilderness areas

Wilderness areas are managed to protect or restore wilderness values and maintain such areas without significant human interference. Wilderness areas can be declared over various tenures including national park.

International agreement areas

Where an international treaty exists to protect nature, international agreement areas can be established to maintain the area's conservation importance and conserve the area's wildlife. Landholder activities might be restricted to protect wildlife, but landholder interests must be taken into account. A management plan must be prepared before the area can be declared.

Black-winged stilt *Himantopus himantopus*

World Heritage areas

World Heritage Areas are listed to protect outstanding examples of the world's natural and cultural heritage for future generations, and they represent vitally important links between the past and the future.

All countries have sites of local or national heritage significance, some of which are conserved as national parks. However, to qualify for inscription on the World Heritage List, applications undergo a rigorous examination by The World Heritage Committee, on the basis of technical evaluations provided by independent advisory bodies. To be included on the World Heritage List, sites must satisfy the selection criteria outlined in the World Heritage Convention. Without the support of the Convention and World Heritage listing, the values of some sites throughout the world would deteriorate, often through lack of funding to preserve them.

World Heritage listing does not affect ownership rights. World Heritage properties in Australia do not become Commonwealth property.

Australia's World Heritage properties comprise a wide variety of land tenures including freehold, pastoral lease, State forest, national park and Aboriginal reserve. Management arrangements vary from property to property.

Inscription of a property on the World Heritage List can produce many benefits for Australian communities. For example, World Heritage listing for the Great Barrier Reef has featured in promotions resulting in an increase in tourism. World Heritage listing also cultivates local and national pride in the property and develops feelings of responsibility to protect the area.

WORLD HERITAGE AREAS IN QUEENSLAND

Of the 13 World Heritage sites inscribed in Australia, 5 are in Queensland and are managed by the QPWS in conjunction with its government and community partners.

Fraser Island

Fraser Island is the world's largest sand island which:

- is an outstanding example of ongoing ecological and biological processes; and
- contains superlative natural phenomena.

With its freshwater lakes, coloured sand cliffs, rainforests growing in sand, crystal-clear creeks and long white beaches, Fraser Island is a beautiful place to visit.

The Queensland Parks and Wildlife Service manages Fraser Island as a recreation area and national park and is working with the community to preserve this very special part of our heritage.

World Heritage Areas in Queensland

Property	*Area*	*Date of inscription*
Wet Tropics	*894,420ha*	*1988*
Great Barrier Reef	*34,870,000ha*	*1981*
Central Eastern Rainforests Reserves of Australia (CERRA) partly in Queensland	*370,000ha (NSW: 310,000ha; Qld: 60,000ha)*	*1986, 1994*
Australian Mammal Fossil Sites partly in Queensland	*10,300ha. (Riversleigh, Qld 10,000ha and Naracoorte.SA 300ha)*	*1994*
Fraser Island	*Approximately 166,283ha*	*1992*

Fraser Island World Heritage Area.

Stretching 123km along Queensland's southern coast, Fraser is the world's largest sand island. More than 98 % of its 165,280 hectares is part of the larger Great Sandy National Park. Dingoes on the island are considered the purest strain of dingoes remaining in eastern Australia.

Wet Tropics

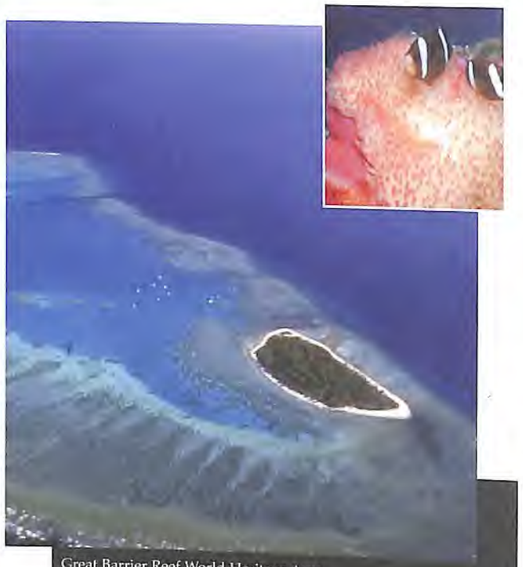
The Wet Tropics of Queensland is one of a handful of sites worldwide which met all four criteria for World Heritage listing. The Wet Tropics:

- represents a major stage of the earth's evolutionary history;
- is an outstanding example of ongoing ecological and biological processes;
- contains superlative natural phenomena; and
- contains the most important natural habitats for conservation of biological diversity.

Australia's most extensive remaining area of wet tropical rainforests is protected here and the area also has the highest concentration of primitive flowering plant families in the world. Spectacular scenery goes hand-in-hand with many rare and threatened plant and animal species, including the southern cassowary and the spotted-tailed quoll.

The Wet Tropics area includes many national parks, such as Daintree, Barron Gorge and Wooroonooran National Parks. Management of the Wet Tropics also has special regard for Aboriginal interests in the tropical rainforest, given the long history of Aboriginal occupation of the region. The Bama people who live here have a history dating back 50 000 years to the earliest human occupation of this continent.

Daintree National Park is part of the Wet Tropics World Heritage Area which protects Australia's most extensive remaining area of wet tropical rainforest



Great Barrier Reef World Heritage Area.
Lady Musgrave Island is protected as national park while the surrounding tidal and marine areas are part of the Mackay/Capricorn Marine Park and the Great Barrier Reef Marine Park

Great Barrier Reef

The Great Barrier Reef, the world's largest coral reef, meets all four natural World Heritage criteria:

- represents major stages of the earth's evolutionary history;
- is an outstanding example of ongoing ecological and biological processes;
- contains superlative natural phenomena; and
- contains important natural habitats for conservation of biological diversity.

More than 1500 species of fish, 4000 species of molluscs, 400 species of sponge and 300 species of hard corals live here. Extensive seagrass beds provide a home for the threatened dugong. Threatened green and loggerhead turtles nest on islands in the Great Barrier Reef. Humpback whales migrate north to the Reef to give birth. Bird life is abundant.

The Reef is very important to Aboriginal and Torres Strait Islander people. Significant cultural sites are located on many Reef islands.

Responsibility for the Great Barrier Reef Marine Park is shared between the Commonwealth and Queensland Governments.

Central Eastern Rainforests

The Central Eastern Rainforests Reserves (Australia) World Heritage area (CERRA), originally listed in 1986 to cover rainforests in New South Wales, was extended in 1994 to include rainforests on the Queensland side of the border.

The CERRA area meets three natural criteria for listing:

- it represents a major stage of the earth's evolutionary history;
- it is an outstanding example of ongoing ecological and biological processes; and
- it contains the most important natural habitats for conserving biological diversity.

This property contains warm temperate, cool temperate, sub-tropical and dry rainforests, and protects the world's most extensive subtropical rainforest and nearly all of the world's Antarctic beech cool temperate rainforest. These rainforests provides a home for many rare and threatened plants and animals and ancient life forms. The rainforests contain more frog, snake, bird and marsupial species than anywhere else in Australia.

Protected areas in this property include Lamington, Springbrook, Mt Barney and Main Range National Parks. The New South Wales and Queensland Governments work together to protect this property.

Antarctic beech trees in a cool misty area in Springbrook National Park, part of the Central Eastern Rainforests Reserves (Australia) World Heritage Area

Riversleigh, which forms part of the Australian Fossil Mammal Sites (Naracoorte/Riversleigh) World Heritage Area, is protected as part of Lawn Hill National Park

Riversleigh

Riversleigh, in north-west Queensland, is part of the Australian Fossil Mammal Sites World Heritage area and was placed on the World Heritage List because it has outstanding natural heritage values. This site covers two areas —Riversleigh and Naracoorte Caves in South Australia.

Riversleigh:

- represents a major stage of the earth's evolutionary history; and
- is an outstanding example of ongoing ecological and biological processes.

The Riversleigh fossils preserve at least 20 million years of evolutionary history, one of the world's best records of our mammal history. This fossil record helps us understand how animals coped when the environment changed drastically overtime from wet rainforests to dry grasslands. Scientists hope that this information can be used to conserve our native mammals and prevent their extinction.

The Queensland Parks and Wildlife Service manages Riversleigh as part of Lawn Hill National Park.

PARKS - PLACES WORTH KEEPING

Great egret *Ardea alba*

Biological diversity is defined in the Nature Conservation Act 1992 *as 'the natural diversity of wildlife (including plants and animals), together with the environmental conditions for their survival'. The Act also specifies that this diversity is at different scales:*

- *regional diversity - the different kinds of landscape which vary from the Mitchell Grass downs to the forested mountains and coastal plains of the Wet Tropics;*
- *ecosystem diversity - the different communities of plants and animals;*
- *species diversity - the number of different species in an area; and*
- *genetic diversity - diversity in the genetic make-up of individuals and populations.*

Biological diversity at all levels can best be protected by conserving the habitats in which animals and plants naturally live. Special programs like breeding endangered species in zoos can only help to save a fraction of the diversity of life. Animals and plants need their natural habitats.

Parks conserve the diversity of life

An amazing range of life, from microscopic bacteria to giant forest trees, from brilliant butterflies and birds to shy wallabies and snakes, is protected in Queensland's parks.

WHY CONSERVE BIOLOGICAL DIVERSITY?

Parks systems are a vital component in protecting the living diversity of the earth and maintaining the species that inhabit it, including people. Many species and ecosystems would not have survived in their natural environments without parks.

The quality of human life depends on biological diversity. Biological resources are necessary for many life-sustaining processes we take for granted, including oxygen supply, clean water, soil formation, flood prevention, climate regulation and waste cleansing. In addition to this, we have an economic reliance on nature to provide food, medicine and other raw materials.

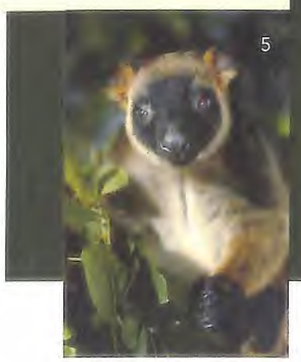
Parks help preserve the genetic variety and the potential for continuing evolution of Queensland's native plants and animals in their natural habitats, which is essential for sustaining and enhancing forestry, agricultural and fishery production. Protected areas provide opportunities for future expansion of ecologically based industries, such as the pharmaceutical industry. The loss of species diversity means options for future benefits are foregone - many species are lost forever before they are even recognised by science.

Parks are also necessary elements in environmental education and in better understanding the importance of the natural environment for sustaining human life. Not only do they provide opportunities for further scientific research, but they also provide valuable benchmarks against which landscape changes can be monitored outside parks. In a world increasingly dominated by humans, there may be relatively few opportunities outside national parks to study natural ecosystems.

Queensland is home to more Australian plants and animal species than any other state or territory. The State's vegetation ranges from heaths and temperate woodland to tropical rainforests, and contains some 8044 flowering plants, gymnosperms and fern species. Diversity of vegetation is matched by the variety of wildlife. Most of Australia's vertebrate animal species, including 210 species of native mammals, 594 native birds, 114 native frogs and 429 native reptiles, live in Queensland.

Twenty-eight different species of the kangaroo family are found in Queensland. The tiny musk rat kangaroo weighs just over half a kilogram, while the red and grey kangaroos can weigh over 80 kilograms. Conserving this diversity of kangaroo species requires a wide range of habitats to be protected. For example:

- *Grey kangaroos favour eucalypt forest and adjacent grassland;*
- *Red kangaroos live in semi-arid and arid woodlands and grasslands;*
- *Musk rat kangaroos are restricted to tropical closed forests;*
- *Rufous bettongs live in coastal eucalypt forests with a dense grassy understorey;*
- *Red-legged pademelons are found in rainforest and wet sclerophyll forest and occasionally deciduous vine thicket;*
- *Yellow-footed rock-wallabies live only along cliff-lines at the edges of low tablelands in mulga areas;*
- *Bridled nail-tail wallabies are restricted to a narrow range in semi-arid acacia shrubland and grassy areas;*
- *Lumholtz's tree-kangaroos live in coastal rainforest of north-eastern Queensland; and*
- *Whiptail wallabies are found in moderately dense dry sclerophyll forest and woodland with understorey of short grasses on slopes and hilltops.*



1. Eastern grey kangaroo *Macropus giganteus*
2. Yellow-footed rock-wallaby *Petrogale xanthopus celeris*
3. Bridled nailtail wallaby *Onychogalea fraenata*
4. Rufous bettong *Aepyprymnus rufescens*
5. Lumholtz's tree-kangaroo *Dendrolagus lumholtzi*

How do parks in Queensland protect biological diversity?

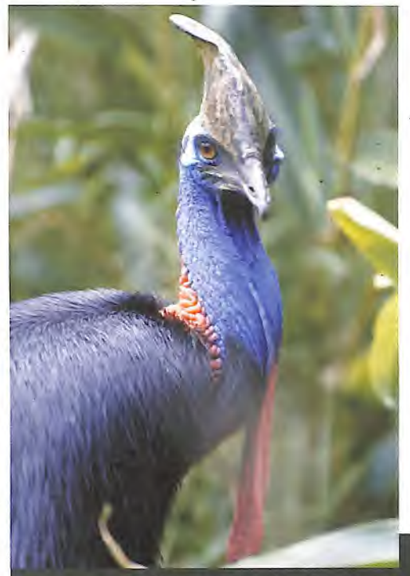
In Queensland, biodiversity is under pressure from many influences, including rapid population growth, increased tree clearing, grazing and the extent of many pest plants and animals. The future of one in 12 of our native animal species and four percent of our native plants is doubtful.

The protection of land in Queensland's parks since 1908 has saved many species and ecosystems from likely extinction as surrounding lands have been cleared and developed. Many new species have been discovered in parks after their declaration. As more research is undertaken, further discoveries are likely and will be of benefit to society in understanding our environment.

It is a considerable challenge to conserve all the levels of biological diversity (genetic, species, ecosystem and landscape) in the most effective and efficient way possible. Since the 1970s, in Queensland, scientists have extensively researched Queensland's natural diversity and have classified the State into 13 'bioregions'[1], which describe the broad types of 'landscapes' or natural systems found across the state. Each bioregion is further divided into units called regional ecosystems, which are based on vegetation communities consistently associated with a particular combination of geology, landform and soil.

The bioregions and regional ecosystems of Queensland have been the fundamental framework used in planning the expansion of the national park estate over the past two decades. By conserving the ecosystems and their essential ecosystem processes, most of the diversity of plants and animals can also be protected. However, there are also cases where parks have been declared to protect particular plants or animals.

National parks currently protect about 69 percent of the State's regional ecosystems as 'surrogates for biodiversity' across these bioregions. It is estimated that the national park system would need to cover about five percent of the State to protect more than 80 percent of the State's regional ecosystems. Deficiencies in representativeness still occur in many of the inland bioregions, coastal and arid wetlands and the 'brigalow belt'.



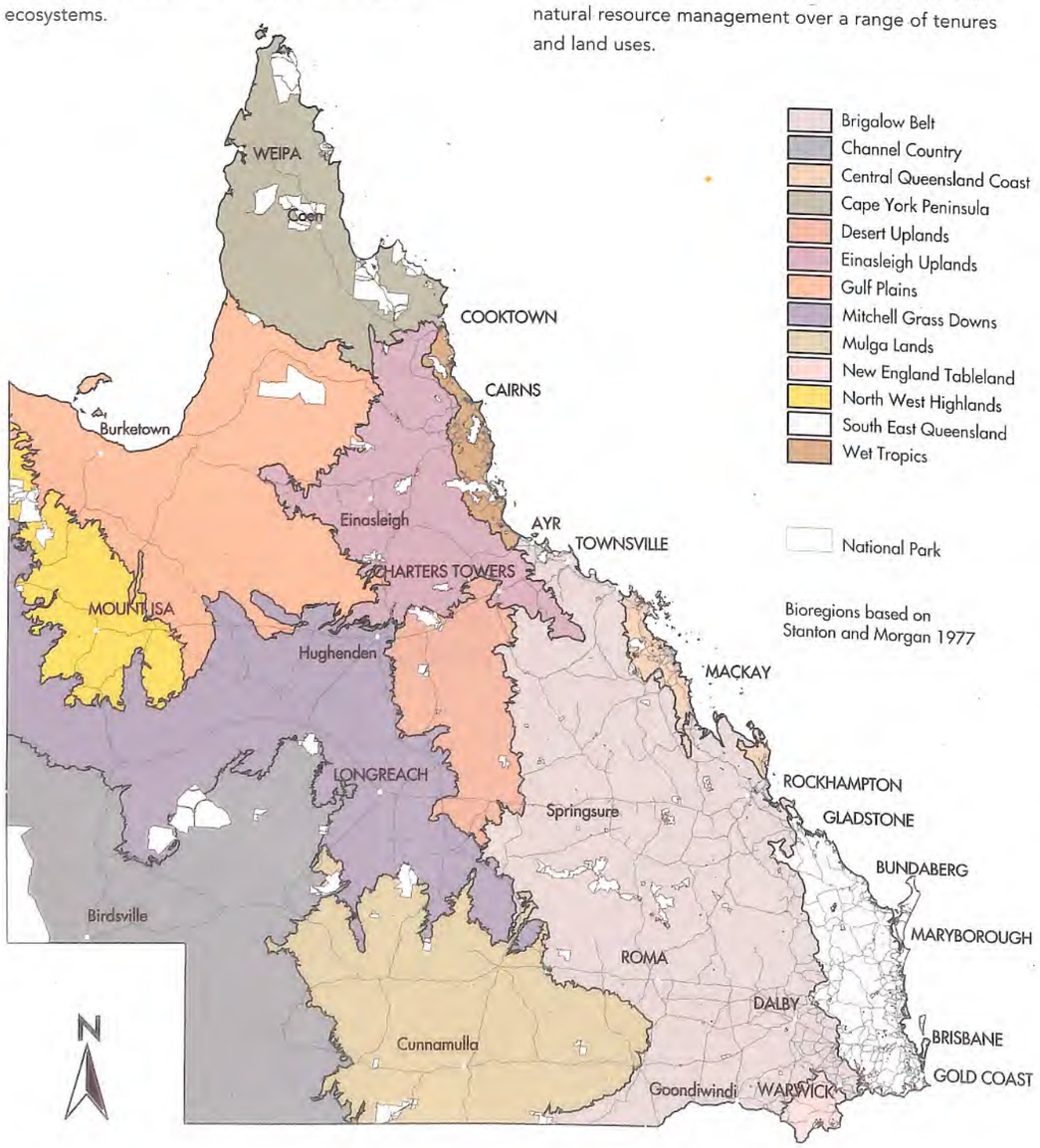
Southern cassowary *Casuarius casuarius*

Christmas bells *Blandfordia grandiflora*

[1] These bioregions differ slightly from those recognised in the Interim Biogeographic Regionalisation of Australia(IBRA) (Thackway and Creswell 1995). This is because a number of bioregions with most of their area in adjacent states also project into Queensland. In Queensland terminology, these systems with only minor representation are recognised as distinct provinces within the 13 bioregions. In addition, the IBRA system divides the Brigalow Belt into two regions (BB North and BB South).

The table opposite shows the conservation status of Queensland's regional ecosystems. Some 30% are considered threatened. Future acquisitions will protect many unrepresented ecosystems together with those that are poorly conserved or at risk. Consolidation of the Parks system across all bioregions will provide additional protection to the species and regional ecosystems.

However, as wildlife knows no boundaries, nature can not be conserved in a Parks system alone. Protecting Queensland's biodiversity can only be achieved by incorporating a range of off-park conservation strategies which complement park management initiatives. Parks will continue to be the cornerstones of a state-wide conservation system which also involves careful natural resource management over a range of tenures and land uses.



Reservation status of Queensland's regional ecosystems (RE) and their degree of replication in protected areas

Biogeographic region area (ha)	Regional area (ha)	Protected (REs)	No. of in protected areas	No. of REs in protected areas	% REs more than one protected area	% in REs
North West Highlands	6 950 000	369 100	41	27	66	22
Gulf Plains	21 377 000	525 300	83	25	30	10
Cape York Peninsula	11 548 000	1 594 100	211	177	84	54
Mitchell Grass Downs	22 787 000	238 900	53	21	40	15
Channel Country	24 594 000	1 634 700	56	44	79	52
Mulga Lands	19 097 000	464 900	66	47	71	39
Wet Tropics	1 850 000	310 400	105	71	68	41
Central Queensland Coast	1 151 000	142 300	37	33	89	59
Einasleigh Uplands	12 808 000	226 900	46	26	57	11
Desert Uplands	6 882 000	153 800	58	25	43	9
Brigalow Belt	35 158 000	730 400	163	110	67	39
South East Queensland	8 231 000	341 800	145	125	86	49
New England Tableland	341 000	26 500	21	14	67	19
Total	172 774 000	6 759 100	1085	745	69	39

Sattler and Williams 1999

The Mulga lands strategy - high representation in a small area

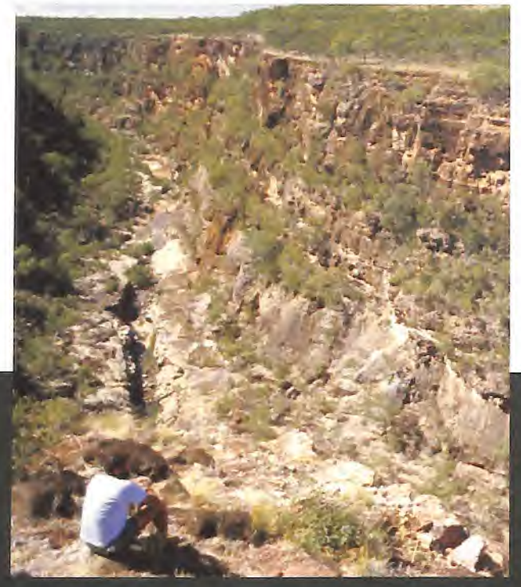
The Mulga lands strategy shows the efficiency and effectiveness of a systematic approach to conserving biodiversity across a bioregion. Prior to 1984 the Mulga Lands bioregion, which covers 20 million hectares or 12% of Queensland, was represented in only one conservation area covering only 0.1% of the bioregion.

In 1984 a study was carried out to determine the conservation needs of the Mulga lands bioregion and to delineate a network of reserves to meet those needs. Using the criteria of diversity, representativeness, rarity, naturalness and effectiveness, the whole bioregion was assessed and 13 properties identified, comprising only 3% of the bioregion but containing up to 92% of the biodiversity.

This allowed for acquisition action to focus on particular properties that would deliver the greatest value for the least cost. Currently 70% of the regional ecosystems are represented in the reserve system, which covers only 2.4% of the bioregion.

Currawinya National Park was established in 1991 to conserve wetland areas and other Mulga ecosystems.

Sattler, P.S. and Williams, R.D.(eds) (1999) *The Conservation Status of Queensland's Bioregional Ecosystems*. Published by the Environmental Protection Agency.



Above: Lookout at Porcupine Gorge National Park.
Right: Caiwarro ruins at Currawinya National Park provide visitors with a link to the pastoral history of the area.

Parks conserve cultural, scenic and spiritual values

Parks protect natural, scenic and cultural values which contribute significantly to Queensland's, and Australia's, identity. The scenic landscapes, cultural values and historic sites in parks represent the living history of our relationships with the land. They are unique, irreplaceable parts of our identity, and should be protected for the enjoyment of present and future generations.

Parks provide scenic backdrops to communities and tourist attractions, and valuable green spaces between urban settlements.

For many people who live in landscapes away from nature, parks give a rare chance to experience the beauty and the sometimes harsh reality of the natural world.

By protecting the diversity of landscapes, parks provide the opportunity for people to connect with the land and to experience and understand our natural and cultural heritage. We are connected again with the earth and its creatures and with whatever we perceive as the force of life. Perhaps we reflect how countless generations of humans felt about the land.

For Indigenous people, connection with nature and with their country is both a life-giving joy and an obligation to care for their country and for anyone who visits it.

PHOTO - Queensland Times

Our material needs for food and drink, shelter and security are obvious enough. So now are their accelerating impacts in this technological age: destruction and pollution of the essential natural ecological processes of soils, water, air and vegetation Losses of wildlife and their intrinsic values are irreversible. We now find ourselves in the throes of a social revolution globally against the pervasive forces of the extractive economy and the 'bottom line'.

The dramatic changes in our environment have ignited a widening search for our identity and safety as humans. We have a deep-down, psychic need for direct experience and intimacy in natural environments. The human species evolved over thousands of generations in close connection with the earth, whereby we became 'programmed' for sensory inputs of diverse qualities. Cultural as well as biological coding, and the evolution of reflexive thought, provide our unique self-awareness. In us, the universe has become aware of itself! Thus we cannot escape our moral responsibility to protect the earth, as ourselves, together.

Within less than 20 generations, the scientific-technological revolution has produced a largely artificial world, especially in cities, where despite amazing innovations, the satisfaction of human psychic needs and peace of mind are being lost. Desperation hangs heavy in the air, invisibly with pollution and violence of all kinds. The power of traditional virtues in cultural coding is threatened by greed, ignorance and lack of respect for nature.

Yet hope persists.As human beings we can draw strength from natural environments whose cultural and now therapeutic values are at last being accepted.

Fortunately, there have been far-seeing and sensitive people who battled for the protection of national parks, nature reserves and similar areas. It is now up to governance at all levels to ensure that ecologically-based management of remaining natural and semi-natural protected areas, along with other healthy productive landscapes, ensures their vital contribution to our physical, mental, emotional and spiritual health.

Professor Len Webb AO April 00

Although I am a long way from my land, I am still part of that land through the ways, culture, beliefs that my father taught me. I feel close through the ceremonies, singing and dancing and language.

It is so important that land is still looked after. People (and community) go out to hunt and gather food to be close spiritually and for healing. It is not a land without people.
People and land are one, because through land is survival.

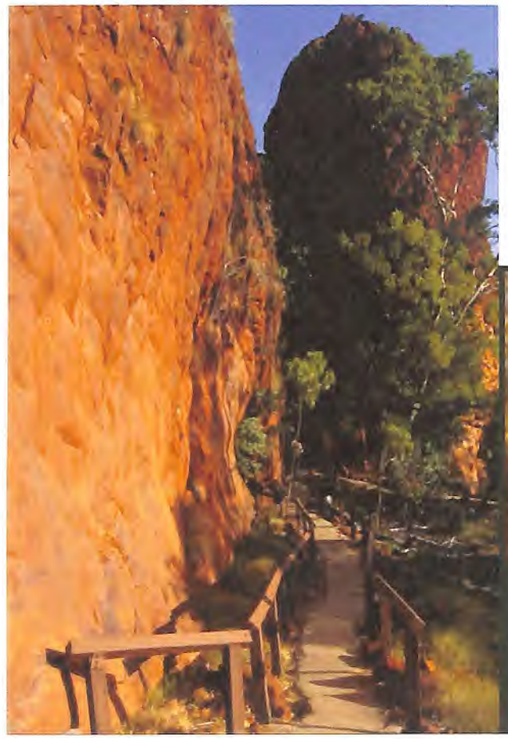
We call it Mother Nature.

Land is important not only for people in the past but also we want the children of tomorrow to share what our elders have taught us. We do not want to see it spoilt and die. We want next generation to carry on culture, ways, environment, of survival, ceremonies, dreaming. It is important we keep this land through dreaming.

Gladys Tybingoompa

PHOTO - Kerry Trapnell

Gladys Tybingoompa searching for yams.



Parks including Lawn Hill (left), Noosa (above left) and Carnarvon (above right) are major tourist attractions and provide significant income for local communities.

Parks give economic and social benefits

Parks generate substantial economic benefits for Queenslanders. Our national parks are one of Queensland's biggest tourist attractions, hosting more than 12.5 million visits each year. Research by the Australian Bureau of Statistics shows that most Australians visit a national park or similar reserve at least once a year. Many are likely to make repeat visits. More than half the four million international visitors to Australia visit national parks or similar natural areas. More visitors to Queensland in 1997 visited a national park than visited a theme park or a casino.

'The goal of parks and protected areas is to contribute as much as possible to the range of choices available to the children of the future. They cannot choose the impossible or dream the unimaginable.'

(Hales 1992,p 144)

Hales, D. (1989). Changing concepts of national parks. in D. Western and M. Pearl, (Eds). *Conservation for the twenty-first century*. New York, Oxford University Press: 139-144.

Spending by park visitors contributes more than $1.2 billion each year to the Queensland economy and supports more than 6000 jobs directly and many more indirectly. More than 500 commercial tour operators and 40 near park resorts rely on national parks for much of their business. Many other businesses benefit from the existence, management and use of national parks and services provided by tourism operators accessing these parks.

As well as the direct income from tourism which they can bring, parks provide vital 'ecosystem services' to the community. For example, many of our parks protect watersheds, resulting in a clean, relatively reliable supply of water flowing from them to agricultural and urban lands downstream. Adjacent lands are protected from salination and erosion, common effects of widespread land clearing. People are now also aware of the value of parks as the large uncleared tracts of natural vegetation absorb greenhouse gases.

These ecosystem services are often undervalued and unappreciated - until clean water, clear air and fertile soil are gone and have to be restored or replaced.

At Koala Bushland Coordinated Conservation Area, koalas are a feature of nature study activities.

For every $1 of government funding invested in their management, national parks generate more than $40 worth of economic activity in the Queensland economy.

Economic impact of Noosa National Park on the Sunshine Coast and Noosa

Noosa National Park lies 155km north of Brisbane on the south-eastern coast of Queensland. The park is renowned for its scenic beauty, the range of vegetation types and its wildlife. The park is surrounded on three sides by rugged coastline with walking tracks joining rocky headlands to quiet coves and sandy beaches. The Headland section alone received an estimated 1,165,000 visitors in 1998.

The economic impact of Noosa National Park on the local and regional economies was investigated through a study in 1998. The study showed that Noosa National Park had a substantial direct economic impact on both the Noosa locality and the Sunshine Coast Region. Most of the direct impact arises from visitors who are attracted to the Noosa area by the National Park. The study indicated that the annual visitor expenditure in the local Noosa area, due to the park, was $26 million, with 65% being from Australian residents from outside of Queensland and 15% by non-Australian residents.

The total park related expenditure for the region was estimated to be approximately $34 million for 1998. Regional expenditure is defined as any money that a visitor spends in the Sunshine Coast economy whilst on holiday to visit Noosa National Park, so the figure includes the local expenditure (Pearson et. al. *1998)*

Pearson, L., Russell, I. and Woodford, K. (1998) *Economic impact of Noosa National Park on the Sunshine Coast and Noosa economies*, School of natural and rural systems management, The University of Queensland.

Birdwatching and bushwalking are popular activities at Lamington National Park.

The walking tracks at Bunya Mountains National Park allow visitors to access areas of magnificent scenery

Parks provide opportunities for enjoyment, relaxation and recreation

For many people, national parks are great places to visit on weekends and holidays - to camp, picnic, hike, climb, enjoy a change of scenery, or have a good time outside with family or friends. Both children and adults can enjoy doing very little or can test their skills and endurance with long hikes and simple living. Some people, especially backpackers and retired people, take long trips and visit many parks in Queensland and other states, learning about our natural and cultural heritage on the way.

"I like going to National Parks because you see lots of animals and noone is allowed to take the plants."

Sally Fergus aged 8

Lawn Hill National Park. National parks provide ideal locations and subjects for nature photography.

Key points from the QPWS Community Survey (1999)

Just over half of all Queenslander residents aged 15 and over visit our parks at least once a year.

Respondents to the survey saw many benefits of parks, especially:

- *Protection of native animals and plants;*
- *Opportunities to get away and enjoy the bush;*
- *Recreational use of these areas;*
- *Opportunities to see and appreciate these natural areas; and*
- *Protection of the environment.*

PHOTO - Kerry Trapnell

The Parks system as a whole provides a great range of opportunities for lots of different activities, in environments which vary from tiny coral islands on the Great Barrier Reef to high forested peaks and remote western plains. While facilities for camping and picnicking are provided on some parks, the emphasis is on low-key recreation in the natural environment, where people enjoy themselves in simple ways without lots of development or artificial activities.

For Indigenous people, parks are places where they can take their families and meet communities back on country which has been kept relatively natural. They can enjoy being together, passing on skills and stories to the next generation.

THE NEXT TWENTY YEARS- NEW OPPORTUNITIES, NEW CHALLENGES

PHOTO - Kerry Trapnell

"The holding of property rights of Indigenous peoples in these parks has to have meaning. This is their home. This is their traditional land. Maintenance and conservation of this country is absolutely essential to our Aboriginal survival in the future."

Noel Pearson, Political Advisor, Northern Land Council 1999

The first 25 years of the Queensland Parks and Wildlife Service has seen significant changes, especially in community expectations and attitudes towards conservation. In the next 20 years, we can be certain of further continual change in our social, economic, legal and physical environment. Some of these changes are predictable and have already begun, while others will only unfold with time. While holding firmly to the principles of the *Nature Conservation Act 1992*, park management must be responsive to changes if our Parks system is to be maintained and the community's support for it kept strong. What are some of the key changes and challenges to which we need to respond to ensure our Parks system functions well over the next 20 years?

NATIVE TITLE ON PARKS

The Government recognises that Native Title interests may exist over many of Queensland's parks. The exact extent of this and the legal implications will become clearer in the next few years, but it is clear that park management must recognise the rights and interests of the traditional owners, and this will mean a major change in the way that some parks are managed. This is a positive opportunity for management of the natural and cultural values of parks, and the Service will be negotiating a range of agreements with traditional owners.

CHANGES IN POPULATION

The population in some parts of Queensland, especially along the coast near Cairns and Brisbane, has increased dramatically over the past twenty years and will further increase in the future. As many more people want to 'escape' to parks from urban environments, quiet places become harder to find. Without good management, damage to natural and cultural values will increase, as will conflicts between different kinds of recreational users and tourists on popular parks.

In contrast, the populations of some rural areas have significantly declined. The need to diversify income sources may open new roles for national parks and ecotourism in these areas. In some rural areas, fewer managers and staff on pastoral properties have resulted in problems with managing fire and pest plants and animals.

INCREASED TOURISM

It is estimated that the total number of trips taken in Queensland (by both domestic and inbound tourists) will more than double by 2020, with the numbers of visitors from interstate and overseas increasing up to five-fold. If the proportion of tourists visiting parks remains the same as at present, this means a very substantial increase in people on our parks.

Increased numbers of visitors could bring benefits but also pose very significant management challenges to some parks. Crowding soon disrupts the peaceful and natural atmosphere of parks, and can affect the environment and the plants and animals. Well-designed walking tracks, camping areas, car-parks and toilets can reduce these impacts, but can attract more visitors and soon become over-crowded too. Many parks agencies throughout the world are faced with the necessity to plan for these increasing numbers and to limit visitor numbers in some areas.

A FRAGMENTED LANDSCAPE

With increased populations and development, many parks have become pockets of protection in a wider landscape of cleared and settled land. Isolation from other natural areas makes it more difficult for parks to conserve their full range of plants and animals. Small parks are under most pressure, as some animals, especially meat-eaters such as quolls and birds of prey, must range widely in search of their food. Fire management is very challenging when neighbours are densely settled on the park boundaries, and invasions of pest plants and animals and domestic pets threaten the parks' integrity.

The challenge is to protect parks from constant 'erosion' of their values as their edges become degraded. Programs are underway to re-establish natural habitat across private lands near parks, and some communities have worked hard to create 'nature corridors' to again link isolated fragments.

Spotted-tailed quolls *Dasyurus maculatus maculatus* require large hunting territories for their survival.

Greater community involvement

People are no longer content to see government employees as the only authorities on conservation management, or to allow parks agencies to operate without community involvement or accountability. There are mutual benefits in greater community involvement and more partnerships in park management.

Higher costs and increasing expectations

Throughout the world, Parks systems have been under increasing pressure, as managing large systems becomes steadily more expensive, with demands for high standards of environmental care (for example, managing effluent from park toilets and over-use of camp grounds), employee care such as workplace health and safety, public accountability and reporting, and greater community involvement. Park managers are expected to become more efficient, to better understand cultural and natural assets, and to recognise and respond to the needs of visitors and communities.

At the same time, governments throughout the world are increasingly cautious about where their resources are spent. The values, including economic values, of Parks systems need to be conveyed to the community if their management is to remain a high priority along with education, health, transport and law enforcement.

Whitsunday Islands National Park. A QPWS staff member gathering information on park management issues from visitors.

The Plan
Parks on track for the future

Directions for the Future

Over the next 20 years the Queensland Parks system will have significantly wider functions than now, but it will be built on and continue the strengths of the existing Parks system. The cardinal principles of the *Nature Conservation Act 1992* will be upheld; as conservation of natural and cultural values remains the primary aim of the Parks system. Increasingly, Queensland parks will have four crucial roles in the life of the Queensland community:

Representation

The Parks system will include representation of all Queensland's diversity of ecosystems and landscapes. This may be achieved both directly, by inclusion within the Parks system, and indirectly, by negotiated agreements with landholders and the participation of Indigenous people in the management of parks. Management agreements between Indigenous peoples and the Service will be essential for the future Parks system, as many parks will be managed by partnerships of Indigenous peoples and the Service.

Core investment in conservation

The Parks system should be regarded as a core society investment in nature. It should exemplify and encourage sound, voluntary conservation on lands not directly within it. The need to protect lands outside the Parks system may be met by negotiating voluntary arrangements with landholders or by acquiring strategic lands. Incentives for voluntary arrangements may be established, for example by linking use of parks for presentation purposes with that of adjacent lands where this promotes both conservation and presentation opportunities.

Appreciation and presentation of nature

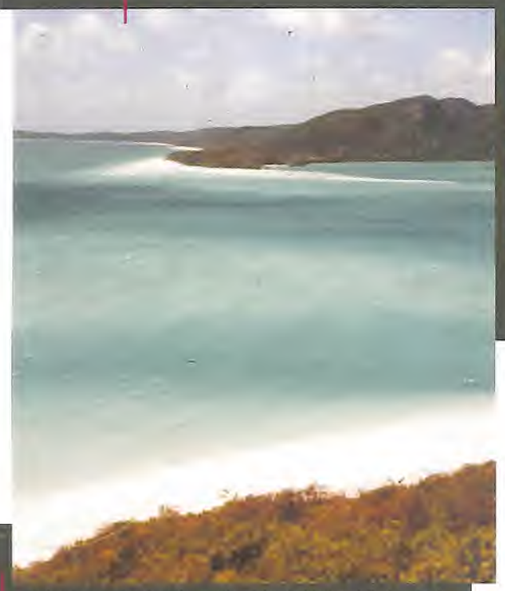
The Parks system should be the cornerstone of a wide public appreciation that protecting and conserving nature makes good economic and social sense, and that the whole community shares responsibility to pass this legacy to future generations. This may be achieved by a concerted campaign to encourage community identification with parks and to manage parks with the community as partners. Where conservation and protection are not compromised, the Parks system should be an important part of a network of nature-based recreation and tourism opportunities.

Linkage of natural and cultural values

The Parks system should encourage a wide acceptance and understanding of the view of Indigenous peoples that natural and cultural values are inextricably linked and essential to our continued existence and well being. The Parks system has the potential to encourage such an appreciation and understanding by providing the community with opportunities to experience and be actively involved in its management. The continuing engagement between the community and parks, including opportunities for people to visit and enjoy parks, is a fundamental purpose of management.

The Master Plan will establish the necessary direction, principles and actions required for Queensland's Parks system to achieve a wider role in protecting and conserving the State's natural and cultural heritage values and in enhancing community appreciation of these values. This Discussion Paper begins a process of continual evaluation and learning to ensure progressive, measurable enhancement in park management.

1.1 TOWARDS A BETTER PARKS SYSTEM



Whitehaven Beach, Whitsunday Islands National Park, which protects ecosystems of the Central Queensland Coast bioregion

Sandhills in Simpson Desert National Park, representing the Channel Country bioregion

CONTEXT

Though conservation[2] cannot be achieved by parks alone, they are regarded worldwide as cornerstones of conservation, to be complemented and linked by conservation efforts and sustainable land use on private, government and community lands.

The National Strategy for the Conservation of Australia's Biodiversity, drawn up in 1996, recognises as the central strategy for conservation the role of a 'comprehensive, adequate and representative (C.A.R) reserve system' where:

- Comprehensive means that the reserve system samples the full range of regional ecosystems across the landscape;
- Adequate means that the reserves are of a sufficient size and appropriate shape to enable natural integrity, including the species diversity, of the park to be maintained; and
- Representative means that the samples of regional ecosystems include the maximum possible diversity of their plant and animal communities.

Comprehensiveness is the first priority in developing a C.A.R. reserve system, in conjunction with meeting the special needs of species and ecosystems, particularly those that are threatened. These criteria accord with the scientific guidelines for the National Reserve System[3].

In Queensland, the movement to reserve parks on a systematic and scientific basis began as early as 1964, when the Department of Forestry annual report stated that 'an important object of the national parks system must be to reserve permanently examples of all the main environments including the less scenic'. In 1977, to establish a systematic framework for conservation, 13 biogeographic regions were identified in the state and by 1985 the Parks system had been systematically reviewed to see which natural systems remained unrepresented within each of these bioregions[4,5].

[2] Conservation in this document is defined as 'the protection and maintenance of nature while allowing for its ecologically sustainable use' (*Nature Conservation Act 1992*)

[3] For a description of the C.A.R. system, see JANIS (1996) *Broad Criteria for the establishment of a comprehensive, adequate and Representative Reserve System in Australia*. Report of the technical working group to the joint ANZECC / MCFFA National Forest Policy Statement Implementation Sub-committee: Department of Environment, Sport and Territories, Canberra

[4] Stanton J.P and Morgan, M.G. (1977) *Project RAKES - The Rapid Selection and Appraisal of Key and Endangered Sites: The Queensland Case Study*. A Report to the Department of Environment, Housing and Community Development. The University of New England, Armidale

[5] Sattler,P (1986) Nature conservation in Queensland: planning the matrix. *Proceedings of the Royal Society of Queensland* 97: 1-21

This work has been extended and a detailed review has been conducted on the conservation status of 1085 regional ecosystems[6] across Queensland[7] (see p.16).

Sixty-nine percent of the state's regional ecosystems are represented in parks greater than 1000ha in size across all biogeographic regions. Though this has been an important achievement for conservation, the reserve system is not yet regarded as adequate, and some valuable and unique biological systems could be lost forever. In five of the regions at least 40% of the regional ecosystems are at risk of being lost: either being 'endangered' (less than 10% of their original distribution remains) or 'of concern' (10-30% of their original distribution). Queensland-wide, 32% of all regional ecosystems are considered at risk. Protected areas constitute 4.1% of the state (3.86% national park), compared with a national average of 7.6%.

Continuing growth of the Parks system is thus important for the protection of biological diversity, especially of regional ecosystems which are not represented in parks at present. It is estimated that 80% will be the maximum possible representation of regional ecosystems in protected areas in Queensland without major compulsory land acquisitions. Conservation of the remainder of Queensland's regional ecosystems may best be achieved through conservation agreements and covenants over private lands.

Further parks may also be declared for conservation of natural and cultural heritage values, as well as providing for sympathetic nature-based tourism and recreation opportunities and the protection of ecosystem services which also have an indirect economic value. Declaration of new parks should maximise positive benefits to society.

PHOTO - Kerry Trapnell

[6] A regional ecosystem is a vegetation community in a bioregion that is consistently associated with a particular combination of geology, landform and soil.

[7] Sattler, P.S. and Williams, R.D.(eds) (1999) *The Conservation Status of Queensland's Bioregional Ecosystems*. Published by the Environmental Protection Agency.

PRINCIPLE AND FUTURE GOALS

The Queensland Parks system will be protected vigorously into the future. The Parks system will be comprehensive, adequate and representative of Queensland's biological and landscape diversity, will include outstanding examples of natural and cultural heritage values, and will maintain the values of World Heritage Areas as key elements of the Parks system.

To uphold this principle, we aim:

1. To develop a Parks system in Queensland which is comprehensive, adequate and representative of the State's biodiversity at all levels from landscape to genetic, which demonstrates the values of natural and cultural heritage, and which has a widely-recognised function in the life of the community;
2. To use the range of the protected area classes from the *Nature Conservation Act 1992* in a transparent manner to provide for a variety of natural and cultural conservation needs. The system will consist of State-owned, private and community lands under a variety of management regimes, encompassing community-based conservation; and
3. To use the Parks system as the cornerstone of an integrated conservation regime and as a benchmark for ecologically sustainable management of the landscape.

STRATEGIC ACTIONS

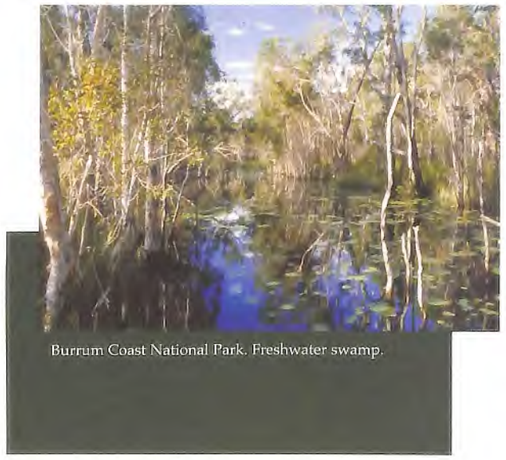
Conservation of biological diversity

Raise the State's level of protection of regional ecosystems from 69% to a minimum of 80 %, primarily through an expansion of national parks to cover at least 5% of Queensland's land area.

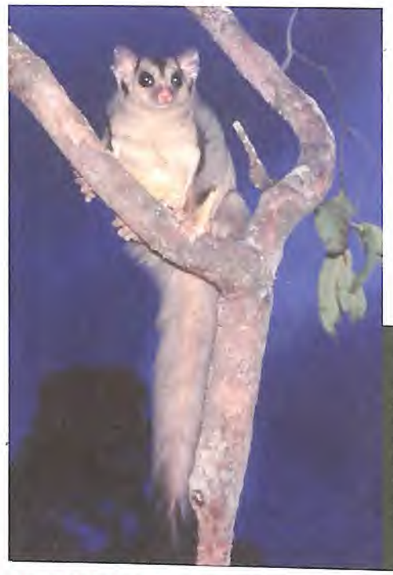
Fully protect Queensland's biodiversity across all bioregions through a system of parks and reserves complemented by nature refuges and a range of covenants and voluntary conservation agreements.

Integration of the parks system with community needs and interests

Clearly identify the benefits parks deliver to the community. Studies of the economic values of parks are an important component of this identification.



Burrum Coast National Park. Freshwater swamp.



The mahogany glider *Petaurus gracilis* is an endangered species occurring in fragmented areas of lowland forests in the Wet Tropics bioregion.

Appropriate use of a range of protected area classes

Review the range of protected area classes and other mechanisms available to conserve nature, modify them where necessary, and apply them to better protect Queensland's biodiversity and cultural values. Park strategies will include programs to ensure conservation has a function in the life of local communities.

Review the current protected area system to ensure that the most appropriate protected area class is used for each park, taking into consideration its ecological, cultural and social values. Develop proposals to alter the status of some parks or parts of parks if this would improve their conservation status or management effectiveness or would allow community access more appropriate to the park's values.

Develop the Parks system with a well-balanced range of protected areas to achieve a wide range of objectives including biodiversity conservation, protection of special and scenic values, cultural heritage protection and presentation, and recreation and tourism opportunities.

Blue grass and brigalow

Albinia Downs, situated immediately west of Rolleston, is part of the Brigalow Belt Bioregion, a large and complex area covering 36.4 million hectares. Major threats to this bioregion include broadscale clearing for pastoral development and intensive agriculture. Nature conservation in the bioregion is a priority because of the rapid and extensive loss of habitat which has been accompanied by declines in species populations.

The Brigalow Belt contains a range of ecosystems, with brigalow forests, eucalypt woodlands and blue grass downs. Albinia Downs contains a large area of blue grass downs, an ecosystem endangered due to the intensive cropping and weed invasion of remaining natural downs areas.

The strategic purchase of the Albinia Downs property for National Park was vital to conserve biodiversity at landscape, ecosystem and species level.

Conservation through agreements

Develop, trial and apply models for the more strategic use of nature refuges and coordinated conservation areas. These models will encourage conservation agreements where they can contribute significantly to conservation through:

- integrating on and off-park conservation to address specific conservation objectives;
- protecting natural systems which are inadequately represented in the Parks system;
- extending the value and effectiveness of existing parks; or
- protecting areas, otherwise well represented, for educational or community purpose benefits.

PHOTO - Kerry Trapnell

1.2 CONSERVING NATURAL INTEGRITY

Carnarvon National Park. Eastern snake-necked turtle *Chelodina longicollis*.

CONTEXT

The cardinal principle of national park management is to 'provide, to the greatest possible extent, for the permanent preservation of the area's natural condition and the protection of the area's cultural resources and values' *(Nature Conservation Act 1992)*. Maintaining natural integrity, cultural values and natural landscapes is the highest priority of national park management.

Conservation of the natural values of our parks is partly achieved by protecting them from development and clearing, and by regulating the impacts of visitors. However, active management is also needed to maintain the plants, animals and landscapes which form the park ecosystems. Over recent decades, there have been a number of changes in how we approach the management of parks.

Humans are now regarded as part of ecosystems, as we affect and are influenced by natural processes. Human judgments determine what should be conserved and what values are placed on a park.

We recognise there are many choices to be made about what a park's 'natural state' is and what values need to be protected. Active decision-making and management is often required to maintain these values.

For example, periodic fire is needed if we wish to maintain the tall, wet eucalypt forests found in some coastal Queensland parks. If fire is excluded, rainforest will expand and total regional biodiversity might decrease. Maintaining biodiversity depends on understanding ecological processes and dynamics, such as fire, so that a mosaic of habitats is maintained over space and time.

We know that knowledge now is far from comprehensive and may never be complete. Where the knowledge to make decisions is lacking, caution must be applied and the potential for resolving uncertainty through further research assessed. Community involvement in these decisions is important.

We understand that parks can be managed successfully only if they are considered as part of the wider landscape and if a long time-frame is considered. Many processes, such as fire, pest invasion and animal migration, do not recognise park boundaries. Animals move from one habitat to another for food or shelter, and flows of materials, energy and information link reserves with surrounding lands. Climatic and evolutionary processes will continue to occur and require dynamic management.

Parks must be managed as 'open systems' rather than isolated 'islands', by recognising and minimising the negative flows between the park and the surrounding landscape (such as the entry of pollutants into watercourses or pest plants into the park) while encouraging positive flows (such as the movement of pollinators and migratory species in and out of the park).

Biological diversity needs to be considered at a number of different levels, from genetic and species up to ecosystem and landscape. Though the basis of conservation is the protection of habitats, conserving biological diversity also requires attention to individual species, especially those which are restricted to a small area or are rare or threatened with extinction.

Mossman Gorge, Daintree National Park. Maintaining good water quality in parks is a critical aspect of natural integrity.

These species may require special management and sometimes deliberate changes to the environment.

Within parks across a bioregion, avoidable loss of natural biodiversity is unacceptable. As biodiversity can be measured at any level from landscape and ecosystem to species and gene, it is essential that conservation measures on parks be as comprehensive as possible. Management of the Parks system must be aimed at controlling rates of change.

Recognising these considerations, a primary goal of park management is the *maintenance of natural integrity.* To maintain natural integrity, including species diversity, natural processes and threats from both inside and outside the park borders must be recognised, understood and managed. Complementary work by local communities, local government authorities, other Government agencies and neighbours is essential to effectively manage the Parks system, not only in managing the inter-related landscape, but as partners with park managers in developing and sharing experience and knowledge. The natural integrity of parks can also be improved by restoration of degraded areas or by voluntary habitat protection on adjacent lands.

Ecosystem management is an integral part of all other activities associated with park use and management, and is critical for all parks, not only those which have high visitor use and a high public profile.

Generally, the priority for ecosystem management is the maintenance of integrity rather than restoration of degraded habitats. However, rehabilitation works should be undertaken:

- where the impacts from a degraded environment are affecting adjacent or downstream areas (e.g. through erosion and siltation);
- where habitat is critically required for plants or animals; or
- where recreational impacts will aggravate the situation if rehabilitation is not undertaken.

All plantings and re-introductions on parks should be based on the best available information, generally with local native species with local genetic stock.

Natural integrity is defined as the condition of an ecosystem where biological diversity and ecosystem processes are optimal and are likely to persist.

'In plain words, ecosystems have integrity when they have their native components (plants, animals and other organisms) and processes (such as growth and reproduction) intact' (Panel on the Ecological Integrity of Canada's National Parks 2000).

Panel on the Ecological Integrity of Canada's National Parks (2000) *Unimpaired for future generations? Conserving ecological integrity with Canada's national parks*. Parks Canada.

PRINCIPLE AND FUTURE GOALS

The natural integrity of parks will be conserved, with their natural values protected and presented, and parks will be integrated with good land management across the landscape. Maintaining natural integrity, cultural values and natural landscapes across time is the highest priority of national park management.

To uphold this principle, we aim:

1. To follow the cardinal principle of national park management - to 'provide, to the greatest possible extent, for the permanent preservation of the area's natural condition and the protection of the area's cultural resources and values' *(Nature Conservation Act 1992)*. As far as practicable and unless specifically decided otherwise in relation to particular areas, conservation will aim for the maintenance of the dynamic landscape and vegetation system of an area in its 'natural state', which might be as it was when acquired or as it was before the influence of European settlement (recognising the changes through time and space in natural systems). However, there are some cases where altered landscapes have a high level of cultural significance to the community. In this case, the artificial landscape in this limited area will be maintained;
2. To conserve the natural integrity of Queensland's Parks system[8] through an ecosystem management approach, which uses scientific information, staff and community wisdom, and adaptive learning to aim for :the maintenance of natural ecological processes such as nutrient and water cycling, with active management of processes such as fire where desirable and eradication of pest plants and animals; the full range of natural biological diversity maintained in the Parks system; and no net loss of biological diversity across the Parks system in each biogeographic region;
3. To set and maintain a high standard in relation to the environmental impacts of all park operations, including the development and maintenance of recreational and management facilities and infrastructure; and
4. To recognise and incorporate Indigenous and community experience, expertise and responsibilities in ecosystem management; and to cooperate with neighbours and other land managers in managing parks as part of the broader landscape.

Burning the balds of Bunya Mountains

Well known in Bunya Mountains National Park are the grassy areas known as "balds" which occur both in the midst of rainforest and next to eucalypt forest. These balds are the largest area of montane grasslands under protection in Queensland and contain a number of rare plants.

Research has indicated no physical basis for the dramatic juxtaposition of grasses and forest, other than Aboriginal fire history. The trick then is to maintain the balds by burning to prevent them being overgrown by wattles, eucalypts and rainforest species. The present program involves burning every 2 to 3 years at different times of the year, resulting in a range of cool, moderate and hot burns, and documenting invasion along fixed transects in order to determine an appropriate burning strategy.

As with all burning, the right weather conditions are needed. With over 100 balds in the Bunya Mountains National Park and the adjoining State Forest, the problem starts to compound as each bald takes a day to burn, and many of the balds have no vehicle access. Adding these concerns to the issues which have to be addressed in any burning exercise -such as cooperation with neighbours, ensuring no risk to staff or visitors; and taking steps to reduce smoke effects - illustrates the complexity involved in managing fire on parks.

"Natural integrity will be the aim across all national parks. However, in the "multi-use" classes of parks such as nature refuges declared over private properties, the derived values of the part will be protected. Natural integrity may not be protected to the same extent across the entire property, especially where it is also used for production purposes."

STRATEGIC ACTIONS

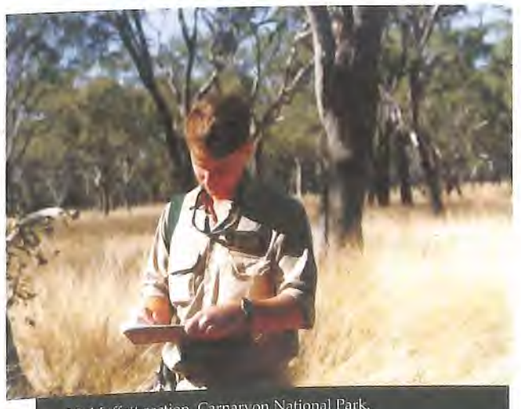
PROTECTING NATURAL INTEGRITY

Prepare a strategy for maintaining natural integrity on parks. This strategy will include criteria for the preparation of natural integrity statements for individual parks, which will recognise natural values and threatening processes such as pest plants and animals. It will identify strategies to minimise the effect of threatening processes and to maximise the conservation role of the park in the surrounding landscape.

Introduce and trial this strategy throughout the state, and complete natural integrity statements for selected key parks in the short term. In the longer term, every park will have natural integrity statements and implemented action plans for the maintenance of natural integrity.

Achieve a substantially higher standard of ecosystem management on parks. Evaluate this standard through a regular monitoring program outlined in the natural integrity statements[9].

Develop a comprehensive set of policies and practices relating to ecosystem management.



Mt Moffatt section, Carnarvon National Park. Monitoring regrowth after fire.

Flame tree *Brachychiton acerifolium*

NATURAL RESOURCE INFORMATION

Implement a program to obtain, over time, basic natural resource information for all parks. The information will include baseline data such as vegetation maps; comprehensive flora and fauna inventories; thorough documentation of rare and threatened species and communities with their habitat requirements and life histories; documentation of existing and anticipated threats to the area; and documentation of potential extensions of habitat and natural values on surrounding lands.

Over time, methodically obtain other critical information such as species interactions, population dynamics, ecosystem function, and responses to disturbance and management regimes, especially for parks of particular ecological value or with a high degree of threat.

When new parks are gazetted, develop and implement within two years basic programs of ecosystem management (e.g. vegetation mapping, fire, pest plant and feral animal management programs and associated monitoring programs) for these areas.

Promote to the public information gathered for ecosystem management on the Parks system.

See section 4 for discussion of management effectiveness evaluation

Increased capacity in ecosystem management

Support a strong and active network of natural resource managers, other government agencies and professionals, and community members working across the state. Enhance significantly the capability of park managers through research, training and up-to-date equipment (actions are detailed in other sections). Ensure information and wisdom is shared and transferred effectively when members of the workforce change. Maximise the effectiveness of partnerships with the other agencies in natural resource management.

Environmental management of Service operations

Develop and implement a system of environmental impact and audit standards for all park operations, including development and maintenance of recreational and management facilities and infrastructure.

Management of adjacent lands

Enable park and extension staff to provide substantial advice and assistance to communities who manage lands adjacent to parks, resulting in further establishment and retention of corridors, remnant patches and habitat extensions.

Greater bilby *Macrotis lagotis*, an endangered species.

Saving the bilby

Maintaining natural integrity includes conserving species diversity by managing the natural processes and threats from both inside and outside park boundaries. An example of this is a management initiative to save the bilby.

Throughout Queensland the bilby population has declined for various reasons, including declining habitat due to grazing by domestic and feral livestock, changed fire patterns, competition for food from rabbits, and other factors, such as introduced predators (feral cats and foxes). Management initiatives needed to protect the bilby include controlling predators and rabbits and using fire to maintain its habitat.

A known bilby colony west of the Diamantina River has been intensely studied and monitored by the Queensland Parks and Wildlife Service since 1988. A large part of the bilby's Mitchell grassland habitat in the Channel Country is now included in Astrebla Downs National Park. Bilbies are also being bred in captivity in Queensland, the Northern Territory, and South Australia. Future measures to protect the bilby could involve removing or controlling cattle and predators, using fire to create more favourable conditions for the bilby, reintroducing captive-bred bilbies to their former habitat, and gaining the co-operation of local landholders.

Managing small parks

Where parks have become small remnant fragments of natural vegetation, surrounded by farmland or urban development and separated from other patches of bush, conserving natural integrity is very challenging.

The park edges are susceptible to invasion by weeds and feral animals. For example, if rainforest is cleared up to the edge of the park, the extra light and wind on the forest edges is too harsh for most rainforest plants, and weeds often gain a strong foothold here. Other 'edge effects' include both obvious and more subtle problems:

- *Pesticides drift onto the park, killing native insects, especially those with low resistance and populations;*
- *Construction of roads, canals and housing lots change nearby drainage patterns and water levels, resulting in death of some native plants such as paperbarks and mangroves;*
- *Nutrients from sewerage or fertilisers flow into the park, favouring weeds and killing some plants such as banksias and other heath plants;*
- *Fire management is very difficult where burning required for ecological reasons conflicts with the safety of local residents and where park edges are burnt frequently;*
- *Populations of native animals may be too small to survive in the longer term, especially when species cannot cross open country to breed with animals in nearby patches of bush;*
- *Animals which venture to the park edge or outside the park may be killed by feral or domestic animals or while crossing roads. These are major causes of death for koalas in southern Queensland; and*
- *Animals which need to migrate to different food sources or altitudes over the seasons are unable to move between their traditional areas and will die.*

These edge effects and other problems associated with fragmentation may be reduced by:

- *interconnecting remnant areas through cooperative management with adjacent landholders, including the retention or replanting of bush corridors;*
- *specifying a minimum size of retention areas for the protection of biodiversity; and*
- *managing the condition of the remnant areas (Boulter* et. al. *2000)*

Boulter, S. L., Wilson, B. A., Westrup, L., Anderson, E. R., Turner, E. J. and Scanlan, J.C. (2000) *Native vegetation management in Queensland*, Department of Natural Resources.

1.3 SAFEGUARDING CULTURAL VALUES

Parks will be cared for and presented in a manner that recognises and respects the links, both past and present, between the land and its people.

CONTEXT

National parks and other parks are established to protect and present not only natural values, but also cultural resources, which the *Nature Conservation Act 1992* defines as 'places or objects that have anthropological, archaeological, historical, scientific, spiritual or sociological significance or value, including such significance or value under Aboriginal tradition or Island custom'.

The cultural values discussed in this section reflect the variety of human experiences of many cultures including both Indigenous and non-Indigenous peoples.

Cultural heritage conservation on parks was previously regarded by many people as the protection of historic places and objects of obvious heritage significance, such as Indigenous art sites, historic buildings and other early heritage sites.

The protection of this 'material' culture is important, and requires considerable expertise and resources.

However, cultural heritage conservation is now viewed as a more dynamic and inclusive process, based on keeping alive the values that people place on the landscape and on their experience of it, as well as protecting specific places, structures, and objects. The cultural importance of parks is not always obvious: it may be associated with the history of a place or people's feelings about it.

Culture is changing and dynamic; it relates to the present as well as the past, and to stories, beliefs, songs, and lifestyles as well as ancient relics. Thus cultural heritage conservation must involve the community, especially those for whom each park holds special significance. Actions might include encouraging or supporting cultural links, and the recording or renewal of living cultural expressions.

Public documents, and all presentation and interpretation activities, need to respect that some cultural heritage information is sensitive and private and will not be available to the public. Cultural heritage management strategies and plans must ensure that sensitive and restricted information in relation to Indigenous culture is managed to the protocols and processes established by traditional owners.

Best practice standards exist or are in development for many aspects of cultural heritage management, including agreements with traditional owners on protocols for field work, data recording, information management and presentation, and protocols such as the Burra Charter[10]. The Service should follow these standards.

[10] Burra Charter is a charter developed by the Australian International Charter for the Conservation and Restoration of Sites (ICOMOS) which defines the basic principles and procedures to be followed in the preservation and restoration of heritage places. It is widely accepted as the standard for historic heritage conservation in Australia.

PHOTO - Kerry Trapnell

Cultural heritage protection recognises the importance of people's cultural links to places.

PRINCIPLE AND FUTURE GOALS

The cultural heritage values of parks will be protected and presented.

To uphold this principle, we aim :

1. To care for and present parks and their cultural values in a manner that recognises and respects the links, both past and present, between the land and its people; and to celebrate living culture as well as the past.
2. To protect, and present where appropriate, places and objects of cultural significance according to current best practice standards.
3. To protect specific cultural heritage places and objects on parks by undertaking cultural heritage and social impact assessments before any development works are initiated.
4. To formally recognise the right of Indigenous peoples to conserve and manage their heritage, to protect their privacy, and to present or permit the presentation of cultural heritage.
5. To consider cultural heritage values and the responsibility to conserve and present cultural heritage in the formulation of park management plans, in park management decisions, such as granting of permits, and in on-park activities such as fire management. Priority will be given to conservation of places, sites and objects of cultural significance which are under threat from human or natural processes.

Cape Moreton Lightstation

This historic lighthouse was gazetted as a conservation park adjoining Moreton Island National Park in May 2000, adding greatly to the historic and cultural values of the park. This lighthouse, which commenced operation in 1857, was the only lighthouse along the Queensland coast at the time of separation from New South Wales in 1859 and was also the only lighthouse in Queensland built of stone.

STRATEGIC ACTIONS

CULTURAL HERITAGE STRATEGY

Prepare a strategy for conserving heritage on Queensland parks. This strategy will outline the priorities for cultural heritage management and will provide detailed guidelines on protocols and procedures.

INDIGENOUS HERITAGE

Seek consultation and negotiation with traditional owners in relation to any proposed park management action which may affect their cultural heritage. The scope of these matters may be specified in Indigenous Land Use Agreements (ILUAs)[11].

Effect local and regional agreements such as partnership agreements and ILUAs with appropriate communities in relation to cultural heritage management on parks.

Develop agreements which formally recognise the right of Indigenous peoples to conserve and manage their heritage, to protect their privacy, and to present or permit the presentation of cultural heritage. Implement Statewide park management policies recognising Indigenous rights, including intellectual property rights, and responsibilities for cultural heritage management and presentation.

HERITAGE MANAGEMENT PLANNING

As part of the management planning process, identify cultural values and consider cultural management for protected areas in conjunction with community interests. Identify both Indigenous and non-Indigenous cultural places (subject to privacy concerns), assess their significance and outline their management requirements. Establish procedures for managing information, involving traditional owners and other interest groups in the process.

Establish and trial guidelines and protocols for preparing cultural heritage plans. Develop plans for parks or areas of parks with known cultural values which are subject to high visitor use or threat of destruction or deterioration.

Methodically implement a high standard of cultural heritage management on all parks.

Record oral histories of parks, especially in relation to prior use and management of parks, respecting intellectual property rights where appropriate.

HERITAGE PLACE AND OBJECT CONSERVATION

Develop and implement a standard procedure for cultural heritage and social impact assessments, which will be carried out before any development works are initiated. Assessment will involve consultation with traditional owners and/or stakeholders.

Institute regular programs for monitoring of cultural heritage places where necessary to detect any deterioration in the condition of values.

Prepare cultural heritage management plans for all cultural heritage sites and objects which need active protection. These plans will aim to conserve the cultural heritage values of the places and objects by whatever means are practical and necessary.

INCREASED CAPACITY IN CULTURAL RESOURCE MANAGEMENT

Train all relevant staff in cross-cultural awareness and in awareness of cultural values, and develop a workforce better able to adequately address cultural heritage issues in conjunction with traditional owners and communities.

Conservation of art sites is an important aspect of management at Carnarvon National Park

[11] ILUAs (Indigenous Land Use Agreements) are agreements entered into by QPWS with Indigenous groups pursuant to the *Native Title Act 1993*.

2 WORKING WITH COMMUNITY PARTNERS

2.1 Working together - Indigenous partnerships, rights and interests

PHOTO - Kerry Trapnell

In some areas, Indigenous peoples have cultural obligations to maintain custodianship of national park lands and waters.

Traditional crafts can be part of cultural relationships with country.

CONTEXT

A significant change in park management in the next two decades will be the increasing role of Indigenous peoples as their Native Title rights and interests in parks are recognised. Participatory models for management of parks are currently being developed.

Many parks have Native Title and/or traditional owners with an interest in the management of the area. Many Indigenous peoples have cultural obligations to maintain continuing custodianship of national park lands and waters.

Management of the Parks system will be enhanced when the laws, customs, knowledge responsibilities, and interests of Indigenous peoples are respected and supported. It is believed that the participation of Indigenous peoples will be of benefit to the Parks system as traditional owners increase their capacity to resume or continue their interest in management of lands and waters and to fulfil their cultural obligations. Maintenance of the ecological and cultural values of parks will remain the primary management principle. Management arrangements may address issues such as natural resource management, possible living areas, cultural heritage management, sustainable hunting and other appropriate activities.

Indigenous peoples are the custodians of their cultural heritage. Traditional owners should lead in defining the level of Indigenous cultural importance of areas and the extent to which any related areas, subjects, material items or stories should be accessible to the public. Interpretation of Indigenous culture requires the authority and advice of the traditional owners.

The Service recognises that developing partnerships with traditional owners will be sensitive and that sufficient time should be allocated for this process. Forums, protocols and agreements should be developed to promote Indigenous input into the management of parks irrespective of the determination of Native Title.

PHOTO - Kerry Trapnell

PHOTO - Kerry Trapnell

PRINCIPLE AND FUTURE GOALS

Responsibilities, interests and aspirations of Indigenous peoples will be respected in relation to their lands, and their roles in park management will be supported. The Parks system will be managed with a high level of cooperation between Indigenous peoples and the Service in a manner appropriate to Indigenous cultural heritage and the protection of natural and cultural values.

To uphold this principle, we aim:

1. To ensure Queensland's Parks system provides for the continued expression of Aboriginal peoples' and Torres Strait Islanders' relationships with the land and waters; and to respect cultural values, including traditional laws, customs and practices;
2. To recognise and respect Indigenous rights and interests in land and waters which coexist with the protection of natural values; and to recognise the role of Indigenous peoples as skilled partners in the Parks system;
3. To express this recognition by managing the Parks system through cooperation and partnerships between Indigenous peoples and the Service in a manner appropriate to Indigenous cultural heritage and the protection of natural and cultural values; and
4. To actively seek opportunities for better cooperation and reconciliation; and to maximise social and economic benefits through actively developing opportunities for Indigenous employment and training both on specific parks and in broader areas, including land management, public awareness and interpretation.

STRATEGIC ACTIONS

Basis of partnerships

Inform the wider community of Native Title rights and the need for partnerships and agreements with Indigenous peoples relating to Parks system management.

Establish with Indigenous groups the strategic policies, principles and procedures to apply between the Service and Indigenous interests concerning Parks management.

Establish Indigenous forums or reference groups at district or park-level to advise on park management issues. Use these forums to coordinate approaches to park-specific issues; facilitate consultation on specific issues and advise and assist where necessary in resolving regional and local issues and in regional and state-wide planning.

Establish a functional system to involve Indigenous peoples in Parks decision-making, with opportunities for community awareness, education and reconciliation.

Agreements

Develop active partnerships between traditional owners, Indigenous land and sea resource management agencies and the Queensland Parks and Wildlife Service, to provide for the management, protection and presentation of the Parks system. Management arrangements will foster direct participation in the management of individual parks or groups of parks by Indigenous peoples who demonstrate traditional custodial interests in those parks.

Negotiate agreements for participation in the management of individual parks or groups of parks with Native Title holders or traditional owners as appropriate. Encourage and support park-level initiatives to involve traditional owners in park management and to renew Indigenous ties with the land.

Employment, training and economic opportunities

Use a range of programs to provide employment for Indigenous peoples in all aspects of conservation management. Ensure that appropriate training is provided and that employment opportunities are expanded over time to include long term employment.

Encourage Indigenous peoples wishing to establish businesses linked with park management and visitation, within relevant policies and guidelines.


PHOTO - Kerry Trapnell

2.2 PARKS, NEIGHBOURS AND LOCAL COMMUNITIES

Cooperation between parks, neighbours and local communities benefits all parties involved.

CONTEXT

With more than 7300 properties sharing a common boundary with parks, good neighbour relations are vital to park management in Queensland.

Cooperation with neighbours and local communities is vital for effective and efficient management of parks. Plants, animals, fire, air and water do not recognise park boundaries and it is not possible to manage parks in isolation from the surrounding landscapes. Park managers and primary producers benefit from and share a common responsibility for the wise, sustainable and efficient use of natural resources for this and future generations.

It has been recognised throughout the world that the ecological, social and economic integration of a park into the surrounding community is a major determining factor in its long-term viability. This can be partly achieved by ensuring that increased benefits flow from parks and that ecosystem management on parks is supported by the management on surrounding lands, such as through habitat corridors.

Local government activities and their landuse plans and controls are of great importance in supporting and complementing the roles of protected areas.

Many existing parks are facing severe problems from pest plant invasion, water pollution, altered fire and drainage patterns and encroachment of feral and domesticated animals, which become more severe as rapid urbanisation or more intensive agricultural development occurs on park boundaries. Park neighbours and local communities also have a range of issues which can only be solved through cooperation with the Service.

Sympathetic park neighbours and local communities can extend the effectiveness of the park through providing wildlife corridors, acting as voluntary guardians, participating in research and monitoring programs and retaining large areas of natural vegetation.

Good relationships are the cornerstone of cooperative management, and it is recognised that such relationships require trust, time and consistency from all parties. The Service should take the initiative to resolve conflicts and develop and maintain good relationships with park neighbours and local communities. Liaising with park neighbours and local communities is considered an important component of staff duties and is supported by the Service.

Issues for which particular efforts in cooperation are needed include fire management, control of pest plants and feral animals, management of native animals which cause damage to crops, pastures and livestock, and the careful use of pesticides and other chemicals adjacent to parks.

The Parks workforce of the future may comprise a combination of government employees and other community members performing agreed management tasks on parks. Where management activities or responsibilities are delegated to park neighbours, landowners, local governments, other organisations or individuals, there must be clear agreements and monitoring to ensure high quality performance and equitable workforce opportunities. Such partnerships should be based on mutual respect and benefits.

Local communities include individuals, community groups, local businesses and local government. The role of local government in biodiversity conservation is being increasingly recognised.

PRINCIPLE AND FUTURE GOALS

Parks will be managed in the context of surrounding landscapes with consideration of local community needs and aspirations.

To uphold this principle, we aim:

1. To manage parks as models of resource management for the community through reciprocal 'good neighbour' relationships; to foster cooperation and partnerships in the management of parks and adjacent lands with neighbours, local communities and local government; and to appreciate and promote the important role of conservation on private lands;
2. To ensure issues and problems between parks and neighbouring properties are considered in park management, and to encourage and, where possible, support landholders adjacent to parks to maintain or restore natural vegetation, especially in park catchments;
3. To cooperate with local government and other community partners in the regulation of certain activities and developments on lands adjacent to parks or where there is a threat to the natural integrity of the park (such as polluted water flowing into a park). The role of local government in allowing only compatible new developments adjacent to parks is critical;
4. To work with neighbours, local government and local communities to ensure that where possible there are increased opportunities for benefits from parks; and
5. To increase Service capacity to perform to the standards expected by the community and to manage national parks as models of resource management for the community.

Involving children in conservation activities is an investment in their future.

Individual land holders can make a huge contribution to nature conservation. R.M. Williams has signed a Conservation Agreement to have his 1500 ha cattle property in central Queensland declared as a nature refuge. Rainbow Nature Refuge, near Rolleston, features forests of brigalow, ironbark and lemon-scented gum and is home to Herbert's rock wallabies. Mr Williams has long been a supporter of conservation and the role of landholders, saying "We need power and support, that's all - public interest. And if we have that we will be happy."

STRATEGIC ACTIONS[12]

RELATIONSHIPS AND COMMUNICATION

Further develop and support a workforce which involves and relates to the local community. Train staff as necessary in facilitation, communication and conflict resolution.

Support the development of good relationships between the Service and communities, based on trust and understanding, and implement a range of programs to improve relationships, investigate potential for cooperation, and resolve potential conflicts. Inform neighbours and local communities of the Service's goals and activities.

BENEFITS OF PARKS TO COMMUNITIES

Evaluate the contribution parks make to local economies. Undertake such studies according to a regular planned program.

COOPERATION WITH LOCAL GOVERNMENT

During the Planning Scheme preparation phase, provide advice through the Environmental Protection Agency (EPA) to local governments on all aspects of their planning schemes to ensure that the Agency's State Interests in terms of nature conservation are not adversely affected. As a minimum, the EPA should advise on the appropriate level of assessment for developments adjacent to parks and whether the development applications should be referred to EPA for comments. It is also desirable for the EPA to be involved in planning scheme reviews and developments which affect parks and their catchments.

Investigate and implement measures to develop greater cooperation with and to improve relationships with local government, including investigation of how parks can increase tourism benefits for park neighbours and local communities, while fulfilling Service responsibilities.

ROLE OF NEIGHBOURS AND LOCAL COMMUNITIES, INCLUDING LOCAL GOVERNMENT, IN PARK MANAGEMENT AND CONSERVATION

Encourage local community involvement in park management and conservation as a highly effective method of enhancing conservation. Models for involvement will include volunteer activities, cooperative management of adjacent lands, catchment protection and revegetation schemes.

Engage neighbours and local communities in the preparation of park management plans and action plans to ensure their interests are taken into account.

Exchange advice or technical assistance with park neighbours and local communities to assist with habitat management and revegetation wherever possible.

Where parks are affected, work with the community to promote and contribute to land care and integrated catchment management initiatives at the local, regional and state level.

Promote community stewardship of natural resources through programs to build community support for natural resource care.

Develop trusteeship agreements on appropriate conservation parks and resources reserves.

Negotiations about fencing, boundaries and wildlife management are important in park-neighbour relations.

[1] See also section 3.3 which discusses the involvement of the wider community in park management, including the roles of volunteers and advisory committees.

[2] Many of these recommendations apply to local communities.

Donaghy's Corridor

Conservation projects being undertaken by members of TREAT (Trees for the Evelyn and Atherton Tableland), the Donaghy family,- the Wet Tropics Management Authority and the QPWS demonstrate the benefits of cooperation between QPWS and local communities.

Donaghy's Corridor is on private land where the owners have signed a Voluntary Conservation Agreement. Five hundred community members of TREAT have helped to revegetate the once degraded stream bank corridor using native trees from a nursery owned by QPWS and jointly operated with TREAT.

This corridor links the isolated Lake Barrine section of the Crater Lakes National Park with the much larger Wooroonooran National Park. The project aims to provide habitat and possible linkages for rain forest animals, including tree kangaroos, cassowaries and ringtail possums.

An extensive monitoring and evaluation program is under way and results to date have shown a great variety of fauna now colonising and moving throughout the corridor.

While QPWS staff assisted and helped direct the project, the drive for the project came from community members, and their rewards were a sense of pride and ownership.

GOOYEA - a conversation with Greg & Sue Kneipp, the neighbours of Hellhole Gorge National Park

What is a national park for?

'A park situated in a grazing area to me signals something like looking into the future, at holding country ... trying to get country back the way it was before man used it for grazing, and for studying the ecology in an area.'

'I feel a national park is somewhere for someone not living in the area to come and enjoy - city people love to get out and I think that's basically the reason behind a national park. '

'We've got to look down the track so the next generation can appreciate what originally was here that has been changed by grazing animals, tree- clearing and people transforming the whole landscape. In 20, 30, and 50 years time you can say that's how it used to be ...it's an ideal learning situation for future generations.'

'Down the track, it can be looked at as learning - to see what has gone wrong with grazing on other properties. The country is the same as properties around it, so it's a benchmark where grazing has not had an influence.'

'Being a benchmark is an important role of parks in grazing areas.'

'When you're driving along and you look over the fence (into the park), you can think and gauge if you're driving the country a bit too hard. We look at Hellhole (National Park) where the feed is a foot high and if we look at our side and it's only a few inches we know we're doing something wrong.'

Are there any benefits to you in living next to a national park?

In my experience, the bank considers bordering a national park to be an asset. It's considered to be a plus, from the fencing side of things. With the good neighbour policy in operation, there have been no problems with national parks (QPWS) renewing fences and controlling feral animals to this point, but funding may be a problem in the future.

SUSTAINING RECREATIONAL AND TOURISM OPPORTUNITIES

3.1 Enhancing visitor opportunities and experiences

Glasshouse Mountains National Park. International tourists bushwalking close to major urban centres.

Simpson Desert National Park. Queensland's national parks provide recreation opportunities in a wide diversity of landscapes.

CONTEXT

People are most likely to care for and protect the things and places that are important to them and that they experience directly. Though conservation always has primacy, 'presentation' of parks to people is also specified in the *Nature Conservation Act 1992* as a major purpose of park management.

The Service has an obligation to the community to allow for enjoyment of parks as well as to protect them, so sustainable nature-based recreation is encouraged as a legitimate use of parks. The level of access and facilities in parks vary, but only in rare cases essential for conservation, research or safety reasons are parks or parts of them closed to visitors.

With parks now supporting more than 12.5 million visitors each year, the Service is one of the largest tourism providers in the state. Parks are the foundation for Queensland's nature tourism industry and generate jobs and economic benefits for the local community and Queensland's economy. They are part of a wider network of recreation and tourism opportunities.

The challenge for park management, as natural places become rarer and more precious, is to balance conservation with the increasing demands for different styles of visitation. Some visitors seek an easy, safe, comfortable and brief experience of nature, perhaps in a large group with a guide, while other people prefer wild places away from any sign of development. Each park has its own attributes and provides different opportunities and settings[13] for visitors. The emphasis in parks is on nature-based recreation[14] , where visitors can relate directly to natural and cultural values. Not all outdoor recreation activities are available on every park. Some activities are not appropriate or legally permitted on national parks but may be undertaken on some conservation parks or resources reserves.

Another challenge is that while conservation is the primary purpose of parks, most resources, including both staff time and materials, are currently directed towards the provision of visitor opportunities and management of visitor impacts.

[13] 'Setting' is a term used to describe the character of a place and takes into account its physical, social and managerial features. Settings on parks range from high volume areas with signs, toilets and car parks, to wild, remote locations. See glossary for definition.

Visitor opportunities must accord with Native Title provisions and be planned in conjunction with traditional custodians and local communities as well as visitor interest groups.

Queensland's Parks system should be managed to support a range of styles of nature-based visitation, and management planning should ensure that a variety of different settings cater for different types of visitors. Four categories of parks[15] are being considered for planning at state-wide and regional levels:

- **high profile** (key parks strongly promoted domestically, interstate and overseas, with defined, highly developed sites receiving high levels of use especially by large groups)
- **popular** (parks with defined, developed sites receiving moderate to high levels of use and with a range of facilities and opportunities);
- **explorer** (low-key developments, low to moderate levels of use); and
- **self-reliant** (few or no developments, low and irregular levels of use).

Visitor use should be managed at a regional scale to ensure a diversity of settings and opportunities appropriate to these styles of use, park values and the interests of local, national and international visitors.

Opportunities for day use and overnight use are required by both independent visitors and people on commercial visits, but these opportunities might not all be provided by the Service or at every park.

National parks provide opportunities for enjoying nature-based activities such as photography.

PRINCIPLES AND FUTURE GOALS

A range of opportunities will be provided for visitors to enjoy parks, and interpretive programs will enhance visitor awareness, appreciation and protection of nature and cultural heritage.

To uphold this principle, we aim:

1. Within the constraints of sustainability and resources, to maximise community use and enjoyment of parks in ways that enhance community support for conservation and maintain the integrity of parks; and to continue to provide opportunities for people to connect with nature on parks across a wide range of landscapes, from rainforest to desert.
2. To ensure that visitor use of parks respects the protection of ecological and cultural integrity. All recreational use of parks should be ecologically sustainable, and the impacts of visitors should be kept within assessed limits of acceptable change[16];
3. To make available a variety of settings and nature-based visitor opportunities on parks, ranging from developed services and facilities to undeveloped wilderness areas for remote and challenging activities; to ensure that across any region, there is no net loss of opportunities for 'unstructured' minimal impact enjoyment of undeveloped settings on parks; and prevent all sites progressively reaching higher levels of development, use and visitation.
4. To maintain a high standard of visitor services and facilities appropriate to the chosen setting, within the commitment of the Service to conservation of natural and cultural heritage as required by the cardinal principal of management; and to achieve a high standard in environmentally sustainable design, development, maintenance and operation; and
5. To assume a leadership role in nature tourism management in parks, in partnership with the tourism industry, recreation industry and community interests; and to work with other suppliers to integrate park visitor opportunities into regional and local tourism and recreation planning, aiming for a healthy diversity of nature-based opportunities across the State.

[15] Each park will be allocated to one of these four classes based on the highest level of development available at certain sites within each park. However, this does not imply that the whole of 'high profile' or 'popular' parks will be developed for visitors. In most cases only a very small part of these parks will be managed for moderate to high visitation, and the undeveloped nature of other parts of the park will be maintained. Management planning will define and limit areas for present and future recreation facilities.

[16] Limits of acceptable change describes the condition of a site at which point intervention is required to prevent further degradation or change.

STRATEGIC ACTIONS

VISITOR OPPORTUNITIES AND MANAGEMENT

Develop and implement a clear direction for the provision of new and enhanced visitor opportunities. There will be a strong emphasis on maintaining, protecting or enhancing the variety of opportunities available to park visitors in each district. Where practical and within the limits of ecological and cultural sustainability and acceptable change, selected sites managed for high profile and popular use may be managed to accommodate substantially more visitors than currently experienced.

Review visitor settings and opportunities in each district. Develop an inventory of visitor opportunities to guide visitor use planning and management. From this review, prepare strategies at district and park level with public consultation to identify existing and projected needs, gaps in existing opportunities, potential conflicts of interests, future development options, and desired directions.

Prepare a Visitor Strategy involving government, industry and local communities. This strategy will be based on the district reviews outlined above, and will provide an overview of the role of the whole Parks system in providing opportunities for a range of appropriate activities and visitor groups. This will consider the opportunities on other public and private lands. Priorities for enhancement of facilities or provision of more visitor facilities on parks will be identified where appropriate. The Visitor Strategy will also include broad principles for visitor management and will be complemented by policies on risk management and the approach to adventure recreation.

Progressively incorporate recommendations from the Visitor Strategy into new and revised park management plans.

Develop clear and comprehensive policies on visitor management and opportunities and on risk management.

The Hinchinbrook Island Management Plan has been a determined effort to maintain the isolated nature of much of the island by specifying the locations which relatively large numbers of people can visit and limiting the numbers of people who walk in the Natural-Recreation Zone and the Remote-Natural areas at any one time. This will help maintain the special values of the area.

Keeping Hinchinbrook natural

As parks become more popular, there is pressure from some people to provide ever more facilities to cope with the increasing numbers. Unplanned development can detract from natural and cultural values, and take away from the experience of visitors who favour undeveloped destinations.

Over the next twenty years, invest in the development or enhancement of recreational facilities on the Visitor Strategy in two major directions:

1. Where in keeping with park values and desired settings, upgrade or create appropriate sites in 'high profile' and 'popular' parks which currently account for more than 90 percent of visitor use **or** develop sites on other parks in the district as alternative destinations[17]; and

2. Develop or enhance visitor opportunities on 'popular' and 'explorer' parks where this will make a substantial contribution to the local social and economic stability of an area, and where the diversity of opportunities for visitors and local people will be substantially increased.

Walking tracks allow people to experience parks with relative safety and comfort.

[17] Development of visitor sites in high profile and popular parks will not necessarily be intensive-use sites, as most parts of these parks will remain natural and available for only low-key visitor use.

VISITOR FACILITIES AND INFRASTRUCTURE

Manage the Parks system to cater for more visitors with less negative impact to park resources than is currently experienced. This will involve designing, developing and maintaining visitor sites to cope with the desired type and level of use and educating visitors on appropriate low impact practices.

Develop and implement a system of environmental impact and audit standards for all Service operations, including development and maintenance of recreational and management facilities and infrastructure (see1.2).

To implement this system, permit major developments such as new roads, large camping areas and significant buildings on parks only as indicated in an approved management plan or through an equivalent process with public consultation and Ministerial approval. Publicly reviewed impact statements for major developments will guide their construction and maintenance.

Develop a strategy to ensure the design of new park infrastructure and facilities is:

- in harmony with the protection of park values;
- appropriate to the park setting (nature, scale, appearance);
- adequate for the desired levels and patterns of visitor use;
- cost effective; and
- based on sustainable design principles and energy-efficient, durable and functional.

Ensure all park infrastructure and facilities conform with the standards identified in this strategy.

STRATEGIC ACTIONS CONTINUED

SUSTAINABLE USE AND LIMITS OF ACCEPTABLE CHANGE

Identify potential opportunities for visitors and potential issues with visitor impacts through management plans. Take management actions to encourage, cater for and where necessary limit the numbers of visitors and types of activities according to the park values and site vulnerability.

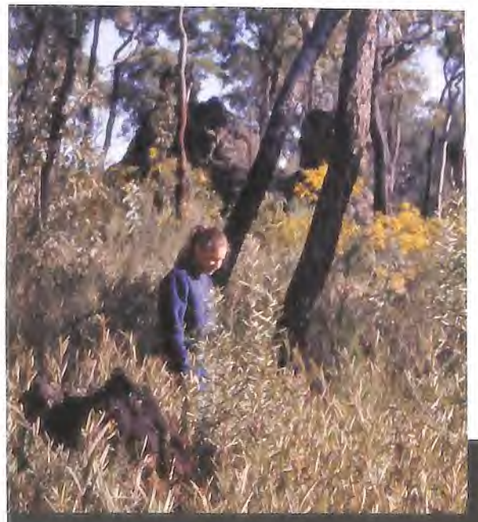
Where impacts are approaching the limits of acceptable change defined for a particular park or site, take action to alleviate these impacts[18]. Such actions may require a reduction in the levels of use or restricting the types of activity in the area or the provision of alternative sites.

As part of the process of evaluating management and safeguarding natural integrity on parks, regularly monitor the impacts of recreational use and evaluate the effectiveness of visitor management. Keep records of visitor numbers, characteristics and satisfaction according to a planned strategy.

VISITOR INFORMATION AND EDUCATION

Provide information through appropriate media to assist people to choose the most appropriate destination for the types of opportunity they are seeking, and advise visitors of the likely conditions and the skills and equipment needed for particular areas. This information will enable visitors to make informed choices about the level of risk they are prepared to accept. In some areas, the level of risk will require management action or may preclude visitation.

See section 3.3 for further actions.



It is important to provide potential visitors with information to help them choose appropriate parks for their activities.

[18] This decision may be made because the impacts are increasing or because new knowledge has emerged about an existing or likely impact, for example, if a rare or threatened plant or animal is discovered at a recreational site.

3.2 SUSTAINING COMMERCIAL AND COMMUNITY SERVICES

Commercial operations can support conservation outcomes as well as economic and employment benefits.

CONTEXT

In addition to conserving nature, Queensland's Parks system supports a diversity of commercial and community services such as guided activities and tours. Parks also provide an important focus for resorts and other businesses in nearby areas. Queensland has the opportunity to be a world leader in the provision of rewarding and sustainable visitor opportunities in parks. This will advance conservation, economic and employment benefits for Queensland, particularly in many regional and rural areas, while maintaining the natural and cultural values. Promoting these park benefits is important to keeping parks relevant to the community.

Parks underpin the nature tourism industry, a significant focus of tourism marketing which delivers significant economic benefits to many Queensland communities.

Spending by park visitors is estimated to contribute more than $1.2 billion each year to the Queensland economy and to support more than 6000 jobs directly and many more indirectly.

Many commercial tour operators, near-park resorts and other commercial operators rely on parks for much of their business and benefit from the existence, management and use of the Parks system. These operations also provide a valuable community service in presenting parks to visitors and can offer a high standard of service and interpretation. It is important for the Service to work in partnership with tour operators, the tourism industry and other tourism professionals to ensure high standards and to maximise the benefits to parks and visitors.

Opportunities exist for the Service to increase its revenue through offering a range of services and facilities for which a fee could be paid. Such commercial services must be carefully considered. Any commercial activities initiated by the Service should deliver a benefit for park conservation, presentation to visitors or community benefits and should aim for enhancement, rather than duplication, of services or facilities otherwise available.

There are also demands for parks to be used for public utilities, such as power supply lines, telephone and radio repeater stations. These demands have the potential to fragment parks and downgrade their values. There is concern over possible conflicts between commercial interests and the public interest which underlies conservation and environmental principles and practice. Utilities, roads and other community facilities will be permitted on parks only under demonstrably exceptional circumstances where a clear and long-term benefit to the community is established, damage to park values will be minimal and where it is shown that no alternatives exist.

The turtle conservation program, with volunteer assistance, gives thousands of people each year the chance to view and learn about nesting turtles.

PRINCIPLES AND FUTURE GOALS

The Parks system will be managed to provide substantial and sustainable environmental, economic and social benefits to the Queensland community while maintaining the intrinsic values of all parks.

To uphold this principle, we aim:

1. To manage parks so that the primary function of conservation is never made subordinate to any commercial use of parks;
2. To ensure that, while parks have a fundamental conservation purpose, they make a major contribution to the economic and aesthetic well-being of Queensland. The need for investment for each of these purposes should be increasingly recognised by Government, community and industry; and
3. To encourage and facilitate the development of sympathetic, well-planned 'gateway communities' at or near entrances to protected areas where private enterprise or local government may provide facilities and services for visitors. These communities will take pride in their association with parks and derive significant benefits from their proximity to parks.

Interpretive programs can develop a deeper understanding of natural and cultural values.

STRATEGIC ACTIONS

CREATING A CLEARER POLICY FRAMEWORK FOR MANAGING COMMERCIAL SERVICES AND RAISING REVENUE

Develop a Commercial Tourism Management Strategy, policies and codes of practices for commercial operations on parks. This strategy will recommend systems to allocate rights for business and other organisations to derive a private benefit from a public resource, and ways in which those deriving a direct financial benefit from the existence, management or use of the Parks system should make a financial return for these rights.

Consider and recommend practical and ethical methods of revenue generation consistent with Government policy. These will include:

- developing systems for collecting donations, bequests and sponsorships from corporate and private sources, for example, establishing a charitable 'National Parks' foundation;
- developing enhanced interpretive opportunities for which some charge may be made;
- reviewing commercial operator opportunities and other private sector involvement in park management; and
- progressively introducing charges for data, copyright matter and providing Service specialist consultancy services.

Develop plans for all parks to identify revenue opportunities consistent with Government policy and the conservation values of each park.

Lawn Hill National Park. Managed carefully, commercial services such as canoe hire can enhance visitors' enjoyment without negative impacts on the park.

COMMUNITY UTILITIES

Develop and implement Service policies to establish the exceptional circumstances under which utilities (for example, telecommunication facilities) **can be permitted on parks, and the procedures which must be followed to demonstrate these exceptional circumstances.** Under any other circumstances, these utilities will not be established or expanded on parks.

Develop a strategy and codes of practice in conjunction with managers of existing utilities and community infrastructure on parks (e.g. power lines, roads, water extraction, telecommunications facilities) to ensure the operation, management and use of this existing infrastructure delivers net environmental, economic and social benefits to the Queensland community.

RELATIONSHIPS WITH COMMERCIAL OPERATORS AND THE TOURISM INDUSTRY

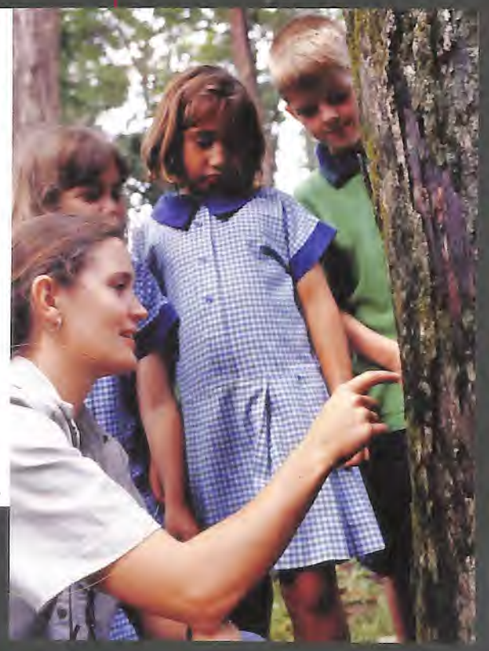
Work with commercial operators to ensure the highest level of compliance and increased monitoring of impacts of commercial operations. Ensure that necessary action is taken if problems are identified.

Work in partnership with commercial tourist operators, the tourism industry and other tourism professionals to encourage a high standard of presentation of parks to visitors and to minimise the potential impacts of tourism on parks.

Encourage Indigenous partners in park management who wish to develop commercial operations, provided the initiatives are in keeping with park values, management agreements and relevant plans and policies.

3.3 Involving the community

Involving the community



Parks are valuable outdoor classrooms for local school groups.

CONTEXT

Without the support of the wider community, the Parks system would not exist. The Service needs to maintain this support and to further encourage feelings of ownership, pride and protection towards parks.

Park interpretation assists visitors, local communities and other interested people to better understand, explore, experience and care for the natural and cultural values of parks. Park managers can communicate specific messages about safe and low-impact behaviour on parks. By providing broad environmental protection messages, interpretation can also encourage people to conserve nature and protect cultural heritage in their everyday lives.

The most effective interpretive programs use a combination of communication techniques with a high standard of facilities and services.

Selective and skilful use of a range of media provides the community and park visitors with accurate, accessible information about parks. While provision of basic information is recognised as essential, interpretive programs should also stimulate a deeper level of connection between people and nature, and a better understanding and appreciation of the environment and cultural heritage.

Community partnerships and involvement with park management offer benefits for all parties, including:

- creation of a more outward-looking agency culture, which better understands community values and needs;
- development of local capacity and self-reliance;
- establishment of communication, trust and mutual understanding among the partners;
- exchange of knowledge and skills between the community and the conservation agency; and
- an extension of conservation benefits as ideas and practices are 'absorbed' into the local social and political system.

Partnerships also contribute to the well-being of the local and wider community. The Service should lead and facilitate community involvement in park management and in promoting awareness and understanding of natural and cultural heritage. The Service is responsible for establishing trust and credibility with its community partners, and meeting its agreed responsibilities. While the Service must give highest priority to conservation objectives, community needs and aspirations are also recognised.

Community involvement in national parks benefits the community and the park. This revegetation program at Kondalilla National Park assisted Green Corps participants from the Barung Landcare Group to gain skills in natural area management.

PRINCIPLES AND FUTURE GOALS

Community awareness, appreciation and involvement in conservation will be encouraged through interpreting and presenting the Parks system.

To uphold this principle, we aim:

1. To build better communication and encourage people to value and protect parks though park interpretation and community involvement. An informed and environmentally responsible community will be inspired to care for Queensland's parks, natural environment and cultural heritage;
2. To enrich visitor experiences on parks, maximising visitor enjoyment and understanding while promoting behaviour which is safe and causes the least possible impact on the environment;
3. To pursue excellence in park management, maximum public benefit and links with the community through:
   - community partnerships, consultation and participation in park management;
   - volunteer programs;
   - cooperation with individuals, communities, organisations and governments; and
   - availability of information on park management, including cultural and natural resource management and promotion of wide natural resource care and restoration;
4. To promote community respect for the culture of Aboriginal peoples and Torres Strait Islanders, and for cultural heritage places on parks. The right of Indigenous peoples to control information and interpretation relating to their heritage is recognised; and
5. To foster good relations and cooperation with communities and to inform and empower community members, park visitors, volunteers and other interest groups to make an active contribution to conservation on parks and on their own land.

Park interpretation and community involvement, through two-way communication, encourages people to value and protect parks.

STRATEGIC ACTIONS

COMMUNITY ENGAGEMENT IN PARK MANAGEMENT

Prepare a community engagement strategy identifying the most effective mechanisms for community partnerships and involvement with park management and interpretation, which may include the following :

- establishing a ParkCARE program for facilitating community engagement;
- developing a volunteer program as a means of community outreach, supported by consistent recruitment, selection, training and support procedures; and
- encouraging or supporting interpretation training for tour operators involved in interpreting parks.

Implement a range of partnership and involvement models on parks across the state with benefits to both community and park management.

ADVISORY COMMITTEES

Develop and trial models for advisory committees, and progressively establish these at appropriate parks or districts.

INTERPRETIVE SERVICES AND FACILITIES

Finalise and implement a strategy for interpretation and education.

Support a professional, skilled and enthusiastic staff to plan, prepare and deliver park interpretive services and programs, and establish a program of interpretive research and evaluation. Train and support park rangers to deliver high-quality interpretation and complement their efforts with interpretive specialists, interpretive rangers, seasonal rangers and volunteers who deliver interpretation during busy periods.

Provide reliable and up-to-date orientation information on all parks designated for visitor use in a range of media including a website, brochures and on-site signs. This information will help people decide which park to visit, to prepare for their visit, and maximise the safe enjoyment of the park.

Increase on-park programs and other media fostering awareness and understanding for children and adults, including:

- an enhanced children's program which will provide activities for children visiting selected parks and will be accessible to all children through the Service website;
- an enhanced program of quality environmental education programs and interpretive activities; and
- detailed interpretive publications for key parks with a charge to cover production costs where appropriate.

Provide interpretive activities and programs outside parks to encourage people who do not visit parks to appreciate them.

COMMUNICATE INTERPRETIVE MESSAGES AND THEMES

Promote broad messages about conservation of biodiversity and ecological processes. Identify important themes relating to the ecology, cultural heritage and management issues of particular parks. Focus particular effort on:

- **cultural interpretation:** The Service will consult with Indigenous communities and other cultural heritage experts when developing any interpretation about cultural heritage places and issues. Indigenous rangers will be employed to help plan, prepare and deliver appropriate cultural interpretation;
- **interpretation as a management tool:** Consistent and relevant information will be provided to promote visitor safety, including visitors using remote or trackless areas. Visitors will be clearly informed about park rules and the reasons behind them. A strong, coordinated program promoting 'minimum impact' philosophy and practices will also be developed and promoted;
- **community 'stewardship':** Park visitors will be encouraged to develop a personal identification with the park through opportunities to be involved in reporting, monitoring and management; and
- **parks as models for sustainability:** Parks will demonstrate environmentally responsible land management and practices such as energy efficiency. Park interpretation programs will encourage the community to follow suit.

Interpretive signs are a useful on-site technique to communicate information directly to park visitors.

Boardwalks enable people to walk through and learn about swampy environments.

PARKS AND CENTRES OF INTERPRETIVE EXCELLENCE WILL BE DEVELOPED

Identify parks and centres of interpretive excellence at key locations across the state. These parks and centres will feature specialist interpretive rangers and high quality interpretive facilities.

Presenting parks to the community

Field days on parks can provide opportunities for staff and local communities to learn and exchange ideas about natural resource management and can also demonstrate how parks can be used as benchmarks for sound land management.

In August 2000, a field day at Lochern National Park gave locals and visitors a new view of practical natural resource management in central western Queensland. Located 130km south-west of Longreach, Lochern has a variety of landscapes, including Mitchell grass downs, open gidgee country and thick mulga.

The purpose of the field day was to demonstrate to the local community how the park is managed and to encourage discussion on the use of fire for vegetation management. Neighbouring landowners, students, local government officers and a natural resource scientist were among the 28 participants.

The rangers conducted a guided tour comparing burnt and unburnt sites in Mitchell grass and mulga grass systems. Of interest was the greater diversity of plants in the Mitchell grass areas burnt last year, including legumes and forbs. Controlled burning had removed a crop of gidgee seedlings which were colonising an adjacent grassland. This was of particular interest to the property owners as gidgee invasion of Mitchell grass is a big problem in the area.

A general discussion was held on the use of fire in land management. This was interesting as the rural community in this area regarded fire in terms of bushfires and wildfires and had not given much thought to using it as a land management tool.

ENHANCING MANAGEMENT CAPABILITIES

4

4.1 IMPROVING PLANNING, POLICY AND MANAGEMENT

Left: Whitsunday Islands National Park. The skills and knowledge of the workforce are critical in delivery of sound management decisions. Managing island parks poses extra challenges and staff need skills for marine as well as terrestrial work.

Above left: *Litoria longirostris*

Above right: a rare *hakea*.

CONTEXT

The previous three sections have dealt with particular aspects of protecting and presenting parks.
The remainder of this Discussion Paper discusses how the Service and its partners in management can become progressively more:

- **skilful** - by raising the professionalism of the workforce, by better involving the skills, knowledge and wisdom of the community and by using progressively better information bases;
- **effective** - by supporting the workforce with trust, encouragement and adequate resources, and by developing and implementing good partnerships, policies and planning systems;
- **adaptive** - by becoming an innovative organisation which learns through experience and is willing to try new ideas to be at the forefront of park management;
- **efficient** - by a careful use of resources, delegation of responsibility to local levels wherever possible, communicating well and sharing information both within the agency and with other organisations; and
- **value-driven** – by ensuring that the principles of park management remain as core factors in all decisions and activities.

The extent, wide distribution and complexity of the Parks system require decisions at many levels. Planning and policy development are effective mechanisms to gather information, to identify and integrate management decisions, and to transparently document a firm course of action. They also ensure similar issues are managed consistently across the Parks system. Planning systems for park operations must be closely linked with the business planning cycle and ensure that resources expended are linked with clear outcomes.

Planning and policy also provide opportunities for community involvement in decision-making. The value of this involvement, cooperative arrangements and partnerships in park management is recognised and has been discussed in section 2. Indigenous peoples should play a role in planning and decision-making.

A high level of cooperation with other government agencies, such as other land management agencies, local government, transport, education, law enforcement and emergency response services, is essential in many aspects of park management and may be defined in relevant plans.

When parks form part of a declared World Heritage area, management will continue to be in cooperation with the Commonwealth and international conservation bodies.

Where planning and decision-making require choices between conflicting imperatives:

- First priority should be given to matters that have the highest potential to promote, affect or impair the natural or cultural heritage values of the Queensland Parks system;
- Second priority should be given to matters that address the needs and aspirations of landholders of the park;
- Third priority should be given to addressing general community needs and aspirations; and
- High priority should be given to matters that assist in resolving issues across the Parks system generally, or across a range of parks in a region, or integrate direction and management of protected natural areas in or between regions.

Pitcher plant *Nepenthes mirabilis*.

PRINCIPLES AND FUTURE GOALS

The Queensland Parks system will be planned and managed skilfully, effectively, adaptively and efficiently to maintain park values in conjunction with other private and State lands.

To uphold this principle, we aim:

1. To manage the Parks system through a comprehensive, integrated and transparent planning and policy framework with agreed standards and information systems. To ensure people working at the park level are trained and empowered to make decisions on day-to-day matters within this framework;
2. To involve Indigenous peoples in park management, with the level of this involvement specified in management arrangements. Other community members and organisations will also be involved in decision-making;
3. To be a cost-effective organisation, operating with the community to deliver effective decisions at all levels of park management; and
4. To seek, share and implement best practice standards within and outside the organisation and to seek partnerships to improve its effectiveness and efficiency.

STRATEGIC ACTIONS

PLANNING AND POLICY FRAMEWORK

Develop an Implementation Plan for the Master Plan to allocate priorities and resources to strategic actions and to establish performance indicators where appropriate. Monitor and evaluate the implementation of the Plan.

Develop and implement an integrated planning and policy framework for park management based on the Master Plan resulting in:

- high quality park management and achievement of conservation objectives;
- the needs and aspirations of landholders and Indigenous peoples being met to the maximum possible extent; and
- maximum community involvement and satisfaction in park management.

Prepare and implement park management strategies including:

- **Conserving natural integrity**: policy, approach and techniques to guide conservation of natural integrity on parks;
- **Indigenous partnerships:** policy, approaches and techniques to develop partnerships with Indigenous groups in management of the Parks system to meet Service and Indigenous people's obligations, objectives and aspirations;
- **Community engagement**: policy, approaches and techniques to encourage partnerships with local community interests in management of the Parks system to meet Service and local community obligations, objectives and aspirations;
- **Visitor opportunities and management**: defining a network of presentation opportunities across the Parks system consistent with current and projected demands; enabling coordination with off-park opportunities; establishing priorities for services and infrastructure; coordinating with natural and cultural heritage conservation needs; and developing consistent, efficient and effective management systems for tourism and recreational use of parks; and
- **Professional development:** outlining the workforce training and progression needs.

Undertake planning priorities to:

- coordinate the direction and management of parks within regions and across the State and provide integrated guidance for individual Park Management Plans, consistent with policies and strategies developed in accordance with the Master Plan; and
- prepare Park Management Plans essential to implement the Master Plan.

BETTER SYSTEMS FOR IMPLEMENTATION OF PLANS AND POLICIES

Develop an operational framework to implement effective use of resources in management and to clearly link planning with resource allocation (see section 4.4).

Form and support expertise-based teams across the organisation to review and report on specific management functions.

INTEGRATE PLANNING, POLICY, RESEARCH AND MONITORING PROCESSES

Link planning, research and monitoring. Park plans, strategies and policies will explicitly identify decisions based on the need to conserve natural integrity, including situations where further research is required before certain actions are taken. Natural resource monitoring programs will be based on natural integrity statements. Review generic management strategies and monitoring standards derived from natural integrity statements for applicability to individual draft Management Plans, as a basis for day-to-day park management programs.

Australian king-parrot

INTEGRATION OF PARK PLANNING WITH SURROUNDING AREAS AND ACTIVITIES

Provide clear statements of Parks direction as a basis for negotiating complementary arrangements such as nature refuges on surrounding lands. Encourage complementary planning, land management and use of surrounding areas and activities.

PARTNERSHIPS WITH COMMUNITY ORGANISATIONS AND OTHER AGENCIES

Develop and trial policies and strategies in relation to community partnerships on a range of parks. To protect all interests, these partnerships and cooperative ventures will, wherever appropriate, be formalised with written agreements clearly defining the rights and responsibilities of all parties.

Organise exchanges and cooperation with other park management agencies within Australia and overseas through both formal and informal mechanisms. Develop arrangements to deliver mutual assistance with other countries in the Asia-Pacific region.

EVALUATION OF MANAGEMENT EFFECTIVENESS

Undertake a regular and consistent state-wide review of park management to identify park management needs across the state. Conduct a regular rapid assessment of management performance, and conduct more detailed evaluations where necessary.

USING A LEARNING APPROACH

Provide policy, planning and technical support to encourage and review innovative ideas for park management.

Identify aspects of park management, including systems, policies and procedures, which need improvement or modification. Implement systems to recognise and reward examples of excellent management, and to adapt and propagate good ideas at appropriate locations throughout the State.

Bing Lucas, an eminent international authority on park management, sharing ideas with QPWS staff member at a Master Planning Workshop.

Good planning ensures visitor facilities fit in well with the environment.

4.2 ADVANCING INFORMATION MANAGEMENT

Left: Monitoring the health of pandanus plants at Noosa National Park is an example of the role science plays in park management.

Above centre: Royal spoonbills *Platalea regea*

Above right: Lamington spiny cray *Eustacus sulcatus*

CONTEXT

High-quality, fact-based and well interpreted information and community wisdom are key supports for effective long-term ecosystem management.

There are numerous gaps, inconsistencies and inadequacies in natural resource information generally and for the Parks system particularly. 'Adequate' information on which to make decisions is never likely to be fully available for all cases. Accepting that information is unlikely to be completely comprehensive, we should increase our knowledge and wisdom, giving priority to that which will help us manage better.

Management decisions should be based on legislation, good science, and sound principles of land management and must be ethical. All management decisions should reflect the best available information. Where adequate information is not available, planning and policy should place a priority on the protection of ecological and cultural integrity, including conservation of biodiversity.

The requirements for further research to reduce uncertainty in decision-making need to be identified.

There is growing awareness that traditional and community-based knowledge and systems can provide a strong basis for conserving both natural systems and cultural values. This experience should be respected and play an increasing role in park management.

Regular pro-active reporting on program progress and outcomes is desirable, while reactive reporting on tight deadlines should occur only in response to emergent events such as wildfires or serious accidents.

Rather than collecting information for its own sake we should aim to develop shared visions, culture and wisdom. Collection and compilation of information should be efficient, with minimum duplication. Priority requirements for compiling park information, including baseline data essential for management purposes, have been identified in other topic areas (e.g. there are considerable information needs for protecting natural integrity). Information gathering should be undertaken on a strategic basis and be conducted wherever possible with the assistance of partners such as other government agencies, academic institutions and local communities.

PRINCIPLES AND FUTURE GOALS

Good management decisions will be made, based on high standards of information and wisdom and with community involvement in decision-making.

To uphold this principle, we aim:

1. To collect information, build knowledge and develop wisdom by combining the best available knowledge systems, including traditional and community knowledge;
2. To maintain and provide access to that information and to ensure that the resulting knowledge is used when making management decisions;
3. To communicate the information to relevant people, with information relating to park management as openly accessible as is consistent with security, privacy and confidentiality imperatives and Government policies;
4. To respect the rights and value the wisdom of Indigenous peoples; and
5. To encourage the workforce and community at all levels to participate in decision-making.

Using traditional and community knowledge

An inspiring project involving students and teachers from Bloomfield State School on Cape York Peninsula and QPWS rangers from Mossman Gorge is a step in presenting traditional and community knowledge to park visitors. Such processes help to strengthen relationships between the Service and Indigenous peoples.

From July to November 1999, three Indigenous QPWS staff worked with the students and teachers on a project that was developed by the school's Alternative Education Care Program.

The project installed sign posts with Ku Ku Yalandji language names for creeks and other locations in their tribal country in Southern Cape York Peninsula. The names are those used by the Ku Ku Yalandji people since the 'Dreamtime' which is still used today. English is spoken as a second language in most Cape York Aboriginal communities. The culturally named signage will be in addition to existing European/ Australian names in the Daintree region. All parties benefited from the experience, and the project set a role model for young Indigenous people who wish to pursue a career in the QPWS.

STRATEGIC ACTIONS

INDIGENOUS KNOWLEDGE SYSTEMS

Develop agreements with Indigenous peoples which recognise the role of Indigenous knowledge and wisdom in park management, and establish protocols for the use and ownership of such information.

INFORMATION GATHERING

Identify specific priority information needs and the most effective ways of obtaining such information.

Identify and support partnerships with organisations and individuals to encourage applicable research and monitoring.

INFORMATION MANAGEMENT

Develop electronic information storage, management and presentation systems to facilitate accessibility and manage large volumes across time and topics. Develop systems to safeguard ownership and use rights of information and to respect community ownership where appropriate.

Ensure the best use of available information through:

- where appropriate, providing data which is owned by the Service to external agencies (this may be done on a cost recovery basis);
- developing strategic alliances with other holders of relevant information and encouraging data sharing arrangements that add value;
- developing data collection protocols and standards to ensure information collected throughout the organisation and partner organisations is compatible; and
- coordinating and integrating information systems.

Develop an integrated park management database to better manage available information, which:

- electronically issues leases, licences, permits and other legal approvals for activities occurring on parks;
- stores information relevant for management; and
- analyses available information and produces useful reports.

INFORMATION DISSEMINATION AND REPORTING

Establish a state-wide information management reporting system to facilitate the strategic provision of quality, factual information to support management decisions. This system will be closely linked to the planning system outlined in the previous topic.

USING INFORMATION IN DECISION-MAKING

Systematically use relevant information, plans and policies to support decisions.

Enable management decisions and plans for the Parks system to be substantially founded on sets of reliable, relevant and long-term information derived from a variety of sources, focussed research and effective operational management. The system will efficiently predict and respond to emergent needs.

PUBLIC PARTICIPATION AND ACCESS TO INFORMATION

Facilitate regular consultation with a range of stakeholders at strategic level, in relation to specific parks, and in relation to particular topics.

4.3 ENHANCING WORKFORCE CAPABILITIES

Fleay's Conservation Park. Skills in animal handling are important in presentation and wildlife management roles of park rangers.

Simpson Desert National Park. Rangers who work in remote locations must be well prepared for the conditions. Managers and staff need to be aware of a range of workplace health and safety concerns.

CONTEXT

Park management relies ultimately on the skills and commitment of the people involved and on the support they are given to perform their tasks. The key role that park rangers have played, and will continue to play, in the conservation and presentation of parks is recognised and appreciated.

In line with international trends, it is likely that the Parks system workforce in the future will be more open to participation from community members and will give greater recognition to their skills, knowledge and enthusiasm. The workforce may consist of staff, volunteers, partners in management and people undertaking complementary works. A balance between effectiveness and efficiency should be sought to deliver quality outcomes.

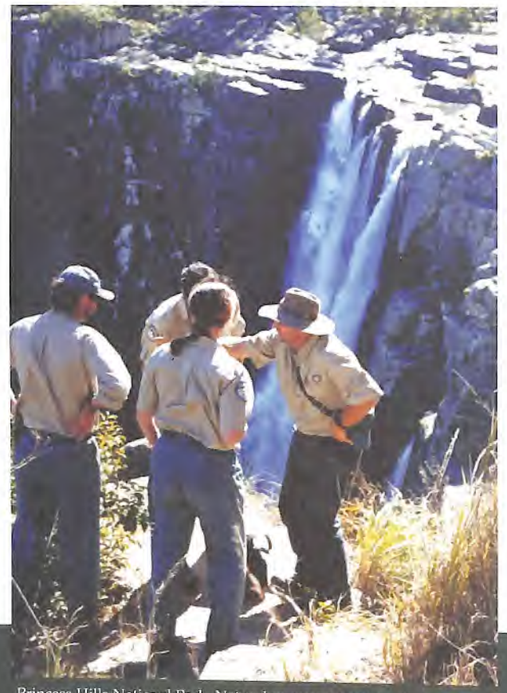
Parks are located in some of the most remote areas of Queensland, and it is often a challenge to define the best locations for work bases and accommodation. After considering the needs and welfare of the workforce, staff accommodation should be provided in the most efficient and cost-effective manner possible to enable effective field operations, community relations, visitor services and emergency responses. Where accommodation is located on-park, it should be in keeping with the park environs and should take advantage of best practice in design and operations, such as the use of renewable energy.

PRINCIPLES AND FUTURE GOALS

A dedicated, skilled and motivated workforce will manage parks, with clear policies, directions and standards.

To uphold this principle, we aim:

1. To value staff as a professional, committed and dedicated resource, with clear reciprocal responsibilities between staff members and managers;
2. To develop a workforce with the necessary skills, resources and capability to protect, monitor, restore and present Queensland parks. The hallmark of park management will be a sense of dignity, honour and achievement, high professional standards and excellence in science, skills, traditional knowledge and resources underpinning protection and presentation;
3. To use a variety of employment opportunities and contractual agreements to develop this workforce. Ensure the workforce is well resourced, highly trained and of sufficient size to meet the management obligations of the Parks system. Service staff will lead and support community involvement in protecting and appreciating parks and other natural areas;
4. To adopt the culture of a learning organisation, fostering innovation, dedication, integrity, and thoughtfulness in its staff. Opportunities will be offered to staff and other participants in management to develop and use their skills and experience in an organised and effective manner; and
5. To locate park management staff wherever possible to encourage close links between parks and community.



Princess Hills National Park. Natural resource assessment is critical for sound decision making.

Tamborine National Park. Restoring native vegetation requires good ecological understanding as well as practical skills.

STRATEGIC ACTIONS

A MORE EFFECTIVE AND BROADLY-BASED WORKFORCE

Investigate potential mutual benefits of delegating or contracting selected park management functions to contractors, local communities or park neighbours; and develop, trial and evaluate mechanisms to efficiently allow this where appropriate. Ensure quality control of any contracting arrangements is undertaken to reflect the importance of maintaining management standards.

Implement the most efficient and effective management arrangements for all parks.

TRAINING AND CAREER PATHS

Develop a system of competencies to match all position needs and responsibilities. Mentor programs will be developed to enhance staffing abilities and provide opportunities for the workforce to develop skills in conjunction with focussed training programs.

Actively engage in training and develop an annual training program.

Facilitate training opportunities for skills in a range of priority functions. Incentives systems will be developed to encourage acquisition and improvement of skills. Options to be reviewed and implemented if warranted will include:

- a formal Service training program coordinated with external service providers;
- cadetship schemes; and
- exchange and work experience programs.

Ensure comprehensive training opportunities, career and achievement structures, and incentives are available to develop and support a workforce with excellent skills in park management.

Resource ranger measuring the fuel load of a monitoring plot at Princess Hills National Park.

PROJECT TEAM APPROACH

Form and support project teams across the state and across levels of management, made up of specialists from each area of management, to plan, develop and monitor initiatives and to disperse this information throughout the State. The focus will be on expertise rather than position or geographic location. Form and support project teams immediately for key areas identified in this Discussion Paper, including natural integrity management and cultural heritage management. These teams will produce more detailed strategies in relation to these topic areas.

STRATEGIC ACTIONS

STAFF ACCOMMODATION, RESPONSIBILITIES AND WELFARE

Establish clear and practical policies and procedures in relation to issues concerning staff welfare and responsibilities, including on-call and emergency responses. Staff and union representatives will be fully consulted in the formulation of these policies.

Meet agreed standards for staff accommodation in all locations where accommodation is provided.

Develop and implement strategies to attract and keep high quality people in the workforce. These strategies may include options for limited term placements in remote areas.

DELEGATIONS, NETWORKING AND PROFESSIONALISM

Arrange delegation of decision-making to the most operational level appropriate, within the improved planning and policy framework. Promote coordination and information exchange to ensure consistent high standards of management and operations across the state.

Support meetings, conferences, exchanges, field work and workshops which increase personal contact between staff at all levels, mentoring and information exchange.

Ranger Helen Wylks (left) points out the effects of fire on Mitchell grass ecosystems

Managing Lochern

Being Ranger in charge of a western park with few visitors, most of my work is concerned with managing the land for conservation. Lochern has been a park since 1994, and we are witnessing the changes taking place on the land after years without stock grazing. We have been trying out different land management tools such as fire.

We are recording the wildlife and enjoy the anticipation of seeing rare and threatened species, such as kultarrs, flock bronzewings and Major Mitchell cockatoos, appear and increase on the park.

Managing the land here has to be in partnership with people living on the surrounding properties. We're learning about the history of the land from them and we're keen to involve the kids from around the district in wildlife surveys so they can see animals they do not see normally.

We're hoping that cooperative management with our neighbours will become even closer in the future.

Helen Wylks - Ranger-in-charge, Lochern National Park

4.4 RESOURCING THE PARKS SYSTEM

Black-necked stork *Ephippiorhynchus asiaticus*

CONTEXT

The Queensland Parks system has expanded rapidly over the past twenty years and is likely to expand further in the next twenty years, as discussed in section 1. At times, increased resourcing has not kept pace with the new acquisitions, greater community expectations and increasing threats to natural systems.

Effective land management to protect natural and cultural heritage and to provide services and facilities for visitors is labour-intensive. It also requires considerable infrastructure and equipment in locations across Queensland. Therefore our Parks system needs substantial and sustained investment if it is to deliver the ecological, economic and social benefits we expect.

PRINCIPLE AND FUTURE GOALS

Continual improvement in park management will be fostered through evaluation, learning, and reliable and logical allocation of resources. Resourcing for Queensland's parks should reflect their irreplaceable value to the public, not only in conserving nature, but also in providing essential ecosystem services such as clean water, carbon sinks and gene pools, and in making a significant contribution to the local, regional and state economies.

To uphold these principles, we aim:

1. To be accountable to the Government and the community, with a management approach based on continuous improvement, tested against performance indicators and regularly reported to Government and the community.
2. To ensure that core funding for Queensland's parks, in addition to protection of park resources and appropriate presentation, provides for interpretation, research, inventory, monitoring and adaptive management. This must be adequate to maintain and, where necessary, restore values and integrity and for the development of management arrangements with traditional owners.

Activities in the Parks system can be classified into three levels:

- **Basic business**, which comprises those aspects of park management that maintain ecological and cultural integrity and natural landscapes.
  Basic business also includes provision of essential presentation opportunities;
- **Enhanced business**, which comprises those aspects of Parks system management that enhance the minimum essential standards of basic business; and
- **Supplementary business**, which comprises those aspects of Parks system management which, while not essential to basic business, would significantly complement and promote the objectives of basic business.

STRATEGIC ACTIONS

Clearly identify, in consultation with the community, activities comprising basic, enhanced and supplementary business.

Develop and implement a resource needs assessment and allocation model for financial and non-financial resources relating to parks. This system will be logical and transparent and will be based on the four dimensions of park management outlined in this Discussion Paper. Aspects addressed will include:

- asset valuation and best-practice asset management under an accrual accounting framework;
- setting priorities for both capital works and other management activities based on the four dimensions for park management discussed in the Discussion Paper, and on priorities identified in the Master Plan and in park management plans; and
- clear links to the business planning system (based on the Managing for Outcomes policy) and to performance monitoring and evaluation.

Develop a resourcing strategy in consultation with the community with:

- basic business adequately resourced from stable sources of funding;
- priorities for enhanced business identified and potential sources of resourcing identified and developed; and
- priorities for supplementary business identified and potential sources of resourcing identified and developed.

Develop clear, publicly promoted materials documenting resourcing use, priorities and rationale.

Develop, in collaboration with a range of community interests, both stable and project-based sources of resourcing for enhanced and supplementary business.

Salt lake, Simpson Desert National Park. The wide spread of parks across Queensland brings benefits to remote rural communities, but requires considerable investment.

Glossary

GLOSSARY

Biodiversity: Biodiversity and biological diversity are used in the sense of the *Nature Conservation Act 1992*, which states that biological diversity is the natural diversity of native wildlife, together with the environmental conditions necessary for their survival and includes-

(a) regional diversity, that is, the diversity of the landscape components of the region, and the functional relationships that affect environmental conditions within ecosystems;

(b) ecosystem diversity, that is, the diversity of the different types of communities formed by living organisms and the relations between them;

(c) species diversity, that is the diversity of species; and

(d) genetic diversity, that is, the diversity of genes within each species.

Burra Charter: a charter developed by the Australian International Charter for the Conservation and Restoration of Sites (ICOMOS) in 1979 at Burra Burra, which defines the basic principles and procedures to be followed in the preservation and restoration of heritage places. It is widely accepted as the standard for historic heritage conservation in Australia.

Cardinal Principle: The cardinal principle of national park management is to 'provide, to the greatest possible extent, for the permanent preservation of the area's natural condition and the protection of the area's cultural resources and values' *(Nature Conservation Act 1992).*

C.A.R. reserve system: The C.A.R. reserve system was recommended by the National Strategy for the Conservation of Australia's Biodiversity and is the basis of Queensland's Parks system.

- Comprehensive means that the reserve system samples the full range of regional ecosystems across the landscape;
- Adequate means that the reserves are of a sufficient size and appropriate shape that the natural integrity, including the species diversity, of the protected area can be maintained; and
- Representative means that the samples of regional ecosystems include the maximum possible diversity of their plant and animal communities.

Commercial use: Under the *Nature Conservation Act 1992*, a commercial activity is any activity conducted for gain, and may include selling an article, material or thing; supplying a facility or service; commercial photography; conducting a tour, safari, scenic flight, cruise or excursion; or advertising or promoting a protected area as part of an enterprise.

Community: The citizens of Queensland, including partners, key stakeholders and the broader community.

Conservation: *The Nature Conservation Act 1992* defines conservation as 'the protection and maintenance of nature while allowing for its ecologically sustainable use'

Cultural heritage: Cultural heritage in parks refers to the values which people place on the park landscape and their experience of it. It includes their knowledge and traditions, stories, songs, dances and relationships, as well as specific places, structures, and objects.

Cultural resources: *The Nature Conservation Act 1992* defines cultural resources as 'places or objects that have anthropological, archaeological, historical, scientific, spiritual or sociological significance or value, including such significance or value under Aboriginal tradition or Island custom'.

Domestic tourism: tourism within Australia by Australians.

Ecologically sustainable development: Using, conserving and enhancing the community's resources so that ecological processes, on which life depends, are maintained and the total quality of life, now and in the future, can be increased.

Ecologically sustainable use of protected areas is defined in the *Nature Conservation Act 1992* as their use within their capacity to sustain natural processes while:

- maintaining the life support systems of nature; and
- ensuring that the benefit of the use to present generations does not diminish the potential to meet the needs and aspirations of future generation.

Ecosystem: a dynamic complex of plant, animal, fungal, and micro-organism communities and the associated non-living environment interacting as an ecological unit (Commonwealth of Australia 1996).

Ecotourism: Nature based tourism which involves education and interpretation of the natural environment and is managed to be ecologically sustainable (Queensland Ecotourism Plan). This definition recognises that the natural environment includes cultural components and that ecologically sustainable use involves an appropriate return to the local community and the long term conservation of the resource (Commonwealth of Australia 1996).

EPA: Environmental Protection Agency.

Feral species: a domesticated species that has become wild (Commonwealth of Australia 1996).

Gene: the functional unit of heredity; that part of the DNA molecule that encodes a single enzyme or structural protein unit (Commonwealth of Australia 1996).

Indigenous Land Use Agreements (ILUA): agreements entered into by QPWS with Indigenous groups pursuant to Sections 24BB to 24BE of the *Native Title Act 1993*.

Interpretation: the process of stimulating and encouraging appreciation of our natural and cultural heritage and of communicating conservation ideals and practices (Queensland National Parks and Wildlife Service 1983).

Local communities include individuals, community groups, local businesses and local Government.

Limits of acceptable change. This term is used to describe the condition of a site at which point intervention is required to prevent further degradation or change.

Natural integrity: the condition of an ecosystem where biological diversity and ecosystem processes are optimal and are likely to persist.

Nature- based activities, in relation to the use of protected areas, includes scientific, educational, spiritual, intellectual, cultural and recreational *(Nature Conservation Act 1992)*. In planning for protected area recreation, nature-based activities should meet the following criteria:

- Appreciation of nature is a key motivational factor;
- Substantial modification of the environment is not required; and
- The natural environment is critical to the experience of the participants.

Parks and Parks system: This Discussion Paper covers Queensland's protected areas declared under the *Nature Conservation Act 1992* and refers to these as 'parks'. Marine parks are not included in this Plan, though island national parks within the marine parks are included. Parks include lands owned and managed by the Queensland Government for the purposes of the *Nature Conservation Act 1992* and lands which may be owned or managed by individuals or community interests for the purposes of the *Nature Conservation Act 1992*. These lands together comprise Queensland's Parks system.

Partnerships: A partnership can be defined as 'a special type of relationship formed among a number of individuals or groups to work collaboratively at all stages towards the achievement of a common goal: there is reciprocal respect, a shared understanding of roles and responsibilities and flexibility to respond and adapt to changing circumstances' (Scherl 1996). Partnership may refer to cooperation in park management by Indigenous groups and QPWS, sometimes under a formal agreement. The term is also used to describe close relationships between the QPWS and the community including neighbours, all levels of government, business, industry and community groups.

Pest (plant or animal): A species occurring in an area outside its historically known natural range as a result of intentional or accidental dispersal, including exotic organisms, genetically modified organisms and translocated species (adapted from National Strategy for the Conservation of Australia's Biological Diversity definition for alien species or introduced species).

Presentation: The term 'presentation' is used in this Discussion Paper in the same sense as for World Heritage Areas. Presentation implies opportunities to visit and appreciate, but also opportunities to become better informed about the values of parks and encouragement to support the continued protection of these values. Presentation of natural and cultural values is listed as a management principle of national parks (*Nature Conservation Act 1992*).

Protected area: defined by the IUCN Commission on protected areas as: 'An area of land and/or sea especially dedicated to the protection and maintenance of biological diversity, and of natural and associated cultural resources, and managed through legal or other effective means' (IUCN 1994).

Regional ecosystems: A regional ecosystem is a vegetation community in a bioregion that is consistently associated with a particular combination of geology, landform and soil (Sattler and Williams 1999). The regional ecosystem is a surrogate measure for biological diversity which is used as the basis for the Parks system in Queensland.

Service or QPWS: Queensland Parks and Wildlife Service

Setting: a term used to describe the character of a place which takes into account its physical, social and managerial features. Settings on parks range from high volume areas with signs, toilets and car parks, to wild, remote locations.

Species: a group of organisms capable of interbreeding freely with each other but not with members of other species (Commonwealth of Australia 1996).

Sustainable: able to be carried out over time without damaging the long-term health and integrity of natural and cultural environments.

World Heritage Areas are significant for their outstanding natural and/or cultural features, and are declared by the United Nations Educational, Scientific and Cultural Organization.

World Heritage Convention. This international agreement, signed to date by more than 150 States Parties, was adopted by the General Conference of UNESCO in 1972. Its primary mission is to define and conserve the world's heritage, by drawing up a list of sites whose outstanding values should be preserved for all humanity and to ensure their protection through a closer co-operation among nations. By signing the Convention, each country pledges to conserve the sites situated on its territory, some of which may be recognised as World Heritage.

Notes

Scherl, L. (1996). *Partnerships and community participation in the protection and management of coral reefs and related ecosystems.* Paper presented at International coral reef initiative Western Indian Ocean Regional Workshop, Mahe, Seychelles.

Commonwealth of Australia (1996). *The national strategy for the conservation of Australia's biological diversity.* Canberra, Commonwealth Department of the Environment, Sport and Territories.

Queensland National Parks and Wildlife Service (1983).
Interpretive manual

Have your say in the future of Queensland's Parks system

master **plan**

for **Queensland's** Parks System

DISCUSSION PAPER

Feedback Guide

The Queensland Parks and Wildlife Service (QPWS) would like to hear your views on the future management of Queensland's national parks and other protected areas.

Your feedback will assist in forming the final Master Plan for the management of Queensland's unique Parks system, due to be released next year. This feedback guide has been set out to assist you in commenting on the main areas addressed in the Master Plan and to assist us in compiling this information and incorporating it into the final Plan.

You can either comment on all sections of the Plan or just concentrate on the issues that interest you the most. There is room at the end of the Feedback guide for additional comments, or you can attach additional pages if required.

To make sure we have time to consider your feedback, we need to receive your comments by Friday 30 March 2001.

Contacting us

You can provide comments by:

- Completing and returning this feedback guide to:
  Master Plan
  QPWS (Level 8)
  PO Box 155
  BRISBANE ALBERT STREET
  QLD 4002
- E-mailing us at:
  masterplan@env.qld.gov.au
- Faxing us on (07) 3227 6386
- Visiting our website www.qld.gov.au and viewing the Master Plan Discussion Paper

Queensland Government
Queensland Parks and Wildlife Service

1. **Do you have any comments on the Executive summary? (p. iv)**

This section details the future direction of the Parks system and the basic principles of park management for next 20 years.

2. **Do you have any comments on the overview of Queensland's parks? (p.1)**

This section outlines what parks are for, the benefits parks provide and the challenges facing Queensland's Parks system.

3. **Do you have any comments on the section on Directions for the future? (p.27)**

This section identifies the primary roles that parks will have in the life of the Queensland community.

4. **Do you have any comments on Section 1 - Conserving natural and cultural heritage? (p. 29)**

5. **Do you have any comments on Section 2 - Working with community partners? (p. 43)**

6. **Do you have any comments on Section 3 - Sustaining recreational and tourism opportunities? (p. 51)**

7. **Do you have any comments on Section 4 - Enhancing management capabilities? (p. 65)**

8. **Further Comments**
Are there any other comments you wish to make in reference to this Discussion Paper?

Further comments continued

How can we contact you?
Providing the following details will assist us in responding to your feedback.

Name:

Organisation:

Position/Title:

Address:

Phone:

Fax:

E-mail:

Thank you for taking an interest in the future of Queensland's Parks system. We look forward to hearing your comments on the Discussion Paper.